

How can an organization gain competitive intelligence?



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*Now the reason the enlightened prince and the wise general conquer the enemy
whenever they move, and their achievements surpass those of ordinary men, is
foreknowledge*

- Sun Tzu

Abstract

This thesis investigates how a data-provider can facilitate competitive intelligence and how datafication can generate intelligent data. Firstly, by analyzing how a data-provider can collect and search for data in order to facilitate competitive advantage. Secondly, by examining the process of facilitating competitive advantage and competitive intelligence. Lastly, by discussing the differences between being a data-provider and being an insight-provider. We do so, by drawing upon a case company named Meltwater. Meltwater is a media intelligence company that provides data. The incentive for this thesis is how a data-provider can present intelligent data in order to facilitate competitive intelligence.

Consequently our research question is: *How can a data-provider facilitate competitive intelligence?*

Moreover our sub question is: *How can datafication enable elements of intelligence?*

We collect our research data through semi-structured interviews, observations and a questionnaire. Moreover, we choose the standpoint of interpretivists, since it allowed us to construct our own meaning to our conclusions. Furthermore, we choose to do a single-case study, since we wish to explore a real-life phenomenon in order to test our assumption. Lastly, the use of both quantitative and qualitative research methods entitles us to be confident towards our conclusions, which also is known as methodological triangulation.

In order for us to gain an understanding of how a data-provider can facilitate competitive intelligence, we apply a theoretical framework using Fleisher & Bensoussan's (2007) notion of the nine forces. This enable us to detect how and where a data-provider collect and search for information concerning the competitiveness of an industry. By doing so, we concluded that Meltwater collects data that corresponds to the nine forces. Moreover, we apply the notion of the generic intelligence cycle by Fleisher & Bensoussan (2007) in order to look into the process of collecting, analyzing and disseminating the data and insights. Lastly, we make use of the

framework concerning how to generate intelligence. We did so in order to discuss the distinction between being a data-provider and an insight-provider.

In the light of our analysis we present the conclusions and discuss the advantages and disadvantages of conducting a single-case study. Moreover, we discuss the theoretical and practical contributions of this thesis. Lastly, we point out avenues for further research.

We conclude that a data-provider cannot facilitate competitive intelligence but only facilitate competitive advantage, since they disseminate only the required data before the client. However, we present the notion of an insight-provider, since Meltwater disseminate not only the required data, but also unexplored and new insights before the client. Moreover, the process of collecting data corresponds to the concepts of datafication. Consequently, Meltwater facilitate datafication within the collecting process, which in turn creates intelligent data. Thus, we conclude that an insight-provider, such as Meltwater, can facilitate elements of competitive intelligence.

Introduction

This thesis investigates the notion of datafication facilitated by Meltwater and how this may enable competitive intelligence. Specifically, we intend to examine the difference between gaining competitive advantage by standardized methods, as opposed to use datafication as a measurement for gaining competitive intelligence. Based on our collected data, we argue that there is a difference between being a data-provider versus being an insight-provider, a new term presented through the research in regard to this study. Consequently, we find that being a data-provider only facilitates competitive advantage, whereas an insight-provider can facilitate elements competitive intelligence. Thus we draw upon the case company Meltwater, a market leader and data-provider within the world of external data, since they facilitate datafication in order for clients to become more intelligent than their competitors.

Based on our research domain and focus of research, our research question is as follows:

How can a data-provider facilitate competitive intelligence?

In order to answer our research question we created the following sub question:

How can datafication enable elements of intelligence?

Through the exploration of our research and the analysis we found that insight-providers, such as Meltwater, can facilitate competitive intelligence. We came to this conclusion by applying the nine forces by Fleisher & Bensoussan (2007), as the standardized method for determining an industry's competitiveness. We use this framework in order to find that there is a difference between a data-provider and becoming an insight-provider. We do so by illuminating that a data-provider enables an organization to receive the data they asked for and only what they ask for - illustrated by the fields that the nine forces hold. By contrast, insight-providers deliver more than what is asked for, and more than the imagined outcome, since they also provide the wanted data i.e. the nine forces, and additionally, insights extracted from the data that the client did not even know existed. Hence an insight-provider uses datafication in order to discover new and unknown/unimagined data.

In order to emphasize on the difference between working as a data-provider and an insight-provider we draw upon the generic intelligence cycle by Fleisher & Bensoussan (2007) and the five phases provided by Bergeron et al. (2002) and Miller (2001). By doing so, we consequently display how an insight-provider facilitates, not only competitive advantage, but also the possibility of competitive intelligence. Through the use of the two frameworks, we come to the conclusion that an insight-provider disseminates the data in such a manner that allows for the data to be explored, in which a feedback phase allows for presentation of unknown and new outcomes, which can lead to new and unintended findings.

On the basis of the analysis we departure into the discussion. Firstly we present our findings from the analysis. From there we will discuss the distinction between being a data-provider and being an insight-provider. We do so, in order to illustrate the distinction more thoroughly than in the analysis. We will discuss this distinction by drawing upon the process of generating intelligence, which enabled us to discover a significant difference between being a data-provider and being an insight-provider. Furthermore, we discuss the practical and theoretical contributions of our findings. We will argue that the practical contribution is the fact that organizations, such as our

case company Meltwater, should position themselves as business partners that can enable elements of competitive intelligence. Moreover, we will turn the focus around, and argue that organizations who engage with insight-providers, should rely even heavier on the delivered data, since the data insights enable elements competitive intelligence to their advantage.

Based on our analysis and discussion, we ultimately conclude that a data-provider cannot facilitate competitive intelligence. Consequently, we present the new term, an insight-provider, since this provider can facilitate elements of competitive intelligence. This is due to the specific data collection process of an insight-provider. Moreover, an insight-provider generates intelligence, which will be illustrated in our discussion by elaborating on the generation of intelligence. This will show that there is a significant difference between being a data-provider and an insight-provider. Solely an insight-provider facilitates datafication, which in turn may enable a higher possibility of generating intelligence from data.

We came to this conclusion through the use of a mixed method research approach, allowing us to draw on a number of data sources, including interviews, a questionnaire, internal documents, and observations of the use of the Meltwater platform. We conducted three semi-structured interviews with the highest ranking part of the Meltwater employees located in Copenhagen. We did so in order to obtain descriptive and exploratory data concerning the work of a data-provider and explore their business processes. We collected quantitative data by conducting a questionnaire for Meltwater clients, endingly having 39 respondents that could validate or invalidate the findings from the qualitative semi-structured interviews. Moreover we conducted five observations through online meetings between clients and Meltwater account managers. We did so in order to explore whether the clients make sense of the data through the visual context provided by Meltwater. Lastly we applied Meltwater documents in order to gain information concerning Meltwater and their clients. We applied all of the above mentioned data collection methods in order to gain insights of how Meltwater operates, both as a data-provider and an insight-provider. The use of both qualitative and quantitative research methods entitled us to validate notions broad forward in the qualitative data, and challenge these notions through the use of quantitative data. Consequently, we draw upon the collected data and thereby identified patterns within our data, resulting in significant areas of research for our thesis.

We have taken an interpretivist approach, since we work in the field of social constructivism. We draw upon interpretivist since we, as researchers, interpret elements of this field of research. In addition, we focus on meaning and employ multiple methods in order to reflect on different aspects of our research. Furthermore, we study a specific and unique phenomenon since we make use of a case company, which is Meltwater. Consequently, we draw upon abductive research strategy as it allows us to describe and understand the social life in terms of social actors, and thereby elaborate on existing theories and terms (Blaikie, 2007).

Research domain

In the following section we will elaborate on the research domain of this study. The research domain will concern the domains of both datafication and competitive intelligence. Since it is of our interest to study whether datafication can be a phenomenon that facilitates competitive intelligence or not. Our research interest concerns whether a data-provider can facilitate competitive intelligence through the use of datafication. It is significant to stress that a data-provider in this sense is only a unit of analysis since we only discuss data-providers in the context of our research domain, which is datafication and competitive intelligence.

We focus our research domain, since we first look at datafication and what this concept withholds. Then we look through previous work concerning competitive advantage, since it can be argued that competitive advantage to some extent is preliminary to competitive intelligence. It can be argued that competitive intelligence derives from competitive advantage since it address how to outmatch the competitors based on foreknowledge. Thus, elements of competitive advantage is still existing due to that competitive intelligence aims to achieve an advantage but the difference here is that the advantage sustains and are timeless, due to foreknowledge based on intelligent data. Thus we will touch upon the notion of datafication and competitive advantage since it can set the stage for competitive intelligence and why this concept have arisen.

When searching for competitive intelligence the previous work only focused on competitive intelligence as a term and the process of competitive intelligence. Thus, we seem to have

identified a gap of research since we could not find any work concerning how a data-provider can facilitate competitive intelligence.

At the time being it is difficult for organizations to stay competitive within the industry environment, since the competitors are likely to have the same resources available. Consequently, we would like to examine how organizations can become more intelligent and competitive than their competitors, since we think it is of high relevance for every organization to be the leading player and thereby outmatch the competition.

Datafication

We argue that it is important to touch upon digitalization as a starting point towards datafication, since datafication is crucial to this specific research study.

There exist two processes at work in the digital economy namely digitalization and datafication (Maull et al., 2014). Digitalization refers to the process by which analogue content such as books, music, photos or other information products are converted into formats that can be stored on digital media (Maull et al., 2014). On the other hand, datafication refers to converting aspects of human existence into data, such as social media data (Lycett 2013). This sort of data provides new insights that may disrupt existing service models or even create completely new ones. Consequently, datafication in contrast to digitalization generally relies on actuators and sensors that generate the data around an object or a person (Maull et al., 2014). In order to illustrate the distinctions between datafication and digitalization we have created a table that summarizes the core differences.

Datafication	Digitalization
<i>Unfinished products and platforms</i>	<i>Platform economics</i>
<i>Mass customization, end-user control over value chain</i>	<i>Process automation, corporate control over value chain</i>
<i>Digital and interaction with the physical world</i>	<i>Digital only</i>
<i>Data analytics based on quantification</i>	<i>Data analytics based on sampling</i>

(Summary table of Digitalization and Datafication)

Therefore, our study touch upon the notion of datafication since it facilitates the process of converting insights, which in turn may aid intelligence. Moreover, we want to examine the process of datafication since we believe that this process is very significant when it comes to generating competitive intelligence. As for the concept of datafication there exists three concepts; dematerialization, liquification and density (Lycett, 2013). Dematerialization “... *highlights the ability to separate the informational aspect of an asset/resource and its use in context from the physical world*” (Lycett, 2013). Whereas, liquification stresses the notion that once the data is dematerialized, the information can be “... *easily manipulated and moved around*” (Lycett, 2013). This allows it to be unbundled and rebundled, which before was difficult, expensive and time-consuming to do. Lastly, density is the “... *best (re) combination of resources*” since it is the outcome of the value creation process. IT has a significant role of datafication since it liberates the constraints, which normally is related to time (when things can be done), place (where things can be done) and actors (who can do what and with whom) (Lycett, 2013). Furthermore, datafication is an information technology driven sense-making process, since sense-making concerns how people generate what they interpret (Lycett, 2013). Consequently, datafication represents changes at work and in markets rather than solely within the technology domain. Consequently, the process of datafication is a relevant field of research in this specific study, since we analyze towards the conclusion that datafication may aid competitive intelligence.

Competitive advantage

Competitive advantage on the other hand has been given much attention since it is a concept that has lived for a long period of time. Moreover, as illustrated in the introduction, competitive intelligence derives from competitive advantage. Thus it is relevant for our research to start with this area of study.

Competitive advantage is a phenomenon that has been studied closely since the 1980s (Porter 1980). Back then it was stated that the only competitive global business strategies would focus on differentiation in terms of quality, service technology, product or cost leadership (Porter, 1985).

Moreover, the notion of excellence was presented in the 1980s, where the hunt for a unique competitive advantage was in focus (Peters and Waterman, 1982). Later on, the emphasis was on certain manufacturing competitive priorities or capabilities, decisions or practices since it could be the base for achieving sustainable or lasting advantage (Avella et al., 2001). Moreover, sustainability of the competitiveness is becoming a key issue for manufacturing strategy (Calvo et al., 2008), but this sustainability can be a difficult goal to reach since there is a high level of competitiveness within the industry environment (Grant, 2010).

Competitive advantage is something that can be practiced (Bell, 2013). For instance it could be an advantage on the product price, the product quality or the delivering time, which then will outmatch the competitors'. Moreover, competitive advantage is not timeless, hence it is an ongoing process. An organization can have the advantage on prize for one month, but then the competitors will strike back even harder and thereby gain the competitive advantage the next month. Another point of view (Bell, 2013), portrays competitive advantage as working both ways, meaning that if an organization can create competitive advantage through data and analytics, than any competitor can do so as well. Consequently, this may lead to a disadvantage (Bell, 2013). Another angle when looking at competitive advantage is, that to be 'competitive' means that a contest is occurring between two or more parties (Fleisher & Bensoussan, 2007). Consequently, competitive advantage enables the organization with an edge over its rivals. Moreover, it enables an ability to generate greater value for the organization and the stakeholder of the organization. Within competitive advantage, it can be argued that there exist two main types, namely comparative advantage and differential advantage (Benjamin et al., 1990). Comparative advantage, can be seen as some sort of cost advantage since it is an organization's ability to produce a product at a lower cost than the competitors and thereby generate a larger margin on sales. On the other hand, a differential advantage is when an organization's products differ from the competitors and are therefore seen as better than the competitor's products. Competitive advantage consists of many aspects of how to outmatch the competitors. However, when looking through other previous work concerning competitive advantage it seems that competitive advantage to some extent lacks the notion of sustainability (Yang Liu, 2013). Moreover, due to evolution of technology and data-use, competitive advantage might become incompetent.

Nonetheless, many researchers discuss the notion of how data can be turned into competitive advantage; *“With vast amounts of data now available, companies in almost every industry are focused on exploiting data for competitive advantage”* (Provost & Fawcett, 2013).

Datafication and competitive advantage

Consequently, competitive advantage has been around for a longer period of time but it seems difficult to sustain the advantage. Moreover, it seems that there is existing new opportunities and possibilities due to technology i.e. data. Thus the field of datafication and competitive advantage has become an interesting aspect to look at, since datafication most certainly has an enormous effect on competitive advantage and how this phenomenon evolves. Wherefore, we will in the next section touch upon the notion of competitive advantage and the effects that datafication may have on competitive advantage.

As mentioned earlier in the research domain, datafication can evolve an organization in terms of *“... turning many aspects of our life into computerized data and transforming this information into new forms of value”* (Lycett, 2013). Datafication represents changes at work and in markets rather than solely within the technology domain (Lycett, 2013) thus this phenomenon can have severe impact on competitive advantage. As stated earlier, competitive advantage has existed since the 1980's, thus it is interesting to address how the evolving field of technology may affect the field of competitive advantage. There is no doubt that datafication can have a major impact on organizational performance and the competitive advantage drawn from the use of data. This new field of research, datafication, can raise new questions concerning how organizations gain competitive advantage. Data collection applications can enable competitive advantage, but the main challenge is the company's ability to implement and integrate the data is very significant if an organization wants to become competitive (Benjamin et al., 1990; Jarworski et al., 2002). Additionally, all of the varying formats and models of communication, due to datafication, is raising severe problems for the integration of data within organizations (Constantiou & Kallinikos, 2014). Jointly, this integration of data challenge the established rules of strategy making, as these are manifested in the canons of procuring structured information of lasting value that addresses specific and long-term organizational objectives (Constantiou & Kallinikos, 2014). Moreover, it

seems that the integration of data within an organization is very significant in order to become more competitive (Brynjolfsson & McAfee, 2014).

As illustrated earlier, competitive advantage is about getting the upper hand before the competitor does. This upper hand is created by establishing a unique value in a unique way (Porter, 1985). This can be done by lowering the price of a product, meaning that the competitors will be deemed too expensive. It can also be done by offering something that the competition cannot offer. This is to some extent what competitive advantage has been about the last decades. However, datafication changes this aspect since it enables sustainability in a way, that competitive advantage has not been able to beforehand (Sonderregger, 2014). Since the concept of datafication has been introduced, it enables entirely new ways of creating value for an organization. Datafication enables insights and wisdom of the crowds, which in turn can be turned into advantage over the competitors. Beforehand, a competitor could copy the same competitive advantage, for instance lower the price on a specific product. But to copy a whole system, i.e. datafication, is more complicated than copying a specific advantage (Sonderregger, 2014). Consequently, datafication adds elements of sustainability since this 'concept' captures and use data across a system of activities in such concrete and difficult ways that the competitors cannot copy. Beforehand, competitive advantage was also based on data. Of course, data was integrated in order to gain an advantage. However, it was specific data concerning specific activities or scenarios. With datafication it is different. Since this kind of data is used across activities and contributes to many different scenarios, which enables a larger collection of data that can be used in many different manners. As mentioned earlier, competitive advantage concerns to some extent a very specific advantage whether it is cost or differentiation. Thus, competitive advantage seems to lack sustainability since it is very context focused and present focused. In this concept, the competitiveness lies in providing the same value as its competitors but at a lower price, or by providing greater value through differentiation (Grant, 2010). Moreover, the existing articles discuss many different types of competitive advantage such as cost structure, product offerings, distribution, customer support etc. This is not our interest field since we want to examine how a data-provider can facilitate competitive intelligence. When looking through the field of research concerning datafication and competitive advantage it is clear to detect a pattern of how

competitive advantage is gained. This advantage is focused on specific measures such as cost, quality or other ways of gaining advantage for the moment. Moreover, it is argued that competitive advantage is not timeless, meaning that it is an ongoing process and it is easy to be outmatched by the competitors (Bell, 2013). Consequently, we argue that datafication may challenge aspects of competitive advantage since datafication enables numerous opportunities and possibilities for organizations. Thus we criticize the concept of competitive advantage since it seems very limited and operates within specific fields of advantage. This notion actually goes against what datafication is about, hence datafication concerns unlimited opportunities of advantage for the organization. Moreover, datafication facilitates sustainability due to the use of data across many activities which also broadens the field of advantage. Therefore, we believe that datafication to some extent change competitive advantage since datafication facilitate and enable more than digitalization enabled before, since digitalization concerned very activity specific data. Consequently, we believe that competitive intelligence is far more compatible with the notion of datafication, since both concepts facilitate elements of sustainability and the use of a various sets of data.

Therefore, our research will draw upon the significance of using real-time data that can provide a company with continuous data flows in order to outmatch the competitors with data through the application of datafication and competitive intelligence. In order to illuminate how data can be applied in an organization we integrate the case of a data-provider into our research. We do so since data is becoming important for every organization in order to stay competitive at all time. Data applications are much more than just a competitive weapon, it is becoming a necessary way of doing business, since it can provide a strategic advantage (Benjamin et al., 1990).

Competitive intelligence

Based on the above research field, we will now point our focus towards competitive intelligence. This focus derives from competitive advantage, since we believe that competitive intelligence to some extent is the evolution of competitive advantage as previously illustrated Competitive advantage is very limited hence it do not supports the notion of datafication. However,

competitive intelligence and datafication is support each other on many levels. Consequently, we will now turn focus towards competitive intelligence and what this concept contain.

At the beginning the exploration of competitive intelligence concerned knowing what your firm is about i.e. internal data (Mena, 1996). This is not our field of interest since we want to stress the significance of external data and how this data can facilitate competitive intelligence. Moreover, we want to draw upon our case company, Meltwater, since the development of data analysis will continue to require experts that smartly utilize all data and information sources, which might can be pieced together and create intelligence that allows the organizations to achieve marketplace advantage (Fleisher, 2008). Given the potential of competitive intelligence, surprisingly little research has been done with focus on the process of generating competitive intelligence and the factors that make the process more or less effective (Jarworski et al., 2002). Consequently, our focus of competitive intelligence will also concern how a data-provider facilitates the process of data collection in order to generate competitive intelligence. On the other hand, it is argued that theory in the intelligence process has been proposed by many authors under many different labels such as, environmental scanning (Sashittal & Jassawalla, 2001; Saxby et al., 2002), business intelligence (Cleland & King, 1975), strategic intelligence, competitor analysis (Fleisher & Bensoussan, 2007) and market intelligence. All of the above concepts are very similar to the competitive intelligence concept as most of these have positioned intelligence as the necessary and assumed prerequisite for strategic planning (Dishmann & Calof, 2007). This study is interested in competitive intelligence instead of competitive advantage since, intelligence helps a company sustain and develop distinct competitive advantages by using the entire organization and its networks to develop actionable insights about the environment, such as customers and competitors. Consequently, we think that the use of intelligent data will enable organizations to become more competitive than the data concerning competitive advantage ever could. Moreover, competitive intelligence is a process of knowing what the competition is up to and staying one step ahead of them (i.e. foreknowledge), by gathering information about competitors and applying it to short and long-term strategic planning (Ettore, 1995). Again, the use of competitive intelligence for our research is of high relevance since it enables organizations to sustain industry advantage since it is timeless. Moreover, competitive intelligence involves the collection and

storage of data, the analysis and interpretation of data and the dissemination of intelligence (Thompson, 2001). This process can be very difficult for any organization to perform (Bergeron et al., 2002), thus we would like to integrate the use of a data-provider in our research, since they are experts in data collection and the analysis of the data. However, we do not know whether a data-provider can facilitate the entire process and thereby generate competitive intelligence, thus this research domain is of high interest to us. Intelligence gives a company competitive advantage (DeWitt, 1997) and better firm performance (Draft et al., 1998) by allowing better business planning (Gordon, 1989) and new product introduction success and new market development (Ahituc et al., 1998). Consequently, it seems that competitive intelligence can enable a more qualified advantage than competitive advantage can. Thus we chose competitive intelligence as our field of research, since it accumulates a various sets of data, i.e. datafication, which can enable different aspects of advantage.

Based on the above-mentioned research, it seems that data is relevant and significant if an organization wants to gain intelligence based on foreknowledge accumulated by data (Provost & Fawcett, 2013). Thus the notion of datafication is a significant research domain for this study. Research concerning datafication in correlation to competitive intelligence is not a discussed phenomenon. There exist many studies concerning solely datafication and competitive intelligence, but there do not exist any studies concerning a combination of the two. This study fills the gap of datafication and competitive intelligence combined, since we want to explore how a data-provider can facilitate competitive intelligence, which in turn often is aided by the use of datafication. We think this is an interesting research field since it seems that competitive intelligence can sustain the advantage and make it timeless, which competitive advantage cannot. Moreover, the aspect of including a data-provider embraces how the difficulties of collecting, analyzing and implementing the data can be managed by a third-party instead of the organization itself.

Analytical framework

The following section will define our limited research domain and establish our main focus. Consequently, we will present terms, theories and models that we are going to apply in the

analysis. The analytical framework will start by drawing attention towards the nine forces as it will be used to define how competitive advantage is gained by collecting concrete information based on the competitiveness of an industry. Lastly, the generic intelligence cycle will be applied in the second part of the analysis, in order for us to analyze where the distinction between a data-provider and an insight-provider is. Moreover, it will illustrate the process of Meltwater and how this process can facilitate elements competitive intelligence instead of only facilitating competitive advantage.

The Nine Forces

The nine forces is very significant for our research since it enable us to investigate how organizations can gain information on the forces as an ongoing process through the use of data. When an organization wants to innovate and stand out, in order to be as competitive as possible, many factors are at play, and many different models of analysis can be examined. From an academic point of view, models such as Porter's five forces and STEEP/PEST which in correlation creates the nine forces by Fleisher & Bensoussan (2009), can be significant models that allows an organization to interpret and identify the organization's competitive environment and where the organization stands contradictory to its competitors. Competitive advantage is not only gained by applying one or two models, competitive advantage can also be analyzed in numerous ways and from many different perspectives. Through the application of the nine forces, we have the possibility of analyzing how an organization can gain competitive advantage, through the use of the nine forces since it determines the competitiveness of an industry.

In order for us to make an analysis on the implications that data can have on business competitiveness through industry analysis. We have drawn the attention towards the framework of the nine forces by Fleisher & Bensoussan (2007). Before going into detail with the applied model, and its origin in other models we would like to stress the notion that these models is made as an application to the organization. Since these frameworks can illuminate the attractiveness of an industry, and how the firm best can compete within the given industry based on the environment (Fleisher & Bensoussan, 2007). In this use of the particular framework we would like to examine the phenomenon of how data can act as a prerequisite for competitive advantage. Moreover, we argue that a distinction between data and datafication can be made. Since the

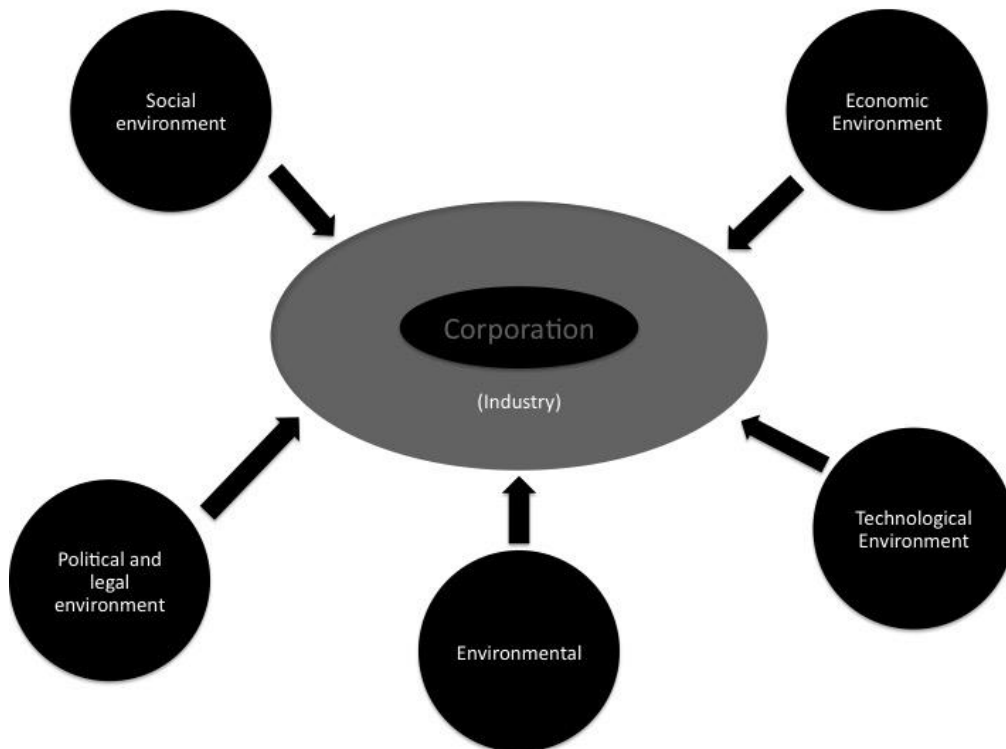
application of gathering data based on the nine forces only can generate competitive advantage whereas datafication may be a prerequisite for gaining competitive intelligence.

The nine forces “... provides a structured and systematic approach to the identification and analysis of relevant trends, events, and the influence and/or impact of each of the nine forces not only within themselves but across the other factors” (Fleisher & Bensoussan, 2007). The model of the nine forces is based on the STEEP/PEST analysis, which is used as a strategic analysis of the environment – followed by Porter’s Five Forces industry analysis model, in which it combines and creates “... a more holistic perspective on a firm’s competitiveness” (Fleisher & Bensoussan, 2007). Meaning that the model should provide a full scalable analysis of the industry environment and the competitiveness of the given industry. In the following we will address both frameworks that accounts for the nine forces since it will make a solid groundwork and point out how many perspectives and factors that are in play when looking at the nine forces. We will start with the STEEP/PEST factors, moving on to Porter’s value chain analysis and his five forces model, and lastly summon these two models into the nine forces model, which then will be the applied forces in the analysis to follow.

STEPP/PEST Factors

The STEEP/PEST factors offers insights on the broad scope of a firm’s industry environment, in which the factors can have “... long-term implications for managers firms, and strategies” (Fleisher & Bensoussan, 2007). These factors goes beyond what can be considered to be ‘controllable’ for a firm, as they represent the general environment in which a firm operates, which also means that all factors is operational across national, international, geographical, and time. Following is an examination of the factors, and the meaning of what each factor holds. (See appendix A.)

The Political/Legal factor relates to governmental implications that an organization needs to take into consideration in order to be as competitive as possible. The reason for this argument is that without having any insights on political aspects, laws, legislations, and public attitudes, these factors can have crucial impact they need to consider in their strategy development process (Fleisher & Bensoussan, 2007). These might change over time, both on a short- and long-term scale, which means that an organization needs to address the matter, and retrieving political and legal knowledge as an ongoing process.



(Appendix A. STEEP/PEST Factors)

The Economic factor covers the economical aspect of the entire society. The implications also include the impact that the global economy can have on a certain market, meaning that markets competitiveness can be determined by factors such as employment rates, inflation rates, spending patterns, spending trends, and level of income nationally as well as internationally. In order to be in control of these factors one must analyze these implications by monitoring all of these significant factors in order to forecast the sensitivity it has on the markets competitiveness (Fleisher & Bensoussan, 2007). In total, the organizations need to consider these at all times in order to find information concerning time products, prices and marketing, if they are to succeed.

The Ecological factor holds the physical and biological factors in which a firm operates. The sustainable factors of a product life cycle can be of great value to a company's competitiveness. By reviewing the global climate, organizations can draw upon these crucial factors in order to be more competitive on this specific area if compared to other companies within their industry environment (Fleisher & Bensoussan, 2007).

The Social factor consists of a large scale that can be found under the umbrella of social context, meaning that the factor includes '*... demographics, cultural attitudes, literacy rates, education levels, customers, beliefs, values, lifestyles, geographic distribution, and population mobility*' (Fleisher & Bensoussan, 2007). These factors can be of crucial value of impact to a company even though these factors do not change as fast as other factors may do. These must be addressed pending on the organization's' products, branding and industry position in order to be successful.

The Technological factor concerns how technological changes has opened new areas to commercial competition than previously seen. The technological factor can be of great impact to production, process innovation, and digital communication within the industry environment of a firm. The analytical task is then to identify and monitor technological changes so that they do not affect your competitiveness in a negative way. In fact the technological aspect should be perceived as a controllable factor in which an organization always have the possibility to take on new technological findings and turn them into an asset for the organization.

These factors help organizations to evaluate different external factors, which can have an impact on the organizations. These factors can give a detailed overview on, which external factors there exists and how they determine the trends, and what may happen in the future. These factors are crucial for an organization, but can be very difficult to figure out where to begin and how to find data concerning these factors. Therefore it is important that an organization applies digital technologies, which can gather data concerning these factors.

Consequently, it is significant that an organization measures data concerning the above mentioned factors in order to gain a competitive advantage.

In correlation to the STEEP/PEST factors the operating environment considers the competitiveness of the market, meaning that customers, suppliers, and competitors are analyzed as they can have immediate impact on the firm on a managerial level (Fleisher & Bensoussan, 2007). This does not mean that the above mentioned factors cannot hold an immediate impact, the difference is found in the customers, suppliers, and competitors, who often are of closer relation than the above mentioned factors and should be viewed thereafter. It is important for an organization to be aware of the operating environment since it is necessary to assess the interrelationship between the different factors in order to gain competitive intelligence based on data.

The *customer component* holds every aspect of possible buyers within the sales process of a given product. Hence the customer can be retailers, wholesalers, distributors, and end consumers. The *customer component* describe the characteristics of all these *customer-component* within the operating environment, which means that an analysis of such should include every aspect of such, or be concrete in which customer one wish to analyze.

The *supplier component* refers to resources that the firm needs in order to produce services and or goods. This means that organizations needs to be of industrial knowledge concerning aspects such as quality materials, commodities, material accessibilities, and the laws and legislations of such components. The supplier component is a large component in which one easily can lose the larger picture of not managed correctly.

The last of the components in the operating environment, is the competitor component, which consists of the rivals within the operating market that a firm must take into consideration in order to develop an effective strategy. The analysis of such should include strengths, weaknesses, and capabilities of the competitors in order to predict their worth and strategies in order to overcome those measures if they want to succeed (Fleisher & Bensoussan, 2007). Consequently, a company needs to consider these aspects since it will enable them to make better decisions based on data concerning factors and aspects from a STEEP/PEST analysis.

Internal Environment

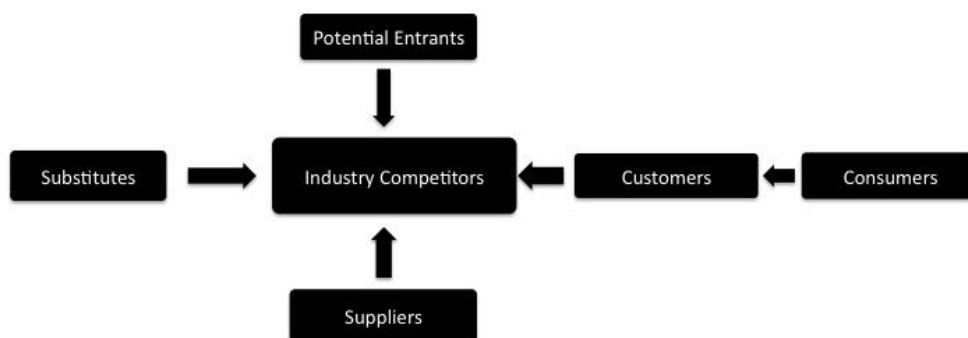
The nine forces takes the operating environment into consideration in the analysis. The same applies to the internal environment of an organization since this is also taken into consideration. This means that an organization must analyze the core competencies of the firm in order to strengthen and nurture the competencies of which an organization is built upon. This also stress the notion of how to be competitive on a higher level, since all of these factors must be included, both internal and external factors are important to be aware of when wanting to gain competitive intelligence. Fleisher & Bensoussan (2007) argues that in order to fully understand these implications, one can with benefit apply the notions of Michael Porter's value chain analysis that helps identify internal core competencies, which will be applied in the following analysis to illuminate how external data can be of use to otherwise internal matters that organizations otherwise would find solutions to from the the data inside the firewall so to speak.

Strategic Rationale Implications

This component of The Nine Forces address the notion that; “... *effective strategic management is about making organizational decisions that correspond positively with the entire business environment*” (Fleisher & Bensoussan, 2007). This means that a firm must be able to shape the environment to its advantage, as well as it will have to adapt and react to their industry environment in ways that disadvantage the organization less than the their competitors (Fleisher & Bensoussan, 2007). This means that organizations must always strategize accordingly to the industry if they are to succeed. This strategizing will be optimized if there is a large amount of data that can support and guide the organization and enable it to make the right choices and decisions based on actionable information. The key purpose of the nine forces model is then to provide a holistic insight to accurate and objective decisions that are in respondents with the core business strategy and the environment. The nine forces goes beyond current activities and address the long-term as well as short-term issues.

Porter’s Five Forces – A generic framework of industry analysis

The role of Porter’s Five Forces model within this perspective as a part of the nine forces is that “... *combining the broader business environment with Porter’s Five Forces the technique enables the analyst to identify and analyze those major forces that will influence an industry’s profit potential*” (Fleisher & Bensoussan, 2007).

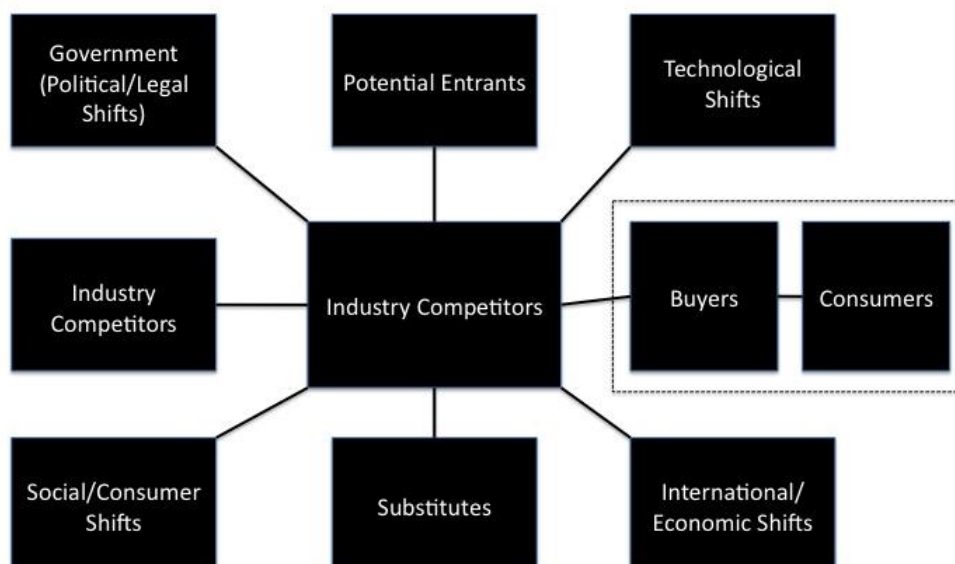


(Appendix B. Porter’s Five Forces Model)

Within the nine forces an organization can address the five forces as followed: (1) *Threat of New Entrants*, which concerns the fact that low competitor rate within the industry might result in new company entrants, which affect the industry profitability. (2) *Bargaining Power of Suppliers*, which

are the influence that the suppliers has on the availability, cost and quality of the organization's materials within the industry. (3) *Bargaining Power of Buyers*, which is the major power that buyers have in which they can force down prices by turning towards competitors due to quality or price. (4) *Threat of Substitutes Products or Services*, which shortly can be described as new competitors/market entrants, and the risk of them acting as a replacement to a firm's product and market possession. (5) *Rivalry Among Existing Competitors*, which is described as the intensity of the competition of the given market. This force is set to be the most influential force throughout the five forces (Fleisher & Bensoussan, 2007).

The total of the forces throughout these models offer an analytical technique that "... *delivers a unique combination of insights that are not apparent when doing either of these analytical techniques in isolation*" (Fleisher & Bensoussan, 2007).



(Appendix C. The Nine Forces Model)

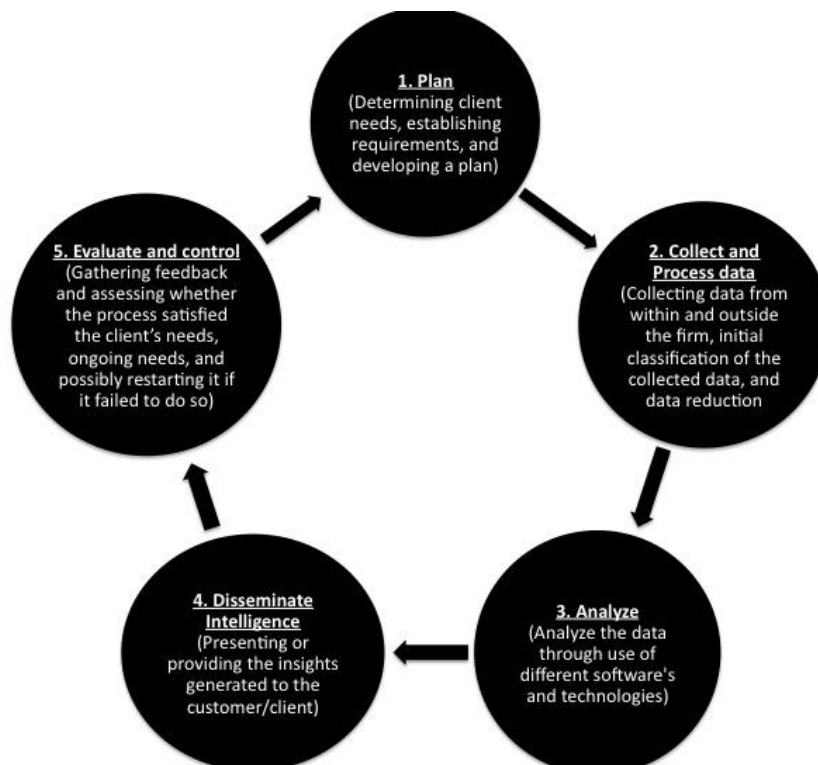
The research at hand wish to illuminate whether one can use data as the phenomenon and mediator in order to answer questions such as '*how attractive is the industry*', and '*how can your firm best compete*', which is the question that the nine forces should enable. The illumination of such will be analyzed in our analysis, in which we will departure from the analytical framework and

apply the nine forces to the already existing processes of Meltwater in order to detect how competitive advantage can be gained by collecting data concerning the nine forces. Finally, the nine forces enables some sort of a guidance for an organization. The framework shows, which factors and aspects that is significant and crucial to detect if the organization wants to gain competitive advantage. Moreover, it is important that all of these factors and aspects are datafied in order for a company to measure and act on the information presented before them.

In total the STEEP/PEST and Porter's five forces model creates the model of the nine forces presented in the figure above. The forces and components covers the total of the two models, and rearrange them in such a manner that takes the considerations of both models into aspect in its analysis (Fleisher & Bensoussan, 2007). The model then covers all the aspects that determines the competitiveness of an industry, in which organizations need to consider, if they want to gain competitive advantage.

The generic intelligence cycle

The generic intelligence cycle, which is presented by Fleisher & Bensoussan (2007) describe the functions of an intelligent operation. The first phase (1) is planning/identifying competitive intelligence needs; the second is (2) data collection; the third is (3) organization and analysis; and the fourth phase is (4) dissemination and the last phase is (5) evaluate and control.



(Appendix D. The Generic Intelligence Cycle)

Competitive intelligence shall not be seen as something linear rather it is a series of loops both within and between each phase presented above. This intelligence process is ongoing (Prescott, 1999). Furthermore, each step is very self-explanatory.

The first step concerns planning and direction of where the focus should be concentrated. In this phase an organization discover and hone intelligence needs. The second step is to collect activities, which normally will concern external events and trends, with a strong focus on competitors' activities and likely intentions (Miller, 2001). The third step is very important since this is where the raw data is transformed into actionable intelligence. The raw data can be everything from a collection of facts, figures to statistics relating to business operations. The actionable intelligence is data that is organized and interpreted to reveal underlying patterns, trends and interrelationships (Miller, 2001); *"... data thus transformed can be applied to analytical tasks and decision making, which forms the basis for strategic management"* (Miller, 2001). This stage is where the collected data is transformed into intelligence through data analysis. Here all the conclusions are drawn based on the gathered information (Prescott, 1999). The fourth step, dissemination is where the findings is presented to the decision makers, which can be a key thrust of the competitive intelligence cycle, if the provider is facilitating this process since they might have some insight to add. Lastly, the fifth step concerns feedback, where all of the responses and needs for the decision-makers is taken into account in order to have a continued intelligence.

The intelligence cycle contains all of the elements required to produce actionable competitive intelligence (Prescott, 1999). It is important to notice that the process is intuitively simple, but the operation is often really complex. Again, it is significant to notice that the process is really dynamic and interactive, since feedback and updates are adjusted throughout the intelligence cycle (Prescott, 1999). Moreover, competitive intelligence allows organizations to anticipate market developments instead of only trying to react to them (Miller, 2001). This anticipation is due to foreknowledge that the intelligent data provided the organization with.

Methodology

This part of the paper will introduce the methods used when collecting data of this research study. This means that we will illuminate the notions of our research paradigm in order to take a stand on how we construct our reality of research. Then we will present our research strategy, which will be followed by the research design that connects the empirical data to the research question at hand. This will lead to the sampling rationale of our research, which will be followed by the data collection methods applied to the research. Endingly it culminate into an illumination of the data analysis methods, and the quality criteria of the above mentioned methods applied throughout the research study. By doing so, we will draw upon Yin (2009), and his notions concerning case study research throughout this part of the thesis.

Research paradigm

As for the research paradigm we aim to explore a gap that has not yet been clarified. Throughout our research we seek to gain new insight concerning how to facilitate competitive intelligence, which can be argued to be our hypothesis. Since the hypothesis is to be explored throughout our research, we argue that we have taken an exploratory research into application. The exploratory research allow us to explore our hypothesis without any restrictions we may came across throughout our research, which aligns with the fact that we do not wish to test a hypothesis, we wish to learn what is going on through exploration of our hypothesis. We do so by exploring the field of competitive intelligence and the facilitation thereof.

We can therefore conclude that this is an explorative case study, since it could have been interpreted in numerous ways depending on social construction of the findings (Yin, 2009). In the field of social constructivism, Gergen (2009) stress the importance of being aware that the environment in which we operate will affect our way of perceiving the world. When we for instance think that something is obvious, others might not share the same understanding, as Gergen (2009) states “... *we each have our own private and personal experience of the world*”. Despite the fact, that we strive to stay as objective as possible, when collecting research data, we have interpreted our data through our own social construction. Thus, we are aware of the fact that our findings, analysis and conclusion(s) are creations from our own personal interpretations, though it may differ from how other researchers and readers interpret our findings. It could be

argued that since datafication towards competitive intelligence is our research topic, our research paradigm should be rooted in positivism, since data should provide valid knowledge through the logics of data. We have concluded that data easily can be interpreted to one's personal construction of meaning, and therefore take the stand of interpretivists throughout this research study. As interpretivists we aim to interpret our research towards the social construction of our real-life phenomenon i.e the case study. We do so alongside our own interpretations, as we explore what is going on through the application of the case study and the theories applied throughout our thesis.

Research strategy

As for our research strategy, we have adopted a single case study. A single case study is used when researchers such as ourselves needs to answer a research question that is formed through a how or why question (Yin, 2009).

In this specific research, the research question wish to explore how data-providers can facilitate competitive intelligence. More so, case study's does not require any control control over behavioural events (Yin, 2009). Meaning that we as researchers merely wish to explore the events, but does not need control over them to so. Concerning these events, Yin (2009) stress that a case study research focus contemporary events (Yin, 2009). As our research seek to explore and challenge the contemporaneity of competitive advantage, we explore the field datafication and competitive intelligence. Concepts that are more contemporary than the concept of competitive advantage. By addressing these concepts, we turn the focus to a case company who can facilitate exploration of these concepts, as they themselves operate within the field of data and datafication, which then Meltwater can be considered a contemporary event. Meltwater can be considered a contemporary event since they are hired to execute some sort of project/process, which means that it is only contemporary and not ongoing. Therefore we conclude that our research focus on contemporary events, just as Yin (2009) describes that a research study does.

In this case we wish to explore these concepts through the application of the case study. Therefore we apply a holistic embedded case study, as we seek to explore the holistic aspect of our research in order to fully explore our assumptions, that in the end will allow for interpretive conclusions. We do so, as we cannot extract the phenomenon i.e. case study that we are

interested in from its nature, but can elaborate on the possibilities of the case study through our theoretical concepts. The sole argument for our application of a case study is that we “... *deliberately want to cover contextual conditions - believing that they might be highly pertinent to our phenomenon of study*” (Yin, 2009). Based on this notion and the other remarks, we conclude that the application of case study is the best strategy for us to draw upon. The advantage for us it, that with a case study as our research design, we will be able to focus on a definite and interesting case, such as Meltwater and explore how they may enable elements of competitive intelligence.

The reason for exploratory research is that it helps us answer the “*how*” in our research question, in which the “*how*” can serve as the exploratory link that enable us to explore the field of interest (Yin, 2009). The reason for a case study in this specific research is that “... *the case study method allows investigations to retain the holistic and meaningful characteristics of real-life events - such as individual life cycles, organizational and managerial processes, neighborhood change, international relations, and the maturation of industries*” (Yin, 2009). Since we, as investigators, wish to make holistic meaning of real-life events such as organizational processes, that can be of correlation to our theoretical assumptions concerning the research, we applied the case study as research strategy.

We, as investigators, wish to make holistic meaning of real-life events. Therefore, this can be in correlation with our theoretical assumptions concerning the research. Consequently, we applied the case study as research strategy, since we wanted to illustrate a particular real life situation from the business world. Moreover, it enabled us to narrow down a very broad field of research, that is the research of data and competitiveness, into one more specific and researchable topic. Furthermore, a case study can give indications and allow researchers for further elaboration on this specific case study. Consequently, we concluded that the use of a case study would empower our thesis with best answers towards our research question and sub question.

Research design

A research design is in short described as “... *the logic that links the data to be collected (and the conclusion to be drawn)*” (Yin, 2009). Yin (2009) stress the notion that when doing case studies, there are five components that are especially important to a research design. The first, (1) which is

the *study question*/research question. In our case it is the “*how*” that is important, since it clarifies the initial task, which is to explore our research question. Secondly (2) is the *study proposition*, which “... *directs attention to something that should be examined within the scope of study*” (Yin, 2009). As the scope of our study is to explore whether a data-provider can facilitate competitive intelligence, we examine Meltwater as a case study through notions of the concepts competitive advantage, datafication and competitive intelligence. As for *the unit of analysis* (3), which should lead to “... *favoring one unit of analysis over another*” (Yin, 2009), we favour the concepts of datafication, competitive advantage and competitive intelligence. We do so, because we wish to explore how data-providers can facilitate competitive intelligence. In order to do so, we came to the conclusion that competitive intelligence derives from competitive advantage. And as we concluded that datafication is the sole enabler for competitive intelligence, we deem these units to be favored over others, as they have now been proven to be the relevant units of analysis in our thesis. *Linking data to propositions* (4), is concerned with the fact that these “... *components should foreshadow the data analysis steps in case study research and research design should lay solid foundation for this analysis*” (Yin, 2009).

We hereby shortly present the data analysis steps for our analysis. The semi-structured interviews were conducted as a qualitative research method in order to gain exploratory data from specific real life context i.e. the case company Meltwater. More so, we conducted observations in order to gain a client perspective on the data delivered, and the sense the data and visuals could bring to the clients. We conducted a questionnaire with 39 clients as a step towards testing the notions broad forward by the experts from Meltwater applied in the semi-structured interviews. And lastly, we applied articles and other written material concerning our case company in order to find information that let towards a final understanding of the case company applied. *The criteria for interpreting a study's findings* (5), concerns with how well the data pattern match with the interpretation of the study's findings (Yin, 2009). Yin (2009) argues that there is “... *no precise way of setting the criteria for interpreting these types of findings*” (Yin, 2009). The fourth notion concerning our our data, can be also be viewed as mixed-method of data collection method, that we will be thoroughly examined in the sampling unit of data collection.

The research design is then designed around an abductive reasoning, since we ask the question *how can an data-provider facilitate competitive intelligence*, in which we had the assumption that a data-provider can facilitate competitive intelligence. The abductive reasoning is the common research approach concerning social studies (Baikie, 2007). The abductive reasoning seeks “... to describe and understand social life in terms of social actors’ motives and understanding” (Blaikie, 2007). Moreover, we conducted an abductive reasoning since we had assumptions and theories to begin with. In the beginning we had some specific assumptions that we went through circles of explanation around our specific assumptions. Furthermore, we do not believe that there exist one solute and best explanation, thus the abductive reasoning examine the next best explanation, which also is illustrated throughout our thesis. Consequently, we believe that by drawing upon the abductive reasoning we were enabled to go through cycles of explanations that provided us with logics to learn something new we did not know from the beginning. Ultimately, the goal of abductive reasoning is to illustrate the next best explanation since there is no such thing as the absolute truth (Blaikie, 2007).

The notion correlates with our research, as we wish to examine the social life and to get a clearer understanding of a data-provider in order to answer whether a data-provider can facilitate competitive intelligence.

Sampling rationale

The sampling rationale of the research was that we had to include methods that allowed for the qualitative data to be exploratory as possible. More so. we had to collect data that would challenge the qualitative data.

In order for us to gain information about data-providers, we turned to one of the authors of this paper, Laurits L. Larsen, who works for one of the world's’ leading data-provider companies, Meltwater. This was an easy choice of rationale, since this gave us the opportunity to gain insights from a data-provider. We purposefully selected three interviewees who were employed at Meltwater. The rationale of choosing them was due to their seniority at Meltwater, which would allow us to receive experienced information concerning our field of research. We conducted a questionnaire with 39 Meltwater clients. The rationale was to gain real-life client insights

concerning the advantages of applying data-providers such as Meltwater. Moreover we held five observations sessions with Meltwater account managers and their clients. This allowed us to collect data concerning the sense-making part of the data that Meltwater provides to their clients, and how the data is perceived from a client perspective. In summary, the best choice of case company was Meltwater due to easy access and the possibility of gathering and collecting data.

Sampling unit of data collection

Interviews

As Laurits L. Larsen, one of the authors of this thesis, is currently working at Meltwater Denmark we had full access to the employees at Meltwater. We conducted semi-structured interviews as a data collection method since it would provide us with primary and exploratory data and information we needed. The sampling rationale for choosing to conduct semi-structured interviews allowed us to explore subjects throughout the interviews and ask probing questions, if we needed to be more thorough or dig deeper into a given topic throughout the interviews. In order for us to gain as much information from the employees' of Meltwater as possible, we knew that *standardized interviews* would not help us in this case. Due to the fact that this method do not allow the interviewees' to elaborate on findings that occur during the interview. We did not create a specific research question before conducting the interviews. We only decided upon our research domain, consisting of four themes in which we included them in our interview questions. We conducted the interviews in such a manner that it would look like a conversation travelling through our intended subjects instead of a very specific and concrete interview only surrounding the research question. Consequently, the form of *semi-structured interviews* allows the interviewer to "... have a list of themes of themes and questions to be covered" (Saunders, et al. 2009). Therefore, we were aware of, which form all of the three interviews were to be conducted in. We stated in our sampling rationale that we choose three employees due to seniority. Moreover Laurits L. Larsen knew that there recently had been a large replacement of staff, meaning that many employees have not worked at Meltwater for more than six to nine months. Through our sampling rationale of seniority we knew we would have the most reflective employees, due to their amount of experience. The interviewees are all employees who had been

employed at Meltwater the longest. Therefore, we knew that they had an in-depth understanding of data, and were opinionated towards the use of data, and what data can bring to the table for businesses. Moreover, we were also aware of that all the interviewees, due to their long period of working with data and data products, had knowledge on the subject at hand, and could share valuable insights to our research field, which would be beneficial to our study.

Consequently, we ended up with choosing three employees, who had worked for Meltwater in a period from three up to nine years;

- Simon Ernst-Sunne, Managing Director, Client Success (Retention), 3 years and 6 months
- Christian Thorsø Pedersen, Managing Director, Client Acquisition (Sales), 3 years and 2 months
- Dennis Mølgaard, Senior Business Development Executive, Client Success (Corporate Sales), 8 years and 5 months

Furthermore, Saunders et al., (2009) stress that *"... managers are more likely to agree to be interviewed, rather than complete a questionnaire, especially where the interview topic is seen to be interesting and relevant to their current work"*, as it *"... provides them with an opportunity to reflect on events without needing to write anything down"* (Saunders, et al., 2009). Which means that these might have seen the interview as being beneficial to themselves, as it allows them to reflect upon their field of work.

Following, we will elaborate on the notion of why we chose each participant for the interviews. Simon Ernst-Sunne is a managing director of the client success department at Meltwater. The goal of the department is to retain existing clients, and prevent them from churning. Moreover Simon Ernst-Sunne ensures that the account managers upsell the existing clients, so that the contracts have a higher monthly recurring revenue (MRR), and the total portfolio grows in revenue. The reason for choosing Simon Ernst-Sunne as a participant to our interviews is due to his role since he support account managers in their interaction with clients in every way possible. He has the knowledge of best practices in upsale situations, contractual negotiations, and in-depth knowhow of the Meltwater platform. This means that Simon Ernst-Sunne can provide us with information concerning the interactions between Meltwater and their clients. These interactions can for

example concern the use of Meltwater data, insights to how different businesses draw upon data, and the outcome that clients receive through this data. Consequently, we believe that this interviewee containing such an amount of knowledge concerning clients, can prove to be very beneficial to our study.

Christian Thorsø Pedersen is managing director of the client acquisition department at Meltwater. The goal of the department is to acquire new clients to the Meltwater portfolio. The reason for choosing Christian Thorsø Pedersen as a participant to our interviews is that Christian has a proven track record of acquiring clients to the Meltwater portfolio. This means that Christian has gained a large level of knowledge concerning, what makes clients see the light in data, and the advantages that such data bring to their business. That means that he may be able to provide us with information answering the question of why external data has become such an important aspect in the business industry. Christian Thorsø Pedersen also supports and manages the sales managers in the client acquisition department, which means that he is aware of ongoing trends concerning data and data needs with the client. Consequently, this can help us to illuminate the importance of certain data sets compared to others, since a data-provider needs to be aware of, where to search for gather and what data to collect.

Dennis Mølgaard is senior business development executive within the client success department at Meltwater. The underlying meaning of the title is that Dennis Mølgaard manages all larger growth case. Larger clients such as Maersk, Lego, Søstrene Grene, Saxo Bank and LEO Pharma, they all might have Meltwater incorporated in one of their departments. Therefore, the need for data provided by Meltwater may be just as beneficial in other departments throughout the organisation. Dennis Mølgaard has the responsibility, with the account managers, to illuminate the possibilities of such, and ensuring Meltwater is incorporated throughout an organisation, which can create large upsales and total portfolio revenue growth. The reason for choosing Dennis Mølgaard as a participant to our interviews is that he may be able to provide us with information concerning how broad the kind of data that Meltwater delivers can be used across an entire organisation. Furthermore, he has more than eight years of experience working with data at Meltwater, so he can also provide insights concerning how the world of data has changed

throughout the years. Moreover, he can explain what kind of data that were significant eight years ago, as opposed to now.

Observations

In order to fully understand the possibilities and opportunities of the Meltwater platform, and thereby the possibilities of external data-gathering and the presentation thereof, we turned to Meltwater. They allowed us to do observations by being a participants of five online meetings with current clients. At the online meetings we would only be listeners to the conversation between the Meltwater account managers and the clients. Moreover we would be spectators to the presentation of the platform through the use of screen-sharing system (Join.me), that allows the clients to see the account manager's screen throughout the presentation. This means that during the observations we would act as complete observers as "*... we do not take part in the activities of the group [Meltwater and client]... and would not reveal the purpose of your activity to those you were observing*" (Saunders & Thornhill, 2009). Therefore, we argue that we are complete observers, since we do not reveal our purpose for the clients, when participating in the online meeting. Thus, the clients were not aware of our existence or purpose at all.

The data collection method as *complete observers* was collected by noting "*... statements by observers of what happened or what was said... and involves those observers' interpretations*" (Saunders & Thornhill, 2009). Through every online meeting, we both listened, and wrote down what happened through the meeting. More significantly, participation lead us to an understanding of how a data-provider works and presents data. Moreover, we also detected data possibilities that external data-providers can facilitate for clients.

Consequently, we wrote all of our interpretations from the observations down (appendix K). These interpretations and experience from being a part of an online meeting enabled us to be more aware of the presentation process of Meltwater.

Through the observations we came across two different aspects of bias that could have consequential to our research. A bias is present due to the fact that Laurits L. Larsen work for Meltwater. He has had numerous online meetings with clients concerning the platform and more. This could lead to an observer bias, as he would not be as exploratory in his notes and

interpretations. The solutions to overcome Laurits' observer bias were that Celina and Laurits both participated as complete observers. Thus the data collection method gave the possibility to compare notes and ensure tacit knowledge from Laurits working inside the organization was overcome.

Pre-interviews and Observations

Appropriateness of Location

As for the setting of the interviews and observations, we were aware of that *"... you should choose a location which is convenient for your participants, where they feel comfortable and where the interview is unlikely to be disturbed"* (Saunders, et al. p. 329, 2009). In order for the interviewees to be as convenient and comfortable as possible we chose to conduct the interviews and observations at the Meltwater Copenhagen office. By doing so, we ensured that the interviewees and participants in our observations did not have to go anywhere, and that they knew their surroundings, and only had to focus on the interview at hand. We chose to conduct the interviews in the conference room that was farthest away from other Meltwater personnel. The reason for doing so, is that since we have chosen to interview only managers, we figured that an interview lasting between 30-45 minutes might have the risk of being interrupted from other employees' needing their management in order to take decisions. Another advantage to this point is that the managers, with the distance in mind, may feel that the interview is a break from their work day where they can talk freely about something that interest them without being interrupted. We chose to do the observations where the respective account managers are placed at the office, in order for them to have participaters to their online meeting as convenient as possible.

A few days before the interviews were to take place, we sended an email to each participant, providing them with the list of themes we wished to go through under the interview. We did this, since it can create a certain amount of credibility towards the interviews *as "... providing participants with a list of the interview themes before the event, where this is appropriate, should help this (credibility)"* (Saunders et al. 2009). Moreover, the interviewees had wished for one or two questions from each theme to understand what kind of questions they were going to be

asked. We provided them with the questions, so that they feel as comfortable as possible before the interviews and could prepare themselves for the interviews. Though we also highlighted that the interviews were to be an open conversation regarding the interview topics, which would allow them to be as elaborate and descriptive as possible. More so, it also empowered us to dig deeper into each topic if there was a need for this. This also seemed sedative to the interviewees' since they did not feel any pressure since they knew the truth and that there existed no right or wrong answer.

The four subjects for the interviews were (1) *data as competitive advantage/intelligence*, (2) *good and bad case examples of data use in businesses*, (3) *tacit and explicit knowledge* and (4) *formation of strategy through data*. These four topics were chosen based on our domain of interest for this thesis. We wanted to gain information about these four themes since these themes could illuminate information in regard to our field of research. The first topic would direct us towards whether a data-provider can facilitate competitive advantage or intelligence. The second topic could provide information concerning assignments that Meltwater had executed, positive and negative cases about using a data-provider. The third subject, concerned whether the information provided by Meltwater were easy obtainable and easy to take make sense of. And fourth, if the information delivered by Meltwater were provided in such a manner that allows for better strategizing and decision-making. All of these themes is linked to our domain of research that endingly lead to our research question and sub-questions.

Throughout the interviews it became clear to us that our focus of research shifted a bit since new information became available to us. All the new information has transformed and modified our point of departure for this paper since it also became more clear to us what the desired theme of the paper was going to be and how we could examine these new domains through questionnaires and other academic articles.

Moreover, we executed the interviews in Danish as it is the native language of both interviewers and interviewees. The reason for doing so, is that by having the interviews in native language, it is more likely that the interviewees share information, as they are not challenged by using another language, which makes the flow of the conversation more fluent and smooth. Moreover, we

created a safe environment for the interviewees' to express themselves in. It makes them feel more comfortable talking their native language instead of speaking a different language where they might not get every single detail, since they do not feel completely comfortable with speaking another language than their own. Another important notion, is the fact that we took the aspect of social constructivism into consideration when gathering our qualitative data. The constructivist movement is "... centrally concerned with the way in which the world is constructed or construed by individual minds" (Gergen et al., 2009). This means that actions are not based on the way the world is, but on the meaning it has for a particular individual. In this case it means that we, as researchers, need to understand the fact, the participants in the interviews might have constructed another reality of the data within their individual minds contrary to how we interpret the meaning of the provided data. This means that we can never detect a true common reality of what we talk about in specifics, but what we can do is that we can *negotiate a common reality* (Gergen et al. 2009). Thus, we were very focused that before the interviews it was significant to create common grounds and negotiate all the terms, since they may be interpreted differently or be misunderstood. By doing so, we help form the actions before the interviews. We did so by emailing the themes of the interview and the interview questions. Moreover, we wanted the location to be informal and a comfortable setting for our participants, ensuring that any interrupting throughout the interview would not happen. Furthermore, we were very certain of explaining the meaning and the purpose of the interviews. We did so by opening the interviews with a statement of what our field of research were, and what we wish to explore in the interviews. Consequently, we tried to create a joint understanding of the conversation at hand in order to ensure a common reality during the interviews. Consequently, we tried our best to understand how each interviewee thought and why they explained as they did. It was important to ask probing questions in order to gain even further and a deeper understanding of why the interviewees' stated as they did and how they interpreted each and every question. Lastly, we were also very concerning of creating common understandings and aligning cognitive and a shared vocabulary with each and every interviewee.

During the interview

Theme Topic and Interview Method

Before each interview we discussed and conducted a strategy towards how the interviews should be executed and how the two of us should act during each interview. In order for the interviewees to feel as comfortable as possible during the interviews, we started off with a brief conversation about our field of research, and what we wish to explore throughout the interview. We did so because we knew that *"... interviewees often has some uncertainties about sharing information, and about the manner in which these data may be used"* (Saunders, et al. 2009). By sending the explained emails to our participants, and due to the brief introduction, we provided the interviewees with concrete information concerning the interviews. Moreover, we tried to create an informal atmosphere and we were eager to make the interviewees feel safe, hence we ensured that the shared information at the interviews were going to be confidential and only used for the thesis.

Another part of our conducting interview strategy we chose specific interview roles for each of us since it creates more structure and prevent any messiness or confusing acts during the interview. Thus we chose Laurits as the main interviewer since he interacts with his managers on a daily basis therefore he has a common understanding and shares the same "Meltwater vocabulary". Moreover, the interviewees knows Laurits, which may create more safe interview thus they might be more willing to share confidential and descriptive information with someone they know instead of an unknown student as Celina. Therefore, by choosing Laurits as the main interviewer, we hoped for an informal conversation between two colleagues.

Moreover, the chosen topics for the interviews all is subjects that is close to their jobs, which makes them the experts and again creates an informal atmosphere and a place where they are in command since they know more about this than us. A more negative perspective of choosing this strategy is that even though our interviewees might feel comfortable talking to Laurits, they also might feel too comfortable and the conversation then turns into be very private, which can result in lost information due to an internally understanding. The interviewees may feel that Laurits knows about this and therefore exclude some information that would have been valuable for Celina to be aware of. We overcame this by having Celina functioning as a co-interviewer, who

throughout the interviews asked follow-up and probing questions if there was something that might get too internal or if she felt that the conversation lacked information on certain topics, or if the conversation made a turn into something irrelevant regarding our thesis. Furthermore, it also ensured that at the end of every interview Celina asked concrete questions concerning untouched topics or if the interviewees had anything to add.

After the interviews, all participants seemed quite pleased with how the interviews went by. Furthermore, they all provided us with links to articles in Danish newspapers, which showed how businesses had used Meltwater in stressful situations, where the Meltwater platform served as solution to a problem. These articles were used by us in order to get a deeper understanding of what Meltwater is doing, very specifically in these cases.

All interviews were recorded, and the recorder were tested before the interviews to ensure that we could hear and understand everything throughout the interview. Endingly, we transcribed the interviews in order to prevent any loss of information. Furthermore the transcription allowed us to understand the interviews on another level since listening is one thing whereas writing and reading the interviews can give us a more thoroughly understanding of each statement in the interviews. After doing so, we had to find a way for us to validate the information we gained from these interviews. We did not want to interview more employees of Meltwater, as we knew that these employees were the ones with the highest level of seniority. Moreover we felt the need, not to look at another company, who works with data differently. Therefore, we turned the focus towards the clients of Meltwater, since they has used the provided data. By doing so, we tried to validate the answers provided by the interviewees since we tried to incorporate the questions and answers from the interviewees into our questionnaire.

Questionnaire

In order to get more into depth we wanted to follow up on our interviews and see if the clients says the same as the managers of Meltwater do. Therefore, we chose to create a questionnaire that were sent out to 80 clients personally by each of the managers. We chose to send out an internet-mediated questionnaire by personal emails since we hoped to get a broad range of answers in order to support our qualitative data with quantitative data. Ten account managers of

Meltwater where to choose between ten and fifteen clients each, and send out the questionnaire to that specific field of clients. It was important that the account managers had a good connection to the clients in order to get a high response rate. This way of conducting and dispatch the questionnaire made it beneficial for both us and Meltwater, since they had an enormous interest in getting to know their clients even more and found this questionnaire to be a great opportunity to do exactly that. Consequently, it made the questionnaire easy to dispatch, since Meltwater also had a stake in the distribution and not only us as researchers. We agreed upon that the account managers could add questions in order for the questionnaire to be relevant for Meltwater as well. Luckily the account managers did not have anything to add concerning the questionnaire, which made the process of the questionnaire easier than expected.

The rationale for conducting a specific internet-mediated questionnaire is that the attributes of this form of questionnaire can serve as broader perspective on for the already gathered data from the interviews and the observation. After the interviews were conducted, we went through the questions to find patterns within the responses from the managers in order to see whether there was something we wished to expand on or get into more depth with. We rapidly realized that the managers of Meltwater highlighted the success of using data provided by Meltwater, and illuminated the reasons for using such data in the first place. We purposely chose to use the same four subjects as we used in the interviews since we wanted to enable a more direct match between responses in both the qualitative and quantitative data. We did so, because the four subject aligns with the data we need to answer our research question. By addressing the notions of competitiveness, alongside the notions of data we had data that addressed the hypothesis in our research question. Moreover, we took the answers provided by the managers and translated them into concrete questions for the questionnaire. Therefore, this use of responses from the interviews made it possible to use this questionnaire to serve as a validation and challenge the content of the interviews. That also means that outcome of the questionnaire should rather be to investigative questions rather than exploratory questions (Saunders et al. 2009). Consequently, this use of the interview responses directed us on how to create a general structure and form of the questionnaire.

Since the questionnaire should serve as a form of challenging data of our interviews and observations, we came to the conclusion that the design of the questionnaire should be based on rating questions, since *"... rating questions are often used to collect opinion data"* (Saunders et al., 2009). Consequently, we wanted our participants to be opinionated towards the statements we bring throughout the questionnaire. One can also refer to the rating questions as the Likert rating scale on a five-to-seven point scale (Saunders et al. 2009). The likert-style rating scale is shortly described as the *"... scale that allows the respondent to indicate how strongly she or he agrees or disagrees with with a statement"* (Saunders et al. 2009). The questions were divided into five categories, which would be the standard rating throughout the whole questionnaire concerning every single subject, statement and questions, the five ratings is; (1) *To a high extent*, (2) *to some extent*, (3) *neither/nor*, (4) *to a small extent* and (5) *to a very small extent*. These ratings allowed us to have a median, that allows respondents not to feel threatened to answer to something they have no meaning about (Saunders et al. 2009). And at the same time divide the opinions into 25 percent rating scale between the remaining four rating categories. The specific reason for the five point rating scale is that it ensures an accurate scale that does not allow for much risk of error and can be easily analyzed (Saunders et al. 2009). Where (3) neither/nor functions as a zero and each side (1-2 and 4-5) can be rated as positive and negative towards the specific question. By doing so, we could thoroughly detect the percentages of each answer, and how that aligned with the notions broad forward in the semi-structured interviews alongside our observations throughout the five online meetings. We translated the percentages of each answer so that it could be compared to the answers found in the semi-structured interviews alongside the observations from our observations.

We only have one open question throughout the entire questionnaire, which were; *What influence does data have on your organization?*

The reason for this open question is that we wanted some exploratory data provided by Meltwater clients although open questions are the most times unanswered since it is more testing than just answering questions with different possibilities of responses. Furthermore, each question had a response opportunity of *"do not know"* since the clients should have the possibility to be neutral toward each question. Finally, the questionnaire was executed in their native language, which is Danish. This was done for the same reasons as stated in the above paragraphs

concerning the interviews. The first time the questionnaire were dispatched to the clients, we received a total of 21 respondents the following four days. We planned to re-send the survey with a reminder, which ended up with 18 more respondents. A total of 39 respondents, which ended our survey rate on a total of 39 answered surveys and answering rate of 48.75 percentage.

Documents

Secondary data can be described as “... data used for a research project that were originally collected for some other purpose” (Saunders et al, 2009). Our used documents (i.e. secondary data) can be divided into different categories; (1) articles from nationwide newspapers, (2) organizational documents such as product brochures, strategy, and mission. And lastly (3) academic books and papers.

We knew that Meltwater had been mentioned as case example, of how to use data when an organisation is under attack from the media, through the example of The Copenhagen Zoo and the Marius killing. We found articles concerning the case, which illuminated other articles where Meltwater were used as a best practice of external data use when dealing with the media (link 1, 2, and 3). These articles served validity to our case, meaning that these articles highlighted the notion that business are dependent on data in order to create competitive advantage. Through these articles we came to the conclusion that our research topic was valid, due to the fact that others had found the topic of data solutions as competitive advantage interesting. The sources are nationwide newspapers, and we found the articles not be own media exposure (payed by Meltwater), but owned media exposure, which made the articles more reliable.

The organizational documents were made available to us by Meltwater as we notified them of our interest in using them as starting point into our field of research. They offered internal brochures with content concerning platform brochures, learning kits for “newbies”, and other informational documents regarding Meltwater, their mission and strategy. These documents served as knowledge for us to fully understand what kind of organization we put our lenses to, and to understand the data they were dealing with. The documents, such as sales guides, platform applications, and data possibility guides are less reliable, as they are colored by Meltwater as sender of these documents (Saunders et al, 2009). Meaning that these documents had but one job, which is to “sell” Meltwater. The implication of this was not to conclude what Meltwater

could or could not provide to their clients, but to understand the data behind these possibilities and understand the world of data. We also gained an understanding of what kind of size Meltwater was, and the possibilities that data can create, which lead towards our research subjects.

Lastly we turned towards academic books and papers, which were used as a foundation to our theoretical framework. These would firstly serve as discovery into the world of theories and academic approaches, in which we branched upon a variation of theories and aspects in order find common ground that were in alignment with our field of research and the collected primary data.

Data analysis method

The data analysis method of the data collection have been applied accordingly to both qualitative or quantitative data collection process (Saunders et al., 2009). The exploratory qualitative data collection does not allow the data to be divided into accountable sub-divisions as easily as the quantitative data we have collected. Though we divided the data into the four different sub categories in order to illuminate whether the answers from each category stood in alignment with each other.

Difference between qualitative and quantitative data

Before analyzing our collected data it significant to be aware of the distinction between qualitative and quantitative data (Saunders et al., 2009). This is due to the analysis of the data, it is a different process since the data also is divergent. Firstly, qualitative data are characterized by “... *richness and fullness based on your opportunity to explore a subject in as real a manner as possible*” (Robson, 2002). On the other side, quantitative data is based on meanings derived from numbers, and all collection results is numerical and standardized (Saunders et al., 2009). Consequently, quantitative data can be argued to be the ‘thin’ abstraction or description whereas qualitative data can be defined as the ‘thick’ or ‘thorough’ description or abstraction (Saunders et al., 2009). In summary, is qualitative data based on meanings expressed through words contrary to quantitative where meanings is expressed by numbers.

Qualitative data

In order for qualitative data to be useful they need to be analyzed and understood (Saunders et al., 2009). Moreover, we constructed categories in order to construct a jigsaw, range from simple categorization of responses to process for identifying relationships between the categories (Saunders et al., 2009). We had access to a computer software that enabled us to categorize the qualitative data (NVivo). However, we did not feel the need to draw upon this computer software. After transcribing all three interviews we had already created an overview of the different categories. It was easy for us to divide the data into categories and locating subsets of these data according to our specified criteria. By executing this process manually it enabled us with a concrete overview of all of our qualitative data, which also made it a good process when drawing upon the interviews within our thesis. Moreover, we conducted the same process with the qualitative data from our observations since we also divided our observation notes into overall research categories and subsets of these data in order to narrow it down to more concrete and specific data. Consequently, this manual process enabled us with a great understanding of our data and made it easy for us to draw upon our data within our thesis.

Quantitative data

The questionnaire served as a method where we divided the client perspectives concerning the same categories as the interviews and observations into percentages. Thereby we had the possibility for comparison between percentages from each category, and the notions broad forward in the interviews and observations concerning each category. Quantitative data needs to be analyzed since the raw data often gives very little meaning without being processed and analyzed (Saunders et al., 2009). Consequently, it is significant to processes the data in order to make them as useful and understandable as possible. We analyzed the quantitative data through graphs, charts and statistics, since it enabled us to explore, present and describe the relationships and patterns within our data. These visualizations were helpful since they showed frequencies and enabled us to see relationships between variables instead of complex statistical modelling (Saunders et al., 2009). Fortunately, we had a program facilitating the visualization process for us (i.e. Allegiance Engage Platform). This platform empowered us with a set of possibilities. We could chose between spreadsheets such as excel, graphs such as powerpoint, or other presentation applications. Moreover, this platform enabled us with a

software where we could examine each and every respondent individually. This enabled us to detect if there were any individual connections or other patterns between each respondent. Lastly, the Allegiance Engage Platform also made it easy for us to elaborate on the different sets of comments provided by the respondents. A function that collects all the provided comments, made it easy for us to detect similarities or other valuable contributions relevant for our thesis. In summary, the use of a personal-computer-based analysis software (i.e. Allegiance Engage Platform) empowered us with easy access to visualizations which indeed helped us analyzing the raw quantitative data, since it facilitated an overview and access to all of the collected data within one platform.

Methodological triangulation

As illustrated, we have applied different data collection methods. We do so in order to gain confidence towards our interpreted conclusions. Thus the method applied can be described as methodological triangulation as it allows us to *"... use different data collection techniques within one study in order to ensure that the data are telling you (us) what we think it is telling you (us)"* (Saunders et al., 2009). Through the various data collection methods applied, we can then use our application of methodological triangulation to ensure that we are confident towards our own conclusions. Moreover Yin (2009) argue that the use of single sources *"... is not recommended for conducting single case studies"* (Yin, 2009). Therefore we argue alongside Yin (2009) and Saunders et al., (2009), that the use of methodological triangulation are appropriate for our single case study.

Quality criteria of the data collection methods

In order to determine whether we have made the right quality criteria, we address the sampling rationale by using Marton's (2013) corpus construction, and the four general guidelines for quality criteria. (1) Credibility, providing documentation of the collection and analysis of diverse data sources. (2) Transferability, as the provisioning of the researcher's database to enable other researchers to transfer the findings to another setting. (3) Dependability, verification of the research process and its product by an "inquiry audit" and (4) Confirmability, scrutiny of raw data, notes, reconstruction and synthesis products, and preliminary developmental information through a "confirmability audit" (e.g. communicative validation) (Marton, 2013). The reason for doing so is

that corpus construction “... Offers an alternative that is functionally equivalent to statistical sampling techniques in terms of the quality of empirical research” (Marton, 2013). Meaning that the technique will serve as the convincing argument to the quality of the data collection methods.

Complementary quality criteria

If we start with credibility (1), we have previously described how we used various data sources and data methods in our data-collection method. We did this due to the fact that it offers diverse data sources, and allows a correlation of the different data sources throughout the analysis. More so, the use of various data sources itself is a quality criteria, which we have applied to our data collection method (Marton, 2013).

Moving on to (2) transferability, we argue that the database we have collected could just as easily have been applied to a research field concerning sense-making and strategizing. We believe this to valid, since we move into these subjects in our discussion. Moreover this proofs that these subjects could as easily have been the sole part of this thesis instead of datafication and competitive intelligence.

If we turn towards the dependability (3), which is concerned with the verification of the research process, and look at it as an “inquiry audit” we find; That we have used different and supporting data sources in order to present our interpretivist findings as credibly as possible. More so, we argue that the data could have been applied to other research studies with other research domains. These studies would have been able to draw upon our database, and used our insights to find other conclusions based upon our research through transferability that this study allows for.

Lastly, confirmability (4), which is concerned scrutiny of raw data, notes, reconstruction and synthesis products, and preliminary developmental information through a “confirmability audit.” We argue that we have overcome the matter by reconstructing our total database into written appendices. We do so in order for the database to allow for communicative dissemination of the database, which proven throughout the analysis of this thesis. In total this makes for the quality concerning the data collection methods for this thesis. As for the confirmability audit we await the oral examination of our thesis, and this is the real confirmability audit. The oral examination then serves as examination by peers who can discuss and/or confirm the audit.

Analysis

In order for the following analysis to be as transparent and comprehensible as possible, an introduction of the case company at hand will follow. After the presentation of the case company, the analysis will be broken down into two separate pieces.

Firstly, we will demonstrate that Meltwater is a data-provider that can answer any question of a client's industry environment. We do so through the use of the nine forces since it determines the competitiveness of an industry and the advantage that can be gained through the use of information concerning the nine forces. In order for us to analyze the above mentioned statement we will draw upon interviews with Meltwater employees, questionnaire with Meltwater clients, and the observations of the Meltwater platform through online meetings. We will in this section endingly conclude, that a data-provider can enable competitive advantage based on data departing from categories of the nine forces.

Secondly, we will elaborate on the data possibilities that a company as Meltwater holds. Moreover, we will look at the process concerning data collection and dissemination of the collected data. We do so in order to find, whether Meltwater can facilitate elements of competitive intelligence. We do so through the use of the generic intelligence cycle, in which we introduce how the data collection process of a data-provider is and if this is different from the process of an insight-provider. By this we want to display how an insight-provider can enable competitive intelligence and why a data-provider only can facilitate competitive advantage. We do so by applying our gathered data from the interviews, questionnaire, alongside the observations from the Meltwater platform.

Case description

Meltwater is *"... one of the largest media intelligence companies in the world, with San Francisco headquarters and offices in 20 countries and 41 cities. Our truly global/local presence has earned us more than 23,000 clients in 108 countries"* (link 1). In the case of Meltwater, media intelligence means that the company monitors all printed, online and social media throughout the entire world. More so Meltwater monitor public and governmental documents in order to gain insights of when projects comes to tender, as an example of its use. As for the vision of Meltwater, which

concerns that their customers, including corporate communications and other media-centric professionals, are pioneering the creation of highly transparent, tightly connected customer communications. With the Meltwater media intelligence platform their clients can stay on top of billions of conversations, extract relevant insights, and use them to strategically drive brand perception for the company. Meltwater exists to help companies make better, more informed decisions based on insights from the outside (link 2). In order to fully understand what Meltwater does the managing director, client success, Simon Ernst-Sunne explains: *"We can help organisations to make the right decisions based on knowledge that we provide them with. All the data that we gather is data outside the firewall. And we choose to see that much more as proactive data, because what you do is that you "put your ears to the train tracks." Due to us, our clients know what's about to happen and what to look out for..."* (Interview 2). As an example, we would like to present a real life case that illuminates exactly what kind of data that Meltwater provides to their clients. In order to do so, we have chosen an example that illuminates



Zookeeper explaining the dissemination of the giraf Marius to a kindergarden

what such data that Meltwater delivers can be used for in a quite critical situation. In the fall of 2014 Danish newspapers reported that *"Danish zookeepers killed healthy baby giraffe with a bolt gun because he was 'surplus to requirements' - then feed him to the LIONS"* (link 3). This created a media for the Copenhagen Zoo that was never seen before. They were able to use the Meltwater data information, as stated by country director, Kasper Lyhr *"... click through sub-themes within the platform in order to find out what people talked about, and where they did it, so that it became easier to address the issue at hand"* (link 4). It is clear that, insights from external data, can enable a decision maker to know what to look out for as the managing director, Simon Ernst-Sunne also pointed out in the interview. Through these case examples and elaborative interview sections, it is clear that external data is not only something that can be considered "nice to have" but for a lot of companies be considered "need to have."

As stated above, Meltwater acts as a case company that shows the context of how an organization can draw on a third party data-provider. The data-provider make sure their clients is constantly informed about their specific industry environment. This kind of data is of high importance if an organization wishes to become more competitive than their competitors. Moreover, we have through the research domain detected how researchers of the data field stress the need for different kinds of components, which are significant if a company wish to be competitive. Through the research domain we detected the gap of how to move from competitive advantage to competitive intelligence in the field of data. This gap is to be examined through the use of the nine forces model by Fleischer & Bensoussan (2007), as the model shed light upon how an organization can determine whether an industry is high in competitiveness. Meaning that the nine forces shows that if an organization wants to create competitive advantage the organization should gain information of the data-field that the nine forces presents. Through the first part of the analysis we will argue that a data-provider can enable information about the fields of the nine forces and thereby create a solid groundwork for facilitating competitive advantage.

Meltwater as a data-provider

In order to display how a data-provider can enable competitive advantage, we will apply the nine forces to the data-collections process applied by Meltwater. In order to do so, we analyze each step of the nine forces by illuminating how Meltwater, as our case company, collect and unpurposely gather data from each force. We do so in order to display the significance of using a data-provider, since they can facilitate a higher level of competitive advantage. Meltwater can facilitate this, since they transform and analyze the collected data into valuable and actionable information that facilitate elements of competitive advantage.

As for the nine forces, we argue that a data-provider can aid and facilitate a process, in which organizations is provided with valuable information that can generate competitive advantage. The data collection process of Meltwater concerns data concerning the competitive environment, such as competitors, substitutes, potential entrants, buyers, consumers and much more. Consequently, we apply the nine forces in order to define what area of perspective that Meltwater base its data collection on. We do so, since it seems that Meltwater collect data similar to the framework of the nine forces.

When data-providers wish to collect information concerning the fields that the nine forces hold, the data-provider can do so in numerous ways. The way that Meltwater manage this data collection challenge is through the creation of intelligent Boolean-language searches, so-called agents, applied to printed editorials, online editorials, social media and government papers. Search-words that address all the above mentioned matters, which is divided based on subjects and relevance to the specific organizations industry environment in which the organization lives, is taking into consideration. They do so in such a manner that presents the data, so that only relevant articles and legislations are presented. Before going into detail with illuminating how a data-provider can act as a mediator for competitive advantage, we stress the notion that organizations should understand the fact that agents, and the data category that they cover, can easily embrace other data categories concerning another force, depending on the angle from which it is analyzed. We do so in order to stress our research approach of interpretivist, since it concerns the fact that a given solution can be interpreted in numerous ways.

Technological shifts

If we look at the technological shifts, below is illustrated a Boolean search for the successful Danish company Novo Nordisk in which the search agent finds all research that concerns type-2 diabetes or Metabolic syndrome as an example. The agent is created in such a manner that allows the agents to find all relevant online articles throughout the entire world. In this case of the Novo Nordisk, we therefore argue

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OR (("Enteroendocrinology"*2 NEAR/7 ("Type-2-diabetes" OR "Metabolic Syndrome" OR "Gut Microbiota" OR "Gut Microbiome" OR "Obesity" OR "Gastric Bypass" OR "RYGB" OR "Enteroendocrinology" OR "Metabolic receptor" OR "Gut hormones" OR "Insulin resistance" OR "Insulin signalling" OR "Metabolic pathways" OR "Nutrient sensing" OR "7TM receptor" OR "Brain-gut axis" OR "GLP-1" OR "Ghrelin" OR "metabolic health" OR "Glucose homeostasis" OR "Lipid homeostasis" OR "diet" OR "Weight loss" OR "exercise" OR "gastrointestinal tract hormone" OR "Energy expenditure" OR "Appetite regulation" OR "Metabolite sensor" OR "Applied metabolic genetics" OR "Epigenetic modifications in" OR "metabolic dysfunction" OR "Metabolic Imaging")) AND ("Type-2-diabetes" OR "Metabolic Syndrome" OR "Gut Microbiota" OR "Gut Microbiome" OR "Obesity" OR "Gastric Bypass" OR "RYGB" OR
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that such a platform, allows an organization to find relevant information regarding the technological shifts, alongside the technological factor of the industry environment from the STEEP/PEST factors within the nine forces. The technological aspects are, amongst others, concerned with new products and market innovation (Fleisher & Bensoussan, 2007). That correlates with the notions the above agent is built upon as it finds new research and innovative projects on the matter of type-2 diabetes or Metabolic syndrome. Endingly this display how information regarding the technological shifts can be found through a data-provider. It does since

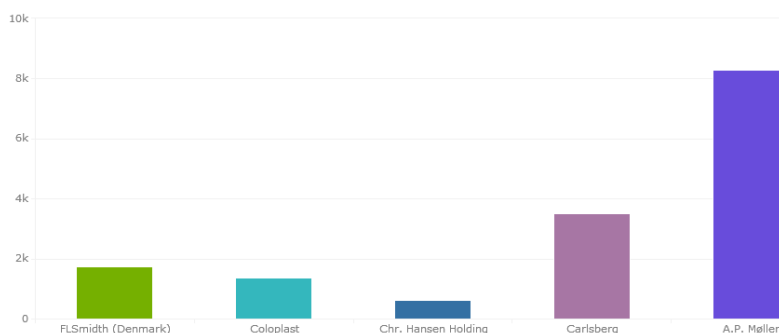
Meltwater draw upon a specific agent with regards to all of the subjects that the technological shift holds.

Now that we have illustrated how an intelligent Boolean search agent is created, and how the use of such can help organisations gain information about for instance technological matters, we will now elaborate on how the data can be presented in such a manner that allows organizations to quickly gain information on their specific information needs. We do so, by applying the framework of the nine forces in order to define what areas that Meltwater collect its data from. Since there exist a similarity to the nine forces and what these forces withhold according to data relevant for a data-provider.

Governmental (political/legal) shifts

If we look at the governmental (political/legal) shifts in the framework of the nine forces, the managing director of Meltwater, Christian Pedersen has previously elaborated on this notion. He stated that through an agent, organizations are able to search through government documents that allows for elaboration on a number of notions included in this force. As an example, concerning an agent searching for and through government papers, organizations are able to find information about government projects, such as new buildings and new playgrounds even before they come to tender. More so, organizations can create the search in such a manner that it can find legal changes within their industry environment. Consequently, this information allows the organization to be in front on the matters concerning the legal aspects. So what Meltwater actually covers in this situation are in alignment with the notions concerning the governmental (political/legal) shifts. We believe this to be a good conclusion to come to, due to the fact that through a data provider such as Meltwater, we can detect that their clients gain information on governmental (political/legal) shifts. We do so because the platform and data provides ongoing information on the shifts within the environment. Thus this means that Meltwater clients can detect the shifts concerning this part of the environment.

If we turn the focus towards another large Danish company FLSmidth, we can see that they have created a



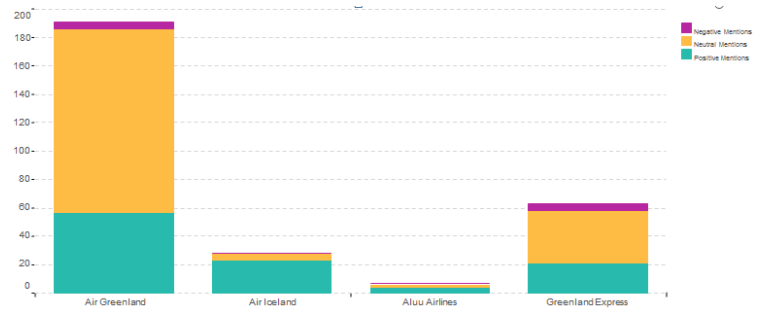
search that allows them to compare their media exposure with other C20 companies, which again is a support to the notion that a data-provider as Meltwater can detect and display information that regular organizations did not even know existed. Through these intelligently created searches, organizations are able to find information on other companies that have the same economic/international shifts as themselves. This means that the organization can benchmark their media presence in order to make decisions. For example, it could concern a decision about whether to take measures in order to enhance the presence compared to other C20 companies that have the same international and economic aspects. In this chart we also see how organizations can find information concerning the economic patterns concerning the C20 companies and the rates they concerns, which we argue that the economic and international shifts can be overcome through the use of Meltwater. This illuminates that through a data-provider as Meltwater, clients can find information that are in regard to economic/international shifts. This conclusion is found due to the fact that FLSmidth has used Meltwater to cover information regarding other C20 companies. As the C20 companies are benchmarked due to their economic comparison, we argue that Meltwater can be applied in regard to the economic/international shifts is a valid interpretation.

As this is a comparison of organizations with the same economic or international aspect, it could be argued that this analysis is a comparison between competitors. We argue that this is not a competitor comparison but only a focus on the economic and international shifts. Below is seen a more concrete comparison of competitors, new entrants and substitutes.

Industry competitors, new entrants and substitutes

As for the industry competitors, new entrants, and substitutes, we can see the benchmark summary for the Air Greenland flight company in the bar chart below, in which they wish to detect their closest industry competitors. Through the use of the media exposure, Air Greenland is provided with information that can illuminate actions from their industry competitors. Information provided by a sentiment analysis on customer satisfaction through cancellation-rates or public opinions through press releases and how they have been met by the media. One might ask how this is possible, as this is just a bar chart. The difference of being just a bar chart is that these charts, also called widgets, are 100 percent 'clickable.' As an example clickable means that an

organization can click on the purple part of the bar chart, which then will display all negative articles concerning themselves or their industry competitors. This illustration is a clear example of how organizations can gain information about the competitiveness of the industry environment. Managing director Christian Pedersen explains the possibility on the platform as a product that can enable organizations to “... look at where you right now see an unsatisfactory or a particular deficiency in a product, or it can also be that you all of a sudden receive information about a government who opens up the possibility of a new private hospital. It may not be natural for companies to look out for new markets to get information about all these things... By knowing all these things in advance, [the client] can plan to make decisions and make plans through data, which he would not otherwise have had” (Interview 1).



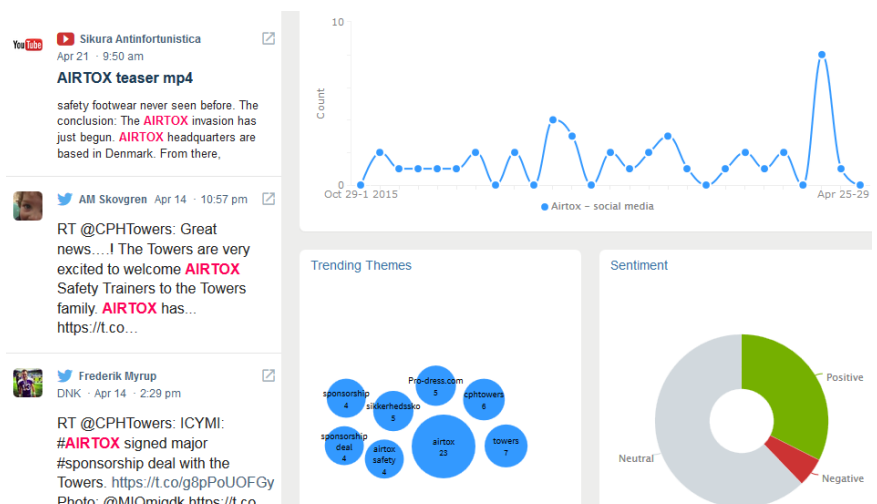
The findings through the Meltwater platform then determine the fact that data can provide information about the environment surrounding the organization. Alongside the quote from the managing director Christian Pedersen, it is clear that an industry competitor analysis easily can be made in a way that turns the information from competitors into information regarding the suppliers on an organization’s industry environment. This is whether the organizations wish to gain information concerning the suppliers’ media presence, the geographical presence, or collaborators. Thus we can conclude that this specific factor and the information that the organization wish to gain, can be solved through the use of a data-provider. We do so because we have detected how Air Greenland has applied Meltwater as a data-provider in order to gain information in regard to the industry competitors and possible new entrants.

Social/consumer shifts

If we go into the social/consumer shifts, and social factor of the STEEP/PEST analysis, which is concerned with customers, beliefs, values, lifestyle, and geographical distribution amongst others (Fleisher & Bensoussan 2007). We argue that social media may be an application that can overcome the social components. This is also seen since Meltwater use social media to provide data concerning the social components. Through the use of media surveillance on social media, a data-provider can detect social aspects concerning the lifestyle, beliefs, and values of their customers (Fleisher & Bensoussan, 2007). If we look at Airtox social media dashboard in the Meltwater platform, we argue that to the left is the daily media exposure in which an organization can detect, which social media the organization is mentioned in and in which context. Through the line chart an organization can detect the period where the organization had the highest media exposure. Since the widget is clickable, an organization can examine why and where the media presence were high or low in given time period. Through the trending themes an organization can see what their customers express and say about the product brand or something else with regard to the organization. It could for example be that the security shoes provided by Airtox helps organizations in their day-to-day work, or that their shoes are of bad quality, this can be detected through the themes. The last widget is a total sentiment analysis of the Airtox brand, in which the organization can discover how strong the brand stands on social medias. Moreover social media

can in an even clearer note bring forward information concerning aspects of an organization's customers. The reason for the ability to do so, is that the "... customer component describes the characteristics those who buy or could buy the firm's good and services" (Fleisher & Bensoussan, 2007). Those characteristics can

be found through the use of data from social media, as it can provide information directly from customers concerning price, quality, brand value, and sentiment. These thereby enables an



organization to understand the characteristics of its customers. Therefore we argue that the use of data from social media, can aid an organization with information concerning the components of the customers, which also corresponds to the consumer component from the framework of the nine forces. The argument is also brought forward by the managing director, Simon Ernst-Sunne, who states that: *"... all the data we collect are data from 'the outside'". We choose to see this as much more proactive data, because you actually go in and put your ear to the railroad tracks - customers because of us what is going to happen right there, and what they should be aware of, instead of having read about it in their internal data , which is more reactive data"* (Interview 2). Therefore, we can conclude that data-provider clients such as Airtox use Meltwater to gain information concerning consumers. We conclude so, since we illustrated that through the use of Meltwaters' social media monitoring that Airtox have applied, we can detect that Airtox has gained valuable information on that specific part of their environment.

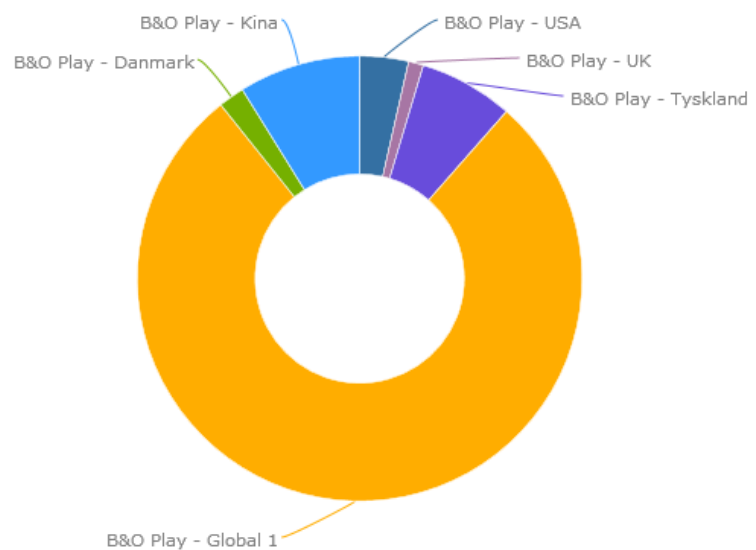
To summarize, we have illustrated how a data-provider can aid and provide valuable information regarding the components of the nine forces and thereby help determine the competitiveness of an industry. Therefore, we turn the focus towards the internal environment from the STEEP/PEST part of the nine forces in order to find arguments concerning how a data-provider can enable information to this specific component of the nine forces.

Internal Environment

As for the *internal environment*, which means to analyze the core competencies of the organization in order to strengthen and nurture the competencies of which the organization is built upon. Thus this thesis goes beyond the recommendation of applying Porter's value chain analysis, in order to help identify internal core competencies. Moreover we argue that, while all of the primary business processes components can be viewed and likely optimized by only addressing the internal data. We argue that information concerning the last two components; 'marketing and sales' and 'services' can be beneficial for an organization in order to gain information from outside the firewall hence external data.

As for the marketing aspect of the business process, it is easy to shed light upon how external data can be of great help towards competitive advantage. As an example, by addressing the promotion part of the marketing mix (the four P's) (Heding et al. 2009), which is concerned with how to best promote the product on a certain market, data can be beneficial as data answers the questions *where to promote the product*, and *how to promote the product*? As for the question concerning where to promote the product, data can be divided into categories of where the media exposure on a certain market or product group is found. As an example we have used the Meltwater client,

and well-known Danish brand Bang & Olufsen, and their product searches to illuminate where the exposure of the product BeoPlay is the highest and in what part of the world, in order to answer the question where to promote the given products. As for the question how to promote the products,



one can through the answer of which social media to choose when promoting the product answer the second question, where to promote the product. It does so, because the various social media offer limits to how the organization can promote the products of the organization. Should the media exposure be highest on twitter, one can only use 140 characters and only linked video material, whereas Facebook offers multiple possibilities, though short text and video has proven to be the content with most views and highest like-rate. Therefore, we argue that this specific part of data on social media can be aid-full when addressing marketing aspect of the internal environment as the data on social media is as elaborate on the measures that marketing components holds.

Turning towards the *service component*, which is customer support, an organization can gain insights to whether their support is successful from a customer point-of-view through external data as seen in the above illustrated arguments of how to do so. By adding search phrases such as

customer support, customer care, service, and other close to these to a product or brand name, the platform offers a sentiment analysis, in which an organization can detect whether their customers are satisfied with their products through the given NTS score (Net Tonality Score) of a product. Furthermore, organizations can divide the data into only hold content from websites such as Trustpilot or Tripadvisor in order to find direct intel on their customer support, which is beneficial to both their marketing mix as well as the service component. Therefore, we argue that such data from a data-provider as Meltwater can provide information in regard to solve matters concerning information within the internal environment.

Strategic rationale implications

The above correlates directly with the last force, which is the *strategic rationale implications* of an organization, which is; “... *effective strategic management is about making organizational decisions that correspond positively with the entire business environment*” (Fleisher & Bensoussan, 2007). This stress that an organization must be able to shape the environment to its advantage, as well as it will have to adapt and react to their industry environment in ways that disadvantage the organization less than the their competitors (Fleisher & Bensoussan, 2007). Through the analysis of the nine forces using the Meltwater platform and the “data-experts”, we argue that the nine forces can, through data delivered by a data-provider, be overcome by the use of data ‘outside the firewall. The analyses thereby argue that data can make any organization competitive through data provided in a manner that allows for direct information.

We have illuminated that external data outside the firewall can enable an organization in numerous important ways. If the data is provided in such a manner that organizations can find information that can turn into solutions in regards to *political, economic, ecological, social, technological* factors alongside their *industry environment* concerning *customers, suppliers, and competitors*, the organization may use the provided data that the nine forces hold in order to gain a higher level of competitive advantage. The argument is supported by the managing director Simon Ernst-Sunne who claims that a data-provider as Meltwater, “... *can help companies make the right decisions based on all the knowledge we can give them . All the data we collect are data from “the outside.” And we choose to see this as much more proactive data, because you actually go in and put your ear to the railroad tracks - customers because of us what is going to happen*

right there, and what they should be aware of, instead of having read about it in their internal data , which is more reactive data” (Interview 2).

Through the findings and ending statement we conclude that data solutions, such as Meltwater, can create a result that give an organization more valuable and actionable information and thereby may create elements of competitive advantage. This argument is even heavier supported by the fact that the respondents of the conducted questionnaire support the argument as above. 23 respondents answered that due to Meltwater, they are better informed than their competitors. More so, 30 respondents answered that they were better informed and thereby more competent to transact business than before (appendix M). Thus we can conclude that data can provide an organization with valuable information that can result in a higher level of competitive advantage. As for the argument that organizations can benefit from applying data as a solution to the fields that the nine forces holds, it is illuminated by the fact that 23 questionnaire participants answered that external data makes them more informed than their industry competitors (appendix M). Moreover this is even clearer supported when 30 participants from various organizations claim that data makes them, not only better informed than previously, it also makes the decision makers better prepared to take informed decisions based on the data delivered by Meltwater (appendix M). These findings relates to the fact that 89,5 percent of the participants answered that data delivered by Meltwater was comprehensible and easy to understand. Only one questionnaire participant answered that data delivered by Meltwater does not give the organization some sort of competitive advantage.

Above we described the processes of Meltwater, when gathering valuable and actionable data in order for the client to gain competitive advantage. However, we believe that there is more to Meltwater. Meltwater do not only provide valuable data, they provide more. Consequently, we cannot explain the different sets of processes that Meltwater engage in by only displaying and applying the nine forces. Therefore, we purposely selected another framework in order to explore Meltwater on another basis than solely competitive advantage, hence we move on to the next section of the analysis where we will dig deeper into the many processes of Meltwater. We selected another framework since we believe that the nine forces does not explain Meltwater

entirely, thus we want to define what area of perspective that Meltwater also can be illustrated from.

The generic intelligence cycle

The first part of the analysis stress the notion of how a data-provider, such as Meltwater, can help an organization with enabling competitive advantage through valuable and actionable information. This part of the analysis will stress the notion of how a data-provider operates in order to generate information to the client through the lenses of our case company Meltwater. Moreover, we illuminate that in order to facilitate intelligence, a data-provider must engage in an ongoing process/cycle in order to become an insight-provider. We then look at how such an insight-provider can process and generate intelligence to a client. Consequently, we will combine and contrast these two processes in order to depict whether Meltwater draw upon one over the other or engage in both processes and thereby can be called an insight-provider that can enable parts of competitive intelligence.

As mentioned in the analytical framework the generic intelligence cycle consists of five phases, which is; (1) planning, (2) collect and process data, (3) analyze the data, (4) disseminate intelligence and lastly, (5) evaluate and control (Fleisher and Bensoussan, 2007; Bernhard, 1994; Rouach & Santi, 2001). This process is constituted by data-providers such as Meltwater and it shows how Meltwater gather and collect data and transform it into valuable and actionable information special-made for the clients.

Planning and direction

The first step of the intelligence cycle concerns the discovering of client needs. Meltwater as a data-provider covers this phase since the managing director Christian Pedersen states “... *in the beginning of a process the focus is on counselling, discussions and creating an understanding for what would give value to the client. Here the big challenge is to understand and learn what exactly the client within this industry wants to get from us. It is all about fitting this solution perfectly to each and every client*” (interview 1). Consequently, it is therefore very significant that the organization and the data-provider together determine the client needs, requirements and develops a future plan for the data gathering process. Since there exist numerous amounts of

data, Meltwater will be able to find tons of data. Thus it is very crucial that there is a common understanding of data requirements and client needs. By engaging with their clients concerning their needs, we can conclude Meltwater engage in process with their clients similar to the first phase concerning the generic intelligence cycle.

Collection of data

In the second phase of the generic intelligence cycle it is the data-provider that is in focus. This phase concerns collecting data from within and outside the organization. What is more, it concerns classification of the collected data and a concrete data reduction. In this phase the concept of datafication arise since datafication is very significant in the search for intelligent data. There exist three concepts of datafication, which should be integrated when gathering and classifying collected data if the data-provider wants to discover and detect data as intelligently as possible. The first concept that needs to be put into focus is *dematerialization* since it highlights the ability to separate the informational aspect of the data and how this data can be used in a different set of context within each organization; “... *Meltwater [data-provider] shall create the easiest way for the client to understand what we present to them. Thus the process with data is of high importance. We shall make the data understandable and available for our clients in their specific context, thus not every data is applicable to all organizations, since their wishes are different from each other*” (interview 3). This quote supports the notion of dematerialization as it is very context-driven and highlights how data can be used as different assets and resources depending on the needs and the given context within the organization. Thusly, we argue that *dematerialization* actually occurs in the process of data collection facilitated by Meltwater. We do so since they draw upon how data can be very context specific, hence the collected data should be considered as a very context-driven source of asset, which stand in alignment with the notion of dematerialization. However, we do not state that Meltwater is aware of the concept dematerialization and thereby draw directly on this concept in their process. However, we argue that, dematerialization exist in the process of data collection facilitated by Meltwater.

Another crucial concept of datafication that any data-provider needs to be certain of is *liquification* (Lycett, 2013), which concerns the use of the information within the organization. The information that Meltwater provides to an organization needs to be easily manipulated and

moved around within the organization without any obstacles. 43 percent of the respondents (appendix M) stated that they (clients) to some extent transformed the data provided by Meltwater into concrete business assignments. Accordingly, we argue that the finding from the questionnaire aligns with the process of liquification part of datafication. Moreover, the managing director states that “... *there is many different ways of doing this ... we always integrate the clients in this process in order to make and create the proper filtering of data. I think our approach is different from others since we ask “how can we help you” and thereby find an output that is really concrete*” (interview 2). Consequently, we argue that the concept can be taken into consideration when processing all of the gathered data and integrating the client in this process of collecting data. Therefore, we conclude that this integration of liquification can again underscore intelligent data instead of only raw data, which is why conclude that notion of liquification aligns with the process applied by Meltwater.

The last concept of datafication is *density*, which concern the best (re)combination of resources. Density can in this sense be measured by how Meltwater combines and cross-validate the collected data. The more Meltwater combine all of the gathered data the more Meltwater can combine and classify all of the data into a perfect culmination of valuable and actionable information. Therefore we argue that *density* can be overcome by applying a data provider such as Meltwater since they “... *[we] always cross-check and combine our data, meaning that the more we use and merge all of our data, the higher value and usability it gets*” (interview 2). This statement supports the argument that density can be detected in the process applied by Meltwater when collecting data. We came to this conclusion because we found that Meltwater ensures the quality of their data through merged datasets that allows for usability, which correlates with the notions concerning density.

Lastly, Lycett (2013) argues that datafication is driven by sense-making, since sense-making concerns how people generate and value what they interpret. Constantinou (2013), argues that “... *data affords enables real-time responses (known as nowcasting) that involve sophisticated algorithms dealing with dynamic data sets and requiring the developments of new indicators as well as new forms of graphical or visual representation that support sense-making under*

conditions of rapid and shifting environmental change.” Consequently, it is crucial that this process of sense-making is taken into consideration when (4) presenting the final data for the client. Moreover, it is important that Meltwater integrates this aspect of sense-making in the phase of (3) analyzing since it is in this phase that the sense-making shall to some extent be stimulated by Meltwater. We argue that the data process used by Meltwater to some extent facilitate sense-making, since 35 respondents answered that data delivered by Meltwater, could either to a large extent or some extent be made sense of. Only two respondents answered that the information delivered by Meltwater could to a minor extent be made sense of (appendix M). Consequently, it seems that a larger amount of clients make sense of the delivered data. We found, in our observations, that Meltwater ensures that the delivered data was easy understood and made sense of in accordance to client needs (observation). Thus we can conclude that sense-making is a crucial part of the process for a data-provider such as Meltwater. If a data-provider do not make sense of the delivered data, then there would be no need for data-providers. If the provided data does not make sense, it is without value to the clients.

Analysis of data

The third phase of the generic intelligence cycle involves the analysis of data since the data needs to be conducted visually in order to generate effective outputs, outcomes and elements of sense-making. This step contains a skilful set of applications and techniques that can be combined with the collected data and thereby result in a visual dashboard that present the results from the collection process. In this phase it is really important to make the data understandable, which also is of high focus at Meltwater since “... *it is our job to make the data understandable and proactive since it enables you to understand the market*” (interview 1). This phase surrounds the notion of the nine forces since it is an analytical framework of how to gather and collect the needed data and what this data can enable speaking of competitiveness: “... *Someone like us [Meltwater] can visualize the future market and where the different opportunities arises in the market therefore these analytics are so important for us and the client since this is where the conclusions can be drawn based on the data ... There are so many different paths to walk on the client just has to point and pick*” (interview 2). This quote illustrates the possibilities and opportunities that lie in this phase of the generic intelligence cycle. This phase concerns how Meltwater makes the data understandable by visualizing the data in such a manner that the clients are aware of what and

where to focus their resources. This step is very crucial for the clients as it is where the data-provider tries to make sense of the data by the application of visual effects. So it is important that the analysis is easy understandable, and that the client understands the charts and visuals since the clients also needs to make sense of the data in order for them to act upon it. In order for us to see if Meltwater manage the implications that the force holds, we asked the clients whether the data provided by Meltwater is understandable and valuable or if it was not. 51 percent said that the data to a very high extent understandable (appendix M), which is supporting the argument that Meltwater manage this stage since they consolidate the data into something coherent. Moreover, the respondents stated that the top three conditions that the data empowered was; *we are better informed than our competitors (56 percent)*, *we are internally better informed and are thereby more competent to transact business than before (77 percent)* and *we are better informed about the business environment and market that we operate in than before (49 percent)* (appendix M).

In summary, we can conclude that Meltwater as a data-provider also covers this part of the generic intelligence cycle as they provide understandable and actionable data through visuals and other charts presenting the collected data.

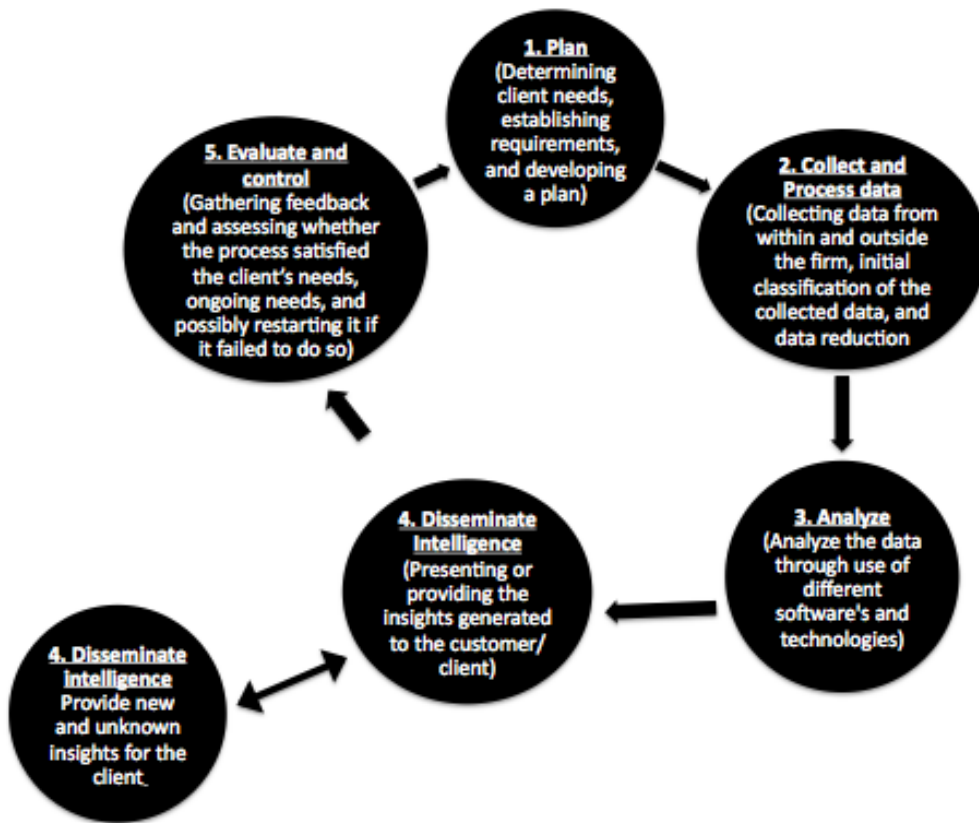
Dissemination

The fourth phase of the generic intelligence cycle is dissemination of intelligence, which is the significant factor when wanting to highlight our finding, which is that in order to facilitate competitive intelligence; a data provider must become an insight-provider. For the time being Meltwater is seen as a data-provider since the organization provides tons of data that are usable, actionable and valuable for the clients. Furthermore, a data-provider present results that the client expect, since they asked for it in the first phase of the generic intelligence cycle. Thus it is expected that the needs and requirements of the client are met in the fourth phase of the generic intelligence cycle.

However, we have found that an insight-provider not only presents the required data that was asked for in the first phase by the client. An insight-provider presents and provides unknown and new insights that the client did not ask for in the beginning, but most certainly can use in the

future. These unknown insights covers gaps in the known data and information-needs, in which it can help the client become more competitive than their original goal. Therefore it can be argued that an insight-provider covers aspects in the data that the client did not even know existed or considered themselves. Consequently, there is a huge difference between being a data-provider that presents and provides the asked and required data and by being an insight-provider that presents and provides the asked and required data, but moreover, also reveals new and unknown insights, that the client did not know was possible, or realized that this was something that they needed in order to become more competitive.

According to our observations we found that Meltwater presents all of the required and needed data for the client. However, Meltwater do not only provide and present these data since they also provide something extra; *"... I have actually tried a meeting where I presented something new and unknown insight before them and it actually was so critical for their business that they were forced to end the meeting and act upon this new insights provided by us [Meltwater]"* (interview 3). This quote presented by the senior business development executive Dennis Mølgaard shows that Meltwater can be considered an insight-provider instead of only a data-provider. Another point that also supports the notion of Meltwater as an insight-provider is the two managing directors, since they state that they often experience clients being surprised of the presented insights since the client do not know about its existence (Interview 1 & 2). Furthermore, we can detect that the new insights fulfils the gaps within the business of the client since 41 percent of the respondents of the questionnaire states that they need to change the overall strategy, vision or/and mission when provided with new insights from Meltwater (appendix M). Moreover, 51 percent of the respondents also state that there exists a change in the daily work procedure after having the new and unknown insights presented to them (appendix M). In addition to the argument of Meltwater as being denoted as an insight-provider instead of a data-provider is the notion of competitive intelligence.



(Appendix E. The Generic Intelligence Cycle w. Insights)

As illustrated in the first section of this analysis, a data-provider can enable a competitive advantage by providing the client with valuable and actionable information. Nonetheless, an insight-provider can be discussed as to enable parts of competitive intelligence since this phenomenon should stimulate an organization's creativeness, innovativeness and willingness to change (Bergeron et al., 2002). Moreover, do competitive intelligence refer to actionable information about the external business environment that could affect a company's competitive position (Fuld, 1995). These requirements are fulfilled since Meltwater presents insights that are innovative, since the client did not even know of these insights and new information presented to them. Moreover, Meltwater provides some sort of creativity to the insights since Meltwater adjust and combines the data in new ways, since Meltwater draw upon datafication in their data collection process. This use of datafication often enables creativity since the insight-provider focus on every possible aspect of the concrete data, which often will result in many different opportunities that the client may not have expected. Furthermore, Meltwater presents new

insights that are significant since a client once needed to storm out of a meeting in order to change something, which also is a necessity if the notion of competitive intelligence is at present. Besides, Meltwater also provides insights that affects the client's competitive position. Consequently, we argue that the innovative insights that Meltwater presents besides the required data can somehow empower or even facilitate competitive intelligence within an organization; *"... we can help the organizations by presenting new insights to them before their competitors, which in the end most possibly can result in better decisions, changes in the organization and more innovativeness than all of their competitors all together"* (interview 2). We conclude so, due to the fact that the respondents of our conducted questionnaire state that they need to change the strategy after being presented with the new insights. Conclusively, Meltwater acts not only as a data-provider that enable competitive advantage, but also as an insight-provider facilitating elements of competitive intelligence.

Evaluation

The last phase of the generic intelligence life cycle is *evaluation and control*, where the provider gathers feedback and is assessing whether the process satisfied the client or not. Additionally, this cycle shall not be seen as something linear, rather as a series of loops both within and between each phase presented above. Moreover, the process of a generic intelligence cycle is often ongoing since the elements and operations is often very complex, thus an insight-provider would be very suitable to perform and facilitate this process since it is messy and complicated.

To summarize, there is not a distinct difference between a data-provider and an insight-provider in terms of process engineering. The main contrast is in phase four where a data-provider only summons what is asked for whereas an insight-provider finds the unknown in the collected data and presents new insights that are innovative, creative and at sometimes forces the client to change something within the organization. Also, we argue that this new and unknown insights can to some extent facilitate competitive intelligence, since these insights contains understanding and learning about what is happening in the specific business environment. Consequently, these insights enables the client to be as competitive as possible, since the client has intelligent data available and often sooner than the competitors; *"... we often experience that clients are excited*

about the new insights because they know, that their competitors do not know about these insights” (interview 1).

Conclusion of the analysis

The analysis contains two conclusions based on the above sections. The first part of the analysis stress that Meltwater can create a solution that provides organizations with valuable and actionable information that in the end can generate competitive advantage. Also, it is concluded that the nine forces provides a framework that uncovers the competitiveness of an environment and information concerning these forces can enable solid groundwork for competitive advantage. Meltwater address all of these areas in their own data collection process, which in turn provides valuable information and insights for their clients. These external datasets, in correlation to the nine forces, can provide any organization with more precise information concerning the operating industry, environment and competitors. As concluded, a data-provider can facilitate elements of competitive advantage by collecting data concerning the nine forces.

However, we argue that there is more to Meltwater, than only providing valuable data concerning the nine forces. Meltwater do not only provide valuable data, they provide more. Therefore we moved away from the notion of a data-provider facilitating competitive advantage and onto the next section of the analysis.

This section of the analysis came to conclude that Meltwater can be denoted as an insight-provider since they facilitate elements of competitive intelligence through the dissemination and presentation of new and unexplored insights that the client did not know existed. These new insights can be the groundwork for facilitating competitive intelligence, since the insights can aid an organization detect market opportunities in terms of being innovative, creative and change the fundamental operations within the organization.

To summarize, the analysis finds that there is a significant difference between competitive advantage and competitive intelligence since a data-provider only can facilitate advantage through the application of required data, whereas the newfound term, insight-provider, can facilitate intelligence through the application of required data and unexplored insights concerning matters that the client did not know existed. Furthermore, the analysis find that datafication is an

important element in the process of enabling intelligence, since Meltwater as an insight-provider act according to dematerialization, liquification and density. Thus this answers our sub-question, since we apply these three concepts of datafication to the business process applied by Meltwater. Consequently, the use of datafication enables us to detect that Meltwater can facilitate elements of competitive intelligence since their process of data collection corresponds with the concepts of datafication. Lastly, the analysis conclude that by going beyond the needed information and discovering the unknown content of the data, a data-provider becomes an insight-provider. The generic intelligence cycle contains five phases in which data is gathered and presented before the client. Consequently, we detected in the analysis that phase four can depict whether the provider only add the required data or also presents new and unexplored insights before the client. Therefore based on our analysis, this phase is the main stage separating an insight-provider from being a data-provider.

Discussion

In the following discussion we start off by illuminating our findings throughout our research. We do so in order to make generalizations towards our findings, in which we can find learnable notions from our study. The next section will discuss the distinction between a data-provider and an insight-provider and branch into possible neglections throughout our research. Following, we will discuss practical and theoretical contributions that our thesis withhold. Moreover, we will discuss the advantages and disadvantages when drawing upon a case study. Lastly, the discussion will culminate in a section concerning avenues for further investigation by going beyond our own research domain and apply new aspects of research.

Competitive advantage

Our starting point was to apply the nine forces in order to shed light upon how a data-provider could facilitate competitive advantage. We did so due to the fact that competitive intelligence derives from competitive advantage. And as we wish to cast light upon how organizations can gain sustainable advantage e.g. competitive intelligence, we must first address the question of how a data-provider can facilitate competitive advantage. The notion that competitive intelligence derives from competitive advantage is illuminated throughout previous research illustrated in the research domain of this thesis.

Through the application of the nine forces we came to the conclusion that a data-provider can enable competitive advantage. We did so because the nine forces contain information regarding aspects that an organization needs in order to gain competitive advantage. Aspects such as industry competitors, suppliers, price, threat of new entrants, technological shifts, political shifts, governmental shifts, are forces from the model of the nine forces that organizations need to consider in order to find information regarding the competitiveness of an industry. What is more, we came to the conclusion that data-providers such as Meltwater can facilitate information concerning these aspects that organizations need in order to gain competitive advantage. To these findings we can ultimately conclude that data-providers can facilitate competitive advantage, since our case company Meltwater collects data that are in correlation to the fields of the nine forces. This finding allowed us to dig into the field of competitive intelligence, and enabled us to answer our research question; *how can a data-provider facilitate competitive intelligence?*

Datafication

We came to the conclusion, that in order to answer our research question, we must first address our sub-question; *how can datafication enable elements of competitive intelligence?* The argument for the following order is that we found datafication to be a crucial theoretical application in order to describe how data-providers can enable elements of competitive intelligence. The reason for this argument is that we detected datafication as the sole factor theoretically used to describe how Meltwater facilitate competitive intelligence throughout their data collection process.

Through the dematerialization concept of datafication, we could conclude that data-providers as Meltwater are able to make the data understandable and available to their clients in their specific context. Proven by the illumination in the analysis that data-providers are able to create the easiest way for organizations to understand what is presented to them. Meaning that Meltwater is able to dematerialize data in such a manner that allows the data to be used as different assets and resources depending on the needs and the given context within different organizations.

Through the liquification concept of datafication, we could conclude that data-providers as Meltwater are able to manipulate and move the data across the organization without any obstacles. Meltwater is able to do so in such a manner that allow for the data to be manipulated

and applied within different aspects and departments of the organization. This is illustrated by the fact that 43 percent of the questionnaire respondents stated that they to some extent transformed the data provided by Meltwater into concrete business assignments. Meaning that a data-provider as Meltwater are able to liquify the data in such a manner that allows for data based implications across the organization.

Through the density concept of datafication, we could conclude that data-providers as Meltwater are able to combine and cross-validate the collected data. Meltwater is able to do so in such a manner that the more a data-provider use and merge all of the collected data, the higher value and usability the data gain and Meltwater can thereby provide the customers with more intelligent data. This is illustrated by the culmination of valuable and actionable information data-providers facilitate to their customers through their data product. Meaning that data-provider as Meltwater is able to densify the data in such a manner that allows for the data to be of high value to the organizations who apply and integrate the presented data.

Through the sense-making concept of datafication, we could conclude that data-providers as Meltwater is able to present the collected data in a manner that allows for organizations to make sense of the data. This can be highlighted by the illustration of the fact that 35 respondents answered that data delivered by Meltwater, could either to a large extent or some extent be made sense of. Consequently, we can conclude that organizations make sense of the delivered data from data-providers such as Meltwater. We can therefore conclude based on the 35 questionnaire respondents, and the findings from our observation that illustrated the high level of interest and time Meltwater applied in order to ensure customers' made sense of the information presented to them.

To summarize the illustrated conclusion above, we can ultimately conclude that datafication and its concepts are core elements in the data collection process facilitated by Meltwater. Datafication are the significant factor when wanting to facilitate competitive intelligence over competitive advantage. Through the application of the four concepts dematerialization, liquification, density, and sense-making we have illustrated *how* datafication can facilitate elements of competitive

intelligence, and thereby answered our sub question how can datafication enable elements of intelligence.

Competitive intelligence

Through the above illustrated conclusion we were able to take the next step towards answering our research question; *how can a data-provider facilitate competitive intelligence?* As collection of data was the second phase of the generic intelligence cycle, in which we found the aspect and conclusion towards datafication and our sub-question, we move through the third phase, analysis of data, concerning the visual aspect of data presentation, and into the fourth phase of the generic intelligence cycle, dissemination.

In the fourth phase of the generic intelligence cycle we concluded that Meltwater is seen as a data-provider, since they provide data that are usable, actionable and valuable for the clients. Moreover we concluded that a data-provider presents only the results that the client expects. Thus it is expected that the needs and requirements agreed upon in the first phase is presented by Meltwater in the dissemination phase in the generic intelligence cycle.

However, we concluded that Meltwater as a data-provider not only present the required data that is asked for in the first phase of the generic intelligence cycle. In this case the data-provider present and provide unknown and new insights that organizations did not even know they were in need of. Through our questionnaire we could conclude that 41 percent of the respondents needed to change the overall strategy, vision or/and mission when provided with new insights from Meltwater. Furthermore we could conclude that 51 percent of the respondents changed their daily work procedure after having the new and unknown insights presented to them. Through the data collection process in correlation to datafication that often enables creativity through the four concepts, and the findings of what Meltwater provides to organizations in the fourth phase of the generic intelligence cycle, we came to the conclusion that answers our research question; *how can a data-provider facilitate competitive intelligence?* The answer to our research question is that, a data-provider cannot facilitate competitive intelligence. A data-provider can only facilitate competitive advantage. Thus, we present a new term of provider, which is an *insight-provider*. In this case Meltwater should therefore be denoted as an insight-provider instead of a data-provider,

since Meltwater provides unexplored insights and not only the expected data. Consequently, a data-provider can only facilitate competitive intelligence by becoming an insight-provider.

A data-provider can enable competitive advantage by providing the client with valuable and actionable information. On the other hand, an insight-provider can enable parts of competitive intelligence, since the notion of competitive intelligence stimulates an organization's creativeness, innovativeness and willingness to change. Datafication enables creativity and innovation, since the insight-provider focus on possibilities within the data, which results in numerous unexpected opportunities. These factors acts accordingly to Meltwater's data collection and business process, which supports our conclusion that in order to facilitate competitive intelligence, data-providers must become insight-providers.

Learning process

Through the application of the case company, we learned that data-providers who apply digitalization as a data collection method can facilitate competitive advantage. Through the research domain we illustrated that digitalization is when information products are converted into formats that can be stored on digital medias. Our deployment of the nine forces illustrated that data-providers are able to find information in regard to the forces of the framework. This framework provides the relevant factors that an organization needs to consider in order to gain information concerning the competitiveness of an industry. Meaning that a data-provider can facilitate competitive advantage if they collect and gather data that are in correlation with the nine forces .

Through our deployment of the generic intelligence cycle we were able to shed light upon how data-providers go about collecting the data. By applying the generic intelligence cycle, we learned that in phase two, collection of data, a data-provider gathers data that are in correlation with the nine forces. Whereas an insight-provider gathers data that are in correlation to the nine forces - *and* the concepts of datafication. By doing so, insight-providers can enable competitive intelligence. By examining the fourth phase of the generic intelligence cycle, we learned that the application of datafication in contrast to digitalization, can enable data-providers to go beyond what can be considered as a data-provider. Through this learning process, we contribute to the

research by presenting the new term insight-provider. We created this term since the data collection process of a data-provider do not correlate with the concepts of datafication. Therefore, a data-provider will never be able to facilitate competitive intelligence. The difference is then that a data-provider only provide the required and expected data that in turn can enable competitive advantage. Whereas an insight-provider can add unknown and unexplored insights besides also presenting the required data to the client. The core difference is that insights go beyond the notions of digitalization and into the concepts of datafication that relies on actuators, and sensors that generates the data around an object or a person.

Throughout our academic research, we have yet to find researchers who have paired datafication with competitive intelligence before this study. We have learned that the two concepts can easily be applied in correlation to each other. In this single case study datafication and competitive intelligence are the two core complementary concepts. They bear the content of this thesis and aid us towards answering our research question. Therefore we have learned that datafication and competitive intelligence easily can be applied and even complement each other in this field of research. In summary we have learned there there exist a gap in the research of competitive intelligence that we have tried to cover throughout our thesis.

A data-provider versus an insight-provider

In this part of the discussion we want to touch upon what the difference is between being a data-provider and being an insight-provider since they are two different concepts within one perspective. Both providers aim to enable a higher level of competitiveness with the client, but it is two different levels of competitiveness they provide. Furthermore, we want to stress the notion of sense-making since we believe it is a significant part of the facilitation when providing intelligence to the clients.

A data-provider can shortly be described as a third-party providing data to a client in order for the client to gain competitive advantage. Furthermore, a data-provider can enable a client with information and data that they are in need of in order to outmatch their competitors or become better informed about the internal and external environment. In the analysis, we stress that a data-provider, such as Meltwater in this case study, facilitates a data collection process with

elements from the generic intelligence cycle. This cycle is also followed by an insight-provider and it is only a few dissimilarities that is differentiating a data-provider from an insight-provider according to our analysis. Accordingly, we want to present concrete distinctions between being a data-provider and being an insight-provider, since it is crucial when looking at how an organization can gain the highest level of competitiveness, which in this case is argued to be through competitive intelligence. This data collection process consists of five phases, which is (1) planning, (2) collect and process data, (3) analyze the data, (4) disseminate the data and lastly, (5) evaluate and control (Thompson, 2001). Here the focus of a data-provider is to gather and collect the required data that the client needs in order to become more enlightened than before. Consequently, the process of data collection for a data-provider is not as demanding as the data collection process for an insight-provider, which we will touch upon further below. To summarize, is the data collection process of a data-provider to some extent similar to an insight-provider, since an insight-provider also needs to consider other steps along the already existing five phases (i.e the generic intelligence cycle).

Findings from the analysis

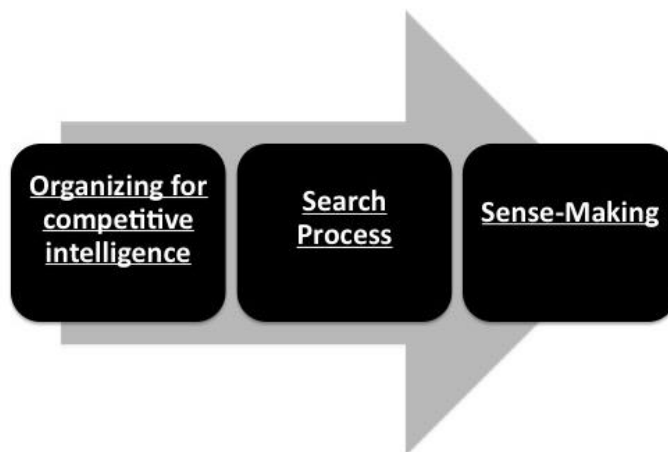
As concluded in our analysis, a data-provider cannot facilitate competitive intelligence. A data-provider can only facilitate competitive advantage. What is more, if a data-provider shall be able to facilitate competitive intelligence, they need to become an insight-provider. An insight-provider are, from our point of view, a provider that adds unknown insights that the client can use in order to become more competitive. These insights contributes knowledge and information for the client in another way than the required data, provided by a data-provider, does. The provided insights could for example be information concerning market change or competitor knowledge, that the client did not even know existed thus they did not ask for it in the phase of (1) planning. Therefore, these insights is undiscovered and unexplored by the client itself but the client became enlighten with the new identified insights provided by the insight-provider.

Our analysis, stressed that there is not an immense difference in the data collection process between being a data-provider and an insight-provider. However, when looking at the process of generating intelligence, there is an extensive difference by being a data-provider and being an insight-provider. This was not covered in our analysis and we think it is significant to touch upon

how the two providers are contrasting. Wherefore, we would like to discuss this gap of analysis in the section to come.

The process of generating intelligence

When an insight-provider generates intelligence it is significant to notice this process. It is crucial that the insight-provider integrates the client within this process, since it is the organization, which shall use the intelligent product and not the insight-provider itself. The process of generating intelligence (i.e. insight-provider) is very different from the process of generating data (i.e. data-provider).



(Appendix F. Generate Intelligence)

In the process of generating intelligence, there exist three phases (Jarworski et al., 2002). The first phase concerns organizing for competitive intelligence, which can be described as structures that supports the competitive intelligence efforts (Jarworski et al., 2002). This phase normally concern how the client itself structure for competitive intelligence activities. Though in our case, it is the insight-provider that focus on these activities since they are the providers of intelligence and not the client itself. Here Meltwater has a formal delineation of staff and resources that can facilitate the activities of competitive intelligence. We argue that this is another element that distinct an insight-provider from being a data-provider, since a data-provider only focus their resources towards the required data instead of also pointing focus towards intelligent activities such as datafication. We argue that another characteristic than an insight-provider have but a data-

provider does not have, is the ability to integrate the data within the organization. Meltwater focus many resources towards the integration of their insights (interview 1). Meltwater do not only present the insights, they also help integrate the provided data and insights within significant departments as well. This facilitation of stability for the competitive intelligence is definitely an enormous contrast between the function of being a data-provider and an insight-provider. Of course it is significant to mention, that not every data-provider do not solely present their findings and then leave the client to themselves. Many data-providers probably facilitate some kind of integration of the data. Nonetheless, the data provided by a data-provider is not timeless thus the integration of these data is not as difficult to facilitate as the integration and stability of intelligence is. So, the integration process of the findings may exist both at a data-provider and an insight-provider. However, the process of integrating intelligence and insights is much more demanding and requires more focus on stability and sustainability than the process of integrating data does.

The second phase concerns the searching for data and insights (Jarworski et al., 2002). Here the difference between being a data-provider and an insight-provider is limited, since they both search for valuable data. Yet, the distinction is on the boundaries of the collected data. A data-provider would be satisfied when finding the required and needed data whereas an insight-provider is never satisfied (interview 3). We could detect that an insight-provider is eager to find something new and thereby add undiscovered insights. Within this phase there exist three variables that assess the efficiency of the research process (Jarworski et al., 2002). These are accuracy, comprehensiveness and timeliness of the data. Accuracy refers to the validity of the obtained data, here both an insight-provider and a data-provider aims towards the same, since they both tries to uncover valid information about the required data. However, an insight-provider would also take the next step, which would be to search for more valid data than only searching for the required. Comprehensiveness reflects the extent to which all data relevant to a particular case is collected (Jarworski et al., 2002). Again, it can be discussed whether a data-provider only collects the relevant data or not. We argue, that the fundamental distinction between a data-provider and an insight-provider is due to the collected data. An insight-provider would have 'more' relevant data, than a data-provider, since an insight-provider would aim to find an

enormous set of relevant data that can provide the unexplored insights. Whilst, a data-provider would aim to a limited set of relevant data, since they 'only' need to provide the prescribed data and nothing else. Of course, a data-provider would not hesitate to collect more relevant data if they spot it in their planned search, but they are not planning to find more than only the mandatory data. An insight-provider plans for a large comprehensiveness since they aim desire to collect valuable insights that can turn-over the market positioning (interview 2). The third variable is timeliness, which reflects the extent to which the data is collected in time to remain useful for decision-making (Jarworski et al., 2002). Here the distinction between a data-provider and an insight-provider is greater, A data-provider desire for data that can be used at the time being, which in turn will facilitate a competitive advantage. On the other hand, an insight-provider focus on gaining intelligence, which means that data collected for the time being is not sufficient. Data concerning future and past events is significant since intelligent data concerns "*... a process of knowing what the competition is up to and staying one step ahead of them, by gathering information about competitors and, ideally, applying it to short and long-term strategic planning*" (Ettore, 1995). Wherefore, there is a contrast between gathering data concerning the present and how an organization can act upon that information immediately (i.e. a data-provider) and collecting data regarding '*staying one step ahead of the competitors*' (i.e. an insight-provider). A data-provider would collect data concerning a specific launch whilst an insight-provider would gather data sufficiently ahead of the target launch in order for the client to implement an intelligent response. In summary, it is two completely different objectives that a data-provider and an insight-provider operates from when collecting data, and will end with disparate outcomes.

Sense-making

The last phase concerns making sense of the data obtained through the search process (Jarworski et al., 2002). Here it is significant that the provider entails sense-making since it is crucial that the client understands the provided data/intelligence. A data-provider make sense of the data by solving the problem that the client had. Often, the client has some needs they want to be covered by data. It could be how the market differentiates or how their competitors is doing. Then a data-provider collects data concerning these specific issues and then apply the data directly to the obstacle and thereby provide valuable solutions and data regarding the problem of the client. Suddenly, the client possess the data that is needed in order to solve the specific problem, and the

client is satisfied with this progression. On the contrary, an insight-provider is not only focused on the specific problem, they are focused on the puzzle that needs to be solved in order for the client to become intelligent (interview 2). First, the insight-provider entails creatively synthesizing and integrating disparate pieces of information into a more complete picture on an issue, second they resembles ongoing puzzle solving rather than a specific issue or activity and thirdly, they redirect the search process for an ongoing basis so that the intelligence can sustain (Jarworski et al., 2002). Here the significant distinction from a data-provider to an insight-provider is that an insight-provider contribute insights concerning the bigger picture and not just one incident, Furthermore an insight-provider facilitates rapidity of the data, meaning that the data is not just for use at the time being but the data can be applied in the future also i.e. it is timeless. Again, it shows that there is a difference between being a data-provider and an insight-provider. As there is also a great distinction between gaining competitive advantage and competitive intelligence. Additionally, the phase of sense-making is very significant for an insight-provider since it is important that the client understand how to become intelligent and use the intelligent data. Lycett (2013) points that intelligent data is useless unless the outcomes can be incorporated into complex decision-making and empower actions that can provide value. Therefore, the sense-making process of intelligence is very significant if a client wants to become competitive intelligent. Sense-making concerns itself with *"...how people generate what they interpret in terms of: (a) the nature of how and why aspects are singled out from the stream-of-experience and (b) how interpretations are made explicit through concrete activity"* (Lycett, 2013) thus there exist some interesting challenges that arise for an insight-provider when wanting to facilitate competitive intelligence.

Meltwater tries to make sense of the intelligent data by visualizing. These graphics will unavoidably channel users towards some kind of inferences or actions, which will funnel creativity in certain directions (Lycett, 2013). This can then create an indication of how Meltwater wants the client to make sense of the presented. By using certain graphics, Meltwater can frame different references of how to make use of the intelligent data, which in turn can have a positive or negative outcome. The negative outcome is that the client is biased, hence cannot make creative decisions themselves and forget to understand the results in different ways than Meltwater

interpret and illustrate the provided data. The positive effect is that Meltwater ensure some sort of sense-making by presenting a concrete scenario for how the data can be applied within the organization.

<i>Data-provider</i>	<i>Insight-provider</i>
<i>Short-term advantage</i>	<i>Sustainable advantage</i>
<i>Provide predetermined and expected data through intentional findings</i>	<i>Provide unexplored and unknown insights through unintentional findings</i>
<i>Unstructured integration of data within the organization</i>	<i>Structured integration of intelligence within the organization</i>
<i>Limited sets of relevant data</i>	<i>Unlimited sets of relevant data</i>
<i>Search scope is focused and limited</i>	<i>Search scope is broad and exploratory</i>
<i>Facilitate elements of competitive advantage</i>	<i>Facilitate elements of competitive intelligence</i>
<i>Data-driven</i>	<i>Insight-driven</i>

(Summary table of Data-provider versus Insight-provider)

To summarize, our argument of the discussion is that a data-provider and an insight-provider are two sides of the same coin (see illustrated summary table above). They both want to enable competitiveness to some degree. The difference is not directly in the generic intelligence cycle, but the distinction comes to show when looking at how to generate intelligence. In the above seen illustration, it is clear to see the differences between the two, and how they operate when creating data suitable for either competitive advantage or competitive intelligence.

Practical contributions

Based on our research, we have come to different sets of conclusions, which can be considered as practical contributions. These practical contributions concerns the environment that we have studied since other practitioner who are in this environment may learn from this study of Meltwater.

As we challenge the concept of competitive advantage, due to the new world of datafication, third party organizations that delivers data to their clients should not brand themselves as facilitators of

competitive advantage. Due to the possibilities of datafication third-party organizations, such as Meltwater, should brand themselves as insight-providers, that can facilitate elements of competitive intelligence. Competitive intelligence can be seen as a far more sustainable advantage than the popular concept competitive advantage. As we challenge the concept of competitive advantage, so should the practitioners within the research environment. By elaborating on the possibilities and outcomes that data can facilitate, insight-providers should be able to position themselves as a partner to their clients, as opposed to a supplier. This is a notion that organization's such as Meltwater deem crucial, hence managing director Simon Ernst-Sunne states; *"... It is also important for us to be dedicated partners instead of just data suppliers. When we are partners, we often bring more value because we customers enables us to pass a lot of information (to them)"* (Interview 2). Thus we can detect how an organization as Meltwater realize that in order to deliver ensured (competitive) intelligence, they must position themselves as partners to their clients. In the questionnaire we could display how 48 percent of the respondents to this day still rely heavily on their intuition concerning decision-making. Therefore we can conclude that organizations as Meltwater has a long journey towards facilitating competitive intelligence to their total client base or their prospects.

If we turn the focus towards organizations that engage insight-providers in their working process, we argue that it is just as significant for these organizations to understand the possibilities that insight-providers may enable. It would be of great value if the organizations understood the fact that insight-providers can facilitate elements of competitive intelligence. If clients were aware of that the application provided by insight-providers can enable intelligent data within the organization, the client would benefit from deeming the supplier as an important business partner. Thus these organizations would gain a business-partner that could contribute sustainable advantage to their organizations instead of only hiring a contract-based insight-provider to facilitate this application. Therefore we argue that our conclusion also contributes to organizations that engage in the use of insight-providers, since they should place focus towards the possibility of creating a partnership instead of only a contract between two companies.

Theoretical contributions

Throughout our research, in which we have correlated datafication and competitive intelligence, we challenge previous theoretical assumptions within this specific research field of competitive intelligence. We do so, as datafication and competitive intelligence have not yet been paired in any research previous to this. Through our research domain we concluded that the two concepts is supporting the notion of each other, although these concepts never before been paired in the same way they are paired in this study.

We therefore argue that this single case study is a theoretical contribution to the field of competitive intelligence and the research thereof. The contribution lies within the use of datafication as a facilitation towards competitive intelligence. This research has illustrated that the concepts of datafication are the factors that describe how organisations, as Meltwater, enable other organizations to find insights not previously detected. Thus we contribute to field of competitive intelligence by making the concepts of datafication the sole factor that can enable elements of competitive intelligence.

The case company Meltwater has contributed with industry insights that allowed us to dig into their data collection process. Through that process, in correlation to our theoretical application of datafication and the generic intelligence cycle, we were able to answer our research question, in which we concluded that in order to facilitate competitive intelligence; data-providers must become insight-providers. Through the application of Meltwater as a case company, we established the core contribution to the research field, which is the term insight-provider.

We thereby set the stage for other researchers, who wish to explore the term insight-provider. Moreover, we stress that the term, insight-provider, can be explored and applied in such a manner that allows it to be extended beyond our existing notions concerning this term. As the term has been presented through the application of a single case study, we do not wish to make any generalizations based on this study.

As this is a single case study, and we have stressed the fact that we do not wish to make generalizations towards other research, we do realize that both our findings, and the term can be

challenged by other researchers. Other researchers might argue that a single case study, that endingly wish to contribute to the research field with new terms, cannot be considered a valid contribution. The next section will therefore discuss the limitations of a single case study, and the advantages of a single case study in order to reflect upon the downsides and upsides of our research.

Limitations

Single case study

In order for us to discuss the advantages and disadvantages of a single case study, we draw upon Merriam (2009), who argue that *"... the case study results in a rich and holistic account of a phenomenon. It offers insights and illuminates meanings that expand its readers' experiences. These insights can be construed as tentative hypotheses that help structure future research; hence, case study plays an important role in advancing a field's knowledge base"* (Merriam, 2009). The quote aligns with our research question, in which we holistically accounted for competitive intelligence and its facilitation through the use of datafication. We did so in order to expand the experience of how to facilitate competitive intelligence from a theoretic point of view. Moreover we draw upon, Yin (2009), who described the case study as *"... an empirical enquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident"* (Yin, 2009). Through the use of Meltwater we could detect that the company's data collection process could be compared quite tightly with generic intelligence process and the concepts of datafication, which supports Yin's quote in regard to using a single case study. Moreover the single case company applied to this research, served as a real-life context that enabled us to explore the phenomenon of competitive intelligence in its natural context. Moreover we apply Flyvberg (2006), to illustrate specific limitations and advantages towards single case studies in the sections below.

Limitations and advantages of single case studies

By drawing upon Flyvberg (2006) we came across five general arguments to the limitations of single case studies. Flyvberg (2006), speaks in favor of single case studies. Flyvberg (2006) illustrates five general misunderstandings, and thereby create counter arguments to each of the five misunderstandings.

The first generalization and misunderstanding is that *“... general knowledge is more valuable than specific context knowledge”* (Flyvberg, 2006). In our case, this means that the knowledge we contribute is very specific. The fact that we only have our lenses pointed to a very small context does not allow for the knowledge we present to be considered valuable. Therefore our knowledge cannot be considered a contribution to the larger research field, as it has no larger value. The counter argument is that *“... universals can't be found in the study of human affairs. Context-dependent knowledge is more valuable”* (Flyvberg, 2006). Specifically to our case study, this means that the data collection process of a real-life example, contributes to universal meaning through the specific case study of Meltwater.

The second generalization and misunderstanding is that *“... one can't generalize from a single case study so a single case study doesn't add scientific development”* (Flyvberg, 2006). The point in this argument challenge our whole research project. The reason is that if this was the case, we could throw away our entire research as it would not make any contributions to the research field at all. Due to the fact that our findings could not be made into any generalizations, and thereby not add any scientific development. The counter argument is that *“... formal generalizations are overvalued as a source of scientific development; the force of a single example is underestimated”* (Flyvberg, 2006). This means that researchers overvalue generalizations, and that our single case study is as valuable as research generalizations. Ultimately, Flyvberg (2006) argues that single case studies such as ours should be given more value and respect as it illustrated a real-life phenomenon.

The third generalization and misunderstanding is *“... the case study is most useful in the first phase of research process; used for generating hypothesis”* (Flyvberg, 2006). Meaning that our research is only the starting point towards answering our research question, as it cannot test any hypothesis as it is. This argument claim that our research question cannot be answered with the application of a single case study. The counter argument in the third generalization is that *“... the case study is useful for both generating and testing of the hypothesis but is not limited to these activities”* (Flyvberg, 2006). Thus our research can be considered an usable method to test and answer our

research question. Basically the argument here is that any activity can be applied to test our hypothesis. A notion we will touch upon after the five generalizations and misunderstandings have been discussed.

The fourth generalization and misunderstanding is “... *the case study confirms the researcher's preconceived notions*” (Flyvberg, 2006). This would mean that our case study does only answer our preconceived notions and the answers we present only applies to our preconceived notions. The counter argument in the fourth generalization is that “... *there is no greater bias in the case study toward confirming preconceived notions than in the other forms of research*” (Flyvberg, 2006). Meaning that we have yet to see other forms of research that does not contain the same bias. Thus researchers of this opinion cannot charge single case study with this bias, as preconceived notions are a part of any study researchers engage in.

The fifth and last generalization and misunderstanding is that “... *it is difficult to summarize case studies into general propositions and theories*” (Flyvberg, 2006). Thus this means that our single case study cannot be tested alongside any theories or propositions. The counter argument in the fifth generalization is that “... *difficulty summarizing case studies are due to properties of the reality studied not the research study*” (Flyvberg, 2006). As for our research we did not find difficulties in summarizing the case study to its reality. We could use the case study and Meltwaters' reality into general theoretical assumptions that were beneficial to our study. The properties of Meltwaters' reality made no difficulties towards our research study. They aided our understanding of datafication and the process of data collection in such a manner that allowed us as researchers to elaborate on the generic intelligence cycle, and contribute with the term insight-provider.

Through these five generalizations and misunderstandings that Flyvberg (2006) propose , we believe that there exists an underlying construction that aligns with our methodology. We believe that the restatements/arguments are based upon the notion of interpretivist. Besides the fact Flyvberg (2006) address the “misinterpretations” as flawed, in which his interpretation of them comes to life. Flyvberg (2006) claims that “... *universals can be found in the study of human affairs*” (Flyvberg, 2006). Flyvberg (2006) thereby argue that human affairs can be made into shared

knowledge i.e. universals. In order to create any form of universals social constructions come to play, as we can only create common understanding through shared meaning. To do so, we must interpret the universals through a shared social construction.

In summary, the five misunderstandings are then based on the same construction as our thesis. We therefore argue that the limitations towards this thesis and through the use of a single case study depend on the epistemology we derive from.

Avenues for further research

In this section of the discussion we will point out avenues for further research. Our field of research concerned competitive intelligence and datafication. Furthermore, our point of departure was the insight-provider. Accordingly, our focus was to examine our field of research from the perspective of the insight-provider and not the perspective of the client.

However, we want to stress the notion of another significant perspective. Namely, the perspective of the client since it is also very significant when integrating and implementing competitive intelligence within an organization. Consequently, we want to show implications of findings that goes beyond our own specific research, since we want to stress the fact that the following research is as significant as our own. Nonetheless it can be argued that a research concerning the organization is a study that derives from our study concerning the insight-provider. Therefore, we think it is of high relevance to touch upon the notion of further exploration, since we know it is related to this study..

However, it is significant to argue that this study did not miss any perspectives, since our approach did not concern the perspective of the client. Our conducted research concerning the point of the insight-provider is focused and applies perfectly to our scope of research. Consequently, we would like to demonstrate what lies beyond our limitation of our research domain, since we are well aware of that there exist more. Thus, we will provide pointers of how other research project can deal with other perspectives deriving from our conducted thesis.

Consequently, this section will concern further research with regards to how an organization can implement and integrate the 'provided intelligence' by an insight-provider such as Meltwater.

A research concerning how to integrate data within an organization and how this integration affects the context of strategy has already been made (Constantiou & Kallinikos, 2014). Therefore, we think that this article is very relevant for further research since it contains elements of how integration of intelligent data may affect and change the organization. Therefore, we integrate this article into our discussion since it is a solid groundwork for implications of further research. This article is relevant since Constantiou & Kallinikos, (2014) touches upon the notion of how integration of data can change the way an organization strategize, make decisions and operates.

A new perspective

An insight-provider can only facilitate intelligence and help integrating it within an organization. However, the last part of a complete integration and facilitation lies within the organization itself. Thus, this field of research combined with ours would create a total picture of how an organization can gain competitive intelligence. This scope was too broad for our research. Hence we decided to focus on the first part of the facilitation, which is how an insight-provider collects data, generates the data into intelligence, and how to facilitate the intelligent data. When a company wants to integrate the attributes of intelligence, it can have severe consequences, since it can challenge already established rules of strategy and working routines (Constantiou & Kallinikos, 2014). Consequently, the integration and implementation of intelligence within an organization will develop new intangible assets and contribute to the existing competitive strategy. By enabling new insights and innovative services that the organization can draw upon. Our study showed that intelligent data can enable know-how concerning the fields of the nine forces. Moreover it can empower information concerning the past, present and future. Thus, an organization has valuable and intelligent data to draw upon, also in their own strategy making. Consequently, the new implementation of intelligent data within a company can create data concerning new and unexplored opportunities for the organization. Thus the available intelligent data may support notions of new strategy making, since there is a new foundation to base the strategy upon.

Data and competitive intelligence is not simply a product, it is an evolution that happens around and within the organization. It is an ongoing process that contains a myriad of elements, which all should play together in order to fulfill this organizational transformation and become intelligent. Consequently, it is important to stress that routines can be conceived as crystallizations of a company's experience (Constantiou & Kallinikos, 2014). Therefore the routines can be seen as building blocks of the organization. Hence routines is very difficult to change and revise in order to adapt to new intelligent data. Wherefore, it seems that the integration of intelligent data will carry out implications that transcend the context of strategy and actually also disturbs the very nature of the organization (Constantiou & Kallinikos, 2014). Accordingly, is this field of research very interesting to study since our thesis demonstrates that there is a need for change within the organization if the client wants to gain competitive intelligence. Integrating and facilitating intelligent data is not enough for an organization to gain competitive intelligence, the organization also needs to integrate, facilitate and implement the data within the already existing routines, culture and strategizing. Consequently, the integration of intelligent data can be very difficult for an organization although an insight-provider facilitate some of the integration process.

How to adapt to intelligent data

As stated earlier, Constantiou & Kallinikos (2014) studies how data can have an impact on organizations. Thus we will clarify findings from their research, since it goes beyond our own. More so, we argue that this field of research is very interesting and studies concerning this will add valuable notions to our own study.

Constantiou & Kallinikos (2014) pinpoint that data *"... reshapes the means and operations through which information becomes available for decision makers in organizations"* (Constantiou & Kallinikos, 2014), which also illustrates that data is not just something an organization installs without any preparations or drastic changes internally in the organization. Moreover, they touch upon that the data can become organizational intelligence, since data affect *"... strategy, and how organizations perceive, assess and act upon their internal and external environments"* (Constantiou & Kallinikos, 2014). Thus it is really interesting to look at the changing context of strategy, since it might become reshaped in the presence of intelligent data. Another significant point of view proposed by Constantiou & Kallinikos (2014) is that organizations are not just

placeholders of resources but social units as well, which all filter and distribute the information around in the organization. Thus it is very important to be focused on the routines, processes and daily work life in the organization when integrating data since it is a change in the employee's regular workday. 43 percent of the respondents wrote that intelligent data provided by Meltwater changes the regular work assignments (appendix M), which also is an indication that data is something that transforms the organization and all of the daily processes. A shift from long-term horizon forecasting to short-term horizon nowcasting is just one of the many new contexts that the organization needs to be prepared for (Constantiou & Kallinikos, 2014). The respondents from our questionnaire also supported the notion that change is happening due to data. 46 percent state that data has changed the organizational strategy. Furthermore 51 percent state that the implementation of data also has changed their work routines and processes (appendix M). One respondent commented that *"... we have changed a lot in my organization ever since data from Meltwater were available for us. Not only strategy but actually every part of my organization has been changed somehow"* (appendix M). This statement pinpoint the notion of that data carries wider implications that transcending the context of strategy. Constantiou & Kallinikos (2014) proclaim that *"... strategy is never an isolated activity. It is rooted in organizational structures, established in routines, labour divisions, industry relations and institutional solutions."* (Constantiou & Kallinikos, 2014), thus the changes that arrives with data cannot only be focused towards strategizing but these changes actually concerns the organization as a whole, *"... data changed everything for us, we are really a new organization. It has been a very turbulent and difficult road..."* (appendix M). Consequently, an organization needs to prepare for the demanding integration of data. This integration is about the people in the organization, how they work, interact and make sense of the new and big changes in their daily work routines. Our data concerning this field would act as solid groundwork for further research since our data proclaims that there is a need for facilitation and changes within the organization. Thus further research concerning this field of departure would be very beneficial for this study since it supports the notion of how to gain competitive intelligence.

Integration strategies

Another point of departure for future research could be, how to balance routines and experience with the use of data. Here the discussion of, how to combine these two would be interesting to

examine. Our research showed that managers often base their decisions on intuition, experience and gut feelings (appendix M) thus a change in how to make decisions needs to be made if the company wants to integrate and embrace the intelligent data completely. Consequently, a fieldwork concerning data-driven and intuition-driven decision making would be beneficial to execute since the integration of intelligent data will affect the organization and how a decision is being made. Moreover, the organization needs to make use of the new data in order to become more competitive. Thus, it would not be sufficient to focus all of the resources on intuition and experience since this is how it has been done in the past. Therefore, changes needs to be made, both on the operational level and the strategical level of the organization.

Barton & Cour (2013) stress the notion of integrating data as a part of the organization instead of just using the data for simple purposes. They mention three key aspects to be aware of when integrating data. The third aspect could be interesting to look at in further research since this aspect focus on the transformation of the organization in order to facilitate the intelligent data proper; *"... management must posses the muscle to transform the organization so that the data and models actually yield better decisions"* (Barton & Cour, 2013). In this process there exist one very important feature, which is having a clear strategy for how to use intelligent data in order to compete. Consequently, we think that research concerning the integration strategy of the intelligent data could be valuable research to study further. This thesis actually supports the notion of changing or in someway adapt the strategy so the organization may have easier to facilitate the intelligent data and actually use it in the decision making, work processes and more.

"... Our clients needs to change or modify their strategy completely since they now have tons of data available. Thus it is obvious that you cannot operate the same way you did before and without data because data provides something new, other working processes are at play. Ultimately, you need to strategize around your data in order to integrate the data and become more competitive" (Interview 3), this quote also recognize the significance of proper strategizing. It is not enough to have intelligent data available, the organization also needs to utilize the data and strategize around the it. Problems concerning data integration is a common problem for most organizations thus we asked the clients of Meltwater about this problem of integration. 71,5 percent states that they did not change their strategy, mission or vision after gaining actionable

data from Meltwater (appendix M). This number most definitely supports the notion of insufficient use of intelligent data provided by Meltwater. Barton & Cour (2013) states that such problems often arise due to a mismatch “... *between an organization’s existing culture and capabilities and emerging tactics to exploit data successfully*”. Moreover, these new approaches towards data either “... *don’t align with how companies actually arrive at decisions or fail to provide a clear blueprint for realizing business goals*” (Baron & Cour, 2013), which also is seen at many clients of Meltwater, “... *if our clients don’t change their work processes or strategy around data they often fail to adapt and use the data the proper way. Often they just use 20% of what the data really can do and that is sad*” (Interview 2). Although many clients do not change their strategy, over half of them state that their work processes has to some extent changed after data has become available. Again, this shows that data is changing an organization and if the organization do not follow or adapt to this change then the data becomes inapplicable and to some extent meaningless since the full potential of the data is far from used.

Bottom line is, that in order to make proper use of intelligent data, the organization requires thoughtful change both on the operating and the strategic level. How to change the organization is much more difficult to conclude on since each organization has different routines, strategies and work processes. Thus there does not exist one ultimate conclusion for every organization that wants to become datafied. “... *I think the strategy should be changed since it is another and different kind of understanding than beforehand*” (interview 2). Therefore, the overall strategy of an organization should be modified in order for the company to use the full potential of the intelligent data.

In summary, we created a thesis concerning how an insight-provider can facilitate competitive intelligence. However, we argue that it is not solely the perspective of the insight-provider that is significant in this facilitation. Clearly, It is also the organization itself that needs to take part in this facilitation. Consequently, it would be interesting to conduct further research concerning this facilitation through the lens of the organization since immense changes needs to be made in order for the organization to fully adapt and facilitate the intelligent data.

Conclusion

In conclusion of this thesis, we will bring together the key findings of the analysis and the following discussion. This master thesis examined how a data-provider can facilitate competitive intelligence. We proposed this area of research since we believe that competitive advantage to some extent is limited and outdated in comparison to the concept of competitive intelligence. This limitation of competitive advantage is mainly due to the lack of sustainability and level of competitiveness.

In the first part of the conclusion we will draw upon findings from the analysis as it formed a departure for the discussion. In order to illustrate how a data-provider can enable competitive advantage we applied the framework of the nine forces (Fleisher & Bensoussan, 2007). We did so, alongside our conduction of three interviews with Meltwater employees with highest seniority that ensured experienced insights concerning external data, observations of meetings between meltwater account managers and their clients, and endingly a questionnaire with 39 respondents, that challenged the assumptions found in the other data collection methods. By doing so, we concluded that Meltwater can create a solution that provide organizations with valuable and actionable information regarding their industry environment that endingly can generate competitive advantage. We illustrated that organizations as Meltwater are able to collect data regarding external environmental factors of an organization. The factors, such as competitors, substitutes, potential entrants, consumer, economic, technological, and international shifts, alongside the internal environment of an organization were analyzed through the application of Meltwaters data collection process. This was done in order to conclude that organizations as Meltwater could provide information that stood in correlation with the nine forces, and thereby were able to uncover the demanded information that organizations needs in order gain an industry advantage. This endingly led to the conclusion that data-providers can facilitate elements of competitive advantage.

The second part of the analysis concerned how a data-provider can facilitate competitive intelligence, since we, based on the above conclusion knew that a data-provider could facilitate elements of competitive advantage. Consequently, we displayed the data collection process of

Meltwater. We did so through information gained from the three interviews, and our five observations that served as our core understanding of the client's' perception of the data, and visual effects in which the data is presented. Moreover, we looked at the generic intelligence cycle in order to delineate if the data collection process of Mæeltwater were in correlation with the generic intelligence cycle. We came to conclude that Meltwater in the (4) dissemination phase provides unknown and unexplored insights instead of only contributing with the expected data, as a data-provider should. Consequently, we concluded that Meltwater can be depicted as an insight-provider since they facilitate elements of competitive intelligence through the presented unexplored insights. Moreover, we concluded that these new insights can be the groundwork for facilitating competitive intelligence, since the insights can help an organization detect market opportunities in terms of being innovative, creative and change the fundamental operations within the company. Ultimately, the application of the generic intelligence cycle enabled us to draw upon the data collection process of Meltwater, when gathering, analyzing and disseminating the data, which in turned showed the distinctive from being a data-provider to an insight-provider. This distinction was entitled since a data-provider only presents and provides the expected and required data, whereas an insight-provider presents the expected data and unexpected insights which can turn into elements of competitive intelligence for the organization. Besides the conclusion that Meltwater is an insight-provider, we also stressed the significance of datafication in the generating process of competitive intelligence. If the concepts of datafication, dematerialization, liquification and density, were present within the data collection process then the insight-provider had a higher chance of creating unknown insights instead of only generating the expected data. Consequently, the use of datafication enabled us to detect that Meltwater can facilitate elements of competitive intelligence, since their process of data collection corresponds with the concepts of datafication. Lastly, the analysis concluded that by going beyond the needed information and discovering the unknown content of the data, a data-provider becomes an insight-provider.

The concluding remarks in the analysis pointed out avenues for our discussion. The discussion contained findings from the analysis, a distinction between being a data-provider and being an

insight-provider, practical and theoretical contributions and lastly, we pointed out avenues for further research.

As the analysis could conclude that in order to facilitate competitive intelligence, a data-provider must become an insight-provider, we discussed the distinction between a data-provider and an insight-provider. In order to make this distinction we looked at the processes of generating intelligence, since a data-provider is not able to create and generate intelligence. Consequently, we wanted to discover the differences between the two providers in this process of generation. When looking at the three processes of generation, we concluded that there existed many distinctions between the two providers. Firstly, a data-provider only facilitates a short-term advantage, provides predetermined and expected data and has a limited set of relevant data. On the other side, an insight-provider facilitates sustainable advantage, provides unexplored and unknown insight and has unlimited sets of relevant data. Consequently, a data-provider solely facilitates elements of competitive advantage, contradictory an insight-provider facilitates elements of competitive intelligence.

As for the practical findings concerning this thesis, we challenged the concept of competitive advantage, due to the new world of datafication, that can enable competitive intelligence. We therefore argued that organizations as Meltwater should forego of the notion that they can enable competitive advantage as data-providers, and instead brand themselves as insight-providers who can enable elements of competitive intelligence. A far more sustainable advantage. Therefore we argued that such organizations should position themselves as business partners instead of suppliers. We could also conclude that this something organizations as Meltwater has yet to succeed in, since 48 percent of their clients rely on experience and intuition rather than data-information concerning decision making.

By turning the focus from organizations as Meltwater, and over to the organizations that engage insight-providers, we argued that they should engage insight-providers even more than previously detected based on the questionnaire. We argued that if these organizations knew what the application of insight-providers could enable i.e. competitive intelligence, they would rapidly engage them as business partners as opposed to suppliers.

We therefore endingly concluded that the practical contribution should be applied from an insight-provider perspective, as well as client perspective.

Lastly, we discussed avenues for further research. Here the notion of integrating and facilitating the intelligent data were in focus. This thesis took departure from the perspective of the provider. However, we argue that further research may integrate the perspective of the organization that wants to facilitate and integrate the intelligent data. We concluded in the discussion that the organization itself also needs to take part in the facilitation of intelligence or else the intelligent data will not be used proper and thereby create competitive intelligence. Consequently, it could be interesting to conduct research concerning this facilitation, which is the next step after being provided with intelligent data from the insight-provider.

In summary, this dissertation answers the research question of, *how a data-provider facilitate competitive intelligence*. We concluded that a data-provider cannot facilitate this process. Competitive intelligence can only be facilitated by an insight-provider, since they provide and generate intelligent data and insights that to some extent is the prerequisite for competitive intelligence. Thereby we answer our research question; how can a data-provider facilitate competitive intelligence, by stating that a data.provider can only facilitate competitive intelligence by becoming an insight-provider.

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Websites

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<http://www.meltwater.com/about/company-history>

Link 2:

<http://www.meltwater.com/about/vision>

Link 3:

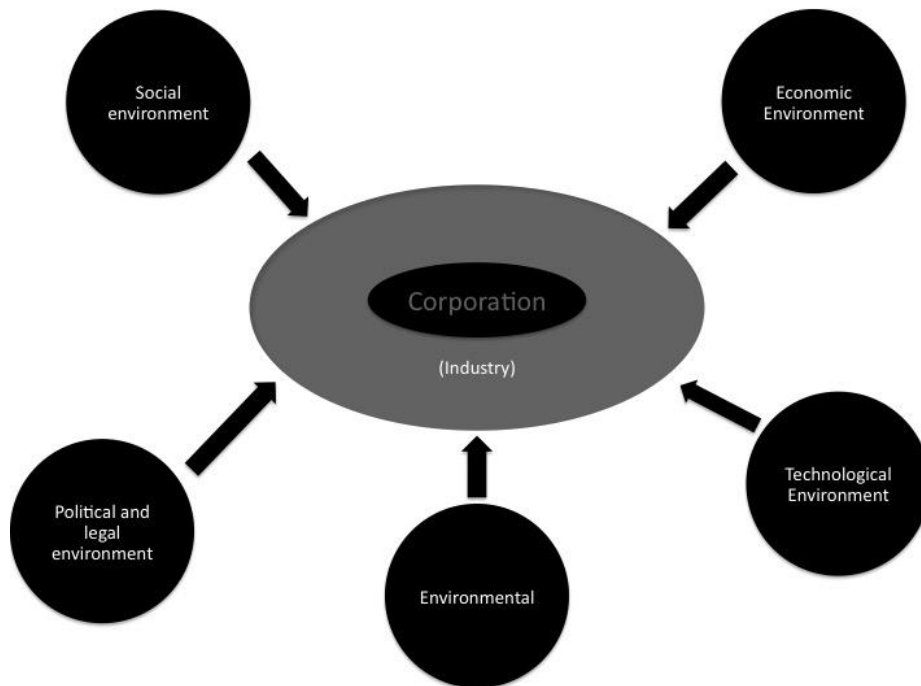
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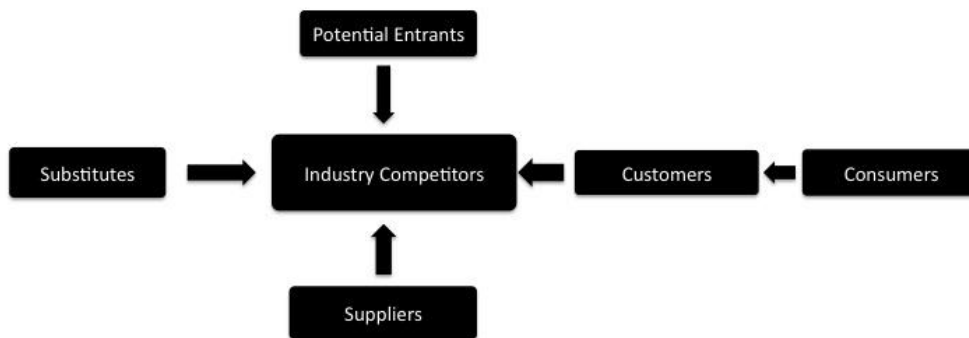
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Appendices

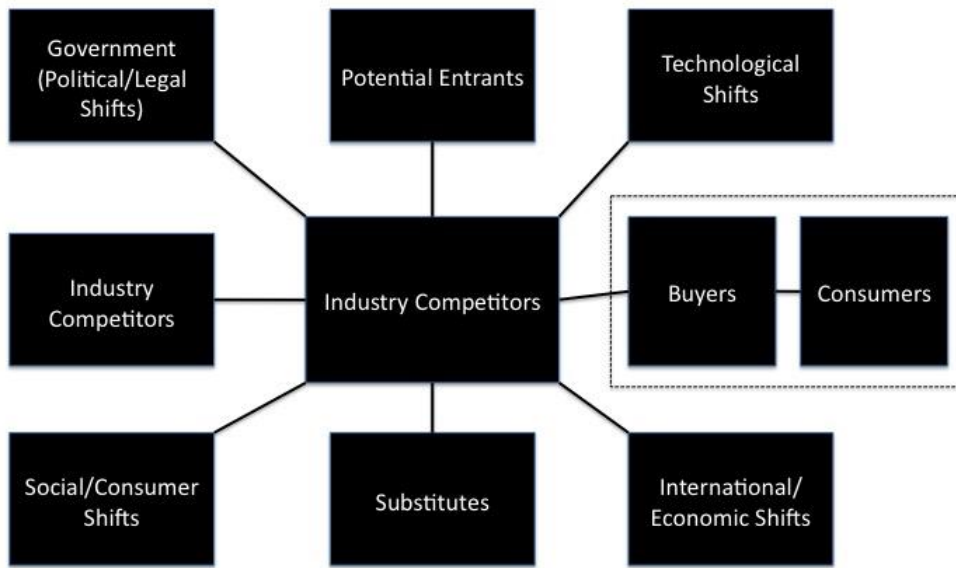
Appendix A. STEEP/PEST Factors



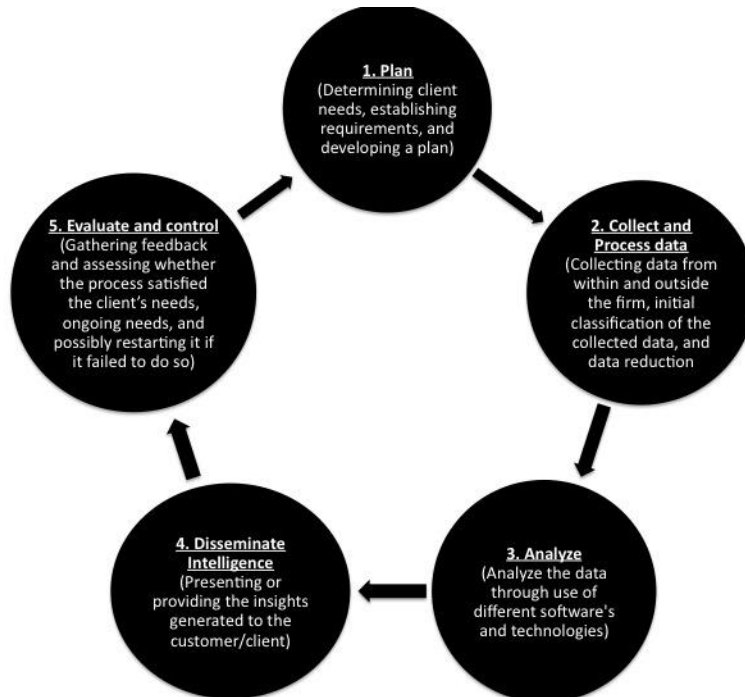
Appendix B. Porter's Five Forces Model



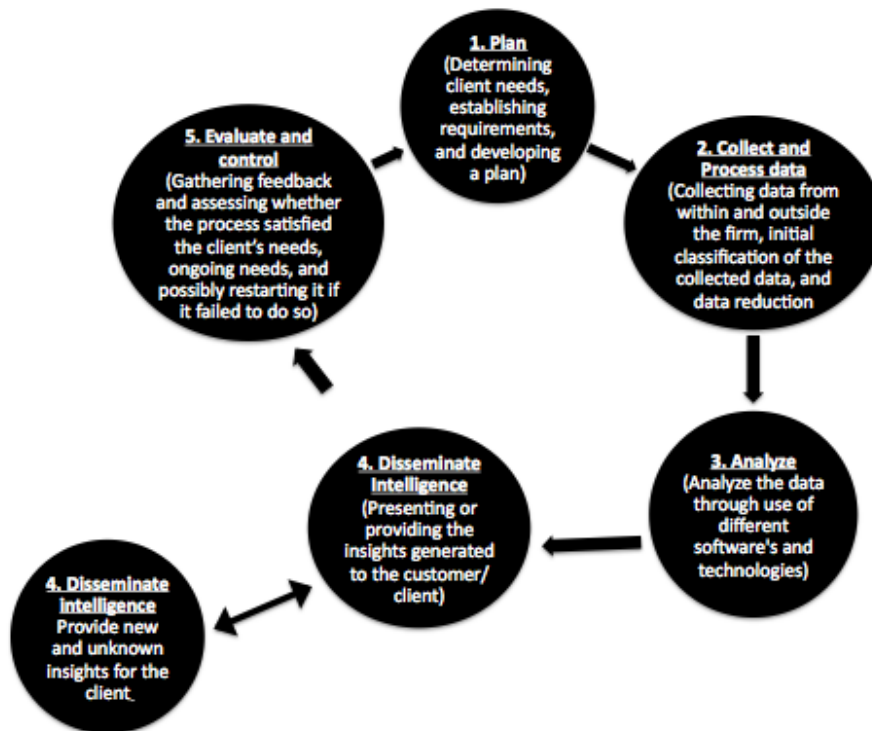
Appendix C. The Nine Forces Model



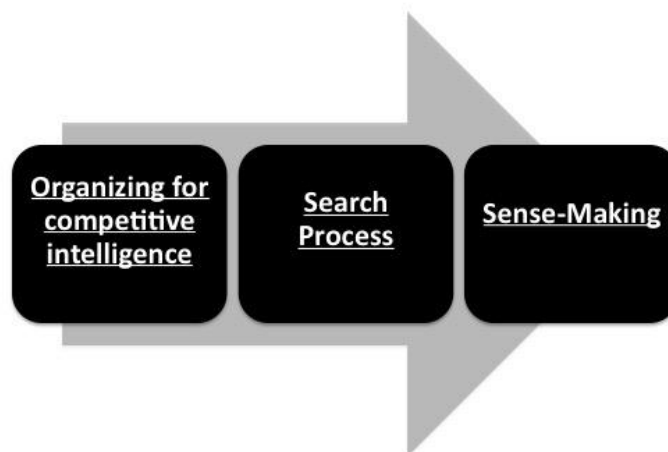
Appendix D. The Generic Intelligence Cycle



Appendix E. The Generic Intelligence Cycle w. Insights



Appendix F. Generate Intelligence



Appendix G. Interview questions

Simon Ernst-Sunne

- Managing Director Meltwater Denmark, Client Success

Christian Thorsø

- Managing Director Meltwater Denmark, Client Acquisition

Dennis Mølgaard

- Business Developer & Key Client Manager

Topic guide Danish and English

Data as competitive advantage

What are the possibilities you have when using data provided by Meltwater ?
/ Hvilke muligheder ser I ved brug af data?

What can you achieve when using data provided by Meltwater?
/ Hvad kan opnå ved brug af data?

Do your clients/prospects understand/are aware of the potential of using data? What is the potential?
/ Forstår jeres kunder potentiale ved arbejdet af data - Hvad er potentialet?

Cases - good + bad examples

How do your clients use the data provided by Meltwater? Good and bad examples
/ Hvordan bruger jeres kunder data? (gode og dårlige eksempler)

Do you see a difference between the clients who use your data vs. organizations within the same field as your clients/competitors who do not use data or do not use data provided by Meltwater?
/ Ser i en forskel i de kunder der bruger data vs. organisationer inde for samme felt (konkurrenter som ikke bruger jeres data)

- What are the differences?

Who is a typical user of the data you provide - data manager, marketing, sales, directors etc.

- Why is that?
- Who "should" be in charge of the data?

/ Hvem håndterer de data i giver dem i organisationen - data manager / marketing / sales

- Har de en overordnet forståelse for data?

Tacit + Explicit knowledge

How do you advise the clients to use the data?

/ Hvordan råder i kunderne til at gøre brug af den data i giver dem?

Do you feel that the clients uses the data proper and is an advantage rather than a disadvantage?
/ Føler i at jeres kunder bruger al den data til deres fordel?

Do the clients understand the provided information?

Can they transform the information into practical use?

/ Får kunderne forstået (omvendt) den rå data til brugbar information som kan bruges direkte i deres forretningsmodel?

Do they use the information "correct"?

- What is "correct"?

/ Hvad er korrekt brug af jeres data?

Strategy - data

Does your data change clients strategies or do they stay the same?

/Bliver der ændret strategisk hos jeres kunder, når de skal bruge jeres data - eller bliver de i de samme vaner?

Does your clients achieve a competitive advantage by using your data?

- Why? How?

/ Føler du at jeres kunder opnår en competitive advantage gennem brug af jeres data?

Does your data provide the possibility of creating a (new) strategy for your clients?

/ Er jeres data med til at udforme en decideret strategi for jeres kunder?

Should your clients change strategy or create a specific data strategy before using or implementing data in the org.

- Why? After?

/ Er jeres data med til at udforme en decideret strategi for jeres kunder?

Appendix H. Interview 1

Christian Pedersen (interview 1)

- Managing Director Meltwater Denmark, Client Acquisition

Hvad tror du rollen for data er i det danske erhvervsliv?

Det vi kalder data i dag og det vi arbejder med er jo det man kalder media intelligence..

Overordnet set så kan man allerede se et skift fra internal data til external data. Dvs. Førhen kendte man meget til de interne data der foregår, alt fra gammel salgshistorik til løndata, så man ligesom prøvede at lave nogle forecast fremadrettet. Det vi ser i dag og det markede vi har er det vi kalder external data. Dvs at vi kigger på alle de faktorer der foregår ude i markede for så bedre at kunne træffe nogle beslutninger internt i virksomheden - alle mulige eksempler på at der sker et eller andet der påvirker vores forretning. Den rolle vi har er at være en del af dette paradigme skifte der er fra internal til external data.

Hvad mener du at diverse kunder kan opnå med denne eksterne data du taler om?

Helt basalt så er det at træffe bedre beslutninger. Dvs at alle decision makers vil gerne være så velinformeret som muligt når de skal træffe en beslutning. Du kan se at der sker et eller andet i dit marked. Ved at du kan se dette, så kan det være med til at du kan træffe de rigtige og korrekte beslutninger på baggrund af denne data. Kontra at hvis du ikke ved at din konkurrent for eksempel investerer rigtigt meget i Kina lige nu, så kan det være en rigtig rigtig fatal information og gå glip af.

Kan du give nogle eksempler på at det er godt når kunder har haft denne data de ikke har haft før og gerne nogle andre negative eksempler?

Ja. Overordnet set så er de gode eksempler jo det her med når man kan træffe en beslutning ud fra noget data og ikke bare træffer en beslutning ud fra ens hunch eller ens erfaring, men at man faktisk har noget konkret at basere sine beslutninger på. Eksempler kunne være at kigge på hvorhenne lige nu at man ser en utliffredshed eller en bestemt mangel inden for et produkt, det kan også være at der ligepludselig kommer information om at en regering åbner op for muligheden om et nyt privat hospital. Det kan være helt oplagt for virksomheder som leder efter nye markeder at få information om alle disse ting. Pressechef for Carlsberg kan også bruge alle disse informationer, så han ikke fremstår som én der ikke ved hvad der sker i verden. Ved at kende alle de her ting på forhånd så kan han brande og planlægge ud fra alle disse data som han ellers ikke havde haft. (1)

Synes du generelt at du oplever et stort skifte fra dem som ikke har haft data - Er der en stor omvæltning i deres arbejdsmåde eller arbejdsmetoder?

Folk er blevet meget mere proaktive fremfor reaktiv. Jo før du kan få information så du netop kan sikre dig om hvad du skal tale om og ved når alle de folk der kontakter dig. Hvis nu du står og skal vælge hvor du skal lægge dine marketingskroner, så kan det være at du ved at der har været god succes med noget tidligere eller dine konkurrenter, så ved du hvor du skal placere dine penge på baggrund af denne data. I dag er det blevet tilgængeligt og vi kan servere det hurtigt nok til dem - det er der forskellen er.

Det der bliver serveret for dem - kan de forstå de data der bliver serveret for dem?

Det er vores arbejde at gøre data forståeligt. Dette kunne for eksempel være at se at I april er Kina et stort markedet etc. Vi kan på den måde gøre grafer til simple KPI'er. Vi kan lægge alle mulige forskellige parametre og KPI'er på, som danner et overblik over alt man kan bruge denne data på.

Kan strategien hos kunden så ændre sig efter at man er begyndt at bruge data?

Ja altså helt sikkert. Jeg tror at de største grunde til at købe data hos Meltwater er hvis man vil spare tid eller hvis der er noget information i dag som man ikke har. Hvis der er information om bestemte markeder som man ikke selv kan få, så har Meltwater en rigtig stor rolle og værdi. Det her big data får en hel ny betydning. Al den data der er i dag kan du ikke selv gabe over med mindre du selv kan sidde og manuelt overvåge det.

Ser du en udvikling hos jeres kunder i forhold til brug af data før og efter?

Ja, man kan sige at hvis man har dataen før en konkurrent om for eksempel en efterspørgsel i markedet, så kan det jo betyde mange penge. Der foregår rigtig meget lobbyisme, jo før du ved

noget og jo før du kan komme ind i beslutningsprocessen. Så der er helt klart en competitive advantage ved og vide nogle ting før dine konkurrenter.

Vi har en masse kunder der kan takke os for mere salg. Data kan også vise, hvilket markede der er bedst til netop deres beslutning. Twitter er for eksempel ikke stort i Danmark kontra i Sverige.

Kan man argumentere at data er en competitive advantage fordi at det kan vise på hvilket markedet man kan bevæge sig hen på?

Data er i en høj grad competitive advantage, men jeg vil også kalde data for et produkt i dag. Fordi data er ligesom.. altså ligesom et ERP system i dag er et produkt så er external data også et produkt i dag, fordi hvis ikke du har en udbyder til at hjælpe dig med at forstå denne data der er i dag, så tror jeg at du har meget svært ved at kunne træffe nogle beslutninger ud fra det. Så er det mere din hunch eller dine netværk du træffer dine beslutninger på. Så jeg vil sige at data er et produkt i dag.

I starten af en process, så er der rigtig meget rådgivning, sparring og forståelse for, hvad der kan give værdi for kunden. En stor udfordring er at vi skal også forstå og lære de forskellige stillinger og brancher. De her data skræddersyes til kunderne.

Når i ser virksomheder få denne data, ændrer deres strategi sig så eller bliver de ved at holde fast i den gamle?

Vi ser to ting.

Den ene ting er når de har en strategi, så vil de gerne have målt på den og opdateret den. Virker den.

Den anden del som er begyndt at ske i stigende grad er at vi bliver inviteret i strategiprocesen. Det kunne være en ny strategi for sociale medier. Vi kommer ind i starten af processen og stille nogle kriterier op.

Fremtidsmæssigt: tror du at denne data rolle bliver større?

Jeg tror kun af denne rolle bliver større, altså markedet har et kæmpe potentialet. Media intelligence. I dag har de fleste en eller anden form for løsning. Deres behov bliver kun større, det gik fra kun at ville have en direkte feedback på hvad man gjorde (jeg er så god osv.) men i dag er det ikke nok - i dag skal du kunne bruge det i alle afdelinger og ikke kun i enkelte tilfælde. Man kan sige at en ting er at man er gået fra at skulle retfærdiggøre sit job til at man er en del af beslutningsprocesserne i direktionen. Jeg tror at marketing får en endnu større del i beslutningerne og at man kommer til at lytte meget mere på dem da de har data, fordi at de kan sige hvad betyder noget og hvad gør en forskel.

Det handler også om hvilke virksomheder der er først ude, innovation osv. Jeg tror kun at dette data markede vokser og det bliver meget større.

Appendix I. Simon Ernst-Sunne (Interview 2)

Managing Director Meltwater Denmark, Client Success

Hvad ser du som de muligheder der er ved brug af den data som Meltwater leverer?

Den data vi har lige nu mener jeg at man kan bruge på et tværsnit af hele virksomheder. Vi kan hjælpe virksomheder med at tage de rigtige beslutninger på baggrund af al den viden vi kan give dem. Alt den data vi henter det er data udefra. Og det vælger vi at se som meget mere proaktiv data, fordi du egentlig går ind og lægger øret på togs Skinnerne - kunderne ved kva os hvad der kommer til at ske lige om lidt og hvad det er de skal være opmærksom på i stedet for at de skal gå ind og læse om det i deres interne data, som er mere reaktiv data. (1)

Ændres kundernes strategier efter at de bruger jeres data?

Både ja og nej. Man kan sige at medieovervågning i gammel forstand har jo eksisteret siden der blev lavet avis første gang, altså man tog jo en saks og klippede avisartikler ud. Det er der stadigvæk virksomheder som bare vil have - de vil bare vide når der skrives om dem og hvornår. Det der er begyndt at komme det er at business intelligence, media intelligence - de går ud og taler med sådan nogle som os fordi de vil godt visualisere fremtiden, markedet og hvor de forskellige muligheder ligger - og det er det der interessant vil vores branche. De forskellige veje man kan gå ned ad ud fra data - der er så mange.

Er vi nået så langt med data at man ikke behøver den menneskelige del mere?

Jeg mener jo på en eller anden måde at der skal være dele af menneskelig adfærd indover.. Bare for at dobbelttjekke og om de data bevæger sig i den rigtige retning og om de outcome er det vi vil have. Når det så er sagt så ser vi også en bedre strømligning og kan gå ind og gøre alt. Altså data kan jo gøre en 95 .. 99 % af det som man ikke kunne før i tiden.. Og vi bevæger os derhen af, at data selv kan klare hele arbejdet, men vi er der ikke endnu.

Vil du sige at det Meltwater leverer at det bliver forstået? Også i andet og tredje led?

Ja

Eksempler på kunder der har brugt Meltwater - gode og positive?

Vi arbejder på at skabe noget værdi for kunden. Så kan man sige, hvad er værdi for virksomheden, det kan være sindssygt svært at komme ind og skulle bidrage med noget værdi udefra. Hvordan skaber vi ROI på det produkt som kunden køber hos os. Det helt basale er leadgenerering. Vi finder leads til kunder. Og der går vi faktisk ind og ændrer vaner hos virksomhederne, den måde de anskuer deres marked på ændrer sig også.

Business development er også ændret. Man søger ligepludselig bredere. I stedet for kun at søge på sig selv og kigge indad, så begynder man at kigge udad og på sine konkurrenter og nu også en hel industri og tendenser, trends og udvikling. Vi kigger også på anderledes form for data - 3.

genreations data .. Når man kan samle alt det ind så får man et helt billede af det der sker derude så på den måde så mener jeg at virksomheder kan bruge data rigtigt meget.

Rockwool har brugt vores værktøj til at lave en hub, som generer en newsfeedcenter, så overvåger vi alle deres konkurrenter og produkter på forskellige markeder. Så alle i hele verden kan gå ind på denne hub og trække det data ud som er specifikt vigtigt for dem og deres marked. Og på den måde kan vi gå ind og ændre en hel virksomhed indefra eller måske en del af en virksomhed, som så giver leads og produkter osv.

Føler du at størstedelen af kunderne forstår potentialet ved disse data i leverer?

Den er svær at svare. Jeg tror at de fleste kunder forstår det, men jeg tror ikke at alle kunder formår at omsætte det direkte, nej det tror jeg ikke. Jeg tror stadigvæk at der er mange kunder der bare skal vide hvad der bliver skrevet om mig, eller om vores konkurrenter. Og der er der nok mange der strander.

Der hvor vi får allermost indflydelse og der hvor vi kan bidrage mest det er hvor det faktisk er at torvholderen på projektet også er højt op. Altså når det er en som kan tage beslutninger.. En stor figur som kan gå ind og trække i en masse tråde, og lave forandringer i hele virksomheden. En direktør der kan få information om alt nedefra og ud fra de data vi trækker, og så kan hive det hele op igennem en tragt, så begynder det først at blive spændende.

Tror du at denne strategi skal ændres for at bruge denne data ordentligt eller kan man godt sætte det som en ekstra ting på den nuværende strategi?

Jeg tror at det skal ændres, fordi at det er en anderledes forståelse. Så ja den skal ændres, det er en ny forståelse.

Hvis vi snakker lidt fremadrettet, hvad tror du så at det næste er både for Meltwater brug af data og erhvervslivets brug af data?

Vi begynder at kigge på sådan noget som job sider. Se hvordan kan man få output ud af al den her data? Så så meget data som vi kan finde, men alt data der ligger online tilgængelig, hvis vi kan få alt det her data ind i et program og få visualiseret det, så er det der jeg tror at vi bevæger os derhen hvor det begynder at blive rigtigt spændende. CXO dashboard, hvor man går ind og henter data for hver enkelt afdeling på sin app, telefon eller skrivebord, hvor man så kan se hvad sker der i min virksomhed lige nu, baseret på data udefra - i stedet for at kigge på kedelig intern data. Så begynder det at bliver interessant og så er det virkelig relevant.

Hvordan sikrer man sig så at al den her data er relevant?

Det er der flere måde at gøre på. til at starte med tager man det lette ting. ting som man ved er relevante. Når vi så gåt videre mod next level, så sker der en filtrering, og den sker igen kun gennem menneskelig interaktion. vi bliver nødt til at gå ind og sige til en direktør i en stor virksomhed, hvad er du godt kunne tænke dig, og så få det visualiseret. jeg tror vores approach er anderledes, fordi vi går ind og siger; hvordan er det vi kan hjælpe dig, og så finder vi det output og leverer det den vej rundt. så det er svært at gå ind at sige om det er jobdata, biblioteksdata eller en helt anden form for data. det hvor det er interessant er når vi går ind og spørger hvilket behov du har, og så finde dataen og visualisere det for dig.

Tror du der ville komme output uden menneskelig interaktion?

Ikke som det er lige nu

Hvad skal der til for at vi når dertil?

det ved jeg ikke, jeg tror vi skal derhen hvor virksomheder blev så strømlinede at alt handlede om inbound salg, så folk kontaktede virksomheden når de ville købe noget. Selv skrev et eller andet sted i sfæren når de utilfredse eller glade for noget. Når alting bliver så automatiseret så løser dig sig selv.

Ser du en forskel hos virksomheder/kunder der bruger data, og deres konkurrenter som ikke gør?

Ja, det letteste er f.eks ved brugen af sociale medier lige nu og hvordan det højner deres salg. men det vigtigste er at se at dem der bearbejder deres data de forstår deres marked og position meget bedre, så jeg tror det er dem der overlever om 10-15 år, og ikke bare fordi de var gode til at booste deres mersalg via facebook. det der sker på det sociale medier nu kan være det der definerer hvad der sker imorgen, om 3 uger, om 3 år.

Hvilken rolle spiller data lige nu i det danske erhvervsliv?

Jeg tror ikke man er klar over hvor meget det betyder. Business intelligence er rolle som er opstået løbende over de seneste 5-10 år, og det er noget vi siger i højere grad i og med det er det data vi leverer. Jeg tror det er det der bliver kongen. En sjov tendens er man kan mærke er at folk der er data nørddede begynder at få større roller i virksomhederne. Folk der kan forstå den data som CFO bliver CEO's fordi de kan forstå den data og gå ind og sige det er her der er mulighed for at sælge.

Vi kigger på mennesket, for en ting er et excel sheet, en anden ting er mennesket der skal forstå det

I gamle dage hvis man havde data havde man et excel sheet, brugte man data, nu har man meltwater eller tablous hvor man sidder med 100 millioner data sheets som laver en graf der viser der er et fucking hul i januar. I januar kommer vi til at tabe 20% af vores salg for 2017. Hvis noget kan visualiseres så let, så er det fordi vi har formået at gøre den data forståelig og tilgængelig for folk.

Oplever i de datamængder som kunderne for som værende for større og uoverskuelige?

Ja det gør vi. Det sjove er at vi sidder i lille Danmark, og ikke store USA, så vores rolle i den globale verden er meget lille. Så det er ofte den vej det kan være en udfordring. Hvis du kigger på vores medieimpact, så kan amerikanerne gå ind og sige hver gang, Nike, Coca cola, Adidas laver en ny reklame så stikker det af og deres salg det boomer. Jojo vi er da også glade for joe and the juice, men det er jo ikke fordi der er nogen der aner hvem det er i f. Eks USA, det er måske kun i Malmø. Så det er nok mere den frustration vi oplever.

Har du gode og dårlige eksempler på kunderne der bruger jeres data? Og hvad er godt eller dårligt?

Ja det ved jeg heller ikke om man kan sige. For skal man lave en virksomhed om for at kunne strømline data, og bliver den virksomhed nødvendigvis bedre af den grund. For nogen måske. I vores kundebase eksisterer der alt fra Danmarks brevueforening til Mærsk, Peugeot, FL Schmidt. De gør ting på forskellige måder så jeg ved ikke om der er noget der er rigtigt eller forkert for de gør ting på forskellige måder. F.eks pornofrit miljø som er kunder. De vil gerne ha der er sex derude, men det skal være på en ordentlig måde. Det du bruger os til, er at finde data omkring sex krænkelse, pornofri information. Så den data hiver de ud og deler på deres hjemmeside via et newsfeed vi har lavet til dem med vores datafilter, for at vise omverdenen de ikke er de eneste der har den holdning til porno og dermed styrker deres holdning og position. Det hjælper ikke dem med at forstå dataen, men det hjælper deres slutmodtager med at forstå dataen. Hvis man så hiver fat i Mærsk Line, de har et datacenter i Indien hvor de har leverandører som os, og så sidder de i Indien og laver rapporter på mediedata, alt form for data. I virkeligheden laver de nok det

slutprodukt som vi godt kunne tænke os vores produkt kunne om meget kort tid. Altså opdele diverse KPI'er rigtigt og forståeligt så man kan tage beslutninger ud fra det. Så vi ser forskellige former for brug

Så den bedste måde at bruge data på er når man tilføjer et menneskeligt aspekt?

Lige nu synes jeg ja. Om det menneskelig touch er sætte sig ned og forstå det der står, eller fjerne et komme her kan være 2 forskellige ting. Men det bedste er når et menneske sætter sig ned og forstår det her lige nu. Men det er en pisse svær proces. Og det tror jeg handler om at være nysgerrig. Det fedeste ville være hvis en direktør kom til os og sagde jeg skal bare vide det her, det her, og det her. Kan i levere det? Den nysgerrig er vigtig for at forstå data. Det er også vigtigt for os at blive deciderede samarbejdspartnere i stedet for bare leverandører af data. Når vi er samarbejdspartnere bringer vi ofte mere værdi fordi vi kunderne giver os bedre muligheder for at videregive en masse information.

Der er 2 former for konkurrencedygtighed, pris og produkt – er data den nye tredje?

Godt spørgsmål, jeg tror jeg ville sige det går ind og understøtter begge ting, og måske fungerer som skridtet før. Den data vi leverer kan jo sige at jeres design/produkt er ikke smart eller sexet nok, samtidig med den data kan sige jeres priser er for høje på de og de markeder. Så måske det er skridtet før.

Så dem der ikke arbejder med data er allerede er et skridt bagud?

Ja, det synes jeg, eller også kommer de til at blive det.

Appendix J. Dennis Mølgaard, (Interview 3)

Senior Business Development Executive

Hvordan modificerer I den data så den er fuldstændig modtagelig med et generelt syn på data i dagens erhvervsliv?

Data outside the firewall kommer til at fylde mere og mere i de virksomheder der bruger det fordi man har mulighed for at gøre det en real time. I gamle data samlede man data inside the firewall. Det gør man også i dag, men i det lys af der hver år bliver skrevet mere på internettet end der tidligere er blevet skrevet på denne jord, så er der meget data man kan mine. Det betyder det kommer til at fylde mere og mere. Det giver nye muligheder at drive forretning på, forøge sin indtjening, finde nye markeder på. Alt det vi laver er meltwater er at finde data som gør at vores kunder kan tage bedre beslutninger hvormed de kan øge indtjening, eller minimere risiko.

Er din fornemmelse at kunderne forstår mulighederne der er for at forstå og bruge den data ud fra alle de kpi'er I kan levere?

Vores data bliver jo ofte sammenholdt med andre slags data, og de løsninger bygger vi også. Når man f.eks kigger på antal af positive og negative historier i medierne vil jo ku læses f.eks aktieudsving.

Vil du mene man kan bruge meltwaters data direkte forkert, eller er det så sikkert det ikke kan lade sig gøre?

Man kan jo få for mange informationer som gør man træffer forkerte beslutninger. Når du snakker om ekstern data taler du om realtid, det er ikke ligesom i gamle data hvor man samlede det internt og så minede det for at finde frem til nogle ting. Vi har mange virksomheder som lancerer produkter, men uanset fokusgrupper kan du aldrig vide hvordan det bliver modtaget, og den feedback kan du samle ind direkte. Vores værktøj viser hvordan det bliver modtaget. F.eks Coca cola.

Har du et direkte case eksempel på god brug af Meltwaters data?

Et sjovt eksempel er en tomandsvirksomhed i Norge der var glarmester. Han monitorerede ekstern data for indbrud, så hver gang der havde være indbrud så viste han at det var et lead. Den data skal jo være i real time så han kan bruge det.

Er det alle der kan bruge den her data i en eller anden forstand, eller er der en typisk modtager?

Der er mange flere der kan bruge det end dem der køber det. Vi er lidt afhængige af det content vi miner, det er jo ligesom det vi kan leverer. Vi kan jo ikke levere sygejournaler med sideeffekter af givne produkter fordi vi ikke crawler det. Alle vores systemer er tomme til at starte med, så hvis du putter crap ind kommer der crap ud, og omvendt genialt ind, genialt ud. Det handler om at forstå kundens informationsbehov. En kommunikationschef bliver målt på hans arbejde med ekstern kommunikation, så derfor er det klart han er meget interesseret i at kommunikere rigtigt på det rigtige tidspunkt. Så hvis han i real time kan følge med i når der bliver skrevet om hans felt så han kan komme ud med en holdning så benefitter det jo ham og hans arbejde så han kan gøre det så hurtigt som muligt.

Oplever du så en ændring i kundernes arbejdsprocesser efter brugen af data?

Ja 100%. En slags ansvarlig, f.eks FL Schmidt som overvågen cement planes i Italien. Hvis der nu er noget strejke der bliver skrevet i de lokale medier, så kan den sælger der er ansvarlig for det italienske marked få en notification om det og gå ind pushe på for at få en handel med dem.

Ud fra det du siger, virker det som om der har været et skift fra man tidligere brugte data til at dokumentere en masse arbejde til nu at bruge det til at være proaktiv?

Man bruger det løbende, og det er hele humlen i big data. At man kan få dataen i rette tid, så man kan se nogle trends og nogle mønstre. Du kan teste et produkt så og så mange gange, men du kan jo aldrig teste den modtagelse det får i real time uden brugen af ekstern data. Lige pludselig der kan du monitorere nogle ting som kun kommer frem via ekstern data. Det minmere de risiko man sidder med, så man kan ændre retning og positionere sig anderledes i forhold til brand og produkt.

Føler du at den data I leverer er så forståelig så den også bliver forstået i tredje led?

Både og. Det er jo kundens opgave at forstå den. Vi laver også enterprise deals hvor vi laver løsninger tilpasset fuldstændig til kundens behov, så det er lige som de vil ha det. En bank som vil ind på det kæmpe store kinesiske marked har ingen mulighed for at forstå alt den eksterne data der ligger derude med mindre de bruger og, så vi kan kategorisere alt det data til viden om bankkulturen leads fra personkunder og oversættelse af sprog ved brug af vores system. Alle deres ønsker om hvordan det vil ha inddelt den information kan vi lave til dem alt efter hvilket data der er vigtigt. F.eks hvilke journalister i Kina der skriver om produktplatform så de direkte kan kontakte dem. Så en ting er at finde dataen en anden ting er at forstå den.

Ser du forskel i de kunder som bruger data og andre som ikke gør? Skaber det competitive advantage i kan se udefra?

Det kan være indikation. Da jeg startede fra 9 år siden var det papirklip som man klippede ud og sendte. Det kunne tage 3-5 dage hvis der skulle til en dansk Investment banker på det kinesiske marked. Den information ville jo være forældet. Nu hvor det er elektronisk kan man i dag ikke undvære den information i realtid. Så der har helt klart været et skifte hvor mange har det i dag kontra tidligere. Madklubben bruger f.eks medieovervågning, og det ville man jo ikke lige regne med.

Ændrer kunder strategi efter brugen af data?

Ja det gør de for det er information de ikke har haft. Jeg har prøvet at være til et møde og vise dem noget der var så forretningskritisk at de var nødt til at stoppe mødet og tage sig af det. F.eks i går havde jeg et møde med nogen der ville vide hvilke personer der styrede debatten så de via de personer kunne præge debatten på diverse medier i deres retninger. Det sker via intelligente søgninger og alerts som vi sætter op til dem. Så når de får informationerne 10 min efter det er skrevet kan de med det samme gå ud og tage fat i de journalister og præge debatten med det samme.

Hvem bruger jeres produkt?

Det kan være alle. En godt eksempel kan være en produktchef i Danmark som gerne vil vide hvad der sker indenfor hans produktfelt. Hvis nu en anden i Australien er ved at lave noget lignende er det jo super vigtigt for ham at vide det indenfor kort tid. Vores systemer kan bruges på 100.000 forskellige måder. Vi skræddersyr søgninger ud fra alle niveauer og perspektiv, både for marketing og kommunikation, men også direktionen. Hos bech-brun har alle partnere 2-3 nøglekunder, og der har de et dashboard med intern og ekstern data, så når de er ude hos kunden kan det bedre konsultere dem ud fra det data med hvad der bliver skrevet om dem. Det er en pengemaskine, men det er det de lever af.

Appendix K. Observations

Online meeting 1.

- Client is presented with the new dashboard
- account manager goes through the new dashboard
- Client has a lot of questions that the account managers answers quite good throughout the presentation
- Client likes that they can click on everthing → explore the data
- Client likes the can create dashboards depending on what the find in the clickable data
- Client likes that that there is so many possibilities of scaling the data
- Client wish to engage their marketing executive in the platform at she finds it usable for her and her team to engage with customers and find patterns on what social media their customers are present on
- Quite astonished that these new possibilities as they can help solve issues regarding information she did not was even possible to find through a supplier like Meltwater

- Account manager explains how some customers use the platform and their account manager everyday in order to follow up on the information ensure the information is used accordingly to its possibilities
- Customer says she will consider doing so as she thinks all this information is very new to her and would like Meltwater to help her to apply all this information according to its possibilities

Online meeting 2.

- Client is presented with the new dashboard
- account manager goes through the new dashboard
- Client has a lot of questions that the account managers answers quite good throughout the presentation
- Client says he has to get use to the new layout but likes he can find more relevant stuff in the data → new knowledge/unknown possibilities
- He likes the visuals and understands them he just says he needs to get friendly with them
- He would like to show the app that we have to his boss → new possibility of using the information in real time
- the account manager sets the app up to his boss as the meeting goes on
- the boss is very pleased with the new possibility that the app creates for him concerning information in real time
- client is very glad that he now has this new information he did not know was accessible
- client goes from being negative to positive
- client would like to buy social media surveillance if he can get a yes from his boss
- they set up a meeting with his boss

Online meeting 3.

- Client is presented with the new dashboard
- account manager goes through the new dashboard
- Client has a few questions that the account managers answers quite good throughout
- Client has little time
- Client wishes to hang up ASAP
- They rearrange the online meeting

Online meeting 4.

- Client is presented with the new dashboard
- account manager goes through the new dashboard
- Client has a few questions that the account managers answers quite good throughout
- Client has little time
- account manager shows crawlica that can detect when something comes to tender
- Client calls on her boss
- Her boss sees the module, and would like to know the price

- the account manager and client agree on a price and the account manager sends the contract so that the client can purchase the module.
- account manager has to give them some discount so that they can buy it at once
- account manager tries to please the boss by adding the social media module to the contract and price
- client is very glad that she now has this new information she did not know was accessible
- client is satisfied (was not before the meeting)

Online meeting 5.

- Client is presented with the new dashboard
 - account manager goes through the new dashboard
 - Client has a lot of questions that the account managers answers quite good throughout
 - Client likes that they can click on everything → explore the data
 - Client likes that they can create dashboards depending on what they find in the clickable data
 - Client likes that there are so many possibilities of scaling the data
 - Client wishes to engage their marketing executive in the platform as she finds it usable for her and her team to engage with customers and find patterns on what social media their customers are present on
 - Say the new platform presents more data than the old one
 - Say she will be able to find more information she did not know the data could provide
 - Account manager shows some new possibilities → client is very glad that she now has this new information she did not know was accessible
-

Appendix K. Questionnaire Questions

Competitive Advantage

1. Data provided by Meltwater creates a competitive advantage, which does that;

- We are better informed than our competitors
- We can react faster (due to real-time data) than our competitors
- We are always one step ahead of our competitors
- Internally we are better informed, and make better decisions due to that
- We are better informed about the market we live in

2. What other aspects of data provided by Meltwater creates a competitive advantage in your organization?

(Open Question)

Tacit vs. Explicit Knowledge

3. How understandable is the data that Meltwater delivers?

- To a high extent
- To some extent
- Neither/Nor
- To a small extent
- To a very small extent

4. To which extent is it easy to redistribute the information delivered by Meltwater internally in the organisation?

- To a high extent
- To some extent
- Neither/Nor
- To a small extent
- To a very small extent

5. To which extent do you transform the data that Meltwater delivers directly into work related tasks?

- To a high extent
- To some extent
- Neither/Nor
- To a small extent
- To a very small extent

Hunch / Intuition vs. Data

6. To what extent do you base your decisions based on experience and gut?

- To a high extent
- To some extent
- Neither/Nor
- To a small extent
- To a very small extent

7. To what extent do you base your decisions based on information/data delivered by Meltwater?

- To a high extent
- To some extent
- Neither/Nor
- To a small extent
- To a very small extent

8. When taking decisions, what do you base your decision on?

(please specify your answer to a percentage so that it results in 100%)

- Meltwater data ____
 - Hunch/Intuition ____
- A total of 100%

Strategy and data

We are interested in knowing whether the customers strategy changes when data is being incorporated to the organization

9. To which extent is data does data information change your strategy/vision and mission?!

- To a high extent

- To some extent
- Neither/Nor
- To a small extent
- To a very small extent

10. What influence does data have on your organization?
(Open Question)

Culture and Data

11. To what extent have your daily workflow after Meltwater data being implemented in your organization?

- To a high extent
 - To some extent
 - Neither/Nor
 - To a small extent
 - To a very small extent
-

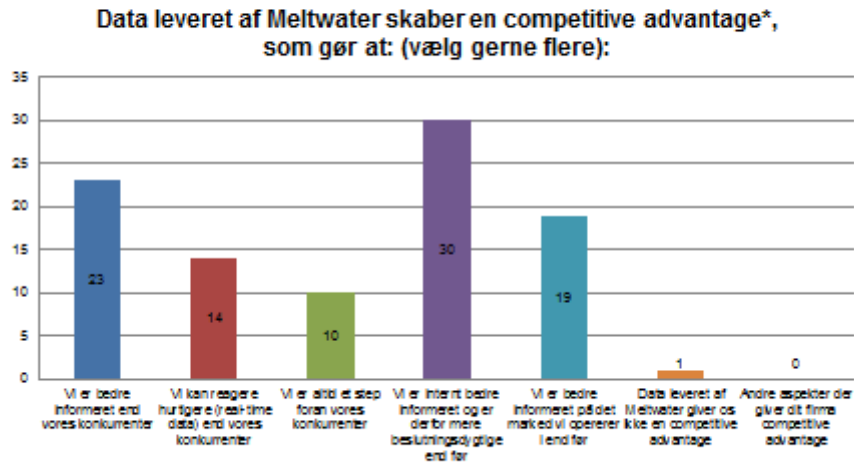
Appendix M. Questionnaire Graphs

Meltwater

Summary Report
04/11/2016

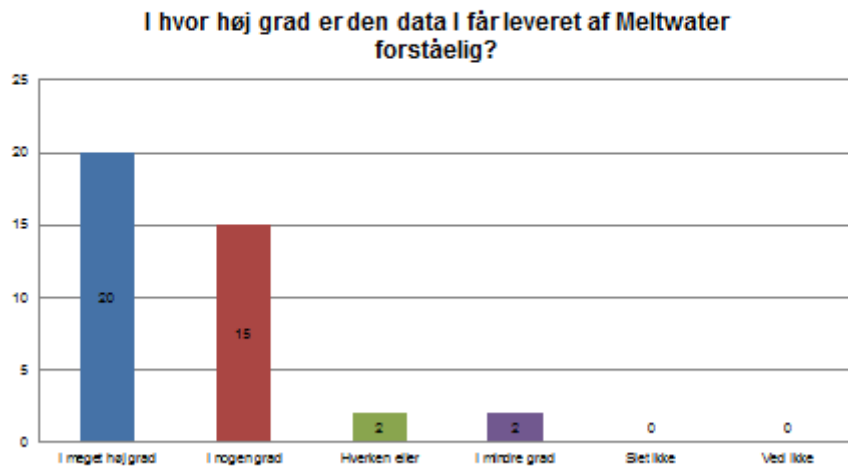
**Data leveret af Meltwater skaber en competitive advantage*, som gør at:
(vælg gerne flere):**

Response Rate: 100% (N=38) Question Type: Choose many



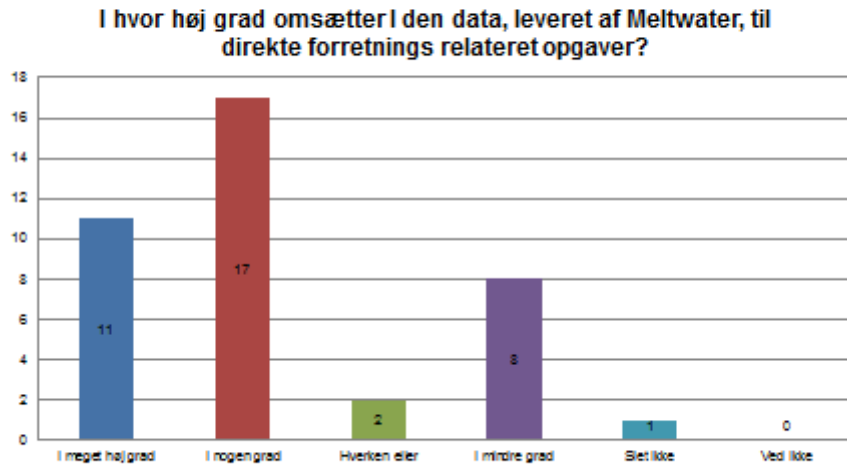
I hvor høj grad er den data I får leveret af Meltwater forståelig?

Response Rate: 100% (N=38) Question Type: Choose one



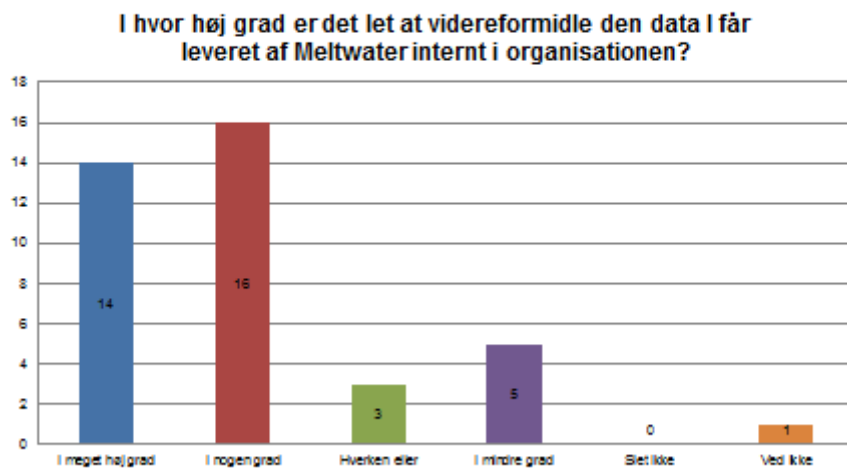
I hvor høj grad omsætter I den data, leveret af Meltwater, til direkte forretningsrelateret opgaver?

Response Rate: 100% (N=38) Question Type: Choose one



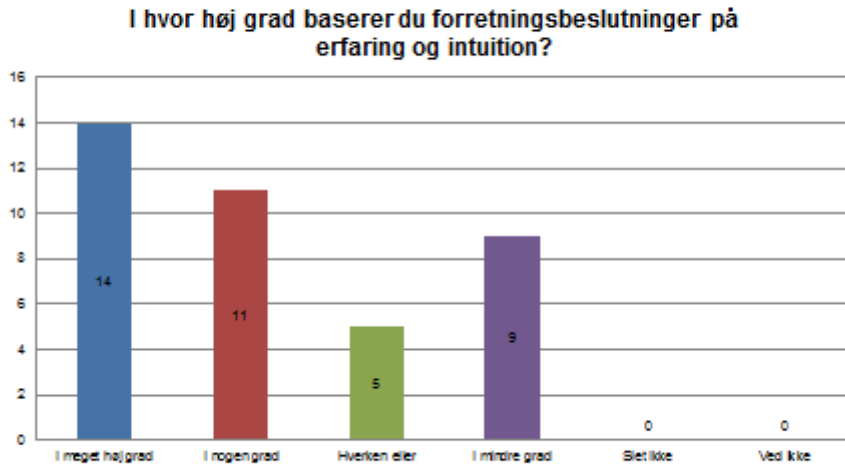
I hvor høj grad er det let at viderefordre den data I får leveret af Meltwater internt i organisationen?

Response Rate: 100% (N=38) Question Type: Choose one



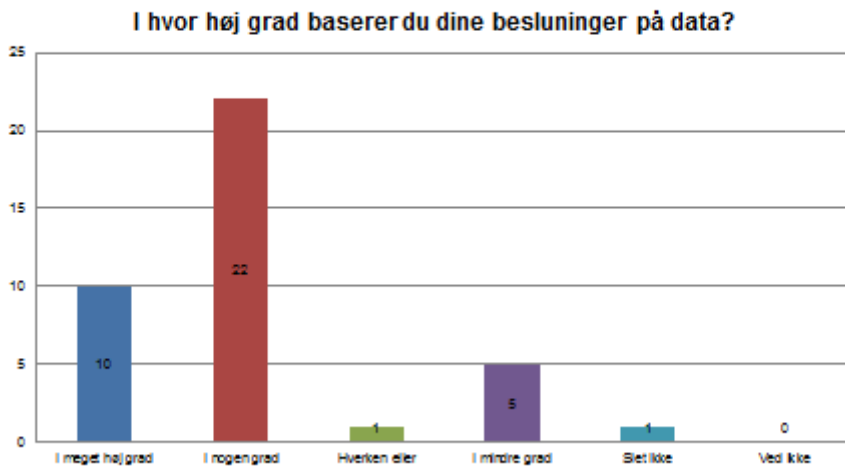
I hvor høj grad baserer du forretningsbeslutninger på erfaring og intuition?

Response Rate: 100% (N=38) Question Type: Choose one



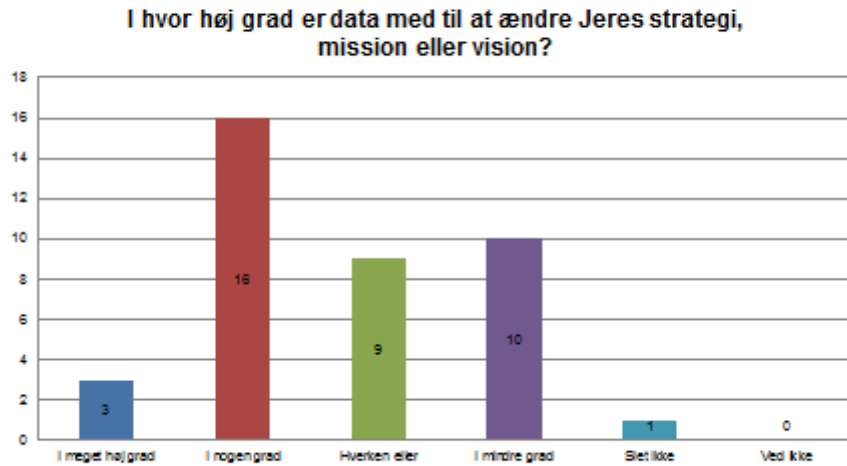
I hvor høj grad baserer du dine beslutninger på data?

Response Rate: 100% (N=38) Question Type: Choose one



I hvor høj grad er data med til at ændre Jeres strategi, mission eller vision?

Response Rate: 100% (N=38) Question Type: Choose one



I hvor høj grad har Jeres arbejdsgange ændret sig efter data, leveret af Meltwater, er blevet tilgængeligt?

Response Rate: 100% (N=38) Question Type: Choose one

