

CREATING DATA-DRIVEN CULTURE IN A FINNISH B2B SOFTWARE COMPANY'S MARKETING DEPART- MENT

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ABSTRACT

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Title Creating data-driven marketing culture in a Finnish B2B software company's marketing department	
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<p>Abstract</p> <p>Generating insights and actions out of data has become one of the most important jobs for marketing departments. While companies are struggling with finding the right data to gather, some of the main problems to become a data-driven company are cultural. The goal for this study is to understand how a data-driven culture is instilled in employees and what the company culture should be like to make the adoption of the new mindset as easy as possible. The research also seeks to identify potential challenges and barriers to the adoption of a data-driven marketing culture. The research is conducted for the Finnish B2B software company where the researcher worked meanwhile.</p> <p>The framework of this study was based on earlier studies and theories of data-driven culture and change management. The empirical material of the study was collected interviewing marketing professionals across the organisation and from two marketing agencies. The qualitative study method is chosen to acquire a deep understanding of the subject under study. In the study the inductive approach was used, wherein the discovered findings were closely tied to the gathered data.</p> <p>Data-driven marketing has not previously been studied from a corporate culture perspective, so this study opens a whole new perspective on the adoption of data-driven marketing. The study provides practical recommendations to the case company on how to facilitate the implementation of the new working methods. The study found that a company needs both clear communication and a strong learning culture to succeed in adopting data-driven marketing. Possible challenges include difficulties in team communication, fragmented data across different systems, and managers' inability to effectively communicate and lead teams, resulting in decreased employee motivation.</p>	
Key words Data-driven marketing, change management, culture change	
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1 INTRODUCTION

The world is changing rapidly toward more digital essence which forces companies to reshape their businesses. Reshaping businesses means reshaping strategies and ways of working. Organizations are in a continuous change process hoping to be more effective, productive, and gainful (Briody et al., 2012). Companies should strive to make precise, timely, and improved decisions since it has become obligatory for companies to survive in a world that is more competitive and complex than ever. Companies need to answer to customer's wants and needs more rapidly and companies have more data to use, so reshaping companies into a more data-driven culture is current. We are in a digital and analytic revolution that will influence how companies are managed and how society and economies work.

There is increasing talk about data-driven decision-making and the importance of monitoring and applying data into practice. Companies have several data sources but do not really have a plan for utilizing all the data they have. In fact, companies struggle with figuring out, how, when, and where to use analytics (Kiron et al. 2013). Technology and consulting company Capgemini made a study in 2021 about how the marketing decision makers in various countries are utilizing data-analytics in marketing and marketing automation, and Finland was clearly behind the other countries (Perttula, 2021.)

Kiron et al. defined data-oriented culture in 2013 as "a pattern of behavior and practices by a group of people who share a belief that having, understanding and using certain kinds of data and information plays a crucial role in the success of the organizations" (p. 18). Did you know that Facebook's mantra was "move fast and break things" and it stands for the encouragement of experimentation? (Taplan, 2017). Data-driven culture often encourages companies to rethink their actions and do different experiments to find the most effective ways of marketing their products.

There are many empirical studies that are centralizing the impacts of marketing performance measurement on how the firm is performing. O'Sullivan et al. stated in 2009 that marketing performance measurement has a positive relationship CEO's satisfaction with marketing. The same study also proved that marketing measurement has a positive impact on firm performance. To achieve success, companies must measure the effectiveness of their marketing and optimize their actions accordingly. Companies that achieve high performance are twice as likely to incorporate data into their decision-making and operational processes compared to other companies. These successful companies utilize analytics as a regular practice in their day-to-day activities and as a guiding tool for shaping future strategies. (LaValle et al., 2011).

Since 2010 Adobe and Econsultancy have done a yearly Digital Trends Report, which is based on a global survey of 10000 marketers, consultants, and practitioners. With that many respondents it is the largest study of how digital trends

are changing the marketing discipline. The 2022 Digital Trends report highlighted that many companies struggle with implementing necessary cultural and operational changes to stay agile and react to rapidly developing market dynamics. In the study, it was found that better performing leaders of marketing organizations were ahead of their mainstream and laggard competitors in certain key areas, including gaining insights, being agile, experimenting, and personalizing their approach. Survey noted that the importance of how companies are gathering the insights from customer data will become more critical.

1.1 Research problem and objectives

Being able to measure digital marketing is essential for companies and companies can analyze every website visitor with different tools and marketing analytics are used to show how your digital marketing plan works. More than half of the Finns who responded to the Capgemini's survey about the data-driven marketing and marketing automation utilization, said that they plan to increase their own organization's marketing and digital marketing skills. Like Marjut Kytösalmi, Head of Capgemini's digital and application services development unit said: "Data and technology must be combined with creative skills and siloing must be avoided. Companies need to invest in managing with information. With a combination of learning and culture, the goal can be achieved". (Perttula, 2021).

The research objective is to create an understanding of shaping a marketing department into a data-driven mindset and explain the success factors of shaping the marketing department. We all understand that nowadays marketers need to be more analytical and technical than ever. However, many companies have developers who can help with technology related questions, so this research rather focus on the data-driven culture and how to build data mindset in marketing organization.

LaValle et al., (2011) found that challenges that arise when implementing analytics are mainly managerial and cultural. Culture is a group phenomenon, behavior is contagious, and people do things because they see others doing them (Piha & Sutinen, 2020). Therefore, it is truly important to get people excited about the change. Data-driven culture does not mean that everyone needs to be a data analyst, but everybody needs to understand the data at some level and believe in its force. Case company has also recognized the importance of creating a culture where the organization is open to new ideas that challenge current practices and patterns. Change management and data-driven marketing combine both of researcher's study areas, corporate communication, and digital marketing.

RQ1:

What kind of culture should the marketing department have in order to successfully implement data-driven marketing mindset?

RQ2:

What qualities and knowledge of data-driven marketing should an employee have in order to be better equipped to adopt a data-driven mindset?

RQ3:

What are the possible threats or challenges when implementing data-driven marketing culture?

The first research question focusses to investigate the kind of culture that a company needs to have to adopt a data-driven approach. The second research question seeks to identify the necessary capabilities that employees must possess to be receptive to this approach. Finally, the third research question aims at identifying potential challenges or issues that a company should consider when transitioning to a data-driven culture.

1.2 About the case company

This study is done for the case company which is a Finnish B2B software company. In 1995, case company was established and later acquired by a larger group in 2016. Case company's marketing department is just 3 years old, which makes it relatively new. During the spring 2023, company adopted marketing automation software Marketing Dynamics 365. The sales team is using CRM software from the same provider which is meant to make cooperation between marketing and sales seamless. The implementation of marketing automation is an important step when creating a data-driven marketing strategy and we will discuss about it more later in this thesis.

Case company has a sales and marketing team overseen by a commercial director, and two digital marketing specialists, one of whom is the author of this thesis. The researcher is responsible for shaping the marketing strategy towards a more data-driven approach. Marketing strategy means rather long-term than short-term strategic decisions with whom company is trying to find an answer to which direction the company should go to achieve its objectives and goals (Kozielski, et al. 2017) When interviewing managers in 2019, about how they define marketing big data analytics, managers said it is "a series of tools and capabilities used to inform product innovation and marketing strategy-making processes and to defend the brand against emerging risks" (Johnson et al., 2019; p. 162). Therefore, can be confirmed that marketing strategy should be led by analytics and marketing department has already taken the first steps of being data-driven.

1.3 Methodology and research structure

This research is built in the following way. The literature review continues after the introduction. The theoretical part is separated into two sections, data-driven marketing, and culture change. After the theory, the empirical part of the study is presented. The empirical part consists of the definition of qualitative research and after the definition, the data collection and data analysis process are defined. Next, the research findings are presented and finally the discussion chapter thoroughly examines and analyses the research findings by dividing them into separate topics. No AI tools or software's were utilized in this thesis process. Below the structure of the research is presented.

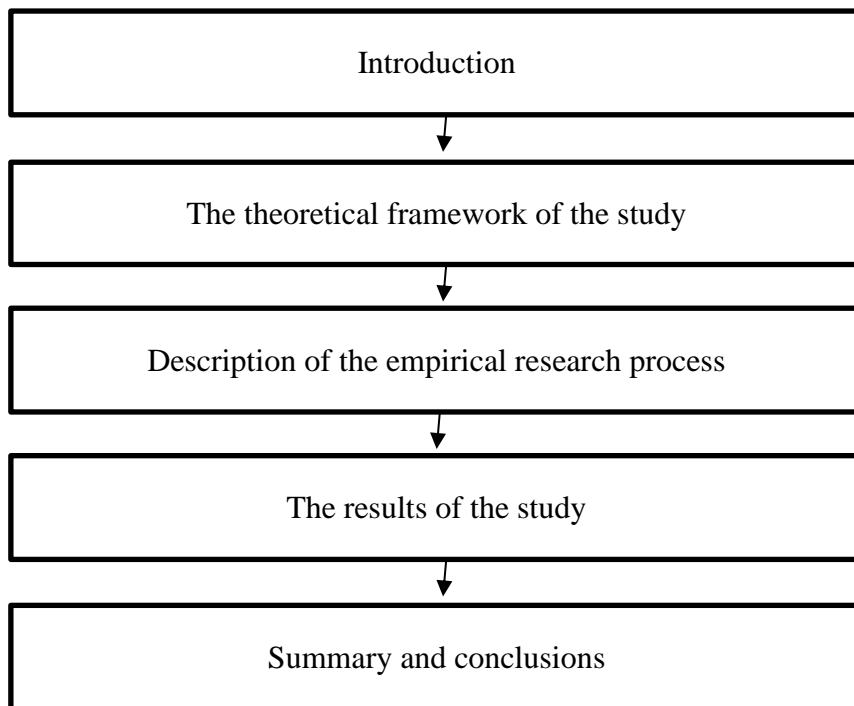


FIGURE 1. Structure of the research

2 DATA-DRIVEN MARKETING

Term data-driven marketing means the process where you collect data from various online and offline sources and analyze the data to understand the consumer and its buying behavior. With that data, the marketing team develops a strategy to create a connection with the target audience and get better results from marketing. (Grandhi et al., 2020).

To be able to implement data-driven marketing and understand customers buying patterns, company needs marketing analytics. Hanlon (2022) described the difference between traditional marketing metrics and digital marketing metrics. Traditional metrics can be for example customer value, market share, key financials, market growth rate, customer satisfaction, customer behavior, and product quality. The digital environment has brought noticeably more metrics available. Some examples of the digital metrics are likes, followers, the share of the wallet, return on investment, conversion rate, and cost per action. Traditional metrics place the company in the center, but digital metrics put the customer at the center. Typically, metrics are the unit, percentage, volume, or number and analytics provide us access to the data and explanation as to why specific metric takes place.

Marketing analytics can be divided into web analytics, SEM and pay-per-click (PPC) analytics, email analytics, and social media analytics. A/B testing is a broadly used method in data-driven marketing. A/B testing means comparing two or multiple things against one another, for example trying two different titles in an email or two different images on a website and then evaluating with data which was more successful. (Hanlon, 2022).

Komulainen presented (2018) that by analyzing the results you can see where resources are used most efficiently, and where they are wasted. With analyzing data, you can identify the gaps in strategy, key messages, and content. By analyzing you can identify which channels have the most potential and gain a better understanding of customer preferences and motivations.

2.1 Marketing automation

Marketing automation is a definition of software that is built to automate basic marketing activities. The purpose of marketing automation is to increase the efficiency of marketing. (Heimbach et al., 2015; Ioana, 2016). Marketing automation's roots are in email marketing but now it can be used in many innovative ways. Marketing automation is not just for big companies to use but also small and medium sized companies can benefit from marketing automation. (Del Rowe, 2016). Marketing automation is used to automatize content and create

personalized real-time messages to the right audience. With marketing automation, you can reach potential customers, get leads, promote the retention of existing customers, guide customers on how to use the product, and improve sales. (Komulainen, 2018).

Marketing automation can combine information from various data sources such as email, social media, website, and SEO analytics and its functions are for example lead management, marketing analytics, campaign management, and digital and social media marketing. Marketing automation can be a great base for the company's data-driven marketing because it enables it to collect, analyze and utilize the data with such performance that humans couldn't do (Wood, 2015).

2.2 Data-driven culture

Decision-making responsibility in modern organizations is widely shared among individuals (Grandhi et al., 2020), which means there cannot be just one person to take care of the decisions based on data. Hence, it is principal for the company to foster a culture that embraces data-driven practices. Already in 1986, Barney defined culture as "a complex set of values, beliefs, assumptions, and symbols that define the way in which a firm conducts its business" (p. 657). Corporate culture is the company's way of operating, communicating, serving, and existing and it affects the company's success (Piha & Sutinen, 2020).

Kiron et al (2013) presented that a data-driven culture improves innovation inside the organization since decision-makers can trust where the data comes from, how the data is developed, and by whom. Therefore, it is important to have data-driven culture inside the organization so that there is room and daring for innovations.

Better use of data helps businesses to produce a greater extent of value for their customers (Grandhi et al., 2020) and it can for example be used to forecast trends (Bumblauskas et al., 2017). Cosic et al. presented a framework in 2015 which proved that companies can leverage business analytics to drive enhancements in business processes, enhance firm performance, and gain a competitive edge. Data-driven organizations tend to be more flexible to compete in the fast-changing environment (van Rijmenam et al., 2019). Cao et al. (2019) demonstrated in their study the positive effects on decision-making and firm performance of marketing analytics. In e-commerce, big data can create a competitive advantage by transforming data into insights to support decision-making and bring solutions to business problems. Leading companies such Amazon, Google, ASOS, Netflix, and Facebook utilize big data analytics and experience great growth. (Akter & Wamba, 2016). Recognizing possible threats and unusual events is more likely possible for the companies that are using data in their decisions (van Rijmenam et al., 2019). Analytics and data are undeniably

useful for businesses and there are several studies to prove it (Grandhi et al., 2020, O'Sullivan et al., 2009, LaValle et al., 2011)

Troisi et al. 2020 found that data-driven decision-making impacts both, the achievements of marketing objectives and firm performance. Companies can be more agile with their decision-making when they share real-time analytics data across the company (van Rijmenam et al., 2019). Schein addressed in 2017 that if the company's founder or leader is not examining how the new principles, beliefs, or assumptions will fit into the company's macro-culture, they will not be adopted. Therefore, it is crucial to have a leader committed to the change and company's culture plays a big role in a change management.

Grandhi et al. proved in 2020 that the company needs data to avoid biases based on decision-making. When it comes to decision-making, Hill & Jones presented in 2018 that many decision-makers fail to do good decisions even if they have all the information and the failing is often caused by their emotions. Cognitive biases affect managers' decision-making and Hill & Jones (2018, pp. 17-18) presented 5 biases that cause poor decisions:

1. *Prior hypothesis bias* means that the decision-maker is believing in his/her strong beliefs even if the beliefs are presented to be wrong.
2. *Escalating commitment* is the bias where the decision-maker puts even more effort to the project when she/he receives the information that the project is failing. In this case, the more logical way to act would be to abandon the project and move on.
3. *Reasoning by analogy* means that the decision-maker is using simple analogies to make sense of complex problems.
4. *Representativeness* is the bias where the conclusions are made from very small sample.
5. *Illusion of control* means people's tendency to overestimate their ability to control events.

Luckily, there are ways to improve the company's decision-making process regarding to Hill & Jones (2018). *Devil's advocacy* is one technique, and it means that one of the team takes the role of the "devil" which means the person is bringing out all the possible reasons why the proposal might be unacceptable. Dialectic inquiry is more complex, and it requires to making a plan (hypothesis) and counterplan (antithesis) and then two persons debating the plan and the counterplan. Then decision-makers are listening carefully to the debate and the debate's purpose is to bring out the possible problems.

3 CULTURE CHANGE

Diefenbach (2007, p. 127), defined change as being “about changing structures, processes, routines, and outcomes. At the same time, it is even more about changing how people do the business, how they think and act, it is about changing (parts of) schemata and worldviews of people.” Managing change is about “evaluating, planning, and implementing operational, tactical and strategic “journeys”.” (Paton & McCalman, 2008, p. 3). Change is usually reviewed as a technical problem or as a “human problem”. Technical problems are related to budgeting, quality, risk, planning, the management, or other technical challenges while people problems are related to culture, communication, attitudes, skills, commitment and so on. (Piha & Sutinen, 2020).

Because digital culture is becoming vital for marketing, the marketing department needs to have skills such as change management, skill development, and organizational design. In today’s world, change is not a project, but a state that is constantly on so organisations and leaders have to become perpetual learners. Schein (2017) identified ten key characteristics of learning culture and they are presented in the next table.

TABLE 1. Ten key characteristic of learning culture (Schein, 2017. p. 344-349).

Characteristic	Definition
Proactivity	Humans should be proactive problem solvers and learners what comes to their relationship with their environment.
Commitment to “Learning to Learn”	Learning culture members should share the assumption that learning is worth investing for and learning to learn is a skill that you can be mastered. Getting feedback and accepting errors and failure as learning opportunities are the keys to learning. This statement suggests that a culture of learning should prioritize and place high value on two key elements: reflection and experimentation.
Positive assumptions about human nature	Leaders should have faith in people's willingness to learn when provided with the necessary resources and a psychologically safe environment.

Belief that the environment can be managed	As the environment becomes more turbulent, it becomes increasingly crucial for the leaders to demonstrate that some degree of environmental control is possible.
Commitment to truth through inquiry and dialogue	People should be brave enough to ask questions and search for the "truth". Leaders must also admit that there is a lot they don't know yet.
Positive orientation toward the future	It is important to balance a forward-thinking orientation with a focus on the present, in order to effectively navigate the challenges of a rapidly changing world.
Commitment to full and open task-relevant communication	Anyone in the organisation should be able to communicate with anyone else with trust and openness.
Commitment to cultural diversity	In a turbulent environment, a diverse organization is better equipped to cope with unexpected events and adapt to change.
Commitment to systemic thinking	It is important to develop the ability to think systemically and use complex mental models in order to effectively navigate the challenges of a complex and interdependent world.
Belief in the value of internal cultural analysis	Leaders and the members of the culture should believe that analysing and reflecting on their own culture is essential part of the learning process.

3.1 Change management in marketing

Change management is a highly researched topic but there have been no studies that are focusing on the marketing department's change management. First, Lewin's and Kotter's change management models are introduced which might be the most known ones and then the culture change model by Schein is presented.

One of the first theories of change was published in 1951 by Lewin and it is three-step-model (Bucciarelli, 2015). "Unfreeze" is the first step, which means the organization is getting rid of the bad attitude where the people are resisting

change. The preparations for the change have started and the organization aims to create an atmosphere that supports change. The second phase is called “Shaping”, which means the actual change is driven and the organization is making people commit to the change. The third phase of the change-management is “Refreezing” where the new phenomenon is built, and the organization is maintaining the new phenomenon. (Lewin, 1951, as cited in Bucciarelli, 2015; Piha & Sutinen, 2020).

Kotter’s (1995) eight-step model about leading the change is classical and the most known model about leading the change and it is described in the table below (Piha & Sutinen, 2020, p. 138-139).

TABLE 2. Kotter’s eight-step model (Kotter, 1995, as cited in Piha & Sutinen, 2020, p. 138-139).

Step	Description
1. Establish a sense of urgency.	Explore the markets and realities of the competition, potential crises, and possibilities.
2. Form a powerful guiding coalition.	Create a team big and powerful enough to show an example to the rest of the organization.
3. Create a vision and strategy.	Vision gives a direction to the change and strategy tells how to get there.
4. Communicate the Vision.	Communicate the new vision and change constantly in all situations.
5. Empower others to act on the Vision.	Eliminate obstacles and modify systems and structures that hinder the change process, encourage to risk-taking, new ideas and activities.
6. Plan and create short-term wins.	Visible improvements are planned and implemented, and employees who make and enable improvements are rewarded.
7. Consolidate improvements and produce still more change.	The rest of the structures and systems that prevent the change are dismantled by utilizing increased credibility. Hire, promote and develop employees that are capable of change.
8. Institutionalize new approaches to the culture.	Communicating a link to good results and new practices. Ensuring leadership development to sustain change.

In 2017, Schein presented the steps of changing the culture (p. 323-339). Schein pointed out the importance of defining the problem precisely and being clear about the change goals before starting the culture change. Schein highlighted

that it is important to answer to questions like what you want to change, why, and where are you heading to, without using the word *culture*. This is why culture is an abstract concept that can refer to many things such as beliefs, behaviour, values, and structures. Schein's theory is based on Lewin's change management model, but Schein's theory is more focused on culture management. First step of Schein is to create the motivation and readiness for change. Then is needed to identify new concepts, new definitions for old concepts, and new criteria for evaluation. The final stage is to fully integrate and adopt the new concepts, meanings, and standards. Schein suggests that when trying to make changes in culture, it's important to define specific behavioural goals rather than simply aiming for "culture change." New cultural elements can only be learned through successful and satisfying behaviours over time. When the fundamental beliefs of a culture change, people may need to unlearn what they previously believed. Schein presented that this can be emotionally difficult and there is always anxiety associated with new learning, so the transformative change is never completely easy.

Lewin's theory suggests that if the change is not embedded in the organisation, it will gradually disappear as the organisation slips back into the old structures. In this theory, the forces driving and resisting change must be identified and the forces driving change must outweigh the resistance for change to occur. Lewin's theory is quite upper-level whereas Kotter's theory focuses more on the actions. Kotter describes different actions that management should be doing to establish successful change. In Kotter's theory, communication is the fourth step. In the researcher's opinion, communication is not just one step, it should be part of all the steps. Schein's theory of cultural change points out the importance of communication. Unlearning is often painful but with the clear communication and clear, achievable goals the pain can be reduced.

3.2 Data-driven culture implementation in practice

In 2019 Tabesh et al demonstrated in their article the necessary steps when implementing data strategy. Data needs to be analyzed with different methods and tools for insights for decision-makers. Usually, companies' analytics and technical departments are the ones who do data collection and are turning that data into insights. While those departments turn the data into insights, the managers should be able to do the decisions. It is an ongoing process to turn insights into decisions based on evidence rather than making decisions with intuition. Insight's main target in the decision-making process is to support decision-makers (Jeble et al., 2018). Department which oversees data collection should be not collecting just as much data as possible but focusing on the relevant data. The company should be able to identify those practices and processes where they can create insights out of data. (Jeble et al., 2018). In addition, the need for Marketing

and IT departments to work closely together is highlighted, with a focus on maintaining a seamless collaboration (Johnson et al., 2019), especially when implementing for example marketing automation system (Wood, 2015).

According to Bumblauskas et al. (2017), because the business environments are constantly changing, firms should be able to sense the surroundings, build insights based on the data, and estimate if their findings to make good decisions. This can be seen as a continuous and challenging process because new data is implemented exponentially, and old data might become outdated. Therefore, the process should be ongoing and well-functioning. Hill & Jones (2018), stated that in some situations it is useful to have external consultants to drive a change since people working in the organization might be too close to the situation. An organization's internal managers might also have their own motivations to drive a change in the direction that they want.

Salminen (2022) talked in his book "Muutoksen johtaminen - Matkaopas organisaation muutosmatkalle" about vision leadership, the importance of the change energy, and a story of change. Change energy is the emotional energy that comes from an inspiring vision. The energy for change is contagious if the leader himself/herself believes in the vision but enthusiasm is hard to fake. In addition to generating change energy, a vision also has another, deeper meaning. A clear goal makes our work and its development meaningful and makes us feel part of something bigger. The hallmarks of a good vision are clarity, concreteness and a strong positive emotional content and the vision must address not only management but also all staff and customers. At its best, a vision for change is a shared vision for a better future shared by management and the whole staff. Storytelling for change is a good way to bring words and plans to life and to humanize the facts. it conveys not just facts but emotions, cause and effect relationships, the impact of actions and creates meaning.

3.3 Challenges of implementing data-driven culture

Bumblauskas et al. (2017) mentioned that in 1970-1980 the amount of information started to cause problems because the technology was lagging and the capacity of turning data into knowledge was limited. Luckily, we have all the technology we need, and companies can utilize data limitlessly. However, the big amount of data can cause information disorder (Grandhi et al., 2020). There are multiple different platforms and metrics to analyze, and companies can spend months just finding new data sources and viewing the charts. Challenge is to find the right metrics and data to follow and with the vast amount of data, there is a great chance for analysis paralysis. Analysis paralysis is a state of overthinking, when there is a vast amount of data and you spend your time just analyzing over and over again and never feeling confident about making the decision ("*Nine Effective*

Ways For Company Leaders To Beat Analysis Paralysis'', 2021). For managers, the large and undue amount of information can be frustrating (Gnizy, 2020).

Johnson et al. (2019) found challenges regarding companies following data being too blinded. If the company is just chasing short-term ROI and making decisions based on that, companies can miss the chance to build a strong brand over time, since consumers might not find brand-advertising believable. Short-term ROI targets should not dominate over brand philosophy. Bumblauskas et al. (2017) stated that data-driven decision-making and data do not mean that human creativity is not needed. To utilize the data and create business value, the company needs human interaction since the ideas that data generates needs to be refined into decisions and actions (Bumblauskas et al., 2017).

Kiron et al. (2013) found that analytically challenged companies have four characteristics in common that separates them from the companies that utilize data well. Those characteristics that company should get rid of are data deficiency, weak information value chain, lack of collaboration, and no burning platform (no key driver to use analytics). According to van Rijmenam et al. (2019) humans are not very skilled at imagining future events and they tend to overestimate their own talents and just center on what they already know which leads to confusion of non-existent patterns and tunnel vision.

4 DATA AND METHODOLOGY

The research purpose is to create knowledge and understanding of the determined occurrence (Adams et al., 2014). In this chapter the methodology that is considered to be the most suitable for this research is presented. The qualitative research method is presented first and then the data collection and data analysing process.

4.1 Qualitative research

Bellenger et al. (2011) defined quantitative research as “research which provides information to which numbers can be applied” (p. 2) and qualitative research “involves finding out what people think and how they feel – or at any rate what they say they think and how they feel” (p. 2). Qualitative research generates non-numerical results and involves impressions and feelings, and quantitative research generates numerical results. In the field of management and business research, it is common to use a combination of both qualitative and quantitative methods. (Saunders et al., 2019).

O’Gorman & MacIntosh (2015) presented that in qualitative research the primary data type can be observation notes, interview transcripts, video material, photos, or field notes. The secondary data type can be publicly available documents, public speeches & interviews, books, archival records, company reports, or journal articles. Primary data means the data produced specifically for the purpose of the research project. Secondary data means the data that is already available for analysing. (O’Gorman & MacIntosh, 2015).

Usually, when you think of data and analytics, you think about quantitative study methods and most data and marketing combined studies have used quantitative methods. In this study, the focus is on the human aspects of a data-driven culture, and the aim is to gain a more nuanced understanding of the topic. To achieve this, the researcher has used a qualitative research method. This study aims to understand people's engagement with the adoption of a data-driven culture and to explore how people experience and understand this change.

Qualitative research is sometimes referred as to naturalistic, because in qualitative research the researchers must act in the natural environment to gain trust, participate, availability of meaning and gain deep understanding. People who participate in qualitative research are not seen just respondents but also the people who participate in data collection. (Saunders et al., 2019). In qualitative research, it is important to note that the aim is not to produce research results that can be generalized, but rather to create a deeper understanding of a single phenomenon, considering the factors influencing it in different contexts.

The aim is to get to know the researched object as comprehensively as possible and offering a holistic view. (Hirsjärvi et al., 2005).

4.2 Data collection

Because in qualitative research the meanings are delivered for example with images and words, there might have multiple meanings, and therefore the methods used are unstructured or semi-structured (Saunders et al., 2019). In this research, the empirical material is collected by interviewing marketing professionals across the organization and from external marketing agencies. Semi-structured interviews were held during January. The semi-structured interview method was chosen because of its resilience to ask further questions and change the question's order if needed (Arsel, 2017). Semi-structured interviews also give interviewees the flexibility and freedom to express their own views on the topic. Some weaknesses of the semi-structured interview are that it may be time-consuming and takes a lot of resources. Keeping on topic also requires good interview skills. (O’Gorman & MacIntosh, 2015). While the interviews tell each individual’s story, the interview should have the purpose to seek new knowledge around the research question (Arsel, 2017).

The researcher identified the most important persons from the organization who are handling marketing data daily. Since the case company is using external marketing companies, people inside the marketing companies were also interviewed and that is how the different viewpoints were created. The criteria for the interview participants were that they have a long experience in marketing field and management, and they work with marketing data daily. After identified the persons, the possible interviewees were approached via email. It is important to brief the possible interviewees at this point. The briefing should include where the data gathered are used, how the data is stored, how confidentiality is insured, how long the interview is taking and how many interviews there would be, and the reassurance that the researcher’s role is not judgemental but evaluative. (O’Gorman & MacIntosh, 2015). Since it is urgent to create trust, the interviewees were told that they are anonymous. Interviews were held in Finnish, recorded, and then translated into English. Arsel (2107), advised not to keep all the interviews at once but rather hold a couple of interviews first which ones you analyse, revise and repeat. All the interviews were conducted remotely via Microsoft Teams and participants got the interview questions beforehand.

Before the interview starts, it is advisable to clarify the roles and talk about the research you are doing and what you are expecting from the interviewee. Researcher can explain why they are interested in this specific topic. Sharing a personal story will help create a trustworthy relationship between the interviewee and you. (Arsel, 2017). Therefore, before the interview started, the researcher talked about her own background and how she got interested about

the thesis topic and what's her relationship with the data-driven marketing.

TABLE 3. List of interviewees

Interviewee	Area of expertise	Experience in marketing in years	Interview duration	Internal / Marketing Agency
Interviewee A	Sales and marketing leadership	18 years	42 min	Internal
Interviewee B	Service Development	15-20 years	49 min	Internal
Interviewee C	Marketing technologies and leadership	14 years	36 min	Internal
Interviewee D	Marketing and leadership	25 years	20 min	Internal
Interviewee E	Digital transformation	14 years	40 min	Marketing Agency
Interviewee F	Digital transformation	10 years	48 min	Marketing Agency
Interviewee G	Marketing and leadership	20 years	31 min	Marketing Agency

Above a list of interviewees can be found. Four of them were internal workers inside the group and three of them were from two different marketing agencies. Interview duration varied from 20 minutes to maximum of 49 minutes. Experience in the marketing field varied from 10 years to 25 years so we can confirm that all the attendees were marketing professionals with high experience in the marketing field. The majority of the interviewees held leadership positions where they were responsible for leading a marketing team. The aim for the interview was to find out, how the marketing data is gathered and used inside the case company and other marketing agencies and to find out, what are the critical factors how to success to create data mindset inside the case company's marketing department.

4.3 Data analysis

In qualitative research, data analysis is done for recognizing and interpreting patterns in the data. It is effective to organize data into themes to review the data and to recognize what is applicable. (Adams et al., 2014). Thematic analysis is a widely used qualitative research method to identify, analyse and report

themes or patterns with data and method can be used in a wide range of epistemologies and research questions (Nowell et al. 2017).

In this research, researcher chose thematic analysis as a data analysis method because of its flexibility and because it can provide complex data, but also detailed and rich. Some of the stages in thematic analysis are similar to the stages of other qualitative research analyses, so all of the stages and phases of thematic analysis are not unique steps. In thematic analysis there is no one-size-fits-all definition in what counts as a theme, but the researcher's own assessment of it is central. In theme defining the flexibility is also important, as there are no strict rules for theming. The researcher can define the themes of their data in many ways, but it is important to do it consistently. (Braun & Clarke, 2006).

Thematic analysis can be done either data-oriented, i.e. inductive, or a theory-oriented, i.e. deductive method of analysis (Braun & Clarke 2006). In this study, the data-oriented approach was used which means that the themes are strongly linked to the gathered data. However, Tuomi and Sarajärvi (2013) pointed out that there are no completely objective observations, which is why it is generally accepted that the observations made by the researcher are somehow connected to the theory. Braun and Clarke (2006) have also said that it is not possible to conduct research in a vacuum freed from all preconceptions. Researcher should strive to recognize own preconceptions and approach the material openly.

TABLE 4. The six stages of thematic analysis (Braun & Clarke, 2006; 16-23).

Stage	Explanation of the stage
1. Familiarization with the data	Read data multiple times and in an active way: start searching for patterns and meanings. Write notes.
2. Generating initial codes	Codes means the features of the data that seems to be interesting for the analyst. Identify the interesting aspects that might form the repeated pattern.
3. Searching for themes	Sort codes into potential themes. Use for example tables and mind-maps.
4. Reviewing themes	Themes are compared to codes and in relation to each other. Creating a thematic "map" from the analysis.
5. Defining and naming themes	Refining the identified themes. Finding the story of the analysis.
6. Producing the report	Writing analysis results with examples and comprehensive comments.

The analysis process is described in the table above. Thematic analysis consist of six stages according Braun and Clarke (2006) and the analysing process can be circular and not progressed linearly: all the steps can be repeated several times and the researcher can move back and forth as needed. In this research the analysis of the data started already in the interview phase when it was possible to make preliminary observations of the interviewees experiences around the interesting phenomenon related to research's topic. Already in the interview phase some interest patterns from the data were noticed and writing the notes started. If working with verbal data, such as interviews, the transcription is an advisable way of familiarizing yourself with the data. It might seem a time-consuming activity, but a researcher will develop a much more thorough understanding of your data by transcribing it. (Braun & Clarke, 2006). While doing the transcription some extra filler words were eliminated at the researcher's own discretion. After transcribing the material were divided into parts according to the research questions which helped to get a better understanding of the material as a whole.

Once the data has been thoroughly familiarized and a list of potential areas of interest has been generated, the second phase starts. Second phase means you will produce initial codes from the data (Braun & Clarke, 2006). The initial creation of codes from the material requires returning to the material repeatedly (Nowell et al. 2017). Generating initial codes can be done manually or with programs. It is advisable to identify as many codes as possible because you don't know yet what might be interesting later. (Braun & Clarke, 2006). In this research the code generation was made manually with colour coding. When there were enough ideas about what the codes could be, each possible code was given its own color and we began to mark points in the data that referred to a certain code.

After identified the initial codes in the third phase the researcher starts to sort the codes in to potential themes. Visual representation of data can be helpful to sort the different codes into themes. (Braun & Clarke 2006). In this phase the each of the codes were marked under a theme. When the creation of the themes started, some of the themes were found in the themes of the interviews, but as the analysis progressed, they were further refined into their own themes. In addition, completely new themes were formed based on the material and theme *undefined* was added for the codes which could not be included in any potential theme yet.

The stage number four means reviewing and refining your themes and making the thematic map. Themes may also have to be deleted if there is too little supporting material, or themes may have to be divided into new, separate themes (Braun & Clarke 2006). The coded material excerpts are examined within each theme, and it is considered whether they form a coherent pattern (Nowell et al. 2017). Once the data had been coded and themed, the codes and themes were revisited. At this stage, it was checked whether there were any inconsistencies or overlaps in the naming of themes and codes. Themes were also

combined and separated where necessary. The thematic map was created and revisited several times to ensure that the theming worked.

Now when all the possible themes and sub-themes are identified, the fifth stage is about defining and naming themes. Each theme is given clear definitions and names and it is defined that what aspects of the data each theme captures, what is interesting about themes and why. Names should immediately give the sense of what the theme is about so the names should be brief and concise. (Braun & Clarke 2006). When there was satisfaction regarding theme design and made sure that no important material has been left behind, the themes and their boundaries were defined even more precisely and conclusively. At this stage the names were formulated to be most descriptive.

Last stage is to write a report and the aim of the theme analysis is to produce a report that is a coherent, logical, and interesting overview of the material within and across themes (Braun & Clarke 2006.)

5 RESEARCH FINDINGS

The purpose of this chapter is to gather all the data together and present the results of the interviews. The two main concepts of the study were data-driven marketing and cultural change, and five main themes were defined under these two main concepts. Five main themes were the definition of the data, the challenges of data-driven marketing, the ideal culture, communication, and new requirements of the employee. These four main themes should be understood to implement a data-driven marketing culture in a company. Under the four main themes, 15 sub-themes were divided to make them more understandable. Each theme will give direct quotes from the interviews. Below the figure of the themes and the subthemes can be found.

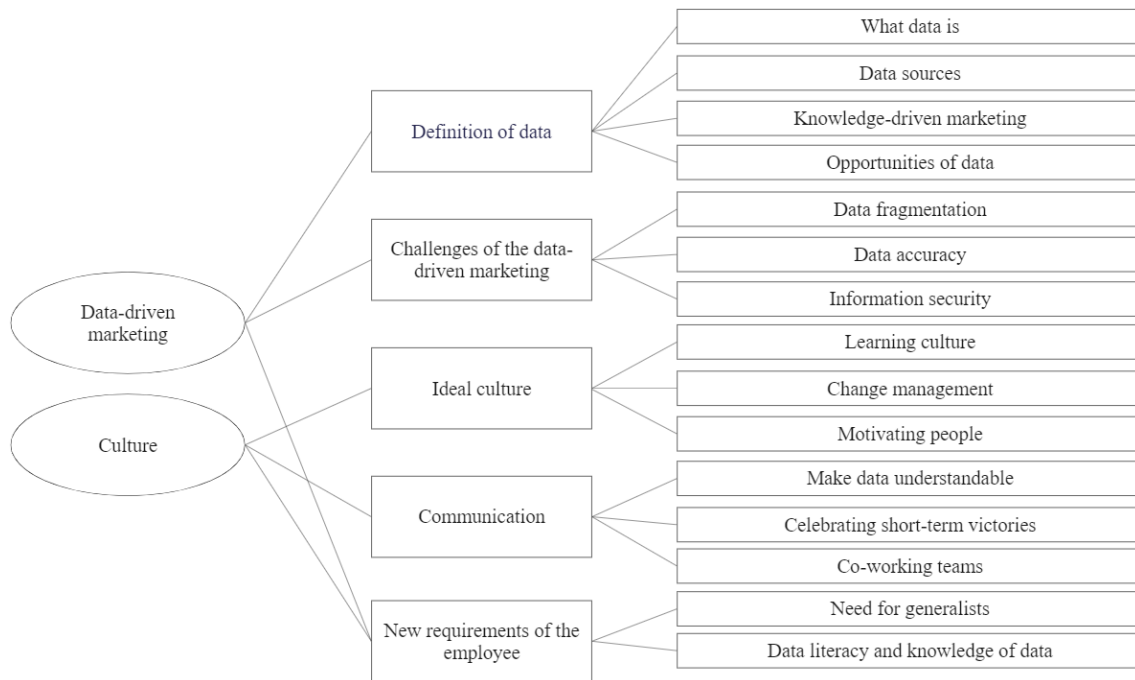


FIGURE 2. Themes and subthemes of the research.

5.1 Definition of the data

One main requirement for the company who wants to do data-driven marketing, is to understand what data is, where you can get it and how you can utilize data in marketing. First theme is "Definition of the data" and it is distributed to four sub-themes which are presented next.

What data is

There were as many definitions of data as there were interviewees and it was prominent fact that people see and define data in different ways. Most common definition of data was that it can be numerical data or qualitative data. Especially interviewees from marketing agencies noted that data can also be non-numerical data.

Interviewee B "On a general level, the word data is an abstract and difficult word. It can mean either external data, which is obtained, for example, when people share their age or gender on social media. It can also mean data that the company itself has collected. Data can also mean, for example, weather data that enables real-time marketing, even from an umbrella, when it is raining. Data means many things, but the way I define it, based on data, it is possible to target marketing to a certain target group very precisely."

Interviewee F "Then of course there is more passive data like, i.e., target groups, media usage and channels, how are trends developing and how is our customer's industry developing? How are seasonal, weekly, and monthly variations in the product they sell and broader of course, all the signals and trends."

Interviewee C "Data related to user experience, i.e., how people use the pages, how deeply they scroll a page, how the user paths go there, so that we could use it to develop the usability of our pages and the purchase paths there."

Interviewees advised that data can be brand research data, employee data, churn data, sales data, NPS data, AB-testing data, conversions, chatbot data, data from marketing platforms, how many ads have been shown and how many have been clicked on, marketing automation data and CRM data, data based on website behavior, number of visits to the page, time spent on the page, click-through-rates of e-mails, and the effectiveness of marketing investments.

Data is often way more broad definition of the knowledge than just numbers, and it should be considered when making decision. Interviewee E emphasized the importance of decision-makers considering which specific data is relevant to the decision or question at hand.

Interviewee E "I think that the definition of data, what kind of data it is, is not relevant. I think it is important to identify what is relevant to the decision in the background and then the form or amount of data arises from the challenge or the situation that we are solving. Data does not always need be numerical, because it does not necessarily correspond to the situation in question, but we must identify the way to find the right kind of data for the challenge and then the means to the situation that how we handle this data."

Data sources

After we know what data can be, it is principal to understand that where you can collect data and where you can get it. Interviewees revealed that Google's tools are mainly used in website-analytics.

Interviewee C "For web analytics we use Google Analytics, both the older Universal Analytics and the new Google Analytics 4. Various measurement and conversion scores are entered into the website via Tag Manager, which is also a Google's tool."

Marketing automation tools can gather information from multiple sources, with HubSpot and D365 Marketing being two examples of such tools that were mentioned.

Interviewee A "In terms of marketing automation, you can collect a lot of data there."

Data can be collected from e-mail tools such as Mailchimp or Creamailer. Some chat automation tools used are also Intercom and Leadoo.

Interviewee C "We also collect data from CRM, but it's basically sales data. So how our deals, opportunities, leads are progressing and if they are won, rejected, or lost, what are the reasons. On top of that, each marketing platform usually has its own pixels that are fed into our web pages, which aggregates web page behaviour from paid advertising perspective, which we then combine with our own web analytics as well."

Knowledge-driven marketing

Short definition of data-driven marketing is that in the context of marketing those decisions are not based on feeling or conjecture but on knowledge. When interviewees were asked to define the data-driven marketing and what kind of data they collect, especially interviewees from external marketing agencies highlighted that companies should use the word "knowledge-based marketing" instead of "data-driven marketing". Data tends to sound just numbers and charts, but knowledge considers people's experience too. Knowledge makes the topic sound more humanlike.

Interviewee G "I always talk about knowledge management or knowledge-based marketing because the data is the information. That data exists or is collected from somewhere and its purposes can be different for what it is used, but in general (data-driven marketing is) knowledge-driven marketing or marketing, which is based on knowledge. And based on that data or knowledge, the accuracy of hits is significantly improved."

Interviewee E *“(Data-driven marketing means) not making decisions based on guesswork but on data or even data-derived information, so I still prefer to talk about knowledge management than data-driven -- it's not just the data that makes us smart but how we use it and what kind of conclusions we draw from it.”*

It is critical to understand that data should not be followed blindly but it gives direction and can support conclusions. Data is often just numbers on excel but it transforms to knowledge when we use that data.

Interviewee C *“Data does not make decisions alone; it is more of an enabling factor in my opinion. That is, when we have the maximum amount of information available, we aim to use that information to make more effective and valid decisions and create hypotheses about what works and what doesn't work and how we can develop marketing and its effectiveness. In other words, data is in a way a tool that enables the monitoring of planning and development and everything around it, so it is one important source of information for us.”*

Interviewee F *“Data driven is a very trendy word and it is a way to get to genuine knowledge management, which also enables us to have a lot of knowledge and understanding, so we can also deviate from that knowledge.”*

Data is a tool, and it does not tell the whole truth and when you have enough knowledge of the phenomenon, you might also have to deviate from the data and numbers you have. Companies should listen to the data, but not forget the long-term experience since the data is not always 100% trustworthy. What comes to trustworthiness, we will go back to that in the next theme. It is important to understand at this point that data will not replace humans because humans make the decisions based on data-derived information.

Interviewee F *“The use of reason is allowed. That's what people are employed for, so that machines don't make all the decisions anyway. When leading with data, the context comes around, because data is just for example, the click price of this channel. But what do I do with that data? Why is it that it's like this? How does it relate to something else? Really, the data just is. It doesn't do anything, it just sits there.”*

Opportunities of data

Data is usually used in companies to find ways to do things and business in a better way. Often data gives a signal that something needs to be developed or changed. Data can give hints that what direction company should take a process or an approach and identify what is the right direction. Data can also be used to identify what's wrong with the process. An example of the use of data could be a company completely abandoning an advertising channel because it is determined, based on the data, that it does not serve the purposes for which it

was intended. Interviewee A said that if data is not exploited, it is like walking in darkness and in today's world, it is not possible to make any decisions or choices unless there is data in the background.

Interviewee D "It (data) guides what we do, so that we can examine whether the activities have been reasonable or not reasonable and what we should continue and what we should not continue. It also guides learning, so that when we monitor what we do, we can learn what is worthwhile and what is not worth doing."

Interviewee C "We track many metrics monthly to understand how our site is performing, where is the traffic coming from and is that traffic generating conversions? Based on this, we adjust our advertising, our site development, content, page conversion optimization and try to get more business from it."

Companies are using data to make informed and fact-based decisions so they can get the best possible results from marketing. In marketing automation companies use lead scoring to identify the potential prospect from a large mass of people. Data is utilized to analyse the functionality of the website and optimize customer journeys for better user experience. The numbers can tell us how the landing page should be built or how the overall user interface design should be done. When testing different variations of websites and ads, the data can tell whether people are responding in the right way to the changes made. From data you can see what activities are working and based on that make even better actions.

Interviewee C "All of this (data) is really based on improving usability and behaviour so that people can use our sites and become our customers as efficiently as possible. Everything we do is based on commercial metrics like how many leads we can generate that end up as opportunities, and that's where the real business comes from, so euros are looked at very closely these days."

5.2 Challenges of data

Under this theme we were able to identify some of the most common challenges or fears regarding data that companies should consider when implementing data-driven marketing.

Data fragmentation

The biggest challenge that all the interviewees identified was that data is fragmented inside various sources. It can be hard to find the data and bring it all together. Often systems do not communicate together, or the system does not even store all the information.

Interviewee D *“Data is so fragmented, and it is in so many data systems.”*

Interviewee B *“That is also the challenge of data today, that many companies have a lot of data in themselves and get a lot of data, but it is extremely difficult to combine it.”*

According to Interviewee C, the company has not made sufficient investments to ensure that the enabling technologies being used are advanced enough to effectively gather data and utilize it beyond manual methods. Interviewee A mentioned that the number of tools is huge, and the tools are changing often.

Interviewee C *“We have to do a huge amount of manual work and dig the data from different systems and combine it through excel. And in this case we have come across several times that a person in a role has changed and the successor is not able to dig the data in the same way, so the traceability and comparability may suffer or we may not be able to collect the same data again when a system has been updated to the extent that the data is not available in the same format.”*

Interviewee B *“Companies very easily adopt individual tools that collect data, but it is not integrated with other systems, so that they are kind of siloed, because the fact that you get the data to move between different systems usually requires more work than, for example, buying such a tool. It is usually not considered.”*

Interviewees were also able to identify a few systems that could help tackle the problem of fragmentation. For example, Google Data Studio sheets and BI (business intelligence) systems were mentioned. These programs are designed to bring together the information scattered across a company's different systems in one place in an easily usable and shared format. The interviewee C provided information of the data warehouse, where group's all data is transferred to for employee use and from where it is further transferred to the Power BI reporting for easy aggregation and review. In addition to that, different segmentation tools are explored, that can be utilized to mine the data automatically and to create various advertising audiences. These audiences can be targeted with different actions and their performance can be tracked closely. It seems that the use of data in the group will become easier with these kinds of reforms.

Interviewee E *“But with numerical data, for example, surely the easiest way is to use dashboard technology to visualize it.”*

Interviewee C *“All the data we are now trying to put together in a data warehouse so that it can be used for things like machine learning, reporting and this kind of automation.”*

Interviewee B pointed out that it is good to understand that you don't necessarily need a lot of data to make it useful, for example in the consumer business it is enough to know a person's gender and based on that you can control the big categories and then give the final customer the opportunity to choose the topic of interest. Often people can get lost into data because there is a lot of it. Companies should remember to keep the data analysing simple at the beginning.

Data accuracy

Companies use data to make decisions, but interviewees also highlighted that data should not be dutifully followed. There might be situations where data is not always applicable. When doing data-driven marketing it is crucial to understand that data tells you certain things, a piece of information and it may not be applicable from all possible angles.

Interviewee C *“Often the data may show something that, on first observation, may lead to conclusions that are not correct, so that is also worth looking at. It has a huge impact on how that data is collected and from what perspective. A bit like statistics, how we measure can influence and manipulate the outcome and its interpretation.”*

Interviewee B *“Data is not always terribly accurate as there are many contributing factors, such as ad blocking programs, that may well cause a lot of data to be lost.”*

Interviewee G *“The purity and authenticity of data on certain issues can be a challenge. And the problem of making sure that the data that is used is actually high quality, that it's not in any way unsustainable.”*

Information security

Among the challenges related to data, security and legal issues were mentioned several times in the interviews.

Interviewee B *“The EU and GDPR legislation, it's always moving forward, it's always being refined, it's always changing and it's almost a full-time job to keep up with that as well.”*

Many big companies tend to have own dedicated legal department and GDPR unit to take care of the security and legal issues. Employees can feel that data is a scary thing because of the information security, and it might not be clear to all companies what data you can collect and what you can not collect.

Some other challenges interviewees mentioned were that company lacks technical capacity to connect and use data, communicating problems, people not understanding why they need to be more data-driven with their work. Employees might not have the understanding, why we do this and how this affects in their life. Interviewee C mentioned that often when the organization is relatively new, there may not be financial or human resources or skills and understanding to do the measurement of actions and data, even if it might otherwise be quite easy. And then again, the bigger the company is, the older it is, the more challenging it is to bring in different data management models from the technical side. Interviewee E and F said that the big problem with data is that people do not use it and one concern was that some employees might not even have the access to all the information they might need to do the job successfully.

5.3 Ideal culture

Now when the previous themes have concentrated to the data-driven marketing, we will talk more about the cultural change and aspects of changing the culture. What kind of culture should a company have to embrace the change to a data-driven mindset? Interviewees felt that the company culture should be open and encourage learning to make change more acceptable and easier to implement. It is often perceived as difficult to learn new things and break old habits so it might feel challenging to get people involved. Many people are interested to hear about the change but when it is time to actually do the new things, people start to back away. Then company should be able to concretely divide what employees should do into meaningful chunks rather than bringing the whole change to the desktop at once. Incorporating the use of data into work processes should be a natural and seamless part of the workflow, rather than something that feels imposed or mandatory.

Interviewee C "A company with people who understand the importance of data and want to bring it into their work and use it to make decisions and take action, this kind of data-driven capability tends to emerge more quickly and work more effectively than in a company where there may be resistance to change because utilizing data is a complex task, as it involves not only the collection of data but also the interpretation of it."

Interviewees agreed that implementing data-driven mindset it is quite long path that requires companies to trust their employees and give them the freedom and independency to make decision based on data and knowledge. Company should also acknowledge, what kind of tools and how much time employees need to adopt the new mindset and give the time to study the data.

Interviewee F "People need to be able to say that if this is the level that is required, then I need such and such things to be able to do it. Provide the keys to success. People can say that now, when I sit in meetings, I can't spend time looking at the data or I don't have access to it, or I can't, or we don't even collect this kind of data or whatever the reason is. Often there is internal issues preventing change that management doesn't even know."

Learning culture

With previous quote from the Interviewee F, we can jump into next sub-theme, learning culture, which many interviewees brought up. Company must have a strong learning culture to adopt new ways of working.

Interviewee E "The demand that you must keep learning more and more has only increased and in my opinion organisations have not sufficiently prepared and given employees time to learn -- Give employees the opportunity to develop and learn and give room for the growth of their skills."

Interviewee G " You must be awake and learn new things, to be ready so that the information flows and gives you opportunities to develop, whether it's training or other internal workshops."

Interviewee G also highlighted the importance of internal promoters, who independently drive things forward in the company and are enthusiastic and willing to learn new things and create enthusiasm from within. But since not everyone can be the internal promoters, company needs the learning culture which encourages slower learners to embrace new processes.

Change management

Company needs change management to help employees to implement the data-driven mindset. Pushing for change evoked different ideas among the interviewees. Some felt that change should come from the top to down.

Interviewee E "In my opinion, management must first set an example of how to implement such data-driven activities, and employees must be given power and also responsibility for what they do."

Some interviewees felt that change can start from the bottom up with the employees, but the change always requires the support of the management to take off and actual implementation plan.

Interviewee C "For change to work, it should come from the top to down and from the bottom to up so that it takes root, so that it becomes like a culture of action. -- These things can even come from the bottom up, from the experts, because they see that this must be done in a data-driven way to get results, but for it to trickle down to the whole organization it requires that the management is also committed to it and pushes the strategy forward. The management acts as an enabler and often such training and so on comes along quite quickly so that people learn and understand what it means in practice."

Interviewee C "The knowledge and understanding of experts has grown much faster than understanding of the peoples in the management positions, for example. And on the other hand, it is quite natural that when there are many young people who have used digital devices all their lives and it is a way of life that the systems are there alongside and are used for everything possible. It comes natural for them that when decisions are made, they should look at what has happened in an advertisement. But then there are a lot of people at senior levels for whom it's not natural and they don't understand the big picture. In such situations, quite often there are leadership challenges and cultural challenges, not understanding how important and big things they are, but assuming that when you add a strategy to a road map without an implementation plan, things will move forward, even though this is not the case."

Interviewee F explained that often when the need for change comes from the employees, the change will get implemented easier. When the need for the change comes from the employees, it feels more relevant for the employees. Open culture also enables employees to open their mouth and say if there is something wrong with the change and its management process. Often if the change is perceived as difficult, some things are left undone or if there is no management support, it is not implemented. Initially, management should oversee that the data collected is used and remind the team about the data. Clear communication is needed to remove difficulties and fears about the change.

Interviewee A "The glorification of the strategy is needed. If you decide to change, or to go down a certain path, the strategy should be sufficiently clear and well-illuminated as to what direction you should go in and what kind of measures you should take."

Strategy and why we do this should be clear for everyone affected by the change. People need to see why they need to change their way to work. Can be

stated that change always needs the support of both management and staff. Interviewee B highlighted the working partner-thinking, where people can get the support from each other. Company's culture should support the employees in challenging situations.

Interviewee B "I think it's very important in the culture to have a certain kind of partner thinking that I've been calling for, where people are not left, that this is your individual's responsibility, but this is your and you work-partner's responsibility. Because these things are really complicated, there's always a big possibility of misunderstanding, so you would get a certain kind of support from each other. And that you get the support of the whole organization is a completely absurd claim because you will never get it. But ideally, we would be able to create a culture in the work community that you always get help from each other and have a low-threshold opportunity to get help in challenge situations and accordingly when someone does something well, give that person so as applause and honor."

Motivating employees

Motivating people emerged as a key issue in the interviews. Management should be able to keep the employees motivated to the change.

Interviewee C "It's really hard to go out and make that change, especially if you don't have the motivation. So, I would say that in order to be fully data-driven, the company must find the will to use it from the top management to the executive level, or at least have the tacit acceptance that even though this is not my natural way of doing things, this is the way to do it."

Interviewee F and B highlighted the fact that every employee has their personal motivations for waking up every morning and coming to work. There might be different ways of motivating employees who are working just to pay their mortgages comparing to employees who are ignited by the idea of developing something new or want to advance in their careers. People can be supported in relation to the big change through their own motivation. Every employee should have the vision clear in their heads. A vision to guide the whole company should be motivating in addition to the person's personal motivation.

Interviewee F "It (motivation) comes from really understanding, why are we doing this? The direction, where we're going? The reason why we're going there? The goal has to be there, what's wonderful about being there? To highlight through the conversations, what makes a difference in your everyday life, what's good about it hopefully then. Something gets left out, you don't have to do so much of something, you can focus more on something else, for example?"

5.4 Communication

All the interviewees emphasized the significance of communication when it comes to changes. If the company do not communicate clear enough, change is almost impossible. Implementing data-driven marketing is often a long process and that's why the communication should be cyclical and steady, and employees should be kept up to date with where things are going. It is important that everyone understands where we are going and why we are going there. Goal needs to be truly clear to everyone, and it requires repetition.

Interviewee A *"Do we all in the team understand in the same way what direction we are going in? And that is perhaps something we should be able to communicate better and better, what is the big picture we are trying to achieve, so that anyone could be able to make decisions about their own work."*

Interviewee F *"It should be so that if someone wakes you up in the middle of the night and asks you why we're doing this, you can answer in the same way as everyone else, and not because the leader said we're doing this."*

Like interviewee A said, the more team members understand, the more confident they are about their work and decisions. And understanding requires two-way communication, dialogue. Employees should feel heard and be able to communicate to the management if something feels hard or nonsense. Communication can help overcome fears and uncertainties.

Interviewee E *"Dialogue is needed, like why does this seem so difficult, why don't you find this useful. And then management should really hear people's concerns. Usually, it helps people to say that I'm a bit stressed now, that I feel that I have too much work or something. And then once you've said it out loud it's easier to move on."*

Make data understandable

Interviewees identified that one problem with data can also be that people do not understand what using data mean to a company and that can be seen as a communication-related problem. It is important to identify and make it clear what does data mean to the company. How it will benefit the employee, can data make the work easier? What it means in an everyday life in concrete terms?

Interviewee F *"We talk about data-driven culture, it can easily sound a bit trendy and something like "since everyone's talking about data, so now we're talking about data too". Why, what does this bring us? What does it mean in*

concrete terms? We have to go right into the everyday processes of what we do, when we have a data-driven culture."

Interviewee B "Data itself is a very abstract concept, it is such a generic term that it can mean many different things. You should also understand what it means in the context of your company."

Problem is that people inside the company might not understand, why we are doing things data-driven and how this actually affects to an individual's life. Data needs to be as accessible as possible to everyone. Company needs to understand, what kind of data does we need and who needs it in their work.

Interviewee D "The information should be open and easily accessible and there would be an understanding of why and who needs the information."

Celebrating short-term victories

One common theme among interviewees was celebrating and noticing short-term wins. It is important to notice what small things are done right to keep people positive and motivated.

Interviewee C "Should more remember to look in the rear-view mirror and celebrate successes."

Interviewee F "There must be milestones, which can then be celebrated together. Find those things that have been done and are visible somewhere."

Interviewee B "We should above all celebrate the kind of small victories that come all the time and encourage people because these (data-driven projects) usually require work and when you do new things you are always at the extreme limits of a certain kind of comfort zone and then you fall into a very uncomfortable zone."

Interviewee F "You must get really small quick wins to start with, although really changing the culture is a slow process, something tangible has to come pretty soon."

Interviewee C pointed out that while marketing successes are reported to the company's management, group management, and board through various reports, there is still a lack of culture surrounding the internal sharing of these successes with a wider audience. Or, on the other hand, also failures, so that employees can learn and share information more effectively. While interviewee D mentioned that success stories are shared during the group's monthly marketing meetings, and that these meetings cover not only data-related successes, but also information on other marketing success factors and projects. However,

interviewee B pointed out that short-term metrics are not the best for data-driven marketing, but things need to be looked at in the long term, even if small successes are celebrated at regular intervals.

Interviewee B "Data-driven marketing projects are usually long, and the successes associated with them need to be measured by many indicators. Short-sighted indicators, which increase the use of the website for example, are fundamentally bad, they should be looked at in the longer term."

Co-working teams

Interviewees revealed that nowadays company's teams must work well together. Data-driven way of working has brought teams closer to each other. Marketing department needs to work with sales and IT team and communication should be fluid. Interviewee B and G mentioned that especially sales and marketing should work well together.

Interviewee B "A successful project like this requires both marketing and sales. You need data from both ends, marketing, and sales."

Interviewee G "Sales still does a lot of its own stuff and marketing does its own stuff, but at the end of the day, especially in this kind of data-based marketing, where concrete results are increasingly sought, sales should be telling marketing that we want this, that or the other, and marketing should understand that we have this and that data on the target groups that sales wants to reach. and when sales want something, whether it's meetings or direct sales or whatever, we should do it together. The goals come from sales and the marketing team has to implement and refine the way it works."

Teams can use each other in decision making which can help to make better decisions and avoid decision-making biases. Interviewee D also mentioned Growth Hacking teams which usually combine people and skills from different departments. Interviewee A said that opening the cause-effect relationship and success through the organization is an important job.

5.5 New requirements of the employee

New way of working always requires new skills. People working different roles have individual key skills related to data, i.e. there are not just one or two key skills people should have when working with data-driven marketing. However, the interviews did identify a few characteristics that everyone working with marketing data should have. Under this theme, two sub-themes were chosen,

one sub-theme to data-related skills and other sub-theme to discuss about the need for generalists.

Need for generalists

Interviewees agreed that the range of skills required of marketers has increased, and marketers need to understand a huge variety of channels, and a much broader range than before.

Interviewee E "You need to understand really big entities and somehow, I feel that the decision-making jungle has become even deeper, there are so many options in technology, for example, that you need to understand who you need around you in order to get the best possible information for your decisions. Maybe it can be summed up in some way in terms of skills requirements, that the elements you need to learn and know are so much more."

Interviewee E "The media is so fragmented that at the operational level you need to understand a huge number of different channels and even the means of advertising effectiveness. And at the same time, you need to analyze data and make decisions based on it to make advertising more effective, and on the other hand there is a lot more technology in the organization. This may make your work easier, but on the other hand you also need to be able to use different technologies much more than before."

Interviewee A mentioned that there is no there is no single important skill, but the skill comes from being able to acquire different skills and knowledge and combine them together. Interviewee F suggested that people should be very agile and have that resilience, because companies plans are changing constantly. Common idea was that since the new skills are coming constantly, we need generalists now more than before.

Interviewee A "Marketing requires so much broader skills than, for example, 10 years ago. You have to manage much larger entities and that creates a challenge for future marketing, how marketing teams stay on track, what they should be able to do in the future."

Interviewee G " The need for generalists is really big, you need to be able to do a lot more with one person and know a lot more than before, when it (marketing) was more straightforward."

Interviewee C "There needs to be a huge increase in skills, you need a variety of different kinds of specialists or multiskilled people who can do a variety of these things."

Interviewee A *“Could it be that the era of the specialist is slowly coming to an end and the generalists are the winning group in marketing, I don't know.”*

Data literacy and knowledge of data

When company starts using data with their marketing, employees need data-related skills. The interviews showed that when it comes to working with data, it is essential to have data literacy and a comprehensive understanding of where data can be sourced from as it is present in various areas. Employees need to be able to analyze data and make decisions based on it, and at the same time be very flexible because data is constantly changing. Constant testing and optimization are daily occurrences and opportunities need to be identified from the data.

Interviewee F *“An understanding of where we can get the data from and whether we can then develop our activities in some way in the direction of collecting even better data on some things that we do not yet collect.”*

Interviewee E *“Data literacy is currently something that everyone should have at some level, and I don't think there is enough investment in the organization at the moment for everyone to be able to make decisions from data.”*

Interviewee G *“A mind change, that the authors would first understand what the data enables, how to handle it correctly and how to analyse it, so that it is not just a number or some comments, for example. When you really know how to handle data, it becomes useful information.”*

Interviewee F *“Of course, there is a huge amount of data, so what we are now talking about here is the understanding that you can at least ask the right questions.”*

Data literacy was mentioned several times and interviewee E said that employees must have time to learn and assimilate new skills especially data literacy. Interviewee E told that employees can definitely learn data literacy from books, like the analysts who went to school on it. People can learn the basics from books, but experience brings a broader perspective to data interpretation. Experience allows you to humanize the data, because if you are completely book-learned, then you can be driven to interpret the data too literally. Through experience you can connect the red threads here and there and, in a way, you need both lessons: the lessons of experience and the lessons of the book. Also, once you have the data literacy skills, you can also confidently deviate from the information that the data gives you.

Interviewee C *“Interpretation of data, which means understanding that it tells you a certain thing, a certain piece of information, and it may not be applicable*

from all possible angles. So, a particular piece of data may not always be valid and its use may not always be applicable to everything."

Interviewee F "Offers the possibility that when we know, this time we can deviate from it. And, in the end, is there an absolute right or wrong answer? Maybe the data is just pointing in the direction that maybe it's worth running in that direction now and taking a look for a while. But you can also deviate from it. That it's not slavish."

One interesting idea came from Interviewee B about the new concept in the companies. Companies should have the data storyteller, whose job is to tell concrete story about the data, what it means and what it tells us. This way, not everyone has to be a master of data, but there would be a person in the company who takes the data and puts it into a narrative form that is understandable for all.

6 DISCUSSION

The study sought to understand how a data-driven culture is instilled in employees and what the company culture should be like to make the adoption of the new mindset as easy as possible. The data collection method of the empirical part was semi-conducted interviews and seven people were selected for interviews from managerial or expert positions. Four of the interviewees worked for the group and three worked for external marketing company. The discussion chapter provides an in-depth analysis of the research findings, breaking them down into distinct topics. The study used an inductive approach, which means that the themes found were strongly linked to the data collected. First, the theoretical contributions are discussed in comparison to earlier studies, with the aim of understanding their findings. The paper then provides a managerial perspective that connects the findings to the case company and offers a practical guideline for the case company to follow. Lastly, this chapter provides the evaluation and the suggestions for further research. The following is a recap of the three research questions of the study.

RQ1:

What kind of culture should the marketing department have in order to successfully implement data-driven marketing mindset?

RQ2:

What qualities and knowledge of data-driven marketing should an employee have in order to be better equipped to adopt a data-driven mindset?

RQ3:

What are the possible threats or challenges when implementing data-driven marketing culture?

The first research question aimed to find out what kind of culture a company should have in order to be receptive to data-driven way of working. The second research question seeks to answer what capabilities an employee should have in order to be open to a data-driven mindset. The third research question sought to identify the potential threads or challenges that a company should consider when moving to a data-driven culture.

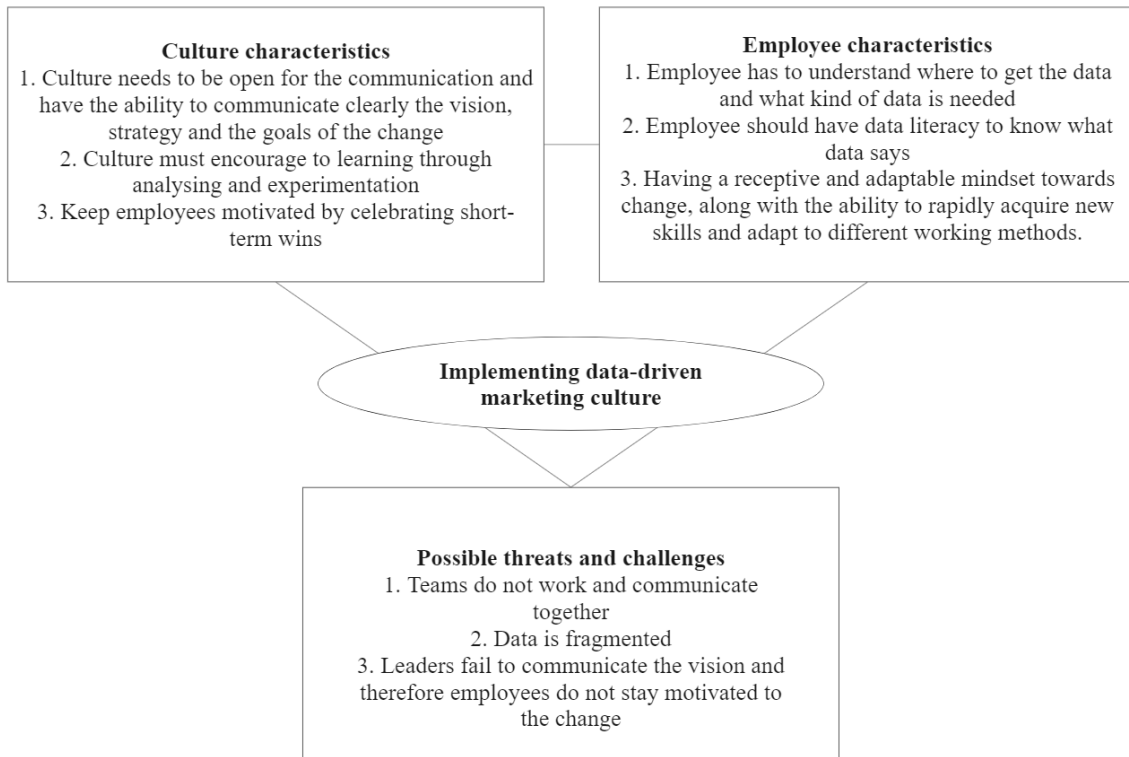


FIGURE 3. The main findings of the study broken by research questions.

Above the main findings of the study can be found, presented according to the research question. This study highlighted the significance of an open and transparent company culture that promotes effective communication and possesses a clear vision. It is important for the company to foster a culture of learning, analysis, and experimentation. Study also proved that company should be able to keep employees motivated and celebrate short-term wins together. While defining the most important employee skills, understanding of data, data literacy and the ability to learn new skills quickly emerged. The potential threats and challenges that can arise when adopting a data-driven marketing culture are presented at the bottom of the figure. Potential threats include communication problems between teams, data fragmentation across systems and the inability of managers to communicate and manage teams, leading to a lack of motivation among employees. The managerial implications section presents the results in more detail.

6.1 Theoretical contributions

The theoretical framework of this study supported the idea that company culture plays a role in how employees perceive a new way of working. Adopting data-driven mindset requires efforts from both employees and managers and

the new culture should be implemented bottom-up and top-down. The empirical part of the study found that change requires a clear vision and strategy that is communicated to the employees, and this finding is supported by Kotter (1995), Schein (2017) and Salminen (2022). In 2017 Schein stated that the goal of the change should be clear to everyone before starting the change process. Interviews consistently highlighted that company should be clear of the reasons that why is the company implementing the data-driven way of doing marketing, what is the future of this change and what does the employees benefit from it. Well-defined goals and objectives are important for both individuals and companies. For individuals, it can provide a sense of purpose and direction. For companies, it can help to motivate employees and guide strategic planning and decision-making. Kotter (1995) presented that change requires encouraging employees to risk-taking, new ideas and activities, the powerful communicating a link to good results and new practices and short-term wins. All of these themes presented by Kotter were presented in the interviews too. This research shows that many of the eight parts of Kotter's theory of change still apply, and the importance of communication has only increased.

The case company should learn to make extensive use of marketing automation now that its deployment is complete, because as the theory (Wood, 2015) suggests, marketing automation can use data in ways that humans cannot. By automating the day-to-day tasks of marketing, you have more time to look at the data and make better decisions.

Interviewees pointed out that learning new things and habits is often difficult and painful to the employees and Schein's (2017) theory of the process of unlearning being uncomfortable supports it. Change may involve acknowledging that previously held beliefs or assumptions were wrong or incomplete. It may also require individuals to re-examine their own biases and assumptions, which can be a challenging and uncomfortable process.

Interviews suggests that when making decisions, it is important to be strategic about the data that is collected and to focus only on the information that is relevant to the decision at hand. Collecting too much data can be overwhelming and may not necessarily lead to better decisions and this theory is supported by Jeble et al. (2018).

The research suggested that if marketing is done solely based on data, brand recognition may suffer because brand advertising may not yield short-term results, unlike tactical marketing, and the study by Johnson et al. (2019) supported this observation of the interviewees. Furthermore, the research showed that human creativity and decision-making skills are also needed, i.e. data alone does not make decisions but only provides direction and this theory was supported by Bumblauskas et al. (2017). It is crucial to recognize that data cannot completely replace human decision-making, as ultimately it is humans who use information derived from data to make informed decisions. Kiron et al. (2013) demonstrated that analytically challenged companies have four characteristics in common that separates them from the companies that utilize data well. Those characteristics are data deficiency, weak information value chain,

lack of collaboration, and no key driver to use analytics. These challenges such as company not having data to utilize, or not knowing where to find it, problems with communicating and sharing information among individuals, lack of co-operation and no key driver to use analytics were also identified in the interviews. If company has no key driver to use analytics, it can be seen as a vision-problem because company fails to communicate the clear vision, why we are using analytics and data.

To drive the change, Hill and Jones (2018) recommended the involvement of external consultants in certain cases, as internal personnel may be too closely involved with the situation. However, the use of external consultants did not come up at all in the interviews, so in this respect this study cannot support the theory Hill and Jones. It can be concluded that in the group, consultants may not have been used in the past in such change situations. However, the researcher knows that within the group, consultants are used, for example, for the implementation of more technical, big entities.

6.2 Managerial implications

The study revealed findings that will help develop the company's marketing culture in a more data-driven direction. First, marketing department should be able to identify, what kind of data do they need and where to get it from. Secondly, it is advisable to centralize all data in one location to facilitate its utilization, since it saves employees time and effort when they don't need to search for data across multiple platforms.

One of the key themes that emerged from this research is the significance of fostering a culture of learning. Encouraging employees to actively seek out new knowledge and explore creative ways to utilize data in their day-to-day work can be crucial for success. Schein's statement (2017) suggests that a culture of learning should prioritize and place high value on two key elements: reflection and experimentation. Reflection refers to the process of taking time to think deeply and critically about one's experiences, actions, and decisions to gain insights and understanding. Experimentation, on the other hand, involves actively trying out new ideas, approaches, or strategies to learn and improve. Based on the interviews, it can be said that the company culture should encourage bold experimentation and analysis of results. When something is done, we are forced to look back to see how the desired things were achieved and, if they were not, why this happened. The company should encourage its employees not only to try different things, but also to analyse the results and ask for feedback.

A learning culture requires communication to succeed. Based on the analysis, it can be deduced that communication is extremely important for making the change to the data-driven mindset successful. The strategy and vision for the change should be clear to all employees involved in the change. Leaders

must be able to communicate the vision clearly, and the strategy for getting there. The results and interim information on where we are going should also be widely communicated throughout the organisation. By prioritizing effective communication, the desired change can become ingrained in everyone's mindset and integrated into daily work routines. As highlighted in the interviews, it is important to continually repeat and reinforce these changes until they become second nature to the employees, even if it may feel too repetitive for the managers. Effective communication should be a two-way process, with dialogue being essential to ensure that employees feel comfortable raising concerns or providing feedback if something is not functioning correctly or requires attention. For example, there may be situations in a company where employees do not have the right tools to implement data-driven marketing. The department's culture must be an open learning culture, where you dare to ask for support.

This study also suggests that employees should be motivated to change and rewarded when they are successful in implementing a new approach. Celebrating small milestones together and highlighting successes is an important part of keeping employees motivated. This part also contains communication because the victories achieved should be communicated widely to the organisation. Previously, the company held a monthly info session every month, where each team had the opportunity to share their successes and future focus-areas. It has been suggested that this practice be reinstated, as these briefing shares information across teams and maintains good communication.

One interesting thing about the term data-driven marketing emerged when experts from marketing companies were interviewed. All of them suggested that companies should be using the word knowledge-driven marketing instead of data-driven marketing. Data is often seen as all possible numerical information that can be obtained. We need to remember that data can also be qualitative data such as the output of interviews, people's feelings, thought and experiences. Incorporating a more humanistic approach towards data may encourage individuals who do not feel comfortable working with numbers, to use data in their work.

The above answers the question of what a company culture should be like. The next research question was what can employees themselves invest in in order to be as receptive as possible to the adoption of data-driven marketing? It is important for employees to acknowledge what is the relevant data for their work and understand that the quality of data is more important than its quantity. Every employee should have some level of data literacy so that they can make informed decisions based on the data and evaluate the success of marketing efforts. Using data and sharing the knowledge can help deleting decision making biases. Employees should study data literacy through books or have the training provided by their employer.

Research suggests that today's employees are being asked to do more than in the past. The skills required of employees have increased as marketing has become more distributed across multiple platforms. Marketers need to be

able to deliver the right material, on the right platform, at the right time, at different stages of the buyer's buying journey. In addition, marketing is changing rapidly, so employees need to be open to change and ready to learn new things. Resistance to change won't get you far. This research suggests that companies should give the marketing employees couple of hours per week to study the area needed.

When it comes to the key issues that companies need to consider before adopting a data-driven approach to marketing, the main concerns include fragmented data sources, communication obstacles, and the need for effective teamwork. All data should be collected in one place, making it easier to use, so employees don't have to spend time hunting for data from different platforms. As revealed in the interviews, the company is investing in power BI reporting and data warehousing solutions and such solutions are vital to make data more accessible and available to all who need it. Marketing department should ensure that communication works between the sales department and it-department. Successful marketing requires input from the other teams too and the marketing department has invested in this by creating a growth hacking team made up of different people from the company. Growth hacking also emphasises learning through experimentation. The marketing and sales teams in the case company operate collaboratively due to the company's smaller size, which promotes smoother communication and regular joint meetings. This is considered a benefit of being a smaller organization.

The study found that the group is already investing heavily in data-driven marketing and its importance is recognised and this will spread to the marketing department too. It is the most important step in this change and fortunately it has already been taken. The marketing department is well equipped to put data-driven marketing into practice, because the company is quite small, so things are still agile, and in addition to that they still have the knowledge and support of a large group around them.

6.3 Evaluation of the study

The goal of this research was to increase the understanding of how a data-driven mindset can be successfully implemented in marketing department by identifying factors affecting the implementation process. To explore this subject comprehensively, a qualitative research approach was chosen, utilizing a case study research strategy. The evaluation of research quality differs between quantitative and qualitative research approaches. Quantitative studies tend to have more defined research methods and standards to measure quality, making them more straightforward and easier to evaluate. In contrast, qualitative studies involve more diverse methods and standards, making their evaluation and reporting more challenging. (Hirsjärvi et al., 2005). The quality of data gathering, and analysis are influenced by the researcher's subjective interpretations.

The empirical data is based on the researcher's observations and what is relevant in her opinion, as well as the researcher's understanding of the situation. Moreover, the analysis process is highly dependent on the researcher's conclusions, interpretations, and reasoning. These factors should be considered when evaluating the quality of the study.

To increase the veracity of the study, interviews with experts from outside the company were also conducted. If all the interviewees had been internal to the company, the company's own current culture and ways of doing things might have distorted the results. By interviewing external experts was ensured that the responses were diverse.

This research should be viewed as providing a specific insight into the case company, as the results are not applicable to other organisations due to the unique elements of the organisation that have shaped the findings. The aim was to look in depth at the phenomenon under study in the case company and the aim was not to find generalisable results but to describe the phenomenon and make observations taking into account the context of the case company. However, this research still provided the useful information of the phenomenon of data-driven marketing culture implementation, that has been scarcely studied.

Challenge of the study was that people interviewed were not culture specialists or change management specialist so the idea of how to implement the cultural change was mainly interviewee's own ideas and based on their previous experience. However, most of the interviewees had for many years' experiences of management and leading people so they did have the vision of how people are managed.

6.4 Suggestions for further research

The study reveals a wealth of potential areas for further research. This study demonstrated that change management is a topic that evokes many opinions and perspectives from individuals. It could be interesting to dig in deeper to change management process when moving into data-driven marketing. In theory, there was talk of using external consultants in the transition to a data-driven marketing approach, but this did not come up in the interviews. However, it would be worthwhile for the company to explore this possibility and to continue research into whether it is useful to use external consultants in this situation. As the research progressed, it was noticed that while change management is a much-studied topic, change management, which is only situated in the marketing field, has not been studied. It would be interesting to see if change management models change in any way from the usual ones when it comes to marketing change.

The idea that companies should talk about knowledge-driven marketing rather than data-driven marketing came as a surprise. On reflection, it makes sense. Data by itself doesn't make decisions, as already mentioned, but it does

point the way. People ultimately make decisions based on data, which can be numerical data, or experience data, for example. In the future, it could be explored what data means to the employees who work with marketing. Whether it is seen as a trend word, which may even have a slightly negative stigma as argued in the interviews.

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APPENDIXES

Appendix 1 Interview questions

Warm up

1. Current role?
2. How long have you been working in your current role?
3. How long have you been working in marketing field?

Data-driven marketing

4. Define data-driven marketing in your own words.
5. What is data-driven marketing's role in your current position?
6. What kind of data do you collect?
 - a. and what tools do you use in data-collection?
7. How do you utilize the data you collect?
 - a. what kind of decisions do you make based on data and how do you use data in the decision-making?
8. How are the data insights generated into real actions? What are the steps?
9. How do you document and protect the created knowledge (about the data) in your organization?
10. What do you feel are the most important skills in your job related to data-driven marketing?
11. Biggest issue with data?

Creating culture

12. How do you communicate the success-stories related to data-driven marketing in your organization?
13. In your opinion, should the whole marketing team be involved in decision-making? If yes, how
14. What do you see as the biggest barrier to leading a change of a new culture?
15. How do you feel the marketing has changed during your time working in the marketing industry?
 - a. How has marketer's role changed? (what new skills does one needs?)
16. What's the organization's culture role when adopting data-driven marketing?

Final question: Is there anything I have not asked regarding your experiences that you'd like to tell me?