#### RESEARCH ARTICLE





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# Perspectives of business process ethics in data-driven marketing management

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#### **Abstract**

In today's digitalized world, people leave trails of data about themselves when operating online. While marketers are eagerly utilizing this data for marketing insights, many consumers have a growing fear of their personal data ending up in the wrong hands and losing their privacy. The aim of this study was to understand the role of ethics in current marketing based on consumer data and to examine how data could be used ethically in marketing. The empirical research was conducted by analyzing secondary data from a 2018 survey about the use of digital services in Europe. The main conclusions that can be drawn from study findings are that the need for ethics is even more apparent in marketing than ever before, because of the broad access to personal data. Giving the consumers the ability to opt-out from data use and data selling without it affecting the use of services can create an enormous competitive advantage for organizations in the future.

#### KEYWORDS

big data, business process ethics, consumer behavior, data ethics, marketing ethics, privacy

#### 1 | INTRODUCTION

We live in a world that is significantly influenced by marketers. Marketing stimuli surrounds us in many forms, both online and offline, and marketers filter much of what we learn from this world. Consumers rely on marketers to sell those products and services that are safe and operate as promised, and to tell the truth about what they are selling.<sup>1,2</sup> Data about consumers is used to personalize marketing messages as well as to gain a better knowledge of the consumers' needs, ultimately improving business effectiveness and increasing profits.<sup>3,4</sup> Every day massive amounts of data are created as we leave a trail of data from millions of messages, emails, photos, and videos shared online or by mobile devices. In addition, the data from sensors like the GPS is gathered from our mobile devices.<sup>5</sup> This abundance of data means that marketers can utilize an enormous amount of consumer data rather easily. Data and the insights received from it are hence at the core of data-driven marketing.

In this setting, ethical issues are more critical than ever before.<sup>6</sup> Consumers demand more individualized and personalized content, which requires using data about individual consumers. The balance between personalization and privacy is a critical issue facing marketers.<sup>7</sup> On the one hand, consumers want personalized communication, but on the other hand, they are concerned with the implications it has on their privacy.<sup>8,9</sup> Privacy as a concept is also closely related to

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ethics, especially data ethics. The amount of personal data gathered in the modern digitalized world is massive, and therefore the threat to personal privacy is more apparent than before. For example, Amnesty has expressed hard criticism towards the leading data giants, Google and Facebook, accusing that their business models are a threat to privacy and even to human rights. Many marketers utilize these companies' marketing tools, so this is a matter that needs to be taken seriously by marketers as well.

The concept of privacy has been widely researched before.<sup>13-16</sup> Martin and Murphy<sup>17</sup> have also studied the role of data privacy in marketing. However, though privacy is an integral part of marketing ethics, the ethical challenges in marketing are not restricted merely to privacy.<sup>10,18</sup> Nor is marketing limited to personalization, albeit being an essential part of modern marketing. Ethics in marketing is gaining attention, and there is some earlier research on data ethics.<sup>19-22</sup> However, most of the research regarding data ethics in marketing focuses on marketing research. There are also some studies about targeted marketing, but most of them concentrate either on targeting to underage children or senior citizens. This research aims to gain a holistic view of the subject, combining both the consumer view on data use and its implications on marketers. The consumer view is taken into account, as marketers need to understand the customers and their behavior in order to satisfy their needs and consumer behavior is the key driver in the collection of marketing and consumer data.

The objective of this empirical research is to gain insights on how consumers view the use of personal data and whether it affects their buying behavior. In addition, this research aims at demonstrating what kind of thoughts consumers have on data ethics. This research studies the ethical considerations regarding data-driven marketing. It describes how data has affected the business and consumer environments and explores how data is used in marketing. In addition, this study examines the role of ethics in current marketing and the ethical challenges facing data-driven marketing. The overall aim of this research is to identify the ethical challenges in data-driven marketing. This gap is fulfilled by examining the changes in the business and consumer environments and explores the role of data and privacy in current society. The individual research objectives aim to answer the following research questions (RQs):

- RQ 1: What kinds of challenges are involved in the use of personal data?
- RQ 2: What is the role of ethics in current marketing management?
- RQ 3: What kind of implications does the concept of privacy pose to marketers and
- RQ 4: How the data can be used in an ethical way in marketing?

The use and storage of personal data can be regulated through laws and regulations, like the GDPR in Europe. However, merely abiding by the law is not enough for organizations. The law cannot keep up with the rapid pace of technological innovations, so the ethical practices need to be taken into account at an organizational level. <sup>23,24</sup> Therefore, it is essential for marketers as well as consumers to understand how data can be used in an ethical way. The concept of privacy is critical when examining ethical considerations. This study explores privacy more from an individual and socio-cultural point of view rather than from a political level. As the concept of privacy and ethics are culturally related, this study focuses on exploring these concepts from a European perspective.

The rest of the article is organized as follows: In Section 2, literature review is highlighted that examined how consumer behavior has changed in recent years and what is the role of consumption in modern society. It also examines the consumer's need for personalization and discusses how privacy is connected to consumption. Research methodology is explained in Section 3, whereas, data-driven marketing is defined and discussed in Section 4. The study results are presented in Section 5. Overall study findings from the empirical research study are stated in Section 6. Several recommendations for the potential practitioners are outlined in Section 7, while, study experiences are concluded and shared in Section 8 along with future research directions.

#### 2 | LITERATURE REVIEW

Due to fast pace of economic globalization and increased market competition, bring challenges to the manufacturers to decide on the appropriate marketing strategies. Based on the strategies, manufacturers products will sell to the right customers at the right time. <sup>25-28</sup> Growing trends in precision marketing considers as a key means of generating profit for manufacturers, which demands to deliver products with accurate data or information to customers<sup>29</sup> (Wolfgang et al., 2018). This data-driven marketing philosophy can bring value into the market by promoting sells. Such marketing strategy is especially important to the rapid development of Mobile Internet and the increasing prevalence of social

WILEY 3 of 18

media. $^{31,32}$  However, data-driven precision marketing integrates higher product involvement, which is also stimulated to the consumer's privacy or ethical concerns. $^1$ 

The need to study consumer behavior is vital for marketers, as knowing the consumers and the consumption culture is good for business organizations and essential for success. <sup>24,31,33</sup> Organizations exist to satisfy needs and the needs of the customers cannot be satisfied unless marketers understand the customers and their behavior, the societal dynamics, and how these affect organizations. <sup>2,11,34</sup> Modern consumers are empowered by technology, and marketing has become more interactive as consumers share feedback about organizations online. Brand loyalty has decreased as consumers can choose from a wide variety of products and services. Therefore, the only way to ensure the success of marketing activities is to be customer-oriented and deliver value to the customers. Consumers are likely to choose a product or service that provides the best-perceived value for them. <sup>32</sup> Hence, a customer-driven marketing strategy requires sufficient knowledge of the consumers and the marketplace. <sup>35,36</sup>

The society we live in today can be described as a consumer society. Obviously, we live in a world that is full of things, but more importantly, the role of consumption has increased. Earlier people were defining themselves mostly through their role in the production process, that is, work, whereas today consuming is becoming more prominent in constructing our personal and social identities. <sup>16,19</sup> For example, people's personalities, values and aspirations can be expressed through the products they buy and the services they use. Consumption also keeps the economy going, because as long as consumers continue buying, the producers keep on producing. The idea of a consumer society is based on this notion that our social lives are organized increasingly according to our roles in the consumption system. <sup>2,13,15,37</sup> At the heart of consumer society is the assumption that consumers exercise their freedom and make their lives more meaningful by purchasing. Consumption can also be seen as the ultimate goal instead of an element of fulfilling needs. <sup>34</sup> In this societal context, marketing plays an important role. Marketing creates jobs by increasing demand for products and services. It also helps organizations introduce product innovations and improvements to help or enrich consumers' lives. <sup>38</sup>

The Internet can also be seen as an essential aspect of modern society and it has influenced consumer behavior tremendously. The amount of information available for consumers means that marketers cannot always trust that consumers will find them, or that the conversations about a brand are always favorable. <sup>31,32,39</sup> The Internet has become an abundant source of marketing content, as well as criticism and complaints. The competition has also expanded with the globalization of services, and organizations need to take into account the industry, competitors, and business opportunities at a global level. <sup>11,35,40</sup> Social media has made it possible for people to build relationships without geographic and demographic barriers, and it gives people a sense of belonging in a community. <sup>10,41</sup> Creating and sharing content is easy for all age groups living in different parts of the world because of the widespread access to a variety of technological devices. The information flow has shifted from the downward movement from organizations to individuals to across individuals as well. Social media also enables a culture of participation because people are contributing instead of just joining social media platforms. <sup>2,18</sup>

One problem facing consumers is the vast amount of choices they have due to the growing number of information. A challenge for consumers is how to narrow search results when enormous amounts of information about products and organizations are available in seconds. <sup>42</sup> Consumers do not want irrelevant information, but instead they want individualized communication matching their own needs. <sup>19,43,44</sup> Every organization needs to add value for its customers, and the value received from personalization is the fit of the product or service to the customer's needs and the convenience of it being delivered proactively. <sup>20,35,45</sup> As the amount of information has increased, the consumers have actually narrowed down the brands they are willing to consider when making a purchase decision. Consumer-driven marketing is based on the notion that consumers are increasing their controls over the information and "pull" relevant information actively to them. <sup>10,46</sup>

#### 2.1 | Research gaps

The concept of privacy has been widely researched before. For example, Chellappa and Sin,<sup>20</sup> Garcia-Rivadulla<sup>21</sup> and Jackson<sup>22</sup> have all studied the relationship of personalization and privacy. Martin and Murphy<sup>17</sup> have also studied the role of data privacy in marketing. However, though privacy is an integral part of marketing ethics, the ethical challenges in marketing are not restricted merely to privacy. Nor is marketing limited to personalization, albeit being an essential part of modern marketing. Ethics in marketing is gaining attention, and there is some earlier research on data ethics. However, most of the research regarding data ethics in marketing focuses on marketing research. There are also some studies

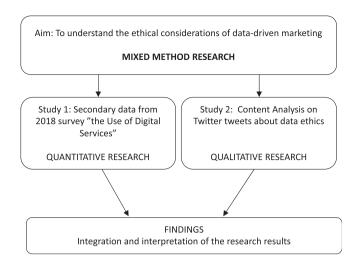


FIGURE 1 The process of the mixed method research (adapted from<sup>47</sup>)

about targeted marketing, but most of them concentrate either on targeting to underage children or senior citizens. This research aims to gain a holistic view of the subject, combining both the consumer view on data use and its implications on marketers. The consumer view is taken into account, as marketers need to understand the customers and their behavior in order to satisfy their needs, and consumer behavior is the key driver in the collection of marketing and consumer data.

#### 3 | RESEARCH METHODOLOGY

The methodology of this research study provides detailed procedural steps taken to complete this study. The chosen research strategy, data collection methods and a framework to analyze the collected data is highlighted in this section accordingly.

#### 3.1 | Research strategy

The research is adopted a parallel research design, where both qualitative and quantitative studies are equally dominant and addressed in order to achieve different aspects of the research problems.<sup>47</sup> The procedural steps of the adopted research approach is visualized in Figure 1. In this research, two individual studies are independently analyzed. Both the studies are weighed equally and the integration of the data is completed at the end of the research with the objective to identify the similarities and differences of the study outcomes.

#### 3.1.1 Data collection method for study 1

From Figure 1, it is noticed that this research consisted of two separate studies, namely study 1 and study 2. The necessary quantitative data for study 1 was collected through the "Use of Digital Services" survey, which is commissioned by the Finnish Innovation Fund Sitra and conducted by Kantar TNS Oy. All the study data was collected through an online survey during the period November-December in 2018. The target population of the survey was individuals between the ages of 18 to 65 years living in Finland, Germany, the Netherlands and France. The number of responses gathered from the survey was altogether 8004, among which 2000 were from Finland, 2004 from Germany, 2000 from the Netherlands and 2000 from France. The survey was consisted of demographic information, and questions with both closed-ended and open-ended types.<sup>48</sup>

In this research, the focus is on analyzing the responses by country and by age. Analysis by country is essential, to see if there are common opinions about data use in different European countries. Analysis by age was incorporated because much talk about data privacy claims that younger people do not care about data privacy as much as the older individuals

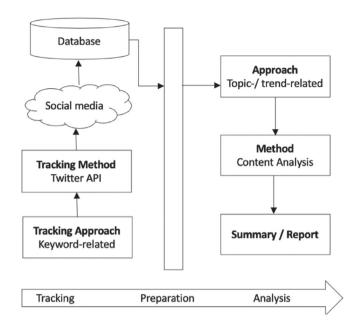


FIGURE 2 Data collection and analysis (adapted from<sup>49</sup>)

do. This research aims to discover if that is true, and therefore the results are analyzed by age as well. The closed-ended questions were analyzed using Excel, and the open-ended questions were analyzed with the help of Voyant Tools. The data from the survey is divided into five sections: the background information of respondents, perceptions about terms of use and rights to personal data, trust towards service providers, information management and fair use of data. The analysis of this survey was made from the publicly available raw data.

#### 3.1.2 Data collection method for study 2

The required data for study 2 was collected through a content analysis of #dataethics on Twitter. Content analysis was chosen for this research, as it aims to create a holistic view of the content and themes of online conversations. This study chose content analysis as part of the research to examine what kind of themes are discussed on Twitter about data ethics. The aim of this content analysis is to understand the opinions of individuals regarding data ethics and to examine if there are any specific recurring themes that arise about the topic. The hashtag #dataethics was chosen because much of the current ethical challenges in marketing are related to data, and the emphasis of this research was on data ethics. In addition, the researched hashtag interlaces well with the secondary analysis data.

The data collection and analysis in this research followed the social media analytics framework by Stieglitz et al.<sup>49</sup> The framework shown is in Figure 2 was adapted for the purposes of this specific research. The aim of the content analysis was to find out recurring themes regarding data ethics, so the approach that was chosen was topic-related.

For the content analysis, public tweets using the hashtag #dataethics were collected. The data collection period was 4 months from 25 September 2019 to 24 January 2020. The total number of tweets collected during that period was 5692, of which 5007 were unique tweets. The data was collected with TAGS, which is a free Google Sheet template that allows automated collection of search results from Twitter. TAGS collect tweets from the Twitter API (Application Programming Interface). In qualitative research, the goal is to understand a phenomenon instead of creating generalizable results. Therefore, this study uses purposeful sampling, which means that the researcher intentionally selects certain individuals or sites to gain a comprehensive knowledge of the phenomenon. <sup>50</sup>

The inclusion criteria for the tweets were: (1) publicly available tweets, (2) use of the hashtag #dataethics, (3) posted between 25th of September 2019 to 24th of January 2020, (4) text in English, (5) Location in Europe. The exclusion criteria for the tweets were: (1) non-English tweets, (2) re-tweets, (3) duplicate tweets, (4) tweets containing only a link, (5) location other than Europe or unspecified. The total number of tweets after the cleaning phase was 579, and these tweets

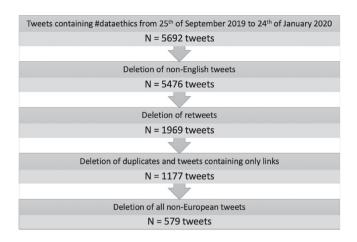
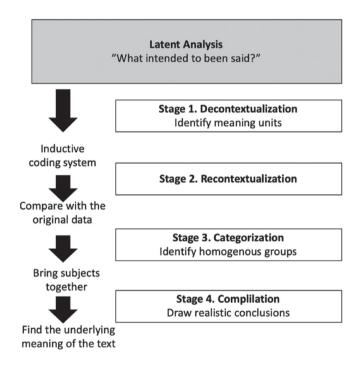


FIGURE 3 Selection of Tweets



**FIGURE 4** Data analysis framework (adapted from<sup>51</sup>)

were included in the content analysis stage. Therefore, the final sample size for the analysis is 11% of the original 5007 unique tweets. Figure 3 shows the stages of the cleaning phase.

Figure 4 shows the data analysis process, which has been adapted from the data analysis framework from Bengtsson.<sup>51</sup> This research uses latent analysis, that is, the focus is on interpreting the text to find the underlying meaning of it. The analysis process consists of four different phases: decontextualization, recontextualization, categorization, and compilation. The first phase in the process is decontextualization, which means that the researcher needs to become familiar with the data to be analyzed in order to understand the whole dataset. The second phase of recontextualization means that the researcher has to check that the original text matches the code list made in the previous phase and whether there is unimportant data that can be excluded from the research. The third phase is categorization that includes identifying themes and categories. The final phase of compilation includes the analysis of the found categories or themes. The data analysis stage was implemented manually using Microsoft Excel. In addition, Voyant tools were used to examine the occurrence of the most popular words in the dataset.

#### 4 | DATA-DRIVEN MARKETING

A marketing strategy's success is measured by consumer response, and organizations can define the market and identify business threats and opportunities by using consumer data.<sup>2</sup> Information itself has little value, but the value comes from customer insights drawn from that information. Creating value for customers and building long-lasting relationships requires delving deep into the wants and needs of the customers. These insights can then be turned into better marketing decisions.<sup>35</sup>

However, it can be very challenging to obtain customer and market insights, as customer needs and buying motives can be difficult to analyze. Creating customer relationships takes a lot of work from identifying the customers and their needs, designing offerings and setting prices, to promoting and product development. Hence, in order to gain effective customer insights, organizations need to manage marketing information from various sources.<sup>35</sup>

By definition, data-driven marketing is concerned with collecting and combining data from online and offline sources, then analyzing the acquired data and gaining insights about the customers and their behavior. Thus, it enables highly personalized communication with the target audiences. The trend in data analysis is shifting towards predicting the future, that is, using the data for strategizing and anticipating customer needs, where technology plays an important role. Building predictive models helps companies in establishing customer-centric processes, and data can be used to identify customer needs and factors that influence the consumer decision-making process. Integrating the analysis of internal and external data can help companies in the development of products and services. The gains can be richer content for customers, acquiring new customers, and preserving current customers. Ultimately, this can lead to cost avoidance or reduction and increased productivity and efficiency.<sup>44</sup>

Companies also need a high degree of innovativeness to be able to differentiate from the competition. This requires developing new products continuously to satisfy customer needs. Profits are also influenced by the degree of innovation. If companies are not able to launch socially accepted, up-to-date products, they are left behind in the market, and consumers will begin to look for a substitute.<sup>35,52</sup>

#### 4.1 | Challenges with the use of data

Though marketers gladly embrace consumer data, and intelligent data use can be seen as a way to increase competitive edge, the use of data also poses many challenges for organizations. Till-to-date, the risks and potential harms of using consumer data often remains unrecognized. The essentialness of technology in modern life and the convenience of tailored marketing messages may leave consumers unaware of the consequences of their information sharing.<sup>53</sup> The knowledge about different data collection methods and personalization techniques are scarce, making the consumers more vulnerable and unable to control the use of their data.<sup>54</sup>

For organizations, using Big Data may result in information chaos. With massive amounts of data from various sources, organizations may struggle with identifying important data from unimportant one and finding the right metrics. In addition, organizations need to be very careful with data storage and security so that consumer data is not compromised.<sup>44</sup> Often, data protection choices are made based on the tradeoff between profitability and privacy, whether consciously or unconsciously. This is especially the case when organizations share their data with outside parties. This is often done to create additional revenue, but the threats to privacy decrease brand value and trust, and can result in legal penalties.<sup>55</sup>

#### 4.1.1 | Challenges with personalization

Some researchers speak of the personalization-privacy paradox, which means that personalization can either enhance or diminish consumer engagement. If personalized communication raises concern for privacy, then engagement with the company decreases. Fersonalization does impose unique challenges concerning other marketing techniques. While consumers are willingly accepting the benefits of targeting, personalization of marketing is not accepted so enthusiastically. The most critical issue with personalization for consumers is the loss of privacy as well as the possible misuse of data. Privacy concerns often lead to consumers feeling skeptical about advertising, hence avoiding it. Though some marketers believe that younger audiences do not value privacy as high as older consumers do, research has shown that privacy is a critical issue for all age groups.

#### 4.1.2 | Data regulation

Regulatory policies regarding data privacy are rules defined by governments. The EU has taken a strict view on data privacy protection and it has defined that personal and sensitive information includes, for example, health status, religion, and sexual identity. The current General Data Protection Regulation, GDPR, which came into force in May 2018, aims to protect the citizens from privacy and data breaches. It applies to all companies processing and holding the personal data of the EU residents, no matter where the company is located. Organizations that do not comply with the GDPR may be heavily fined. If an organization processes data for another organization, the regulations of GDPR apply for it too. According to the GDPR, individuals have the right to know when their information is being collected and to review that information. Furthermore, individuals need to give consent to the collection and use of their personal information (Ess, 2020). In addition, opposed to the earlier privacy laws in the EU, the GDPR requires organizations to address data privacy at a high level early on in the design process, instead of being an add-on. The control of the cont

#### 4.2 | Ethics in the digital age

So far, we have examined how the changes in society and customer behavior have changed marketing and how data is used in marketing. On a general level, ethics is concerned with what is right or wrong, and it provides a standard for human behavior and morals. One of the most important aspects of ethics is trust, as ethical behavior builds trust among people. If we think about the balance between ethics and law, both of them are concerned with creating criteria for acceptable behavior, but ethics is a much broader concept than the law. The law is concerned with the minimum regulation for ensuring public order, whereas the law may not cover ethical behavior at all. Ethical behavior bases on voluntary action of shared values. For example, taking care of the elderly or not telling a lie are examples of socially acceptable conduct, which is not covered by the law.

Ethics can be viewed from two different perspectives: consequentialism and deontology. They differ in the way morality with its objectives and principles is defined. Consequentialism emphasizes the consequences of actions, whereas deontology is concerned with duty and the decision-making process. In consequentialist theories, the probable outcome or consequences determine the morality of an action or a decision. One of those theories is utilitarianism, which is the most popular of ethical theories. Utilitarianism is based on the notion that moral choices should always create the most happiness for the largest group of people. At the heart of utilitarianism is the belief that most people desire ultimate good, for example, happiness or pleasure.

#### 4.2.1 | Ethics in business

Business ethics means that general ethical rules are applied to business behavior. These rules of business can be used in order to judge the appropriateness of business activities. Ethics in business is needed because organizations are part of society and they need to operate as responsible corporate citizens in the society. <sup>28,63</sup> As regulations cannot cover all situations and are hard to enforce, organizations need social codes and rules for professional ethics to govern their activities. Acting for the long-term interests of customers and the environment is essential for socially responsible organizations. Sustainability does not mean merely caring about the environment, but it also involves social aspects, that is, building a long-term sustainable society.<sup>35</sup>

Ethical dilemmas in business are usually complex with multiple choices and alternatives. The outcomes of ethical decisions may be uncertain, or they can be favorable one-way but unfavorable the other way. For example, an organization may need to choose between short-term or long-term outcomes. Often, organizations have to balance between economic and social performance. Ethical dilemmas can also have significant consequences on different stakeholders, therefore making decision-making risky.<sup>63</sup> There are multiple ways to handle ethical dilemmas. Singh and Mishra<sup>64</sup> propose that business and marketing ethics should be viewed as a form of professional ethics.

#### 4.2.2 | The role of ethics in current marketing

As organizations are part of society, they need to abide by the commonly accepted norms of behavior. Though there are regulations protecting the personal data of consumers, regulations can only be seen as minimum requirements for

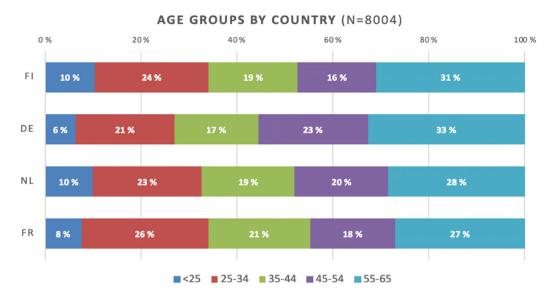


FIGURE 5 Age groups of the respondents by country

behavior. The general view on acceptable behavior usually goes far beyond regulations. This is why organizations need to accept that ethics must be taken into account in their operations.<sup>65</sup> In fact, the need for ethics is even more apparent in marketing than ever before, because of the broad access to personal data. The power of Big Data does not come from the raw data itself, but the ability to combine and merge data, thus creating detailed insights about consumers. There also lies the foundation for ethical dilemmas.

The basis of ethics is trust; consumers need to trust that organizations behave in a socially responsible manner and handle consumers' data in a trustworthy manner.<sup>25</sup> The content analysis showed that transparent organizations receive praise from consumers. Those organizations, which jeopardize the privacy and confidentiality of information, receive heavy criticism. In addition, the survey showed that reliability and security are essential for consumers using digital services. Consumers are becoming more aware of ethical issues in marketing and in the future, ensuring ethics in all business operations is a way to ensure success in the end.

#### 5 | RESEARCH RESULTS

The objective of this study was to gain insights on the consumers' view on the use of personal data and trust towards service providers. The research findings were consisted of two dimensions namely, a secondary data survey and a content analysis. The study results were analyzed considering both the research dimensions and the similarities and differences of the results are analyzed.

#### 5.1 | The use of digital services survey

First, the demographic information of the respondents was noted down. The demographic information included age, gender, region type, level of education, and occupational group or situation. Figure 5 shows the percentage of age groups in different countries. The largest group to answer the survey was aged between 55 and 65 years. The youngest group aged between 18 and 25 was the smallest. There are some variations in the age groups between the countries. For example, in German respondents, the number of respondents under the ages of 25 was significantly lower than in other countries.

In case of total survey population, 48% were men and 50% were women, 2% of the respondents stated "other" as their gender or did not wish to say. Figure 6 shows the percentage of gender variable by each country. In all countries, the gender composition was almost equal between men and women.

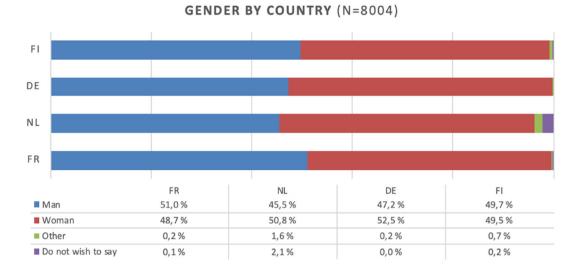


FIGURE 6 Gender of the respondents by country

#### 5.2 | Rights to personal data and perceptions about terms of use

The first part of the survey was to find out people's perceptions about their rights to personal data, as well as how they perceive the terms and conditions of applications or services. Figure 7 shows what kind of rights people believe to have concerning personal data that has been gathered by service providers. The responses of the whole population as well as individual countries are shown. This question was a multiple-choice question, so the respondents could pick more than one option from the list. Over half of all the respondents believed that they have the right to access or delete any personal data collected from them. However, in the Netherlands, these beliefs were significantly lower than the average. In addition, nearly 60% of all the respondents believed they have the right to know how and for what their data is being used. 35% of all the respondents believed that they have the right to be notified when their data is being sold or handed over to a third party. This amount is quite high, regarding that the statement is false. There was less belief on the right to move data from one system to another, with only 21% of respondents believing so. 6% of respondents believed that they do not have any rights regarding personal data. This belief was higher in Finland (9%), whereas in the Netherlands, only 3% believe they have no rights. 15% of all the respondents did not know about their rights.

#### 5.3 | Trust towards service providers

The second part of the survey examined trust towards service providers. The first question in this category was how the recent news of data leakages had affected the respondents' use of different services. The respondents could choose more than one option. Figure 8 shows that the responses vary in different countries. The most popular option in Finland (36%), France (34%), and Germany (29%) was that data leakages have not had any effect on the use of digital services. In the Netherlands, the most popular option was adjusting settings in some services, with 28% of the respondents stating so. Still, of all the respondents, 38% had either stopped or reduced using some services because of the news of data leakages.

The respondents were asked to evaluate if the lack of trust towards service providers prevents them from using digital services. Figure 9 shows that most of the respondents in all the countries either agree or strongly agree that the lack of trust affects the use of digital services. Still, nearly a third of the respondents in Germany, the Netherlands, and France neither agree nor disagree with the statement. In Finland, 20% of respondents disagree with this statement.

Figure 10 shows how the GDPR has affected the user's online behavior in different countries. The respondents could choose several options. Most (36%) of all the respondents felt that the GDPR had not affected their behavior in any way. The second popular option was "I have accepted the new terms and conditions that service providers emailed me without reading them thoroughly."

The respondents were asked what kind of factors affect their trust towards service providers when personal data is used for either for service production, development or targeting or for selling to third parties. It can be seen from Figure 11,

What rights do you believe you have concerning the personal data the service provider has gathered of you?					
STATEMENT	Finland	Germany	The Netherlands	France	TOTAL
Right to have access to any personal data the service provider has collected of me	60 %	61 %	57 %	54 %	58 %
Right to have any personal data collected of me corrected or updated	51 %	54 %	39 %	51 %	49 %
Right to have any personal data collected of me deleted	51 %	62 %	49 %	56 %	55 %
Right to move any personal data from one system to an other	19 %	22 %	24 %	20 %	21 %
Right to know how and for what purpose my personal data is used	65 %	64 %	56 %	49 %	59 %
Right to get a notification from the service provider when my personal data is being sold/handed over to a third party	30 %	43 %	37 %	31 %	35 %
Right to restrict handling of my personal data, especially where automated decision making is conserned	33 %	43 %	33 %	37 %	
Right to be informed when there is a service provider data breach involving my data	38 %	47 %			
I do not believe I have any rights	9 %	6 %	3 %	5 %	
Tuo not believe Thave any lights	9 %	6 %	3 %	5 %	6 %
I do not know	12 %	13 %	18 %	18 %	15 %

FIGURE 7 Perceptions about rights to personal data

that the ability to delete all personal data and the ability to accept or decline the selling of data to third parties are the most important factors increasing trust towards service providers. In addition, important factors affecting trust are the clarity of terms and conditions, the clarity of data use, and the ability to get information about what kind of data the service provider has about the person. The least significant factors for increasing trust are getting paid or getting extra service in exchange for giving permission to use personal data.

Figure 12 shows the factors increasing trust when personal data is sold to third parties. There we can see that the ability to accept or forbid selling personal data to third parties as well as the ability to delete all personal data are the most important factors in trust-building when data is sold to third parties. In accordance with the previous question, getting paid or getting extra service in exchange for giving permission to use personal data are the least important factors in increasing trust when data is sold to third parties.

#### 6 | STUDY FINDINGS

To sustain the usability of this research, it concentrates on the ethics of data-driven marketing on a general level without focusing on specific platforms or technologies. As platforms and technologies evolve and change rather quickly, it is not useful to concentrate on any particular platform and doing so could make the research quickly outdated. Ethics, on the other hand, is an important issue regardless of what platform is used. In this research, the emphasis is given on using Big Data for customer analytics, focusing on Business-to-Consumer (B2C) marketing and online marketing, where data is used for targeting and personalization. This research study focuses on the digital data, as it is the largest in volume in current marketing data sources. In addition, the use of digital data is the source of most of the ethical dilemmas in contemporary marketing. The concept of privacy is critical when examining ethical considerations. This study explores

## HOW HAVE RECENT NEWS OF DATA LEAKAGES IN APPLICATIONS/SERVICES (E.G. FACEBOOK) AFFECTED YOUR USE OF DIFFERENT SERVICES? N=8004

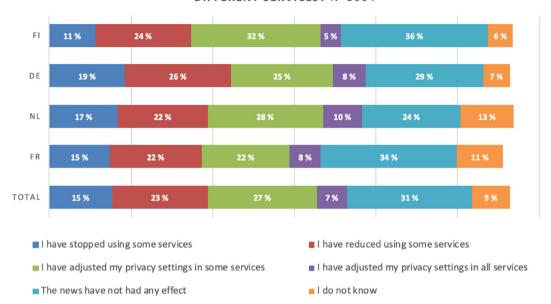


FIGURE 8 Effect of data leakages to use of different services by country

privacy more from an individual and sociocultural point of view rather than from a political level. As the concept of privacy and ethics are culturally related, this study focuses on exploring these concepts from a European perspective. Ethical theories are only briefly examined in this research, and the focus is more on the practical implications of ethics in business.

The results of the "Use of Digital Services" survey showed that, in general, individuals are not very well aware of their rights regarding privacy and data use. The knowledge about data rights also varies in different countries. What comes to terms and conditions, there is variation on how the terms and conditions are understood in different countries. A large amount of people (25%) does not understand the terms very well or not well at all. People also do not read the terms and conditions of services very thoroughly. From the changes of settings point of view, it is seen that the younger people are generally more eager to change the settings of services or applications based on their own needs. Younger people feel that changing settings is not important, and they do not want to spend time on it. Older people believe more that changing the settings does not have any effect, or they are unaware of how it is done.

From the trust towards service providers' point of view, it is seen that it varies in different countries. Roughly, 40% of people feel that the lack of trust prevents them from using digital services, whereas 25%-30% disagrees with this statement. The news about data leakages has not affected the behavior of over a third of the respondents. Still, nearly 40% respondents state that they have either stopped or reduced using some services. In terms of age, the effect of data leakages was more significant for younger people, whereas older people felt more that the news has not had any effect. If it is seen at the factors that affect trust, the ability to delete all personal data and the ability to accept or decline the selling of data to third parties are the most important factors that increase trust. Getting paid or getting extra service in exchange for giving permission to use personal data are the least important factors in increasing trust. The GDPR has not affected the behavior of over a third of the individuals, especially for the older age groups.

When it comes to data management, individuals are generally reluctant to give access to personal information under any circumstances. Still, people would be willing to allow access to information about consumption habits and previous purchases if they were paid for it. People are also willing to give access to personal information for scientific research. The reliability and security of digital services or applications are very important to the majority of people. In addition, transparency, ease of use, and charge less services are important. Personalization was quite surprisingly the least important factor.

Opinions about data management and utilization in the future vary in different countries. In Finland, the emphasis was on authorities and organizations, whereas in Germany the emphasis was more on the user's own activity. The

### TO WHAT EXTENT DO YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENT?

### LACK OF TRUST TOWARDS SERVICE PROVIDERS PREVENTS ME FROM USING DIGITAL SERVICES (N=8004)

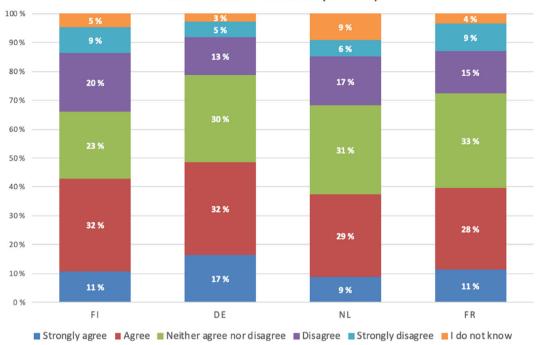


FIGURE 9 Lack of trust and the use of services by country

emphasis on the user's own responsibility and the regulation of authorities grows with older ager groups. Respondents under the age of 25 emphasized the organization's role more than in the other age groups. The acceptance of a single application for all data management varies in different countries, Finns being the most eager to use a single application, and the French the least. Safety and reliability were the most important features for a single data management application in all the countries and age groups. The respondents felt that the fair use of data includes security and transparency and bases on user consent. A majority of respondents in all the countries and age groups would welcome a fair data label for services. The requirements for a fair data label would include security, transparency, and trustworthiness.

#### 7 | RECOMMENDATIONS FOR PRACTITIONERS

Organizations are faced with the dilemma of making profits, and on the other hand, accepting that they are part of society and, therefore, subject to its norms. Privacy, transparency, and consent are themes that continuously arise when discussing data ethics and ethics in marketing. Therefore, marketers need to realize their role in the battle for privacy. They simply cannot hide away from the fact the personal information can be used irresponsibly. Instead of just talking about ethics, real action needs to be taken. Organizations should be proactive in developing and deploying marketing ethics strategies and practices to meet the high demands of consumers, stay competitive, and embrace their roles as essential players in society.

Organizations need to decide how ethical issues will be dealt within the organization. All the ethical theories introduced in this study have both benefits and drawbacks. The utilitarian approach may not be sufficient in the modern world anymore. If the chosen strategy is utilitarian, then the approach is more unorganized and reactive as ethical dilemmas are contemplated as they appear. Using a normative strategy provides the organization with a more effective capability to address ethical dilemmas as ethical codes are decided in advance. However, real-life situations are often more complicated than what was imagined beforehand. If the chosen approach is virtue ethics, then the organization bases its actions on commonly accepted virtues. Organizations need transparency and concreteness in their statements for ethics. It is not enough that an organization merely states that it values ethics; it needs to have proof of it as well.

TOTAL

29 %

# HOW HAS THE EU'S GENERAL DATA PROTECTION REGULATION (GDPR), ENFORCED ON 25 MAY 2018, AFFECTED YOUR ONLINE BEHAVIOUR? N=8004

40 % 35 % 30 % 25 % 20 % 15 % 10% 5 % 0% I have had to I have stop using an I have accepted the I have I have on line I have I have requested a forbid den I have requested a service new terms service requested requested a and requested service the because it access to my It has not service provider to conditions how my provider to auto mat ed was no personal provider to correct some affected my I do not that service information. delete all the use of my longer of the information move my behaviourin know providers is used, from information offered to personal from a in formation information any way emailed me a service theyare data from a me (e.g. service to another theyare without provider holding on service service was provider holding on service reading them provider not available me me th oro ughly to European customers) ■ FI 5 % 2 % 10 % 36 % 7% 3 % 5 % 12 % 6% 36 % ■ DE 29 % 9% 9% 4 % 6% 8 % 8 % 3 % 38% 8% NL 18 % 10 % 11% 8% 6% 8% 8 % 4% 34 % 18 % 8 % 7 % 4 % 4 % 8 % 2 % 11 % ■ FR 34 % 4 % 36 %

FIGURE 10 Effect of the GDPR on online behavior by country

8 %

4%

8%

If organizations and marketers want to embrace ethics, they should also require ethical behavior from the providers of tools and technologies they are using. This is quite an idealistic and heavy demand, and balancing ethics with practice can be daunting. At the very least, organizations should acknowledge the potential ethical issues related to the tools and technologies they use. As a result, organizations can make informed decisions on whether or not to continue using these tools. The use of tools that, for example, pose threats to privacy should be made aware to the customers as well, thereby increasing transparency. On the practical level, it is also vital that consumers have the option to opt-out from personalization without it affecting the use of the service. This way, consumers can feel more in control of their personal data. In addition, organizations should have clear data privacy and security policies and they should be communicated in an understandable way.

5%

6%

9 %

4%

36 %

12 %

#### 8 | DISCUSSIONS AND CONCLUSIONS

Overall, it is seen from the survey results that the people's perception of the use of data varies in different countries, and there is not a consistent European view on these matters. There was more consistency with the results when looking from the age point of view, younger people being more active, for example, with changing the settings on applications and services. The results of the survey are still contradictory. It can be stated that, in principle, individuals value privacy and security very high. However, in practice, data leaks do not affect their behavior in any way for some of the people. In addition, people in principle are not willing to give access to their personal information, but they are also not very eager to change the settings in services or applications.

What all of the above then mean for data-driven marketing? First, if data is used for marketing, the same assumptions apply to it as in other data uses. Consumers fear for their privacy and do not trust organizations with their personal data. Ensuring that the control over data remains within the consumers is a way to increase trust. Transparency is also very

# HOW MUCH DO THE FOLLOWING INCREASE YOUR TRUST TOWARDS A SERVICE PROVIDER WHEN YOUR PERSONAL DATA IS USED FOR PRODUCING, DEVELOPING AND TARGETTING THE APPLICATION/SERVICE YOU USE? N=8004

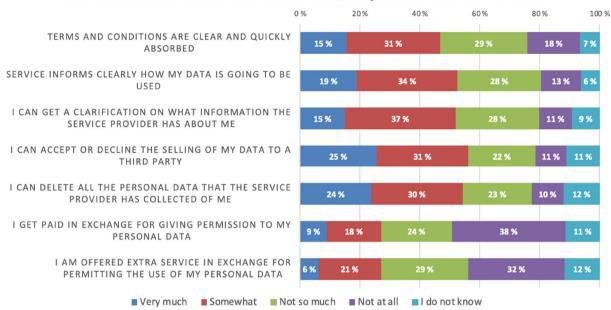


FIGURE 11 Trust-building factors in service production, development, and targeting

important for consumers, and it is an excellent way for organizations to stand out from the competition. Surprisingly, personalization was not seen as an important factor for a digital service in the survey. Do consumers really understand how personalization works, and would they be willing to lose it? Personalization is such an integral part of modern marketing, and it also affects the usability of services. If the content is not filtered and personalized, it might result in an overload of irrelevant information.

The consumers' power on data use can be seen as influential players in the market, for example, in setting up boycotts and informing their peers about unethical conduct by companies. The question lies, how influential boycotts are for individuals if the harm is already done and personal information jeopardized. Of course, boycotts do have impacts on organizations' future revenue and brand image. In addition, boycotts may draw attention to ethical issues so that more organizations start to think about ethical issues proactively. Trust takes a long time to build but can be lost in seconds. Responsible marketers take ethics seriously and understand that ethical practices bring benefits. It is advisable to override short-term gains with long-term vision. Of course, organizations need to balance between profitability and customer satisfaction. Still, these two do not need to be mutually exclusive. If an organization is able to plan operations with long-term objectives in mind, it is possible to ensure both ethical conduct and profitability. Customers reward those kinds of organizations with trust and loyalty.

This research has examined the concept of data ethics in marketing from a general point of view. In the result analysis phase, the research results were rechecked at the end of the research to ensure research validity. There were minor differences in some of the research results compared with the primary research, probably resulting from using raw data instead of the weighed data. In addition, some of the percentages may be rounded differently, creating slight differences between the primary and secondary analysis of the survey. However, the differences were so small that they do not affect the overall conclusions that can be made from the results. To achieve validity, the research needs to be conducted in a systematic way, and the procedure and reasoning need to be transparent. In addition, the research design and method need to suit the research problem. As explained in the research methodology section, the process of content analysis included a phase, where the initial codes were rechecked in order to confirm that the tweets were categorized correctly. The procedure for the data analysis was also carried out systematically and explained in detail. These procedures enhance the reliability and validity of the results.

It is established that there is a need for organizations to think about data ethics when using data in marketing and ethics is linked to almost every aspect of marketing. The emphasis of the empirical research was on consumer perception

## HOW MUCH DO THE FOLLOWING FEATURES INCREASE YOUR TRUST TOWARDS A SERVICE PROVIDER SELLING YOUR PERSONAL DATA TO THIRD PARTIES (E.G. ADVERTISING COMPANIES)? N=8004

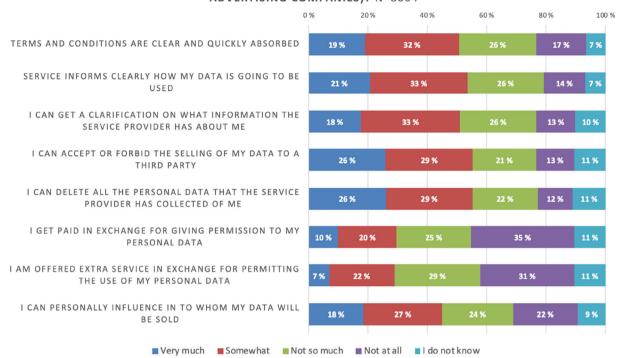


FIGURE 12 Trust building factors in selling data to third parties

of ethical data use. In the future, it would be interesting to study how organizations in Finland and in Europe implement data ethics in practice, and what kind of data ethics strategies or policies have been established by organizations. It would be valuable to find case study organizations to study what kind of impacts ethical data use has had on organizations and their customers. In addition, the effects of the GDPR could be further examined; what are the consumers' views on the effectiveness of the regulation. Though the secondary analysis of the "Use of Digital Services" survey touched on this matter, the GDPR was still new at the time the survey was made. Therefore, it could be useful to study the effects of GDPR after more time has passed. In addition, it would be valuable to study the consumer views related to the use of data specifically in marketing.

#### DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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