Bachelor's Thesis in Retail Management

Stockholm School of Economics

"It feels like every company tries to spy on me"

A qualitative study on the underlying elements that drive customer
attitudes towards data collection

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Abstract

Advancements in technology have proportionally brought the internet closer into our homes throughout the years. This has increased the awareness of data collection among consumers, establishing ethical and legal limitations for companies. The limitations imply that companies need permission from consumers to collect personal data. Several studies find that consumers' overall attitude affects the permission to share data. However, there is little research examining consumers' attitudes towards different forms of personal data collection throughout different areas in the shopper journey and through different touchpoints. Therefore, this thesis has conducted in-depth interviews among respondents between the age of 30-45 years old to find common patterns in consumers' attitudes and determine what underlying elements drive those attitudes towards certain scenarios. Our findings suggest four main elements: experience, benefits, autonomy, and trust that affect consumers' perception of personal data collection, summarized through model BETA. The findings of this thesis provide valuable suggestions for retailers to follow to help foster a stronger relationship with their consumers and understand the consumers' overall attitude.

Keywords: Personal data collection, big data, autonomy, trust, benefits, experience, attitudes

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1. Introduction

The following section aims to present the background for the research subject, followed by the research gap. Thereafter, this thesis's expected contribution as well as area and purpose are presented. Lastly, the research question is stated.

Modern technology allows companies to collect data during all customer journey steps, creating new innovative methods to collect data. Due to legal and ethical grounds, companies need permission from the customers before collecting personal data. Several studies have investigated specific areas of data collection, giving a vague representation of the customer's perspective. The customer decides whether or not to share personal information, depending on their overall attitude. Therefore, this study will investigate the underlying elements that drive customer attitudes towards data collection.

1.1 Background

Data collection has previously been possible only when a data provider, such as a customer, takes action within the customer journey, typically during the purchase and post-purchase evaluation stages. Today, customers leave digital footprints throughout all stages of the customer journey, creating new opportunities for data collectors, typically companies, to analyze customer behavior (Buhalis & Volchek, 2021). IBM has estimated that 2.5 quintillion bytes of data are created daily (Barnes, 2013). Companies are no longer limited to data being collected in-store or through their websites. Data collectors can acquire data from third-party firms to gain a more holistic picture of each consumer giving them an endless data database. However, access to big data also comes with some challenges, such as legislation, making the data valuable, and consumer opinion.

1.2 Legislation

Data collection concerns have been in question since 1890, when Warren and Brandeis observed, "what is whispered in the closet shall be proclaimed from the house-tops." The concerns have escalated quickly in connection with the development of technology and the internet of things (Graeff & Harmon, 2002). Customers leave data all over the customer journey, creating new opportunities for companies to analyze customer behavior. This has led to the question of whether individuals have the right to privacy online due to the collection of personal data.

In 1995, the European Union adopted the EU Data Protection Directive, which regulated the processing of personal data within the EU. In 2012 the EU gave individuals the right to be

forgotten, allowing people to request search engines to have personal information removed from their name if searched online. The EU took further steps to protect people online with the General Data Protection Regulation (GDPR) in 2018. The law protects people within the EU and EEA and protects people's information being transferred outside the EU and EEA. The GDPR limits what companies can do with individuals' personal information. It aims to hold data collectors accountable, transparent, and punish those that mishandle personal data (What is GDPR, the EU's new data protection law. 2019). These laws make it even more important for researchers to be at the forefront of comprehending the ethical and privacy issue (Nunan & Domenico, 2013).

1.3 Positive Attitude Compared to Negative Attitude

The advances in legislation for consumers' privacy rights online have brought the topic of data collection and tracking into the public. Many individuals were not aware of the extent of online data collection until it got attention in the news. This has led to consumers becoming more knowledgeable and opinionated when it comes to data collection. With this peaked awareness, consumers are worried about possible abuse and misuse of data. A survey in 2013 conducted in the U.S. by the Pew Internet & American Life Project found that many individuals have taken action to turn off location tracking, and a survey by a non-profit Cable Forum found that 95% of individuals would opt-out of third-party tracking (Kshetri, 2014).

For retailers to have access to consumers' data and use its full potential, they must help to foster a positive attitude with their consumers, which can be achieved through transparency and trust. Culnan and Armstrong found that if fair information practices were observed, customers would be more willing to continue a relationship with a company, allowing continued access to data as a result of that relationship (Culnan & Armstrong, 1999). Phelps et al. found that privacy concerns correlated with consumers' desire for autonomy over the spread of personal information. It is vital that firms give consumers some form of control (Phelps et al., 2000). Suppose consumers are negative towards firms collecting personal data and lack trust. In that case, they may take steps to hinder it by not signing up for loyalty programs, refusing to shop at a specific retailer, or by blocking cookies online (Hoffman et al., 1999). This affects firms as they may lose customers and lose access to vital data, which can lead to their marketing being less targeted and personalized and loss of liquidity due to customers refusing to shop at their store (Belanger et al., 2002).

1.4 Gap in Research

The legislation on data collection has increased customer awareness, resulting in several studies investigating data collection as a whole and parts of data collection. Krafft et al. (2021) argue that customers share personal information with an expectation of benefit in exchange, yet there is no definition of benefit in their study. Further, the Krafft et al. (2021) study, similar to Muhammed et al. (2018), focuses on data collection during transactions. With the help of technological development, companies can collect data through several sources, allowing companies to get an overview of data collection from the whole customer journey (Buhalis & Volchek, 2021).

Most studies, for instance, Redman (2008) and Bradlow et al. (2017), investigate data collection from the company's point of view. The small number of studies that have considered customer's perspectives have mostly looked at factors affecting the revenue stream, such as; (i) Redman's (2008) suggestion on how data can maximize the firm's financial statements; (ii) Customers' willingness to leave digital footprints on social media (Muhammad, Dey, & Weerakkody, 2018) and; (iii) Privacy concerns and consumers' willingness to provide personal information to companies (Phelps et al., 2000).

A research gap was found in primarily the customer's attitude toward data collection, without centering the study around companies' needs. Earlier studies have focused on benefits without distinguishing the different types of benefits a customer can receive. Further, this study will investigate whether data collection forms affect the customer's overall attitude towards data collection.

1.5 Expected Contribution

The thesis will investigate the consumer's perspective on personal data collection in terms of companies collecting data for business strategy and marketing purposes. The aim is to see the consumers' between age 30-45 years old overall attitude and elements influencing that attitude throughout different scenarios. It will further expand academic research by shedding light on an area that has not received much attention, which is the underlying elements driving the customer's attitude towards data collection. Finally, the thesis contributes to future research with the creation of model BETA.

This study's expected managerial contribution is that companies can use this study as a guideline for data collection purposes and launching new initiatives. The thesis will help companies

understand why a particular attitude is influenced depending on the scenario. Further, by understanding which underlying elements drive the attitude toward data collection, companies can develop strategies to best implement procedures for data collection.

1.6 Area and Purpose

Big data is an argued topic today, leading to more concerns for individuals on how that will affect their privacy. However, big data is often viewed from the perspective of a retailer or firm and how they can utilize it to improve their business and marketing strategies to stay relevant in today's competitive market. As technology continues to develop with data collection, the internet of things, and tools to analyze big data better, it is vital to see where the consumer stands. Therefore, a qualitative study was conducted to interview in-depth individuals between the age 30-45 to see what elements affect them the most in terms of companies collecting personal data. Additionally, the study looked at their overall view in different data collection scenarios. Retailers need to take in the considerations and concerns of consumers to ensure that it does not affect the retailers' bottom line or consumers' trust in them.

This paper aims to explore consumers' in the middle-age segment perceptions and concerns relating to personal data collection from retailers. Building on previous research on consumers' willingness to leave digital footprints online and trust personal data collection, the study aims to dive deeper into aspects that affect consumers' attitudes towards data collection and the underlying elements that drive the customer attitude. The purpose is to understand why the specific elements modify the customer's perception regarding personal data collection.

1.7 Research Question

What are the underlying elements that drive customer attitude towards personal data collection?
-   Why do those elements alter consumers' perception of personal data collection?

1.8 Delimitations

This study focuses on certain scenarios related to data collection, such as pre-purchase scenarios and eye-tracking cameras. As a result of the specific scenarios, this study is limited to the scope of the scenarios. Unfortunately, data collection is a broad term and this study does not cover all possible scenarios related to data collection. However, the thesis aims to understand the underlying elements that drive the overall attitude and how the different scenarios affect that specific attitude. Further, the result of this study is consciously delimited to the interviewed

segment (individuals between the age of 30-45 years old). Even if the results will be affected by only the middle-age segment, the authors believe that this specific segment will be least affected by external factors.

2. Review of Literature

The literature review aims to construct a foundation for the theoretical framework utilized in the analysis of the report. It begins by giving theoretical evidence of data collection throughout the years, as well as different modes for collecting personal data. It is then followed by describing different themes; benefits, experience, trust and autonomy that are found to be important for consumers according to several studies.

2.1 Collection of Personal Data

2.1.1 Periodization of Marketing

Marketing has been around since before there was research on this particular field of study. The periodization of marketing history is well contested; however, in the U.S., Richard Tardlow's four-stage sequence is the most well known. The first stage is fragmentation which is markets with regional modes of operation (pre-1880s) followed by unification, national mass marketing (the 1880s-1920s), then segmentation which is marketing by age, lifestyle, class, and other socioeconomic variables (1920s-1980s). The last stage is hyper-segmentation, marketing focusing on even smaller segments of the market with a focus on customized approaches (post-1980s) (Berghoff et al., 2012).

2.1.2 Marketing Meets Information Technology

In the 1960s, marketing started to benefit from advances in information technology. UPC and EAN-barcodes have helped create purchasing datasets integrated into supply chains to help with production and stock-keeping (Berghoff et al., 2012). The 1990s came with improvements to computers which brought a significant change to marketing. This came with an explosion of data that started to become available to companies thanks to mass public access to the internet (Ratchford, 2020).

2.1.3 Personal Data

Personal data is any information that discloses details about an identified or identifiable living person, such as name, address, cookie ID, or internet protocol (IP) address. It also includes parts of information that, when pieced together, can reveal the identity of a particular person (What is

personal data. 2019). Data collection in the context of this paper is the gathering of personal data either online, in-store, or through the internet of things (IoT) for marketing and business strategy purposes. Andrea Mauro analyzed different definitions defined in different research articles to be able to construct a general definition of what big data is. "Big data is the information asset characterized by high volume, velocity, and variety to require specific technology and analytical methods for its transformation into value (De Mauro et al., 2016)."

2.1.4 Big Data

Big data has become one of the most valuable assets for companies in the modern market, adding immense value to firms that can utilize the information effectively. The issue for many firms is that they have too much data making it challenging to sift through to draw beneficial conclusions. As Bradlow et al. argue, "better data" is more valuable to a company than big data. It requires a firm to combine a mix of new data sources, innovative applications of statistical tools, and theory (Bradlow et al., 2017).

2.2 Types of Methods for Retailers to Collect Data

There are different methods firms can use to collect data on consumers. Some traditional methods include loyalty programs, clickstream data, purchasing third-party data, and utilizing the internet of things (IoT). Loyalty programs are an effective way for retailers to collect, track, and build relationships with their customers (Lacey & Sneath, 2006). These programs allow companies to gather data such as name, age, date of birth, and purchase history. Analyzing past purchases allows companies to better curate, customize, and suggest new products to consumers (Prassas et al., 2001). Online retailers have the ability to track the whole digital journey from the moment consumers land on their page to when they leave to inform the firm how the consumer found their page and what they viewed on the website through clickstream data (Montgomery et al., 2004).

Web 2.0 has opened a world where an immense amount of data is generated from every individual, creating a market for consumer data. Companies can combine big data and purchase third-party data to collect locational data to hyper-track individuals throughout their day to know when they are close to a store (Bradlow et al., 2017). Similarly, firms can combine their data with third-party data to build a psychological profile of a consumer (Bradlow et al., 2017; Matz & Netzer, 2017). The internet of things (IoT) has opened new possibilities for collecting far more in-depth data such as consumer habits, demographics, and how they interact with the product,

i.e., which features are most used. IoT gives companies valuable real-time data on things to improve and learn more about their customers (Tariq et al., 2020).

Technological advances have paved the way for innovative solutions within data collection that have not yet been launched on the market. Retinal eye scanners can open the door to capturing real-time consumer data on which brands and products capture the customers' attention. This can be measured through visual lift (Bradlow et al., 2017; Chandon et al., 2012). Comparable to collecting data while consumers shop online, eye scanners can provide stores with real-time data on their assortment. Another intriguing development is the possibility of collecting heartbeat data through headphones to improve personalized music streaming experiences (Matz & Netzer, 2017).

2.3 Benefits From Sharing Personal Data

If utilized correctly, big data can become a valuable asset for companies, making data a priority for retailers (Xie et al., 2016). Retailers could acquire several potential benefits from big data, such as streamlining marketing, increasing revenue-stream, and value-adding to customers (Redman, 2008). Similarly, customers could obtain benefits from disposing of data. Benefits have become a requirement from customers - the more information shared, the more benefits are expected (Control alt delete. 2018). Customers often understand that data is collected but not how and when they will receive the benefits because the terms & conditions policies are not widely read (Digital footprints. 2016). Benefit has been defined differently in studies, focusing mainly on the advantages companies receive (Redman, 2008) or financial benefits customers potentially will receive (About half of global consumers expect financial benefits in exchange for their data. 2020).

Customers are used to sharing personal information with companies, as they have experienced it since the creation of the modern technological era. Data providers understand the value their personal data creates for data collectors, therefore, requiring benefits in exchange. Britainthink has not specified the benefits customers expect (Control alt delete. 2018). However, Dentsu Aegis Network has clarified that approximately half of the global consumers expect a financial benefit in exchange for personal data (About half of global consumers expect financial benefits in exchange for their data. 2020). Nevertheless, benefits can go beyond financial benefit and create value in other areas such as convenience and entertainment (Ziefle et al., 2016).

Ziefle et al. argue that customers analyze the risks and benefits of sharing data before permitting data collection (Ziefle et al., 2016). The perceived benefits need to weigh more than the potential risks for customers to accept the terms of data collection. The potential risk is defined as the consequences of a particular action, such as poor data management. Further, Xie et al. (2016) argue that for customers to provide companies with personal information, the customer needs to feel comfortable that the shared data will create value co-creation. Value co-creation is defined as customers and companies jointly creating value; it allows the customer to co-construct the service experience to fit them (Prahalad & Ramaswamy, 2004). This permits the customer to create their unique experience, adding value and partnering with the company.

The current literature provides insight on how benefits influence the overall attitude, and benefit becoming a requirement from the customers. However, there is a gap in understanding the value the specific benefit provides and how different benefits might affect the attitude, hence asking question 4C and 6C (Appendix).

2.4 Experience From Data Sharing

Experience is a broad term, dependent on several other factors. Narula et al. (2014) argue that privacy and security are two important factors influencing data experience. If a customer has a bad experience with one of the two factors, then the customer will not trust the company, breaching the commitment of data collection. Further, the article proves that more than half of the consumers are more likely to purchase from retailers that protect customers' personal information (Narula et al., 2014). Ridley-Siegert does not want to limit customer experience to only two factors. The author argues that experience is instead the result of every customer's encounter with the company. For instance, a negative experience with the return policy will also affect the customers' trust in how the company handles the customers' personal information. Therefore, Ridley-Siegert concluded that the customer's attitude on new occasions would be based on previous experiences not necessarily similar to the new occasion (Ridley-Siegert, 2015).

The quality of the experience with the retailer directly influences the level of trust (O'Reilly, 2018). If the customer does not trust the retailer, consequences such as sharing personal information can negatively affect the revenue stream and brand image. O'Reilly further argues that a positive customer experience can build a foundation for a loyal relationship between the customer and retailers, resulting in the customers trusting that the retailer will handle their

personal information carefully. Therefore, companies need to aim for a positive customer experience before collecting personal information.

The presented literature focuses on the customer's general experience gained from the company and how that experience might affect the trust. This study aims to decompose the term experience, making it not limited to only the general experience. Will the experience from the data collection scenario affect the perception of experience without mentioning any companies, is an example of a question this study aims to answer.

2.5 Trust in the Data Collector

In recent years, privacy and security within data collection have been a massive theme. With technology developing so fast throughout the years, regulations have had to play a catch-up game in regulating how companies use and collect individuals' digital footprint. It has become even more challenging for regulators to determine when companies have gone over the line regarding having access to unauthorized personnel data (Muhammad et al., 2018). As a guideline, regulators have implemented directives such as "GDPR" and "Data Protection Act." However, customers lack trust in companies' collection and usage of data, where 1 out of 3 are not confident in being protected by companies collecting data (Digital footprints. 2016). In contrast, responsible data collection and procedural fairness could increase customers' trust in the retailer, helping to maintain a relationship (Culnan & Armstrong, 1999; Hewett, 2021).

Trust has become one of the key elements of privacy and security, as trust works as a cognitive guarantee that the firm will protect and monitor customers' personal information. Further, trust reduces the uncertainty with the perceived risk of data collection (Muhammad et al., 2018). Companies can help to build trust through transparency, the ability to opt-in, and security (Hoffman et al., 1999). Data collectors must be upfront and transparent, making it easy for everyday people to understand what data is being collected, not hiding it behind complicated terms of use or making it difficult for individuals to find. The ability to choose is crucial for data providers. They are more likely to trust a company if they can easily decide to stop sharing their data. Lastly, companies must invest in the security of protecting individuals' personal data. As data collection and IoTs are becoming ever more common, it is vital that people can trust that their personal information is safe at a company (Belanger et al., 2002).

Most of the literature regarding data collection have focused on trust and its importance. Similar to previous studies, this thesis will look at how trust influences the overall attitude. However, this study differs by looking at trust solely within data collection. Does the customer trust the process of data collection? Hence, names of companies will not be provided to not affect the outcome of the study.

2.6 Autonomy in Data Collection

Control and authority are terms often used within the retail context related to customers' ability to affect the results of specific inputs. Customer autonomy differs from the psychological definition of autonomy because, within the customer context, the customer is not expected to influence the outcome (Wertenbroch et al., 2020). Consumer choice includes the shoppers' ability to make a decision without influence from external factors, which will lead to a specific outcome out of the customer's control scope. In distinction, control is when the customer can also affect the outcome.

For the purpose of this paper, we define autonomy as having governance over oneself and not being guided by external forces. Instead, one is influenced by personal considerations, desires, values, and characteristics (Christman, 2020). The ability to choose and have control over one's decisions leads to a more positive attitude toward oneself and creates a sense of moral responsibility (André et al., 2017). Big data and hyper-targeting have led to the perception of customers losing control, requiring companies to strike a balance between personalized suggestions and allowing customers to have the freedom of choice. Firms must allow consumers some control, especially with subsequent dissemination of personal information, to maintain a relationship (Phelps et al., 2000).

Customers expect the freedom to decide, but some customers will not make a decision if they are exposed to choice overload (André et al., 2017). Too many choices will overwhelm the customer, resulting in not making a decision. Baumeister et al. maintain that a person feels free even by choosing from an option, where a third party decides the options. Individuals do not like orders but appreciate guidance when having to decide. Further, there needs to be a balance between choice and over choice in order for the individual to feel autonomous (Baumeister et al., 2009).

Current literature on autonomy is general for customers and not exclusively for data collection. This study aims to find if the current literature can be applied to data collection as well.

3. Method

The following section will describe the research approach and how the qualitative approach was achieved. Thereafter, it depicts how and why the hypothetical scenarios are included as well as the reasons for the questions developed. It will be followed by the selection criteria for the participants and the strategy for analyzing the results.

3.1 Research Design

3.1.1 Qualitative Research Method

This study focuses on the ulterior sources that affect the customers' overall attitude towards data collection, making the outcome established on subjective opinions. The qualitative method was chosen over the quantitative method as it allowed for insights into a specific industry, understanding attitudes, flexibility, and room for human experience (Fossey et al., 2002). In order to gain insight into the general attitude of the respondents, a narrative investigation was conducted, which resulted in in-depth interviews. In particular, as this is a more sensitive topic, we wanted to figure out the respondents' thoughts, attitudes, and experiences concerning our different hypothetical scenarios (Milena et al., 2008). The in-depth interviews compared to focus groups also ensured that it was the participants' honest response compared to being influenced by another group member's opinion or attitude.

3.1.2 Research Approach

The researchers in this study used theoretical explanation and empirical observations from qualitative research, resulting in an abductive research approach. The abductive approach combines two approaches: the inductive, using the qualitative measure to develop theory based on the results of data analysis, and the deductive, using quantitative measures to develop and test theories (Alrajeh, 2012). The empirical observations were conducted to gauge the respondents' natural response with no limit on the answer. The object is to find whether or not respondents felt that data collection in a specific scenario intruded on their privacy or whether they were comfortable with it. This was a better approach compared to a survey as some of these forms of data collection have not yet launched on the open market, requiring us to give more in-depth background information due to the lack of respondents' knowledge. Further, numerical measures will not provide a fair outcome, making it challenging to find the underlying indicators of the overall attitude.

3.2 Narrative Research Approach

3.2.1 In-depth Interviews

The in-depth interviews allowed room to describe a scenario where the respondent had to imagine the technology in the real world. The hypothetical scenarios allowed us to ask respondents their thoughts about a situation without having to have prior experience or knowledge of it. The respondents recognized some of the scenarios, while others were completely new. The in-depth interviews provided insights into the respondents' attitudes and the foundation of that specific attitude. Data collection often benefits the retailers (Akçura & Ozdemir 2019), but sometimes it could damage the customers' perceived brand image (Digital footprints. 2016). Companies can collect data from several touchpoints throughout the customer journey, where data collection has different purposes and provides different benefits (Shankar, 2019). Therefore, it is necessary to understand how different scenarios might affect the attitude by allowing the respondent to freely discuss the given scenarios through a qualitative approach. Furthermore, the complete interviews were recorded and transcribed after the interviews.

The eight different hypothetical scenarios were carefully picked and designed to cover a broad spectrum of different forms of data collection to gauge the participants' general thoughts in the area and see where and why they accept some forms versus others. Below, the scenarios and their specific purpose are presented. All scenarios are included in the appendix as well.

3.2.1.1 Scenario 1: Birthday Discount

The British government invested in a data-related study on the implications of GDPR, investigating the customers' point of view (Control alt delete. 2018). The state-driven study concluded that customers expect benefits in exchange for information; more information creates higher expectations of the benefits. Scenario 1 is inspired by the British study, where the customer trade-off benefits with personal information. The scenario is about being a loyalty member and the retailer collecting personal data (such as your birthday) to send promotional messages to encourage you to make a purchase (Lacey & Sneath, 2006). Most individuals are aware of this scenario and have experienced it earlier, allowing the respondents to become comfortable with the topic.

3.2.1.2 Scenario 2: Eye-Scanning Cameras

The second scenario is based upon a technology, eye-scanners embedded in shelves, that exists but is not on the open market (Bradlow et al., 2017). The benefit for the retailer is being able to

measure visual lift, defined as incremental consideration caused by in-store visual attention (Chandon et al., 2012). Eye movement studies have proven that looking at eye movement to different brands displayed on shelves is generally correlated with brand consideration and is a valid measure of visual attention. This data collection form can be incredibly beneficial for retailers and brand-named companies if integrated in-store. However, a vital component is knowing the customers' perceived comfortability level and whether or not this will hinder them from visiting a retailer. The benefit in this scenario was consciously not presented distinctly at first. However, after five follow-up questions, the respondents were provided the benefit they would receive if sharing the personal data to see if their overall attitude would change.

3.2.1.3 Scenario 3: Mouse-tracking Technology

For a long time, online retailers have been able to use interactive marketing thanks to the collection of data from things such as where a customer lands on their website, how they got to their website, past-purchase history, and clickstream data. Clickstream data collects and records the consumer's pathway on the retailer's website (Montgomery et al., 2004). Some, but not all, consumers are aware of this form of data collection. This scenario aims to gauge whether consumers are okay with a form of data collection that already exists on the market and how data collection would change their behavior if they were aware of this. This scenario is also similar to scenario 2 (including the same follow-up questions). However, it is on an online platform through mouse tracking, which can help to draw different conclusions.

3.2.1.4 Scenario 4: Smart Headphones

Matz and Netzer briefly mentioned the idea of using a person's momentary heart rate measured through the headphones to suggest new songs as an example of how companies can use detailed real-time data to optimize advertisement (Matz & Netzer, 2017). Scenario 4 is based on Matz and Netzer's study; however, this study aims to distinguish the attitudinal indicators. Additional health-related features are added as follow-up questions to the entertainment-related benefit. The purpose is to find whether the different benefits change the overall attitude, as the Granello and Wheaton's study suggests (Granello & Wheaton, 2004). The retailer's benefit in this scenario is to understand their customers' needs by collecting personal data.

3.2.1.5 Scenario 5: Post-Purchase Recommendation

For years, retailers have used recommendation systems to give the consumer a more personalized experience with the retailer based on past purchases (Prassas et al., 2001). Similar to scenario 1

(birthday discount), customers receive financial benefits traded for personal information. However, the difference is that the customer receives the information post-purchase in this scenario (compared to scenario 1) and that the information is a specialized offer based upon past purchase. Further, the layout is designed to separate the benefit from being informative to financial benefit in order to find if there is a change in attitude.

3.2.1.6 Scenario 6: Geographical Tracking

Scenario 6 concerns geographical tracking; customers receive beneficial financial offers depending on their geographical location. Bradlow et al. stated that location is one of the five dimensions of big data in retail. Tapping into the consumer's daily geo-location opens up a new door in forms of marketing effectiveness. With this data, retailers can change offers, hyper-target consumers, and determine what marketing depth to make an offer at (Bradlow et al., 2017). Further, one ethical consequence mentioned in the article is the negative boomerang effect arising from this form of data targeting. This scenario aims to gauge the consumer's perspective on whether or not they find this targeting beneficial or if it creates a negative boomerang effect for companies using this form of data collection and targeting.

3.2.1.7 Scenario 7: Psychological Image

Retailers can create social graph data by combining consumers' purchase history and third-party data giving retailers the opportunity for psychographic and behavioral-based targeting (Bradlow et al., 2017). For a long time, latent psychological traits were unable to be observed directly within the marketing field. However, with big data, consumers' personalities, IQ, and political orientation can be predicted accurately from consumers' digital footprints (Matz & Netzer, 2017). This gives a new usage of data collection, where the targeting of individuals can be perceived as invasive. Therefore, this scenario aims to identify whether the respondent finds the situation invasive and, if so, what specifically makes the scenario invasive. Further, the purpose is to identify if there are any elements that can change the respondents' attitude if the respondent finds the scenario invasive. Granello and Wheaton concluded that customers expect something in exchange for personal information. This scenario aims to identify what "something" is from their study (Granello & Wheaton, 2004).

3.2.1.8 Scenario 8: Smart-Home

This scenario aims to measure a consumer's acceptability of data collection and whether they welcome the retailer into their home in the form of AI devices. The benefits in this scenario can

be categorized into several areas depending on the respondent. For instance, automatic brewed coffee could be either entertainment or convenience. Depending on the classification of the benefits, the authors aim to find a correlation between different categorized benefits and attitudes. Tariq et al. (2020) have identified several benefits of the internet of things (IoT) from retailers' and manufacturers' points of view; this study has modified the focus on customer attitude instead.

3.2.2 Questions

The in-depth interview consists of 8 hypothetical scenarios, including 6 to 8 follow-up questions functioning as guidelines for the conversation with the respondents. The hypothetical scenarios were developed after researching different data collection solutions, either existing on the market or developed but have not reached the market yet. Some follow-up questions were repetitive to compare the answer from the different scenarios, while some questions were adapted for the specific scenario. The questions asked during the interview have been influenced by previous studies, such as questions 3E and 6C (see appendix) being inspired by Krafft et al. (2021), which examines customers' willingness to hand over personal data for monetary personalization incentives. This also helped us to understand when and where the respondents drew the line of feeling comfortable about data collection. Some questions were additionally supplemented as a result of the discussion to understand the underlying element of the attitude.

3.2.3 Participants

The participants in this research paper were second-tier acquaintances to the researchers. There was a focus on the age group 30 to 45-year-olds. This was considered the optimal group due to them potentially having less bias while still understanding what data collection is. We found that individuals over the age of 45 had a higher probability of not shopping online consistently and not fully understanding what type of information companies collect while shopping online. For the younger segment (below the age of 30), we assumed they had experienced technology and data more, resulting in a more considerable amount being favorable to data collection. A test-pilot interview was conducted on a respondent within the younger segment, proving that our assumption regarding the younger segment being more optimistic towards technology is accurate. Further, the younger segment consists mainly of students who may be biased towards data collection if they receive a discount due to having a lower income making them more perceptible to accept any form of data collection.

Given the arguments mentioned above, individuals aged 30-45 were considered suitable for this study. The age group is young enough to have a deeper understanding of online shopping and data collection from retailers. This age group has a higher probability of having a stable income, making them less influenced by discounts. Therefore, this segment of respondents allows more room for their actual opinion on whether they would be okay with a form of data collection. Further, the considered age group has a higher probability of being parents, enabling deeper consideration of what it means to allow a company to collect personal data. Twelve participants were interviewed; eight were female, and four were male. We found no significant difference in attitudes due to gender. Therefore, there was no need to add more participants to make the gender split more evenly distributed. Because the results from the interviews were repetitive, there was no need to find additional respondents. Table 1 further describes the characteristics of each respondent.

3.2.4 Privacy - Handling of Personal Data

Several controls were put into place to ensure that the research was conducted ethically, as laid out by Bryman and Bell (Bryman & Bell, 2013). All respondents were fully informed via text message or verbally about the interview's content and the purpose of the study. Participants were given a choice of whether or not they wanted to participate in the study, leaving room for consent. At the beginning of each interview, the respondents were informed that the interview would be recorded, their responses would be transcribed, and their names would remain completely anonymous. Respondents are anonymous because answers cannot be connected to a specific individual. They were also informed that this was a semi-structured interview where their personal opinion was crucial and that there was no right or wrong answer. In addition, respondents were informed that the information would only be distributed in the form of a research paper. All materials throughout the process were handled carefully and confidentially. Upon submitting this research paper, all recordings, transcripts, and personal information will be deleted.

Table 1: Characterics of respondents.

	Gender	Age	Education	Occupation	Parent	Interview Conducted
A	Female	34	BSc Social Work	Welfare Office	No	Online
B	Male	36	Double Ma Science and Engineer; Ma in Education	Youth Pastor	No	Online
C	Female	30	BSc Environmental Science & Policy; Ma environmental management & Physical Planning	Environmental Consultant	No	Offline
D	Female	32	BSc in Spanish, minor in history	Minster	Yes	Online
E	Female	34	MA engineering; Currently studies BSc economics	Student	Yes	Online
F	Female	30	BSc Economics, MA Art in fashion studies	Quality management and assurance lead	Non	Online
G	Male	30	Real Estate Agent	Real Estate Agent	No	Online
H	Female	41	Currently studying BSc Economics	Student & Entrepreneur	Yes	Online
I	Female	31	Currently studying BSc Economics; BSc Art	Finance Manager	Non	Offline
J	Male	31	Real Estate Agent	Real Estate Agent	No	Offline
K	Male	33	Currently studying Chiropractor	Student and part-time at Padel facility	No	Online
L	Female	36	Ma Social Science; Currently Studying Economics	Student	No	Online

3.3 Strategy for Analyzing the Result

3.3.1 Results Analysis

This study used grounded theory to analyze the result after collecting data through in-depth interviews. A chart was created to help identify any patterns within each scenario's first question, which looked at the general opinion of the scenario. They were classified into either positive, negative, or neutral groups. The classified group was used as a guideline for the remaining questions. Responses from the other questions were also analyzed to identify more prominent themes and cross-referenced with the chart to see additional patterns. All significant findings are further described below in the results portion of this report.

In order to ensure qualitative rigor, Gioia et al. methodology was used while conducting the analysis to ensure that the report had credibility (Gioia et al., 2013). First, the assumption was taken that the respondents were "knowledgeable agents" to ensure that an accurate account of the respondents' experiences, thoughts, and intentions were collected. Further, an outer perspective was utilized as a check and balance to ensure that the analysis maintained its trustworthiness. Additionally, table 2 visualizes the summarization of the results section. The

table is a concise version of the empirical results to clarify the overview of the respondents' outcomes. Lastly, the in-depth interviews will be combined with literature to draw conclusions from the study. Model BETA (Benefit, Experience, Trust, Autonomy) demonstrates the phenomena studied in this thesis.

4. Empirical Results

In this section, the empirical results will be presented in accordance with themes found and supported by quotes from the participants collected during the in-depth interviews.

4.1 Data collection

4.1.1 What is Data Collection

Respondents from the qualitative study have similarly defined data as the personal information collected by companies. The collected information is defined as general information, such as gender and date of birth, and more specific information, such as IP address or preferred products. However, some respondents stated the importance of limiting the information depending on the customers' level of involvement. For instance, more involved customers should have a more considerable amount of data compared to less involved customers. Respondent C clearly stated that it is scary and incomprehensible when companies can collect data if the customer is not identified or a loyalty member.

"… I don't fully understand how my data is collected, to be honest…"

- Respondent C

Some respondents differentiated data collection from physical stores compared to online stores. Online data collection is understandable, as respondent L explained that behavior could be tracked and recorded online but felt more uncomfortable with data collection in brick-and-mortar stores.

4.1.2 Attitude on Data Collection

Most respondents had a negative or neutral view of data collection, explaining that it is mainly used to increase the company's monetary value. Data collection is considered more beneficial to companies than the data provider. Three respondents were very favorable to data collection, where two out of them (E and G) separated being loyal customers compared to non-loyal. If the

two mentioned respondents are loyal customers, they are very favorable to data collection compared to when they are not loyalty members.

"Those I am a member at, I would say it is more okay as long as we, the customers, get something back."
- Respondent E

4.2 Experiences

4.2.1 New Experiences Increase the Probability of Negative Attitude

The outcome of the interviews proposes a correlation between having experiences and attitudes; the in-depth interviews showed that new experiences increase the probability of negative attitudes. The respondents that have experience with a form of data collection depicted in the scenario will probably be more favorable towards the scenario. In the case of not having experience with a specific scenario, respondents indicated a more negative attitude. This behavior can be demonstrated in scenarios 1, 3, 5, and 6. Scenario 1, about receiving a discount because of a birthday, was deemed "normal" as the respondents have personal experience with it. In contrast, scenario 2, dealing with eye-tracking cameras, received a negative attitude from 10 (out of 12) respondents. The two favorable respondents about eye-tracking argued that this technology already existed and that customers presumably experience it without knowing it.

"I have already experienced it. I would be happy with it…"
- Respondent L on answering question 1A

Further, respondent I compared eye-tracking cameras (scenario 2) with the already existing store cameras, finding the two incomparable. The respondent argued that the eye-tracking cameras would recognize customers, making it personal compared to the in-store cameras that record due to the customers' safety. Because the respondent finds differences in the experiences, she approves of using cameras in the store but finds eye-tracking uncomfortable and creepy.

"I know that they already have cameras in store. But If they track me personally, like get my face and reaction, then it feels much more creepy."
- Respondent I on answering question 2B

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4.3 Benefits

<u>4.3.1 Benefits That Are Tough to Identify Make Consumers Less Willing to Give Data</u>

When customers provide companies with information, they expect something in exchange. Respondent I, argued that the personal information is not handed to companies but sold in exchange for one or several benefits to the customer. The optimistic respondents regarding scenario 2 could identify one or several benefits compared to those who are negative. Person J, for instance, was for the prospect of eye-scanning cameras as it would save time as the customers do not have to look through all the assortment and get promotions that are customized depending on the customer. In opposition, respondent A could not identify the benefit for the customer hence being negative. This pattern is illustrated in scenarios 3 (mouse-tracking technology) and 5 (post-purchase recommendations). Those respondents being, for instance, open to post-purchase recommendations, find the suggestions to be valuable and helpful (respondents F & I). In contrast, the unfavorable respondents are skeptical as the gesture does not seem genuine or beneficial (respondent K).

"I think that we also benefit because sometimes we are not aware or sure what we want when we go to any retail store. But in the end, when they collect enough data to know what people are looking for, that would make shopping easier and maybe quicker instead of going through items that most people don't regularly want."
-Respondent J on answering question 2E

"…I would be skeptical if the discount really is a discount. It is just another offer to sell another product. I never buy products presented like this."
-Respondent K on answering question 5A

<u>4.3.2 Presenting Benefit</u>

When respondents could not identify the customer's benefit, they were provided with either the benefit or asked if their attitude would change if the company clearly stated what benefits the customer would get. Even if some respondents were skeptical of the presented benefit, their overall attitude changed. In scenarios 2 (eye-scanning cameras) and 3 (mouse-tracking technology), the interviewees were given benefits such as a better-curated assortment and decreased costs, leading to decreased prices. The majority of those feeling intruded changed their attitude after receiving comprehensible benefits in the less involved forms of data collection. Respondent C argues that the company needs to inform its customers of the type of data collection and how their data is handled in order to change their attitude. Customers need to

understand the risks before the benefits. This would make person G feel more positive, and less intruded on their privacy.

"…if it helps me and they clearly state how they will use my data and that they will protect my privacy, and show their effort. Only then will I change my mind."
- Respondent I on answering 2E

4.3.3 Benefit vs. Risk

Respondents differed in their attitudes towards the scenario. Some recognized the possibilities with the scenario, while others distinguished the risks. Whether it is risk or benefit-focused, the attitude affects the overall view towards providing companies with personal information. Person J discussed the possibilities of eye-scanning cameras (scenario 2); shopping time would probably decrease and increase promotional offers that align with the customer's preferences, resulting in an overall positive attitude towards data collection. In distinction, respondent F picked out the risks with eye-scanning cameras as the customer's freedom would be threatened and consequently had an overall negative attitude towards providing data.

Further, interviewee K perceives the promotions created by eye-scanning cameras as a risk of increased shopping behavior, which will lead to overconsumption. Person L supports the idea of retailers having a more curated assortment as it may help reduce waste. A similar example can be found in scenarios 5 (post-purchase recommendations) and 3 (mouse-tracking technology).

"I know that they just want to sell, and I am part of a larger system."
-Respondent K on answering question 5F

"… I don't see any benefit from the customer's point of view. Today it feels like every company tries to spy on me, it scares me."
- Respondent I on answering question 3A

4.3.4 Value Adding

For the customer to be willing to hand over data, the benefit needs to add value and produce superior or at least helpful results. Scenario 4 (smart headphones) shows that the product collecting data needs to add high value for the consumer to be willing to utilize it. Those respondents that had a negative attitude towards the headphones did not see the benefit as

valuable. Person C, for instance, compares the music recommendation feature with Spotify's already existing attribute, being therefore negative to the idea even if the benefit is clearly understood. In order to find if different benefits will affect customer attitude accordingly, additional features were added (4C). The additional benefit has a health purpose, affecting both (i) the number of benefits and (ii) the purpose of benefits. The change in known benefits showed little or no effect on the outcome; respondent A also compared the health-related benefits to other (existing) products designed specifically for that benefit. Finding the product that collects data in order to give a benefit is unsatisfactory when a device/product exists that does not need to collect personal data.

"Yeah, I don't think it changes now. Instead of having headphones, people should have something else in that case. Like maybe in their smartwatches or whatever, but like not in my headphones."

\- Respondent A on answering question 4C

4.4 Autonomy

<u>4.4.1 Being in Control or Being Controlled</u>

Control has been an intriguing issue discussed during the interviews, as the definition of "control" has been subjective depending on the respondent. The home system (scenario 8) was, for instance, appreciated by J because the respondent perceived to be in control and able to hand-select the products. At the same time, person A was apprehensive as she considered herself a control freak. Being in control has been a significant component for respondents when deciding their attitude; scenario 6 (geographical tracking) depicts this well. Those neutral and positive toward geographical tracking require either valuable benefit in exchange for the data (respondents E and I) or the choice to accept the terms (respondents B, G, and H). Person G explains that he does not like when companies notify him what to do and instead resists the promotion. Control has been required and discussed in all scenarios, revealing that some respondents perceive data collection as losing control. In contrast, others believe that they are more in control - the perspective is crucial for the overall attitude.

"I want to feel free and do whatever I want. I don't want people to tell me what to do."

\-Respondent G on answering question 6A

4.4.2 Turn-off Data Provision

Freedom and power were themes throughout all of the interviews. Respondents find the importance of making unbounded choices and the flexibility of changing the choice. The ability to "turn off" the sharing of data was a requirement of, among others, person G. Respondent G was one of the two that were positive to both scenarios 6 (geographical tracking) and 7 (psychological image) as long as the customer has the option to stop sharing their data. Individual J has required this as well in scenario 8 (smart-home) and assumed by additional seven respondents (C, D, E, F, H, I, and L) during the interview (a total of 9 out of 12 respondents). As a consequence of companies not fulfilling the requirements, some respondents, such as K and B, stated that they would avoid and switch retailers - regardless of the benefit(s). The data provider should authorize the whole process of giving data. Respondent L further adds that the customer should be able to limit or choose areas to provide data for (and what the customer gets in exchange for each area).

"… it's very important that I can either unsubscribe or pause it - or turn it off and turn it on… at least I have this control that I need to confirm these purchases before happening."
- Respondent J on answering question 8F

4.5 Trust

4.5.1 Trust Favorite Retailer

Some respondents distinguished between regular and favorite retailers, as they have more information to draw conclusions on from their favorite retailers. These expectations were raised by respondents D, E, G, H, and L on several occasions, especially in scenario 6 (geographical location) and scenario 7 (psychological image). The other respondents did not discriminate between regular and favorite retailers. Some even argued that the retailer would no longer be their favorite if it collected data on that specific level. The attitude on whether the customer prefers the retailer was relatively evenly distributed among the respondents.

"If they did that, then they would not be my favorite anymore."
- Respondent K on answering question 6D

4.5.2 Trust the System to Work Accurately

Most of the scenarios were fictional, making some respondents skeptical of the technology and its components. Even though the skeptical respondents were encouraged to imagine trusting the

system to work accurately, they still mistrusted it to work precisely. Respondent D disapproved of the smart headphones (scenario 4) because she sometimes likes to listen to bird-sound, making it impossible for the algorithm to predict that. Similarly, respondent L finds the headphones illogical because she has a heart condition, making the feature worthless. If the respondents did not trust the system, they had an overall negative attitude towards the data collection.

Further, respondents believe that the system can be manipulated by understanding the algorithm. For instance, during scenario 6 (geographical location), interviewee D discussed that she would go to a competitor until she gets an offer from the desired company. This behavior will manipulate the system and cause unnecessary traffic in-store.

"...If I want something from them, I'll just walk towards the other retailer and be like let me see what I can get for free."

- Respondent D on answering question 6D

Table 2: *Summary of the results*

Element	Specification	Explanation
Experiences	New Experiences increases the probability of a negative attitude.	Respondents that have experience with a form of data collection showed more positive attitude towards encoring similar form of data collection, and vice versa with negative attitude.
Benefits	Benefits that are hard to identify make customers less willing to give data.	Customers expect a benefit in exchange for personal information. In case the customer cannot identity the benefit(s), then the customer will probably have a negative attitude.
	Presenting benefits.	Most of the respondents had a positive effect on the overall attitude when companies presented the benefit. Specially if the respondents could not identify the benefit by themselves.
	Benefit vs risk.	Scenarios having benefits that are greater than the risk resulted in more positive attitude, compared to if risk weighted more than benefit.
	Value adding.	The benefits need to add value to the respondents in order to have an effect on the overall attitude.
Autonomy	Being in control or being controlled?	The respondent's perception of being in control or being controlled will influence the overall attitude.
	Turn-off data provision	Choices need to be unbounded, where respondent's have the flexibility to change their opinion.
Trust	Trust favorite retailer	Respondents have more information to draw conclusions on from their favourite retailers.
	Trust the system to work accurately	Respondents that feels the process of data collection to be illogical or worthless will negatively impact the overall attitude.

5. Discussion

The following section aims to discuss the research question and its importance. It will be done by analyzing the conceptual framework combined with the empirical evidence. Finally, contributions to current theoretical frameworks are presented along with the model BETA.

5.1 Present Thesis

Data collection has been a source of information for marketing purposes, where personal data has been utilized since the creation of marketing to understand their customers (Berghoff et al., 2012). Due to ethical and legal grounds, retailers need to respect the customers' attitude regarding data collection. Customer attitude is generally difficult to measure, as there are no fair numeric metrics. Not the least, because attitude is subjective, a scale of, for instance, intrusion will not be perceived equally among the respondents. However, by analyzing the outcome of the discussions, it is possible to identify the underlying elements that drive the customer attitude towards data collection. The overall attitude of the customer is necessary for companies as it will allow companies to collect personal information (Hoffman et al., 1999). In the discussion below, we will answer our research question: What are the underlying indicators that drive customer attitudes towards data collection?

5.2 Benefit

The results suggest that the underlying elements that drive customer attitude toward data collection depend on several aspects, among others, benefit. Several studies suggest that benefit is crucial for a positive attitude, notably financial benefit (About Half of Global Consumers Expect Financial Benefits in Exchange for Their Data. 2020). However, the data does not show a clear correlation between (financial) benefits and a positive attitude toward data collection. Nevertheless, identifying an actual benefit is important—those cases where the respondents could not identify the benefit of sharing personal information ended in being negative. The context of the benefit did not have a direct effect, as long as customers understand that there will be a valuable benefit. Therefore, this study provides new insight into Britainthinks' study; indeed, customers expect a benefit in exchange (Control alt delete. 2018). However, only receiving benefits will not be enough (as we can see in the scenario of eye-scanning cameras); the benefit needs to further add value to the customer. The received benefit needs to align with the customer's perceived definition of benefit. For instance, time-saving is not perceived as a benefit for some respondents, while others may perceive it to be convenient.

If the customer can not identify the benefit, the qualitative data shows that respondents are more likely to become positive if the retailer presents the benefit. These results build on the existing study from Ziefle et al (2016)., concerning that value is what defines a benefit. If the benefit is not valuable to the customer, it will be difficult for the customer to identify the benefit - resulting in being negative toward data collection. The individual's cognitive process will impact the evaluation of the benefit. The results from scenario 2 (eye-scanning cameras) prove the difference between perceiving the outcome as either benefit or risk will influence the attitude. This can be found for instance in the quote from respondent I on answering question 3A ("...I don't see any benefit…"), which supports the theory of Ziefle et al.'s (2016) conclusion that the perceived benefit needs to weigh more than the potential risk.

5.3 Experience

While previous studies have focused mainly on the benefits of information sharing, the results reveal that experience is a vital element driving the overall attitude. New occurrences make customers more skeptical of the data collection, affecting the overall attitude. Ridley-Siegert (2015) argues that customers instead will base their attitude on new occasions depending on other experiences; a bad return policy will, for instance, affect the attitude toward a new form of data collection as well. It is similar to arguments from O'Reilly (2018) regarding customers needing to understand how the sharing of personal information will be beneficial for the customer before accepting the terms. Further, experienced occasions are well understood by the customers, making the customer less skeptical about providing companies with personal information. This explains why customers perceive scenarios 1 (birthday discount) and 5 (post-purchase recommendations) as more optimistic, compared to scenario 2 (eye-tracking cameras). New forms of data collection that feel invasive need to be similar to an experienced occasion in order to not to frighten the customer, yet the new form of data collection needs to add different value compared to the similar occasion. Some respondents did not perceive smart-headphones as intrusive because the feature reminded them of Spotify's recommendation algorithm. However, the respondents were negative because they could not see additional value in the smart-headphones.

The scenarios that have been experienced on different occasions guided the attitude; for instance, smart headphones' features can be recognized from AppleWatch's algorithms, guiding the overall attitude. Recognizing that AppleWatch is helpful for health purposes, some respondents saw similar benefits from the headphones. Similar statements can be found in the

Ridley-Siegert study, where experience is not limited to only the specific retailer (Ridley-Siegert, 2015). There was no clear pattern between having experienced a particular scenario and being positive about that specific scenario. Ridley-Siegert's study goes in line with the quote from respondent L on answering question 1A ("I have already experienced it. I would be happy with…") as well as respondent I's answer on 2B (page 23). However, new occasions that respondents did not find familiar made them mostly feel uncomfortable and that the retailer invaded the respondents' privacy (such as scenarios 2 and 6). These results build on the evidence from scenario geographical tracking and eye-tracking cameras. Data collectors need to ease customers into new forms of data collection by either slowly introducing the new form of data collection or making it similar to an already existing form of data collection.

5.4 Trust

The results indicate that trust influences the overall attitude towards data collection, regardless of the scenarios. Trust is a heavy word that concerns several parts of data collection. The results correspond with the study that customers need to be comfortable with the retailer before sharing personal information (Digital Footprints. 2016). However, the results provide new insight into this study. Results from scenario 6 (geographical location) and scenario 7 (psychological image) suggest that a favorite retailer cannot influence a change in attitude because of trust. Instead, there will be a negative effect on trust because the favorite retailer misuses their relationship, resulting in the customer not trusting the retailer on future occasions. Similarly, Hewett (2021) concludes that responsible data collection could increase the data provider's trust in the data collector. Hewett's study matches with the quote "If they did that, then they would not be my favorite anymore." (Respondent K on answering 6D).

The results align with Muhammed et al. (2018) hypothesis, proving that trust decreases the uncertainty with the perceived potential risk. The outcome from the scenario of smart headphones proposes that if the data provider does not trust the system to work accurately, the data provider's attitude towards data collection will be negatively affected. Trust is further built on the perception that the data collector has the customer's best interest in mind and does not utilize the information to increase the revenue stream. The data suggest that companies can build trust by being transparent and secure. When companies make the terms of data collection understandable for customers and discuss it directly with the customer, respondents feel more comfortable with the company increasing their trust (Hoffman et al., 1999).

5.5 Autonomy

Previous studies have focused mainly on the customer's autonomy, supporting the results of this study as well. The data from the geographical location scenario supports Andre et al.'s (2017) study regarding the importance of feeling independent. If a particular factor threatens the perceived autonomy, the customer will be more negative towards that specific variable such as "I want to feel free and do whatever I want."). This behavior can be proven in, among others, the scenario of geographical location, where respondents complained regarding receiving orders. Commands are a character of deprivation of liberty, hurting the overall attitude. The data from this study is in line with Christman's results, giving a clear understanding of why data is perceived as losing control (Christman, 2020).

In order for customers to interpret that data collection does not threaten their freedom, Wertenbroch et al. argued that the customer needs to control the inputs, such as freely deciding. The customer decides the inputs, such as decisions and choices. However, the results of their decision are out of the customer's control. This study gives a new insight into the existing evidence from the article (Wertenbroch et al., 2020). The results prove that respondents perceive given alternatives as an act of being autonomous because it is up to the customer to decide. Further, the customer needs to constantly be in control of their decision and be able to withdraw the choices if required by the customer. If the company cannot provide the control for the customers, then they will have a negative attitude towards data collection, resulting in not sharing personal information.

5.6 Model BETA

The overall customer attitude towards data collection is based on four underlying indicators; (1) benefit, (2) experience, (3) trust, and (4) autonomy. Companies need to invest resources in the suggested underlying indicators for a customer to share their personal information and be positive about the idea. Model BETA, developed according to the results from this study, illustrates the underlying elements and what influences those components. BETA should be interpreted as a framework for analyzing customer attitudes towards data collection. Attitude is built on the four mentioned pillars that act individually on different touchpoints. The earned benefit needs to add value and be greater than the risk. Experience is based on the data provider's knowledge from previous occasions, which leads to understanding the data collection. Understanding is further a touchstone of trust, together with feeling comfortable with the specific data collector. Lastly, the data collector needs to provide the data provider with

autonomy, which can be achieved by not threatening the individual's privacy and allowing them to choose freely. The freedom to choose needs to be applied throughout the whole data collection process. Data providers should be able to withdraw their decision during the process. BETA can be further developed by asking questions such as "how to add value (to benefit)" or "how can the scenario not threaten privacy."

Model BETA: *Benefit, Experience, Trust, Autonomy*
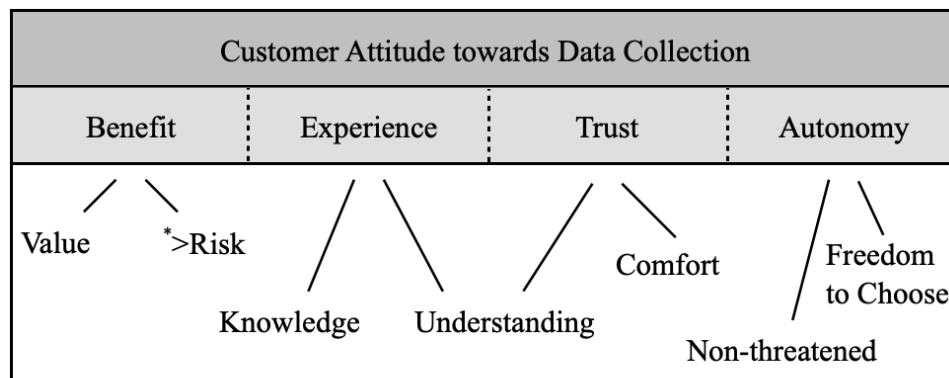
* = Stating that benefit needs to be greater than the risk (benefit > risk)

6. Conclusion

The purpose of this section is to answer the research question by presenting the contributions, limitations, and proposals. It will then give managerial implications, followed by suggestions for future research.

Collecting data during the several steps of the customer journey has become easy for firms, mainly due to the digitalization of the market. The digital footprints left by the customers are delimited by ethical and legal factors, requiring firms to inform customers and receive approval for collecting data. Several studies conclude that the customer's attitude is vital for approval of sharing personal information. Therefore, this study explores the underlying elements that drive the customer's attitude towards data collection. Through the in-depth interviews, it is possible to identify four underlying elements that impact the overall attitude; (1) benefit from sharing data, (2) experience with the form of data collection, (3) trust towards the data collector, and (4) autonomy regarding decisions throughout the complete data process. The elements have further touchpoints influencing the specific element, visualized in model BETA. The identified elements lay the foundation for the overall attitude, resulting in the customers giving either permission to

collect personal information in case of positive attitude, or as a consequence of negative attitude deny the approval and refuse the retailer.

6.1 Managerial Implications

This study found multiple managerial implications that could help firms navigate the tricky field of big data and customer relationships. First, this study found that benefits played an important role in consumers' willingness to hand over personal data. However, the challenge at hand is to define what that benefit is. Benefits can differ from person to person; therefore, it is vital to have a strong customer experience team to understand the firm's unique customer base and determine what resonates well with them. This can further foster a more personalized experience for the customer giving the firm a competitive advantage as well as a stronger relationship with their customers. As the results of this study support, the perceived benefit needs to be greater than the perceived risk.

This study further found that experience influenced the general attitude toward a form of personal data collection. Familiarity or experience with a form of personal data collection can help ease the customer as they can recognize its potential purpose and what information it will collect from them. Suppose a firm wants to implement new data collection technology such as eye-scanners in store. In that case, it is vital to educate the consumer on what information is being collected and how it is stored to allow the customer to become familiar with the new technology. Firms can also build familiarity with a new form of data collection by explaining the similarity to something that customers already understand.

The study found that trust was an important aspect when it came to handing over personal information to companies. The results showed that if companies are transparent and follow fair information practices, then customers are more likely to build trust with a company. It was found as well that firms need to prioritize the security of personal data to ensure that no harm comes to the customer. Trust takes time to build up; however, trust reduces perceived risk and increases willingness to share personal data with companies.

Lastly, this study found that autonomy was another important aspect for customers. If a customer perceives a lack of control and forcefulness from a company, it can produce negative attitudes. It is important to give customers a choice; this can be achieved by opt-in compared to

opt-out options. Here the power and control are given to the customer to decide to share their data.

6.2 Future Research

The purpose of this study was to identify underlying elements that drive customer attitudes towards personal data collection. Four elements were detected; benefits, experience, trust, and autonomy. It further aimed to determine why those elements alter consumers' perceptions. Future research should consider the potential effects of the internet of things (IoT) being more widely used and how that affects consumers' overall attitude toward personal data collection. General Electric estimates that by 2030 IoT could contribute $15 trillion to the global GDP(Weinberg et al., 2015). Future research on examining each element independently could extend the explanation and understanding of why that particular element is important to the consumer. Further, examining what factors can positively and negatively affect those elements can better help retailers understand what practical implications they can implement to foster a beneficial relationship with the consumer where they have continued access to personal data.

7. References

About half of global consumers expect financial benefits in exchange for their data. (2020, -08-21T13:30:20+00:00). Marketing Charts, Retrieved from https://www.marketingcharts.com/customer-centric/datadriven-114369

Alrajeh, A. (2012). A qualitative research process using abductive approach

André, Q., Carmon, Z., Wertenbroch, K., Crum, A., Frank, D., Goldstein, W., . . . Yang, H. (2017). Consumer choice and autonomy in the age of artificial intelligence and big data. Customer Needs and Solutions, *5*(1-2), 28-37. doi:10.1007/s40547-017-0085-8

Barnes, T. J. (2013). Big data, little history. Dialogues in Human Geography, *3*(3), 297-302. doi:10.1177/2043820613514323

Baumeister, R. F., Masicampo, E. J., & Dewall, C. N. (2009). Prosocial benefits of feeling free: Disbelief in free will increases aggression and reduces helpfulness. Personality and Social Psychology Bulletin, *35*(2), 260-268. doi:10.1177/0146167208327217

Belanger, F., Hiller, J. S., & Smith, W. J. (2002). Trustworthiness in electronic commerce: The role of privacy, security, and site attributes. Journal of Strategic Information Systems, *11*(3-4), 245-270. doi:10.1016/S0963-8687(02)00018-5

Bradlow, E. T., Gangwar, M., Kopalle, P., & Voleti, S. (2017). The role of big data and predictive analytics in retailing. Journal of Retailing, *93*(1), 79-95. doi:10.1016/j.jretai.2016.12.004

Bryman, A., & Bell, E. (2013). Business research methods 3rd edition (3rd ed.) Oxford

University Press. Retrieved from

http://bvbr.bib-bvb.de:8991/F?func=service&doc_library=BVB01&local
_base=BVB01&doc_number=025150600&sequence=000001&li
ne_number=0001&func_code=DB_RECORDS&service_type=ME
DIA

Buhalis, D., & Volchek, K. (2021). Bridging marketing theory and big data analytics: The

taxonomy of marketing attribution. International Journal of Information Management, *56*

doi:10.1016/j.ijinfomgt.2020.102253

Chandon, P., Hutchinson, J. W., Bradlow, E. T., & Young, S. H. (2012). Measuring the value of

point-of-purchase marketing with commercial eye-tracking data. Visual marketing: From

attention to action (pp. 225-258) doi:10.4324/9780203809617 Retrieved from

https://www.scopus.com/inward/record.uri?eid=2-s2.0-84920395054&doi=10.4324%2f9780

203809617&partnerID=40&md5=b7164291745cde4c951bc9ba2562e2c0

Christman, J. (2020). Autonomy in moral and political philosophy. In E. N. Zalta (Ed.), The

Stanford Encyclopedia of Philosophy (Fall 2020 ed.,) Metaphysics Research Lab, Stanford

University. Retrieved from

https://plato.stanford.edu/archives/fall2020/entries/autonomy-moral/

Control alt delete (2018). Which?.

Culnan, M. J., & Armstrong, P. K. (1999). Information privacy concerns, procedural fairness, and

impersonal trust: An empirical investigation. Organization Science, *10*(1), 104-115.

doi:10.1287/orsc.10.1.104

Digital footprints (2016). [Digital Footprints: Consumer concerns about privacy and security] Communication Consumers Panel 2016.

Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. Australian and New Zealand Journal of Psychiatry, *36*(6), 717-732. doi:10.1046/j.1440-1614.2002.01100.x

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the gioia methodology. Organizational Research Methods*, 16*(1), 15-31. doi:10.1177/1094428112452151

Graeff, T. R., & Harmon, S. (2002). Collecting and using personal data: Consumers' awareness and concerns. Journal of Consumer Marketing, *19*(4), 302-318. doi:10.1108/07363760210433627

Granello, D. H., & Wheaton, J. E. (2004). Online data collection: Strategies for research. Journal of Counseling and Development, 82(4), 387-393. doi:10.1002/j.1556-6678.2004.tb00325.x

Hewett, N. (2021). Responsible data collection could inspire consumer trust – here's how. Retrieved from https://www.forbes.com/sites/worldeconomicforum/2021/04/06/responsible-data-collection-could-inspire-consumer-trust--heres-how/

Hoffman, D. L., Novak, T. P., & Peralta, M. (1999). Building consumer trust online. Communications of the ACM, 42(4), 80-85. doi:10.1145/299157.299175

Krafft, M., Kumar, V., Harmeling, C., Singh, S., Zhu, T., Chen, J., . . . Rosa, E. (2021). Insight is power: Understanding the terms of the consumer-firm data exchange. Journal of Retailing, *97*(1), 133-149. doi:10.1016/j.jretai.2020.11.001

Kshetri, N. (2014). Big datas impact on privacy, security and consumer welfare. Telecommunications Policy, 38(11), 1134-1145. doi:10.1016/j.telpol.2014.10.002

Lacey, R., & Sneath, J. Z. (2006). Customer loyalty programs: Are they fair to consumers? Journal of Consumer Marketing, 23(7), 458-464. doi:10.1108/07363760610713000

Matz, S. C., & Netzer, O. (2017). Using big data as a window into consumers' psychology. Current Opinion in Behavioral Sciences, 18, 7-12. doi:10.1016/j.cobeha.2017.05.009

Milena, Z., Dainora, G., & Stancu, A. (2008). Qualitative research methods: A comparison between focus-group and in-depth interview. Annals of Faculty of Economics, 4, 1279-1283.

Montgomery, A. L., Li, S., Srinivasan, K., & Liechty, J. C. (2004). Modeling online browsing and path analysis using clickstream data. Marketing Science*, 23*(4), 579-595+630. doi:10.1287/mksc.1040.0073

Muhammad, S. S., Dey, B. L., & Weerakkody, V. (2018). Analysis of factors that influence customers' willingness to leave big data digital footprints on social media: A systematic review of literature. Information Systems Frontiers*, 20*(3), 559-576. doi:10.1007/s10796-017-9802-y

Narula, A., Milano, F. & Singhal, R. (2014). Building consumer trust. Retrieved from

https://www2.deloitte.com/us/en/insights/topics/risk-management/consumer-data-privacy-strategies.html

Nunan, D., & Domenico, M. (2013). Market research and the ethics of big data. International Journal of Market Research, 55, 505. doi:10.2501/IJMR-2013-015

O'Reilly, L. (2018, June,). The future of digital marketing in a data-privacy world. Wall Street Journal Retrieved from https://www.wsj.com/articles/the-future-of-digital-marketing-in-a-data-privacy-world-1529341496

Phelps, J., Nowak, G., & Ferrell, E. (2000). Privacy concerns and consumer willingness to provide personal information. Journal of Public Policy and Marketing, 19(1), 27-41. doi:10.1509/jppm.19.1.27.16941

Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. Journal of Interactive Marketing, *18*(3), 5-14. doi:10.1002/dir.20015

Prassas, G., Pramataris, K. C., Papaemmanouil, O., & Doukidis, G. J. (2001). A recommender system for online shopping based on past customer behaviour. Bled eConference, Retrieved from https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1052&context=bled2001

Redman, T. (2008). Data driven: Profiting from your most important business asset Harvard Business Review Press.

Ridley-Siegert, T. (2015). Data privacy: What the consumer really thinks. Journal of Direct, Data and Digital Marketing Practice, 17(1), 30-35. doi:10.1057/dddmp.2015.40

Shankar, V. (2019). Big data and analytics in retailing

Tariq, B., Taimoor, S., Najam, H., Law, R., Hassan, W., & Han, H. (2020). Generating marketing outcomes through internet of things (iot) technologies. Sustainability (Switzerland)*, 12*(22), 1-12. doi:10.3390/su12229670

Weinberg, B. D., Milne, G. R., Andonova, Y. G., & Hajjat, F. M. (2015). Internet of things: Convenience vs. privacy and secrecy. Business Horizons, *58*(6), 615-624. doi:10.1016/j.bushor.2015.06.005

What is GDPR, the EU's new data protection law. (2019). Retrieved from https://gdpr.eu/what-is-gdpr/

Xie, K., Wu, Y., Xiao, J., & Hu, Q. (2016). Value co-creation between firms and customers: The role of big data-based cooperative assets. Information and Management, 53(8), 1034-1048. doi:10.1016/j.im.2016.06.003

Ziefle, M., Halbey, J., & Kowalewski, S. (2016). Users' willingness to share data on the internet: Perceived benefits and caveats. Paper presented at the *IoTBD 2*016 - Proceedings of the International Conference on Internet of Things and Big Data, 255-265. doi:10.5220/0005897402550265 Retrieved from https://www.scopus.com/inward/record.uri?eid=2-s2.0-84979517497&doi=10.5220%2f0005897402550265&partnerID=40&md5=e4957a242edc37654e3a020855fecef8

8. Appendix

<u>Background Questions</u>

    A. Gender

    B. Age (30-45)

    C. Education

    D. Parent / or not

    E. What do you do for a living?

    F. How often do you visit a retailer a week, either online or offline?

    G. Do you often sign up for loyalty programs?

        - Definition: A loyalty program is a marketing strategy designed to encourage customers to continue to shop at or use the services of a business associated with the program.

    H. How do you view data collection from retailers?

        - On an interval of 1-7, were 1 = Very negative, and 7 = Very positive (4 = neutral)

    I. How do you define data collection?

    J. How are you feeling today?

        - On an interval of 1-10, were 1 = depressed or very sad or down, to 5 = neutral, not happy nor sad, to 10 = happy, awesome, great

Qualitative survey

Questions:

    1. Suppose you become a member at the new retailer near your apartment. One month later it is your birthday, and the new retailer sends you this letter home:

        Happy Birthday, XXX! Celebrate your birthday with a 10% discount!

1A. How would you feel about this?

1B. Do you think the new retailer is invading your privacy?

1C. Would the discount rate change your feelings about this? (eg. 5% vs 20%)

1D. Would you utilize the discount?

1E. Today companies have terms of ***use agreements*** that are difficult to understand, and few customers actually read through it. Do you think the agreement is enough for this type of scenario?

1F. IF NO in E: Would you change your mind if the company clearly stated what information they were collecting and what benefit you will receive from giving them that information?

1G. If positive to the scenario - How would you define the benefit? Health/Security, Joyful/entertainment, convenient or financial benefit? If negative - picture yourself as being positive to the scenario, what would you see as the benefit received?

1H. What specifically are you negative towards in this scenario?

2. Suppose that while you are in-store, every eye moment is tracked by eye-tracking retinal scanners embedded in shelves to see what customers are interested in. The benefit to the customers is that retailers can better curate their assortment to what their specific customers are interested in.

2A. How would you feel about this?

2B. Do you feel like this is too much of an intrusion of your privacy?

2C. Today companies have terms of *use agreements* that are difficult to understand, and few customers actually read through it. Do you think the agreement is enough for this type of scenario?

2D. IF NO in C: Would you change your mind if the company clearly stated what information they were collecting and what benefit you will receive from giving them that information?

2E. This new type of tracking can better understand the exact assortment customers want. If this technology could better help the retailers to stock particular items that customers visiting that store want. How would you feel about this? Would you change your mind? Would you feel okay that retailers use this type of technology? After hearing the intended use of the technology do you feel that it is less of an intrusion of your privacy?

2F. If positive to the scenario - How would you define the benefit? Health/Security, Joyful/entertainment, convenient or financial benefit? If negative - picture yourself as being positive to the scenario, what would you see as the benefit received?

2E. What specifically are you negative towards in this scenario?

3. Suppose that while you are shopping online, every mouse placement on your computer is tracked through mouse-tracking technology to see what customers are interested in. The benefit to the customers is that retailers can better curate their assortment to what their specific customers are interested in.

3A. How would you feel about this?

3B. Do you feel like this is too much of an intrusion of your privacy?

3C. Today companies have terms of *use agreements* that are difficult to understand, and few customers actually read through it. Do you think the agreement is enough for this type of scenario?

3D. IF NO in C: Would you change your mind if the company clearly stated what information they were collecting and what benefit you will receive from giving them that information?

3E. This new type of tracking can better understand the exact assortment customers want. If this technology could better help the online-retailers to stock particular items that customers visiting that store want. How would you feel about this? Would you change your mind? Would you feel okay that retailers use this type of technology? After hearing the intended use of the technology do you feel that it is less of an intrusion of your privacy?

3F. If positive to the scenario - How would you define the benefit? Health/Security, Joyful/entertainment, convenient or financial benefit? If negative - picture yourself as being positive to the scenario, what would you see as the benefit received?

3G. What specifically are you negative towards in this scenario?

4. Suppose your headphones have a complex algorithm connected to a sensor that can feel your heartbeats through your temple *(Sw. tinning).* The heartbeats felt through the headphones gives the music app an overview of the particular mood you are in at that moment. Based on this, the music app can give you specialized recommendations of a unique playlist created just for you depending on your mood. For example, when you are out running the music app can sense the heightened heart rate and suggest a running playlist. Or if your heart rate shows that you are happy it will suggest a joyful playlist.

4A. How would you feel about this?

4B. Do you think the headphone company invades your privacy?

4C. Suppose that the algorithm can sense when you have for instance a heart attack and contact emergency service for you, would this feature change your answer from the previous question? -(in terms of how you feel about your privacy.)

4D. Would you buy the headphones?

4E. Today companies have terms of *use agreements* that are difficult to understand, and few customers actually read through it. Do you think the agreement is enough for this type of scenario?

4F. IF NO in E: Would you change your mind if the company clearly stated what information they were collecting and what benefit you will receive from giving them that information?

4G. If positive to the scenario - How would you define the benefit? Health/Security, Joyful/entertainment, convenient or financial benefit? If negative - picture yourself as being positive to the scenario, what would you see as the benefit received?

4H. What specifically are you negative towards in this scenario?

5. Suppose that you purchase a TV at a retailer where you are a member at. After a couple of days you receive an email stating that they hope that you are satisfied with your purchase and recommend an HDMI-cable and cleaning-kit for that TV at a discounted rate.

5A. How would you feel about this?

5B. Do you think the retailer is invading your privacy?

5C. Today companies have terms of *use agreements* that are difficult to understand, and few customers actually read through it. Do you think the agreement is enough for this type of scenario?

5D. IF NO in E: Would you change your mind if the company clearly stated what information they were collecting and what benefit you will receive from giving them that information?

5E. If positive to the scenario - How would you define the benefit? Health/Security, Joyful/entertainment, convenient or financial benefit? If negative - picture yourself as being positive to the scenario, what would you see as the benefit received?

5F. What specifically are you negative towards in this scenario?

6. Suppose that you are a club member at a retailer and that retailers uses past purchase history, your personal promotional response, and your browsing history to micro-segment you. They then combine this with your location (using geo-coding) to identify you to a specific area (specific geo-code), knowing when you are close to their store (geofencing to track you when you are within a specific retailer) or when you are heading towards a competitor (geo-conquesting to see when you are heading to a competitor) to then target you with promotions, through notifications to your phone, to encourage you to shop at their store versus the competitor.

6A. How would you feel about this?

6B. Do you believe this invades your privacy? What exactly in this scenario do you feel is an invasion of your privacy?

6C. Is there a certain discount percentage where you would allow companies to track you to this level?

6D. Would you opt-in for your favorite retailers to track you on this level?

6E. Today companies have terms of *use agreements* that are difficult to understand, and few customers actually read through it. Do you think the agreement is enough for this type of scenario?

6F. IF NO in E: Would you change your mind if the company clearly stated what information they were collecting and what benefit you will receive from giving them that information?

6G. If positive to the scenario - How would you define the benefit? Health/Security, Joyful/entertainment, convenient or financial benefit? If negative - picture yourself as being positive to the scenario, what would you see as the benefit received?

6H. What specifically are you negative towards in this scenario?

> 7. Suppose that along with traditional marketing techniques companies also analyze data to build a psychological image of you as a consumer and can use this information to help you if they detect that, for example, that you have early signs of depression and direct you to self-help pages or offer you professional advice.

7A. Would you find this helpful?

7B. Do you find this to invade your privacy?

7C. Today companies have terms of *use agreements* that are difficult to understand, and few customers actually read through it. Do you think the agreement is enough for this type of scenario?

7D. IF NO in C: Would you change your mind if the company clearly stated what information they were collecting and what benefit you will receive from giving them that information?

7E. Do you feel like it is a part of a company's corporate social responsibility to help you with your mental health if they have access to your psychological profile through data collection?

7F. If positive to the scenario - How would you define the benefit? Health/Security, Joyful/entertainment, convenient or financial benefit? If negative - picture yourself as being positive to the scenario, what would you see as the benefit received?

7G. What specifically are you negative towards in this scenario?

8. Suppose that the majority of the products in your home are smart devices, with built in AI. The home-system recognizes when you come home and can turn on the lights automatically, read the mail and brew your coffee. Further, the home-system will automatically buy basic necessities such as toilet paper, toothpaste, milk etc. You need to choose a prefered online store the home system can purchase from, and add a payment card - the rest will take care of itself.

8A. How would you feel about this?

8B. Do you believe this type of smart-home invades your privacy?

8C. Today companies have terms of *use agreements* that are difficult to understand, and few customers actually read through it. Do you think the agreement is enough for this type of scenario?

8D. IF NO in C: Would you change your mind if the company clearly stated what information they were collecting and what benefit you will receive from giving them that information?

8E. If positive to the scenario - How would you define the benefit? Health/Security, Joyful/entertainment, convenient or financial benefit? If negative - picture yourself as being positive to the scenario, what would you see as the benefit received?

8F. What specifically are you negative towards in this scenario?

After the interview, how do you feel?
- On an interval of 1-10, were 1 = depressed or very sad or down, to 5 = neutral, not happy nor sad, to 10 = happy, awesome, great