



**Bachelor Thesis, 15 credits, for a
Bachelor of Science in Business Administration:
International Business and Marketing
Spring 2021**

Co-creators or puppets?

A study on AI-marketing's role in consumers'
value co-creation

Frida Bergquist Olsson & Hanna Dahl

Faculty of Business

Abstract

Authors:

Frida Bergquist Olsson and Hanna Dahl

Title:

Co-creators or puppets? A study on AI-marketing's role in consumers' value co-creation

Supervisor:

Lisa Källström

Examiner:

Heléne Tjárnemo

Abstract

In recent years, AI has received increased attention in the field of marketing and is believed to grow even more in the future. It seems that the use of AI in marketing has a significant impact on consumer value creation. The purpose of this thesis is to explore how consumers experience the role of AI-marketing within the scope of the online customer journey, including how both positive and negative aspects of AI-based decision aids influence their value co-creation. Based on previous research, a conceptual model was created to determine whether consumers co-create or co-destroy value in the interactions with AI-based decision aids, as well as which types of values that are the outcomes. Three focus groups were used as a qualitative method to collect empirical data. Findings resulted in two main insights. Firstly, consumers experience the role of AI-based decision aids positively and can co-create values regarding economic and efficiency benefits, facilitation of information search, and more inspiring, personal and relevant experiences. Secondly, AI-based decision aids are also perceived negatively and contribute to co-destruction of value as well. Consumers experienced negative aspects regarding manipulation, limitations and loss of integrity and autonomy, as well as risks of overspending, being misled and distracted, and having irrelevant experiences. This thesis contributes with new insights into the consumer perspective of AI-marketing. Marketers can use these results to understand consumers' value creation and avoid the negative aspects to achieve the best possible AI-marketing strategies.

Keywords

Digital marketing, AI Marketing, AI-based decision aids, Service-Dominant Logic, Value co-creation, Value co-destruction, Consumer value

Acknowledgements

We want to express our greatest gratitude to

Lisa Källström

For supporting us with excellent guidance, thoughtful feedback and genuine interest in helping us develop this thesis.

Annika Fjelkner

For contributing to making this thesis more readable through sharing her linguistic expertise and patiently reminding us of using the right tense.

Participants

For making this thesis possible and for taking the time to share valuable opinions.

Our families and friends

For always supporting us throughout this stressful period and contributing with positive energy and shoulders to cry on.

Each other

Lastly, we would like to thank each other for all the encouragement and support during the process.

Kristianstad 26th of May, 2021



Frida Bergquist Olsson



Hanna Dahl

Table of contents

1 Introduction.....	1
1.2. Problematization	4
1.3. Purpose.....	5
1.4. Research question.....	5
2 Theoretical Background.....	6
2.1 AI in marketing	6
2.1.1 Pre-purchase stage.....	6
2.1.2 Purchase stages.....	8
2.1.3 Post-purchase stage	10
2.1.4 Summary of AI-marketing	11
2.2 Consumer value and value co-creation	12
2.2.1 Types of consumer value	14
2.3 Conceptual model.....	17
3 Method.....	19
3.1 Research philosophy	19
3.2 Research approach	20
3.3 Choice of theory.....	21
3.4 Research design and strategy	21
3.5 Data collection	22
3.5.1 Participant selection	25
3.5.2 Focus group guide	28
3.6 Data analysis	30
3.7 Trustworthiness	31
3.8 Limitations	32
4 Findings.....	33
4.1 Value co-creation and co-destruction.....	33
4.1.1 Playfulness value.....	34
4.1.2 Aesthetics value	35
4.1.3 Consumer Return on Investment (CROI) value.....	37
4.1.4 Service Excellence value.....	38

4.1.5 Altruistic value	40
4.2 Negative effects of AI-based marketing activities	41
4.3 Consumers as co-producers of value.....	43
5 Analysis and Discussion.....	45
5.1 Analysis of empirical findings	45
6 Conclusions.....	51
6.1 Summary of thesis and conclusions	51
6.2 Conclusions	52
6.3 Theoretical contribution	53
6.4 Practical contribution	54
6.5 Critical review and suggestions for future research.....	54
List of References.....	56
Appendix A - Focus Group Guide (Swedish).....	60
Appendix B - Focus Group Guide (English).....	63

List of Tables

Table 1. Summary of AI-marketing	11
Table 2. Holbrook's (1999) typology of consumer value	15
Table 3. Matchwick et al.'s (2001) typology of experiential value	16
Table 4. Focus groups	25
Table 5. Summary of focus groups participants.....	27
Table 6. Playfulness value.....	35
Table 7. Aesthetics value	36
Table 8. CROI value	38
Table 9. Service excellence value	40
Table 10. Altruistic value	41
Table 11. Negative effects.....	43

List of figures

Figure 1. Conceptual model.....	18
---------------------------------	----

1 Introduction

Imagine this, Olivia wants to buy a t-shirt and therefore visits her favorite webshop to find one. She finds two t-shirts that she likes but buys neither at that time. A few days later when she is on Facebook, an ad with t-shirts from that webshop appears. Since she is still interested in the t-shirts, she visits the webshop again and reads the product descriptions and reviews. In the days to come, advertisements about the t-shirts continue to appear around the Internet. In addition, she receives a discount code from the online store via email. She then decides to order one of the t-shirts. At checkout, she receives suggestions for other products she might be interested in, one of which is the other t-shirt she liked. With a quick click, she buys that t-shirt as well. After she has received her products, she writes a positive review of the products and also publishes a post on Instagram with her new outfit and tags the store in the post. This is an example of a customer journey that is driven by marketing based on *Artificial Intelligence (AI)*.

In recent years, marketing has been conquered by AI which has meant increasingly more individualized interactions between companies and customers (Ma & Sun, 2020). AI is even recognized by many as the future of marketing (Ma & Sun, 2020; Conick, 2017). Pedro Domingos, writer of the book *The Master Algorithm*, puts it like this: “AI is the planet we’re headed to. Machine learning is the rocket that’s going to get us there. And Big Data is the fuel.” (Conick, 2017, paragraph 14). As this statement indicates, one of the cornerstones of AI is *Machine Learning (ML)*. This can be briefly and simply be described as a computer program that learns from experience, based on input data and previously performed tasks (Ma & Sun, 2020). ML forms the basis of how AI algorithms are constructed and, therefore, an essential characteristic of AI is that it learns from the system. ML allows for computers to use input data to learn, grow and create the same way humans do, but a lot faster and without explicit programming (Conick, 2017). The AI process is that it interprets data, analyzes feedback loops, tests conclusions based on data and feedback, assesses results based on certain criteria and draws new conclusions based on new feedback and new results. These processes are automated and AI makes its own decisions, which distinguishes it from *advanced analytics*, where human reviews and decision-making are needed (Stone et al., 2020). However, AI is highly reliant on data. Both Big Data and Customer Data, such as search and purchase history and interactions on social platforms, are required to develop the AI algorithms (Darmody & Zwick, 2020).

As just explained, AI is based on ML and Data, but how is it used in online marketing? The example that introduced this chapter presents an online customer journey that is driven by AI-marketing algorithms. Bjørlo et al. (2021) established the term *AI-based decision aids* to describe such algorithms, which are used to facilitate consumers' decision-making process. This includes need recognition, identifying relevant options, forming decision sets, and selecting, using, and evaluating products or services. The fictive consumer in the example was interested in t-shirts and browsed t-shirts at a webshop. As she was later browsing on Facebook and other websites, she was presented with customized advertisements which showed the t-shirts she had previously viewed. She also received a personalized email from the retailer with a personal discount code. These phenomena are examples of how AI is used in so called retargeting and bidding algorithms, which are used to examine a consumer's profile, in order to determine the optimal ad and price for that individual (Campbell et al., 2020; Ma & Sun, 2020).

Once the fictive consumer in the example had reached checkout to complete the purchase, she was presented with personal recommendations of products that she might be interested in, including one of the t-shirts she had previously shown interest in. These are examples of algorithmic decision-guidance techniques that are used to shape personalized choice contexts for consumers (Darmody & Zwick, 2020). From a consumer perspective, the purpose of these techniques is to present consumers with relevance and they are given personal recommendations to enable more efficient decision-making (André et al., 2018; Bjørlo et al., 2021; Campbell et al., 2020). After the fictive consumer had completed the purchase, she posted her new outfit on Instagram, wrote how she felt about the purchase and tagged the retailer. From a firm perspective, this information is useful for feedback analysis which can also be conducted by AI algorithms (Campbell et al., 2020; Ma & Sun, 2020).

According to Darmody & Zwick (2020), the transition to digital marketing has meant a shift from "asymmetrical modes of communication and manipulation to symmetrical modes of co-creation and prosumption" (Darmody & Zwick, 2020, p.1). Co-creation refers to creating something together, and prosumption emphasizes both production and consumption (Ritzer & Jurgenson, 2010). These notions can be considered relevant in AI-based marketing as it is based on consumer data and might benefit both marketers and consumers. Consumer benefits lead us towards value creation. If we once more return to the example of the online customer journey that introduced this chapter, it can be seen that the AI-based marketing activities might have

an effect on the consumer's value creation, as it can be said to reduce her search, decision-making and transaction costs and, thus, better satisfy her needs and preferences (André et al., 2018). Therefore, the role of AI marketing in consumers' value creation process is relevant to further investigate.

Value creation is described within the scope of *Service-Dominant (SL) Logic* as a co-creation process that takes place in the interaction between service providers and consumers (Grönroos & Voima, 2013; Vargo & Lusch, 2016). The introductory online customer journey illustrated how value can be seen as co-created between the online retailer (the provider), who makes profit on the sale, and the customer (the consumer), who is presented with relevant products and offered a discount for the same products. Another relevant concept within SD logic, entails a co-production role of consumers', who are considered co-producers of the resources that are used to create value (Grönroos & Ravald, 2011). In service, production and consumption are considered by some to take place partly simultaneously, which means that the customer contributes to the production of resources while using the services (Grönroos & Ravald, 2011). This could be put in the context of the introductory example as well. While the consumer searched for t-shirts on the webshop, the AI algorithms collected her data. The data was used to personalize her experience on the webshop as well as to offer relevant product recommendations (André et al., 2018; Bjørlo et al., 2021). In this way, it could be argued that the consumer is a co-producer. The co-creation of value, on the other hand, occurs when the consumer uses the AI-powered features that the online retailer offers, such as personalized product recommendations and individual discount codes.

The arguments about value co-creation in the exemplified online customer journey in the paragraph above is a theoretical reasoning, but how do *consumers* experience the role of AI marketing in their value co-creation process? Do they feel that AI-based decision aids contribute to more or less value? Since AI is highly dependent on customer data, what do consumers think about that? Research (Bjørlo et al., 2021; Hoyer et al., 2020) has shown that the use of consumer data in AI-based marketing may entail negative effects for consumers. For instance, the data can be used to predict or manipulate consumer behaviors (Darmody & Zwick, 2020; Lumbreras, 2018). This can consequently mean violation of consumer autonomy, which is defined as "the ability of consumers to make independent informed decisions without undue influence or excessive power exerted by the marketer" (Bjørlo et al., 2021, p. 2). In addition, the collection and use of consumer data can impose privacy risks, as the data owners may gain

deep insight of consumers' personal attributes which can be used for manipulative purposes (Bjørlo et al., 2021; Hoyer et al., 2020). If we return one last time to our initial example of an online customer journey, does the consumer feel manipulated into buying or does she feel that her perceived value increased due to the AI-based marketing activities?

1.2. Problematization

AI is highly reliant on data (Darmody & Zwick, 2020), which might mean that the success of AI-based marketing strategies and activities will depend on how much and how qualitative personal data marketers' have about customers. Using personal information for marketing purposes has long raised privacy concerns, but in the era of automation, and especially in an AI context, they are more relevant than ever since it is machines and algorithms that extract, use and own the consumer data (Anica-Popa et al., 2021). André et al. (2018) stated that more studies are needed on consumers' perceptions on recommendation systems and data-driven marketing, as individual integrity and autonomy are important to preserve in order to achieve consumer well-being. In addition, Manser Payne et al. (2021) stated that companies need to gain a better understanding of how value is created for consumers in digital servitization, due to the growth of AI in the world. Similarly, many marketers are not aware of the pros and cons of AI and how they can use it to create more consumer value (Campbell et al., 2020).

AI in marketing has received increased attention in recent years. Manser Payne et al. (2021) examined how digital technologies, such as AI, affect value creation in the financial sector, as well as increase the understanding of the relationship between digital services and transformation, including the value-in-use of AI. In another aspect, André et al. (2018) studied how new technology, such as AI, impacts on consumers' well-being and sense of autonomy when making choices. Similarly, Bjørlo et al. (2021) studied the possible advantages and disadvantages of AI's influence on, as well as the consequences for, consumers' autonomy and decision-making. Campbell et al. (2020) described opportunities with AI for marketers and proposed guidelines on how these marketing strategies should be used to succeed in an AI-based business environment. The literature studied the value creation process and the advantages and disadvantages of the use of AI in marketing. But to the best of our knowledge, previous research has not investigated how consumers experience the role of AI-based decision aids in their value creation process in the specific context of the online customer journey.

Many studies agree that the development of AI is of great importance for the interaction, and the value co-creation, between consumers and companies (Campbell et al., 2020; Cukier, 2020; Lumbreras, 2018). However, research has pointed in different directions regarding AI-marketing's role in consumers' value creation process. Manser Payne et al. (2021) claimed that consumers, instead of firms, are those who determine the value of AI services, even though there is a mutual dependence between the providers and the consumers, where the providers use their knowledge in AI to offer AI-based value propositions to consumers (Manser Payne et al., 2021). In contrast, Lumbreras (2018) found that AI technologies in marketing have meant that consumers are manipulated, and the use of AI marketing strategies to customize content has also shown an increase in abuse. Therefore, the interaction between consumers and AI technologies becomes problematic and worrying (Lumbreras, 2018). This indicates a further need to explore how both positive and negative effects associated with AI-marketing impacts the consumer value creation process, as well as consumers' role as co-creators.

Therefore, based on the literature review, it is relevant to study AI-based decision aids' influence on consumers' value creation during the online customer journey from a consumer perspective. Since previous research mostly assumed how consumers may experience AI-marketing, it is essential to explore consumers' actual perceptions and experiences. We believe that our thesis can contribute with an increased understanding of the role of AI-based decision aids in consumers' value co-creation within the scope of the online customer journey. Our thesis will also contribute to the understanding of which types of consumer values that can be co-created and co-destructed from the use of AI-marketing in this context.

1.3. Purpose

The purpose of this study is to explore how consumers experience the role of AI-marketing within the scope of the online customer journey, including how both positive and negative aspects of AI-based decision aids influence consumers' value co-creation.

1.4. Research question

How do consumers experience AI-based decision aids in their value co-creation process?

2 Theoretical Background

To explore AI-based decision aids' role in consumers' value co-creation process, this chapter will provide an overview of the aspects relevant to this study. These aspects include positive and negative effects of AI-marketing, consumers' value creation process and the types of value consumers can create. Lastly, a conceptual model is presented that will facilitate the analysis.

2.1 AI in marketing

According to Campbell et al. (2020), AI in marketing makes it possible to generate solutions to marketing problems that human intelligence can not accomplish. Overgoor et al. (2019) described it as a technical development where algorithm-based AI agents use information about consumers and other stakeholders to suggest and/or take actions to achieve the best marketing outcomes, based on its calculations. From a consumer perspective, the algorithms are used to “facilitate the process of decision-making, including but not limited to need recognition, identifying relevant options, forming a decision set, and selecting, using, and evaluating a product or service.” (Bjørlo et al., 2021, p. 5). Bjørlo et al. (2021) referred to the AI agents as *AI-based decision aids*, which is the term mainly used in this thesis as well. Through a literature review on the topic, it was identified how AI-based decision aids were used by marketers, as well as positive and negative effects for consumers. In this thesis, we have chosen to structure these according to the three stages of the online customer journey; *Pre-purchase*, *Purchase*, and *Post-purchase*. The customer journey refers to the decision-making process a customer goes through with a firm across these three stages (Gao et al., 2020).

Under the subheadings below, the AI-based decision aids used in each stage of the customer journey will be discussed. Firm ambitions with AI-driven marketing will be presented as well as how it may benefit consumers. Additionally, the negative effects it may pose for consumers will also be discussed.

2.1.1 Pre-purchase stage

The pre-purchase stage refers to the consumer activities that take place before the acquisition of a product or a service activity, such as problem recognition, information search and

alternative evaluation (Gao et al., 2020). In this stage, AI-based decision aids can give consumers detailed and relevant information to aid their decision-making process (Hoyer et al., 2020). From a firm perspective, this is made possible as the AI-based decision aids use consumers' search history, page views and previous reviews in order to provide consumers with relevant information (Cambell et al., 2020). Furthermore, AI has been found to often be applied in market research to gain insight into the market (Ma & Sun, 2020) in order to understand current and future markets, and evaluate and predict product demand and customer emotions (Campbell et al., 2020; Overgoor et al., 2019; Stone et al., 2020).

The online customer journey often begins with information search on Internet search engines. In that context, AI can facilitate information search and provide relevant search results (Ma & Sun, 2020) as AI-based decision aids have been found to “accelerate and integrate information search [...] by extracting users' preferences and acting on their behalf.” (Kim, 2020, p. 319). Kim (2020) further found that consumers experienced that this reduced their information search costs, as the AI-based decision aids searched for information both faster and easier than the consumers. AI-based decision aids, such as recommendation agents, can also identify and suggest relevant product options based on consumers' preferences (Bjørlo et al., 2021). Bjørlo et al. (2021) further stated that consumers are often faced with an overabundance of choices in today's digital marketplace. Therefore, it was stated that they need help with narrowing down their choices to better match their needs and preferences. In this context, AI-based decision aids can entail a more efficient decision-making process for consumers (Bjørlo et al., 2021; Darmody & Zwick, 2020; Kim, 2020). Research has shown that many consumers felt empowered by AI-based decision aids, and experienced them as convenient, as they reduced their search, decision-making and transaction costs (André et al., 2018; Bjørlo et al., 2021; Kim, 2020).

Another part of the pre-purchase stage is alternative evaluation (Gao et al., 2020). In this activity, AI-based decision aids, including chatbots, can be used on social media and various apps to encourage consumer buying (Campbell et al., 2020; Ma & Sun, 2020; Stone et al., 2020). This can help consumers explore which products and brands best suit their desires. Chatbots have also been described to offer personalized customer service. From a marketer perspective, it was stated to contribute to the collection of consumer data, as well as maintain relationships and create loyalty (Campbell et al., 2020; Ma & Sun, 2020).

However, the AI-based decision aids used during the pre-purchase stage may have negative effects for consumers. Andre et al. (2018) and Bjørlo et al. (2021) found that by analyzing consumers' preferences and predicting their future needs based on their historical choices and behaviours, marketers risk reducing consumers' opportunities for self-development. Since the algorithms use past data to present relevant content, consumers can be caught in so-called filter bubbles that only present them with content similar to what they have liked in the past. This was found to risk encouraging consumers to repeat previous behaviors and choices instead of evolving (Andre et al., 2018; Bjørlo et al., 2021), which meant that consumers would have to sacrifice aspirational preferences in favor of personalization. Previous research (Andre et al., 2018) believed that this could be particularly harmful for consumers who want to quit destructive behaviors such as smoking or online gambling. In addition, previous research (Bjørlo et al., 2021; Hoyer et al., 2020) also found the risk of invading consumer privacy, since the algorithms are based on consumers' data. Examples of privacy risks for consumers are localization, tracking and profiling, as well as the deep insights data owners gain about consumers' personal attributes, which is extracted through accumulated data (Bjørlo et al., 2021; Hoyer et al., 2020).

2.1.2 Purchase stages

The purchase stages refer to the choice of product, ordering and payment, and involve comparison of promotions, prices, and assortments of the alternatives found during the pre-purchase stage (Gao et al., 2020). When reviewing literature about AI in marketing, relevance is often mentioned as something that AI can bring consumers (André et al., 2018; Bjørlo et al., 2021; Kim, 2020). Darmody (2020, p.6) described relevance as “understanding and matching a customer's intentions or needs in relation to interactions or experiences in the moment.”. In the purchase stages, marketers can offer consumers relevance in the form of personal shopping experiences, on-point offers and unique customized website content for each specific consumer (Bjørlo et al., 2021; Campbell et al., 2020; Ma & Sun, 2020). Campbell et al. (2020) stated that this can be achieved through the analysis of customers' personal data, such as purchase history and wish lists.

As stated, two stages in a customer's purchase decision involve comparison of promotions and comparison of assortments (Gao et al., 2020). AI can facilitate the understanding of customer segments and can help marketers identify and segment consumers within specific criteria (Campbell et al., 2020; Overgoor et al., 2019). This, combined with customers' personal data,

was stated to generate more precise communication to consumer segments as well as customized campaigns for individual customers, which could facilitate comparison of promotions. The AI-based decision aids were further claimed to contribute to more relevant product recommendations for consumers, related to their individual preferences and tastes (André et al., 2018; Campbell et al., 2020). From a marketer perspective, Campbell et al. (2020) stated that AI-based decision aids, and specifically personal recommendations agents, can help retailers increase customers' checkout baskets as these can encourage customers to complete items they have already decided to purchase. For example, a customer can be suggested to complement a sweater with a skirt to get a whole outfit (Campbell et al., 2020).

The most important stage in a customer's purchase decision was claimed by Gao et al. (2020) to be comparison of prices, as customers "aim to maximize consumption utility by minimizing the cost" (p. 1104). Campbell et al. (2020) suggested that AI-powered pricing engines could be used in pricing strategies to maximize sales by, for example, evaluating consumer price elasticity, enabling dynamic pricing and detecting consumers' buying trends (Campbell et al., 2020). This was believed to generate on-time personalized prices for consumers (Campbell et al., 2020; Ma & Sun, 2020), which could help them compare prices and make decisions.

Although there seem to be many possible benefits for consumers with personalization, relevance maximization and cost reduction in the decision-making process during the purchase stage, the use of AI-based decision aids can also entail negative effects. Lumbreras (2018) found that it can be used to manipulate customers to buy certain products or certain brands, or to direct them to various behaviors, some of which may even be addictive behaviors, with the aim of increasing commercial gainings. Furthermore, Bjørlo et al. (2021) found that AI-based decision aids might pose ethical risks of depriving consumers of their free choice and autonomy. Consumer autonomy is defined as "the ability of consumers to make independent informed decisions without undue influence or excessive power exerted by the marketer" (Bjørlo et al., 2021, p. 2). As consumer data and AI-based decision aids can be used to influence consumers' choices, as well as predict and manipulate their behavior (Darmody & Zwick, 2020), it risks depriving them of absolute autonomy. Bjørlo et al. (2021) stated that the AI algorithms have already made a first choice selection, and as these are often used in secret without consumers' knowledge, it was claimed to prevent them from making informed choices. Although customers have the opportunity to make trade-offs during the decision-making

process, André et al. (2018) claimed that AI-based decision aids can still have severe consequences for their autonomy.

2.1.3 Post-purchase stage

The post-purchase stage refers to the customer experience after the purchase, and involves usage and consumption, post-purchase engagement as well as possible service requests (Gao et al., 2020). In order to gain an increased understanding of how consumers interact with products, marketers can use AI to analyze post-purchase consumer discussions on online forums, as well as images and interactions on social media. Reviews and feedback on such platforms can be gathered and analyzed through so-called social listening algorithms (Campbell et al., 2020; Ma & Sun, 2020). The insights gained by analyzing such feedback was found by Cambell et al. (2020), as well as Ma and Sun (2020), to facilitate customer targeting and customization, as it contributes to the collection of consumer data. Such data also included returns of products and post-delivery customer service (Campbell et al., 2020). From a marketer perspective, this can be useful to gain insight in how a customer segment is met by the company and other competitors, as well as to create marketing strategies that consumers can relate to. From a consumer perspective, this was believed to facilitate continued offers of relevant and personal shopping experiences (Campbell et al., 2020; Ma & Sun, 2020).

The use of AI-based decision aids in the post-purchase stage again actualizes the ethical risk of invading consumer privacy. Consumers may perceive it as intrusive, and since they are often unaware of how data is handled, they may feel exploited (Cukier, 2020). However, Cukier (2020) further stated that it might not be AI itself that constitutes such problems. He emphasized that the responsibility to communicate how data is handled lies with firms. According to Park et al. (2021), consideration of consumer privacy was seen as a crucial variable. Because consumers spend so much time on new technologies, they should feel that their data is handled securely. In contrast, if consumers perceive that AI systems are unpredictable, they may experience anxiety and mistrust (Park et al., 2021). Moreover, classification and discrimination of consumers could also be a negative effect due to social listening and data collection. According to Cukier (2020), consumers may be at risk of being classified as a certain type of person, perhaps someone that the consumer neither considers him-/herself to be, nor wants to be. This was believed to have a negative impact on the individual's self-esteem and was perceived as discrimination of consumers' feelings (Cukier, 2020).

2.1.4 Summary of AI-marketing

Table 1 presents a summary of the previously discussed AI-based decision aids and summarizes firm ambitions with the AI-marketing, as well as possible positive and negative effects it may yield for consumers.

Table 1

Summary of AI-marketing

	Pre-purchase	Purchase stages	Post-purchase
Firm ambitions	<ul style="list-style-type: none"> - Predict future markets and demands - Understand current markets and demands - Evaluate customer emotions - Collect of consumer data - Maintain consumer relationships - Create consumer loyalty 	<ul style="list-style-type: none"> - Gain insight into customers' preferences and desires - Anticipate future needs - Segment customers - Evaluating consumer price elasticity - Detect buying trends - Set competitive prices to drive customers to make purchasing decisions - Increase customers' checkout basket 	<ul style="list-style-type: none"> - Understand product interactions - Better targeting and customization - Create relatable marketing strategies
References	<p><i>Campbell et al. (2020)</i> <i>Ma and Sun (2020)</i> <i>Stone et al. (2020)</i> <i>Overgoor et al. (2019)</i></p>	<p><i>Bjørlo et al. (2021)</i> <i>Campbell et al. (2020)</i> <i>Overgoor et al. (2019)</i></p>	<p><i>Campbell et al. (2020)</i> <i>Ma and Sun (2020)</i></p>
Positive effects for consumers	<ul style="list-style-type: none"> - Facilitate information search - More relevant and detailed search results - Relevant product and brand recommendations - Personalized customer service 	<ul style="list-style-type: none"> - Personal shopping experience - Customized campaigns - Relevant product recommendations - Personalized prices - Customized website content 	<ul style="list-style-type: none"> - Personal shopping experience
References	<p><i>André et al. (2018)</i> <i>Bjørlo et al. (2021)</i> <i>Campbell et al. (2020)</i> <i>Darmody & Zwick (2020)</i> <i>Kim (2020)</i></p>	<p><i>André et al. (2018)</i> <i>Bjørlo et al. (2021)</i> <i>Campbell et al. (2020)</i> <i>Ma & Sun (2020)</i></p>	<p><i>Campbell et al. (2020)</i> <i>Ma and Sun (2020)</i></p>
Negative effects for consumers	<ul style="list-style-type: none"> - Reduced opportunities for self-development - Encouraged to repeat past choices - Sacrifice aspirational preferences in favor of personalization - Invasion of privacy 	<ul style="list-style-type: none"> - Manipulation - Direct to certain behaviors - Deprivation of free choice and autonomy 	<ul style="list-style-type: none"> - Invasion of privacy - Exploitation - Classification and discrimination
References	<p><i>Andre et al. (2018)</i> <i>Bjørlo et al. (2021)</i> <i>Hoyer et al. (2020)</i></p>	<p><i>Bjørlo et al. (2021)</i> <i>Lumbreras (2018)</i></p>	<p><i>Cukier (2020)</i> <i>Park et al. (2021)</i></p>

2.2 Consumer value and value co-creation

The purpose of this study was to explore how consumers experience the role of AI-marketing within the scope of the online customer journey, including how both positive and negative aspects of AI-based decision aids influence consumers' value co-creation. In order to understand value co-creation, one must begin with understanding value. According to Holbrook (2006), consumer value provides the basis for all effective marketing activities, including creating successful marketing strategies, as well as the core of our wishes for its ethical justification. The definition and the concept, as well as the locus, of consumer value has been at the core of the marketing research agenda over the past decades, and there has been an increase of interest in it in the marketing literature (Echeverri & Skålén, 2011; Grönroos & Ravald, 2011). Holbrook (2006, p.715) defined value as "an interactive relativistic preference experience", which meant that it involved the *interaction* between *objects*, such as products, and *subjects*, such as customers. This interaction was seen to be relativistic and depending on individuals' subjective preferences based on the individuals' comparisons between objects. Such interactive relativistic preferences connect consumer value creation to the consumption experience (Holbrook, 2006). According to previous research, value is created in these experiences (Grönroos, 2011; Grönroos & Voima, 2013; Holbrook, 1999; Holbrook, 2006; Mathwick et al., 2001).

Looking at value through a customer experience lens, implies that value also need to be viewed from a service perspective. In *Service-Dominant (SD) Logic*, which is a stream of research that originates from relationship marketing, service has the essential role. Many researchers in the field of SD Logic believe that regardless of whether customers buy a product or a service activity, they consume it as a service (Grönroos & Ravald, 2011; Vargo & Lusch, 2004). Holbrook (2006) also emphasized products' connection to the consumption experience, which also indicated a service perspective on products. SD Logic recognizes consumers at the value chain center and the role of the firm is to assist consumers' value creation processes (Grönroos & Voima, 2013). The experience of value scopes the increase of customer well-being, or that the customer becomes better off, throughout the value creation process. This means that value is created through the accumulated experiences of the consumer's mental states connected to, possession of, or usage of, goods or services (Grönroos, 2011; Grönroos & Ravald, 2011; Grönroos & Voima, 2013). Furthermore, similarly to Holbrook (2006), SD logic emphasizes that value is co-created through *interactions* between consumers and service providers, or other

agents such as employees or even AI-powered chatbots (Grönroos & Voima, 2013; Manser et al., 2021; Vargo & Lusch, 2016). Value then emerges in this value co-creation process when the customer uses, or consumes, the resources “made available to them by a given provider, by other market actors or by themselves in order to increase their well-being” (Grönroos & Ravald, 2011, p. 8). This is referred to as *value-in-use*.

Grönroos and Ravald (2011) further described consumers’ role as *co-producers* of the resources that facilitates value creation. Production and consumption were seen to be partly simultaneous processes in the interaction of service activities, and therefore consumers were argued to be part of the production process as well. They further stated that products and service activities can, from a consumption perspective, be seen as distribution mechanisms for service, and as customers consume products and service activities as services, they can be considered to co-produce the distribution mechanisms of service. However, Grönroos and Ravald (2011) were keen to point out the difference between value co-creation and the co-production of resources, as value creation occurs in the process of which consumers co-create value-in-use out of the co-produced resources during the interaction with the service providers.

In the context of ML and AI-based decision aids, the value creation process, in terms of co-creation, value-in-use and co-production of resources, becomes complicated. The AI algorithms, which drive the marketing functions, are what is produced. But the algorithms build on consumer data and could not be produced without it, since the data is needed to teach and train the algorithms (Darmody & Zwick, 2020). Therefore, it can be argued that consumers do have a co-production role in this context, in line with the implications by Grönroos and Ravald (2011). Consumers’ value creation, on the other hand, can be argued to occur in the *interaction* with such algorithms, meaning when consumers use the website functions generated by such algorithms and made available to them by service providers. This indicates that the production of resources for value creation occurs simultaneously as the value is co-created between providers and consumers. This also means that consumers create value-in-use, as consumers *use* the functions of the AI-based decision and from that usage, value is created. In this study, value creation is referred to as co-creation, due to the important aspect of the interaction within our context. Manser Payne et al. (2021) similarly described consumer value creation as co-creation, and it was argued to occur through "application-in-use of AI services" (p. ahead-of-print, third paragraph in Introduction).

However, Echeverri and Skålén (2011) argued that the notion of value co-creation is a one-sided concept. The viewpoint of value creation through interaction between consumers and providers implies that value co-creation is the only outcome during this interaction, but Echeverri and Skålén (2011) claimed that *value co-destruction* is another side of that coin. The notion of value co-destruction suggests the possibility that consumers could become worse off through interactions, which would lead to a diminishing of perceived value-in-use (Källström, 2019).

2.2.1 Types of consumer value

In order to understand the role of AI-based decision aids in consumers' value co-creation process, it was necessary to understand the types of value that consumers can create. In this study, the *Typology of Experiential Value*, proposed by Mathwick et al. (2001), formed the basis for this understanding.

Mathwick et al. (2001) based their scale of experiential consumer value on Holbrook's (1999) work. Holbrook (1999) studied the nature of consumer value and proposed a typology of consumer value which divided it into three dichotomies. The first one involves extrinsic value and intrinsic value. By *extrinsic value* means a consumption experience which functionally or instrumentally serves as a means for any additional purpose. *Intrinsic value*, on the other hand, means a consumption experience that is prized for its own sake as a self-justifying goal in itself. The second dimension involves self-oriented value and other-oriented value. *Self-oriented value* is experienced when a consumption experience is appreciated for one's own sake or the responses or effects it entails on oneself. *Other-oriented value* occurs when a consumption experience is appreciated for another one's sake or the responses or effects it entails on another. The third dichotomy regards value as active or reactive. *Active value* involves "things done by a consumer to or with a product as part of some consumption experience" (Holbrook, 1999, p. 11). This involves physical and mental manipulations to both tangible and intangible objects (Holbrook, 1999), and indicates a collaboration between the consumer and the service provider (Mathwick et al., 2001). Mathwick et al. (2001) further explained the part of the consumer as a type of financial, behavioral or cognitive investment made by the consumer. On the contrary, value is *reactive* when a consumption object or experience causes responses in consumers, such as appreciation for, comprehension of, or response to the object or the experience. The three dichotomies are presented in *Table 2* below, which forms Holbrook's (1999) typology of consumer value.

Table 2*Holbrook's (1999) typology of consumer value*

		Extrinsic	Intrinsic
Self-oriented	<i>Active</i>	Efficiency	Play
	<i>Reactive</i>	Excellence	Aesthetics
Other-oriented	<i>Active</i>	Status	Ethics
	<i>Reactive</i>	Esteem	Spirituality

Note. Based on Holbrook (1999, p. 12).

Drawing on Holbrook, Mathwick et al. (2001), aimed at conceptualizing the *experiential* aspects of consumer value. Their research was conducted in the context of a multi-channel retail environment consisting of both online shopping and catalogue shopping. Mathwick et al. (2001) described online shoppers as expecting personalized service, around the clock access and interaction through multiple means. In the online environments of today, much of the AI-based decision aids are aimed at making consumer experiences personalized and relevant (André et al., 2018; Bjørlo et al., 2021; Cambell et al., 2020; Kim, 2020; Ma & Sun, 2020), which indicates that this description of online shoppers might still be relevant.

Mathwick et al. (2001) aimed at conceptualizing a typology of experiential value by using the context of online and catalogue shopping, to provide online retailers with a tool for managing the range of values delivered by continuously more diverse retail environments. The basis for this conceptualization was found in Holbrook's (1999) typology of consumer value in the dimension of self-oriented value, which is shown in *Table 2*. According to Mathwick et al. (2001), the perceptions of experiential value are based upon interactions that involve either direct usage or distanced appreciation of products and services, and could therefore be captured in the dimensions of extrinsic-intrinsic values and active-reactive values. Mathwick et al. (2001) extended Holbrook's typology and relabeled the different types of values based on prior research. The typology of experiential value by Mathwick et al. (2001) are presented in *Table 3* below.

Table 3*Mathwick et al.'s (2001) typology of experiential value*

	Active	Reactive
<i>Intrinsic</i>	Playfulness	Aesthetics
<i>Extrinsic</i>	Consumer Return On Investment (CROI)	Service Excellence

Note. Based on Mathwick et al. (2001, p. 42)

Four types of consumer value are presented in the typology. The first value, *Playfulness*, regards active sources of intrinsic value. Mathwick et al. (2001) described playfulness as something that, more or less, exists in those activities that are freely engaged in, and it operates beyond immediate material interests. The value of playfulness is described to be perceived when a consumer becomes absorbed in consumption activities that generate intrinsic enjoyment, and it is seen as a means-end in itself. Mathwick et al. (2001) emphasized the active role of the consumer for this value to be generated. The second value, *Aesthetics*, regards reactive sources of intrinsic value and Mathwick et al. (2001) explained aesthetics as consisting of two dimensions. The first one reflects the visual elements of the online retail environment, and regards graphic layout, the use of colors and the attractiveness of the setting. The second one is the service performance itself, which regards an entertainment perspective that refers to a cherishing for the retail spectacle (Mathwick et al., 2001).

The third value presented in the typology of experiential value, *Consumer Return on Investment (CROI)*, regards active sources of extrinsic value. Like Aesthetics, CROI are made up of two dimensions - economic utility and efficiency utility. Mathwick et al. (2001) argued that these two dimensions could be integrated in the CROI value and together be described as active investments of financial, psychological and behavioral resources that can potentially give a return. The last value, which is that of perceived *Service Excellence*, regards reactive sources of extrinsic value. It was described to reflect the general appreciation a consumer feels when a service provider delivers on its promises through task-related performance and demonstrated expertise (Mathwick et al., 2001).

2.3 Conceptual model

The aim of this study was to explore how consumers experience the role of AI-marketing within the scope of the online customer journey, including how both positive and negative aspects of AI-based decision aids influence consumers' value co-creation. To serve this purpose, a conceptual model was developed (Figure 1). The model is based on the AI-based decision aids presented in the literature review, the concept of value co-creation and co-destruction of *SD logic* (Echeverri & Skålén, 2011; Grönroos & Ravald, 2011; Grönroos & Voima, 2013) and Mathwick et al.'s (2001) *typology of experiential value*.

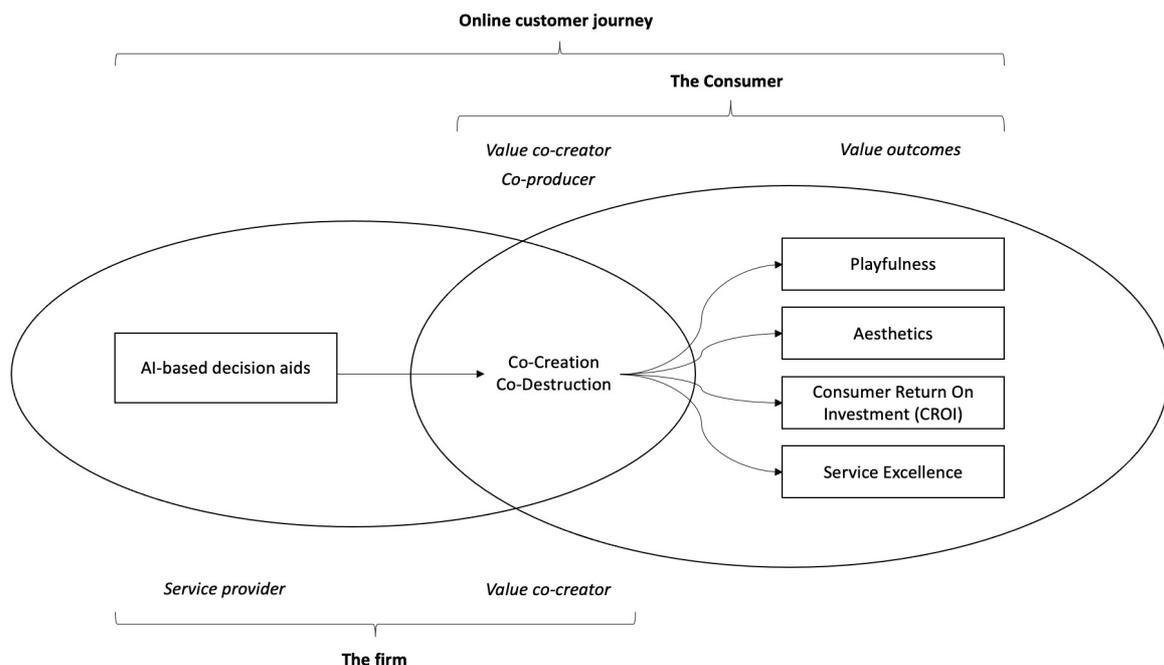
The model consists of two spheres, the firm's and the consumer's, and aims to describe the *interaction* between them in the context of the *online customer journey*. Through the interaction, value creation occurs either by *co-creation* or *co-destruction* between the service provider and the consumer (Echeverri & Skålén, 2011; Grönroos & Ravald, 2011; Grönroos & Voima, 2013). The resources that enable value co-creation (Grönroos & Ravald, 2011) are found in the firm's sphere. They consist of the AI-based decision aids discussed in the theoretical background, such as AI-powered search engines, customized advertisements, recommendation agents, personal prices and discounts, as well as customized content. These may entail various negative effects for consumers and are in such cases assumed to contribute to the co-destruction of value, which is based on the assumptions of Echeverri and Skålén (2011). Furthermore, the AI-based decision aids are based on AI algorithms, which in turn use consumer data in their construction (Campbell et al., 2020; Overgoor et al., 2019), as well as to be able to generate value-in-use for consumers. Based on this, the model considers that consumers are also *co-producers* of the value-enabling resources, which is based on assumptions from Grönroos and Ravald (2011).

Furthermore, in the value creation process, consumers can co-create or co-destroy different types of value. In the model, these outcomes are considered to be Playfulness, Aesthetics, Consumer Return on Investment (CROI) and Service Excellence, which are the four different consumer values in Mathwick et al.'s (2001) *typology of experiential value*. This typology was chosen as it was conceptualized based on an Internet shopping environment and aimed at providing marketers with a tool for managing the range of values delivered by diverse retail environments. This was seen as relevant for this study.

The value of *Playfulness* can be the outcome when a consumer becomes absorbed in a consumption activity that generates intrinsic enjoyment. For this value to be created, the consumer must have an active role. In the context of this study, an example of when Playfulness is created, can be when a consumer feels inspired by customized content, advertisement or product recommendations and feels eager to explore what is presented. *Aesthetics* can be the value outcome when a consumer appreciates the visual elements of an online retail environment, as well as the service performance itself which includes the entertainment perspective of the retail environment. In the present study, an example of this can be when a consumer feels that the customized content creates a pleasant and personal shopping environment. *CROI* can be created when a consumer feels that invested resources yield a return. The resources that a consumer can invest are financial, temporal, behavioral and psychological. In the context of this study, an example of this can be when a consumer feels that time or money is saved through the use of AI-based decision aids. Finally, when a consumer feels that a service provider delivers on its promises by displayed expertise and task-oriented performance, *Service Excellence* is created (Mathwick et al., 2001). An example of this is when a consumer feels that the AI-based decision aids generate accuracy in what is expected by the consumer.

Figure 1

Conceptual model



Note. Conceptual model of how AI-based decision aids influence value co-creation or co-destruction in the online customer journey, leading to the co-creation or co-destruction of four types of consumer values.

3 Method

In this chapter, we present and argue for our epistemological assumptions and will briefly cover our research philosophy, approach, design and strategy. We will also explain the choice of theory as well as the choice of focus groups as a method for data collection and describe how these were conducted. Moreover, we will discuss how the data was analyzed through the use of deductive and inductive thematic analysis. Lastly, the trustworthiness of this study will be discussed as well as the limitations.

3.1 Research philosophy

According to Bryman and Bell (2011), there are three main epistemological philosophies that explain researchers' views about the world: *positivism*, *interpretivism*, and *realism* (Bryman & Bell, 2011). These viewings will influence the choice of research strategy and method, which implies the importance of considering research philosophy (Saunders et al., 2009). Positivism draws from the methods of natural sciences and believes that researchers should *objectively* understand the social world through gathering of facts (Bryman & Bell, 2011). The aim is to *explain* human behavior, and knowledge is only knowledge if it is confirmed by the senses (Bryman & Bell, 2011). Realism relies, similarly to positivism, on the view that the methods and explanations of natural sciences should be applied to the social sciences as well. However, unlike positivism, realism is based on the assumption of an external reality that influences humans' perceptions of the world (Bryman & Bell, 2011).

In contrast to positivism and realism, interpretivism builds on social sciences and aims at *understanding* human behavior (Bryman & Bell, 2011). It builds on *subjectivity* and that researchers should use an empathic understanding of human actions in order to make relevant interpretations of their meanings. Moreover, it strives to highlight words rather than quantification in data collection and analysis (Bryman & Bell, 2011). This thesis aimed at exploring how consumers experience the role of AI-marketing within the scope of the online customer journey, including how both positive and negative aspects of AI-based decision aids influence consumers' value co-creation. Therefore, interpretivism was seen as the most

relevant research philosophy, as the underlying desire of this study was to *understand* how consumers' value co-creation is influenced by AI-based decision aids, as well as to interpret which types of values consumers created through that process. Furthermore, value co-creation was seen to revolve around the *interaction* between consumers and service providers, which also indicates the relevance of an interpretivism philosophy.

3.2 Research approach

Lind (2019) explained research approaches as the nature of the relationship between theory and empirical material in a study. He further stated that there are three types of research approaches; *deduction*, *induction*, and *abduction*. According to Bryman and Bell (2011), a deductive approach is the most common view of the relationship between theory and research. In this approach, existing knowledge forms the basis of theory development (Bryman & Bell, 2011) and acts as the starting point of data collection (Lind, 2019). In an inductive approach, on the other hand, the empirical material forms the basis and is used to develop theoretical concepts and models (Lind, 2019). Induction allows researchers to draw generalized conclusions based on observations (Bryman & Bell, 2011). Lastly, an abductive approach is a middle ground between a deductive and inductive approach where theories are used together with the empirical basis of the study to clarify connections and properties about the investigated phenomenon (Lind, 2019).

As the purpose of the present study was to explore how consumers experience the role of AI-marketing within the scope of the online customer journey, including how both positive and negative aspects of AI-based decision aids, a comprehensive theoretical framework was needed based on existing knowledge about both AI-marketing and consumer value creation. Since much research has already been done in the fields of AI-marketing and value creation, we wanted to design and focus our study with the help of previous research and existing theory, which later guided our empirical context and analysis. Therefore, deduction was seen as the most suitable approach. The study did not aim to contribute with any new theory, rather it aimed to increase the understanding of previous theories by testing them in our empirical context, which further strengthens the choice of a deductive approach.

3.3 Choice of theory

Researchers use theories to explore, explain and create an understanding of phenomena in our world. Therefore, theories are essential tools and fundamental in the research process (Lind, 2019). Firstly, theories place the study in a more comprehensive knowledge context, and secondly, theories help identify relationships relevant to the study. Finally, theories are important for analyzing and interpreting the empirical basis (Lind, 2019). Previous research has explained how AI is used in marketing activities. What has been described in previous research was therefore useful in exploring how consumers can co-create value with the help of AI-based decision aids, which was part of the purpose of this study. Previous theory in the fields of service marketing and consumer research was also used to understand value creation. Previous research in the field of Service-Dominant Logic was found useful, as we considered that AI-based decision aids could be seen as types of services, such as creating relevant content for the customer and offering more personalized experiences. Another reason was that in this field, value creation is discussed through interaction between consumer and firm, which we considered to be an important aspect since AI-based decision aids are interactive. The second field, that of consumer research, deals with consumer value. The previous theory we chose in the field of consumer research was the one that was considered most relevant to contribute to fulfilling the purpose. This regarded experiential consumer value, again because we considered that value creation is about interaction and thus also an experience. Together, these three fields of theory formed the theoretical foundation for this study and were used to develop the conceptual model presented in this thesis, which aided the analysis and interpretation of empirical data.

3.4 Research design and strategy

According to Bryman and Bell (2011), the design of a research aims at providing a framework for how the empirical and analytical work of a study is to be carried out. This implies the importance of choosing a design that aligns with the research philosophy. The philosophy that formed the basis of this study was interpretivism. Interpretivism is based on understanding rather than explaining human behavior, which led us to an exploratory research design. Furthermore, since the purpose of this study was to *explore* how consumers experience the role of AI-marketing within the scope of the online customer journey, it further indicates the exploratory nature of the present study. The study is also *qualitative* in its nature, which is a strategy that has been linked to the interpretivism approach as well (Lind, 2019). According to

Bryman and Bell (2011), research strategies can either be *qualitative* or *quantitative*, and forms the general focus of the drive for business research (Bryman & Bell, 2011). The qualitative research strategy was seen to present appropriate methods, such as focus groups, which suited the purpose of the present thesis. Qualitative strategies are characterized by the desire to understand social interactions and what phenomena mean in that context (Rennstam & Wästerfors, 2015), which further indicates the relevance of such a strategy to be used in this thesis.

One of the advantages of qualitative strategies is that they provide nuanced descriptions of complex phenomena (Bryman & Bell, 2011; Denscombe, 2018; Lind, 2019). We considered AI-marketing as a complex phenomenon, based on the wide variety of usage and the complexity of its constructions. And to be able to understand how consumers experience the role of AI-marketing in consumers' value co-creation process in-depth, we found it most advantageous to use a qualitative strategy. Another advantage of qualitative methods is that they are characterized by being flexible, enabling the researcher to change direction during the research process. In quantitative methods, the researcher does not have these possibilities (Bryman & Bell, 2011). It was important for us to remain flexible during the process, due to the complexity of the phenomenon studied in combination with the explorative nature of our purpose. However, two disadvantages of qualitative methods are that they can be subjective and impressionistic. Qualitative results often rely too much on the researcher's unsystematic view of what is important and that close relationships arise between the researcher and the people that are being studied (Bryman & Bell, 2011). Nevertheless, since we wanted to explore the phenomenon in the current context, and provide insight and understanding rather than provide generalizable results, a qualitative strategy was most appropriate for this study.

3.5 Data collection

Based on the purpose and research question of this thesis, we decided to use three focus groups online as a qualitative method to get an insight into how consumers experience the role of AI-decision aids in their value co-creation process during their online customer journey. *Focus groups* are a semi-structured group interview that is used to examine perceptions, attitudes, and feelings on a specific topic. According to Denscombe (2018), the interviewer has a list of topics to be covered during semi-structured interviews. Nevertheless, those interviewed have the opportunity to develop their ideas and provide open answers. The group participants are

brought together by a so-called moderator, who facilitates the progress of the discussion (Denscombe, 2018). Focus groups can be useful when the purpose is to capture interactions between participants and obtain more open responses and reflections (Bryman & Bell, 2011; Denscombe, 2018). The interaction helps the researcher to understand reasoning based on the opinions expressed by the participants, which gives insight into both *what* participants think and *why* they think like that (Denscombe, 2018). This was important for our study as we wanted to explore consumers' value creation regarding the influence of AI-based decision aids. Therefore, a focus group method was considered most appropriate. Due to the prevailing COVID-19 pandemic, *online focus groups* were chosen to avoid physical contact and potential spreading of the virus. According to Bryman & Bell (2011), online focus groups can be either *synchronous* or *asynchronous*. Synchronous online focus groups are accomplished in real-time, while asynchronous online focus groups can be conducted for a more extended period. It was considered most appropriate to use synchronous online focus groups since our study was conducted for a relatively short period of time. Another reason was to ensure a sufficient number of participants, as asynchronous online focus groups can cause participants to deviate from the study if it is too time-consuming (Bryman & Bell, 2011).

There are both advantages and disadvantages with the use of focus groups, both in general as well as regarding those held online. The focus group method in general, allows participants to listen to other participants in the group to get ideas and inspiration if they have difficulty coming up with reflections, which is an advantage stated by Bryman and Bell (2011). Denscombe (2018) explained that focus group discussions could lead to the participants either agreeing or showing essential differences in views. He further stated that both could be valuable for a study, as these discussions provide the researcher with data on many viewpoints and perceptions of the topic (Denscombe, 2018). It was believed that the use of this method would provide us with participants' viewpoints and perceptions, as well as their arguments for these. Since the method is discussion and interaction based, it means that participants need to defend their viewings and opinions in the conversations with each other. However, according to Denscombe (2011), trust within the group is needed in order to facilitate this in the most successful way, which we aimed at creating.

Since we had the focus group interviews online, participants did not have to go to a specific place to participate. Instead, they could choose the place that best suited them. This was believed to make participants feel more safe, and thus increase the feelings of trust.

Furthermore, overcoming geographical distance is mentioned by Bryman and Bell (2011) as advantageous when using online focus groups. For this study, it was convenient in the times of the COVID-19 pandemic, as the government advised people to work from home as far as possible to minimize the spread of infection (Krisinformation, 2020). Another advantage of online focus groups is that they are seen to be time-effective and cost-effective (Bryman & Bell, 2011). Since we used online focus groups, we did not have to pay for travel for participants to get to a specific location and we also increased the chances of getting people to participate, since they did not have to spend any time traveling.

Apart from the advantages of focus groups, some disadvantages need to be addressed. Firstly, there may be a time gap between the questions and answers depending on different internet connections, which may affect the views expressed by a participant. However, it can be beneficial, as the other participants have time to think (Denscombe, 2018). To counteract this, we urged participants to ensure that they had access to a good internet connection. Secondly, participants may also be distracted by something that the moderator is not aware of, which may lead the moderator to continue to ask questions as if he/she has the participant's full attention (Bryman & Bell, 2011). To overcome this, we made sure that we listened carefully to the participants and the discussions, as well as carefully watched their videos in order to interpret the moods of the participants. We were also careful to find ourselves in calm, quiet spaces to avoid distracting the participants in any way through our environments during the interviews.

Another disadvantage with focus groups is that the discussions can float away from the subject (Denscombe, 2018). However, this could also be advantageous, as the moderator does not have to push the participants to talk. As previously mentioned, the moderator's role is to facilitate the discussion and not lead it (Denscombe, 2018). Therefore, it is preferable if the focus group participants take control of the discussion, as long as the participants discuss within the topic (Bryman & Bell, 2011). During one of our sessions, the discussion floated off-topic for a couple of minutes. However, since we were well on time, we let the discussion continue in order to facilitate the flow of the overall discussion, similarly to what is described by Denscombe (2018). Despite the disadvantages just mentioned, we believe that the advantages outweigh the disadvantages and that the method will serve the purpose of this thesis.

The three online focus group sessions were held through the online meeting platform *Zoom*. This platform was chosen due to its convenience, as it did not require any particular software.

In this way, participants were not compelled to download programs to their computers that they did not want. According to Bryman and Bell (2011), requirements of certain computer programs could be perceived as inconvenient by participants. Each focus group discussion was recorded by using the recording-tool in Zoom. Four to six people participated in the sessions, since we wanted the number of participants to be low. Having too many participants in a group interview can mean a risk of the discussion becoming unmanageable (Bryman & Bell, 2011; Denscombe, 2018). According to Bryman & Bell (2011) and Denscombe (2018), a reasonable number of participants in a focus group are six to eight participants in order to capture a range of views and opinions from the participants. One of our focus groups consisted of only four people, which might be too few participants in order to start and keep a discussion going. However, smaller focus groups make it possible for more shy people to come forward and participate in the discussion (Bryman & Bell, 2011). Moreover, Denscombe (2011) stated that the number of participants could be lower than six in focus groups in small-scale research projects, which we believe that our thesis can qualify as. Each session lasted for about an hour. Denscombe (2018) stated that focus groups are usually around 30-120 minutes, which indicates that one hour is an appropriate time frame for our focus group sessions. The date, time and participant number of the focus groups are summarized in *Table 4* below.

Table 4

Focus groups

Group	Date	Time	Number of participants
1	2021-05-05	18.30 - 19.31	6
2	2021-05-06	10.00 - 10.58	4
3	2021-05-06	18.32 - 19.21	6

3.5.1 Participant selection

Since the aim of this study was to explore how consumers experience the role of AI-marketing within the scope of the online customer journey, including how both positive and negative aspects of AI-based decision aids influence consumers' value co-creation, it was most appropriate to ask consumers about their experiences and perceptions. First and foremost, a convenience sample was used, which is a selection method that is based on the researcher's convenience. This means that the researcher chooses the selection based on advantageous

alternatives due to a lack of time or resources (Denscombe, 2018). At first, the plan was to try to get in touch with people in another way, but due to a lack of time, this became the most advantageous option for the study at that time. A convenience selection is fast, cheap and time-efficient according to Denscombe (2018), which were the biggest reasons for why that method was used. However, a problem with convenience sampling is that the results can not be generalized due to the uncertainty of which population the sample represents. But since the purpose of this study was to explore and provide insights rather than to provide generalized results, this was not considered an obstacle to this choice of method.

Based on convenience sampling, 30 people were contacted via *Facebook*, all of which we were somewhat acquainted with. We chose to contact these people because they were considered most likely to accept the request and fulfill the criteria for the study. To be included in the study, they needed to meet two criteria; be between the ages of 15-75 years old and have shopped from an established online retailer at some point in the last three months. The age criterion was chosen in order to capture as many perspectives as possible. Fourteen people declined to participate in the focus group due to lack of time, did not respond to the inquiry or did not fulfill the criterion of being active in e-commerce. Seven people who declined due to the latter reason, were all of those between 40-60 years old that were asked. Three women between 20-30 years old declined due to a lack of time. The remaining four people who chose not to participate were men between 20-35 years old who were either not active consumers in e-commerce or had the time to participate. Finally, three focus groups were constructed where two of the groups consisted of six participants and one of four participants. In one of the groups, two men participated, and the rest of the participants were women. All participants were between 20-31 years old. At first, the idea was to choose a sample with mixed ages and genders, as it could explore different perspectives, but due to time pressure, we chose to use the present sample. However, the homogeneity is seen as a limitation and is further addressed under heading 3.8 *Limitations*.

Most participants in each group were acquainted with another participant before the focus groups. This had two reasons. The first regards the selection method of convenience sampling. It was most convenient to contact people we already knew, which also meant that several of those we contacted were acquainted with each other from before. The second reason was that trust had been found to be an important part of a successful focus group (Denscombe, 2018). Participants must feel safe together to be able to express their opinions and views (Denscombe,

2018). Therefore, it was believed that it would make participants feel more comfortable and have easier to talk to each other if they were familiar with someone else in the group. Moreover, group interviews are based on group dynamics and the researcher wants to promote the participants' ability to participate, express opinions, and reflect (Bryman & Bell, 2011). Since we were inexperienced in moderating focus groups, and thus also in building trust between strangers in an interview situation, it was considered most favorable to put together the focus groups based on the participants' relationships to each other. However, all participants in each group did not know each other prior to the focus groups. The participants of the three focus groups are summarized in *Table 5* below.

Table 5

Summary of focus group participants

Group	Gender	Age	Occupation	Participant
1	Female	26	Student, full-time worker	A
	Female	24	Student	B
	Female	24	Maternity-leave	C
	Female	29	Full time worker	D
	Female	28	Full time worker	E
	Female	25	Full time worker	F
2	Female	23	Student	G
	Female	27	Student	H
	Female	23	Student	I
	Female	23	Student	J
3	Male	23	Student	K
	Female	23	Student, full time worker	L
	Female	25	Full time worker	M
	Female	25	Full time worker	N
	Female	23	Student	O
	Male	31	Full time worker	P

3.5.2 Focus group guide

The three focus groups were conducted with the assistance of a semi-structured interview guide (Appendix A and B) consisting of thirteen main questions and three follow-up questions. The guide and the discussions were built around two cases presenting two different, fictive online customer journeys describing interactions with different types of AI-based decision aids. The cases, including related questions, formed the basis of the discussions. Before the discussions began, participants were informed about the purpose of the focus group as well as the study. Consent for recording the interview was also asked for and the participants were informed that their integrity would be protected due to anonymity in the thesis. The first phase of the focus group interviews included a warm-up round where participants introduced themselves. They were also asked to tell which online retail store was their favorite. This question acted as an ice-breaker question to make participants a little more comfortable.

After the introduction and background followed the case discussions. The first case was read by one of us, which was a broad case that more generally presented several AI-based decision aids in an online customer journey (Case A, Appendix A). The aids that the case described regarded customized advertisement, customized content, AI-powered chatbots and personal product recommendations. After that, the participants were asked about which thoughts and feelings the case provoked. They were encouraged to think for themselves first and then vote through the interactive voting tool *Mentimeter*¹ on the events in the presented customer journey, if these were believed to be positive or negative for the consumer in the case. Thereafter, the participants were asked to explain *why* they considered the phenomena positive or negative. With these questions, the aim was to capture participants' overall opinions, thoughts and reflections regarding AI-marketing in general as well as on the specific AI-based decision aids in the case. In the conceptual model, co-creation and co-destruction were believed to contribute to the outcome of four different value types. Therefore, we also aimed at exploring how the participants co-created or co-destroyed value through the use of such AI-based decision aids, as well as which types of values these contributed to.

Directly after the first case followed the second case. This case focused on customized content on webshops and also described personalized emails that included personal discounts and product recommendations (Case B, Appendix A). For the second case, the questions were a bit

¹ www.mentimeter.com

deeper and required participants to think from different angles, in order to capture as much data as possible. Similar to the first case, participants were asked about which thoughts and feelings the case provoked, which was freely discussed amongst participants. We intended to capture value co-creation or co-destruction as well as which values that could be the outcomes, as these were the main concepts of the conceptual model. They were also asked how they felt about the company, which aimed at capturing consumers' perceptions of a brand or a company that uses AI-based decision aids and if it is considered to contribute to value co-creation or co-destruction. The participants also received two questions with two other scenarios based on the same set of AI-based decision aids described in the case, where they had to reflect on whether their previously discussed thoughts and feelings persisted or changed. This aimed to explore their perceptions from two additional perspectives.

Further, we asked about their thoughts on customized and personalized content in general. Lastly, they were encouraged to visit Mentimeter and send in as many advantages and disadvantages as possible of the phenomena discussed throughout Case B, then discuss all of those sent in, and lastly agree on the three most important ones in those two categories. The purpose of having them discuss the advantages was to see which values that could be created for consumers and how they were co-created in the interactions with AI-based decision aids. Asking about the disadvantages were aimed at exploring co-destruction as well as the negative effects of AI-based decision aids. The purpose of basing the discussions on two cases was to present participants with a way of grasping the complexity of how AI-marketing is used in the e-commerce environment and through the online customer journey. We aimed to make the cases as generic as possible, to increase the chances of recognition within participants, as this was seen as important in order to capture consumers' perceptions of AI-based decision aids.

The last phase of the focus groups included four questions about participants' reflections of their own experiences of AI-marketing. These questions aimed at capturing eventual negative effects of AI-based decision aids and how these contribute to co-destruction of value, participants' views on being co-producers of the AI-based decision aids instruments, as well as their views on being co-creators of value. Since we had a deductive approach, the questions were shaped based on theory and the conceptual model. Lastly, we expressed our gratitude towards the participants and thanked them for their commitment and contribution to our thesis.

3.6 Data analysis

All three focus groups were recorded with the verbal consent of the participants, and the data was later transcribed. Transcription has been found to be very time-consuming (Bryman & Bell, 2011). With this in mind, the online transcription tool *oTranscribe*² and its feature of playing audio in a slower tempo were used in order to facilitate the transcription and make it as efficient as possible. The transcribed material from all three focus groups constituted 33 pages. The focus groups were held in Swedish and, therefore, the quotes that are presented in the fourth chapter had to be translated into English. Bryman and Bell (2011) stated that qualitative data could be difficult to analyze and interpret as there is often an overflow of data that comes from qualitative methods. Therefore, the data were systematically coded to facilitate the analysis and the interpretations. A *thematic analysis* was conducted, which Bryman and Bell (2011) described as a method that is based on the search for recurring topics in the empirical data, that relates to the focus of the research. There are different ways of approaching a thematic analysis (Auckland University, 2020) and for this thesis, a deductive reflexive approach was used. A *deductive reflexive thematic analysis* means that coding is directed by existing concepts (Auckland University, 2020). This was seen as the most suitable method for this study, as the labels presented in the conceptual model (Figure 1) guided the coding of the data. However, before we began coding, we got familiar with our empirical material by listening to the audio recordings and reading the transcriptions. This can be helpful in order to understand the empirical data in its context (Denscombe, 2018).

After becoming immersed in the content of the data, the first phase of the coding process began. The data was coded by using a color method which meant that different colors represented different labels of the conceptual model. In this way, it was easier to gain an overview of the material as a whole. In the coding process, the types of values that consumers created were actively searched for and these were labeled *Playfulness*, *Aesthetics*, *Consumer Return on Investment (CROI)* and *Service excellence*. These values were also labeled as positive or negative to be able to distinguish between co-created values and co-destroyed values. Since part of the purpose of this study was to explore how both positive and negative aspects of AI-based decision aids influence consumers' value co-creation, sentences that indicated co-creation of value through the experience of AI-decision aids were labeled *co-creation*. Those

² www.otranscribe.com

that indicated destruction of value were labeled *co-destruction*. Through this, the aim was to identify how the AI-based decision aids contributed to creating or destroying consumers' value. Lastly, we searched for sentences that indicated that consumers saw themselves as being co-producers of value. These were labeled *co-producers*. However, even if we coded by using labels from the conceptual model, we were open for other recurring themes as well. During the coding, we found one recurring theme. This theme captured a fifth value that was not described in the conceptual model. It was a value type regarding care for the environment and was coded with the label *Altruistic*.

The second phase of the coding process consisted of a second-round coding with an inductive reflexive approach. An *inductive reflexive thematic analysis* means that existing concepts and ideas in the empirical material control the coding and development of themes (Auckland University, 2020). A second-round coding was performed on the four value-categories presented in the previous paragraph, in order to find subcategories within these values. The subcategories captured both different aspects, as well as different emotions. Those we found under Playfulness were *Inspiration, Fun, Desire to Explore, Interest, Boring, Uninspiring* and *Limiting*. In Aesthetics, we found *Personal, Unique, Disruptive, Distracting* and *Annoying*. The subcategories of CROI were *Save Time, Save Money, Overspending* and *Wasting Time*. Lastly, *Relevance, Convenience, Reminders, Misleading* and *Irrelevant* constituted those of Service Excellence. A second-round coding was also performed on the coding of Co-destruction. Part of the purpose of the present study was to explore how both positive and negative aspects of AI-based decision aids influence consumers' value co-creation and in the conceptual model, the negative effects were believed to contribute to the destruction of consumer value. Therefore, the inductive thematic approach was used to identify themes of negative effects that contributed to value co-destruction and were labelled *Integrity Violation, Manipulation* and *Autonomy Deprivation*.

3.7 Trustworthiness

Trustworthiness is a criterion for how good a qualitative study is. Trustworthiness consists of four criteria, which are parallel to the criteria of quantitative studies; credibility, transferability, dependability and confirmability (Bryman & Bell, 2011). *Credibility* refers to how acceptable the results of the researcher's study are. In addition, credibility means that the study's qualitative data have been checked and produced with good practice (Bryman & Bell, 2011;

Denscombe, 2018). According to Denscombe (2018), one of the advantages of qualitative studies is that the findings are largely built upon empirical data and fieldwork. The fieldwork in our context is referred to as time spent reviewing the collected data (Denscombe, 2018). Since we have spent much time carefully analyzing and trying to understand our empirical data, it contributes to the credibility of our study.

Transferability represents applicability of the results in other contexts or in the same context at another time (Bryman & Bell, 2011). To increase the transferability of this study, we tried to give rich and detailed descriptions of the approach and method used, as well as of the results. Bryman & Bell (2011) explained that the researcher should give "thick descriptions" to increase the transferability of the study, which we aimed to do. *Dependability* regards if the results are applicable at other times, which means that all phases of the research process are kept in an accessible way (Bryman & Bell, 2011). We maintained interview guides, interview recordings, transcripts, and other data collected in an accessible way on our devices to increase the dependability of this study. Lastly, *confirmability* means that the researcher has not allowed personal choices to influence the research and its results (Bryman & Bell, 2011). We strived to be transparent in the research process to not influence the results with our own opinions in order to increase the confirmability.

3.8 Limitations

There are some limitations with the methods used in this thesis that could influence the trustworthiness of the study. Convenient sampling was used to find participants for the focus group interviews. According to Bryman and Bell (2011), the use of this type of selection makes results impossible to generalize as responses from participants cannot be assumed to represent the population. Furthermore, the participant sample was very homogeneous, as 14 out of 16 participants were women and all were between the ages of 20-31 years old. This meant that it did not represent the population, nor could we capture as large a variety of perspectives as desired. Men and women might think differently in this context, as well as younger and older people might. Therefore, the findings of this study are limited to this age group, and perhaps somewhat to the gender group as well, and can not be assumed to be true for the general population.

4 Findings

In this chapter we will present our empirical findings from the focus group interviews. Since the aim of the present study was to explore how consumers experience the role of AI-marketing within the scope of the online customer journey, including how both positive and negative aspects of AI-based decision aids influence consumers' value co-creation, these findings will also form the basis for further discussion. Firstly, the findings regarding consumers' experience of AI-based decision aids in their value creation process will be presented, including findings regarding consumer value. Secondly, the found negative effects of AI-marketing will be presented. Lastly, findings regarding consumers' role as co-producers will be presented.

4.1 Value co-creation and co-destruction

During the focus group discussions, participants were presented with two cases that described two different online customer journeys (Case A and B, Appendix A). They were then invited to discuss how and why AI-based decision aids, referring to those described in the cases as well as overall in their own online shopping, could be perceived as positive and negative, and which benefits and costs that come with them. The AI-based decision aids presented in the cases included customized advertisement, personal product recommendations, customized content, personal discounts, personalized messages and reminders of various kinds. This section presents the findings regarding these positive/negative perceptions, as well as described benefits/costs, as these were aimed at capturing participants' experiences of value creation through using AI-based decision aids. In the conceptual model, value creation was described to occur in the *interaction* between consumers and service providers, either by *co-creation* or *co-destruction*, referring to if consumers became better-off or worse-off through the interaction (Echeverri & Skålén, 2011; Grönroos & Ravald, 2011; Grönroos & Voima, 2013; Vargo & Lusch, 2016). Under each subheading below, value co-creation and co-destruction are presented and linked to the four types of values described in the model, which were *Playfulness*, *Aesthetics*, *CROI*, and *Service Excellence*. A fifth *Altruistic* type of value was also found, which constitutes a separate subheading as well.

4.1.1 Playfulness value

In the conceptual model, it was believed that a *Playfulness* value could be co-created through the interactions with AI-based decision aids. Mathwick et al. (2001) described the value of Playfulness as intrinsic enjoyment generated from a consumption activity in which a consumer has an active role. Findings showed that the Playfulness value arose during discussions regarding *inspiration* and *fun*, as well as *desire to explore* and *interest*, generated through the use of customized content and product recommendations. Playfulness was also found in discussions about how customized content and product recommendations were *uninspiring*, *boring* and *limiting*.

In all three focus groups, participants agreed that customized content provided them with *inspiration* (Table 6). Participants of Group 1 and 3 concluded that product recommendations that showed different products within the same category as well as of different categories, provided *inspiration*. Participant F also stated that customized content *broadened her view*, which was considered to be *fun* (Table 6). On the contrary, some participants in Group 3 felt that customized content made it *difficult to broaden their views*. In both Group 1 and 3 it was stated that customized content means that consumers *only see what they usually see*. It was described by Participant E in Group 1 as *uninspiring to only see the same goods* (Table 6). However, all three groups still discussed product recommendations in terms of being fun. In Group 1 and 3, participants stated that personalized product recommendations were *fun* if they only intended to scroll around a webshop not looking for any particular product, or did not know what they were looking for.

Several participants in each focus group also mentioned that customized advertisements and personalized product recommendations created interest and helped them explore. As Participant C in Group 1 pointed out, advertisements and recommendations helped her *find new products* that she wanted, which was considered positive. In Group 1 and 3, participants also concluded that it led them to *explore* new websites and brands they did not know existed. In that sense, Participant F stated that customized advertisements helped her find a product that was sold out on the webshop she usually visited, at a webshop she had never heard of before (Table 6). Many participants in the focus groups also pointed out that personalized content aroused interest. As Participant I in Group 2 explained, receiving product recommendations via email, arouses an *interest* which was explained to yield value. The participant also claimed

that customized content could be an excellent way of *getting started* with her shopping and *finding* something nice. Furthermore, participants in Group 3 agreed that they perceived benefits of customization when they visited start pages of webshops, in order to find anything *interesting*. However, customized content was also discussed as boring. Participant K in Group 3 stated that it would be *boring* for a consumer to be *limited to a recommended category*, if it is the only one that appears (Table 6). Similar conclusions were made in Group 1. Participant F stated that customized advertisements were *boring* if they only showed ugly things.

Table 6

Playfulness value

Value type	Subtheme	Illustrative quotes
Playfulness	Co-creation	Inspiration, Fun <i>If I just want to window shop, obviously it's inspiration, it's great [...] fun to broaden your views a bit [...]</i> - Participant F (Group 1)
	Co-creation	Exploration <i>For example, we are looking at new rugs now and thought of buying a new rug from Jotex but it was out of stock. But then it suddenly appeared, after a bit of searching, all of a sudden exactly the same carpets, but on other websites at more expensive and cheaper prices. And in that way we could, like [...] it was out of stock at Jotex but then we could find the same carpet on another website at a better price. -</i> Participant F (Group 1)
	Co-destruction	Boring <i>[...] it's boring in that regard if she doesn't just want to look at floral dresses and if it's the only thing that comes up. Then it's a bit boring for her to look around [...]</i> - Participant K (Group 3)
	Co-destruction	Uninspiring <i>[...] it is uninspiring to only see the same [...]</i> - Participant E (Group 1)

4.1.2 Aesthetics value

An *Aesthetics* value was, in the conceptual model, believed to be co-created/co-destroyed through the interactions with AI-based decision aids. The value of Aesthetics is created when a consumer appreciates the visual elements of an online retail environment, as well as the service performance itself, which includes the entertainment perspective of the retail environment (Mathwick et al., 2001). Findings showed that the Aesthetics value arose most in discussions about content, recommendations and advertisements being *personal* and *unique*. Negative aspects of the Aesthetics value were discussed in terms of customized advertisement and recommendations being *distracting* and *disruptive*, also causing feelings of *annoyance*.

In group 2, Participant J explained that customized content made the shopping experience feel *personal*, since webshops often have so many products (Table 7). Participants in Group 1 were on a similar track and saw the *uniqueness* of customized content as an advantage. Moreover, participants in all groups considered that personal product recommendations were positive because they also felt *personal*, as many stated that they did not want random product recommendations. However, most participants agreed that they sometimes received irrelevant or uninteresting product recommendations, which participants in all three groups described as *annoying*.

Customized advertisement was also discussed in positive terms of being personal. Participant L in Group 3 explained that consumers like advertising more nowadays and do not find it as disturbing as before, because now they feel *personal* (Table 7). However, many participants also discussed negative experiences with customized advertisements. Participant L in Group 3 stated that customized advertisements were *disruptive* and caused her to *lose focus* from what she was actually doing. Similarly, Participant E claimed that she was *distracted* by how some advertisements were presented (Table 7). Customized advertisements and offers were also described by Participant B in Group 1 as *annoying* and “*in the way*” when it appeared at times when she did not intend to shop (Table 7). This was also discussed by participants in Group 3. On the contrary, recommendations and reminders at webshops, i.e., when the intention was to shop, were considered more positive by many participants.

Table 7

Aesthetics value

Value type		Subtheme	Illustrative quotes
Aesthetics	Co-creation	Personal	<i>I still think it's good somehow because there are so many different things online that you can shop and here and there, and lots of different categories. So in that way, it somehow becomes personal anyway.</i> - Participant J (Group 2)
	Co-creation	Personal	<i>I guess it's also personal</i> - Participant L (Group 3)
	Co-destruction	Annoying	<i>I'm not on Facebook to check out costumes, then I want to do something else, then it feels annoying if it comes up there</i> - Participant B (Group 1)
	Co-destruction	Distracting	<i>Maybe the negative thing I experience is how it is presented, not necessarily where [...] it is terrible, terribly disruptive and I am extremely easily distracted.</i> - Participant E (Group 1)

4.1.3 Consumer Return on Investment (CROI) value

In the conceptual model, it was believed that a *CROI* value could be co-created through the interactions with AI-based decision aids. Mathwick et al. (2001) described the value of *CROI* as when a consumer feels that the invested resources provide a return, in the form of economic and efficiency benefits. The *CROI* value was found mainly during discussions about *saving money* and *saving time*, and in the opposite of *overspending* and *wasting time*.

Economic benefits, such as *better prices*, were discussed in all focus groups from the perspective of personalized discounts. Many participants considered it advantageous to *save money* through personal offers. However, many participants claimed that they *bought more than they needed* when they received discount codes and personal offers, which was considered negative in the perspective of *overspending*. Participant M in Group 3 stated that in retrospect, she felt bad that she had *bought so much that month*. Participant I in Group 2 explained that without pop-ups reminding a consumer of products still in the shopping cart, the consumer would forget about the products and keep the money (Table 8). Participants from Group 1 also claimed that it was provocative to be reminded of products if intended to save money, as it was challenging to resist shopping when they received discounts (Table 8). Participant F in Group 1 also described that it could trigger a buying need because she felt that she needed to use her personal discount code before it expired. Nevertheless, some considered that it made them happier and more eager to shop. Participant G in Group 2 said that she often got *discounted prices* on products she usually buys, which she considered positive since she often repurchased those products (Table 8). This was agreed upon by all participants in Group 2. In that regard, however, some participants in Group 3 said it was “bad for the wallet”. Participant N in Group 3 also felt that personal discount codes and personal offers did not matter that much anymore, as it was believed to be possible to get discounts everywhere.

Participants in all focus groups also believed that AI made products *easy to find* and helped them *save time*. This was discussed in all three groups. Participant H in Group 2 explained that she did not have to spend *so much time* searching for products since AI did the job for her (Table 8). Several participants in Group 2 agreed that this was *convenient*, and it was also brought up in Group 3 (Table 8). Moreover, many participants felt that customized content and product recommendations *made shopping easy* and *helped them find* the right products *quickly*.

In contrast, Participant N in Group 3 claimed that consumers might not find products they are looking for due to customized content, which means they have to *look for a longer time*.

Table 8

CROI value

Value type		Subtheme	Illustrative quotes
CROI	Co-creation	Save time	<i>I think it can be quite easy that I do not have to spend a lot of time looking around, but the computer understands that I, or whatever it is, AI understands that I am interested in something, it's like, it does the job for me and I think it's nice because then I don't have to look around. - Participant H (Group 2)</i>
	Co-creation	Save money	<i>They often give out discounts, i.e. discounted products that I have bought before. That is, it is often weekly discounts, so that's usually what I buy and I think that is very positive. - Participant G (Group 2)</i>
	Co-destruction	Overspending	<i>I also think that it can be quite provocative, or a bit compelling, to be kind of reminded, because I might decide that I might want to save my money instead so I shut everything down [...] But if it then comes up again, it is difficult to resist. - Participant B (Group 1)</i>
	Co-destruction	Overspending	<i>But if you had not received a notice that it remains in the shopping cart or something, then you would probably have forgotten about it and then you could have put the money on something else. - Participant I (Group 2)</i>

4.1.4 Service Excellence value

The last value in the conceptual model, that was believed to be co-created/co-destroyed through the interactions with AI-based decision aids, was a *Service Excellence* value. The Service Excellence value was described by Mathwick et al. (2001) as when a consumer perceives that the service provider delivers promises through its expertise and task-oriented performance. The findings showed that the Service Excellence value arose in positive terms when the focus groups discussed *relevance* and *convenience* with product recommendations and customized content, as well as *reminders* via customized advertisements and messages. It arose in negative aspects when these AI-based decision aids were *misleading* and showed *irrelevant* products or advertisements, and were described in terms of annoying, irritating, provocative, compelling and stressful.

In all focus groups, there were discussions about the relevance of product recommendations. Participants in all three groups stated that product recommendations often showed products that they *were interested in* or *were looking for*. Participant F in Group 1 described that product recommendations were often correct, they usually showed her *what she wanted*. Participant E in Group 1 thought it was positive because it *provided information* about different trends before each season. However, several participants in Group 2 and 3 agreed that product recommendations were also *irrelevant* sometimes. Two participants described how they got recommendations for products they *were not interested in*, just because they had viewed those products before, which caused feelings of *irritation* and *annoyance* (Table 9).

Many participants felt that it became *easier to navigate* different websites when they received recommendations. Participant I in Group 2 stated that there are so many products to choose from on webshops these days and that customized content provided *tangible selections*. Customized content was generally discussed in positive terms by all three groups. For example, Participant G in Group 2 explained that customized content *screens out irrelevant products* (Table 9) and Participant F in Group 1 said that it smoothly *helped her find the right products*, as well as complementary products (Table 9). However, Group 1 discussed that when the AI-based decision aids do not function smoothly, meaning that when the participants had to manually search the websites instead of getting the help they expected from the recommendations, it made them feel *annoyed*. It was also stated that if the recommendations do not suit a consumer, it does not create any value. Some participants in Group 3 also explained that if a customer is *misled* into products other than those that the customer was looking for, the customer may *lose focus* and look at products not intended to. In addition, consumers were believed to *miss out on* other products due to the customized content.

Furthermore, findings showed that many participants perceived it as a positive thing to be reminded of products they have viewed but not yet bought, through personalized advertising and personalized messages, as long as it was products they *were still interested in*. Participant N in Group 3 described an example of her contact lenses (Table 9). She needed to buy new ones on a regular basis and felt that personalized advertising helped her remember. However, reminders through customized advertisements, messages and personal recommendations were also discussed in negative terms. Participant B explained that it felt both *provocative* and *compelling* to be reminded through advertisements and recommendations. Several participants agreed that it was *provocative*, while others considered it *annoying* but not compelling. Many

participants also expressed that customized ads, reminders and recommendations can lead to *irritation*. All groups further discussed that all these events to some extent contribute to them feeling *stressed and pressured to buy*. In Group 2 and 3, participants felt that customized ads, reminders and recommendations had the opposite effect of what marketers intended, and made them completely *refrain from shopping*.

Table 9*Service Excellence value*

Value type		Subtheme	Illustrative quotes
Service Excellence	Co-creation	Reminders	<i>[...] it usually comes every three months when it's time to refill and then they help me refill it by popping up. I actually think that's really good. Because then you do not have to think about it yourself. Just after three months, I get new advertising that I need to buy new lenses. - Participant N (Group 3)</i>
	Co-creation	Relevance	<i>I think it's good in the sense that it sifts out what is really not relevant, such as male products or golf stuff, something that is not at all interesting to me. - Participant G (Group 2)</i>
	Co-destruction	Irrelevant	<i>What bothers me the most is that they do not understand once you have bought something, so then you continue to get about the product you bought a week ago. And then I can get irritated. It could have been done a little smarter so that it also senses when you have bought the product, so it would stop, like, remind me [...]</i> - Participant H (Group 2)
	Co-destruction	Irrelevant	<i>[...] you may have searched for something for your brother as a gift or whatever, and then it keeps coming up in the same way, then it's really annoying</i> - Participant N (Group 3)

4.1.5 Altruistic value

In the discussions regarding how AI-based decision aids can be perceived as negative, an *Altruistic* form of value was found. This is a fifth value that was not described in the conceptual model. However, Altruistic value is an established form of value and was described by Holbrook (2006) as the concern of how the consumer's own consumption behavior influences others. Our found value might also be a form of the *Ethics* value presented in Table 2, which is part of Holbrook's (1999) typology of consumer value.

The Altruistic value arose in discussions regarding the environment and how AI-based decision aids, such as customized advertising, product recommendations and personal discount codes, contribute to *overconsumption*, which was considered *bad for the environment* by many participants. Participants described how shopping more than they needed, due to AI-marketing, made them feel *climate anxiety* (Table 10) and how it also gave them an overall bad feeling. The Altruistic value was only found to arise in negative terms. No participant described how any of the AI-based decision aids contributed to any positive forms of Altruistic value.

Table 10*Altruistic value*

Value type		Subtheme	Illustrative quotes
Altruistic	Co-creation	Over-consumption	[...] when I look back at what I bought in the last month, I would feel a little anxiety, from like, just this that you contribute to overconsumption and stuff like that. - Participant N (Group 3)
	Co-destruction	Over-consumption	[...] that you get advertisements all the time and become interested in buying more and more things, and therefore buy more things that you may not really need and that leads in the long run to overconsumption [...] It is quite negative for the environment. - Participant K (Group 3)

4.2 Negative effects of AI-based marketing activities

Through the discussions regarding negative aspects and disadvantages with AI-based marketing and decision aids, we found three themes of negative effects described by participants; *Integrity Violation*, *Manipulation* and *Autonomy Deprivation*. These negative effects could not entirely be connected to the co-destruction of the specific value types, they rather captured participants' perceptions and feelings regarding the use of AI-based decision aids in general.

In Group 1, participants discussed how their *Integrity* was violated by AI-based decision aids. The participants believed that companies could find out a lot of information about individuals nowadays. Most participants in Group 1 perceived this as scary and they felt *monitored* since companies could gather so much information about them by using AI (Table 11). Similarly, Participant N in Group 3 explained that it is *scary how much information* can be obtained from consumers, based on their purchase history. When discussing sharing data with companies,

Participant H in Group 2 stated that she thinks many people are against it and feel *monitored*. The other participants in Group 2 agreed. Participants also brought up specific examples. Participant C in Group 1 explained how she has experienced being presented with personalized advertisements based on products she had spoken about on the phone. She was careful to point out that she had not searched for those products online, only spoken about them. Participant B agreed and described how she had experienced the same thing, only she was not even on the phone but discussing it around the dinner table with her family. This phenomenon was brought up in Group 2 as well. Participant I explained, similarly to Participant C, that she got ads from webshops based on conversations she had on the phone and a major disadvantage with this was that her *integrity was violated*. The other participants in Group 2 all agreed. In Group 3, participants also raised the issue of integrity. Participant K asked if there is any *privacy* online nowadays. Participant P agreed and stated that it felt scary if information about, for example, consumers' location *would be leaked* to “the wrong people”.

Another theme of negative effects found in the discussions was *Manipulation*. All three focus groups discussed that personalized content and advertisements could contribute to consumers buying more things even though they did not need it, which was previously presented regarding the CROI value. Many participants believed that it contributed to stressing and *pressuring* consumers to buy. Participant I in Group 2 stated that she sometimes fools herself that personal reminders, such as pop-ups reminding of products in the shopping cart, are comfortable and convenient. But instead, they *lead her to buy more products* in the long run, than she would have without the reminders, which was considered to be negative (Table 11). Participant H continued and described that recurring and repeated ads and recommendations *affect the subconscious*, which makes you “*fall for the marketing*”. Participants in all groups discussed that AI-based decision aids were provocative and compelling, as previously mentioned in relation to the Service Excellence value. In Group 3, Participant N expressed that this made her feel *chased*. Participants further discussed that they perceived that companies use customized marketing activities for *their own gain*. They believed that companies want to increase sales and therefore use AI-based decision aids.

The last theme of negative effects that we found through the discussions regarded *Autonomy Deprivation*. Participants discussed autonomy in terms of *feeling limited* by customized content. Some participants expressed that customized content made it *difficult to explore new* types of products, which was previously presented regarding Playfulness value. Participant F

in Group 1 stated that consumers do not see the full range of products and “*miss out*” due to customized content. Further, Participant B explained that she likes to use different styles, and if she views products of a certain style, the websites are shaped accordingly, and the *range of other products becomes limited* (Table 11). In Group 1, participants discussed that customized content is based on previous history. Two participants agreed that it is *dangerous* in a way, since it was considered to contribute to *confirming what you are already thinking*. Further in the discussion, this phenomenon was perceived as *controlling*. Participant E stated that it is controlling because consumers only “get what they have”, since content is based on what they have previously liked.

Table 11*Negative effects*

Theme of negative effect	Illustrative quotes
Integrity Violation	<i>[...] instead of just saying disturbing, it is also maybe a little, in the direction of, a little scary even. All Internet sites are so connected to you that everyone can find out really everything about you via your online shopping behaviors. So it's a little scary. - Participant F (Group 2)</i>
Manipulation	<i>[...] you fool yourself that it is comfortable and convenient, but in the long run it will be that you buy more than you would have done in normal cases - Participant I (Group 2)</i>
Autonomy Deprivation	<i>I can enjoy using very different styles, and if you look at a certain garment and a certain style, it feels like all these, that the websites are shaped according to that style from time to time, it feels like my supply of the other goods is limited a bit - Participant B (Group 1)</i>

4.3 Consumers as co-producers of value

Grönroos and Ravald (2011) described consumers as co-producers of value resources. Since AI-based decision aids are based on consumer data (Campbell et al., 2020; Overgoor et al., 2019) to be able to generate value for consumers, the conceptual model considered consumers to be *co-producers* of the value-enabling resources, which was based on the assumptions of Grönroos and Ravald (2011). Findings showed that co-production was discussed in terms of *tactical shopping*, and different types of *collaborations* and *exchanges*.

In the focus group discussions, it was found that consumers sometimes take an active role in trying to influence AI-based decision aids. Two participants in different focus groups stated that they usually actively try to get a discount code. Participant B in Group 1 described that she

sometimes shops “*tactically*” by placing products in the shopping cart without completing the purchase. She then waits a few days because she has noticed that she usually gets a discount code from the company. She pointed out that she would have bought the item regardless but that she usually waits a few days to get a discount code. In Group 2, Participant H described it similarly and explained that she usually keeps products in the shopping cart to see if the companies send any discount codes.

Furthermore, participants discussed how they felt about AI-marketing being based on their data. The findings showed that many participants saw it as a kind of *collaboration* with companies. In one of the discussions, Participant I in Group 2 explained that it was okay for her that companies saved her purchase history *in exchange* for personal discounts and other benefits. Other participants in the group agreed and described that they also saw benefits in sharing their data. In Group 1 and 3, participants also described that they thought it was *good to share their data* to get customized content. The findings further showed that participants felt that they had a *choice*. Some participants stated that they usually *become a member* of different webshops since they enjoy getting personalized offers and advertising. In other words, participants in Group 2 agreed that one can *end one’s customer membership* to avoid receiving customized advertising and messages. In Group 1, Participant C instead described that she usually *refrains from accepting* certain types of cookies in order to avoid customized advertising. Furthermore, several participants in all groups discussed cookies and data collection as something unpleasant. They stated that they saw the benefits for themselves and therefore *agreed to share* their data, but that they simultaneously felt a bit worried that companies would use their data for other purposes that may not benefit the participants themselves.

5 Analysis and Discussion

In this section, we will analyze and discuss the empirical findings that were collected through the focus group interviews and that are notably interesting in relation to the research question of how consumers experience AI-based decision aids in their value co-creation process.

5.1 Analysis of empirical findings

The empirical findings show that AI-based decision aids have a role in consumers' value co-creation process. All four value types in the conceptual model were more or less shown to be both co-created and co-destroyed through the interactions with AI-based decision aids. However, we found it difficult to separate the aspects of co-creation/co-destruction of value from the very outcomes of the value types. These two aspects were so intertwined that we have chosen to discuss them together instead of separately, in order to make sense of our findings.

Firstly, the empirical findings show clear evidence that CROI value could be both co-created and co-destroyed through the interactions with AI-based decision aids. Through these interactions, consumers experienced that they could save both time and money. As Mathwick et al. (2001) described the value of CROI, consumers feel that the invested resources provide returns in the form of both economic and efficiency benefits. The results show that consumers felt that customized content helped them save time because it made it *easy to find* products, and it also made it easier to find the *right* products *quickly*. This is in line with what Kim (2020) stated, that AI-based decision aids search for information faster and easier than consumers, which helps reduce consumers' information search costs. In addition, André et al. (2018) and Bjørlo et al. (2021) argued that it contributes to a more efficient decision-making process and reduces transaction costs as well. This was also proven in this study, as consumers saved money through personal offers and discounts. Consumers explained that they got personal discounts on products they usually bought, which was considered positive. They also actively tried to get discounts by placing products in shopping carts without completing the purchases, in order to save money. In this way, the economic benefits of the CROI value were co-created. However, findings also showed that both economic and efficiency CROI values could be co-destroyed in

the interactions with AI-based decision aids. Some consumers perceived it harder to find products due to customized content which led to the increase of search costs. Moreover, findings also showed that consumers were *overspending* due to personal offers. Consumers explained that they bought more than they needed due to personal offers, which in some cases made them feel bad. Both of these disadvantages indicated that CROI value was co-destroyed.

Secondly, findings clearly showed that AI-based decision aids have a direct role in the co-creation and co-destruction of Service Excellence value. The results showed that AI-based decision aids provided consumers with relevant recommendations and content, which indicated that it met consumers' expectations and contributed to the co-creation of Service excellence value. Previous research stated that AI is useful to offer consumers relevance (Bjørlo et al., 2021; Kim, 2020), which our findings align with. The findings also correspond to what André et al. (2018) and Campbell et al. (2020) described, that AI-based decision aids contribute with relevant product recommendations that are related to consumers' preferences and tastes. Consumers described that AI-based decision aids often showed products that they *were looking for* or *were interested in*, or even *provided information* about up-coming trends that were relevant for the consumer. In addition, the findings showed that consumers felt that it is *convenient* to get product recommendations because it gets *easier to navigate*. Consumers also believed that customized advertisements served as *reminders*, keeping them from forgetting about certain products or brands that they wished to remember. This is in line with what previous research believed (André et al., 2018; Bjørlo et al., 2021; Kim, 2020), that AI-based decision aids are perceived as convenient as they reduce search and decision-making costs, as well as transaction costs as previously mentioned. However, findings also showed that consumers perceived customized content as *misleading* and *irrelevant*. They felt misled into other products than those they were looking for which contributed to the co-destruction of Service excellence value. Consumers described that this brought on negative emotions, such as *irritation* and *annoyance*.

Thirdly, empirical findings showed that consumers experienced that AI-based decision aids *broadened their views* and gave them a *desire to explore* new products and brands, which indicated co-creation of Playfulness value. These findings also support previous research (Campbell et al., 2020; Ma & Sun, 2020; Stone et al., 2020), which believed that AI-based decision aids can help consumers explore which products and brands best suit their desires. Customized content, advertisements and personal product recommendations were further

found to yield *inspiration*, which consumers considered to be *fun*. In that sense, findings further indicated co-creation of Playfulness value through AI-based decision aids interactions. However, whether consumers considered the product recommendations to be fun or not, seemed to depend on their intentions with their webshop visits. It was seen to be the most fun when consumers were not looking for any particular products or if they did not know what they were looking for. Moreover, evidence also showed that consumers found customized content, advertisements and personal recommendations *boring* and *uninspiring* if these did not show the *right things* or only showed the *same type of products*. This indicates that AI-based decision aids can contribute to co-destruction of Playfulness value as well. However, the participant selection upon which the findings were based, consisted almost entirely of women, and all consumers who discussed that AI-based decision aids generated inspiration were female. Therefore, we cannot know if this is a female perspective or not.

Lastly, findings showed indications that AI-based decision aids contribute to consumers' co-creation of Aesthetics value. Consumers emphasized that it was valuable with *personal* and *unique* content, which the AI-based decision aids contributed to. Consumers explained that since webshops have so many products these days, personal product recommendations and customized content created a more personal shopping experience. Customized content and advertisements were also perceived as *distracting*, *disruptive* and *annoying* by consumers. This could indicate that these are connected to the co-destruction of the Aesthetics value. However, it was partly difficult to interpret if the perceptions of customized advertisements regarded advertisements in general or specifically the AI-based aspects of them. Some of the consumer statements could be interpreted as referring to advertisements in general, meaning that they would have been distracting, disruptive and annoying whether they were customized or not. Therefore, we cannot with certainty say that AI-based decision aids contribute to the co-destruction of Aesthetics value.

Part of the purpose of this study was to explore how both positive and negative aspects of AI-based decision aids contribute to consumer value co-creation. Previous paragraphs have discussed co-creation and co-destruction based on specific value types, but findings showed three themes of negative effects that contributed to co-destruction of several value types, or that could not be connected to any of them.

The first theme showed value co-destruction through *Manipulation*. Consumers experienced that personal offers and customized advertisements led them to buy more products even when they did not intend to, which led to overconsumption. This way, an Altruistic type of value was co-destroyed as consumers stated that it gave them climate anxiety. Moreover, findings showed that consumers felt compelled, pressured and lured into buying. This contributed to the co-destruction of Service Excellence value as well, as it was perceived as forceful instead of promise-delivering. The results also showed that consumers believe that companies use AI-based decision aids to sell more products and make more money. These findings agreed with those of Lumbreras (2018), which showed that companies use AI-based decision aids to manipulate consumers into buying specific products and direct them to specific behaviors, to increase sales and revenues. Lumbreras (2018) further found that these behaviours could in some cases be addictive behaviors, which the present study also found indications of. Consumers described how AI-based decision aids triggered buying needs and that they felt compelled to use personal discount codes even though they actually wanted to save their money. In this way, these negative effects are also connected to the CROI value, which is co-destroyed through overspending.

The second theme of negative effects that contributed to consumer value co-destruction regarded *Autonomy Deprivation*. Findings showed that consumers considered that the range of choices was limited by customized content, and that it sometimes made it harder to explore new products, which contributed to the co-destruction of Playfulness value. This indicates that their autonomy was perceived to be affected negatively. These findings agree with both André et al. (2018) and Bjørlo et al. (2021), who found that consumers are deprived of absolute autonomy as AI-algorithms have already made a first choice selection. They also support what previous research found regarding consumers' self-development. AI-algorithms were considered to encourage consumers to repeat previous behaviors instead of evolving (Andre et al., 2018; Bjørlo et al., 2021). We found that consumers believed that customized content in general was confirming their already existing worldview, which was perceived as controlling.

Lastly, findings showed negative effects regarding *Integrity Violation*. These could not be linked to the co-destruction of a specific type of value, as those of Manipulation and Autonomy Deprivation. Rather, they regarded consumers' perceptions of AI-based decision aids in general. Consumers expressed that their integrity was violated and that they felt monitored, since companies can collect so much information about them through their online shopping

behaviors by using AI-based decision aids. This might indicate that consumers' privacy is at risk, which was previously found by both Bjørlo et al. (2021) and Hoyer et al. (2020). They found that profiling and deep insights about consumers' personal attributes were related to privacy risks. Moreover, evidence from the empirical findings also showed that consumers are worried that their information will be leaked to unauthorized persons. If consumers do not feel that AI systems handle their data securely, it can create mistrust (Park et al., 2021), which was shown in our study as well. Consumers were also worried about whether they have any privacy online. Similar concerns were described by Cukier (2020), who stated that consumers are often unaware of how their data is handled which impose privacy concerns. As stated, the negative effects of Integrity Violation could not be connected to any specific value type in the conceptual model. However, since it regards consumer data, it can be connected to consumers' role as co-producers of value resources.

Findings showed that consumers can be seen to have an active role as co-producers of the resources that generate value. Evidence from the empirical findings showed that consumers believed that the benefits they generated through the AI-based decision aids was a collaboration between themselves and the companies. Consumers actively chose to share their data in order to receive customized content, product recommendations and discount codes. Grönroos and Ravald (2011) stated that production and consumption can be seen as partly simultaneous processes in the interaction of service activities, and therefore consumers were argued to be part of the production process as well. Value creation was described to occur in the process of which consumers co-create value-in-use out of the co-produced resources during the interaction with the service providers (Grönroos & Ravald, 2011). In the conceptual model, the production process regarded that consumers shared their data with the service providers and could thereafter create value-in-use of the AI-based decision aids. Findings showed that consumers sometimes shopped "tactically" by placing items in shopping carts and waited a few days in order to receive discount codes. These discount codes were then used to buy the items they placed in the shopping carts, meaning the items they intended to buy in the first place. Therefore, it can be argued that consumers were active in producing the personal discount codes that were later used to buy items at better prices and to co-create CROI value.

Findings also showed that consumers were active in producing the resources that are needed to create both Service Excellence value and Playfulness value. Consumers actively signed up as

members at webshops with the intention of receiving customized advertisement and personal product recommendations. This further indicates that they knew that they could, and also that they wanted to, co-create different types of values together with firms' AI-based decision aids. Mathwick et al. (2001) described that the Playfulness value needs consumers to have an active role as co-producers, which our findings confirmed.

6 Conclusions

In this section, we present a summary of the thesis as well as conclusions about how consumers experience AI-based decision aids in their value co-creation. Thereafter, we will present theoretical and practical contributions, and conclude with a critical review as well as present suggestions for future research.

6.1 Summary of thesis

This thesis explored how consumers experience the role of AI-marketing within the scope of the online customer journey, including how both positive and negative aspects of AI-based decision aids influence consumers' value co-creation. Based on previous research, a conceptual model was constructed to fulfill the purpose. The conceptual model illustrated the online customer journey with a firm sphere that consisted of AI-based decision aids, and a consumer sphere which consisted of four types of consumer value outcomes. The model shed light on how consumers can co-create or co-destroy consumer value in the interactions with firms' AI-based decision aids. In the consumer sphere, consumers were also seen as co-producers of value facilitating resources. A deductive approach was used to understand previous theories, which laid the foundation for the conceptual model as well as the analysis of data. The study used a qualitative research strategy, and collected data through three focus groups with active online consumers. The use of focus groups aimed to explore consumers' experiences and gain a deeper understanding of positive and negative aspects of AI-based decision aids, through the eyes of consumers. Both deductive and inductive thematic analysis were then used to analyze the collected data and identify topics which related to the research question.

The findings indicate that firms' AI-based decision aids influence consumers' value creation in both positive and negative ways. Through the interactions with customized advertisements, customized content, personal recommendations, offers and various on- and off-site messages, consumers can co-create several types of consumer values; CROI, Service Excellence, Playfulness and Aesthetics. The findings also indicate that these values can be co-destroyed as well, with the exception of the Aesthetics value which was not found with sufficient conviction.

We did find, however, that consumers can co-destroy a consumer value of Altruistic character which was not illustrated in the conceptual model. Negative effects of AI-based decision aids, such as manipulation risks and deprivation of integrity and autonomy, contributed to the co-destruction of consumer value. Lastly, the results show that relevance, timing and accuracy is important for consumers' value co-creation with AI-based decision aids and that consumers sometimes actively try to influence the decision aids to their advantage.

6.2 Conclusions

To conclude, the aim of this study was to explore how consumers experience AI-based decision aids in the co-creation of value. Our study indicates that consumers perceive the decision aids both positively and negatively, and that they can both co-create and co-destroy consumer value in the interaction with these. The findings of this study have resulted in three main insights.

Firstly, consumers might not just be puppets of firms' AI-based decision aids, rather they can be argued to be co-creators of value. Consumers experienced that AI-based decision aids are positive in many ways, and they believed that the interactions with these contributed to the co-creation of several types of values. The most prominent of these were economic and efficiency benefits, which indicate co-creation of CROI value, as well as facilitation of information search, which contribute to co-creation of Service Excellence value. These findings agree with André et al. (2018) and Bjørlo et al. (2021) that AI-based decision aids contribute to more efficient decision-making processes, reduce transaction costs and information search costs. The findings also show that AI-based decision aids provide inspiration and invitations to explore new products and brands, which contributes to co-creation of Playfulness value. This also supports previous research (Campbell et al., 2020; Ma & Sun, 2020; Stone et al., 2020), who stated that AI-based decision aids can help consumers explore which products and brands best suit their preferences. The findings further show that consumers believe that AI-based decision aids create personal experiences. This indicates that it can contribute to the co-creation of Aesthetics value.

Secondly, consumers experienced that AI-based decision aids can affect them negatively and contribute to the co-destruction of several types of values. The negative effects of moral and ethical character that was found by previous research (André et al., 2018; Bjørlo et al., 2021; Cukier, 2020; Hoyer et al., 2020; Lumbreras, 2018) was also found to some degrees in the

present study. Through the interactions with AI-based decision aids, consumers sometimes feel manipulated, limited and deprived of their autonomy. The decision aids are experienced as pressuring and controlling, as they push consumers to purchases and narrow their views. Consumers also feel monitored and that AI-based decision aids violate their integrity, since these gather so much data about them. Value co-destruction also occurred when consumers experienced that AI-based decision aids were misleading and made it harder for them to find relevant products, which contributes to co-destruction of Service Excellence value. Findings also showed that AI-based decision aids made it harder to resist from shop unnecessary products, which lead to an overspending of money, and co-destruction of Altruistic value as well as CROI value. Value co-destruction of Playfulness value occurred when AI-based decision aids created boring and uninspiring experiences.

Lastly, our results indicate that the circumstances surrounding consumers' experiences with the AI-based decision aids throughout their online customer journey influence their value creation. Consumers experience AI-based decision aids as the most positive and value-generating when these are smart enough to function smoothly and seamlessly, providing them with what they expect. On the contrary, when the AI-based decision aids are not smart enough, or when they are used too intensively by online retailers, it contributes to the co-destruction of value. The relevance of the content that the decision aids provided consumers, also greatly affects if value is co-created or co-destroyed. This supports previous research, which emphasized consumer relevance in AI-marketing contexts (André et al., 2018; Bjørlo et al., 2021; Kim, 2020). Furthermore, consumers' intentions online also influenced if they co-created or co-destroyed value in the interactions with AI-based decision aids. When they were window-shopping or ready to explore, these were experienced positively. But when consumers' intentions were not set on shopping, these were seen as negative. Moreover, the results indicate that consumers are also co-producers of the value-facilitating resources (Grönroos & Ravald, 2011), as they actively chose to share their data with firms in order to receive customized content, personal product recommendations, and customized discounts and offers.

6.3 Theoretical contribution

Previous research has focused on how AI can negatively affect consumers (Bjørlo et al., 2021; Cukier, 2020; Hoyer et al., 2020; Lumbreras, 2018), and it has also aimed at creating conceptualizations and frameworks for how marketers should use AI in their marketing (Bjørlo

et al., 2021; Campbell et al., 2020). To the best of our knowledge, previous research has not explored consumers' experiences with AI-based decision aids in the online customer journey, from both positive and negative perspectives, as well as consumers' value creation in that context. Therefore, this thesis contributes with new insights of how consumers interact with firms' AI-based decision aids to co-create and co-destroy value, as well as co-produces the value facilitating resources. In addition, the thesis provides insights on which types of experiential values (Mathwick et al., 2001) consumers can create with AI-based decision aids. This thesis also showed that the scope of Service-Dominant Logic and the notion of value co-creation can be a relevant way of exploring value creation in an AI-marketing context. Moreover, Echeverri and Skålén (2011) claimed that co-destruction of value is an important part of value co-creation and our thesis provides support for these claims, since the same types of AI-based decision aids that contributed to value co-creation, also contributed to co-destruction of value.

6.4 Practical contribution

This study provides new insights into how consumers experience AI-based decision aids in their value co-creation process within the scope of their online customer journey. AI-marketing has received much attention the past decades and is believed to significantly impact marketing in the future (Ma & Sun, 2020). If retailers understand how their customers experience and interact with AI-based decision aids, they can use these in the best possible way throughout the customer journey. When developing their marketing strategies, marketers can have great use of understanding that consumers are both positive and negative about AI-based decision aids. Additionally, marketers who are not aware of the benefits that AI can bring in marketing, can gain new insights into the positive aspects that consumers experience. Lastly, as an Altruistic type of value was found regarding overconsumption in relation to environmental issues, marketers and retailers may benefit from having their CSR initiatives and values in mind when developing their AI-marketing strategies.

6.5 Critical review and suggestions for future research

This study explored the role of AI-based decision aids in consumers' value creation through the scope of Service-Dominant Logic and the notions of co-creation and co-destruction, as well as which types of consumer values that could be the outcomes. As we found it difficult to separate the aspects of co-creation/co-destruction of value from the very outcomes of the value

types, future research can aim at finding an approach which makes this separation more evident as it might generate even deeper insights into the topic. Moreover, this study used Mathwick et al.'s (2001) typology of experiential value, which was based on Holbrook's (1999) typology, and found that all four types of value could be co-created and co-destroyed. For future research, it would be of interest to examine Holbrook's (1999) entire typology of consumer value in an AI-marketing context, as we found a fifth Altruistic value that was not described in Mathwick et al.'s (2001) typology. This value can be linked to Holbrook's intrinsic, other-oriented value of Ethics.

AI-marketing is a large and complex phenomenon which indicates that a possible limitation with the present study is that it is small. Therefore, in future research, there is an interest in conducting a more extensive study that examines consumers' value co-creation, as well as the typology of experiential value, in the same AI context. In addition, a homogeneous participant selection was used for this study, which might mean that essential aspects from other types of participants, such as men and older people, were missed. Therefore, future research might also have interest in exploring if men and women create different types of values with the help of AI-based decision aids, as well as how older people experience AI-marketing in their online customer journey. As the results showed that consumers are positive about AI-based decision aids, which differs from what some of the previous research (André et al., 2018; Bjørlo et al., 2021; Cukier, 2020; Hoyer et al., 2020; Lumberras, 2018) has concluded, we believe that there is also an interest in future research to investigate in more detail how consumers experience AI-marketing, from both positive and negative perspectives.

List of References

- André, Q., Carmon, Z., Wertenbroch, K., Crum, A., Frank, D., Goldstein, W., Huber, J., Leaf van Boven, Weber, B. & Yang, H. (2018). Consumer Choice and Autonomy in the Age of Artificial Intelligence and Big Data. *Customer Needs and Solutions*, 5(1), 28-37. <https://doi.org/10.1007/s40547-017-0085-8>
- Anker, T.B., Sparks, L., Moutinho, L. & Grönroos, C. (2015). Consumer dominant value creation: A theoretical response to the recent call for a consumer dominant logic for marketing, *European Journal of Marketing*, 49(3/4), 532-560. <https://doi.org/10.1108/EJM-09-2013-0518>
- Auckland University. (2020). *Thematic analysis - a reflexive approach* <https://www.psych.auckland.ac.nz/en/about/thematic-analysis.html>
- Bjørlo, L., Moen, Ø. & Pasquine, M. (2021). The Role of Consumer Autonomy in Developing Sustainable AI: A Conceptual Framework. *Sustainability*, 13(4), 1-18. <https://doi.org/10.3390/su13042332>
- Bryman, A. & Bell, E. (2011). *Business Research Methods*. 3rd edition. Oxford University Press Inc.
- Campbell, C., Sands, S., Ferraro, C., Tsao, H-Y. & Mavrommatis, A. (2020). From data to action: How marketers can leverage AI. *Business Horizons*, 63(2), 227-243. <https://doi.org/10.1016/j.bushor.2019.12.002>
- Conick, P. (2017, 1 december). *The Past, Present and Future of AI in Marketing*. American Marketing Association. <https://www.ama.org/marketing-news/the-past-present-and-future-of-ai-in-marketing/>
- Cukier, K. (2020). Commentary: How AI Shapes Consumer Experiences and Expectations. *Journal of Marketing*, 85(1), 152-155. <https://doi.org/10.1177/0022242920972932>
- Darmody, A. & Zwick, D. (2020). Manipulate to empower: Hyper-relevance and the contradictions of marketing in the age of surveillance capitalism. *Big Data & Society*, 7(1), 1-12. <https://doi.org/10.1177/2053951720904112>
- Denscombe, M. (2018). *Forskningshandboken: för småskaliga forskningsprojekt inom samhällsvetenskaperna*. 4th edition. Studentlitteratur

- Echeverri, P. & Skålén, P. (2011). Co-creation and co-destruction: A practice-theory based study of interactive value formation. *Marketing Theory*, 11(3), 351-373. <https://doi.org/10.1177/1470593111408181>
- Gao, L. X., Melero, I. & Sese, F.J. (2020). Multichannel integration along the customer journey: a systematic review and research agenda. *The Service Industries Journal*, 40(15-16), 1087-1118. <https://doi.org/10.1080/02642069.2019.1652600>
- Grönroos, C. (2011). Value co-creation in service logic: A critical analysis. *Marketing Theory*, 11(3), 279-301. <https://doi.org/10.1177/1470593111408177>
- Grönroos, C. & Ravald, A. (2011). Service as business logic: implications for value creation and marketing. *Journal of Service Management*, 22(1), 5-22. <https://doi.org/10.1108/09564231111106893>
- Grönroos, C. & Voima, P. (2013). Critical service logic: making sense of value creation and co-creation. *Journal of the Academy of Marketing Science*, 41, 133–150. <https://doi.org/10.1007/s11747-012-0308-3>
- Güngör, H. (2020). Creating Value with Artificial Intelligence: A Multi-stakeholder Perspective. *Journal of Creating Value*, 6(1), 72-85. <https://doi.org/10.1177/2394964320921071>
- Holbrook, M.B. (1999). *Consumer Value - A framework for analysis and research*. Taylor & Francis e-Library. http://eprints.stiperdharmawacana.ac.id/28/1/%5BM._Holbrook%5D_Consumer_Value_A_Framework_for_Anal%28BookFi%29.pdf
- Holbrook, M.B. (2006). Consumption experience, customer value, and subjective personal introspection: An illustrative photographic essay. *Journal of Business Research*, 59(6), 714-725. <https://doi.org/10.1016/j.jbusres.2006.01.008>
- Hoyer, W., Kroschke, M., Schmitt, B., Kraume, K. & Shankar, V. (2020). Transforming the Customer Experience Through New Technologies. *Journal of Interactive Marketing*, 51, 57-71. <https://doi.org/10.1016/j.intmar.2020.04.001>
- Kim, J. (2020). The influence of perceived costs and perceived benefits on AI-based interactive recommendation agent value. *Journal of Global Scholars of Marketing Science*, 30(3), 319-333. <https://doi.org/10.1080/21639159.2020.1775491>
- Krisinformation. (2020, 21 April). *Skärpta nationella råd*. <https://www.krisinformation.se/detta-kan-handa/handelser-och-storningar/20192/myndigheterna-om-det-nya-coronaviruset/nationella-rad>

- Källström, L. (2019). *'A good place to live': Rethinking residents' place satisfaction and the role of co-creation*. Lund Studies in Economics and Management.
- Lind, R. (2019). *Vidga vetandet: teori, metod och argumentation i samhällsvetenskapliga undersökningar*. 2d edition. Studentlitteratur
- Ma, L. & Sun, B. (2020). Machine learning and AI in marketing – Connecting computing power to human insights. *International Journal of Research in Marketing*, 37(3), 481-504. <https://doi.org/10.1016/j.ijresmar.2020.04.005>
- Manser Payne, E.H., Dahl, A.J. & Peltier, J. (2021). Digital servitization value co-creation framework for AI services: a research agenda for digital transformation in financial service ecosystems. *Journal of Research in Interactive Marketing*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JRIM-12-2020-0252>
- Mathwick, C., Malhotra, N. & Rigdon, E. (2001). Experiential value: conceptualization, measurement and application in the catalog and Internet shopping environment. *Journal of Retailing*, 77(1), 39-56. [https://doi.org/10.1016/S0022-4359\(00\)00045-2](https://doi.org/10.1016/S0022-4359(00)00045-2)
- Overgoor, G., Chica, M., Rand, W. & Weishampel, A. (2019). Letting the Computers Take Over: Using AI to Solve Marketing Problems. *California Management Review*, 61(4), 156-185. <https://doi.org/10.1177/0008125619859318>
- Park, S.S., Tung, C-T.D. & Lee, H. (2021). The adoption of AI service robots: A comparison between credence and experience service settings. *Psychology & Marketing*, 38(4), 691-703 <https://doi.org/10.1002/mar.21468>
- Rennstam, J. & Wästerfors, D. (2015). *Från stoff till studie: om analysarbete i kvalitativ forskning*. 1st edition. Studentlitteratur
- Ritzer, G. and Jurgenson, N. (2010). Production, Consumption, Prosumption: The nature of capitalism in the age of the digital 'prosumer'. *Journal of Consumer Culture*, 10(1), 13-36. <https://doi.org/10.1177/1469540509354673>
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5 ed.). Prentice Hall.
- Stone, M., Aravopoulou, E., Ekinci, Y., Evans, G., Hobbs, M., Labib, A., Laughlin, P., Machtynger, J. & Machtynger, L. (2020). Artificial intelligence (AI) in strategic marketing decision-making: a research agenda. *The Bottom Line*, 33(2), 183-200. <https://doi.org/10.1108/BL-03-2020-0022>
- Vargo, S.L. & Lusch, R.F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68(1), 1-17. <https://doi.org/10.1509/jmkg.68.1.1.24036>

Vargo, S.L. & Lusch, R.F. (2016). Institutions and axioms: an extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, 44, 5–23
<https://doi.org/10.1007/s11747-015-0456-3>

Appendix A - Focus Group Guide (Swedish)

Formaliteter

- 5 och 6 maj 2018
- Välkomna alla deltagare
- Förklara att vi kommer fungera som moderatorer under timmen, medan det är deltagarna som kommer diskutera med varandra.
- Informera deltagarna om att intervjun kommer spelas in för att vi ska kunna använda den i analys syfte. Inspelningen kommer bara vara tillgänglig för oss och vår handledare och kommer raderas när analysen är klar, och även att deltagarna kommer anonymiseras i uppsatsen.
Muntligt svar från deltagarna, samtycker ni till att intervjun spelas in?
- Förklara att deltagarna under timmen får tänka högt och diskutera som en grupp.

Bakgrund

- Introducera ämnet och syftet med vår kandidatuppsats
- Förklara att vi kommer gå igenom 2 case som handlar om två olika kundresor online. Företeelserna som de upplever är styrda av automatiserade algoritmer som bygger på AI och konsumentdata. Även, att intervjun avslutas med några frågor om deltagarnas personliga upplevelser.

Inledande fråga

1. Vi ska börja med att vi går laget runt och berättar vad vi heter, hur gamla vi är och vilken vår favorit onlinebutik är.

Case A

Carl behöver en ny beige linnekostym inför sommaren och går därför in på Google och söker på "beige linnekostym herr". Han går in på några av sidorna som Google föreslår och kollar på några av de beiga kostymerna på de olika hemsidorna. Under de kommande dagarna visas annonser med kostymer, varav några annonser är från hemsidorna han besökte för några dagar sedan. Nästan en vecka senare kollar han på Youtube och mitt i videon kommer en annons med kostymer. Det är ett märke han känner till och gillar sedan tidigare och bestämmer sig därför att besöka deras webbshop.

Han klickar in sig på kostymer och filtrerar på färgen "beige". Bland urvalet hittar han en kostym som han tycker om och går in på produkten för att läsa mer om den. Han lägger den i varukorgen direkt för att lätt kunna hitta den sen, och läser sedan om produkten. Han funderar över passformen och noterar att det inte står något om den i produktbeskrivningen. Då går han in bland recensionerna för att få sig en uppfattning om

vad andra kunder tycker. Kostymen har fått bra genomsnittsbetyg men ingen har recenserat passformen. Precis då poppar det upp en liten ruta nere i hörnet. Det är en chattfunktion där Lena från kundtjänst skriver att hon gärna hjälper till om han har några frågor. Han börjar chatta med Lena och får lite information om kostymen, dock inget om passformen utan hon hänvisar hela tiden till deras storleksguide. Han stänger sedan ner chatten då han inte riktigt har tid att kolla på kostymer mer. Han klickar också för att stänga ner hela webbläsaren och när han gör det poppar det upp en ruta som påminner honom om att han fortfarande har produkter i varukorgen. Han tvekar lite, men bestämmer sig sen för att han faktiskt kan chansa på att beställa hem kostymen och prova den. Passar den inte kan han alltid skicka tillbaka den. Han går in i kassan för att slutföra köpet. Där blir han rekommenderad produkter som han kanske vill komplettera kostymen med, däribland en annan beige kostym, en svart kostym, och två olika slipsar.

2. Vi undrar då vad ni tänker och känner när ni hör om Carls historia? Ni ska få rösta om ni tycker att det är positivt eller negativt för Carl.
3. Varför upplever man det som positivt? Alla kan vara med och diskutera hur det skulle kunna upplevas som positivt, alltså inte bara de som svarade positivt.
4. Varför upplever man det som negativt?

Case B

Maria pratar med sin väninna Sara i telefonen som berättar att hon har hittat en blommig klänning som hon funderar på att köpa. Den finns på förstasidan till en webbshop som både Maria och Sara brukar handla från, och Sara ber Maria gå in på webbshoppen för att titta på klänningen. Maria går in på webbshoppen men istället för klänningen ser hon en outfit till barn på förstasidan. När Maria scrollar på förstasidan för att se om klänningen finns längre ner, ser hon bara fler barnkläder och inspirerande bilder från en ny kollektion med barnkläder.

Maria öppnar sidans sökfunktion och söker efter "blommig klänning". Då får hon upp massor med olika blommiga klänningar fast de översta är bara för barn. Hon scrollar igenom ett flertal klänningar och till slut hittar hon den som Sara menar. Hon klickar in på den och säger till Sara att hon skulle passa superbra i den. När Maria några dagar senare ska gå in på samma webbshop, finns några klänningar med på förstasidan. Hon får även ett mail från webbshoppen där det står "Vi saknar dig! Just nu får du 10% rabatt på ditt nästa köp". Längst ner i mailet står det "Rekommenderat för dig" och där visas dels några barnplagg men också ett antal klänningar, däribland den blommiga klänningen som Sara visade henne några dagar tidigare.

5. Vilka känslor eller tankar väcks när ni hör Marias historia?
 - a) Follow-up: Hur hade det påverkat er om ni var kund?
 - b) Follow-up: Vad tänker ni om företaget?
6. Finns det något tillfälle då ni skulle tänka annorlunda om företeelserna? Låt säga att ni blev inspirerade av er kompis Sara och också vill ha en blommig klänning. Vad kan företeelserna skapa för värde då? Varför?
7. Tänk er istället nu att ni inte ska köpa något speciellt utan ni vill bara fönstershoppa och scrolla runt lite. Vad tänker ni om det anpassade innehållet och produktrekommendationerna då?
8. För både Carl och Maria finns anpassat innehåll, i form av anpassade annonser, produktrekommendationer, anpassat innehåll på sidorna hos webbutikerna och personliga erbjudanden. Anpassat innehåll kan också vara anpassade reklaminylägg på Instagram eller Pinterest, och andra sociala medier, eller det kan också vara anpassade nyhetsbrev och meddelanden på mail eller sms. Vad tänker ni generellt om anpassat innehåll?
9. Nu ska ni var och en skicka in fördelarna ni ser med anpassat innehåll. Ni får gärna skicka in så många som ni kommer på. Kan ni tillsammans enas om topp 3 största fördelarna?
10. Nu ska vi göra samma sak med nackdelarna. Skicka in de nackdelar ni ser med anpassat innehåll. Även här får ni gärna skicka in så många ni kommer på. Kan ni tillsammans enas om topp 3 största nackdelarna?

Personliga upplevelser och avslutande frågor

11. Varför tror ni företagen använder AI i deras marknadsföring?
12. Alla de AI-baserade företeelserna som vi har pratat om idag, utifrån Marias och Carls historier, är baserade på data som företagen har samlat in eller köpt in. Dels konsumentdata generellt men också personlig data för varje specifik kund. Vad tänker ni om det?
13. Om vi påstår att ni genom att dela med er av er data, hjälper företagen att erbjuda er anpassat innehåll, personliga rekommendationer och relevant innehåll, vad tänker ni då?
14. Hur upplever ni generellt AI och algoritmbaserade marknadsföringsaktiviteter, alltså liknande de vi har pratat om idag utifrån casen, i ert egna online-shoppande, ?
 - a) Har ni haft nytta av dem någon gång? Varför/på vilket sätt?

Appendix B - Focus Group Guide (English)

Formalities

- 5th and 6th of May 2018
- Welcome all participants to the session
- We explain that we will act as moderators during the hour, and that it is the participants who will discuss with each other.
- We inform participants that the interview will be recorded for analysis purposes. The recording will only be available to us and our supervisor and will be deleted when the analysis is complete. The participants will also be anonymous in the essay.
- Oral consent from the participants, do you agree to the interview being recorded?
- We explain that participants can think aloud and discuss as a group during the session.

Background

- We introduce the subject and purpose of our bachelor thesis
- We explain that we will describe 2 cases about two different customer journeys online. The phenomena they experience are powered by automated algorithms based on AI and consumer data. Also, the interview ends with some questions about the participants' personal experiences.

Introductory question

1. We will start by introducing ourselves with our names, how old we are and which our favorite webshop is.

Case A

Carl needs a new beige linen suit for the summer and therefore, goes to Google and searches for "beige linen suit men". He visits some of the pages that Google suggests and looks at some of the beige suits on the various websites. In the coming days, ads with suits are displayed, some of which are from the websites he visited a few days ago. Almost a week later, he watches Youtube, and in the middle of the video, an ad appears showing suits. It is a brand he is familiar with and likes from before and therefore, decides to visit their webshop.

He clicks on suits and filters on the color "beige". Among the selection, he finds a suit that he likes and clicks on the product to read more about it. He puts it in the shopping cart directly, so he can easily find it later, and then reads about the product. He wonders about the fit and notes that it does not say anything about it in the product description. Then he turns to the reviews to get an idea of what other customers think. The suit has

received a good average rating, but no one has reviewed the fit. Just then, a small pop-up appears in the corner. It is a chat function where Lena from customer service writes that she is happy to help if he has any questions. He starts chatting with Lena and gets some information about the suit, but nothing about the fit, but she constantly refers to their size guide. Then, he closes the chat as he does not really have time to look at suits anymore. He also clicks to close the entire browser and when he does, a pop-up reminds him that he still has products in the shopping cart. He hesitates a bit, but then decides that he can actually take a chance on ordering the suit and try it on at home. If it does not fit, he can always return it. He goes to the checkout to complete the purchase. There, he is recommended products that he may want to complement the suit with, including another beige suit, a black suit, and two different ties.

2. What do you think and feel when you hear about Carl's story? You will vote if you think it is positive or negative for Carl.
3. Why do you experience it as positive? Everyone can participate and discuss how it could be perceived as positive, i.e. not just those who answered positively.
4. Why do you experience it as negative?

Case B

Maria talks to her friend Sara on the phone, who tells her that she has found a floral dress that she is considering buying. It is on the front page of an online shop that both Maria and Sara usually shop from, and Sara asks Maria to go to the online shop to look at the dress. Maria goes to the webshop, but instead of the dress she sees an outfit for children on the front page. When Maria scrolls on the front page to see if the dress is further down, she only sees more children's clothes and inspiring pictures from a new collection of children's clothes.

Maria opens the page's search function and searches for "floral dress". Then she sees lots of different floral dresses, although the top ones are only for children. She scrolls through several dresses and finally she finds the one that Sara means. She clicks on it and tells Sara that she would fit super well in it. When Maria goes to the same web shop a few days later, there are some dresses on the front page. She also receives an email from the webshop where it says "We miss you! Right now you get a 10% discount on your next purchase". At the bottom of the email it says "Recommended for you" and it shows some children's clothes but also a number of dresses, including the floral dress that Sara showed her a few days earlier.

5. What feelings or thoughts are aroused when you hear Maria's story?
 - a) Follow-up: How would it have affected you if you were the customer?
 - b) Follow-up: What do you think about the company?
6. Is there any occasion when you would think differently about the phenomena? Let's say that you were inspired by your friend Sara and also wanted a floral dress. What value can the phenomena create then? Why?
7. Now, imagine that you are not shopping for anything special but you just want to window shop and scroll around. What do you think about the customized content and product recommendations then?
8. For both Carl and Maria, there is customized content, in the form of customized ads, product recommendations, customized content on the pages of the webshops and personal offers. Customized content can also be customized advertising posts on Instagram or Pinterest, and other social media, or it can also be customized newsletters and messages by email or text message. What do you generally think about customized content?
9. Now you should each submit the benefits you see with customized content. Can you agree on the top 3 biggest benefits together?
10. Submit the disadvantages you see with customized content. Can you agree on the top 3 biggest disadvantages together?

Personal experiences and concluding questions

11. Why do you think companies use AI in their marketing?
12. All the AI-based phenomena we have talked about today, based on Maria and Carl's stories, are based on data that companies have collected or purchased. Partly consumer data in general but also personal data for each specific customer. What do you think about that?
13. If we claim that by sharing your data, you help companies offer you customized content, personal recommendations and relevant content, what do you think about that?
14. How do you generally experience AI and algorithm-based marketing activities, i.e. similar to the ones we have talked about today during the case discussions, in your own online shopping?
 - a) Have you ever benefited from them? Why and in what way?