



Fashioning the Future: Can AI-Enabled Fashion Rental Platforms Drive Sector Disruption?

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Abstract

The fashion rental model aims to attract customers by offering possibilities to experiment with styles, while consuming sustainable. As fashion rental companies lack widespread success, companies are searching for ways to captivate potential customers. Generative artificial intelligence in the fashion market has gained attention in recent times, and companies are trying to leverage its features to offer their customers an advanced experience. This thesis explores the transformative impact of AI on the fashion rental sector, focusing on its ability to reshape consumer attitudes and potentially drive sector disruption. A review of the literature addressing fashion rental, AI, diffusion of innovation, first mover advantages and consumer adoption intention was conducted to gain secondary data. Primary data was collected through expert interviews and a survey. Finally, secondary data and primary data were triangulated, and possible future scenarios were created. Results revealed that mass adoption will likely not be reached by integrating AI in the customer journey, with AI features not leading to sector disruption. However, there exists a target group that is willing to heighten their willingness to adopt when presented an AI-enabled platform. Offering companies the opportunity to focus on the expansion in an existing niche market in which the business model itself is accepted by consumers.

Keywords: Fashion rental, Artificial Intelligence, Consumer Adoption, Digital Fashion, Fashion Innovations

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Sumário

O modelo de aluguer de moda visa atrair clientes, oferecendo possibilidades de experimentar com estilos, ao mesmo tempo que consome de forma sustentável. Como as empresas de aluguer de moda não têm sucesso generalizado, as empresas estão à procura de maneiras de cativar potenciais clientes. A inteligência artificial gerativa no mercado da moda ganhou atenção nos últimos tempos, e as empresas estão a tentar aproveitar os seus recursos para oferecer aos seus clientes uma experiência avançada. Esta tese explora o impacto transformador da IA no sector do aluguer de moda, concentrando-se na sua capacidade de remodelar as atitudes dos consumidores e potencialmente impulsionar a ruptura do sector. Realizou-se uma revisão bibliográfica sobre aluguer de moda, IA, difusão da inovação, vantagens do primeiro movimento e intenção de adoção do consumidor para obtenção de dados secundários. Os dados primários foram coletados através de entrevistas com especialistas e de uma pesquisa. Finalmente, os dados secundários e primários foram triangulados, e possíveis cenários futuros foram criados. Os resultados revelaram que a adoção em massa provavelmente não será alcançada através da integração da IA na jornada do cliente, sem que as funcionalidades de IA conduzam a uma perturbação do sector. No entanto, existe um grupo-alvo que está disposto a aumentar a sua disponibilidade para adoptar uma plataforma habilitada para IA quando lhe for apresentada. Oferecer às empresas a oportunidade de se concentrarem na expansão de um nicho de mercado já existente em que o próprio modelo de negócio é aceite pelos consumidores.

Palavras-chave: Aluguer de moda, Inteligência Artificial, Adoção pelo consumidor, Moda digital, Inovações na moda

Título: Fashioning the Future: Poderão as plataformas de aluguer de moda com recurso à IA impulsionar a disrupção do sector?

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List of Abbreviations

AI	Artificial Intelligence
DL	Deep Learning
DOI	Diffusion of Innovation
GAI	Generative Artificial Intelligence
ML	Machine Learning
PSAP	Product Specific Adoption Potential
RQ	Research Question
TAM	Technology Acceptance Model
UK	United Kingdom
VAM	Value-based Adoption Model

1. Introduction

Fast fashion consumer behaviour fuels practices that tend to be unsustainable, wasting valuable resources and polluting our environment (Lang, Li, and Zhao, 2020). Introducing a circular usage model, where items are rented for specific durations, presents an innovative strategy to reshape consumer behaviour in the fashion industry. Despite its potential, fashion rental services have not gained widespread acceptance among consumers (Mukendi and Henninger, 2020). In 2022, the global fast fashion market generated revenue of over 106 billion U.S. dollars, greatly surpassing the 5.87 billion U.S. dollars earned by the fashion rental market worldwide (Statista, 2023). One of the best-known fashion rental companies is Rent the Runway, which was founded in 2009 and is active in the United States.

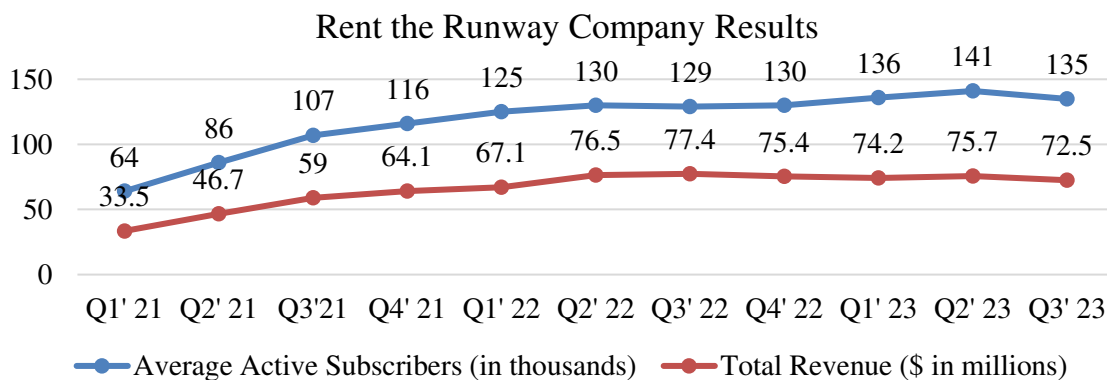


Figure 1: Rent the Runway Subscribers and Revenue (Rent the Runway, 2023)

Recent company results show a decline in average active subscribers and total revenue, as well as stagnating results, as depicted in the figure above. This negative development and the general revenue gap between fast fashion and the fashion rental market underlines the need for evaluation of consumer attitudes and market strategies within the fashion rental sector.

Artificial Intelligence (AI) is reshaping the fashion rental sector, particularly with the rise of Generative Artificial Intelligence (GAI) and its widespread adoption (Eisfeldt, Schubert, and Zhang, 2023). John Lewis Fashion Rental, a UK-based company, has embraced these innovations. In the summer of 2023, they integrated Zylar, an AI-powered virtual fashion try-on software. This technology allows customers to visualize how clothing items fit before renting, enhancing the user experience. By October 2023, the John Lewis website experienced a significant shift, with over 30% of its sales attributed to the utilization of the AI visualization tool (Fashion Network, 2023). Pioneering the introduction of virtual try-on technology in the UK rental market, John Lewis anticipates a rising customer adoption of the AI-driven feature

in the coming months (ibid.). Similarly, Sizekick (2023) reduces uncertainty about sizes with their AI-enhanced size recommendations. US-based company Rent the Runway has integrated AI-driven search engines, allowing users to search for outfits based on specific “vibes”. For instance, entering phrases like "Lisbon vibe" results in tailored outfit suggestions, aligning with the city's unique atmosphere (The Current, 2023). These advancements reflect a growing trend in the industry, emphasizing the integration of AI technologies to enhance customer engagement and refine user experience.

However, it is crucial for companies to anticipate consumer acceptance of AI tools to gain a competitive edge. According to McKinsey (2024), 73% of fashion executives said that generative AI is a top priority for their business in 2024. Additionally, a study by Vogue Business and Google (2023) found that “the incorporation of AI enhancements by brands has the potential to significantly boost spend, with personalisation, sustainable development and innovative design among the biggest opportunities for increasing spend”. Moreover, they found that growing ease of use leads to a better understanding of the technologies usefulness and ultimately results in fuelling the desire of potential customers, leading them to become active users (ibid.). This thesis will therefore explore the transformative impact of Artificial Intelligence on the fashion rental sector, focusing on its ability to reshape consumer attitudes towards fashion rental. Specifically, the Research Question is:

RQ: Can AI-Enabled Fashion Rental Platforms Drive Sector Disruption?

According to Christensen, Raynor and McDonald (2015, p. 4), the process of disruption happens when “a smaller company with fewer resources is able to successfully challenge established incumbent businesses” and is successful if “mainstream customers start adopting the entrants’ offerings in volume”. The research question therefore explores if including experienceable AI-features in a fashion rental platform can lead to mass adoption of the business model, disrupting the established fashion sector. The exploration includes an in-depth examination of Artificial Intelligence, particularly focusing on Generative Artificial Intelligence, to comprehend its background and capabilities. To analyse consumer adoption, Diffusion of Innovation and First and Second Mover Advantages are reviewed. Regarding consumer attitudes, the Technology-Acceptance Model and Value-based Acceptance Model are explored. This theoretical foundation is then integrated with use-cases of Generative Artificial Intelligence to formulate hypotheses regarding consumers' adoption intention. Qualitative data was gathered through semi-structured interviews with experts in AI and the fashion industry.

The results were analysed using Mayring and Fenzl's (2019) inductive categorization method. Additionally, quantitative data was obtained through a consumer survey. The qualitative and quantitative results were then triangulated with the existing literature, ensuring a comprehensive analysis. Utilizing these triangulated findings, various scenarios were developed, considering consumer attitudes and the potential impact on fashion rental companies' popularity. The last section consists of a conclusion, accompanied by practical implications for management, potential directions for future research, and limitations of this dissertation.

2. Literature Review

This literature review consists of four main sections. These include the definition of the fashion rental concept with its drivers and barriers, exploration of Artificial Intelligence, as well as a deep dive into Generative AI. Furthermore, the Diffusion of Innovation framework, along with First and Second Mover Advantages, the Technology Acceptance Model and the Value-based Adoption Model are investigated as theoretical foundations. Lastly, the research question is viewed in light of the prior presented academic frameworks.

2.1 The Fashion Rental Concept

Reusing clothing articles and accessories is a business model with the goal of making the fashion industry more sustainable. It shifts the focus from ownership of a product to collaborative usage (Jain, Jain, Behl, Pereira, Giudice and Vrontis, 2022). This opposes fast fashion, which promotes rapid turnover of new fashion products due to changing styles and the public' desire to stay up-to-date by following the latest fashion trends (Lang, Li and Zhao, 2020). Ultimately, fast fashion causes overconsumption and is significant to environmental pollution due to vast amounts of textile waste and inadequate disposal (Hu, Li, Chen and Wang, 2014). This underlines the relevance of the shift towards more sustainable business models within the fashion industry, which can be achieved by integrating the concept of a sharing economy with rental models (Lee and Chowb, 2020).

Fashion rental enables consumers to rent clothing articles for fixed time periods, either by renting an individual piece of clothing or by enrolling in a subscription model, which makes it possible to rent a certain number of articles per the agreed time period (Bodenheimer, Schuler and Wilkening, 2022). A rental business model in practice is Rent the Runway, a US based e-commerce rental company (Rent the Runway, 2023). Rent the Runway offers different subscription plans, offering either 5, 10 or 15 items per month, while also providing one-time rentals (Rent the Runway, 2023). Other popular rental companies also include Nuuly, By Rotation or Armoire, all having similar business models.

Another differentiating factor for fashion rental companies is the spectrum of products they offer. Special occasion wear is the most popular product type among consumers, while swimwear and underwear are not suitable for fashion rental businesses for reasons of hygiene (Mukendi and Henninger, 2020). Meanwhile, articles used for a short time period, for example maternity wear, are especially suitable for the rental model, but many customers are still reluctant to rent everyday clothing (Bodenheimer et al., 2022). Moreover, renting fashion is

very popular for luxury fashion items, as it allows consumers to wear an item that they otherwise would not be able to afford (Feng, Tan, Duan and Bai, 2020).

2.1.1 Drivers and Barriers of Fashion Rental

Despite relieving customers of the burden of ownership and offering a sustainable business model, fashion renting is not especially widespread (Jain et al., 2022; Mukendi and Henninger, 2020; Lang and Armstrong, 2018). Success depends on adoption, and it is crucial to understand factors influencing consumer perceptions on fashion rental services (Lee and Chowb, 2020; Lang and Zhao, 2020).

From customer perspective, one of the main reasons to rent rather than buy is the possibility to experiment with different trends and styles without having to own certain pieces (Gyde and McNeill, 2021; Mukendi and Henninger, 2020; Lang and Zhao, 2020). This goes along with the advantage of saving money by only paying a rental price rather than the full retail price, especially for expensive luxury articles (Jain et al., 2022; Gyde and McNeill, 2021; Lang and Zhao, 2020; Mukendi and Henninger, 2020; Lang, 2018). Lastly, environmental concerns and consciousness about wasteful consumption practices motivates consumers to shift their behaviour towards renting (Bodenheimer et al., 2022; Mukendi and Henninger, 2020). In contrast, scepticism regarding hygiene and cleaning processes of rented items is a key barrier for potential users (Jain et al., 2022; McCoy and Chi, 2022; Mukendi and Henninger, 2020; Armstrong, Niinimäki, Lang and Kujala, 2016). General uncertainty regarding the rental process concerning product availability, finding the right size, time management and liability for a potential damage of the rented item also influence consumer attitudes negatively (Bodenheimer et al., 2022; Gyde and McNeill, 2021; Mukendi and Henninger, 2020; Lang, 2018). For consumers with no prior experience in fashion renting, the value of ownership and missing trust in the rental provider were seen as major roadblocks (Bodenheimer et al., 2022; McCoy and Chi, 2022; Jain et al., 2022; Gyde and McNeill, 2021; Lang, 2018; Armstrong et al., 2016).

Consumers who already engaged in rental services were also influenced by prior lack of satisfaction with their experience due to poor product performance, insufficient product selection or poor customer service (Bodenheimer et al., 2022; Lang et al., 2020). Shipping fees for returning items, delayed shipments and slow responses by customer support were named as issues too (Lang et al., 2020). Moreover, prior rental customers cited cost as a reason to cancel subscriptions (Bodenheimer et al., 2022), which goes along with the general assumption that

reused articles should be considerably cheap and renting fees less expensive than buying (Mukendi and Henninger, 2020).

Various factors that positively influence the consumer experience accelerate public adoption. Clear communication must address concerns regarding the hygiene of reused items and liability in case of damage (Mukendi and Henninger, 2020; Lang, Seo and Liu, 2019). Moreover, customer support is crucial throughout whole rental process, from finding the right size to handling returns (Lang and Zhao, 2020). Product selection must focus on having high-quality items and the service must be easy to use (Gyde and McNeill, 2021). Lastly, marketing is an important tool to highlight the sustainability aspect (McCoy and Chi, 2022), cost and resource savings (Lee, Jung and Lee, 2021), as well as make potential customers familiar with the rental concept (Bodenheimer et al., 2022).

2.2 Artificial Intelligence

Artificial Intelligence has already transformed the business landscape and is continuously evolving towards enhanced technological dimensions (Ahmed, Jeon, Piccialli, 2022; Chen, Wu and Zhao, 2023; Kanbach, Heiduk, Blueher, Schreiter and Lahmann, 2023). In general, we will define AI as a technology that is able to mimic human behaviour and performance by making use of software and algorithms (Kumar, Rajan, Venkatesan and Lecinski, 2019; Vlacic, Corbo, Costa e Silva and Dabic, 2021). AI can perform tasks autonomously, which normally require human intelligence (Ahmed et al., 2022). Artificial Intelligence has different subsets based on technological capabilities and functions. AI is the broadest term and encompasses the subset systems of (1) Machine Learning (ML), (2) Deep Learning (DL) and (3) Generative AI (GAI).

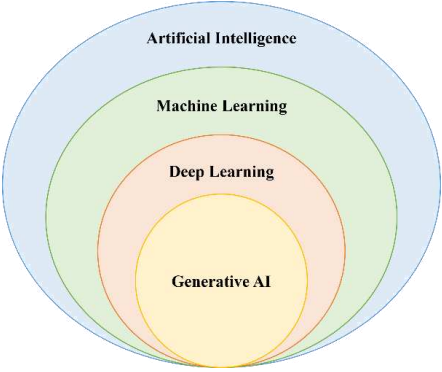


Figure 2: A comparative view of AI, machine learning, deep learning, and generative AI (Adapted from Zhuhadar, 2023)

(1) Machine Learning is a form of AI trained on large data sets that uses algorithms to detect patterns to work as a prediction and recommendation engine (McKinsey&Company, 2023). ML is capable of learning from data procession and adapts machines according to knowledge

encompassed in new data sources (ibd.; Zhuhadar, 2023). (2) Deep Learning is a subset of Machine Learning and expands the abilities of ML by being able to process different data types, for example images (McKinsey&Company, 2023). Compared to ML, Deep Learning improves the accuracy of results by making use of neural networks for in-depth analytics (Zhuhadar, 2023). These neural networks heighten the performance level of DL, as they consist of interconnected layers, which are trained on large amounts of data to simulate human intelligence (Chui, Hazan, Roberts, Singla, Smaje, Sukharevsky, Yee and Zimmel, 2023; Zhuhadar, 2023). (3) While ML and DL are frequent AI approaches, Generative AI is currently disrupting the business landscape and experiencing immense growth with tools such as ChatGPT (Chui et al., 2023).

2.2.1 Generative AI

Generative AI expands DL by having the ability to process and analyse larger amounts of data and generate new content (Chui et al., 2023; Agrawal, 2023). While ML and DL detect patterns and learn from data sets, Generative AI is the first subset of AI that enables new content creation such as text and images, through learning behaviour (Chui et al., 2023.; Zhuhadar, 2023; Bi, 2023). GAI has the ability to produce content in a language style that resembles human speech, making it a powerful tool within the business sphere (Agrawal, 2023; Eisfeldt, Schubert and Zhang, 2023). Applications such as ChatGPT or DALL-E are already finding widespread adoption due to their usefulness and performance (Kanbach et al., 2023). GAI is currently in early stages of development and public accessibility and adoption is expected to grow significantly (Chui, Yee, Hall, Singla and Sukharevsky (2023). A survey conducted by McKinsey (Chui et al., 2023) showed that 75% of respondents expected GAI to be disruptive within the next three years. Moreover, the survey demonstrated that GAI is already being used in organizations, with the most prominent application being for marketing and sales (14%), followed by product and /or service development (13%) and service operations (10%) (ibd.).

2.2.2 GAI Use-Cases

Generative AI is creating new opportunities in the area of innovation and creativity through its functionalities (Chui et al., 2023; Lee, Suh, Roy and Baucus, 2019). Generative Chatbots can interact seamlessly with customers in real-time without being restricted by the language, scope and location (Chui et al., 2023; Mondal, Das and Vrana, 2023; Nah, Zheng, Cai and Chen, 2023). Through chatbots, a higher share of customer interactions can be automated without loss of quality, while personalizing responses and enhancing customer experiences (Chui et al., 2023; Chen et al., 2023; Bi, 2023). Synchronizing Generative AI with human customer service,

creates efficiencies due to GAI's ability to instantly derive all relevant information on the specific customer (Chui et al., 2023; Bi, 2023). Currently GAI chatbots include ChatGPT, which generates meaningful answers in human-like speech, and DALL-E, which creates images from inserted text prompts (Cao, Li, Yan, Dai, Yu and Sun, 2018).

GAI can help to create effective marketing campaigns (Chen, Wu and Zhao, 2023; Nah, Zheng, Cai, Siau and Chen, 2023), by personalizing advertisements and automating content creation (Kanbach, Heiduk, Blüher, Schreiter and Lahmann, 2023; Mondal et al., 2023; Chui et al., 2023). One example is personalized recommendations based on patterns identified in customer behaviour and individual customer preferences, helping to build a strong customer-brand relationship (Mondal et al., 2023; Bi, 2023). A company already using GAI functionalities is Stitch Fix, which recommends clothing styles to customers with the help of algorithms that analyse customer data regarding preferred style, sizes, and budgets (Chui et al., 2023). Stitch Fix has recently integrated text-to-image visualization from DALL-E, which enables stylists to transform customer preferences in text form into an image of the clothing article and use image search to find a similar article in the Stitch Fix inventory (Chui et al., 2023).

The ability to make intelligent recommendations can be expanded into performing future market forecasts and trend analyses (Bi, 2023; Chui et al., 2023). Sales communications and analytics can be enhanced by using GAI's data analytics capabilities (Chui et al., 2023), for example by adjusting prices according to the optimal discount rate with regard to customer demand (Bi, 2023). GAI can be implemented as a virtual assistant, helping customers to find the right item (Chui et al., 2023). Google recently announced the integration of Bard, Google's GAI chatbot, into their virtual assistant (Hsiao, 2023). The AI powered assistant will be able to support users in an intelligent manner, adapting automatically to personal preferences and mannerisms, for example when creating a grocery list or formulating a text message (ibd.).

2.2.3 Limitations and Risks of Generative AI

Despite excitement surrounding GAI, there are risks which must be considered when evaluating its implementation as a business tool. One important factor is data privacy (Chen, Wu and Zhao, 2023; Wach, Duong, Ejdy, Kazlauskaitė, Korzynski, Mazurek, Paliszkiwicz and Ziemba, 2023). GAI models are trained on large datasets (Aydin and Karaarslan, 2023) and when offering personalized services, the data also consists of private information on users, exposing them to risks in cases of data breaches (Chen et al., 2023). Data that is publicly available must adhere to intellectual property rights and regulatory compliance (Chen et al., 2023). Potential

biases are another risk associated with GAI models (Wach et al., 2023; Nah et al., 2023). Bias refers to the manifestation of stereotypes and discrimination, for example with regard to gender, sexual orientations, or cultural background (Zhuo, Huang, Chen and Xing, 2023; Nah et al., 2023). GAI bias depends on the datasets used for training the model, as biased training data leads to biased outputs (Chui et al., 2023; Bi, 2023). This risk can be mitigated by using a diverse dataset of high-quality (Wach et al., 2023; Zhuo et al., 2023; Cao et al., 2018). High-quality datasets provide more reliable information for training, leading to fewer false outputs (Zhuo et al., 2023). A high-quality extensive dataset increases the time and resources needed to train the model (Cao et al., 2018), leading to barriers as this heightens firm expenses related to integration of a GAI model (Agrawal, 2023). The case of ChatGPT also shows that despite implementing a content policy, GAI can still generate inappropriate content due to algorithmic limitations (Nah et al., 2023).

2.3 Management Frameworks

The following management frameworks are used to assess the research question.

2.3.1 Diffusion of Innovation

According to Rogers (2003, p.5):

“Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system.”

For a small percentage of innovations, widespread adoption is only a matter of time, as the innovation delivers better performance than existing products (Robertson, 1967). Other innovations will not be adopted by everyone, as they are not perceived as superior by potential consumers (ibd.). Rogers (2003, p.12) defines innovation as “an idea, practice, or object that is perceived as new by an individual or other unit of adoption”. The time taken until an innovation is adopted differs, making it possible to categorize adopters (Rogers, 2003).



Figure 3: Categories of innovation adopters (DVJ Insights, 2023)

Innovators can be described as venturesome, as they are keen to use an emerging technology first but make up the smallest proportion of adopters (Alexander and Kent, 2021). Early adopters act as role model for others and comprise the early majority. The late majority have higher reluctance while laggards have a sceptical view towards innovation (ibd.). The rate of adoption refers to the swiftness of adoption and is determined by five characteristics (Rogers, 2003). (1) Relative advantage pertains to whether an innovation is perceived as better than the idea it aims to substitute; this has a positive impact on the rate of adoption (ibd.). The level with which an innovation fulfils consumer needs and fits into their definition of value and experiences positively influences the adoption rate and is defined as (2) Compatibility (ibd.). (3) Complexity describes whether an innovation is difficult to use and understand and is negatively correlated to adoption. When the outcome of adopting an innovation is visible to other people, it has a positive effect on the rate of adoption and is described as (4) Observability. Lastly, (5) Trialability describes the possibility to modify the innovation when adopting it. In other words, reinventing the innovation positively affects the rate of adoption also (Rogers, 2003). Besides the characteristics of innovations, the rate of adoption is also influenced by the innovation-decision type, communication channels, the nature of the social system and the extent of a change agent's promotion efforts (Rogers, 2003). Innovation decisions can consist of either deciding to adopt independently, collectively with other members of a given system or being forced to adopt by authority decision (ibd.). Communication channels can be divided into mass media channels and interpersonal channels, with mass media being more important for early adopters (ibd.). Interpersonal channels have a strong influence on consumer perceptions but are difficult to manage from a firm perspective (Robertson, 1967). The nature of the social system refers to the norms of the social environment of potential users and shows that being connected to other people within this environment has a positive effect on individual

innovativeness (ibid.). A change agent is someone within the social system who has the power to influence individual rates of adoption by calling attention to the innovation (Rogers, 2003).

2.3.2 First and Second Mover Advantages

Firms that are first to enter a market for a product or service are defined as first movers and can gain sustainable competitive advantage by doing so (Kerin, Varadarajan and Peterson, 1992). First mover advantages can be derived from technological leadership by taking advantage of the learning curve when implementing new technologies, resulting in cost reduction (Liebermann and Montgomery, 1988). Another way to achieve this is by being ahead of the competition in research and development due to the benefits of being the first to market (ibid.). Later entrants are consequently faced with entry barriers, meaning they have to make higher resource investments to gain a competitive standing relative to the first entrant (Kerin et al., 1992). Entry barriers therefore heighten the first mover advantage as they lengthen the lead time between a first entrant and the rest of the competition (Robinson, Kalyanaram and Urban, 1994; Kerin et al., 1992). First movers also benefit from scale effects (Rao and Rutenberg, 1979) and experience effects (Smiley and Ravid, 1983). The pre-emption of assets further strengthens the position of first movers, as they can be first to gain access to assets such as physical resources or geographic locations (Lieberman and Montgomery, 1988).

First entrants often influence consumer attitudes in their favour (Kerin et al., 1992; Robinson et al., 1994) and benefit from buyer switching costs, as later entrants are challenged to convince users to switch to their brand (Lieberman and Montgomery, 1988). However, there also exist second mover advantages, such as the possibility to “free ride” on achievements of the first entrant. Second movers can exploit existing knowledge by analysing customers and business structures (Kerin et al., 1992; Lieberman and Montgomery, 1988). Later entrants can further benefit from first movers having solved for market uncertainties and establishing market positioning (Kerin et al., 1992; Lieberman and Montgomery, 1988). Second mover advantage is heightened when existing firms are unable to respond adequately to market changes (Lieberman and Montgomery, 1988). Ultimately, advantages depend upon the business models of competing firms and reactions to strategies used by the competition (Markides and Lourdes, 2013).

2.3.3 Technology Acceptance Model and Value-based Adoption Model

Technology has the power to create new industries and shape the competitive landscape by leveraging new entrants over long-established firms (Porter, 1985). The Technology

Acceptance Model (TAM), introduced by Davis (1985), is a reliable system to determine user acceptance of technology (Chau, 1996; King and He, 2006; Marangunic and Granic, 2015). TAM defines two main variables that influence attitudes towards using a system, these perceived usefulness, and perceived ease of use (Davis, 1985). Perceived usefulness refers to the extent to which a system enhances user performance and perceived ease of use relates to how uncomplicated the use of the system is thought to be (Davis, 1989; Chen, 2011). Perceived usefulness has a strong positive effect on a user intention, while perceived ease of use has a positive but less significant effect (Davis; 1989; Davis, Bagozzi and Warshaw, 1989; Chau, 1996; George and Kumar, 2013). This indicates that the functionalities of a system are crucial as ease of use cannot compensate for missing usefulness of a system (Davis, 1989). TAM was originally created to explain the intention towards using information systems (Davis, 1985), but it has been extended to other areas o, such as the adoption of internet banking (Ghani, Rahi, Yasin and Alnaser, 2017), consumer e-shopping acceptance (Ha and Stoel, 2008) and fashion AI (Liang, Lee and Workman, 2018).

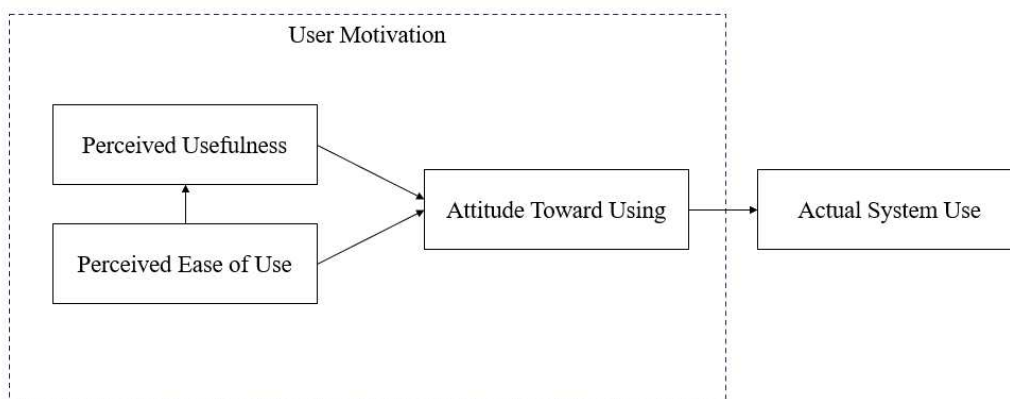


Figure 4: Technology Acceptance Model (Adapted from Davis, 1985)

Sohn and Kwon (2020) found that the Value-based Adoption Model (VAM) is useful for AI systems. VAM integrates enjoyment as a predictive variable and the notion that technology is used voluntarily for personal reasons. This broadens the definition of technology users to encompass consumers who have to pay for usage (Kim, Chan and Gupta, 2007). TAM was initially proposed as a model for users in an organizational setting where costs were borne by the organisation (Davis, 1985; Kim et al., 2007). In VAM, usefulness and enjoyment are perceived benefits and technical difficulty and cost are perceived sacrifices which influence perceived value (ibid.). The VAM model was tested by surveying adoption of M-Internet by potential consumers. It was concluded that the utility derived from using a technology (Rogers, 2003) has a positive effect on perceived value (Kim et al., 2007). Enjoyment derived from using

the technology also positively affects perceived value. Technicality, defined by the ease of use, system reliability, connectivity, and efficiency also did likewise (Kim et al., 2007). In contrast, the perceived cost has a negative effect on perceived value (Kim et al., 2007).

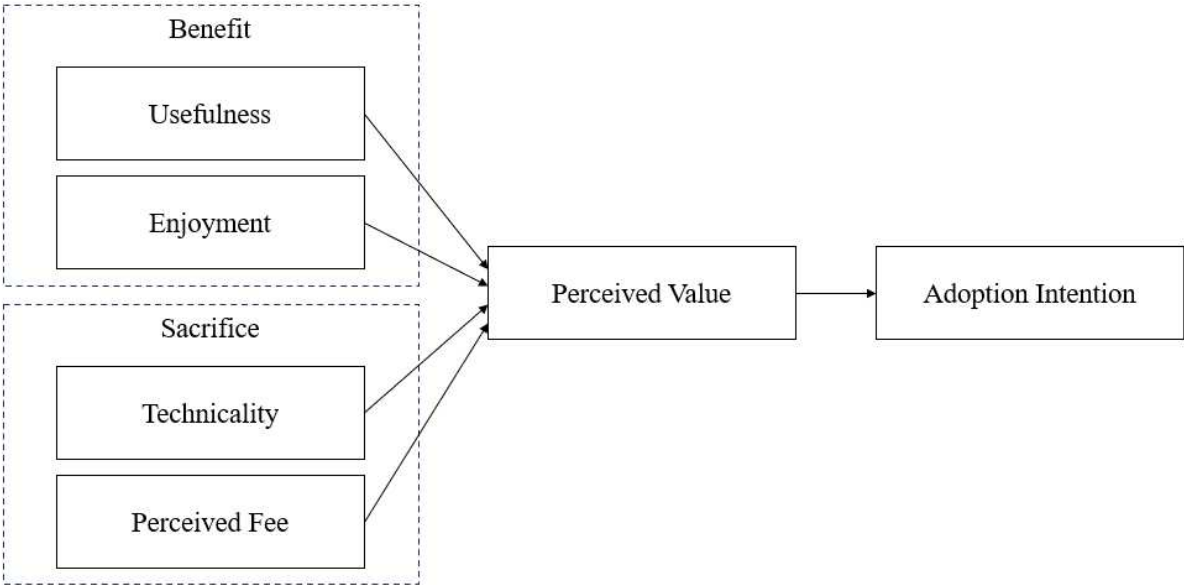


Figure 5: Value-based Adoption Model of Technology (Adapted from Kim et al., 2007)

2.3.4 Usage of Frameworks to answer Research Question

The presented theoretical frameworks will support the exploration of the transformative impact of Artificial Intelligence on the fashion rental sector, focusing on its ability to reshape consumer attitudes towards fashion rental to potentially drive sector disruption. They will provide the foundation for the quantitative and qualitative exploration of the research question, which will later be triangulated with the literature review. Due to the usage of the presented frameworks and related literature, we are able to propose clear hypothesis, which will be explored in the data collection to answer the research question:

RQ: Can AI-enabled fashion rental platforms drive sector disruption?

Value-based Adoption Model (Kim et al., 2007)	
Adopted from	Hypothesis
Kim et al., 2007	H1: Perceived value is positively correlated to adoption intention.
Sirdeshmukh, Singh and Sabol, 2002	
Kim et al., 2007; Davis, Bagozzi and Warshaw, 1989	H2: Usefulness is positively correlated to perceived value.

Agarwal and Karahanna, 2000	H3: Enjoyment is positively correlated to perceived value.
Kim et al., 2007; Davis, 1989	H4: Technicality is positively correlated to perceived value.
Voss, Parasuraman and Grewal, 1998	H5: Perceived fee is negatively correlated to perceived value.
Diffusion of Innovation (Rogers, 2003)	
Moore and Benbasat, 1991	H6: Relative Advantage is positively correlated to eagerness to adopt.
Moore and Benbasat, 1991	H7: Compatibility is positively correlated to eagerness to adopt.
Moore and Benbasat, 1991; Richardson, 2011	H8: Technicality (Complexity) is positively correlated to eagerness to adopt.
Moore and Benbasat, 1991; Meuter, Bitner, Ostrom and Brown, 2005	H9: Observability is positively correlated to eagerness to adopt.
Meuter et al., 2005; Kapoor, Dwivedi and Williams, 2013	H10: Trialability is positively correlated to eagerness to adopt.

Table 1: Research Hypotheses

3. Methodology

The research utilized a mixed-method approach, incorporating both qualitative and quantitative data collection methods. Qualitative data was obtained through semi-structured interviews with experts in Artificial Intelligence and professionals from fashion rental companies. Quantitative data was gathered through a consumer survey. The data was subsequently triangulated with the insights obtained from the literature review, ensuring a comprehensive analysis.

3.1 Qualitative Data

Semi-structured interviews were chosen for their flexibility, enabling a dynamic and spontaneous dialogue during the research process (Adams, 2015). This approach involved a hybrid model incorporating both closed- and open-ended questions, as recommended by Adams (2015). The interview questions were formulated in accordance with the knowledge derived from the literature review and can be found in Appendix C. The results of the interviews were divided into results from closed- and open-ended questions. Answers to closed questions were analysed with visualization tools to show data patterns and trends (Adams, 2015). Open-ended questions were analysed according to qualitative content analysis by Mayring (2004). In detail, inductive category development was used to code responses after conducting interviews and reading through the interview material (Mayring and Fenzl, 2019). The results from hard numbers and the inductive categorisation were used to discuss the research question along with the literature review and quantitative data.

3.2 Quantitative Data

The literature review emphasized the significance of consumer acceptance in the context of fashion rental models and their intention to adopt innovative practices. However, there is a gap in our understanding, concerning the influence of AI innovations on consumer intention toward adopting fashion rental models. To address this gap, a consumer survey was conducted, specifically focusing on consumers value perception of fashion rental, and exploring the potential impact of AI features on their adoption intention. As AI is a very broad term, three concrete innovations for fashion rental platforms that can be notably experienced by the customer were chosen based on current articles and applications in the industry. The survey was then conducted as an A/B test for which one group was presented with a fashion rental platform without significant AI innovations and the other group was shown a platform with three innovative AI tools. Both groups were asked the same questions to determine if AI

integration significantly enhances the adoption intention of a fashion rental platform. The detailed survey questions can be found in Appendix A.

Chosen AI tools	Reference
<p>Virtual try-on Visualization of any outfit by adding a photo and basic measurements, as developed by Zyler (Zyler, 2024).</p>	<p>“Virtual try-on technology leader Zyler has teamed up with John Lewis Fashion Rental to elevate the rental experience for customers.” (Zyler, 2023)</p>
<p>AI-driven search Search for clothing by typing common terms or use cases instead of the clothing description. For example searching for “Lisbon vibe” or “Graduation ceremony” (The Current, 2023).</p>	<p>“Rent the Runway Now Lets Customers Search by Vibes” (Women’s Wear Daily, 2023)</p>
<p>AI styling assistant AI-powered virtual shopping assistant that helps customer find and style the right clothing items based on personal preference and occasion.</p>	<p>“YesPlz’s GPT AI Stylist has the answer to every style scenario, in any writing style that’s comfortable for the shopper; it’s like having your own personal AI stylist.” (YesPlz, 2023)</p>

Table 2: AI tools used for customer survey

4. Results

The following results were derived from the interviews conducted and the customer survey.

4.1 Qualitative Results of the Interviews

Based on the interviews with AI experts and fashion rental experts, inductive categorization was used to gain insights. Interviewees were aged between 24 and 43 and of six different nationalities. Seven of the interviewees were male and two were female. The interviews were coded according to Mayring and Fenzl (2019), leading to five categories at the top level, which can be seen in figure 6, namely AI-Powered enhancement areas, challenges in AI-Implementation, implications for business performance, AI-Impact, and future outlook. In the figure below, top-level categories and sub-categories can be seen if the category was mentioned at least five times. The most frequently mentioned top-level category is AI-impact with 84 mentions, closely followed by AI-powered enhancement areas with 77 mentions. Those categories will be analysed separately for each sub-category, while the other categories are analysed in aggregated form.

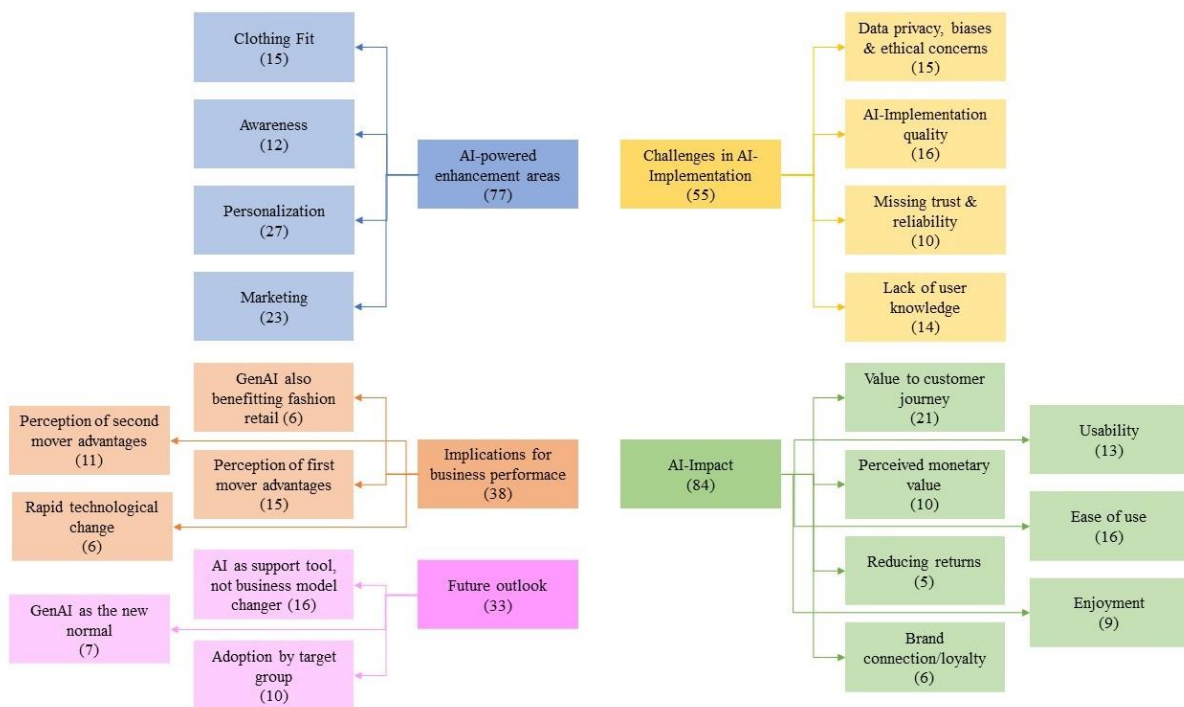


Figure 6: Inductive categorization of survey results (Mayring and Fenzl, 2019)

4.1.1 AI-powered enhancement areas

Personalization was mentioned 27 times by eight out of nine interviewees. It was seen as one of the areas in which AI can have the most impact to enhance customer experience.

Personalization was mentioned in different contexts, from personalized marketing to personalized style recommendation. With regard to marketing, interviewee A (2023) highlighted that personalized marketing will lead to increased interest. When asked about the adoption of AI tools, interviewee B (2023) mentioned the positive effect of personalization on the adoption intention:

“Fashion is a part of our identity, therefore integrating the consumers into the fashion selection process with personalized AI tools will enhance adoption.”

This was confirmed by the machine learning engineer working at a leading fashion rental company, who stated:

“The higher the customization, the greater the acceptance.” (Interview G, 2023).

Overall, experts clearly saw the potential of a positive effect on the adoption of fashion rental, which Interviewee H (2023) confirmed:

“Communication to customers will be far more personalized and if it then leads to more advanced AI tools, such as visual try-on, it has the ability to increase consumer adoption.”

Marketing was mentioned 23 times by eight out of nine interviewees. Marketing was often connected to the personalization of the marketing content, as the Senior AI consultant (2023) anticipated that:

“Especially AI marketing will lead to more users, as the marketing content shows them exactly what they desire.”

This was confirmed by the digital marketing expert in the field of fashion rental (2023), who believed that AI marketing can turn “prospects into active customers”. Tackling the current barriers for fashion rental directly, interviewee E (2023) stated that generative marketing can help to tackle “personal stigmas surrounding fashion rental”. The founder of the company focusing on AI solutions even said that:

“AI definitely has the power to drive a business model such as fashion rental into mass adoption, because it will vastly improve marketing and customer experience.” (Interview I, 2023).

Closely linked to marketing is the category awareness, as missing awareness about the option to rent rather than buy was identified as a factor that could be improved by the implementation of AI marketing. The digital marketing expert (2023) confirmed that many consumers are not

aware of fashion rental and also do not understand the value proposition behind the business model. Lastly, clothing fit was named as a field where AI can generate great improvement. Interviewee D (2023) confirmed that a barrier for users is, “fearing that their ordered items will not fit them”. The sales expert in a fashion rental company stated:

“If it would be possible to reduce the number of returns by integrating a visual try-on, I think that users would perceive a greater value because they are more secure when choosing the size of their desired item.” (Interview D, 2023)

In interview G (2023) the impact of AI on clothing fit was expanded to “improving recommendations, style matching and giving more information on the rental item”, which would enhance the overall decision process for a rental item.

4.1.2 AI Impact

The impact of AI on fashion rental is separated into eight smaller sub-categories. The overall value to the customer journey was mentioned the most, as experts believed that whenever AI tools have an experienceable impact on the customer journey, it influences the overall value. Interviewee B (2023) mentioned that when AI is visible to consumers “it always either has a positive or negative impact” and differentiated this by saying:

“If AI is able to accomplish an advancement in the normal fashion behaviour of fashion rental consumers, it will expand its success.”

Interviewee C (2023) confirmed this by stating that AI will “either have a positive or negative impact, depending on how well they are integrated”. If implemented well, experts thought that AI will have a positive impact on the value of the customer journey, as Interviewee C (2023) concluded:

“When AI is implemented in an area where it is experienceable for the user, it will always have an impact and if done well it will be a positive one by adding value.”

Ease of use was mentioned 16 times and experts highlighted the importance that AI tools have to be easy to understand and use in order to increase adoption:

“The speed of adoption will be influenced by the degree of the technical barrier of using the AI tools.” (Interview C, 2023).

Experts agreed that the ease of use can differ depending on the quality of implementation, but interviewee H (2023) believed that “AI is always more likely to improve a system rather than make it more complicated”.

Usability was mentioned 13 times and is connected to various use cases of AI in fashion rental by the experts, such as personalized advertisements, recommendation engines and style matching. Interviewee A (2023) mentioned a possible use case of AI helping to find the desired article and the AI doctoral researcher (2023) highlighted: “Usability is the most important factor for the adoption of AI tools.”. In interview H (2023), the effect on usability was summed up with the statement:

“AI is rational, accurate and efficient and is available 24/7. Therefore service quality and usefulness can be brought to another level.”

The perceived monetary value shows that experts had a contrary opinion. While interviewees A, B, H, and I believed that AI features will not lead to users perceiving a greater value for their money, interviewees C and D thought that it would be possible. The professor of Societal Implications of AI (2023) elaborated on this by stating:

“When user can recognize that AI features are used and are aware that other competitive platforms do not use those features, they can perceive a greater value for their money and increase their willingness to pay.”

The category enjoyment shows more unity between experts, as they believed that AI tools will increase the enjoyment of users. Interviewees A and B mentioned the visual try-on as an example to enhance enjoyment and interviewee H (2023) stated:

“I think especially in the fashion area it can make the customer experience much more fun, as the interaction with innovative new tools always brings more enjoyment.”.

AI experts also united in the opinion that the integration of AI will lead to more customer loyalty and a stronger connection to the brand. Interviewee F (2023) confirmed this:

“Enhancing customer experience will improve customer loyalty and the company is able to engage more customers than its competitors who are not using generative AI.”

This is underlined by interviewee H (2023), who stated that AI will make customers “feel more worshipped, which will in turn increase their customer loyalty”.

Mentioned five times was the impact of AI on reducing returns, as expert acknowledged accurate size and fit predictions generated with AI. Although the items are only rented and not bought, finding the right size is just as important and interviewee F (2023) mentioned that if returns could be improved “it would enhance the fashion rental business model”.

4.1.3 Challenges in AI-Implementation

The most mentioned challenge is AI-Implementation quality. Experts agreed that the impact of AI depends on how well it is implemented. The senior IT consultant (2023) stated:

“The main barrier currently is the right implementation, but this will get easier with growing progress.”

Interviewee B (2023) underlined that users will stop to use AI tools, if they are not working properly. In interview G (2023) it was concluded that if AI tools are not integrated well, “it can also turn users away from using the platform”.

Data privacy, biases and ethical concerns was acknowledged as a challenge, but most interviewees assessed that generative AI will be used anyway, as the benefits outweigh the concerns. Interviewee B (2023) said that “data privacy will not be a serious concern of many users”. This was confirmed by the Professor of Ethical Aspects of AI (2023), who found that data privacy, biases, and ethical dilemmas “do not play a significant role for users”. Lack of user knowledge was also mentioned as a barrier by experts, due to uncertainties about the functionalities of AI tools. Interviewee C (2023) concluded:

“Many people are afraid they first have to invest time to further understand AI tools before using them and are unwilling to do so.”

Missing trust in AI was also mentioned as a barrier and interviewee F (2023) said:

“The trust has to be built, but I believe this is only a matter of time and that the mass adoption of AI tools in general will definitely come.”

4.1.4 Implications for business performance

Perceptions on first and second mover advantages by experts showed contrary opinions. While expert B, C, G and I (2023) believed that second movers will be able to outperform first movers that did not implement AI well enough, expert H (2023) stated that “innovations are always trial and error” and that first movers “are also more likely to have a breakthrough with their business”. Interviewees A, G, and I (2023) agreed on the rapid development of generative AI

and the importance to keep up to stay competitive. Lastly, interviewees A and F acknowledged that generative AI will also benefit fashion retail, not generating a unique advantage for fashion rental.

4.1.5 Future Outlook

Interviewees B, C, D, E, F, and H concluded that AI does not improve the business model of fashion rental but can work as a tool to increase factors such as awareness, usability, enjoyment, and ease of use. As interviewee B (2023) stated:

“The service itself must be popular first in order for AI to be able to extend their success.”

The strategic consultant (2023) confirmed:

“It can therefore be used as a tool to reach the goal of increasing awareness, but if users are still opposed to renting it will not lead to mass adoption.”

Experts A, C, D, G, agreed that the younger generation will be quick to adopt AI features, while expert D pointed out that older generations might be more hesitant. In interviews A, F and H GAI was considered an elemental part of the future for businesses and the management consultant in fashion (2023) concluded:

“I think using generative AI will become the new normal.”

4.1.6 Closed Questions

In the first closed questions users were asked about their level of agreement with the following statement:

“User concerns regarding data privacy, biases or ethical dilemmas will lead to consumers rejecting the implementation of generative AI”.



■ Strongly Disagree ■ Disagree ■ Neutral ■ Agree ■ Strongly Agree

Figure 7: User concerns regarding data privacy, biases or ethical dilemmas

Results showed that seven out of nine disagreed, while two were neutral. This outcome matched the prior opinion of experts that data privacy, biases or ethical dilemmas will not hinder most users to use GAI features.

The second closed question asked their level of agreement on:

“Companies that implement Generative Artificial Intelligence earlier than competitors have a competitive advantage”.



Figure 8: Competitive Advantage through early integration

The results are dispersed, as interviewee B (2023) disagreed since “many companies are not integrating AI tools well enough”. However, seven out of nine interviewees agree or strongly agree, showing the tendency for GAI to boost the competitive edge of a company.

4.2 Quantitative Results of the Survey

The following results were derived from a customer survey, which was conducted as an A/B test to verify the influence of AI-features on consumer perception. The first group of respondents was shown a fashion rental platform with three significant AI-features as explained in Chapter 3. The second group was shown a fashion rental platform without significant AI-features as a control group.

4.2.1 Demographics and Personal Usage

The survey was answered by 138 respondents, who passed the attention check. Each survey group for the A/B test therefore had 69 respondents. The age of respondents ranged from 16 to 64, with a mean age of 29. 67.15% of respondents identify as female and 31.39% identify as male, while 0.73% are non-binary and 0.73% preferred not to state their gender. Respondents reside in 26 different countries, with 46.72% residing in Germany, 8.03% in the UK and 8.03% in the USA. The whole table of the residential distribution can be viewed in Appendix B. The distribution of income levels is displayed in the following table:

Less than 1,000 €	1,000 € - 3,000 €	3,000 € – 5,000 €	5,000 € – 10,000 €	10,000 € - 15,000 €	15,000€ - 20,000 €	Above 20,000 €
30.66%	51.09%	11.68%	2.19%	0.73%	0.73%	2.92%

Table 3: Income Levels

When being asked how much they care about fashion, the mean value is 3.11 and the median 3, with 3 standing for the answer option “A moderate amount”. The mean value for the question “Does your level of interest (or lack thereof) in fashion influence your consumption behaviour?” is 3.64 and the median 4 with “Probably yes”, showing that the majority of respondents see a correlation between a general interest in fashion and their personal behaviour. The following graph shows the level of familiarity with the concept of renting clothes before taking the survey:

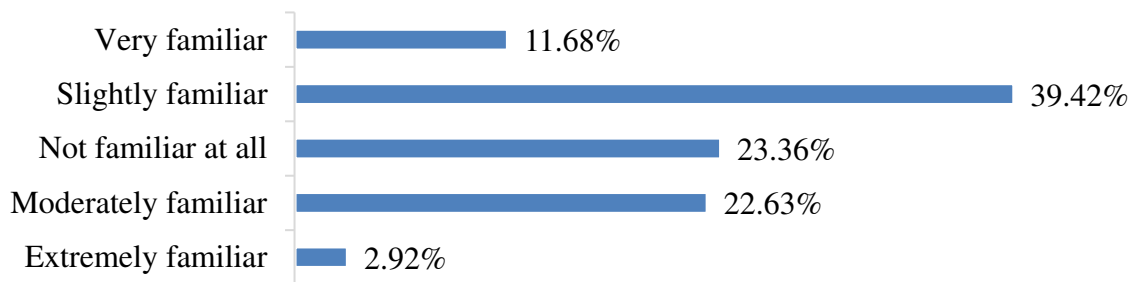


Figure 9: Familiarity with fashion rental

The mean value of 2.31 and the median of 2, show that the majority of respondents are not fully familiar with the concept. This goes along with the finding that 66.18% have never seen advertisements for fashion rental services before taking the survey:

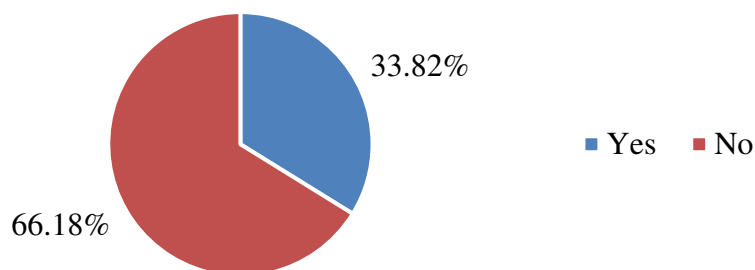


Figure 10: Exposure to fashion rental advertising

4.2.2 Value-based Adoption Model

As a next step, the Value-based Adoption Model was applied as explained earlier (See Chapter 4.2.2). To fully capture the impact of the presented AI-features on consumer perception, it was evaluated with regard to the two groups of respondents. As the data set contains multiple columns for the same variable as presented in Appendix A, the mean over the related columns was calculated and used as the variable to ensure consistency and simplify the regression output.

VAM Regression Model for adoption of AI-enabled rental fashion platforms					
	Dependent variable:				
	(1)	Perceived_Value (2)	(3)	(4)	Adoption_Intention (5)
Usefulness	0.697*** (0.093)				
Enjoyment		0.630*** (0.087)			
Technicality			0.676*** (0.147)		
Perceived_Fee				-0.783*** (0.103)	
Perceived_Value					0.860*** (0.104)
Constant	0.839** (0.356)	1.231*** (0.317)	0.903 (0.558)	5.686*** (0.313)	0.045 (0.374)
Observations	69	69	69	69	69
R2	0.458	0.441	0.241	0.466	0.504
Adjusted R2	0.450	0.433	0.229	0.458	0.496
Residual Std. Error (df = 67)	0.819	0.832	0.970	0.814	0.950
F Statistic (df = 1; 67)	56.614***	52.881***	21.218***	58.354***	67.983***
Note:	*p<0.1; **p<0.05; ***p<0.01				

Table 4: VAM regression model for adoption of AI-enabled fashion rental platforms

VAM Regression Model for adoption of rental fashion platforms (Control Group)					
Dependent variable:					
	(1)	Perceived_Value (2)	(3)	(4)	Adoption_Intention (5)
Usefulness	0.715*** (0.070)				
Enjoyment		0.639*** (0.078)			
Technicality			0.567*** (0.144)		
Perceived_Fee				-0.675*** (0.094)	
Perceived_Value					0.820*** (0.090)
Constant	0.720*** (0.242)	1.031*** (0.263)	1.118** (0.508)	5.217*** (0.313)	0.180 (0.289)
Observations	69	69	69	69	69
R2	0.608	0.499	0.188	0.432	0.554
Adjusted R2	0.602	0.492	0.176	0.424	0.548
Residual Std. Error (df = 67)	0.606	0.684	0.871	0.729	0.711
F Statistic (df = 1; 67)	103.704***	66.802***	15.485***	50.973***	83.377***

Note: *p<0.1; **p<0.05; ***p<0.01

Table 5: VAM regression model for adoption of fashion rental platforms

The first regression captures the perception of the AI-enabled platform, while the second shows the perception of a fashion rental platform without significant AI-features as a control group. For both regressions, all variables were statistically significant at the 1% level. Usefulness, Enjoyment and Technicality were positively correlated to Perceived Value, while Perceived Fee is negatively correlated. Perceived Value showed a positive correlation to Adoption Intention. This confirms our hypothesis H1 to H5 as presented in Appendix A. While Usefulness and Enjoyment showed a stronger positive effect in the control group, Technicality, Perceived Fee and Perceived Value show a stronger positive effect in the AI-enabled model. This suggests that the technicality and fee have a bigger influence on the perceived value when integrating AI-features in the platform. Likewise, the perceived value also has a stronger effect on the adoption intention. However, as the coefficients do not differ significantly between the two regressions, the relationship between the independent and dependent variables is not significantly influenced by the integration of AI features.

Category <chr>	Mean_AI <dbl>	Mean_Control <dbl>	Median_AI <dbl>	Median_Control <dbl>
Perceived Value	3.415459	3.072464	4	3
Usefulness	3.695652	3.289855	4	4
Enjoyment	3.468599	3.193237	4	3
Technicality	3.714976	3.449275	4	4
Perceived Fee	2.898551	3.178744	3	3
Adoption Intention	2.980676	2.700483	3	3

Table 6: VAM Comparison of mean and median for AI-enabled versus control group

The comparison of means shows that all variables, except Perceived Fee, have been assessed higher on the five-point Likert scale for the AI-enabled platform. This indicates that respondents tend to have a favourable perception of the AI-enabled platform with regard to the overall value, the usefulness, enjoyment and technicality and that respondents tend to have a higher adoption intention for AI-enabled platforms. The perceived fee was assessed on a reversed five-point Likert scale and the result shows that respondents perceive it more negative for the platform without AI features and tend to see it as more reasonable for the AI-enabled platform. Additionally, the median shows the central tendency without being influenced by outliers. As the median of AI-enabled platforms is one point higher for Perceived Value and Enjoyment and one point lower for Perceived Fee, it highlights the more positive perception of these aspects by respondents.

As the mean and median values also do not differ significantly between the two groups, the individual distribution levels give more insight on consumer perception.

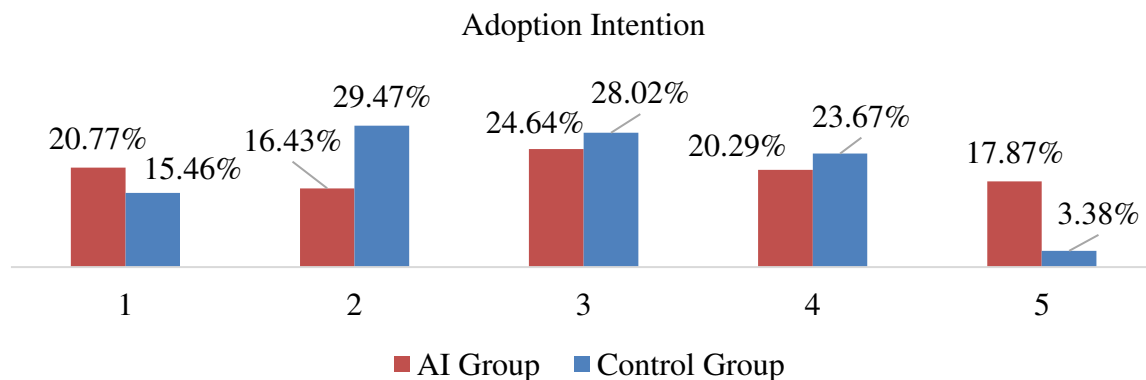


Figure 11: Adoption Intention

The variable adoption intention shows that 17.87% of respondents in the AI group are very willing to adopt, while the percentage of respondents in the control group is considerably lower at 3.38%.

4.2.3 Diffusion of Innovation

The distribution of innovation adopters as introduced in the literature review and figure 3 (See Chapter 2.3.1) was measured via the Product Specific Adoption Potential (PSAP) scale (De Marez and Verleye, 2004) in the survey. Consequently, the different distribution levels of the control and AI group can be compared to the Diffusion of Innovation (DOI) Model (See Chapter 2.3.1).

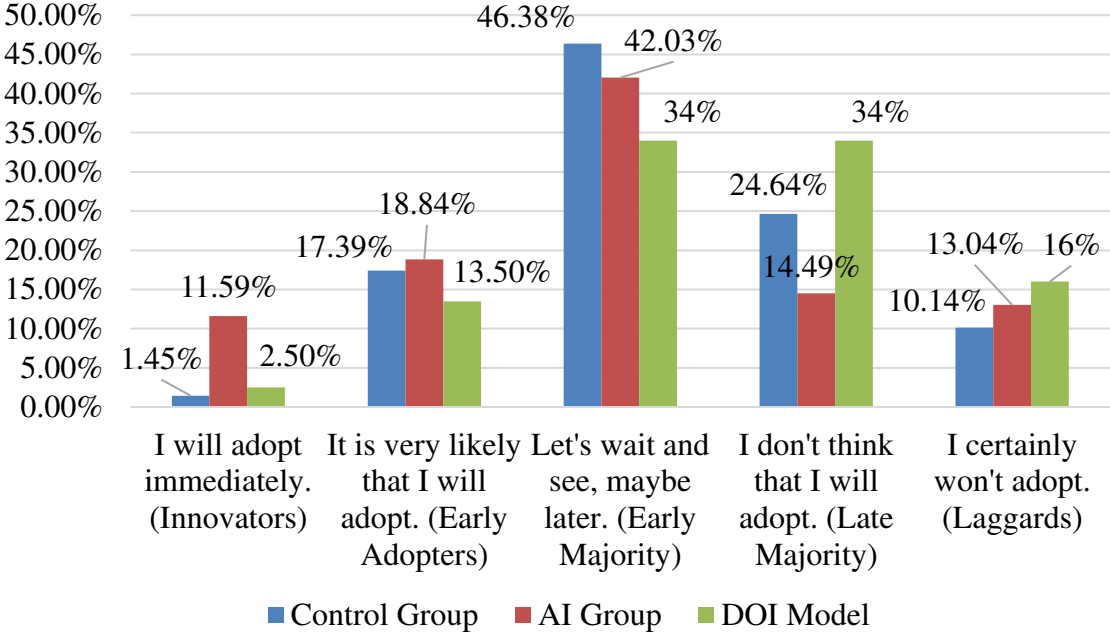


Figure 12: Comparison of Distribution of Innovation Adopters

The comparison highlights that the percentage of respondents that are Innovators and answered that they will adopt immediately is remarkably higher in the AI Group with 11.59%. While the control group underscores the estimate from the DOI model, the AI group overscores it significantly, indicating that more respondents are willing to adopt to AI-enabled fashion rental platforms faster. This is underlined by the finding that the percentage of Early Adopters and Early Majority is higher than presented in the DOI model (Rogers, 2003), while the percentage of Late Majority and Laggards is lower. Comparing it to the control group shows that for AI-enabled platforms people tend to act more likely as either Innovators and Early Adopters or Laggards, while the platform without AI features has a higher level of Early Majority and Late Majority. This indicates that AI features in a platform influences the adoption behaviour by either motivating respondents to adopt more quickly or delay their adoption significantly. The data derived from the control groups underlines this by showing a slower adoption of the fashion rental platform.

As explained in the literature review (See Chapter 3.2.1), the speed of adoption is determined by five characteristics, which were tested in the survey. Complexity as proposed by Rogers (2003) was measured as Technicality, as it has the same interpretation and simplified the conduction of the survey. As the data set contains multiple columns for the same variable as presented in Appendix A, the mean over the related columns was calculated and used as the variable to ensure consistency and simplify the regression output.

DOI Regression Model for Adoption of AI-enabled rental fashion platforms					
Dependent variable:					
	(1)	Eagerness_to_Adopt			(5)
		(2)	(3)	(4)	
Relative_Advantage	0.652*** (0.104)				
Compatibility		0.640*** (0.081)			
Observability			0.419*** (0.105)		
Trialability				0.659*** (0.128)	
Technicality					0.633*** (0.159)
Constant	0.679* (0.388)	1.010*** (0.274)	1.722*** (0.348)	0.714 (0.462)	0.662 (0.602)
Observations	69	69	69	69	69
R2	0.371	0.480	0.192	0.284	0.192
Adjusted R2	0.361	0.472	0.180	0.273	0.180
Residual Std. Error (df = 67)	0.925	0.840	1.048	0.986	1.047
F Statistic (df = 1; 67)	39.447***	61.866***	15.879***	26.526***	15.942***
Note:	*p<0.1; **p<0.05; ***p<0.01				

Table 7: DOI regression model for adoption of AI-enabled fashion rental platforms

DOI Regression Model for Adoption of rental fashion platforms (Control Group)					
Dependent variable:					
Eagerness_to_Adopt					
	(1)	(2)	(3)	(4)	(5)
Relative_Advantage	0.518*** (0.085)				
Compatibility		0.575*** (0.083)			
Observability			0.284** (0.119)		
Trialability				0.572*** (0.118)	
Technicality					0.582*** (0.135)
Constant	1.121*** (0.283)	1.090*** (0.255)	1.962*** (0.348)	0.857** (0.404)	0.747 (0.474)
Observations	69	69	69	69	69
R2	0.355	0.417	0.079	0.259	0.218
Adjusted R2	0.345	0.408	0.065	0.248	0.206
Residual Std. Error (df = 67)	0.740	0.703	0.884	0.793	0.814
F Statistic (df = 1; 67)	36.832***	47.880***	5.717**	23.366***	18.690***

Note: *p<0.1; **p<0.05; ***p<0.01

Table 8: DOI regression model for adoption of fashion rental platforms

The first regression again captures the perception of the AI-enabled platform, while the second shows the perception of a fashion rental platform without significant AI-features as a control group. For both regressions, all variables are statistically significant at the 1% level. All variables are positively correlated to the Eagerness to Adopt, confirming our hypothesis H6 to H10 as presented in Appendix A. The comparison of both regressions shows that all variables have a stronger positive influence on the eagerness to adopt for the AI-enabled platform. This indicates that the integration of AI features enhances the eagerness to adopt and therefore the speed of adoption, confirming the findings derived through the comparison of the distribution of innovation adopters in the prior chapter.

Category <chr>	Mean_AI <dbl>	Mean_Control <dbl>	Median_AI <dbl>	Median_Control <dbl>
Relative Advantage	3.584541	3.149758	4	3
Compatibility	3.130435	2.893720	3	3
Observability	3.082126	2.787440	3	3
Trialability	3.492754	3.314010	4	3
Technicality	3.714976	3.449275	4	4
Eagerness to Adopt	3.014493	2.753623	3	3

Table 9: DOI Comparison of mean and median for AI-enabled versus control group

The comparison of means shows that all variables have been evaluated higher for the platform with AI features. The median value for Relative Advantage and Trialability is one point higher for the AI group, highlighting the tendency of respondents to perceive these aspects as more positive. Compatibility, Observability, Technicality and Eagerness to Adopt have the same median, indicating that overall respondents have a similar tendency.

4.2.4 Usage Model

In the next section, respondents were asked about their preferred usage model.

Question	AI Group	Control Group
Does the need for a formal outfit change your willingness to use the platform?	Mean: 3.45 Median: 4	Mean: 3.44 Median: 4
Does being more sustainable by renting clothes instead of buying positively influence your decision to use the platform?	Mean: 3.45 Median: 4	Mean: 3.28 Median: 3

Table 10: Personal Usage

Both groups showed the tendency to have an increased willingness to use the platform when in need of formal attire. The aspect of being more sustainable was evaluated as a stronger influence on adoption behaviour by the AI group, whilst the control group evaluated it as less significant.

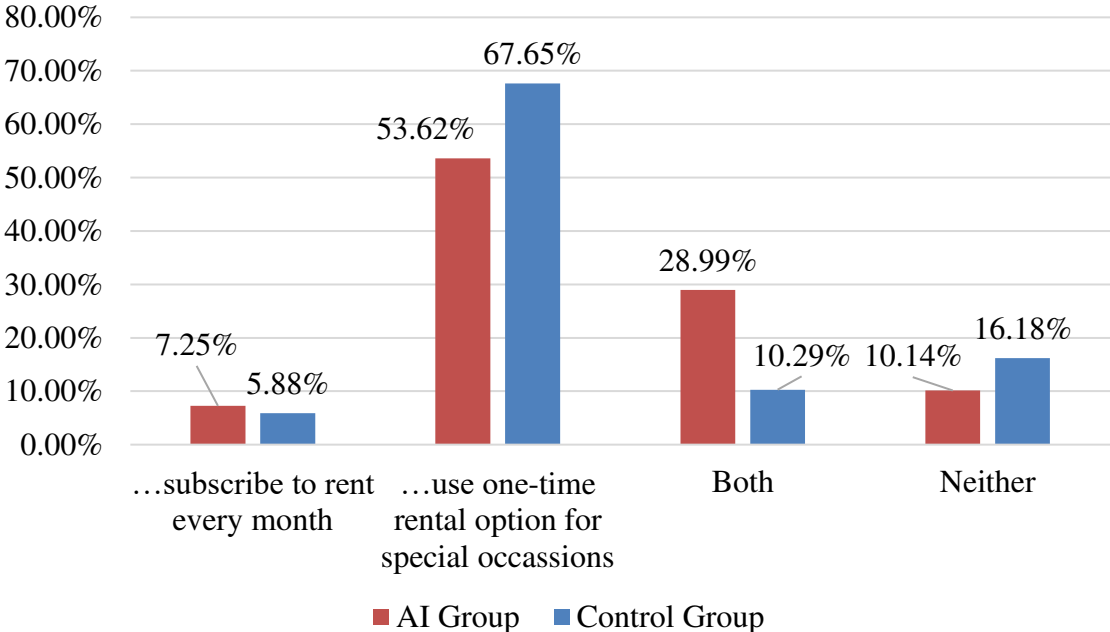


Figure 13: Preferred Usage Model

Regarding the general preferred usage model of one-time rentals versus monthly rentals, more respondents of the AI group were willing to use both, differing by 18.7% from the control group. They were also more likely to rent every month, although the difference to the control group here is only 1.37%. The control group that evaluated the platform without AI features has a higher tendency to use one-time rentals, differing by 14.03% from the AI group. They also showed a higher tendency to use neither with a difference of 6,04% to the AI group.

5. Discussion

The discussion consists of two chapters. The first chapter entails a general discussion in which the results from the literature review, the interviews and the survey are triangulated. The second chapter presents potential scenarios for future development.

5.1 General Discussion

The literature review discussed current drivers and barriers for fashion rental with the main drivers being the possibility to experiment with different trends, saving money by renting rather than buying and being more sustainable (Jain et al., 2022; Gyde and McNeill, 2021; Lang and Zhao, 2020; Mukendi and Henninger, 2020; Lang, 2018). Being able to experiment with different trends is an incremental part of the customer experience and linked to the aspect of personalization. A higher personalization was frequently mentioned in the interviews as one of the main enhancement areas of GAI. Experts acknowledged that offering a highly personal experience and adjusting the trend options to personal preference has the power to increase customer adoption. The customer survey confirmed our hypothesis derived from the Value-based Adoption Model (Kim et al., 2007) that perceived value is positively correlated with adoption intention. Therefore, GAI has the chance to increase adoption intention by offering a high personalization that enhances the overall value for consumers. However, the AI-enabled platform presented in our survey did not lead to a significantly higher mean and median for the variables of the VAM model, showing that although the general perception is slightly more positive than of a platform without significant AI features, it does not entail a clear lead. The driver to save money is closely linked to the perception of the fee that the renting process entails. Interviewees were undecided if AI features can increase the value consumers perceive for their money. In general, the survey confirmed our hypothesis that the perceived fee has a negative effect on the value of a platform, meaning that if a fee is perceived as too high, potential consumers derive less value from the platform. As the mean of the perceived fee is slightly lower for the AI-enabled platform it indicates that it is perceived as more reasonable, but again not gaining a significant advantage due to the small difference to the perception of the control platform without AI features. The last driver of being more sustainable cannot be directly increased by integrating AI features in the customer experience. In the survey the aspect of sustainability showed only a slight tendency of respondents to use the platform because it makes consumption more sustainable. Regarding the current barriers for fashion rental, the literature review mentioned scepticism regarding the hygiene, general uncertainty regarding the rental process concerning product availability, finding the right size, time management and liability

for a potential damage, as well as the value of ownership and missing trust (Bodenheimer et al., 2022; Gyde and McNeill, 2021; Mukendi and Henninger, 2020; Lang, 2018). Integrating GAI in the customer journey only has a direct effect on one of the mentioned barriers, namely size uncertainty. In the interviews it was confirmed that helping customers find the right size by integrating innovative tools, can enhance the customer experience. The survey therefore integrated the option of a visual try-on for the AI-enabled platform, but this only led to a small and not immense enhancement of customer perception.

The literature review triangulated with the expert interviews and survey leads to the conclusion that AI features will not have a significant impact on strengthening the drivers and weakening barriers. Although the VAM regression model confirmed that higher value leads to a higher willingness to adopt, the model showed no distinctive advantage of an AI-enabled platform in comparison to a platform without significant AI-features. This goes along with the assessment of experts in the interviews, as they stated that AI tools can merely work as a support tool for an already successful business model but will not thoroughly elevate or enhance the whole concept. To consider GAI as an enhancer of an existing customer base, it is also important to evaluate its implementation and the associated risks. Experts highlighted the importance of high-quality tools to convince customers of its advantages and gain an edge over the competition. The majority of interviewees agreed that early GAI implementation will lead to First Mover Advantages. However, experts underlined that First Mover Advantages will only be derived if the implementation is done in a high quality and companies still have the need for continuous improvement due to the fast technological change. Fashion rental companies implementing AI features as the first in the market could therefore indeed profit from being a first mover. As the GAI technology will also be implemented in traditional fashion rental, first mover advantages will likely be restrained to the existing fashion rental market, as it will not be a unique selling point for rental companies. Data privacy and security issues will likely not play a significant role in consumer perception according to interview experts.

Comparing the distribution of innovation adopters from the survey to the theoretical framework (Rogers, 2003), shows that the percentage of Innovators and Early Adopters for AI-enabled platforms is significantly higher, but that the majority of respondents is still unsure about adoption. As the number of innovators was outstandingly high for the AI-enabled platform, it shows that AI features might increase the speed of adoption among a bigger consumer group. More consumers might be willing to adopt to fashion rental quicker due to the added AI features. The opinion of our experts adds to this by highlighting that the young generation will

be quick to adopt GAI features. Although the general speed of adoption might be increased, results showed no implication that AI features will result in a considerable competitive advantage when considering the variables of the DOI model (Rogers, 2003). Although influencing factors on the adoption speed were assessed as slightly more positive for the AI-platform, the gained advantage is minimal.

In general, the adoption intention for AI-enabled platforms showed a very dispersed distribution. The most remarkable finding is the significantly higher percentage of respondents in the survey who were very willing to adopt, when comparing it to the platform without AI features (See Figure 11). This indicates that although the overall willingness to adopt is not increased by adding AI features, there might exist a smaller target group that perceives an AI-enabled platform as very positive and would therefore increase their adoption intention. The mean to reach this target group would be to increase the awareness about the option to rent and use effective marketing strategies. The survey showed that the majority of respondents are only slightly familiar with the concept of renting and have never seen an advertisement for it. The importance of awareness and marketing is also frequently mentioned in the interviews, as experts see it as one of the main enhancement areas for GAI. This view entails implications for GAI implementation in two pathways; first, marketing can be improved by implementing GAI for a higher personalization of the content and second, effective marketing can then attract the target group of venturesome consumers who are very willing to use innovative AI tools in a fashion rental platform. GAI improving marketing and the customer perception would then potentially be able to exploit the full potential of a target group consisting of Innovators, who were not aware of the option to rent beforehand. Besides this focus on a smaller target group, the triangulation of literature, survey and interviews showed no clear improvement for the general adoption of fashion rental platforms when integrating AI features. Overall, the results allowed valuable insights in the main areas of enhancement for GAI in the customer experience and its implications on adoption intention. These results will be further discussed by aggravating them into possible future scenarios to view the potential development and impact on the competitive standing of fashion rental companies in the fashion sector.

5.2 Scenario Development

As mentioned in the literature and by experts, generative AI is beginning to transform the business landscape and the impact it will have on fashion rental will be visible in the future. Multiple companies in the fashion sector have already started to integrate GAI tools to enhance the customer experience, but as it is still an emerging technology, its long-term impact on the

competitive standing and consumer adoption will show in the future. Therefore, possible future scenarios for fashion rental companies were developed using the 2 x 2 matrix approach (Ramirez & Wilkinson, 2013). The two most important factors influencing the future success of AI-enabled rental platforms are (1) consumer adoption behaviour and whether mass adoption can be achieved, and (2) the enhancement level of a customer journey through GAI features. Consequently, these two dimensions will be assessed to evaluate whether AI-enabled fashion rental platforms can drive sector disruption.

AI as a driver of mass adoption in fashion rental (1)

This scenario would happen if there were a high consumer adoption as well as a high enhancement of the customer journey through AI features. In this scenario, AI acts as a catalyst for mass adoption of fashion rental. As outlined in the literature review, fashion rental is currently lacking widespread adoption. The integration of AI features and an increase in awareness would attract people who have not been using fashion rental platforms prior and keep them as long-term customers due to an enhanced customer experience. Just as interviewee I (2023) anticipated:

“AI definitely has the power to drive a business model such as fashion rental into mass adoption, because it will vastly improve marketing and customer experience.”

AI features are the driving force behind the mass adoption, by enhancing user experience and increasing platform popularity. This leads to a shift in consumer behaviour to the acceptance of fashion rental as a mainstream choice, driving sector disruption.

AI as an enabler of expansion within existing niche market (2)

In this scenario, the enhancement level through AI features is high, while the consumer adoption remains considerably low. This scenario anticipates fashion rental platforms to expand in their existing niche market, but they do not reach mass adoption. Despite not reaching mass adoption, it “will expand its success” by accomplishing “an advancement in the normal fashion behaviour of fashion rental consumers”, like Interviewee B (2023) suggested. AI helps to identify underserved segments, tailor offerings and foster loyalty among customer groups. This empowers the presence of AI-enabled fashion rental platforms in their niche market, leading to sustained growth. While mass adoption is not reached, rental platforms expand their specific customer base and strengthen their market position by leveraging AI.

AI as a short-term hype for new customers (3)

In the next scenario, consumer adoption is high but the enhancement of the customer journey through AI is low. This scenario could happen when companies invest heavily in marketing to increase the awareness of fashion rental and their AI-advanced platform. Due to the increased awareness, many consumers would be willing to adopt, but would not profit from an enhanced user experience due to the low quality of the AI features. Just as the senior IT consultant (2023) acknowledged, “The main barrier currently is the right implementation (...)”. Although adoption of fashion rental is high, AI does not play a crucial role in offering an advanced customer experience and retaining customers in the long-term.

AI as a contested element in the fashion rental sector (4)

This scenario happens in case consumer adoption and the enhancement level through AI features is low. Instead of increasing the adoption rate of fashion rental, AI implementation becomes a barrier for fashion rental usage. Users perceive poor value from the implementation of AI due to privacy concerns, ethical dilemmas, and biases. This results in a negative perception and less trust towards AI-driven fashion rental platforms. The implementation of AI, instead of attracting more users, has resulted in a decline in customer trust and user satisfaction, leading to a decreased customer base and weakened market standing. Just as interviewee G (2023) proposed that when AI tools are not integrated in high quality, “it can also turn users away from using the platform”.

Scenario	AI as a driver of mass adoption in fashion rental	AI as an enabler of expansion within existing niche market	AI as a short-term hype for new customers	AI as a contested element in the fashion rental sector
Mass Adoption	Yes	No	Yes	No
Enhancement Level	High	High	Low	Low
Probability	20%	60%	10%	10%
Factors that increase the probability	Exploitation of unused potential in marketing &	Support by the experts, High Level of	Effective marketing & increased	Concerns over data privacy & security, Lack of

	awareness, Improved customer experience through personalization, Innovators & Early Adopters acting as a role model (Alexander and Kent, 2021)	Innovators and Early Adopters, Base of existing customers, current status of platforms, successful implementation of high-quality tools, First Mover Advantages	awareness, Challenges in AI implementation, Early stages of development,	consumer understanding on usage, Low quality implementation
Factors that decrease the probability	Current barriers of fashion rental, Dispersed adoption intention, Incidental role of AI in the business model, Limited enhancement of customer experience, High investment to increase awareness, Limited differentiation from competitors	Resistance from existing consumers, Low quality implementation	Low adoption willingness, low current usage of fashion rental, Expensive investment in marketing, current fashion rental barriers	Technological savvy young generation, Opinion of experts

Table 11: Scenario Development

To evaluate the probability of scenarios the most likely scenario was first assumed as a base case. As fashion rental companies currently serve a niche market, scenario “AI as an enabler of

expansion within existing niche market” was assessed as the base case and the probability of all scenarios was adjusted accordingly.

The first scenario “AI as a driver of mass adoption in fashion rental” is supported by the opinion of experts that an investment in effective marketing strategies to increase awareness can substantially increase the user base. As the senior IT consultant (2023) highlighted:

“Especially AI marketing will lead to more users, as the marketing content shows them exactly what they desire.”

As personalization was also mentioned as a main enhancement area, this could lead to frequent usage of the platforms. As the customer survey showed a high percentage of Innovators and Early Adopters, they could act as role models for the majority, as proposed by Alexander and Kent (2021). However, as current barriers of fashion rental will not be greatly minimized by AI features and the survey results showed no significant improvement in adoption intention, it becomes unlikely that solely the integration of AI will act as the main catalyst for mass adoption. Companies would need to invest heavily to increase the awareness, which would not solve the issue of improving the whole business model of renting rather than buying. In the same way, missing differentiation of AI tools as a unique selling point for fashion rental would hinder mass adoption, as fashion retail profits from the technological change to the same extent. This leads to the conclusion that the probability for this scenario is only at 20%.

The next scenario is “AI as an enabler of expansion within existing niche market”, which goes along with the base case of AI companies serving a niche segment of the market. The survey supports this scenario by showing a high level of Innovators and Early Adopters, but a lower level of the majority that is willing to adopt. This results in AI-enabled fashion rental platforms attracting a specific target group and being able to expand within this niche market by profiting from first mover advantages. The current customer base could therefore be slightly expanded by the integration of AI tools, as the survey shows that the level of consumers willing to adopt is higher when integrating AI features. This goes along with the opinion of experts that the business model of renting must be attractive for a certain consumer group “in order for AI to be able to extend their success” (Interview B, 2023). This would be possible when leveraging the implementation of high-quality tools to attract more customers in the existing niche market and binding them to the company through first mover advantages. One factor that would decrease the probability is the chance of consumer resistance due to data privacy and security concerns, but this assumption was estimated as unlikely through the experts. Also, first mover

advantages could be minimized due to the implementation of low-quality tools. Due to the current state of the fashion rental market and our results, the probability for this scenario is by far the highest at 60%.

The third scenario “AI as a short-term hype for new customers” would be realised if companies were able to implement very effective marketing strategies to attract new customers and profit from their curiosity. Due to experts seeing a good implementation as the currently biggest challenge for AI tools, this could result in low enhancement and therefore an unsatisfactory customer experience. Customers would therefore quickly neglect adoption after a first time-hype of high customer adoption. This scenario becomes unlikely as extremely high investments would be necessary to attract as many curious customers as possible. As the survey showed only a medium to low willingness to adopt and the literature review emphasized the current status as a niche form of consumption due to extensive barriers, the probability for this scenario is rather low at 10%.

The last scenario “AI as a contested element in the fashion rental sector” would become reality if the user concerns regarding AI implementation would lead to current customers neglecting the usage of an AI-enabled platform. As interviewee C (2023) mentioned:

“Many people are afraid they first have to invest time to further understand AI tools before using them and are unwilling to do so.”

However, experts assessed user concerns regarding data privacy and security as a non-deciding factor and concluded that the younger generation will be quick to adopt to AI. Therefore the probability for this scenario results in only 10%.

6. Conclusion and Limitations

6.1 Conclusion

Based on the literature review, the interviews and the survey, the main aspects to consider are the enhancement level that can be reached by implementing AI features in the customer experience and the change this brings for the willingness to adopt of potential customers. Results showed that the main enhancement areas in the fashion rental context are a high personalization, increased awareness, better marketing, and a better clothing fit. Despite these potential improvement areas, the survey did not indicate a general heightened adoption intention when integrating AI features in a platform. The barriers of fashion rental cannot be overcome through the integration of GAI features, leading to the conclusion that this measure will not be sufficient to drive fashion rental into mass adoption.

However, the survey and the opinion of experts showed that there does exist a target group for fashion rental, which is broadened when implementing AI features and could be even further expanded when increasing the awareness and investing in effective marketing. Therefore, fashion rental companies could leverage GAI to expand in their existing niche market and broaden their customer base within it. This thesis highlighted the main action fields recommended by experts, possible challenges for companies and the effect on potential customers. To conclude, AI-enabled fashion rental platforms will not drive sector disruption, but they can help to strengthen the market positioning in an existing niche market.

6.2 Limitations

The interviews were conducted with experts of fashion rental and AI. This might lead to biases, as the fashion rental experts are committed to the success of the business model and AI experts have a certain commitment to the technology. The semi-structured interviews only covered a limited scope, as the results derived depend on the selection and variance of interviewees. The survey underlies general limitations as it was conducted with a sample size of 69 respondents and was rather homogenous, due to the majority of respondents residing in Germany. Moreover, the survey compared an AI-enabled platform that entailed three current AI features, which were chosen based on real life applications, but only represent a limited proportion of GAI features. The presentation of the different platform types in the survey may have produced biases. As GAI is still in its early stages, the scenario probabilities were derived from the results but based on hypothetical assumptions. As the pace of technological development is fast, the scenarios might not capture all relevant implications and outcomes.

6.3 Theoretical Contributions

Sustainable fashion consumption models are a topic that is frequently discussed and the fashion rental concept gives insight into the drivers and barriers for a specific form of it. Generative artificial intelligence is an important and fast developing technology for various business cases and is forecast to be a significant force in the global economy. This thesis aimed to combine the factors of fashion rental and GAI to derive insights on the driving factors for the enhancement of the customer experience. Viewing the research question in light of theoretical frameworks allowed an academic viewpoint, which was then enriched by the findings of the quantitative and qualitative data collection. Results contributed to the theoretical knowledge and were set in relation to the initial literature review to develop a new theoretical viewpoint of AI impact on fashion rental.

6.4 Practical Contributions

GAI is considered an important factor in the development of the fashion market and the customer experience, underlining the importance to integrate it into future business strategies. As GAI is an emerging technology, it is vital to realistically assess its impact on the business development with regard to its limitations. This thesis was able to derive distinctive areas in which the integration of GAI features is most likely to increase adoption of fashion rental, namely Marketing, Awareness, Personalization and Clothing Fit. Moreover, the results indicate that while mass adoption will likely not be reached solely by integrating AI features in the customer journey, there exists a certain target group that is willing to heighten their willingness to adopt when presented an AI-enabled platform. This gives companies the opportunity to realistically assess the potential of GAI features, while focusing on the expansion in an existing niche market in which the business model itself is accepted by consumers.

6.5 Further Research

To further understand the impact and potential of GAI, further research must be conducted on the different application areas of features and their implication on consumer behaviour. As this thesis focused mainly on features that are visible to the customer, future investigation should also consider improvement through AI in back-office processes and its impact on the competitive standing of a company. Also, future studies could focus on investigating the characteristics of the target group that increases their willingness to adopt with AI-enabled platforms to assess the different determinants of consumer acceptance and possible homogeneity among this group.

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8. Appendices

8.1 Appendix A: Survey Questions

AI Group	Control Group
<p>Wardrobe Wonders lets you borrow clothes for a certain time period instead of buying. It introduces you to an AI personal stylist that is always available to recommend outfits and answer questions. Wardrobe Wonders also lets you refine your search by specifying details like "Lisbon vibe". Additionally, the platform offers an innovative visual try-on feature. You have the option to rent a variety of high quality clothes by either: Having a subscription plan to rent 10 items per month for 92 € with the option to pause or cancel the subscription at any time. Paying a one-time rental fee to rent one item for a special occasion beginning from 28 €. Your virtual personal stylist is available 24/7 to help you find the perfect outfit combinations for your vacation. Additionally you can search for the exact occasion or vibe you need your outfit to fit to, like "outfit for a beach bonfire". The visual try-on allows you to try on every outfit on the website by uploading a photo of yourself and adding your body measurements.</p>	<p>Wardrobe Wonders lets you borrow clothes for a certain time period instead of buying. You have the option to rent a variety of high quality clothes by either: Having a subscription plan to rent 10 items per month for 92 € with the option to pause or cancel the subscription at any time Paying a one-time rental fee to rent one item for a special occasion beginning from 28 €</p>

Table 12: Survey A/B Groups

Value-based Adoption Model			
Variable	Question	Adopted from	Hypothesis
Adoption	I plan to use the fashion rental platform in the future.	Agarwal and Karahanna, 2000	
Intention	I intend to use the fashion rental platform in the future.		
	I predict I would use the fashion rental platform in the future.		

Perceived Value	Compared to the fee I need to pay, the use of the fashion rental platform offers value for money.	Kim et al., 2007 Sirdeshmukh, Singh and Sabol, 2002	H1: Perceived value is positively correlated to adoption intention.
	Compared to the time I need to spend; the use of the fashion rental platform would be worthwhile to me.		
	Overall, the use of the fashion rental platform would deliver me good value.		
Usefulness	Using the fashion rental platform would enhance my fashion experience.	Kim et al., 2007; Davis, Bagozzi and Warshaw, 1989	H2: Usefulness is positively correlated to perceived value.
	Using the fashion rental platform would make it easier to accomplish my fashion needs.		
	The fashion rental platform would be useful in reaching my fashion needs.		
Enjoyment	I would have fun interacting with the fashion rental platform	Agarwal and Karahanna, 2000	H3: Enjoyment is positively correlated to perceived value.
	Using the fashion rental platform would provide me with a lot of enjoyment		
	I would enjoy using the fashion rental platform.		
Technicality	It would be easy to use the fashion rental platform.	Kim et al., 2007; Davis, 1989	H4: Technicality is positively correlated to perceived value.
	The system of the fashion rental platform would be reliable.		
	It would be easy to get the fashion rental platform to do what I want it to do.		
Perceived fee	The fee that I have to pay to rent clothes is too high.	Voss, Parasuraman and Grewal, 1998	H5: Perceived fee is negatively correlated to perceived value.
	The fee that I have to pay to rent clothes is reasonable (reversed).		
	I am pleased with the fee that I have to pay for renting clothes (reversed).		

Table 13: VAM Survey Questions

Diffusion of Innovation			
Eagerness to adopt according to PSAP scale	I will subscribe/adopt immediately.	De Marez and Verleye, 2004	
	It is very likely that I will subscribe/ adopt.		
	Let's wait and see, maybe later.		
	I don't think I will subscribe/adopt.		
	I certainly won't subscribe/adopt.		
Relative Advantage	The fashion rental platform would make it easier to accomplish my fashion needs.	Moore and Benbasat, 1991	H6: Relative Advantage is positively correlated to eagerness to adopt.
	The fashion rental platform would enhance my effectiveness in finding the right clothes.		
	Overall, I find using the fashion rental platform advantageous in fulfilling my fashion needs.		
Attention Check			
Compatibility	The fashion rental platform fits well with the way I like to acquire clothes.	Moore and Benbasat, 1991	H7: Compatibility is positively correlated to eagerness to adopt.
	The fashion rental platform is compatible with my lifestyle.		
	The fashion rental platform fits well with my fashion needs.		
Technicality (Complexity)	Complexity measured as Technicality (See in Table 12)	Moore and Benbasat, 1991; Richardson, 2011	H8: Technicality is positively correlated to eagerness to adopt.

Observability	I believe that others would notice if I would start to use the fashion rental platform.	Moore and Benbasat, 1991; Meuter, Bitner, Ostrom and Brown, 2005	H9: Observability is positively correlated to eagerness to adopt.
	I believe that I would notice if someone else would start using the fashion rental platform.		
	Using a fashion rental platform would bring visible changes.		
Triability	It is easy to try the fashion rental platform out without a big commitment.	Meuter et al., 2005; Kapoor, Dwivedi and Williams, 2013	H10: Triability is positively correlated to eagerness to adopt.
	I would not have to expend much effort to try the fashion rental platform out.		
	The fashion rental platform is easily available to get familiar with.		

Table 14: DOI Survey Questions

Usage Model	
Does the need for a formal outfit change your willingness to use the platform?	5-point Likert scale
I would be more attracted to...	...subscribe to the platform to rent new clothes every month ...use the one-time rental option for special occasions Both Neither
Does being more sustainable by renting clothes instead of buying positively influence your decision to use the platform?	5-point Likert scale

Table 15: Usage Model Survey Questions

Demographics

General Questions	Which gender do you identify with?	Male (1) Female (2) Non-binary (3) Prefer not to say (4)
	In which country do you currently reside?	List of countries
	How old are you?	Text field
	Which of these categories describes your average personal income per month after tax?	Less than 1,000 € (1) 1,000 € - 3,000 € (2) 3,000 € – 5,000 € (3) 5,000 € – 10,000 € (4) 10,000 € - 15,000 € (5) 15,000€ - 20,000 € (6) Above 20,000 € (7)
	Do you consent to participate in this survey?	Yes (1) No (2)
Personal Usage	How much do you care about fashion?	5-point Likert scale
	Does your level of interest (or lack thereof) in fashion influence your consumption behaviour?	5-point Likert scale

Table 16: Demographics Survey Questions

8.2 Appendix B: Residency of Survey Respondents

In which country do you currently reside?	
Australia	0.729927
Austria	5.109489
Canada	1.459854
China	3.649635
Denmark	0.729927
France	2.189781
Germany	46.715328
Greece	0.729927
Hong Kong (S.A.R.)	1.459854
Hungary	0.729927
India	1.459854
Ireland	0.729927
Israel	0.729927
Italy	1.459854
Kenya	0.729927
Netherlands	2.919708
New Zealand	1.459854
Pakistan	0.729927
Portugal	2.919708
Russian Federation	0.729927
Slovakia	0.729927
Spain	1.459854
Sweden	2.189781
Switzerland	2.189781
United Kingdom of Great Britain and Northern Ireland	8.029197
United States of America	8.029197

Table 17: Residency of survey respondents

8.3 Appendix C: Interview Questions

#	Question
1	What is your country of origin, your age, and your current occupation?
2	AI Experts: What are common barriers for consumers to adopt AI technologies and how can they be overcome? Fashion Experts: What are common barriers for consumers to use fashion rental services?
2.1	Only Fashion Experts: Do you believe that many people are not using fashion rental because of missing awareness of rental companies and the business model?
3	Would you anticipate rapid user adoption of AI features in fashion rental platforms, or a slower user acceptance process? What factors might influence the speed of user adoption?
4	Please indicate your level of agreement to the following statement: “User concerns regarding data privacy, biases or ethical dilemmas will lead to consumers rejecting the implementation of generative AI.”
5	Do you believe AI implementations are more inclined to contribute to success within an existing niche market, or do you see the potential for AI to drive fashion rental into mass adoption? What factors do you think influence this direction?
6	Can the implementation of AI technology enhance the usefulness and enjoyment of a platform? And if yes, in which ways?
7	Do you believe AI technology implementation can improve the technical performance and ease of use of a platform, or do you think it might complicate the system due to users' lack of understanding or unreliable AI features?
8	Do you believe users would perceive greater value for their money when using a platform with AI features compared to one without AI features? If yes, what influences this?
9	Do you think it is likely that newly integrated AI features in a platform have no impact on consumer engagement and usage?
10	Please indicate your level of agreement to the following statement: “Companies that implement Generative Artificial Intelligence earlier than competitors have a competitive advantage.”
11	Do you believe that businesses implementing Generative AI later can successfully outperform first movers?

12	From your perspective, how could the integration of Generative AI enhance consumer adoption of fashion rental models?
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Table 18: Interview Questions

8.4 Appendix D: Interview A

Age: 30; Country of Origin: Austria; Occupation: Senior IT Consultant and prior machine learning developer

RR	What are common barriers for consumers to adopt AI technologies and how can they be overcome?
A	<ul style="list-style-type: none"> • Commercially available tools are very powerful, but it often fails at the implementation level. • More AI technologies will be available soon for users, as big companies are recognizing the importance of these tools. • The main barrier currently is the right implementation, but this will get easier with growing progress.
RR	Would you anticipate rapid user adoption of AI features in fashion rental platforms, or a slower user acceptance process? What factors might influence the speed of user adoption?
A	<ul style="list-style-type: none"> • It will be implemented very quickly, as I see especially the fashion sector as a pioneer in implementing technological innovations. • Fashion often attracts young people who are already used to technology. • Especially a visual-try will have a positive effect on customers, it will heighten the profit. • The adoption will only be slow if the new tools do not work well in the beginning, as users will have an instant negative impression of these tools. • But overall it is a high critical mass that would use these tools.
RR	Please indicate your level of agreement to the following statement: “User concerns regarding data privacy, biases or ethical dilemmas will lead to consumers rejecting the implementation of generative AI.”
A	<p>Disagree.</p> <ul style="list-style-type: none"> • Only a small number of consumers will reject it because of their data privacy concerns, but the great mass will have no concerns.

RR	Do you believe AI implementations are more inclined to contribute to success within an existing niche market, or do you see the potential for AI to drive fashion rental into mass adoption? What factors do you think influence this direction?
A	<ul style="list-style-type: none"> • It will probably only contribute to success in an existing niche market. • AI tools can also be implemented in fashion retail platforms; therefore it will not boost explicitly the rental concept.
RR	Can the implementation of AI technology enhance the usefulness and enjoyment of a platform? And if yes, in which ways?
A	<ul style="list-style-type: none"> • The usability for the consumer is increased, as they get more advertisement on their exact needs and desires. • The enjoyment for consumers will be heightened because it will be fun to visually try-on new outfits.
RR	Do you believe AI technology implementation can improve the technical performance and ease of use of a platform, or do you think it might complicate the system due to users' lack of understanding or unreliable AI features?
A	<ul style="list-style-type: none"> • With AI it will get easier for the consumer, especially regarding the selection process of clothes. • In a long-term view it will definitely increase the ease of use, but short-term it might be that users first have to get used to the new tools and develop a sense of understanding.
RR	Do you believe users would perceive greater value for their money when using a platform with AI features compared to one without AI features? If yes, what influences this?
A	<ul style="list-style-type: none"> • No, implementing AI tools will not increase the perceived value for money.
RR	Do you think it is likely that newly integrated AI features in a platform have no impact on consumer engagement and usage?
A	<ul style="list-style-type: none"> • No, it definitely has an impact on consumer engagement and usage. Everything that can be personalized for a customer binds them more strongly to the brand and the service.
RR	Please indicate your level of agreement to the following statement: “Companies that implement Generative Artificial Intelligence earlier than competitors have a competitive advantage.”
A	Strongly agree.

	<ul style="list-style-type: none"> • AI will generate more traffic and a higher revenue. • Especially AI marketing will lead to more users, as the marketing content shows them exactly what they desire.
RR	Do you believe that businesses implementing Generative AI later can successfully outperform first movers?
A	<ul style="list-style-type: none"> • No, as Generative AI will not generate second mover advantages. The whole AI market moves at an extremely rapid pace and even those being the first to implement GAI have to advance their technology rapidly to keep up with the technological change. • It is more useful to learn from AI features right from the beginning, as due to the rapid technological change a company cannot learn much from first movers. They have to try out what works for them and what does not, as there are advancements in AI nearly every week.
RR	From your perspective, how could the integration of Generative AI enhance consumer adoption of fashion rental models?
A	<ul style="list-style-type: none"> • Marketing will be essential, as this business unit will be the first to transform towards GAI. • Especially the personalization of ads will have a great impact on consumers. Normally, you get a lot of advertisement and most of it will be ignored. But as soon as a consumer gets content created for their needs, they will want to explore the company behind the advertisement.

Table 19: Summary of Interview A

8.5 Appendix E: Interview B

Age: 32; Country of Origin: Germany; Occupation: Doctoral Researcher specialised in the field of Artificial Intelligence

RR	What are common barriers for consumers to adopt AI technologies and how can they be overcome?
B	<ul style="list-style-type: none"> • A main barrier is people not knowing that those AI tools exist. • Many AI tools are also not working properly and therefore first-time users quit to use them after their first try. • Missing knowledge to use the tools properly, for example not asking clear prompts to ChatGPT and therefore receiving false information.

	<ul style="list-style-type: none"> Usability is not laid out for the average user, as it is too complicated to use for the broad public. AI tools have to be easy to use and must be integrated into our everyday lives for people to use them frequently.
RR	Would you anticipate rapid user adoption of AI features in fashion rental platforms, or a slower user acceptance process? What factors might influence the speed of user adoption?
B	<ul style="list-style-type: none"> AI tools, such as using a visual try-on, will be adopted more quickly when integrating the user, for example by asking him what his preferences are. Fashion is a part of our identity, therefore integrating the consumers into the fashion selection process with personalized AI tools will enhance adoption.
RR	Please indicate your level of agreement to the following statement: “User concerns regarding data privacy, biases or ethical dilemmas will lead to consumers rejecting the implementation of generative AI.”
B	<p>Neutral.</p> <ul style="list-style-type: none"> Data privacy will not be a serious concern of many users, as it is always important superficially but in the end everyone cares more about using the platform.
RR	Do you believe AI implementations are more inclined to contribute to success within an existing niche market, or do you see the potential for AI to drive fashion rental into mass adoption? What factors do you think influence this direction?
B	<ul style="list-style-type: none"> AI implementation can only extend the success of an existing business model. The general success depends on various other factors, such as market dynamics and social values. Regarding fashion rental, the whole business concept could have trouble to overcome the popularity of fast fashion and rapid changes in fashion trends. The service itself must be popular first in order for AI to be able to extend their success.
RR	Can the implementation of AI technology enhance the usefulness and enjoyment of a platform? And if yes, in which ways?
B	<ul style="list-style-type: none"> Usability is the most important factor for the adoption of AI tools. Regarding enjoyment, the integration of the user, for example through a visual try-on, will enhance their enjoyment.
RR	Do you believe AI technology implementation can improve the technical performance and ease of use of a platform, or do you think it might complicate the system due to users' lack of understanding or unreliable AI features?

B	<ul style="list-style-type: none"> • It highly depends on how well the AI tool performs. There are some tools that are easy to use and others that do not work properly because of poor execution. • If an AI application is well executed, it will enhance the performance and ease of use for consumers.
RR	Do you believe users would perceive greater value for their money when using a platform with AI features compared to one without AI features? If yes, what influences this?
B	<ul style="list-style-type: none"> • No, the service itself will be the only factor they consider when assessing the value for their money.
RR	Do you think it is likely that newly integrated AI features in a platform have no impact on consumer engagement and usage?
B	<ul style="list-style-type: none"> • Only when the AI implementation is not visible to consumers, otherwise it always either has a positive or negative impact.
RR	Please indicate your level of agreement to the following statement: “Companies that implement Generative Artificial Intelligence earlier than competitors have a competitive advantage.”
B	Disagree. <ul style="list-style-type: none"> • Many companies are not integrating AI tools well enough, because of their lack of understanding of those technologies. This results in a poor performance and does not generate a competitive advantage for them.
RR	Do you believe that businesses implementing Generative AI later can successfully outperform first movers?
B	<ul style="list-style-type: none"> • This depends on how well AI tools have been implemented by competitors. If they have a good performance it will be very hard to outperform them, but if their integration of AI works poorly, second mover can make it better.
RR	From your perspective, how could the integration of Generative AI enhance consumer adoption of fashion rental models?
B	<ul style="list-style-type: none"> • AI has to be integrated into our normal fashion behaviour to be quickly adopted by consumers. It has to be easy to use, without creating more barriers to quickly rent our desired article. If AI is able to accomplish an advancement in the normal fashion behaviour of fashion rental consumers, it will expand its success. But first the concept of fashion rental has to be accepted by consumers.

Table 20: Summary of Interview B

8.6 Appendix F: Interview C

Age: 43; Country of Origin: Germany; Occupation: Professor for Ethical AI

RR	What are common barriers for consumers to adopt AI technologies and how can they be overcome?
C	<ul style="list-style-type: none"> • Many people are afraid they first have to invest time to further understand AI tools before using them and are unwilling to do so. • The barrier to engage with AI tools is currently considerably high due to this time constraint, but public tools such as ChatGPT lower this barrier. ChatGPT is easy to understand and use.
RR	Would you anticipate rapid user adoption of AI features in fashion rental platforms, or a slower user acceptance process? What factors might influence the speed of user adoption?
C	<ul style="list-style-type: none"> • In case of fashion rental the greater barrier will be to use the platform itself. I would anticipate that those using fashion rental have no problem with using AI, as this will be no barrier to use the whole platform. • The speed of adoption will be influenced by the degree of the technical barrier of using the AI tools. • However, I would anticipate that the target group of fashion rental platforms is used to new technology and will adopt quickly to well-functioning AI tools.
RR	Please indicate your level of agreement to the following statement: “User concerns regarding data privacy, biases or ethical dilemmas will lead to consumers rejecting the implementation of generative AI.”
C	Disagree. <ul style="list-style-type: none"> • In my research, I found that data privacy concerns have no great impact on user behaviour.
RR	Do you believe AI implementations are more inclined to contribute to success within an existing niche market, or do you see the potential for AI to drive fashion rental into mass adoption? What factors do you think influence this direction?
C	<ul style="list-style-type: none"> • I do not believe that integrating AI features will have a significant impact on users who have not used fashion rental beforehand. They are more likely to be a nice add-on for the existing user base but will not be the main driver for people deciding to use fashion rental.

	<ul style="list-style-type: none"> • However, where AI can have an impact is in the case of personalized marketing for fashion rental. I believe that this can help to increase awareness for the service itself and can therefore lead to more consumers.
RR	Can the implementation of AI technology enhance the usefulness and enjoyment of a platform? And if yes, in which ways?
C	<ul style="list-style-type: none"> • Yes, I believe it will enhance the enjoyment and usability of using a platform by integrating AI, as greater customization can boost the user engagement. However, first the initial barrier to use the service itself has to be overcome.
RR	Do you believe AI technology implementation can improve the technical performance and ease of use of a platform, or do you think it might complicate the system due to users' lack of understanding or unreliable AI features?
C	<ul style="list-style-type: none"> • This depends on the individual implementation of AI tools, as functionalities that are not developed properly can lead to a complication. • With more functionalities there will always be a slightly complicated more user interface. However, after users first get used to this new interface it can make the usage of a platform easier.
RR	Do you believe users would perceive greater value for their money when using a platform with AI features compared to one without AI features? If yes, what influences this?
C	<ul style="list-style-type: none"> • When user can recognize that AI features are used and are aware that other competitive platforms do not use those features, they can perceive a greater value for their money and increase their willingness to pay. • User will only have a greater willingness to pay when experiencing different platforms and concluding that the one with AI features offers them a greater value than those without.
RR	Do you think it is likely that newly integrated AI features in a platform have no impact on consumer engagement and usage?
C	<ul style="list-style-type: none"> • AI features will most likely not be neutral. They will either have a positive or negative impact, depending on how well they are integrated.
	Please indicate your level of agreement to the following statement: “Companies that implement Generative Artificial Intelligence earlier than competitors have a competitive advantage.”
C	Agree.

	<ul style="list-style-type: none"> Companies will have immense advantage in the area of market intelligence, giving them information about their market segment and target group.
RR	Do you believe that businesses implementing Generative AI later can successfully outperform first movers?
C	<ul style="list-style-type: none"> Yes, I think that some pioneers in the field of AI are going to fail at their attempts to successfully implement it and that second movers are able to learn from their mistakes. First movers could especially suffer from bad press due to ethical worries of potential users, leading to shitstorms. Having the strategy to be a second mover in this market can therefore lead to a competitive advantage.
RR	From your perspective, how could the integration of Generative AI enhance consumer adoption of fashion rental models?
C	<ul style="list-style-type: none"> Generative AI will contribute to a more natural interaction with technical features. It will also attract those who are not as technically savvy, because it enables user to interact with AI in natural human language. This will lead to a higher user acceptance.

Table 21: Summary of Interview C

8.7 Appendix G: Interview D

Age: 20; Country of origin: England; Occupation: Sales Expert

RR	What are common barriers for consumers to use fashion rental services?
D	<ul style="list-style-type: none"> The fear of damaging an item is a huge barrier, as they are unsure if they will have to pay a huge fee in case of damage. Another barrier is users fearing that their ordered items will not fit them.
RR	Do you believe that many people are not using fashion rental because of missing awareness of rental companies and the business model?
D	<ul style="list-style-type: none"> Yes definitely. I work at an on-site location of Hurr in London and when new customers enter the store they are often not aware that we are not a traditional retail store but offer fashion rental. Many consumers have never even heard of fashion rental beforehand. The awareness for fashion rental has to be increased to gain more customers.
RR	Would you anticipate rapid user adoption of AI features in fashion rental platforms, or a more gradual process? What factors might influence the speed of user adoption?

D	<ul style="list-style-type: none"> • I believe it will be a more gradual process because generative AI is completely new to most fashion users. • Hurr powers the rental platform for different department stores, such as Selfridges and John Lewis. John Lewis has already begun to implement Generative AI with a visual try-on tool from Zila. Other companies managed by Hurr, such as Selfridges, are waiting to see how the AI tool performs for John Lewis before implementing it themselves. • User adoption of these tools heavily depends of the demographic of the customer, as the younger generation is always quicker to adopt to new technologies. Older generations are often more hesitant to try it out.
RR	<p>Please indicate your level of agreement to the following statement:</p> <p>“User concerns regarding data privacy, biases or ethical dilemmas will lead to fashion rental consumers rejecting the implementation of generative AI.”</p>
D	<p>Disagree.</p> <ul style="list-style-type: none"> • I believe that the benefits of generative AI will outweigh the concerns. • What is important is the communication style of the brand implementing AI tools. Users have to be well informed about the utilization of their private data and the general implementation of AI to foster their trust in the platform.
RR	<p>Do you believe AI implementations are more inclined to contribute to success within the existing fashion rental market, or do you see the potential for AI to drive fashion rental into mass adoption? What factors do you think influence this direction?</p>
D	<ul style="list-style-type: none"> • I think AI tools will most likely not be the driving factor for users of fashion rental, but it can become a secondary driver. • What can help is marketing over social media to attract more users.
RR	<p>Can the implementation of AI technology enhance the usefulness and enjoyment of a fashion rental platform? And if yes, in which ways?</p>
D	<ul style="list-style-type: none"> • Yes, as it can improve the whole customer journey to make it more enjoyable and useful at the same time.
RR	<p>Do you believe AI technology implementation can improve the technical performance and ease of use of a fashion rental platform, or do you think it might complicate the system due to users' lack of understanding or unreliable AI features?</p>
D	<ul style="list-style-type: none"> • I think this depends on how the brand markets it and how it addresses different generations.

	<ul style="list-style-type: none"> • Gen Z and Boomers have to be addressed differently, as Boomers often have less technical understanding. • But overall, I believe it will make the platform easier to use.
RR	Do you believe users would perceive greater value for their money when using a platform with AI features compared to one without AI features? If yes, what influences this?
D	<ul style="list-style-type: none"> • I believe that users would perceive greater value when using a platform with AI features. A real-life example in the company I work for would be the improvement of size and fit predictions. When a consumer orders an item to rent at Hurr and it does not fit, they have the possibility to send it back. However, when doing so they have to pay a delivery fee and lose their free cleaning fee. If it would be possible to reduce the number of returns by integrating a visual try-on, I think that users would perceive a greater value because they are more secure when choosing the size of their desired item.
RR	Do you think it is likely that newly integrated AI features in a platform have no impact on consumer engagement and usage?
D	<ul style="list-style-type: none"> • I think they will definitely have impact on consumer engagement and usage. I was already able to experience it first-hand from the business side in the case of John Lewis rental service and their integration of the visual try-on, which had a very positive impact on the user group and was used very frequently.
RR	Please indicate your level of agreement to the following statement: “Companies that implement Generative Artificial Intelligence earlier than competitors have a competitive advantage.”
D	<p>Agree.</p> <p>I think users will be more likely to use a platform with Generative AI than one without. Although technical difficulties could also lead to a negative impact, most companies will likely benefit from integrating AI.</p>
RR	Do you believe that businesses implementing Gen AI later can successfully outperform first movers?
D	<ul style="list-style-type: none"> • First Movers will have the benefit of the trust from customers when implementing AI well enough. Consumers will then be more reluctant to switch to a different brand due to their customer loyalty. • I think that therefore first movers will have a stronger market position than second movers.

RR	From your perspective, how could the integration of Generative AI enhance consumer adoption of fashion rental models?
D	<ul style="list-style-type: none"> • Creating an omnichannel experience, where you can visually try-on clothes will defiantly enhance the user experience of fashion rental users. • It could also help by marketing and explaining the concept of fashion rental and emphasizing the advantages of it. Fashion rental offers many benefits people are unaware of.

Table 22: Summary of Interview D

8.8 Appendix H: Interview E

Country of origin: USA; Age: 23; Occupation: Personal Stylist for clothing rental

RR	What are common barriers for consumers to use fashion rental services?
E	<ul style="list-style-type: none"> • Sizing is a barrier because people quickly get frustrated when they rent an item, and it does not fit. • Lack of awareness is also a barrier, because especially older generations do not even know about the option to rent fashion.
RR	Do you believe that many people are not using fashion rental because of missing awareness of rental companies and the business model?
E	<ul style="list-style-type: none"> • Yes, fashion rental has a stake in the market of occasional wear especially and it would help to place the advertisements for renting an evening gown more prominently when someone browses for one on the internet. • Regarding day-to-day wear there is a general lack of awareness and on top of that a lack of understanding why fashion rental can also provide value when renting everyday clothes.
RR	Would you anticipate rapid user adoption of AI features in fashion rental platforms, or a more gradual process? What factors might influence the speed of user adoption?
E	<ul style="list-style-type: none"> • I would separate the effect of features that users not actively engage with, such as recommendation engines. Users love those features and often do not realize that they are using AI. They will adapt to those features very quickly without even realizing it. However, the features they have to actively engage with will need some more time to be adopted by users, as many will be hesitant at first to engage with AI, especially when it does not feel as personal.
RR	Please indicate your level of agreement to the following statement:

	“User concerns regarding data privacy, biases or ethical dilemmas will lead to fashion rental consumers rejecting the implementation of generative AI.”
E	Disagree. <ul style="list-style-type: none"> • Those issues are on peoples’ minds but often they do not have a significant impact on their usage behaviour. Mostly, people like to discuss such things as data privacy but end up using the platform anyway.
RR	Do you believe AI implementations are more inclined to contribute to success within the existing fashion rental market, or do you see the potential for AI to drive fashion rental into mass adoption? What factors do you think influence this direction?
E	<ul style="list-style-type: none"> • I think it can add to success of existing companies and their user base. • Enhancing fashion rental into mass adoption will highly depend on the marketing strategies and how successful those will be. • But overall the likelihood for retention is higher than those of adoption.
RR	Can the implementation of AI technology enhance the usefulness and enjoyment of a fashion rental platform? And if yes, in which ways?
E	<ul style="list-style-type: none"> • Yes I think it can, for example by enhancing the filtering and search options for certain styles. AI can make everything more personalized, which will be more fun and more usable for consumers.
RR	Do you believe AI technology implementation can improve the technical performance and ease of use of a fashion rental platform, or do you think it might complicate the system due to users' lack of understanding or unreliable AI features?
E	<ul style="list-style-type: none"> • It can go either way, depending on how well it is integrated. • Also there is a learning curve for consumers regarding the use of AI and the more they are exposed to it the more they will understand the different functionalities.
RR	Do you believe users would perceive greater value for their money when using a platform with AI features compared to one without AI features? If yes, what influences this?
E	<ul style="list-style-type: none"> • Yes, because if it is used to make the customer experience more personal it will give consumers a higher value.
RR	Do you think it is likely that newly integrated AI features in a platform have no impact on consumer engagement and usage?
E	<ul style="list-style-type: none"> • I think it has an impact, especially when being used in marketing.
RR	Please indicate your level of agreement to the following statement:

	“Companies that implement Generative Artificial Intelligence earlier than competitors have a competitive advantage.”
E	Strongly agree. <ul style="list-style-type: none"> • Adopting new technologies as the first in the market will enhance the market position of a company. • Especially everything that makes the customer journey more personal will gain a competitive advantage for the company.
RR	Do you believe that businesses implementing Gen AI later can successfully outperform first movers?
E	<ul style="list-style-type: none"> • They could when they have a very strong platform. But due to brand loyalty of customers to the first movers, it will be very difficult to get them to switch brands.
RR	From your perspective, how could the integration of Generative AI enhance consumer adoption of fashion rental models?
	<ul style="list-style-type: none"> • The strongest effect will be in the field of marketing because it can transform prospects into active customers. • Also UX design, which will enhance the customer journey.

Table 23: Summary of Interview E

8.9 Appendix I: Interview F

Age: 25; Country of Origin: Italy; Occupation: Management Consultant in Fashion and Luxury

RR	What are common barriers for consumers to adopt AI technologies and how can they be overcome?
F	<ul style="list-style-type: none"> • AI is getting more and more accessible, but the older generation has still trust issues regarding AI. • The trust has to be built, but I believe this is only a matter of time and that the mass adoption of AI tools in general will definitely come.
RR	Would you anticipate rapid user adoption of AI features in fashion rental platforms, or a slower user acceptance process? What factors might influence the speed of user adoption?
F	<ul style="list-style-type: none"> • A lot of brands are currently investing heavily in generative AI, which will speed up user adoption due to growing user exposure. • In a few years I anticipate that generative AI will be implemented widely in the fashion market.

	<ul style="list-style-type: none"> User adoption will therefore happen very quickly.
RR	<p>Please indicate your level of agreement to the following statement:</p> <p>“User concerns regarding data privacy, biases or ethical dilemmas will lead to consumers rejecting the implementation of generative AI.”</p>
F	<p>Neutral.</p> <ul style="list-style-type: none"> Some people are very worried about AI knowing everything about them and are afraid of sharing their data, others have no concerns whatsoever and just use AI features, such as Chat GPT.
RR	<p>Do you believe AI implementations are more inclined to contribute to success within an existing niche market, or do you see the potential for AI to drive fashion rental into mass adoption? What factors do you think influence this direction?</p>
F	<ul style="list-style-type: none"> Generative AI will not only impact the fashion rental but the whole fashion industry. The effect of fashion rental will not be exclusive for fashion rental. Therefore it can be an enhancer of fashion rental, but it will not be a total game changer for the business model. The one thing it can have a great impact is in marketing, increasing the awareness about the option of fashion rental.
RR	<p>Can the implementation of AI technology enhance the usefulness and enjoyment of a platform? And if yes, in which ways?</p>
F	<ul style="list-style-type: none"> Yes, AI allows us to drive this personalized shopping experience even further, which will enhance the enjoyment of the customer. Better customer experience.
RR	<p>Do you believe AI technology implementation can improve the technical performance and ease of use of a platform, or do you think it might complicate the system due to users' lack of understanding or unreliable AI features?</p>
F	<ul style="list-style-type: none"> Yes, it will make it easier, especially considering the integration of human like speech.
RR	<p>Do you believe users would perceive greater value for their money when using a platform with AI features compared to one without AI features? If yes, what influences this?</p>
F	<ul style="list-style-type: none"> Yes, this could happen. Clients are always searching for a personalized experience.
RR	<p>Do you think it is likely that newly integrated AI features in a platform have no impact on consumer engagement and usage?</p>

F	<ul style="list-style-type: none"> No, it will have a big impact.
RR	Please indicate your level of agreement to the following statement: “Companies that implement Generative Artificial Intelligence earlier than competitors have a competitive advantage.”
F	Strongly agree. <ul style="list-style-type: none"> Enhancing customer experience will improve customer loyalty and the company is able to engage more customers than its competitors not using generative AI.
RR	Do you believe that businesses implementing Generative AI later can successfully outperform first movers?
F	<ul style="list-style-type: none"> I think using generative AI will become the new normal. The first mover will have a big advantage, but second movers will also experience a boost when implementing it.
RR	From your perspective, how could the integration of Generative AI enhance consumer adoption of fashion rental models?
F	<ul style="list-style-type: none"> Personalized experience. Marketing. Everything that can also be used for a fashion retailer. AI could help by improving size and fit predictions to reduce returns. AI can also enhance the understanding of the target group to know which rental items and categories are popular and suitable to rent.

Table 24: Summary of Interview F

8.10 Appendix J: Interview G

Age: 25; Country of Origin: India; Occupation: Machine Learning Engineer

RR	What are common barriers for consumers to adopt AI technologies and how can they be overcome?
G	<ul style="list-style-type: none"> People do not know which tools to use for which job. Discover Ability. For people 18-35 the usage is far easier than for older people. Mix of discover ability, usability, and technical know-how.
RR	Would you anticipate rapid user adoption of AI features in fashion rental platforms, or a slower user acceptance process? What factors might influence the speed of user adoption?
G	<ul style="list-style-type: none"> If the user segment is young the acceptance will happen very fast.

	<ul style="list-style-type: none"> • The higher the customization the better the acceptance.
RR	<p>Please indicate your level of agreement to the following statement:</p> <p>“User concerns regarding data privacy, biases or ethical dilemmas will lead to consumers rejecting the implementation of generative AI.”</p>
G	<p>Disagree.</p> <ul style="list-style-type: none"> • People do not really care about those topics in reality. • We just have to be careful with the AI training data to make the AI unbiased and would need AI Ethics to comply with.
RR	<p>Do you believe AI implementations are more inclined to contribute to success within an existing niche market, or do you see the potential for AI to drive fashion rental into mass adoption? What factors do you think influence this direction?</p>
G	<ul style="list-style-type: none"> • I think it would be possible for AI to push people to use fashion rental. For example a Nuuly Bot that users can talk to, which would highly improve the user experience.
RR	<p>Can the implementation of AI technology enhance the usefulness and enjoyment of a platform? And if yes, in which ways?</p>
G	<ul style="list-style-type: none"> • Yes definitely. • AI can make a platform more useful by for example integrating better recommendations and search bars and it will be also more fun to use.
RR	<p>Do you believe AI technology implementation can improve the technical performance and ease of use of a platform, or do you think it might complicate the system due to users' lack of understanding or unreliable AI features?</p>
G	<ul style="list-style-type: none"> • It depends, with the right implementation it can improve the technical performance. But when it is not implemented very well, it can also turn users away from using the platform.
RR	<p>Do you believe users would perceive greater value for their money when using a platform with AI features compared to one without AI features? If yes, what influences this?</p>
G	<ul style="list-style-type: none"> • Yes, I think that would be possible if AI highly increases user experience.
RR	<p>Do you think it is likely that newly integrated AI features in a platform have no impact on consumer engagement and usage?</p>
G	<ul style="list-style-type: none"> • It depends on the implementation. It only will have no impact if it is only used internally on the business side. But when AI is used in areas where it influences the customer journey, it will always have an impact.

RR	Please indicate your level of agreement to the following statement: “Companies that implement Generative Artificial Intelligence earlier than competitors have a competitive advantage.”
G	Neutral. <ul style="list-style-type: none"> GAI is currently developing very fast. Even if a company implements GAI, it might not give them a great competitive advantage because others can catch up very quickly.
RR	Do you believe that businesses implementing Generative AI later can successfully outperform first movers?
G	<ul style="list-style-type: none"> Yes, because of the fast pace of GAI. The first mover advantage will diminish very quickly, as technical development outpaces the adoption of an existing tool. Therefore, second movers can benefit from the development and implement an even better tool.
RR	From your perspective, how could the integration of Generative AI enhance consumer adoption of fashion rental models?
G	<ul style="list-style-type: none"> It can improve the whole customer journey by helping them decide on their rental items. By improving recommendations, style matching and giving more information on the rental item, the decision process can be quicker and more fun. It can also increase the advertisements to make marketing catchier for the target group.

Table 25: Summary of Interview G

8.11 Appendix K: Interview H

Age: 27; Country of Origin: Germany; Occupation: Strategic Consultant in the field data and AI

RR	What are common barriers for consumers to adopt AI technologies and how can they be overcome?
H	<ul style="list-style-type: none"> Trust, many people do not understand how AI works and therefore are doubtful regarding the usage and outputs. Biases and discrimination are also a huge barrier that turns users away from using AI.

RR	Would you anticipate rapid user adoption of AI features in fashion rental platforms, or a slower user acceptance process? What factors might influence the speed of user adoption?
H	<ul style="list-style-type: none"> • In the retail context AI is pretty developed already, for example through recommendation engines. From this experience, I predict a rapid adoption of GAI. • I think what is important is to backup GAI with human customer support in case it is needed.
RR	Please indicate your level of agreement to the following statement: “User concerns regarding data privacy, biases or ethical dilemmas will lead to consumers rejecting the implementation of generative AI.”
H	Disagree. I think the advantages and the degree of digitalization within the public sphere will overpower doubts of users. Many people will only see the possibilities AI offers without thinking too much about the privacy and ethics behind it.
RR	Do you believe AI implementations are more inclined to contribute to success within an existing niche market, or do you see the potential for AI to drive fashion rental into mass adoption? What factors do you think influence this direction?
H	<ul style="list-style-type: none"> • I think AI is only an add-on to an existing business model, but business model itself has to be successful first. With regard to fashion rental, I think that AI can improve the usage of this existing consumption model, but the consumption model itself, renting rather than buying, will not be changed. AI will not use the problem that already exist within this model and greatly change the user acceptance, but AI can enhance customer communication and increase awareness. It can therefore be used as a tool to reach the goal of increasing awareness, but if users are still opposed to renting it will not lead to mass adoption.
RR	Can the implementation of AI technology enhance the usefulness and enjoyment of a platform? And if yes, in which ways?
H	<ul style="list-style-type: none"> • Absolutely. AI is rational, accurate and efficient and is available 24/7. Therefore service quality and usefulness can be brought to another level. I think especially in the fashion area it can make the customer experience much more fun, as the interaction with innovative new tools always brings more enjoyment.

RR	Do you believe AI technology implementation can improve the technical performance and ease of use of a platform, or do you think it might complicate the system due to users' lack of understanding or unreliable AI features?
H	<ul style="list-style-type: none"> • It depends how well the user interface is developed. But overall, I think AI is always more likely to improve a system rather than make it more complicated.
RR	Do you believe users would perceive greater value for their money when using a platform with AI features compared to one without AI features? If yes, what influences this?
H	<ul style="list-style-type: none"> • No, because the rental item itself will not be changed. But I do think that users will increase their fashion rental usage with the right implementation of AI, as it can also improve the connection a customer has to a brand.
RR	Do you think it is likely that newly integrated AI features in a platform have no impact on consumer engagement and usage?
H	<ul style="list-style-type: none"> • I think it will most likely have a positive influence, due to the increased personalization. • AI will have a lot of knowledge about a customer and has the power to make them feel more worshipped, which will in turn increase their customer loyalty.
RR	Please indicate your level of agreement to the following statement: “Companies that implement Generative Artificial Intelligence earlier than competitors have a competitive advantage.”
H	Strongly agree. GAI will have the power to bring completely new business models on the market. The earlier companies start the journey with GAI, the better it will be for them.
RR	Do you believe that businesses implementing Generative AI later can successfully outperform first movers?
H	<ul style="list-style-type: none"> • I do not think so, because even if a first mover makes mistakes in the implementation it will still improve their knowledge. • Innovations are always try and error, especially in the case of technical advancements. Those starting first to experiment with it and go through different maturity levels of AI are also more likely to have a breakthrough with their business.
RR	From your perspective, how could the integration of Generative AI enhance consumer adoption of fashion rental models?

H	<ul style="list-style-type: none"> • Trying clothes on remotely will have a great impact. • The biggest impact in the fashion sphere will happen over marketing and increasing the awareness. Communication to customers will be far more personalized and if it then leads to more AI tools such as visual try-on, it has the ability to increase consumer adoption.
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Table 26: Summary of Interview H

8.12 Appendix L: Interview I

Age: 28; Country of Origin: Germany; Occupation: Managing Director and CTO

RR	What are common barriers for consumers to adopt AI technologies and how can they be overcome?
I	<ul style="list-style-type: none"> • Trust in the data privacy and storage of personal data. • Ease of use, if an AI tool is too complicated it will not be used, it has to be easy to understand.
RR	Would you anticipate rapid user adoption of AI features in fashion rental platforms, or a slower user acceptance process? What factors might influence the speed of user adoption?
I	<ul style="list-style-type: none"> • I think it will happen very fast since the benefit GAI offers is huge for the consumer.
RR	Please indicate your level of agreement to the following statement: “User concerns regarding data privacy, biases or ethical dilemmas will lead to consumers rejecting the implementation of generative AI.”
I	Disagree. <ul style="list-style-type: none"> • ChatGPT already shows that GAI will be accepted because it greatly supports human tasks and this outweighs any doubts.
RR	Do you believe AI implementations are more inclined to contribute to success within an existing niche market, or do you see the potential for AI to drive fashion rental into mass adoption? What factors do you think influence this direction?
I	<ul style="list-style-type: none"> • I think AI definitely has the power to drive a business model such as fashion rental into mass adoption, because it will vastly improve marketing and customer experience.
RR	Can the implementation of AI technology enhance the usefulness and enjoyment of a platform? And if yes, in which ways?

I	<ul style="list-style-type: none"> • Yes, because it will personalize the whole customer journey. Building this new connection between users and fashion by inspiring them to try new styles binds to user to the platform and the brand.
RR	Do you believe AI technology implementation can improve the technical performance and ease of use of a platform, or do you think it might complicate the system due to users' lack of understanding or unreliable AI features?
I	<ul style="list-style-type: none"> • I think the usage must be seamless for the user and GAI offers this seamless experience, making it extremely easy to use for everyone.
RR	Do you believe users would perceive greater value for their money when using a platform with AI features compared to one without AI features? If yes, what influences this?
I	<ul style="list-style-type: none"> • I do not think that user would perceive greater value for the items they rent, but I do think that companies can save money by implementing AI. This can happen by reducing returns through better size predictions and visual try-on, which will reduce the costs of returns on the company side.
RR	Do you think it is likely that newly integrated AI features in a platform have no impact on consumer engagement and usage?
I	<ul style="list-style-type: none"> • No, when AI is implemented in an area where it is experienceable for the user, it will always have an impact.
RR	Please indicate your level of agreement to the following statement: “Companies that implement Generative Artificial Intelligence earlier than competitors have a competitive advantage.”
I	Strongly agree. <ul style="list-style-type: none"> • GAI offers the possibility to gain a competitive advantage with minimal investment.
RR	Do you believe that businesses implementing Generative AI later can successfully outperform first movers?
I	<ul style="list-style-type: none"> • When for example a company implements visual try-on that does not work properly or implements a ChatBot that gives out wrong information, a company can very quickly loose a lot of customers. When technology is not mature enough it can have an extremely negative output and second-movers doing it better can be the brand that customers turn to.

RR	From your perspective, how could the integration of Generative AI enhance consumer adoption of fashion rental models?
I	<ul style="list-style-type: none"> • I think it can just generally enhance the whole experience my matching rental items to personal style preferences.

Table 27: Summary of Interview I