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**THE IMPACT OF AI-POWERED PRODUCT RECOMMENDATIONS ON
CONSUMERS ONLINE PURCHASE INTENTION IN THE UK FASHION RETAIL
INDUSTRY**



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**Master's Degrees by Examination and Dissertation
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Abstract

The rapid adoption of Artificial Intelligence in product recommendations transforms the UK fashion retail industry by influencing consumers' online purchase intentions. Within this focus, the study investigated how AI-powered product recommendations impact buyers' online purchasing intentions across the UK fashion retail landscape, as well as determining their effectiveness for businesses and perceived personalisation. From consumers' perceptions towards AI-driven product recommendations adoption, the influence of perceived personalisation and online purchasing intentions have been highlighted as the research objectives, whereas the research question pointed out the primary factor in increasing buyers' online shopping behaviour in the fashion retail industry in the UK. As a methodological choice, the study has used primary quantitative data to collect responses from online shoppers in the fashion retail market. For data collection, a well-structured online questionnaire has been considered which further clarifies the generated reliable outcomes. The collected quantitative data not only measured perceived personalisation and purchase intentions of buyers but also highlighted the statistical relationship between these two important factors.

Furthermore, the findings have illustrated that AI-based product recommendations are already preferred by UK fashion consumers. Considering participants' responses, the results signified that AI recommendations play a pivotal role in the online fashion retail landscape which supports consumer perceptions, whereas perceived personalisation positively transformed buyers' searching patterns or browsing histories into shopping behaviour. Similarly, the technical performance of AI-driven product recommendations has been reflected as an important asset to boost consumer confidence and enhance trust towards the UK online fashion retail industry. Lastly, by considering the overall research context and findings, the conclusion section has demonstrated that emphasised personalisation, transparency and responsible data use have been determined as important dimensions for delivering UK fashion retail companies AI-enabled immersive customer experiences.

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List of Abbreviations

Abbreviation	Full Term
AI	Artificial Intelligence
ANOVA	Analysis Of Variance
H0	Null Hypothesis
ONS	Office for National Statistics
OPI	Online Purchase Intention
PP	Perceived Personalisation
PU	Perceived Usefulness
SD	Standard Deviation
SPSS	Statistical Package for the Social Sciences
TAM	Technology Acceptance Model
TR	Consumer Trust

Glossary

Term	Definition
AI-powered product recommendation	Technology-driven recommendation which uses AI to evaluate customer information
Algorithmic bias	Systematic tendency within an algorithm that produces inaccurate outcomes
Cross-sectional study	Research design in which data are collected and outcomes are measured in a specific point of time
Deductive approach	A research approach which uses existing theories to develop hypotheses which are further tested using empirical data
Likert scale	A measurement that is used in surveys to measure levels of agreement or disagreement of respondents across a spectrum

Chapter 1: Introduction

1.1 Background of the research topic

Artificial intelligence is one of the transformative technologies that has empowered the retail industry and enabled the customer experience through data driven decision making in terms of personalised marketing. Chowdhury *et al.* (2024) stated AI powered product recommendation is one of the most effective adaptations towards the retail marketing system which has analysed the consumer browsing history purchasing behaviour and preferences towards their product to match the best need. The recommendation system is essential for online fashion retailers as they improve product discovery customer engagement and purchase conversion rate. As per the reports of UK office for National Statistics (ONS) the AI adaptation among the UK business has increased the personalisation product choice and service delivery process by empowering business operations (ONS, 2025).

Ademtsu, Pathak and Oduraa (2023) contradicted AI has particularly defined the UK fashion retail sector by evolving the online shopping as a dominant purchasing channel for the consumers. The fashion retailers like ASOS, Marks and Spencer, Next, Primark and many more have utilised Ai powered recommendation system to provide personalised shopping experiences and improve the consumer satisfaction. The recent report of marks and Spencer has defined that Ai styling has become the major assistant to understand the personalised outfit recommendation as per the body shape and style preferences of consumers (Butler, 2024). Therefore, it is seen that AI recommendation technologies have improved the shopping transparency and privacy to influence consumer acceptance.

The introduction of AI-enabled recommendations led to a rapid growth of online fashion shopping in the country. eMarketer (2025) forecasts that UK textiles, clothing and footwear e-commerce sales will grow by 4.6% in 2025 to reach £21.01 billion, highlighting the growing importance of digital channels for fashion retailers. In the past year, 51.8% of shoppers in the UK have purchased fashion or accessories online showcasing the large consumer base that could be exposed to AI-supported recommendations (Skywire, 2025).

Consumers are increasingly adopting AI-assisted shopping. According to research conducted among 41,000 consumers in 28 countries, Adyen has revealed that UK

consumers' spending expectations are increasing. 35% of UK consumers say they use AI when shopping, a 39% increase on 2024. It also found that 56% of UK consumers who use AI when shopping said that it inspired them to pick items like outfits. A further 66% said they understand that retailers may use AI to offer them products (Adyen, 2025). These results show that AI is increasingly relevant to consumers' fashion purchases.

Scholarly investigation in recent years has added further support. A study using 375 online fashion shoppers, found that AI-powered personalisation influences purchase intention through perceived benefits, shopping experience, perceived risk and trust (Jasim *et al.*, 2026). So, AI recommendations should not just be regarded as a technological function but rather as a consumer-facing mechanism that can influence product evaluation, trust and purchasing intention.

1.2 Research Problem and Literature Gap

The rapid growth of artificial intelligence has transformed the online fashion detail industry by enabling the personalised delivery and product recommendation as per consumers browsing behaviour. Nasri *et al.* (2025) articulated the major fashion retailers in the UK has been relying on AI powered recommendations to improve their customer engagement and styling statement which has increased the online sales capability. However, after having this widespread implementation the recommendation has influenced the online purchasing intention and evaluated how the inconsistent findings can impact the ai driven recommendation towards the perceived relevance and purchase intention (O Brien and Shoaib, 2026). The overall study has focused on the privacy and algorithm transparency as well as recommendation accuracy of artificial intelligence which may increase the consumer's willingness to purchase.

The gap of the entire academic literature focuses that experimental design and secondary data set can simulate the shopping environment as it can accurately represent the real consumer behaviour. O Brien and Shoaib (2026) contradicted many research shows countries like China, United States, South Korea and many more have limited applicability towards the UK fashion retail market thus it is necessary to focus on the ai aspects for better recommendation quality or algorithm performance which can drag the attention and combine the influence of perceived personality with consumer trust. Therefore, the limited research shows that AI powered product

recommendation in real world online setting can empower the UK fashion consumer responses (Yeo *et al.* 2022). Thus, it is necessary to evaluate the concept of personalisation and trust as a joint component for online purchasing intention in the UK retail fashion industry.

1.3 Research aim and objectives

The aim of the study is to examine the impact of AI powered product recommendations on online purchase intention among UK fashion retail consumers.

Here are the strategic objectives of the study-

- To examine consumers' perceptions of AI-powered product recommendations in the UK online fashion retail industry.
- To investigate the influence of perceived personalisation on consumers' online purchase intention.
- To examine the influence of trust in AI-powered product recommendations on consumers' online purchase intention.
- To identify the key factors that influence the effectiveness of AI-powered product recommendations in the UK online fashion retail sector.

1.4 Research questions

Main Question

How do AI-powered product recommendations influence the online purchase intention of consumers in the UK fashion retail industry?

Secondary Questions

1. What are the perceptions of consumers towards the AI powered product recommendations in the UK online fashion retail industry?
2. What is the influence of perceived personalisation on consumer online purchase intention?
3. What is the influence of trust in AI powered product recommendation on consumers' online purchase intention?
4. What are the key factors that can influence the effectiveness of AI powered product recommendations in the UK online fashion retail sector?

1.5 Scope of the Review

The dissertation strongly focuses on the impact of AI powered product recommendation on the online purchasing intention and behaviour of consumers within the UK retail industry. The scope of the study examined the key concepts as well as the AI recommendation systems received personalisation consumer trust and online purchase intention by drawing academic literature published between 2021 to 2026 in order to ensure contemporary relevance in the study. The study has also defined the limitation towards the online fashion retail and exclude the physical retail environments as AI applications such as chat bots dynamic pricing and inventory management can only be defined through artificial intelligence. Thus, the review focuses on consumer perception rather than organisational or technical perspective by concentrating on the UK fashion retail industry.

1.6 Significance and Rationale of the Study

This research holds significance because AI is influencing how consumers look for, compare and choose fashion products online. The use of AI-generated recommendations can make shopping easier and less cumbersome for consumers. Nonetheless, these recommendations may not always be accepted by consumers. Consumers may doubt whether the recommended items are accurate, beneficial or reliable. Recent findings indicate that trust, risk perception, and the shopping experience can affect consumers' purchase intention of AI-enabled recommended products.

The significance of the study arises from the fact that personalisation may create benefits and concerns. Customized suggestions can minimize efforts and maximize product discovery. The amount of personal information which retailers collect or use may cause discomfort in consumers. This creates a need for personalised services to complement enhanced privacy, transparency and consumer control. As per recent studies in fashion e-commerce, these factors have an influence on trust and purchase intention.

UK fashion retailers can benefit from this research as it will allow them to gauge the consumer's reaction to AI suggestions. The results can help retailers enhance the quality of recommendations and provide transparent AI-based shopping experiences. It can also help retailers understand why some consumers trust AI recommendations and others may shun them. The research is significant from a shopper's perspective

because e-shopping involves a host of choices. AI can make this less challenging by displaying pertinent products. Nonetheless, before purchasing, they need to trust the recommendations. Consequently, it is important to understand the link between these concepts.

1.7 Structure of the dissertation

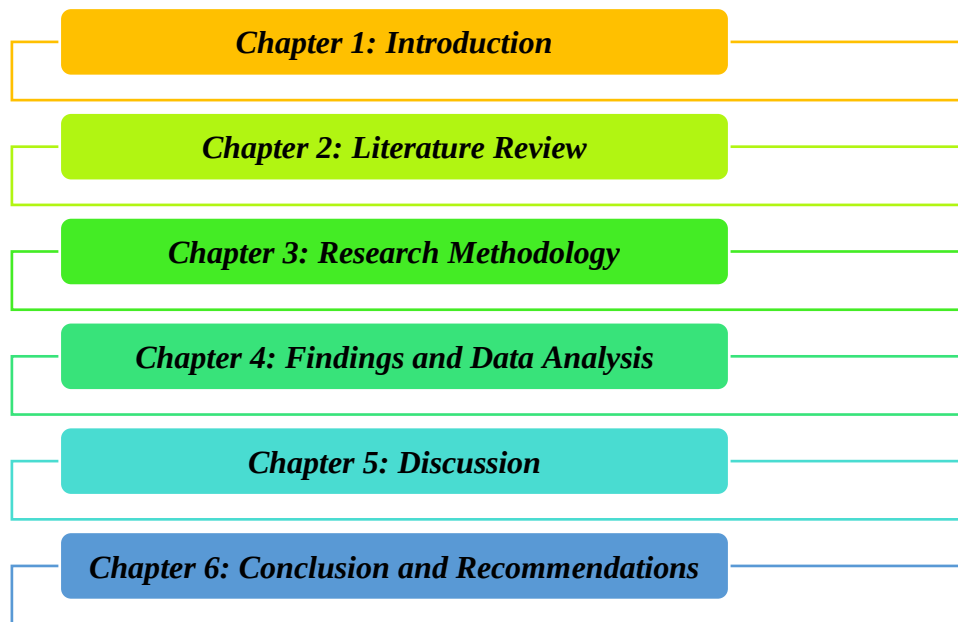


Figure 1: Structure of the dissertation

(Source: Self-Developed)

The structure of the dissertation consists of six stages of evaluation related to how the dissertations should be structured. **Chapter 1 Introduction** significantly focuses on defining research aim objective research problem and rationality of the study with specific background. **Chapter 2 Literature Review** consists of core literature identified from the secondary sources considering a specific year range of 2021 to till 2026. **Chapter 3 Methodology** specifically focuses on the primary data sources by evaluating the quantity phenomena of the study and the data collection analysis approach and many more other factors. **Chapter 4 Findings and Data Analysis** focuses on the analysis of the collected data sources from the primary quantitative data collection method by evaluating the responses of the participants with statistical findings. **Chapter 5 Discussion** evaluates the ultimate understanding of the research from its literature review and findings that can evaluate the interrelationship between

these two chapters. The last and final **Chapter 6 Conclusion and Recommendations** highlight the overall conclusion and Smart recommendation with significant analysis of future scope and limitation of the study.

Chapter 2: Literature review

2.1 Introduction

AI technology use in the fashion business has increased significantly in recent years. This chapter has focused on evaluating different peer-reviewed sources to recognise the impact of this technology on the business. Analysis of these journals as well as articles develops a knowledge ground for further study. In addition to that, evaluation of different literature also aids in understanding the relation among different variables. The understanding of these relationships allows to proceed further in the research as well as meet the objectives of this study. This segment also includes evaluation of different theoretical aspects and relates it with the AI-powered fashion business. This evaluation helps in the creation of the hypotheses.

2.2 Relationship among Variables

2.2.1 Role of AI in the fashion industry

The use of AI technologies is transforming the operations in the fashion retail segment. This innovative technology plays an important role in improving the experience of the consumers as well as their decision-making capabilities. According to Al-Surmi, Bashiri and Koliouris, (2022), the use of AI has also enhanced the overall operational efficiency along with sustainability of the business. It has been noted that the use of AI has helped in the personalisation of operations. AI is able to analyse the browsing patterns of the consumers along with purchase history. In addition to that AI also aids in managing preferences as well as interaction between the products and consumers. Wang (2021) stated that the development of this interaction allows companies to personalise the promotional activities along with tailor the recommendations.



Figure 2: Roles of AI

(Source: Al-Surmi, Bashiri and Koliouris, 2022)

It is seen that the use of AI enhances the personalisation experience along with intention for product purchase. Contrary to Wang (2021) Alhitmi *et al.* (2024) commented that management of privacy along with transparency creates concerns among consumers. Demand forecasting as well as management of inventory is also a role of AI in the fashion business. Rane *et al.* (2024) stated that the use of machine learning is able to evaluate the historical information. This can in turn be able evaluate the seasonal pattern of product purchases as well as demands of the consumers. This understanding ultimately helps fashion businesses to manage the stocks in an effective manner. The use of AI has helped in addressing the uncertainty of the market. On the other hand, virtual try-ons as well as improvement of the experience of digital shopping are also some of the major roles of AI. According to Zimmermann *et al.* (2023) AI uses augmented reality that in turn helps consumers to properly visualise the products. In addition to that this innovative technology also aids in image searching along with personalisation of the styling. This in turn creates a highly interactive experience for the customers. Bieńkowska (2025) stated that the use of AI technology in the fashion operation has also enhanced sustainability. Use of this technology has allowed retailers to reduce overproduction as well as improve the allocation of resources. Contrary to Bieńkowska (2025) Papagiannidis *et al.* (2023) commented that implementation of this technology requires a noticeable amount of information along with a proper governance structure. In addition to that concerns regarding ethics management along with privacy management of the consumers are also creating challenges for the business.

2.2.2 Evaluating the effectiveness of AI-powered product recommendations in influencing fashion retail consumers' online purchase intention

Integration of AI in product recommendation has become an emerging trend that is transforming the fashion retail market by analysing shoppers' behaviour, previous purchase history, browsing history and product preferences. Through an in-depth analysis of shoppers' purchase behaviour, AI-powered product recommendations system effectively bridges the gaps within the fashion retailers' strategies to enhance customer journeys and influence their purchase decisions. A review of existing studies has evidenced that the integration of AI in recommending and personalising fashion products, has significantly accelerated consumers' purchase intestines through impulse-driven decision-making (Alabi, 2024; Hu *et al.* 2025;). AI-powered product

recommendation is emerging as a vital component of the modern e-commerce system which explicitly influences consumer experience and influences their purchase intentions by strengthening an emotional connection with the brand.

Moreover, the product recommendation system, in a broader context, defines the methods of collaborative filtering, product-based filtering and hybrid approaches. AI-powered recommendations system not only minimises consumers' search costs and meet their product needs, but also promotes a higher level of usefulness, influencing their online purchase intentions. Contrarily, another study by Mathews, Malhotra and Kaur (2025) have pointed out the limitations of integrating AI in product recommendations systems by highlighting algorithmic bias in personalising the recommendation system, resulting in decreased consumer trust. Consequently, consumers' perceived brand image by the violation of transparency and integrity strongly impact their trust and purchase decision-making. Fashion retailers can address these issues by deploying internal audits and integrating data encryption to ensure data security and privacy.

In the context of AI-powered product recommendation systems, relevant studies have portrayed that AI-driven product recommendations empower the fashion retailers to become psychologically attuned to the targeted customers and strengthen brand image (Sharma *et al.* 2025; Janakiraman *et al.* 2025). AI-powered recommendation systems enable the retailers to deliver personalised and relevant suggestions that eases consumers' online shopping activities by minimising time consumptions and complexities in finding suitable fashion accessories or outfits. Transparent and ethically sound recommendation systems significantly strengthen targeted consumer trust in online shopping and influence their engagement by addressing their perceived intrusiveness and ambiguities associated with online shopping.

On the other hand, Jancy and Muthukumaravel (2025) have highlighted in their studies that AI-based recommendation systems involving virtual try-ons, chatbots and dynamic pricing are susceptible to data breaches and algorithm bias. Associated ethical issues significantly catalyse consumers' mistrust in online fashion reality and hinder them from purchasing from such online fashion brands. Hence, the fashion retailers can prioritise developing ethical governance and comply with data privacy

regulations for ensuring consumers belief and instigate their purchase decisions for accelerating online sales.

2.2.3 Analysing the accuracies of AI-powered personalised product recommendation in transforming consumers' online purchase intention

AI-powered product recommendation systems have already emerged as an integral part of the online fashion retailing sector, whereas personalisation adds a higher value to the brands in developing an emotional connection with their consumers. Personalisation strategy by considering individual customers' browsing history, search patterns, buying behaviour, product and price preferences, help the fashion retailers to integrate AI in recommending relevant fashion items to ensure customer satisfaction. A detailed review of studies has demonstrated that AI-powered personalised recommendations by embracing the power of advanced AI algorithms and data-led insights enhances accuracy and relevance in the product recommendations by delivering a hassle-free user experience (Alabi, 2024; Cherukuri, 2024). Advanced algorithms assist the retailers by analysing vast datasets, involving user preferences, browsing history and purchase patterns to tailor product recommendation. Additionally, such recommendation systems optimise business operations and revolutionise the path in which customers interact with specific online fashion platforms.

AI integration enables the fashion retailing platforms to acquire a deep understanding of customer needs and individual preferences for personalised accurate recommendations to influence conversion rates. From a contrary viewpoint, Kordzadeh and Ghasemaghaei (2021) have shown in their study that integration of AI in decision-making is likely to create ethical risks of algorithmic bias. A lack of fairness while recommending products by disrupted personalisation strongly affects consumer trusts and inclination to purchase online. Inaccurate personalisation interrupts in recommending suitable fashion products which increases customer resentments and hinders their choice to shop online from the fashion retailers. Hence, the retailers need to ensure hiring a strong IT team and conduct internal audits to identify the inaccuracies in the recommendation system to minimise potential customer dissatisfaction and decline in e-commerce business.

Reviewing another set of studies have also emphasised that an AI-based recommendation system offers fashion products by identifying the products in which consumers have shown interest or purchased similar products earlier (Raji *et al.* 2024; George *et al.* 2026). During the digital transformation era, the fashion retail market where AI has emerged as a driving force that propels a future where it will optimise consumer-business relationship and influence consumers' perceived value of online fashion platforms. Aligning user behaviour with fashion product characteristics is the key to acquire more accuracy and diversity in personalised recommendations that transform online shopping ideas and influence consumers' purchase decisions. Dursun *et al.* (2025) in their studies have supported the revolutionary application of AI in transforming online shopping experiences and profoundly shaping new purchase behaviour, delivering scalability as a differentiator for the modern fashion retailers. Therefore, the retailers can establish a more transformed technologically capable e-commerce system which influences customers' shopping decisions by delivering a hassle-free customer journey and increased conversion rate.

2.2.4 Examining consumers' trust in AI-powered product recommendations that influence their online purchase decision-making

Robust adoption of AI across the fashion retail sector in transforming e-commerce operations through personalised product recommendation systems, signals increasing consumer preference and trust in AI-driven fashion guides. By addressing the difficulties in the traditional product recommendation system, AI-integrated personalised recommendation has significantly transformed fashion shoppers' online shopping experience by offering more convenient and time-saving features for selecting suitable clothes and fashion items. An in-depth review of existing studies on AI-powered recommendation systems has outlined that AI's explainability enables users to perceive AI-based recommendations as a more trustworthy and preferable option while shopping online from fashion retailers (Shin, 2021; Bohara, Gupta and Kumar, 2025). The alignment between user understanding and interpretation of AI algorithms is the key determinant of their trust in AI-driven recommendation and personalisation in terms of online shopping.

Transparency, accountability and integrity through the AI-driven recommendation system influence consumer reliability and acceptance of such a recommendation

system which optimises online shopping experiences. Moreover, personification of AI in recommending products has been evidenced to become more effective in driving consumer trust and boost engagement to encourage profound use of the technology in transforming the fashion retail sector. On the other hand, a study by Sipos (2025) has highlighted that privacy concerns predominantly affect consumers' trust and relatively their purchase behaviours. With the rapid adoption of AI, data privacy concerns are increasing parallelly among the users, affecting their trust and online shopping behaviour. Despite the fashion shoppers who admire personalised recommendations for conveniences, less time consumption and seamlessness, its data collection, processing and storage process often become suspicious, lacking transparency and integrity.

Another set of studies have shown that AI-driven personalised recommendation is more reliable, precise and accurate compared to human assessments, that drive trust and mediates consumer satisfaction throughout their online shopping (Hassan, Abdelraouf and El-Shihy, 2025; Kim, Giroux and Lee, 2021). By using virtual assistants, AI-driven recommendation systems collectively improve consumer journey, satisfaction, and retention along with personalised customer services. In a broader context, AI recommendation systems are being integrated in the marketing content personalisation which offers fashion products to specific groups of customers with similar fashion needs. On the other hand, Alharthi and Awad (2026) highlighted in their study that overreliance on AI-powered recommendation systems often seem to be intrusive and over-intrusive for the fashion shoppers. The consumers may feel uneasy to share personal information to the AI-led system which involves third party interventions as well, resulting in an increased distrust in the online fashion retail brands. Therefore, the retailers can average the power of AI in operational optimisation through personalised product recommendation by offering a strong user control and integrating granular toggles to manage aggressive recommendations to ensure user trust.

2.2.5 Consumer perception of AI product recommendations

It has been noted that convenience, trust regarding the brand as well as personalisation are some of the important aspects that affects the perception of the consumers regarding the AI recommendations. This innovative technology evaluates

the search history along with the interaction of the consumers to suggest items. According to Bhuiyan (2024) this in turn allows the business to effectively meet the specific needs of the diverse customers. This recommendation in turn significantly reduces the efforts regarding product search as well as enhances the shopping experience. AI technology allows consumers to discover products that cannot be found by individual search. This highlights that AI-oriented recommendations allow fashion businesses to properly value the personalisation requirements.

Contrary to Bhuiyan (2024) Kim, Giroux and Lee (2021) commented that bias in product recommendations by AI technology negatively influences the perception of consumers. Usefulness of the recommended products as well as relevance to needs are directly affecting the perception of the consumers during product purchase. Deldjoo *et al.* (2023) stated that proper understanding of the styling as well as identity of the consumers is important during product recommendation. Realism of the recommended items along with credibility is evaluated by the customers while choosing fashion products. However, personalised recommendations according to the needs create a positive perception regarding the business. On the other hand, Röding *et al.* (2022) opined that management of both trust as well as transparency in information management are important in managing positive perception. Consumers sometimes highlight the manipulative or biased behaviour by the AI-powered recommendations.

Supportive role of this technology increases the level of satisfaction of the consumers while considering the recommendations. Similar to Röding *et al.* (2022) Alhitmi *et al.* (2024) commented that concerns regarding privacy management also create challenges in using this innovative technology. It has been noted that the development of personalised suggestions needs information about the consumers' choices. However, this creates challenges in managing data privacy in the operation. Therefore, follow-up of proper information protection regulations within the operations can increase trust among the people. In addition to that the accuracy of the responses of this AI system also affects the perception of the consumers. However, transparency management is developing concern among consumers.

2.2.6 Key factors that influence the effectiveness of AI-powered recommendation of products

It has been noted that the performance of this innovative technology as well as perceptions of customers highlights the effectiveness of the recommendations provided by AI. In addition to that usefulness of AI as well as trust among consumers are also highlighting the usefulness of these innovative recommendations. Okeleke *et al.* (2024) commented that AI technology is able to analyse the preferences along with context regarding purchasing of the consumers. Consideration of these factors allows the AI to recommend proper fashion products. Proper recommendations according to the specific needs ultimately reduce the cost of information search.

In addition to that this also enhances the perception regarding the usefulness of these recommendations. Accuracy of the recommendations to the consumers enhances trust about this innovative technology. In addition to that, reflection of the individual characteristics in the recommendations is also one of the major factors in improving the effectiveness of the recommendations. Yin, Qiu and Wang (2025) stated that the use of browsing histories, information regarding previous purchases along with preferences of the products helps the AI to increase the effectiveness of recommendations. However, management of ethics during the evaluation of sensitive information is important. According to Kumar and Suthar (2024) overuse of sensitive information can create a negative perception regarding the company. This can have a long-term negative impact on the reputation in the competitive market. In addition to that belief regarding the competence of the system allows organisations to accurately recommend products. Wang *et al.* (2026) stated that it also creates a sense of trust among the people that in turn increases the acceptability of the technology. These key factors lead to further development of these innovative technologies.

On the other hand, explainability of the AI-powered recommendation is another major factor that enhances effectiveness. Therefore, explanation of the reason behind a fashion product recommendation increases the acceptability of the tool. Wang *et al.* (2023) management of transparency while recommending products aids in creating a sense of trust. This positively affects the reputation of the fashion business in the competitive market. On the other hand, the quality of the company website as well as platform for the shopping is also the key factors that influence the effectiveness of the

fashion product recommendations generated by AI. Efficiency of the interface along with reliable information of the products increases the acceptability of the recommendations. Furthermore, efficiency in navigating the fashion products also creates trust in the product recommendations by the platforms.

2.3 Theoretical background

Technology acceptance model

The technology acceptance model highlights that perceived usefulness as well as perception regarding ease in using a technology are the two aspects that lead to acceptance of it (Vorm and Combs, 2022). AI-oriented recommendations in the fashion segment allow consumers to effectively identify the proper products. This in turn enhances the decisions regarding product purchasing. In addition to that simplicity along with less effort in using the platform creates a positive perception regarding the product use.

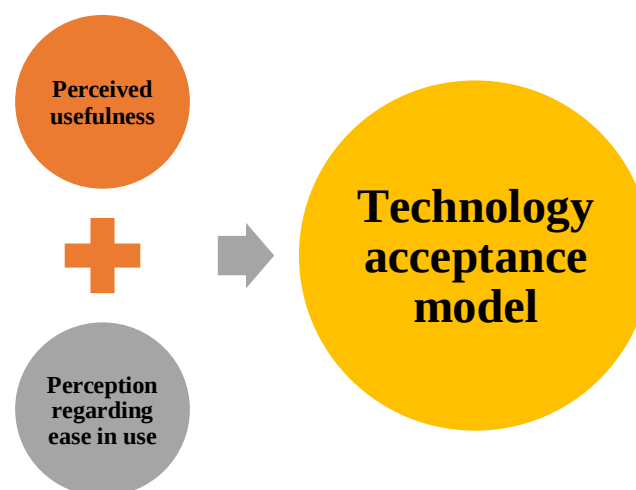


Figure 3: Technology Acceptance Model

(Source: Vorm and Combs, 2022)

It has been noted that usefulness along with perceptions regarding ease in using has developed a positive attitude towards the use of AI-powered recommendations. Use of this technology also enhances the purchase intention among the consumers (Yin and Qiu, 2021). Therefore, most of the fashion organisations are increasingly considering the inclusion of AI for personalisation of the recommendations. On the other hand, perception of simplicity as well as utility of the innovative technology directly influences the intention of the consumers. Therefore, user-oriented interfaces

have been developed by fashion businesses. This in turn increases the acceptance of this new AI-enabled system. Additionally, the usability of the AI-powered recommendations has also created a positive perception among consumers.

Planned behaviour theory

This theory highlights that attitude towards a product or service, subjective norms as well as behavioural control are affecting the intention of the people. This intention is affecting the decisions regarding consideration of a new system (Hagger and Hamilton, 2024). Attitude highlights the view of the people towards recommendations provided by the AI. It has been noted that consumers show a positive attitude towards recommendations due to their mindset of AI accuracy. On the other hand, subjective norms highlight the influence of families as well as influencers on the consideration of AI-recommendations in purchasing. In addition to that trends among the larger consumer segments are also affecting the acceptance of AI in purchasing decisions. On the other hand, behavioural control shows confidence of the consumers in capability in using recommendation features of AI. This can in turn aid them in completion of purchase. Consideration of these two models as well as theory has helped in developing a conceptual foundation in analysing recommendations created by AI in the fashion industry.

2.4 Literature gap

Evaluation of different peer-reviewed articles along with journals has helped in recognising the influence of the AI-powered recommendation system in the purchase decisions of the consumers. Literature highlights the factors behind the increasing use of AI in the fashion business. Additionally, it has shown the factors affecting the perception and acceptance of AI in product recommendations. However, lack of in-depth information about AI-powered recommendation use in the UK fashion industry is noted. This has created a gap in the literature. Therefore, further study is conducted to overcome this gap. This can in turn help in meeting the developed objectives as well as provide an authentic outcome.

2.5 Conceptual framework and hypothesis

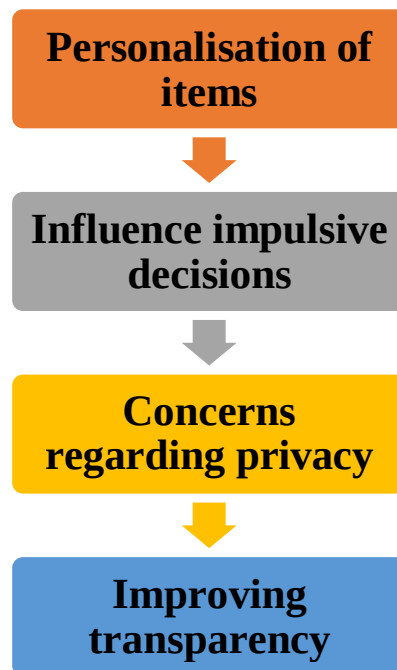


Figure 4: Flow diagram

(Source: Self-created)

Figure highlights that AI-powered recommendations are personalising fashion items. Additionally, different filtering processes have also influenced impulsive decisions regarding fashion product purchase. AI technology uses browsing history as well as patterns of search while recommending products. In addition to that the use of consumer information reduces the chances of inaccuracies in the recommendations. This in turn reduces the chances of consumer dissatisfaction. However, concerns regarding privacy and loss of sensitive information negatively affect the choice of AI while searching along with choosing fashion products. In addition to that, bias in product recommendations also creates dissatisfaction among some consumers. However, the scalability of this innovative technology has disrupted the fashion market.

Therefore, the hypotheses for this study are

H0: AI-powered fashion product recommendation has no impact on the intention of online purchase among UK consumers

H1: AI-powered fashion products have a significant impact on the intention of online purchase among UK consumers

H0₂: Perceived personalisation of AI-powered product recommendations has no significant relationship with consumers' online purchase intention.

H2: Perceived personalisation of AI-powered product recommendations has a significant positive relationship with consumers' online purchase intention.

H0₃: Consumer trust in AI-powered product recommendations has no significant relationship with consumers' online purchase intention.

H3: Consumer trust in AI-powered product recommendations has a significant positive relationship with consumers' online purchase intention.

H0₄: Perceived usefulness of AI-powered product recommendations has no significant relationship with consumers' online purchase intention.

H4: Perceived usefulness of AI-powered product recommendations has a significant positive relationship with consumers' online purchase intention.

2.6 Summary

The evaluation of different journals as well as articles highlights that AI-powered recommendations are increasing in the fashion business. This personalisation as well as usability has increased the acceptability among the consumers. Use of consumers' information, search patterns to recommend products has enhanced the convenience for the people. This has created higher satisfaction among the consumer segments. However, data privacy as well as potential bias in product recommendations creates concern among the people. Therefore, companies need to keep a transparent approach while using consumer data. However available information lacks in-depth data about the UK market. Therefore, selected methods are discussed in the next chapter that helped in further data collection.

Chapter 3: Methodology

3.1 Introduction

This chapter explains the research design that has been used to analyse the impact of the AI-enabled product recommendations on the consumers' online purchase intention in the UK fashion retail industry. Using quantitative methodology as the main variables in the study can be measured using numbers. The research adopts a positivist philosophy and a deductive approach. Primary data will be collected through a cross-sectional survey design from UK consumers having experience of online fashion shopping. Fashion is the largest online category in the UK. According to Statista (2024), more than 28.5 million people bought fashion products online in 2024. This adds to the suitability of the consumer group for the research overall.

3.2 Research Philosophy

The research will take a positivist approach. Positivity is appropriate if the researcher inspects observable facts and objectively measures the relationship. This philosophy fits well because the research investigates measurable consumer responses to AI product recommendations. The study will quantitatively measure perceived personalisation, trust and purchase intention. These concepts will be transformed into measurable questionnaire items. All participants will be asked the same questions and given the same response options. This helps maintain uniformity throughout the data collection and report stage and reduces judgment on the part of the researchers.

Positivism also favours the statistical analysis of relations. This study will explore whether there is a relationship between perceived personalisation and purchase intention. This will also look at whether or not trust in AI recommendations influences purchase intention. The results will be evidenced through numbers, not through opinion. Interpretivism was not selected as it is more subjective to individual meanings, experiences and views. The current research needs quantifiable data that can be compared between respondents. Researchers employ quantitative methods when their goal is to measure, test, or evaluate variables, hypotheses, relationships and outcomes (Ma & Lee, 2026). Therefore, positivism provides a suitable methodological foundation for examining AI recommendations, personalisation, trust and purchase intention among UK consumers.

3.3 Research Approach

The study will utilize the deductive approach of research. Starting with existing theories and academic literature and testing expected relationships with primary data is called deductive approach. This is appropriate as the study draws upon established ideas like A.I., personalisation, trust and purchase intention. First, relevant theories, concepts and relationships will be identified by existing literature. The results will be useful for research objectives and research variables. The study will then use structured questionnaire to gather numerical data from UK fashion consumers. Statistical analysis of the responses will determine whether predicted relationships hold.

Literature from the quantitative research domain indicates that one uses deductive research when moving from theory to hypotheses (Barroga *et al.*, 2023). The anticipated relationship in this study is that perceived personalisation and trust in AI-powered recommendation will correlate positively with online purchase intention. The study does not create a new theory based on qualitative observations so an inductive approach will not be used. The goal instead is to test existing ideas within the UK fashion retail context. The methodology links the literature review, research questions, questionnaire and analysis.

3.4 Research Design

The research will adopt a quantitative cross-sectional survey design. The design is appropriate because the research quantifies various constructs, perceived personalisation, trust in AI-powered recommendation and online purchase intention. A cross-sectional study involves collecting data from participants at a single point in time which can investigate the association between variables (Setia, 2016).

A five-point Likert scale will be used for data collection through a structured questionnaire. All subjects will answer the same questions which aids consistency and makes it easier to statistically compare the answers. The questionnaire will feature 20 questions pertaining to demographics, online shopping of fashion goods, AI recommendation, personalisation, trust and purchase intention.

This design makes sense because the research focuses on consumers' actual experiences with AI recommendations. Cross-sectional studies cannot determine

cause-and-effect relationships since the variables are measured simultaneously (Guerrero *et al.*, 2024). The present study will thus restrict itself to the identification of relationships and predictive patterns between personalisation, trust and online purchase intention.

3.5 Population and Sampling

The research will target UK consumers aged 18 years old and above who have purchased fashion items online and have used AI product recommendations. According to ((Nikolopoulou, 2022), purposive sampling will be used because participants are selected for inclusion in the sample due to their characteristics relevant to the research objectives. The researchers intend to select a total of 100 respondents. Given the limitations of the dissertation, this sample size is appropriate. For the research, having focused responses from relevant consumers is essential. Despite this, purposive sampling is a non-probability approach and thus does not give every qualified consumer a known chance of selection. As a result, the findings will not be statistically generalised to all consumers in the UK.

3.6 Data Collection Method

A structured online questionnaire will be used to collect primary quantitative data. An online survey will be practical to reach the respondents who have the experience to shop for fashion online. According to Vultorius (2026), the use of online survey to collect feedback, test concepts, and gain insights into the customer base or employees is quick and easy. However, questionnaire design and question clarity are important for obtaining reliable results.

There will be around 20 questions in the questionnaire. This will be segregated into sections which will cover demographics, online fashion shopping behaviour, AI-based product recommendations, perceived personalisation, trust and online purchase intention. The questions included in this structure will directly relate to the research objectives. Earlier published quantitative studies consisting of structured online questionnaires with 20 items and five-point Likert scales have measured multiple research variables successfully (Al-Kahtani, 2022).

Most attitudinal questions will use a five-point Likert scale: Strongly Disagree; Disagree; Neutral, Agree, and Strongly Agree. A five-point scale enables participants

to express varied levels of agreement to each statement. Likert-type scales offer respondents a range of options to choose from to measure varying degrees of opinion.

3.7 Source of the Survey

This questionnaire was developed upon former studies conducted on AI recommendations, personalisation, trust and purchase intention. Jasim, Puthineedi, and Jha (2026) studied personalisation, trust, perceived risk and purchase intention among 375 online fashion shoppers using AI-based personalisation. Likewise, Hafis (2026) who used structured questionnaire and a five-point Likert scale on 312 e-commerce users to study AI recommendations, personalisation, trust and purchasing decisions. Magano and Rebelo (2026) studied personalisation, trust and purchase intention among fashion consumers. The questionnaire was structured around the literature studies; questions were additionally simplified for UK respondents. Sasikala, Shobhana and Kamaladevi (2026) surveyed 160 online shoppers to examine perceived relevance, consumer trust, and purchase intention in AI-driven personalised recommendations. Tliche *et al.* (2025) applied an online survey to study AI-generated fashion suggestions and purchase intention. However, the questions were not a direct copy but were adapted and simplified so that they were clear and suitable for UK consumers buying fashion products online. The final questionnaire includes 20 questions related to participant screening, AI-driven recommendation, perceived personalisation, trust intentions and online purchase intention. This structure reflects the research objectives directly. Consequently, accordingly collected responses as well as through descriptive statistics and Cronbach's alpha, correlation Regression analysis can analyse.

3.8 Data Analysis

The research analysis will apply statistical tools to evaluate the quantitative data collected via the online questionnaire. This method is appropriate as this research aims to find a relationship and connection between AI-powered product recommendation, perceived personalisation, trust and online purchase intention. Quantitative research refers to the collection and analysis of numerical data to describe characteristics, discover correlations, or test hypotheses (Bhandari, 2020).

First a descriptive statistic will be used to summarise the data. Descriptive statistics are brief informational coefficients which summarize a given data set representative

of an entire population or a sample (Hayes, 2024). The demographic features and online shopping behaviours of respondents would be described in frequencies and percentages. Responses to the five-point Likert-scale questions will be summarised by means and standard deviations. With the help of these results, the overall understanding of consumers' views about AI recommendations, personalisation, trust and purchase intention can be assessed.

Secondly, Cronbach's alpha will be used to check the internal consistency of the questionnaire items. This is critical because multiple indicators will assess the same construct (Frost, 2022). Subsequently, the correlation assessment will evaluate the strength and direction of the relationships between perceived personalisation, trust as well as online purchase intention. Finally, regression analyses will find out whether personalisation and trust can predict purchase intention (Sri, Dassucik and Mujianti, 2025). These methods are appropriate when measuring the relationship of utility-between two variables. The findings will be interpreted carefully because the cross-sectional design can identify relationships and predictive patterns but cannot establish definite cause-and-effect relationships.

3.9 Ethical Considerations

The research will employ ethical standards to safeguard participants and their information. Informed consent, voluntary participation, and the right to withdraw are key requirements in research involving human participants (Gordon and Prohaska, 2006). The research will also comply with data-protection principles relevant to the UK, including data minimisation, confidentiality and secure storage (Information Commissioner's Office, 2025).

Ethical Principle	Purpose	Application in this Study	Protection Provided
Informed consent	Ensure participants understand the study before participating.	Participants will receive information about the research purpose and questionnaire before starting.	Supports informed decision-making.

Voluntary participation	Ensure participation is free from pressure.	Participants can decide freely whether to complete the survey.	Prevents coercion.
Right to withdraw	Protect participant autonomy.	Participants will be informed that they can withdraw before submitting their responses.	Gives participants control over participation.
Anonymity	Prevent participants from being identified.	Names, addresses and unnecessary identifying information will not be collected.	Reduces privacy risks.
Confidentiality	Protect collected responses from disclosure.	Individual responses will remain confidential and will only be used for this dissertation.	Protects participant privacy.
Secure data storage	Prevent loss or unauthorised access.	Electronic data will be stored securely and accessed only by the researcher.	Protects research information.
Data minimisation	Collect only necessary information.	Only information required to address the research objectives will be collected.	Reduces unnecessary privacy risks.
Responsible use of responses	Maintain research integrity.	Data will be analysed honestly and will not be manipulated or used for unrelated purposes.	Supports accurate findings.

Data retention	Avoid keeping information unnecessarily.	Data will be retained according to university requirements and securely deleted when no longer required.	Reduces long-term privacy risks.
Institutional ethical approval	Ensure the research meets institutional standards.	Approval will be obtained from the relevant university before primary data collection.	Provides formal ethical oversight.
Data protection	Ensure personal information is handled lawfully.	The study will follow applicable UK data-protection requirements.	Supports lawful and fair data handling.
Participant protection	Reduce potential harm or distress.	The questionnaire will focus on ordinary online shopping experiences and avoid unnecessarily sensitive questions.	Minimises potential participant risk.

Table 1: Ethical Considerations

(Source: Self-created)

3.10 Methodological Limitations

The research has a number of methodological limitations. To begin with, the sample will be just 100 respondents, which is rather small and may reduce the reliability and generalizability of the findings. Small sample sizes limit the capacity of researchers to generalise beyond what was tested (Morgado *et al.*, 2017). Purposeful sampling is a non-probability strategy. Consequently, the sample may not represent all UK fashion consumers, and the results cannot be statistically generalised to the whole UK population (Andrade, 2021).

The third limitation was the use of self-reported responses, which can lead to response bias as the respondents may give answers based on their belief and not on their real actual purchasing behaviour. According to Singh and Sagar (2021), online surveys

may encounter problems regarding response quality and generalisability. The collection of data at one time is a cross-sectional design. While it can recognize correlations, it does not determine specific causes. To conclude, the structured questionnaire offers limited chances to express views in detail. For this reason, qualitative interviews may provide deeper explanations about consumer attitudes towards AI recommendations.

3.11 Validity and Reliability

To produce accurate results and consistent results, questionnaire validity and reliability are very important. Validity refers to whether an instrument measures what it is intended to measure; reliability to the regularity of the measurement. According to Andersson, Boateng and Abos (2024), questionnaire logic and layout are both important.

To ensure content validity, the questionnaire items will be developed from research objectives and academic literature. The questions will cover all of the aspects such as AI-powered recommendations, perceived personalisation, trust and online purchase intention. To demonstrate good construct validity, questions designed to get at the same thing should obviously relate to that thing. To ensure questionnaire clarity, straightforward language will be used, avoiding confusion or leading questions (Ranganathan, Caduff and Frampton, 2024).

Prior to the main survey, a small pilot test will be held in order to highlight any unclear questions to improve the questionnaire. Pilot testing is recommended for identifying problematic items and assessing initial reliability (Artino *et al.*, 2014). The internal consistency of items measuring each construct will be assessed using Cronbach's alpha. A guideline for alpha of around 0.70 or above is often adopted, though it should not be regarded as the sole indicator of measurement.

3.12 Chapter Summary

The chapter discussed the way the study was conducted on the AI-powered product recommendations and online purchase intention in the UK fashion retail industry. The research employed a deductive methodology based on a philosophy of positivism. A quantitative survey with cross-sectional design will be conducted. 100 UK consumers aged 18 years and above with online fashion shopping experience will be the primary

data source. A structured questionnaire will be used to measure AI recommendation, personalisation, trust and purchase intention using a 5-point Likert scale. The analysis will include descriptive statistics, Cronbach's alpha, correlation and regression analysis. Other considerations were validity, reliability and ethical principles. Finally, limitations were noted.

Chapter 4: Data Analysis

4.1 Introduction

The following chapter presents the findings, which are obtained from the primary quantitative survey that is conducted to analyse the impact of AI-integrated product recommendations on consumers' online purchase intention in the UK retail industry. The main purpose of this chapter is to assess the collected responses of the consumers through SPSS and address the relationship between AI-powered recommendations, perceived usefulness (PU), perceived personalisation (PP), consumer trust (TR), and online purchase intention (OPI). The chapter presents data screening, the demographic and behavioural profile of respondents, followed by descriptive statistics to summarise responses relating to PU, PP, TR, and OPI. Also, reliability analysis through Cronbach's Alpha highlights the internal consistency of the measurement constructs, while Pearson Correlation analysis demonstrates the relationship between the variables and multiple regression examines the predictive contributions of the variables. The chapter reflects the hypothesis-testing results and summarises the key findings in relation to the research objectives.

4.2 Data screening and preparation

4.2.1 Response Screening

A total number of 100 participants' responses have been collected through a structured online questionnaire, and the data have been screened before conducting statistical analysis. All the responses have been obtained as valid cases, which results in a final sample of 100 participants. Moreover, by maintaining consistency with the criteria established in Chapter 3, completing the screening process helped to ensure that all the respondents have been provided the required consent and that they are UK residents (Sharifnia *et al.*, 2026). Therefore, after the data screening process, the final dataset composed 100 valid responses and has been considered suitable for further statistical analysis in SPSS.

4.2.2 Variable Preparation

To complete the data analysis structurally in SPSS, the Likert-scale statements from Q6 to Q19 have been coded numerically from 1 (strongly disagree) to 5 (strongly agree). Based on the conceptual framework in Chapter 2, the coded items are then

grouped into four composite constructs, where perceived usefulness has been coded as “PU_Mean” that has been measured using Q6-Q9. Similarly, perceived personalisation is represented by “PP_Mean”, measured using Q10-Q12, consumer trust represented by “TR_Mean”, measured by Q13-Q15, and online purchase intention represented by “OPI_Mean”, measured by Q16-Q19. Q20 has been retained separately as an overall measure of the online fashion shopping experience. Completing the composite variable enabled to produce more accurate outcomes by making complex and large data into a single item. Moreover, the Mean scores have been calculated for each construct to provide composite measures for subsequent reliability.

4.3 Respondent Profile

4.3.1 Age Distribution

This demonstrates that respondents are represented across six age categories.

Age				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-24	19	19.0	19.2	19.2
25-34	34	34.0	34.3	53.5
35-44	30	30.0	30.3	83.8
45-54	15	15.0	15.2	99.0
55-64	1	1.0	1.0	100.0
Total	99	99.0	100.0	
Missing System	1	1.0		
Total	100	100.0		

Figure 5: Age distribution

(Source: Analysis of Primary Survey Data)

The above figure highlights that the largest proportion of participants are aged 25-34, which accounted for 34% of respondents, followed by 30% of respondents aged 35-

44, 19% of respondents aged 18-24, 15% aged 45-54, 1% aged 55-64 and 65 or above.

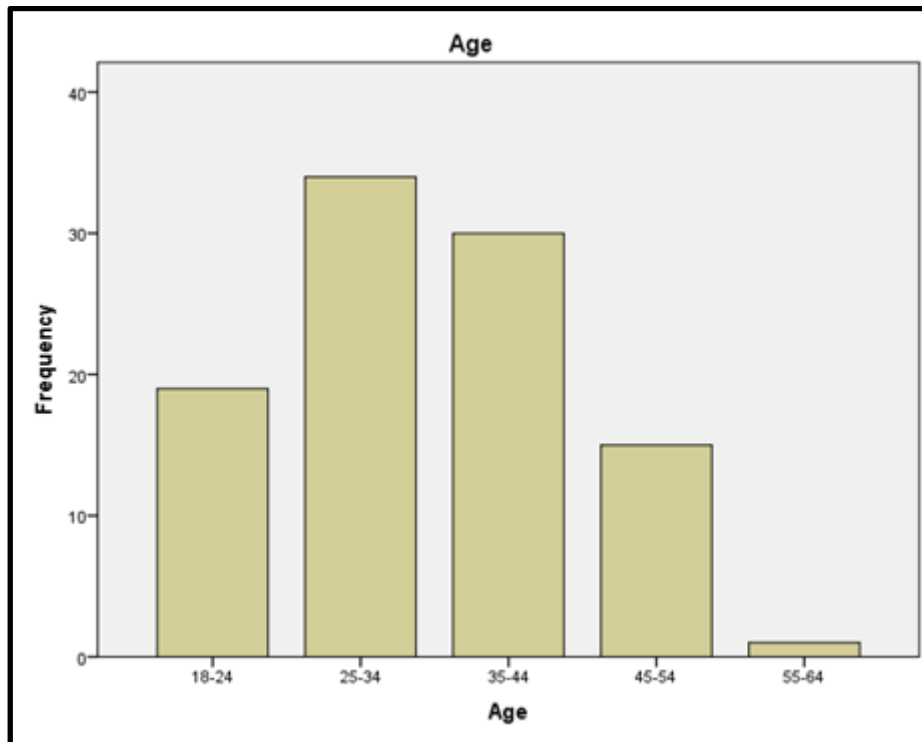


Figure 6: Age distribution

(Source: Analysis of Primary Survey Data)

Figure 2 represents the visual presentation of the age distribution, which highlights that the sample concentrated within the 25-44 age range that reported 64% of the total sample.

4.3.2 Online Fashion Shopping Frequency

Analysing the frequency of online shopping suggests the extent to which respondents regularly engage with the online fashion retail environment.

Shop_Frequency				
	Frequenc y	Percent	Valid Percent	Cumulative Percent
Valid Less than once every 6 months	15	15.0	15.0	15.0
Once every 3–6 months	27	27.0	27.0	42.0
Once every 1–2 months	34	34.0	34.0	76.0
2–3 times a month	19	19.0	19.0	95.0
More than 3 times a month	5	5.0	5.0	100.0
Total	100	100.0	100.0	

Figure 7: Shopping frequency

(Source: Analysis of Primary Survey Data)

The largest group included 34% of respondents who reported purchasing fashion products online once every 1 to 2 months, followed by 27% of respondents purchasing once every 3 to 6 months. Similarly, 19% purchased 2 to 3 months, 15% of respondents purchased less than once every 6 months, and only 5% bought more than 3 times a month [Refer to Figure 7].

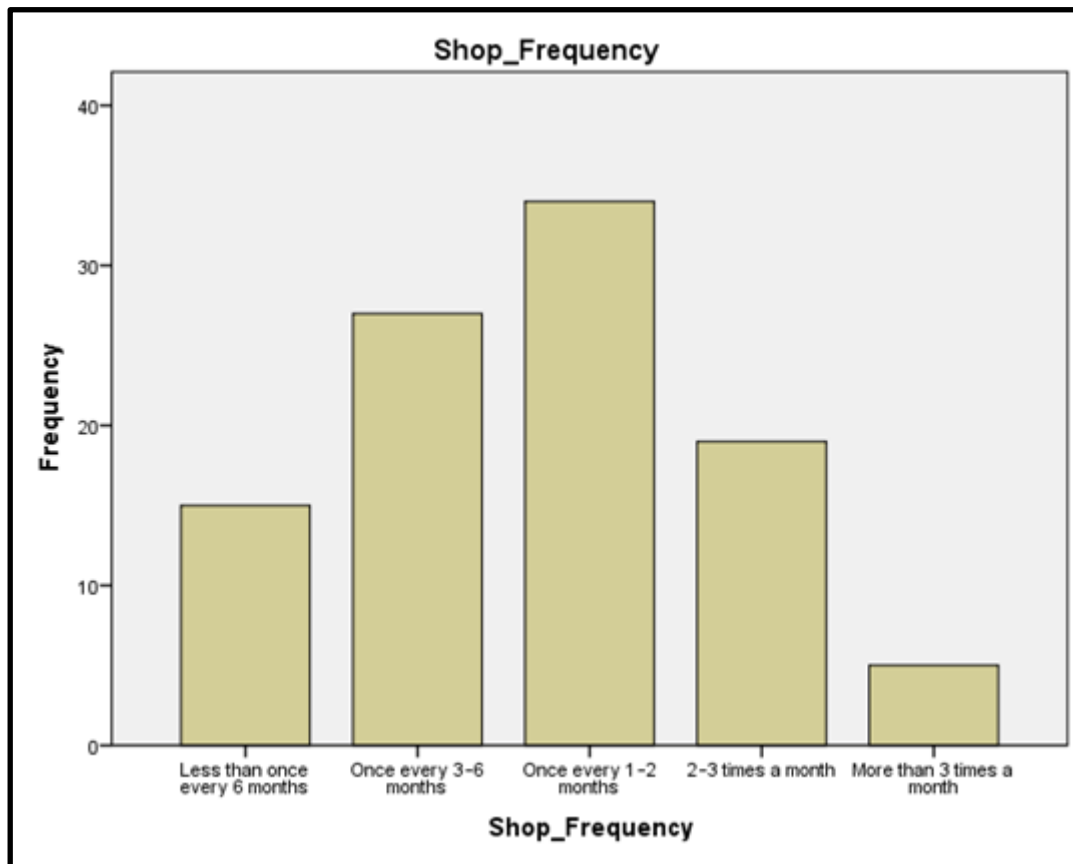


Figure 8: Shopping frequency

(Source: Analysis of Primary Survey Data)

Therefore, the findings from the data analysis indicate variation in the respondents' shopping frequency, where they generally engage in online fashion shopping periodically rather than very frequently.

4.3.3 Experience of AI-Generated Recommendations

The experience of the respondents with AI-generated product recommendations has been analysed to establish their familiarity with the technology that has been investigated in the study.

AI_Exposure					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	96	96.0	97.0	97.0
	No	3	3.0	3.0	100.0
	Total	99	99.0	100.0	
Missing	System	1	1.0		
Total		100	100.0		

Figure 9: AI Exposure

(Source: Analysis of Primary Survey Data)

The results highlighted that 96% of respondents had significant experience in AI-generated product recommendations, while 3% of respondents had not experienced such recommendations and 1 of the respondents has not been sure about the experience.

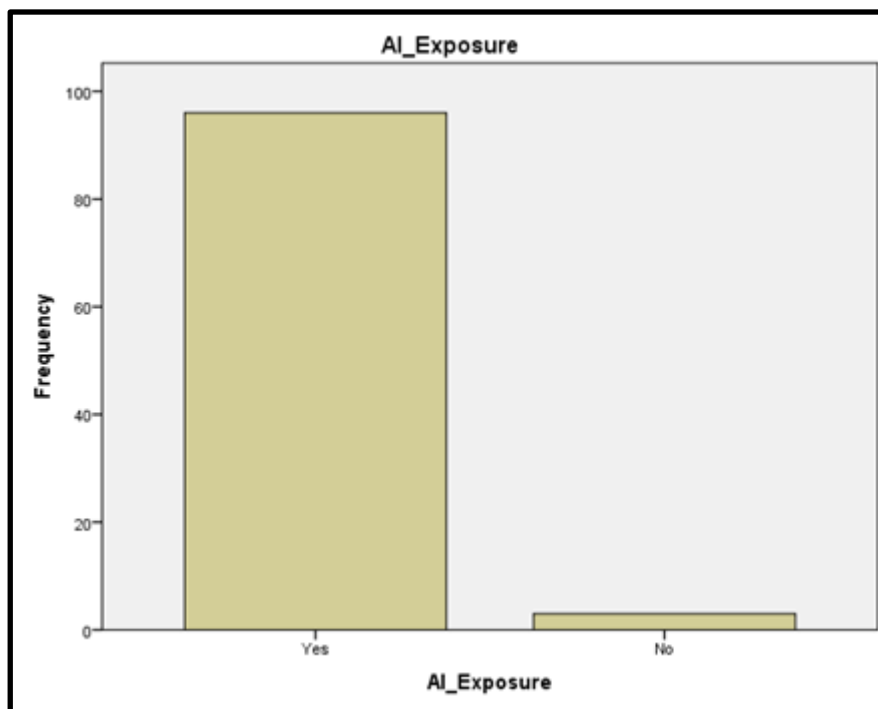


Figure 10: AI Exposure

(Source: Analysis of Primary Survey Data)

The above-mentioned figure showcases above 95% of AI exposure frequency, which provides a proper basis for examining respondents' perceptions of usefulness, trust, and personalisation in AI-generated recommendations and their relationships with online purchase intention.

4.4 Descriptive Statistics

This analysis has been conducted to determine the perceptions of respondents about AI-powered recommendations and their online purchasing intention.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
PU1	100	1.00	5.00	3.5100	1.15902
PU2	100	1.00	5.00	3.4500	1.07661
PU3	100	1.00	5.00	3.6700	1.02548
PU4	100	1.00	5.00	3.5500	1.05768
PP1	100	1.00	5.00	3.5800	1.24868
PP2	100	1.00	5.00	3.4700	1.08670
PP3	100	1.00	5.00	3.5900	1.19844
TR1	100	1.00	5.00	3.5700	1.14816
TR2	100	1.00	5.00	3.5800	1.13867
TR3	100	1.00	5.00	3.5900	1.05500
OPI1	100	1.00	5.00	3.6400	1.13280
OPI2	100	1.00	5.00	3.6300	1.09779
OPI3	100	1.00	5.00	3.5700	1.24117
OPI4	100	1.00	5.00	3.5800	1.06534
Overall_AI_Exp	100	1.00	5.00	3.7900	1.07586
Valid N (listwise)	100				

Figure 11: Descriptive statistics

(Source: Analysis of Primary Survey Data)

The analysis includes mean scores, minimum, maximum values, and standard deviation values, where all the variables have been measured by using a five-point Likert scale ranging from 1 to 5. Moreover, all the variables accounted for 100 valid responses, indicating that the descriptive analysis is based on the complete sample.

4.4.1 Perceived Usefulness (PU)

PU has been measured through four items, which analysed the helpfulness, purchase relevance, usefulness, and time-saving benefits of AI-powered fashion recommendations. All the items recorded 100 valid responses, where PU1 accounted

for a mean value of 3.51 with SD = 1.159 [Refer to Figure 11]. The mean value of PU2 is 3.45, SD = 1.077, PU3 is 3.67, SD = 1.025, and PU4 is 3.55, SD = 1.058, respectively. Therefore, the result and the moderate variation in standard deviations indicate that respondents generally perceived AI-powered recommendations as useful.

4.4.2 Perceived Personalisation (PP)

This variable is measured by using three items, which mainly examined whether AI recommendations matched the preferences of respondents. In this analysis, each item recorded 100 valid responses, where PP1 accounted for a mean of 3.58, SD = 1.249, and PP2 recorded a mean of 3.47, SD = 1.087. Similarly, PP3 produced a mean of 3.59, SD = 1.198. The highest mean value of PP3 and the SD value of PP1 suggested an initial descriptive indication of respondents' perceptions of personalisation before examining its relationship with online purchase intention through inferential analysis whether respondents generally perceived recommendations as personalised.

4.4.3 Consumer Trust (TR)

This variable has also been assessed by using three items to measure respondents' reliance on AI recommendations. TR3 produced the highest mean of 3.59, SD = 1.055, indicating greater responses for this item. The lowest mean value of TR1 is 3.57, SD = 1.148 [Refer to Figure 11]. As all these items' mean values exceed the neutral midpoint of 3.00, it suggests that participants generally perceived AI-generated recommendations as reasonably trusted (Koo and Yang, 2025).

4.4.4 Online Purchase Intention (OPI)

OPI is measured through four items, where OPI1 recorded the highest mean value of 3.64, SD = 1.133 and the lowest mean value of OPI3 3.57, SD = 1.241. However, OPI3 produced the highest standard deviation value, which suggests comparatively greater variation in the purchase intention responses of respondents. Moreover, the descriptive analysis results for this variable indicates a positive online purchase intentions of respondents towards AI-recommended fashion products.

4.4.5 Overall Online fashion shopping Experience (Overall_AI_Exp)

This is assessed through the last item of the survey questionnaire, where the reported mean value is 3.79, SD = 1.076 [Refer to Figure 11]. The analysed result indicates that respondents generally expressed a favourable overall assessment of AI-powered recommendations in their online fashion shopping experience.

4.5 Reliability Analysis

Cronbach's Alpha has been used to analyse the internal consistency among the multi-item constructs of the study (PU, PP, TR, and OPI), which helped to check the reliability of the items (Taber, 2018).

Construct	Items	Cronbach's Alpha
Perceived usefulness	4	.790
Perceived personalisation	3	.732
Consumer trust	3	.800
Online purchase intention	4	.826

Table 2: Reliability table

(Source: Analysis of Primary Survey Data)

4.5.1 PU Reliability

The reliability of PU has been measured through four items (PU1-PU4), which reported a Cronbach's Alpha value of .790, highlighting acceptable internal consistency, as 0.70-0.80 and above denoted an acceptable reliability (Taber, 2018). The findings indicate that the selected items demonstrate a satisfactory consistency degree in measuring respondents' perceptions of the usefulness of AI-generated product recommendations.

4.5.2 PP Reliability

It has been analysed through three items (PP1-PP3), producing 0.732 Cronbach's Alpha, which also indicates acceptable internal consistency [Refer to Table 2]. Although this is the lowest value, the items are considered sufficiently consistent to measure the perceptions of respondents on AI-powered recommendations' personalisation.

4.5.3 TR Reliability

Consumer trust has been assessed by using three items (TR1-TR3), reflecting good internal consistency across the items with a value of .800, which means the items are strongly consistent to measure consumer trust. It is also appropriate to use in the subsequent inferential analyses to investigate the relationship between online purchase intention and consumer trust.

4.5.4 OPI Reliability

It has been measured through four items (OPI1-OPI4), generating the highest Cronbach's Alpha of .826, supporting the reliability of the purchase intention scale. The result represents a good internal consistency among the items measuring respondents' intention to purchase fashion products that are recommended by AI.

4.6 Pearson Correlation Analysis

This analysis has been conducted to examine the direction and strength of the relationships between composite variables (PU_Mean, PP_Mean, TR_Mean, and OPI_Mean), which quantifies relationships by simplifying complex data (Schober, Boer and Schwarte, 2018).

		Correlations			
		PU_Mean	PP_Mean	TR_Mean	OPI_Mean
PU_Mean	Pearson Correlation	1	.915**	.706**	.804**
	Sig. (2-tailed)		.000	.000	.000
	N	100	100	100	100
PP_Mean	Pearson Correlation	.915**	1	.744**	.858**
	Sig. (2-tailed)	.000		.000	.000
	N	100	100	100	100
TR_Mean	Pearson Correlation	.706**	.744**	1	.790**
	Sig. (2-tailed)	.000	.000		.000
	N	100	100	100	100
OPI_Mean	Pearson Correlation	.804**	.858**	.790**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	100	100	100	100

** . Correlation is significant at the 0.01 level (2-tailed).

Figure 12: Correlation analysis

(Source: Analysis of Primary Survey Data)

The analysis has been based on all 100 respondents, where all the correlations are statistically significant and positive at the 0.01 level [Refer to Figure 12].

4.6.1 Correlation between PU and OPI

With the value of $r = .804$, $p < .001$, PU and OPI reflects a positive correlation, which indicates respondents who prefer higher perceptions of AI-powered recommendations' usefulness also tended to report stronger intentions to purchase fashion products online. Although it showcases a significant and positive relation that supports H4, it should be interpreted alongside the regression analysis to get a more accurate result.

4.6.2 Correlation between PP and OPI

PP demonstrates the strongest correlation with OPI ($r = .858$, $p < .001$), which indicates that respondents who perceived AI recommendations as more personalised generally reported stronger intentions to purchase fashion products online, supporting

H2. However, the strong association between purchase intention and personalisation does not by itself establish a causal relationship when other predictors are considered.

4.6.3 Correlation between TR and OPI

Consumer trust also significantly correlated with online purchase intention ($r = .790$, $p < .001$) [Refer to Figure 12]. The result indicates that greater trust in AI-powered product recommendations is associated with stronger intentions for purchasing fashion products online. As the correlation results are statistically significant, it provides initial support for the positive relationship proposed in H3. However, the subsequent regression analysis is required to establish whether trust remains a pivotal predictor after controlling for the other explanatory variables.

Overall, conducting the Pearson Correlation analysis highlights a positive pattern across the study variables, where perceived personalisation, usefulness, and consumer trust are all significantly associated with online purchase intention. Therefore, the findings provide strong initial evidence about the interconnected relationships between variables, where conducting regression analysis is required for further validation.

4.7 Multiple Linear Regression Analysis

This analysis has been conducted to explore whether perceived usefulness, perceived personalisation, and consumer trust significantly predicted online purchase intention of consumers. In this analysis, OPI_Mean is considered as the dependent variable, where PU_Mean, PP_Mean, and TR_Mean are the independent variables. The results of the Regression analysis are presented below through the model summary, ANOVA, and coefficient table.

4.7.1 Model Summary

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.888 ^a	.788	.782	.43047
a. Predictors: (Constant), TR_Mean, PU_Mean, PP_Mean				
b. Dependent Variable: OPI_Mean				

Figure 13: Model summary

(Source: Analysis of Primary Survey Data)

Conducting the multiple linear regression analysis includes the results of a model summary, which highlights the overall relationship between predictors (perceived personalisation, perceived usefulness, and consumer trust) and the dependent variable (online purchase intention). The result demonstrates $R = .888$, $R^2 = .788$, indicating that PU, PP, and TR collectively explain 78.8% of the variation on consumers' online purchase intention in the context of UK fashion retail. The adjusted R^2 value (.782) also reflects a closer relation to the R^2 value, which suggests that the model maintains substantial explanatory power after accounting for the number of predictors included (Zapf, Wiessner and König, 2024). Therefore, the result indicates that the selected AI-related factors provide a strong explanation of consumers' intention to purchase fashion products online.

4.7.2 ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.233	3	22.078	119.145	.000 ^b
	Residual	17.789	96	.185		
	Total	84.023	99			

a. Dependent Variable: OPI_Mean

b. Predictors: (Constant), TR_Mean, PU_Mean, PP_Mean

Figure 14: ANOVA

(Source: Analysis of Primary Survey Data)

The above figure highlights that the regression model is statistically significant ($F = 119.145$, $p < .001$), which means that collectively perceived usefulness, perceived personalisation, and consumer trust strongly predict consumers' online purchase intention in the UK fashion retail context. As the significance value is below the .05 threshold, H_0 (null hypothesis) "AI-powered fashion product recommendation has no impact on the intention of online purchase among UK consumers" is rejected. Thus, the findings statistically support H_1 by suggesting that AI-powered recommendations collectively play a significant role in shaping consumers' intention to purchase fashion products online.

4.7.3 Regression Coefficients

Coefficients ^a												
Model	Unstandar dized Coefficient s		Standard ized Coefficie nts	t	Si g.	95.0% Confidenc e Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Low er Bou nd	Upp er Bou nd	Zer o- ord er	Part ial	Pa rt	Tolera nce	VIF
(Const ant)	.19 2	.193		.99 2	.3 24	- .192	.576					
1 PU_Me an	.07 5	.127	.069	.58 8	.5 58	- .178	.327	.80 4	.060	.0 28	.162	6.1 80
PP_Me an	.55 2	.126	.544	4.4 00	.0 00	.303	.801	.85 8	.410	.2 07	.144	6.9 44
TR_Me an	.32 9	.069	.337	4.7 72	.0 00	.192	.466	.79 0	.438	.2 24	.443	2.2 58

a. Dependent Variable: OPI_Mean

Figure 15: Coefficients

(Source: Analysis of Primary Survey Data)

The regression coefficient results provide further insights into the individual contribution of each predictor, where perceived personalisation is becoming the strongest and significant predictor by producing the value of $B = .552$, $\beta = .544$, $t = 4.400$, $p < .001$. This particular result supports H2, as the positive coefficient indicates that higher perceived personalisation is associated with higher online purchase intention when the other predictors are held constant. Similarly, consumer trust also highlighted a significant positive relationship with online purchase intention ($B = .329$, $\beta = .337$, $t = 4.772$, $p < .001$). It supports H3 by indicating that greater trust in AI-powered recommendations is correlated with stronger purchase intention after controlling for perceived usefulness and personalisation.

Alternatively, the coefficient value of perceived usefulness ($B = .075$, $\beta = .069$, $t = .585$, $p = .558$), which does not make a statistically significant unique contribution to online purchase intention. However, the coefficient is positive, but the significance level exceeds .05, which does not support H4. The findings therefore indicate that perceived

usefulness, when considered alongside personalisation and trust, does not independently predict online purchase intention in this sample.

4.8 Regression Diagnostics

4.8.1 Multicollinearity

Considering the regression results, multicollinearity is evident among some predictors, where perceived usefulness and perceived personalisation showed relatively high VIF values of 6.180 and 6.944, and tolerance values of .162 and .144, respectively [Refer to Figure 14].

Collinearity Diagnostics ^a							
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	PU_Mean	PP_Mean	TR_Mean
1	1	3.936	1.000	.00	.00	.00	.00
	2	.039	10.060	.95	.01	.03	.06
	3	.021	13.787	.00	.08	.06	.91
	4	.005	28.877	.04	.90	.92	.03

a. Dependent Variable: OPI_Mean

Figure 16: Collinearity diagnostics

(Source: ANALYSIS OF PRIMARY SURVEY DATA)

The collinearity diagnostics also reported a condition index of 28.877, suggesting considerable overlap between PU and PP, which may partly explain why PU is not a significant and unique predictor in the regression model.

4.8.2 Residual/Normality Checks

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.4772	4.9728	3.6050	.81794	100
Residual	-1.59775	1.03407	.00000	.42390	100
Std. Predicted Value	-2.601	1.672	.000	1.000	100
Std. Residual	-3.712	2.402	.000	.985	100

a. Dependent Variable: OPI_Mean

Figure 17: Residual Statistics

(Source: ANALYSIS OF PRIMARY SURVEY DATA)

The residual statistics also provided generally acceptable evidence for the regression assumptions, where the mean value of 0.000 and standard deviation value of .985 indicates that residuals are broadly centred around zero.

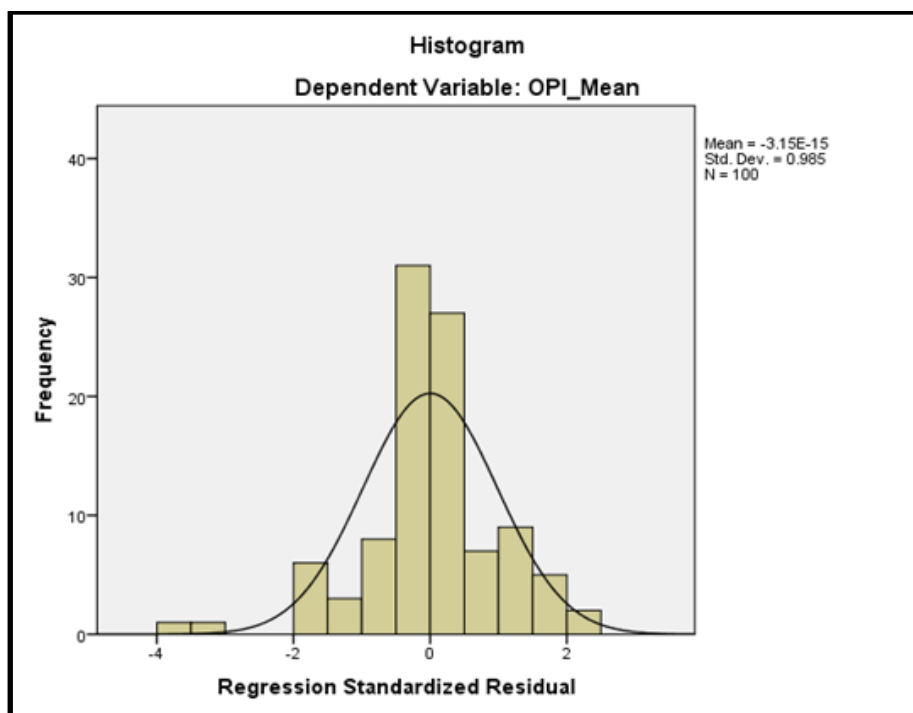


Figure 18: Histogram

(Source: ANALYSIS OF PRIMARY SURVEY DATA)

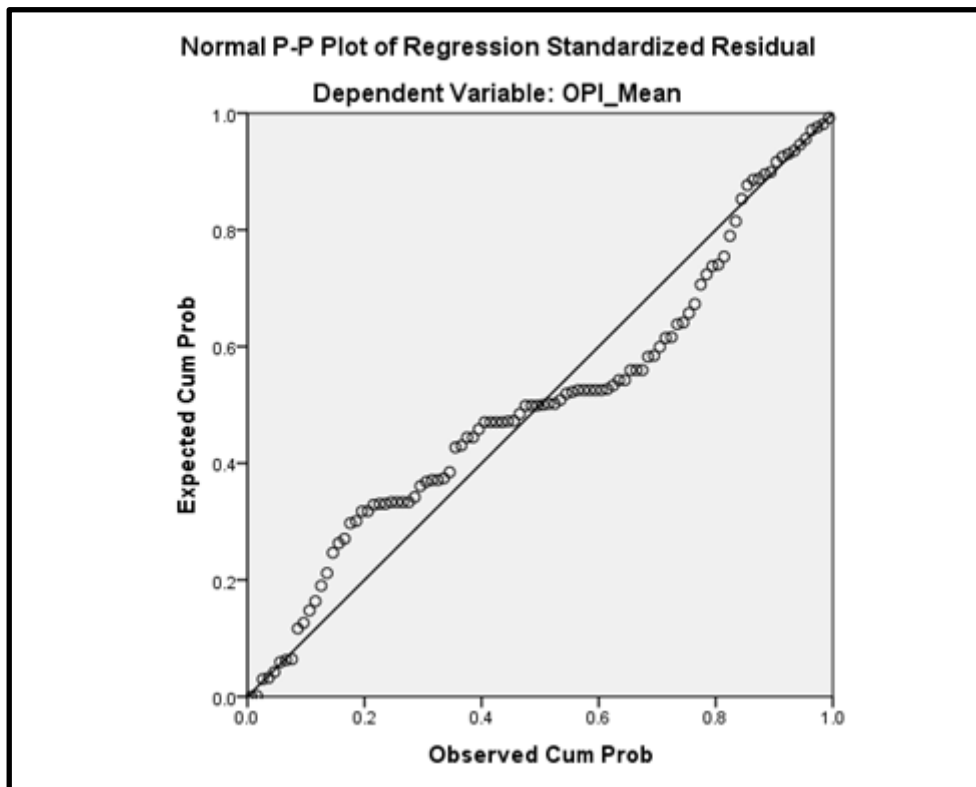


Figure 19: P -P Plot of Regression Standardised Residual

(Source: ANALYSIS OF PRIMARY SURVEY DATA)

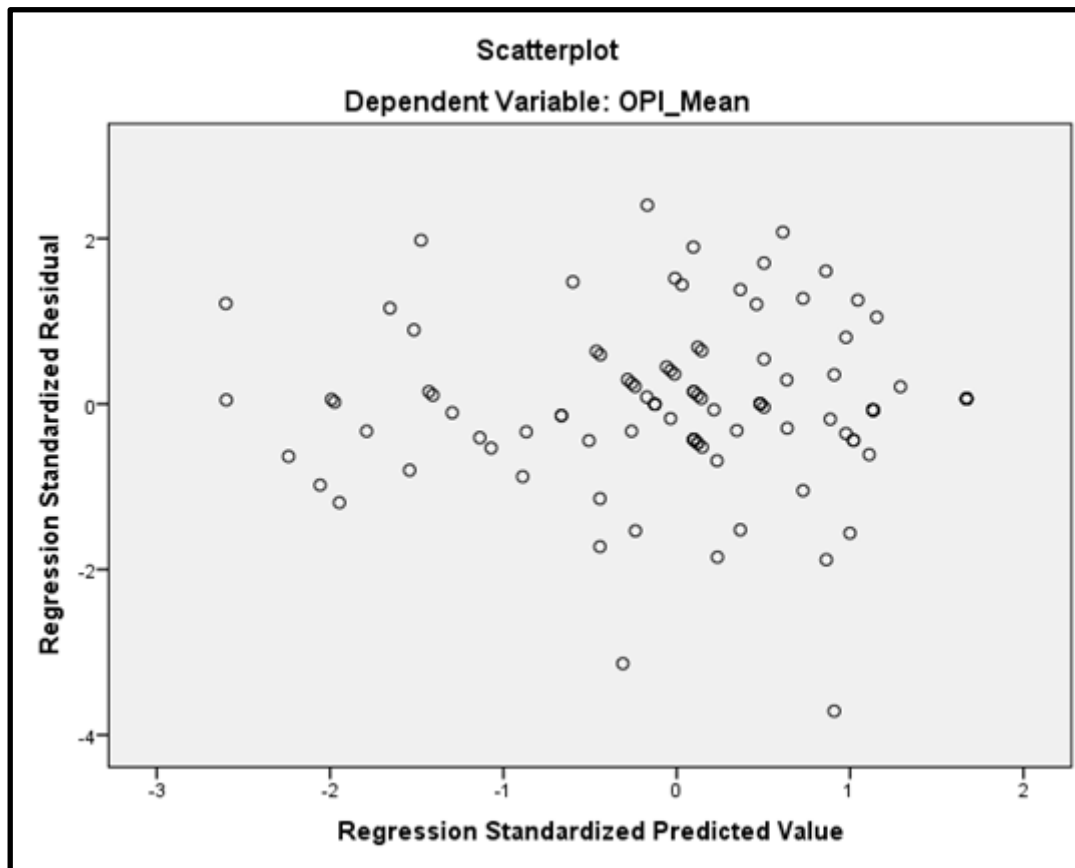


Figure 20: Scatterplot

(Source: ANALYSIS OF PRIMARY SURVEY DATA)

Also, the above-mentioned histogram and P-P Plot demonstrated that the residuals are reasonably close to a normal distribution, while the scatterplot indicated a broadly random spread of residual around zero, providing reasonable support for normality and constant variance.

4.9 Hypothesis Testing Summary

Testing the hypotheses through multiple analysis techniques provides a concise overview of whether the proposed relationships are supported by the findings. Particularly, H1 is assessed at the overall regression model level, whereas H2, H3, and H4 are assessed by using the individual regression coefficients. The overall model is statistically significant ($F = 119.145$, $p < .001$), suggesting that AI-powered recommendation -related factors collectively explain a strong proportion of variation in online purchase intention.

Hypotheses	Relationship tested	Result	Decision
H1	AI-powered recommendations → OPI	$F = 119.145, p < .001$	Supported
H2	PP → OPI	$\beta = .544, p < .001$	Supported
H3	TR → OPI	$\beta = .337, p < .001$	Supported
H4	PU → OPI	$B = .069, p = .558$	Not supported

Table 3: Summary of hypothesis testing

(Source: Self-created)

Collectively, the results highlight that perceived personalisation and consumer trust are significant positive predictors of purchase intention, where perceived usefulness fails to make a unique contribution when the other predictors are considered. Therefore, the hypothesis testing signifies that AI-powered recommendations have a significant influence on online purchase intention, where perceived personalisation and trust are the key individual predictors.

4.10 Findings in Relation to Research Objectives

The first objective is to explore consumers' interest in AI-powered recommendations, where the descriptive findings suggest a favourable response, as the overall AI shopping experience recorded a mean of 3.79. It suggests that respondents are reasonably positive towards AI-generated recommendations. Similarly, the second objective focused on perceived personalisation and purchase intention, where positive correlation ($r = .858, p < .001$) and regression ($\beta = .544, p < .001$) confirm personalisation as the strongest significant predictor. The third objective is to examine consumer trust, where the data analysis highlights that trust is strongly associated with purchase intention ($r = .790, p < .001$) and also remains significant in the regression

model ($\beta = .337, p < .001$). The fourth objective addressed the factors influencing recommendation effectiveness, where perceived personalisation and trust are the strongest predictors of purchase intention. Alternatively, perceived usefulness made only a small and non-significant contribution ($\beta = .069, p = .558$), suggesting comparatively low influence on purchase intention.

Therefore, the findings of the data analysis highlight the strong relation with the research objectives, showcasing that personalisation and trust are particularly important in shaping online fashion purchase intention.

4.11 Chapter Summary

This chapter established the empirical basis of the study using data from 100 respondents, with most having prior experience of AI recommendations. The analysis assessed the reliability and relationships among usefulness, personalisation, trust and purchase intention. Regression analysis confirmed a significant overall model, which supports H1, H2 and H3, while the results do not support H4.

Chapter 5: Discussion

5.1 Introduction

The following chapter interprets and discusses the overall findings presented in Chapter 4 in connection with the literature, theoretical perspective, research objectives, and hypotheses. In particular, this chapter considers the effect of AI-powered product recommendations on purchase intention among UK fashion consumers. With this consideration, the study explored consumers' perception of AI-generated recommendation and examined whether perceived personalisation, perceived usefulness and trust in AI contribute to influencing customers' readiness to buy. Most importantly, this discussion chapter not only focuses on presenting statistical findings but also explains the way customers respond to AI recommendations for fashion products. To explain this, the findings reflected that perceived personalisation was the strongest predictor of customer intention to make a purchase, while perceived usefulness did not show a significant effect on purchase intention. Moreover, this discussion evaluates Technology Acceptance Model (TAM) and Theory of Planned Behaviour, while practical implications and literature gap are also considered. Therefore, this chapter reflected key outcomes in relation to statistical analysis, which aligned with the research objectives as well.

5.2 Overview of the Key Findings

The section provides insights into how AI-powered product recommendations are connected to online purchase willingness among UK fashion consumers. Gathering responses from the 100 respondents, it showed that 96% of customers have experienced AI-powered products recommendations. Collectively, respondents have shown a generally positive perspective towards AI-oriented recommendations. In the regression model, it showed 78.8% of the variation in consumers' online purchase intention suggesting a substantial explanatory power that contributes in customer purchase intent. With a significant positive regression coefficient ($\beta = .544$, $p < .001$), perceived personalisation has a stronger relationship with online purchase intention, followed by consumer trust ($\beta = .337$, $p < .001$). Therefore, this suggests that customers are more willing to purchase fashion products when they perceive AI recommendation tools match their expectations. As stated by Gao and Liang (2025), integrated AI-powered recommendation systems such as virtual try-ons and chatbots

provide more personalised shopping suggestions, which influence consumer's online impulsive purchasing intentions. However, within the regression model, perceived usefulness does not represent a statistically significant impact. Hence, it suggests that perceived usefulness alone is not significant in affecting customer purchase decisions, while personalisation and trust play a significant role.

5.3 Discussion of Research Objectives 1: Consumer Perceptions of AI-powered product recommendations

The overall findings indicated that customers showed a relatively positive perception of AI-driven recommendations in terms of purchasing fashion products. In this matter, the statistical analysis highlighted that overall AI shopping experiences received a mean of 3.79. It suggests that customers are more inclined to use AI tools when purchasing fashion products online, where trust remains the greatest contributor. Hence, when customers perceive AI recommendations as beneficial and convenient, they trust the system and are willing to purchase products.

This positive perception is aligned with the literature review outcomes. As examined by Bhuiyan (2024), AI helps to analyse search history to provide recommendations by aligning with customers' specific needs, which leads to more customer interaction. Additionally, it is reflected that AI makes online shopping more convenient by decreasing search effort. Therefore, the literature highlighted that personalisation can enhance customers' willingness to accept AI recommendations. Additionally, the statistical findings also demonstrate positive relationships, with better customer perception and purchase intention, which highly converge with existing literature views.

In the view of the critical interpretation, it was seen that the mean score of perceived usefulness ranged from 3.45 to 3.67 and perceived personalisation from 3.47 to 3.59. Therefore, it indicates that customer responses were not strongly positive. Although AI recommendations increased customers' purchase intention, they simultaneously create concern regarding data use and privacy, which may reduce customer confidence in AI recommendations. Therefore, it highlights a customer concern regarding information collected by fashion brands. In this regard, Sipos (2025) suggests that consumers value AI-recommended convenience but simultaneously remain uncertain about the personal data collected by the brands, which can reduce

customer trust and negatively affect purchasing behavior. As asserted by Shabankareh et al. (2025), managing trust and transparency within the AI tools is an important consideration for brands in terms of influencing positive customer perception towards brands.

Overall, the findings are directly linked to objectives 1, which examined customer's perception of AI-powered recommendations and found that respondents perceive AI recommendations positively. Nevertheless, although convenience in AI recommendation tools encourages positive perception, privacy and transparency create uncertainty among customers, which negatively affects their perception. Therefore, to understand customer perception towards AI recommendations, personalisation, usefulness, and trust must be assessed together rather than separately.

5.4 Discussion of Research Objectives 2: Perceived Personalisation and Purchase Intention

The findings highlighted a positive relationship between two variables, such as perceived personalisation and purchase intention. With a value of $r = .858$, $p < .001$, perceived personalisation and purchase intention indicated a positive correlation. It reflected that customers perceived AI recommendations as more personalised to their preferences, which turned into greater intention to purchase fashion products online. Further, the multiple regression model found the same findings, with the value of $\beta = .544$, $p < .001$ which findings that perceive personalisation is the strongest predictors of online purchase intention. Through these outcomes, it has been confirmed that the findings are highly linked to objectives 2, which investigates the influences of perceived personalisation on customers' online purchase intention, supporting H2.

It has been found that AI-driven recommendations embrace data-driven insights that increase product recommendation accuracy, which provide more convenient customer experiences (Alabi, 2024). Hence, it suggests that through the perceived benefits of AI recommendation tools, customers can be inclined to purchase from fashion brands. As supported by An and Ngo (2025), personalisation significantly increases perceived relevance by highlighting the effectiveness of personalised advertising, which increases customer intention to buy. Therefore, the findings demonstrated that a high correlation between perceived personalisation and purchase intention are highly

justified and consistent with the current literature outcomes. It indicates that personalisation can enhance the value of AI-driven shopping experiences, although its influence highly relies on the way customers experience the recommendation process.

On the other hand, the incorporation of AI-driven personalisation within shopping experiences can increase the chances of algorithmic bias and ethical risk. As argued by Jasim, Puthineedi, and Jha (2026), when customers perceive AI personalisation as unreliable and biased, it increases the risk of eroding trust, creating doubt in the decision process, and consequently reducing their purchase intentions. Hence, this literature perspective is consistent with the current literature reviews correlated with AI recommendations.

Overall, the findings aligned with research objectives, which illustrate the perceived personalisation that has the greatest influences on online purchase intention among UK fashion consumers. With empirical support, it is found that a strong regression coefficient ($\beta = .544$) and a correlation value ($r = .858$) support these results. Therefore, the evidence suggests that personalisation does not contribute to influencing customer purchase intention alone, while personalisation must be accepted by customers when it is relevant and ensures responsive use of data.

5.5 Discussion of Research Objectives 3: Trust and Purchase Intention

The findings showed that customers' trust has a strong positive relationship with online purchase intention. Respondents exhibit a higher intention to purchase fashion products on online platforms because they trust AI-powered recommendations, ($r = .790$, $p < .001$), signifying customer trust is significantly correlated with online purchase intention. This indicates that customers have a higher level of trust in AI-powered recommendation, which contributes to stronger eagerness towards purchasing fashion products online. With due respect, Sarra and Datt (2026), also confirmed that trust and purchase intention are significantly positively correlated, as the study found that transparency within AI-generated advertising and recommendations affects customer trust and behavioral intention towards product purchase.

Despite that, while perceived personalisation and perceived usefulness have been considered collectively in the multiple regression analysis, the customers' trust value is a significant predictor in purchase intention with a value of $\beta = .337$, $p < .001$.

These statistical findings converge with the literature review outcomes, as it was found that trust is a crucial consideration for customer acceptance of AI recommendations in terms of making product purchase decisions. As supported by Shin (2021), when customers perceive AI -based recommendations as more trustworthy and genuine, they are more inclined to shop online from fashion retailers. Therefore, this perspective is aligned with research objectives which emphasise the influence of trust in AI-powered product recommendations on consumers' online purchase intention.

However, AI personalisation can bring issues such as data privacy and security risks that undermine customers' trust. Although the descriptive results indicate that trust received means a score of nearly 3.57 - 3.59, which indicates responses had moderate levels of trust in AI recommendation. Therefore, it suggests that consumers are reluctant to buy online products because they feel uncertain about data privacy and may distrust systems. This finding converges the argument of Hardcastle, Vorster and Brown (2025) who suggest that when AI algorithms provide over-intrusive or recommendation, customers feel that their personal data may be exposed without adequate benefit.

Overall, the findings suggest that trust plays a significant role in the relationship between AI-powered recommendations and buying intention among UK fashion consumers. The findings support the literature while also reflecting that developing trust relies heavily on transparency and privacy within AI-powered recommendations.

5.6 Discussion of Research Objectives 4: Factors Influencing Product Recommendation Effectiveness

The outcome implied that the combination of perceived personalisation, perceived usefulness, and consumer trust is an important factor in determining the effectiveness of AI-Powered recommendations. In this matter, the statistical outcomes noted that perceived personalisation had a high positive correlation with customer purchase intention, with a value of $r = .858$, $p < .001$, while it received $\beta = .544$, $p < .001$, as the primary predictor in the regression model. Therefore, this suggests that AI recommendations are effective, particularly when customers perceive the suggested products match their preferences. It supports the literature of Wang (2025) and Okeleke et al. (2024), who suggest that AI recommendations examine customers'

products preferences by which customers perceive as effective for making better decisions in terms of purchasing products.

In addition, trust is another crucial factor, as statistical analysis showed a positive correlation with purchase intention with a value of .790, $p < .001$, which also remains significant in the regression model ($\beta = .337$, $p < .001$). It signifies the greatest trust in AI-powered recommendation which turns into purchase intention. This outcome is consistent with the literature, which denotes that management of transparency within the system supports the creation of a sense of trust (Wang et al., 2023). On the contrary, Akter et al. (2021) argued that concern regarding privacy and algorithm biases can lead to vulnerability among customers in AI systems, which increases the likelihood of rejecting the system. Hence, it suggests that AI recommendations' effectiveness not only depends on product suggestions but also depends on how confident customers feel in using the system to make a purchase.

On the contrary, perceived usefulness showed a strong correlation with purchase intention $r = .804$, $p < .001$, however, the coefficient value received was $\beta = .069$, $p = .558$. It indicates a statistically non-significant effect in the regression model when the other predictors, such as personalisation and trust, are considered simultaneously. Therefore, perceived usefulness can be considered as an important factor that evaluates the AI recommendation effectiveness, as customer acceptance is highly influenced by efficiency, trust, and personalisation.

Therefore, these outcomes align with the objectives, as it was found that factors such as perceived personalisation, customer trust, and perceived usefulness are the main factors influencing the effectiveness of AI-powered product recommendations. Consequently, effective AI-powered recommendations that affect customers to shape customers' purchasing behaviour.

Hence, it can be stated that perceived usefulness not only determines the effectiveness of recommendations, while trust and personalisation play a significant role in shopping customers' purchase intention.

5.7 Discussion of the Overall Research Question and Hypotheses

The statistical findings revealed that AI recommendations are highly connected with customer purchase intention as the overall regression was statistically significant. It

directly aligns with research question 1, which highlights positive customer perception towards AI recommendations. It supports the findings of Yin, Qiu, and Wang (2025), who note that AI recommendations reduce shopping pressure as customers perceive the system is convenient, which influences their purchase intention, supporting H1.

The findings found that perceived personalisation has a significant relationship with purchase intention, which directly supports research question 2: the influence of perceived personalisation on consumer online purchase intention. As supported by Hardcastle, Vorster, and Brown (2025), AI algorithms analyse customer preferences and browsing history to tailor product recommendations which increases customers' purchase willingness, signifying that H2 is supported.

In relation to H3, the statistical outcomes showed that customer trust in AI recommendations has a positive relationship with purchase intention. This is consistent with the findings of Srivastava and Gurme (2025), which revealed that maintaining fairness and reliability within AI recommendations enhances customers' trust, which influences purchase intention, while privacy concerns affect relationships. Thus, these judgments align with research question 3 by highlighting the influence of trust in AI-powered product recommendation on consumers' online purchase intention.

Further, the statistical findings found that perceived usefulness made a non-significant contribution in regression analysis despite revealing a high correlation with purchase intention. Therefore, it suggests relatively low influence on purchase intention, as perceived usefulness may overlap with other constructs, which signifies that H4 is not supported. Aligning with research question 4 of key factors influencing the AI-powered recommendations' effectiveness, it suggests that customer value AI-powered recommendation usefulness, alongside consideration of personalisation and trust, which shapes purchase intention (ElSayad and Mamdouh, 2024).

Therefore, it indicates that fashion brands must consider customer trust, relevance, perceived usefulness, and personalisation together to increase the effectiveness of AI-powered recommendations, which influences customer purchase intention.

5.8 Theoretical Implications

The results provide insights into the application of theoretical perspectives such as the Technology Acceptance Model (TAM) and the Theory of Planned Behaviour. Aligning

with the TAM, it has been found that perceived usefulness and ease of use are important factors, which strengthen technology acceptance (Vorm and Combs, 2022; Fridkin et al., 2024). Therefore, it implies that perceived usefulness may influence customers' perceptions of useful AI recommendations in making decisions regarding fashion products. However, the statistical findings imply that the perceived usefulness showed no statistically significant contribution in purchase intention when other variables are considered in the regression model. Therefore, it is suggested that the perceived personalisation and consumer trust play a significant role in customer acceptance of AI-powered recommendation usefulness in terms of accepting AI-powered systems, supporting the principle of TAM.

Moreover, considering the Theory of Planned Behaviour, it is revealed that when customers perceive AI recommendations as convenient and beneficial, they show more positive attitudes towards accepting the technology (Grassini et al., 2025; Magwegwe and Shaik, 2024). Additionally, trust has an important contribution in increasing the confidence of customers in AI recommendation, particularly when they perceive the system as reliable and transparent (An and Ngo, 2025). With the support of empirical findings, it showed a significant positive relationship between customer trust and purchase intention. Therefore, when customers perceive AI recommendations as useful, alongside the consideration of trust and personalisation, they exhibit greater control in the system and are more willing to purchase fashion products online, supporting the theory of planned behavior.

Overall, the study's findings suggest that the application of TAM and the Theory of Planned Behavior provides a comprehensive understanding of customer perception in relation to AI recommendations, which influences purchase intention.

5.9 Practical and Managerial implications

The obtained study findings provide various practical implications for UK online fashion retailers in relation to AI-powered product recommendations. In particular, gaining insights into the importance of perceived personalisation, fashion retailers should focus on developing reliable and transparent personalised recommendations that would foster customer trust and consequently increase purchase intent (Xu and Chen, 2025). Additionally, customers highly value AI recommendations when they align with

customers' fashion needs and preferences; hence, retailers must enhance their recommendation system to provide product suggestions aligning with customer needs.

However, retailers must try to avoid intrusive recommendations, as they can determine the customer's confidence in making a purchase. Alongside this, as building customer trust is a crucial factor, fashion retailers should consider responsible use of customer data and ensure their privacy (Markou et al., 2025). This can help to reduce customer uncertainty about the collection of data and make AI recommendations more reliable and trustworthy to them. Furthermore, fashion retail managers must consider the perceived usefulness of recommendations, along with customer perception, personalisation, and trust, which affect customer buying decisions significantly. Therefore, it suggests that gaining insights from study findings would allow UK fashion retailers to focus on meaningful personalisation, customer trust, and its perceived usefulness in influencing customer purchase intent instead of focusing solely on developing AI-powered recommendations.

5.10 Contribution to the Literature Gap

On the basis of the overall study, it is identified that the existing literature contributes to providing a comprehensive understanding of how AI-driven product recommendations influence customer purchase intention. Even though previous studies have investigated factors that influence customers in using AI in the fashion business by considering their purchasing behaviour, there remains a lack of in-depth information about AI recommendations, particularly focusing on the UK fashion industry. Therefore, this current study addressed this gap by assessing the role of AI recommendations in affecting customer buying intention, particularly in the UK retail fashion industry context.

Most importantly, this study has investigated how perceived personalisation, perceived usefulness, and consumer trust are collectively associated with online purchase intention (ElSayad and Mamdouh, 2024). By considering these factors, the study provides a more comprehensive and balanced approach regarding customer perception and attitudes in terms of responses to AI recognition within the following industry context. Hence, the study contributes to providing insights into the UK fashion

context, which increases the opportunity for further research in responsible AI recommendation.

5.11 Chapter Summary

This chapter has critically evaluated and discussed the main findings concerning the influence of AI-driven product recommendations on customers' online fashion purchase intentions. The study findings connect the research objectives, hypotheses, existing literature, and theoretical perspectives, while also considering the contribution to the literature gap. In particular, the findings revealed that AI-powered product recommendations are positively correlated with online purchase intention among UK fashion customers. Moreover, it shows that perceived personalisation and consumer trust appear to have a higher contribution to online purchase intentions, which is consistent with the existing literature as well.

On the contrary, it was also observed that perceived usefulness does not make a significant contribution in the regression model, as consideration of customer trust and convenience plays a significant role in affecting customer buying decisions. Moreover, applying the TAM and theory of planned behaviours, it has been identified that managing transparency, reliability, and trustworthiness within AI systems is important for increasing technology acceptance and influencing purchasing behaviour.

Chapter 6: Conclusion and Recommendations

6.1 Introduction

This chapter summarises the overall empirical outcomes based on the study regarding the impact of AI-powered product recommendation on the online purchasing intention of UK fashion consumers. It presents the findings by connecting them to research questions, which demonstrate how customer perception and trust in AI systems contributed to fashion product purchasing decisions. Identifying the key limitations of the study, it provides practical recommendations for UK fashion retail companies to strengthen AI-powered product recommendations approaches for influencing customer purchasing behavior, while future research potential has also been considered.

6.2 Summary of Key Insights

To conclude, it demonstrates that AI-driven product recommendations have become an essential component in shaping customers' online purchase intentions in the UK fashion retail industry. The outcomes highlighted that fashion retailers have utilised AI-driven product recommendations to analyse purchasing behaviors to influence customer purchasing intentions. By fulfilling the diverse customer needs and reducing search efforts through AI-driven recommendations, fashion retailers are able to build customers' trust in the system, which turns into positive customer perception towards purchasing products online. The study has adopted a positivist philosophy, and the collected data has been analysed through SPSS, which provides inclusive results on customer perception and trust in affecting their purchasing behavior. Additionally, customer concern regarding data privacy can undermine customers' trust in the system, as maintaining transparency and reliability is an important part of providing a better customer experience.

However, the effectiveness of AI recommendations not only depends on the functionality and usefulness of the system, but also on perceived personalisation and customer trust which remain significant in determining customer purchasing intention. Hence, the findings suggest that when customers perceive AI-powered recommendations as trusted, personalised, and appropriate, they are more willing to purchase fashion products online.

6.3 Research questions achieved

The study findings highlight that AI-powered product recommendations have a positive relationship with online purchase intention, as customers responded that product suggestions aligned with their fashion preferences, which influences their purchase intentions, achieving the main research questions. In particular, it has been found that AI-driven product recommendations reduce search effort and increase product discovery, which reinforces positive perception during product purchase. Additionally, the statistical findings also showed an overall favourable perception regarding AI shopping experiences (mean= 3.79), considering it convenient and beneficial, signifying that question 1 of customer perception of AI-powered product recommendation was achieved.

The research question 2 has been addressed by discovering that perceived personalisation has a positive correlation with online purchase intention. It indicates that customers are more willing to buy online fashion products, as AI-driven product recommendations produce more convenient customer experiences through data-led insights.

Moreover, literature shows that maintaining accountability and transparency in AI-driven recommendations is an integral part of building customer trust for fashion retailers, as customers may feel uncertain about data privacy. As support, the statistical findings also asserted a strong positive correlation with purchase intention, indicating that question 3 is achieved, which emphasises the influence of trust in AI-powered product recommendation on customer online purchase intention.

Lastly, statistical findings showed that perceived usefulness does not make a statistically significant unique contribution to online purchase intention in the regression model. Hence, considering personalisation, customer trust, and perceived usefulness together is an important factor for determining recommendation effectiveness rather than perceived usefulness alone, which demonstrates that question 4 is achieved.

6.4 Limitations of the study

Despite providing favourable outcomes, the study's limitation lies in adopting a small sample size, which may limit the generalisability of the findings. Additionally, primary quantitative data offer limited insights into customers' perceptions of AI-powered recommendations, while qualitative approaches such as interviews can provide a

deeper understanding on customers' perception (Abdalla et al., 2026). Moreover, the study was unable to effectively investigate the association of perceived usefulness (PU) with purchase intention (PI) as the regression model identified significant overlap between PU and PI, which is incompatible with H4.

6.5 Theoretical contribution

The study has contributed to addressing the literature gap by investigating the function of AI-powered product recommendations in shaping customers' purchase intention, particularly focusing on the UK retail fashion industry. Moreover, underpinning the TAM and Theory of Planned Behaviour helps to find that technology usefulness and maintaining trustworthiness are the main foundations for increasing customer confidence of technology acceptance and influencing purchasing behavior.

6.6 Recommendations

6.6.1 Focusing on Developing Meaningful AI Personalisation

UK fashion retailers should focus on developing personalised recommendation approaches, which provide more value for customers to fulfill their fashion preferences. The findings suggest that perceived personalisation has a greater influence on customer purchase intention. By analysing user browsing behaviour and previous purchase behaviour, retailers can provide more tailored and relevant product suggestions that influence customers to purchase products (Yin, Qiu, and Wang, 2025). However, excessive and intrusive personalisation can reduce customer confidence in AI-powered recommendations; hence retailers must ensure that personalisation is appropriate and relevant by aligning with customer needs. Thus, meaningful personalisation can enhance customer engagement with retailers by influencing their purchase intention.

6.6.2 Strengthen Customer Trust in AI-powered product recommendations

To strengthen customer trust, fashion retailers must maintain transparency and accountability within AI-driven product recommendations. Findings showed that customers feel uncertainty about data privacy, and trust significantly shapes purchase intention. UK retailers must ensure responsible use of customer data by providing clear information about how data are collected and used. Yet, irresponsible use of customers' sensitive data and lack of transparency in AI recommendations can create customer uncertainty about product suggestions and reduce trust (Glassberg,

Brender-Ilan, and Zwilling 2025). Thus, retailers must monitor responsible data practices, which strengthen customer trust and boost confidence in the system and their likelihood to buy products.

6.6.3 Prioritising Increasing AI Recommendations Effectiveness

UK retailers must focus on a more balanced approach by considering the perceived personalisation and customer trust alongside perceived usefulness of AI-powered technology. By prioritising balancing personalisation and customer trust, alongside the usefulness of the system, retailers can increase the effectiveness of AI-powered systems and create long-term value for customers (Utami and Aimin, 2026). Thus, this balanced approach significantly reshapes customer behaviour towards purchasing from fashion brands.

6.7 Implications for future research

The future study would focus on utilising larger sample size and reliable mixed method approach (primary quantitative and qualitative) to gain more detailed and comprehensive results of customer perception regarding AI-powered products recommendations (Hongling et al., 2025). Additionally, the future study must consider the function of perceived usefulness in detail, linking to customer trust and perceived personalisation.

6.8 Chapter Summary

The chapter concluded that AI-powered product recommendations have the greatest impact on influencing customers' online purchase intention. Synthesising the key findings by connecting them to research questions, the study found that perceived personalisation, customer trust, and perceived usefulness not only determine recommendation effectiveness but also contribute to influencing customers' online purchase intentions from UK fashion retailers.

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Appendices

Appendix 1: Survey Questionnaire

Questionnaire

The Impact of AI-Powered Product Recommendations on Consumers' Online Purchase Intention in the UK Fashion Retail Industry

Instructions: Please answer all questions honestly. Your responses will remain confidential and will be used only for academic purposes.

Section A: Consent and Background Information

Q1. Are you happy to take part in this research study?

Yes / No

Q2. Which age group do you belong to?

18–24 / 25–34 / 35–44 / 45–54 / 55–64 / 65 or above

Q3. Do you currently live in the UK?

Yes / No

Q4. How often do you shop for fashion products online?

Less than once every 6 months / Once every 3–6 months / Once every 1–2 months / 2–3 times a month / More than 3 times a month

Q5. Have you seen product recommendations generated by AI while shopping for fashion products online?

Yes / No / Not sure

Section B: AI-Powered Product Recommendations

For Questions 6–20, please select one answer: (1 – Strongly Disagree | 2 – Disagree | 3 – Neutral | 4 – Agree | 5 – Strongly Agree)

Q6. I find AI recommendations helpful when looking for fashion products online.

Q7. The products suggested by AI are usually useful to me.

Q8. AI usually recommends fashion products that I would consider buying.

Q9. AI recommendations save me time when I am looking for fashion products online.

Section C: Perceived Personalisation

Q10. The fashion products recommended to me usually match my personal preferences.

Q11. I feel that AI recommendations are tailored to what I am looking for.

Q12. The recommendations I receive often match my personal style and interests.

Section D: Trust in AI Recommendations

Q13. I feel that I can rely on AI-powered product recommendations.

Q14. I trust AI to suggest fashion products that are suitable for me.

Q15. I feel confident using AI recommendations when shopping for fashion products online.

Section E: Online Purchase Intention

Q16. I would be likely to buy a fashion product that is recommended by AI.

Q17. AI recommendations make me more interested in buying fashion products online.

Q18. If AI recommends a fashion product, I would consider buying it.

Q19. I would use AI recommendations when making future online fashion purchases.

Section F: Overall Experience

Q20. Overall, AI recommendations make my online fashion shopping experience better.

Thank you for taking the time to complete this questionnaire.

Appendix 2: Ethics Form

APPLICATION FOR ETHICAL APPROVAL

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically.

The University follows the OECD Frascati manual definition of **research activity**: “creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications”. As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the “principal researcher”.

This form must be completed and approved prior to undertaking any research activity.

SECTION A: About You (Principal Researcher)

1	Full Name:	Dishantkumar Bipinbhai Patel
2	Student Number:	2503795
3	Email address:	2503795@student.uwtsd.ac.uk
4	Programme of Study:	Master of Business Administration
5	Supervisor:	Dr Ghulam Mujtaba Kayani

SECTION B: Internal and External Ethical Guidance Materials

	Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, location-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines. You may add rows to this table if needed.	
1	UWTSd Research Ethics & Integrity Code of Practice	☒
2	UWTSd Research Data Management Policy	☒

SECTION C: Details of Research Activity

1	Indicative title:	The Impact of AI-Powered Product Recommendations on Consumers Online Purchase Intention in the UK Fashion Retail Industry		
2	Proposed start date:	27/07/2026	Proposed end date:	10/09/2026

	Introduction to the Research (maximum 300 words in each section) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the three points below: • <i>Purpose of Research Activity</i> • <i>Proposed Research Question</i> • <i>Aims of Research Activity</i> • <i>Objectives of Research Activity</i> Demonstrate, briefly, how <u>Existing Research</u> has informed the proposed activity and explain • <i>What the research activity will add to the body of knowledge</i> • <i>How it addresses an area of importance.</i>
3	Purpose of Research Activity The purpose of this research is to critically evaluate the impact of AI-powered product recommendations on UK consumer online purchase intention within the fashion retail sector. Artificial Intelligence (AI) has become a cornerstone of the UK fashion retail business, particularly to influence purchase intentions among consumers by offering personalised product recommendations (Anwar et al., 2026). Despite the growing importance of this technique, UK-based fashion retailers are still failing to attract customers by shaping their purchasing decisions, indicating a clear gap in the effectiveness of their AI-driven product recommendation system (Arachchi and Samarasinghe, 2025). The development of the present research as it can help in offering evidence-based insights on how AI can be effectively utilised to offer accurate product recommendations. From an academic perspective, this research is significant will contribute to the existing body of literature by offering clear evidence on ensuring effective personalisation through AI-based recommendation mechanisms and their direct influence on trust. This research will ultimately simplify AI usage among the UK-based fashion retailers by allowing them to design more effective AI-based customer engagement.
4	Research Question How do AI-powered product recommendations influence consumers' online purchase intention in the UK fashion retail industry?
5	Aims of Research Activity The aim of the research is to examine the impact of AI-powered product recommendations based on UK fashion retail consumers' online purchase intention.
6	Objectives of Research Activity • To examine consumers' interest towards AI-powered product recommendations in the UK online fashion retail industry. • To investigate the influence of perceived personalisation on customers' online purchase intention.

	• To examine the influence of trust in AI-driven product recommendations on consumers' online purchase intentions. • To identify the key factors that influence the effectiveness of AI-based product recommendations in the UK online fashion retail industry.
	Proposed data collection methods (maximum 600 words) Provide a brief summary of all the methods that may be used in the research activity to collect data, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed. You do not need to justify the methods here but should instead describe how you intend to collect the data necessary for you to complete your project.
7	The research will follow a deductive approach and positivist research philosophy to find the influence of perceived personalisation on customer online purchase intentions within the UK fashion retail environment. According to Hall, Savas-Hall and Shaw (2023), the deductive approach helps to generalise findings by developing suitable theories that contribute to standardising the measurement of AI-powered product recommendations' effectiveness in shaping UK people's online purchase behaviour. However, inductive approaches limit theoretical application in research findings; hence it will not be used in this study (Yuwono and Rachmawati, 2023). Additionally, the positivism philosophy enables the researcher to maintain consistency of the overall results and standardise the evaluation of collected data (Park, Konge and Artino Jr, 2020). In contrast, interpretivism philosophy considers high subjectivity that limits generalisation findings on broader populations (Alharahsheh and Pius, 2020). Therefore, these research paradigms are suitable to focus on the research objective reality and evaluate the cost-effectiveness relationship between AI-driven product recommendations on influencing consumers' online purchase intentions. This particular research will follow the purposive sampling strategy due to its specific interest in UK consumers who have continued online shopping for fashion products and have been exposed through AI-driven recommendations. As discussed by Giri (2024), this sampling technique is not only suitable for generalising findings from a targeted population but also for collecting data from direct sources. However, generalised findings resulting from a larger population may create difficulty in validating representativeness and validity. In this regard, the sample will be collected from 50 respondents who reside in the UK and have online shopping experience from fashion retailers considering AI-powered product recommendations. Moreover, key variables of the study are AI-powered product recommendations (Independent Variable) and UK consumers' online purchase intention (Dependent Variable).

	The study will select the primary quantitative data collection method to measure the impact of AI-driven product recommendations in influencing UK consumers' online purchase intentions of fashion retail products. As per the statement of Ghanad (2023), the quantitative data collection method seeks to establish knowledge by collecting data from a quantitative sample and then generalise findings. Therefore, an online structured survey will be conducted to collect UK buyers' responses who continue their shopping by prioritising AI-based product recommendations from the online fashion retail landscape. The survey will consist of a total number of 20 questions where participants will be able to provide their responses through a 5-point Likert scale. However, the inflexible design of quantitative data may limit the researcher's ability to evaluate potential findings as per requirements (Oranga and Matere, 2025). The study will employ a statistical data analysis to synthesise quantitative data and evaluate the relationship between measurable variables which assess the impact of AI-driven product recommendations on consumers' online purchasing behaviour. In quantitative research, statistical analysis is suitable for producing the potential outcomes through measuring the central tendency which highlights the relationship significance between variables (Kotronoulas et al., 2023). For enhancing the reliability and validity, the research will conduct descriptive, correlation and regression analysis along with representing empirical evidence rather than producing subjective interpretation. According to Wickham (2019), thematic analysis provides a subjective measurement to examine the research question and evaluate outputs. Therefore, due to a lack of specificity, the study will choose statistical analysis rather than secondary qualitative data analysis. Based on the quantitative survey research, the study will follow some ethical principles that protect human participation by maintaining confidentiality, informed consent and prioritising voluntary participation. As discussed by Adley et al. (2024), ethical approval for the focus group is essential to facilitate the voluntary nature of UK people's participation and collect their informed consent before accessing the questionnaires. Additionally, to protect individual participants' privacy, the research will adhere to the UK GDPR (General Data Protection Regulation) and keep all responses confidential and anonymous (Franke et al., 2024). Hence, the particular study will not only investigate UK people's online shopping behaviour depending on AI-powered product recommendations but also seek to minimise risks regarding confidentiality and ensure academic integrity.
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SECTION D: Scope of Research Activity

	Will the research activity include:	YES	NO
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1	Use of a questionnaire or similar research instrument?	☒	☐
2	Use of interviews?	☐	☒
3	Use of focus groups?	☐	☒
4	Use of participant diaries?	☐	☒
5	Use of video or audio recording?	☐	☒
6	Use of computer-generated log files?	☐	☒
7	Participant observation with their knowledge?	☐	☒
8	Participant observation without their knowledge?	☐	☒
9	Access to personal or confidential information without the participants' specific consent?	☐	☒
10	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
11	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
12	Investigation of participants involved in illegal activities?	☐	☒
13	Use of procedures that involve deception?	☐	☒
14	Administration of any substance, agent or placebo?	☐	☒
15	Working with live vertebrate animals?	☐	☒
16	Procedures that may have a negative impact on the environment?	☐	☒
17	Other primary data collection methods. Please indicate the type of data collection method(s) below.	☒	☐
	Details of any other primary data collection method: Online Survey		

If you have ticked NO to every question then the research activity is (ethically) low risk and you may skip section E and continue to section F.

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION E: Intended Participants

	Who are the intended participants:	YES	NO
1	Students or staff at the University?	☐	☒
2	Adults (over the age of 18 and competent to give consent)?	☒	☐
3	Vulnerable adults?	☐	☒
4	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	☒
5	Prisoners?	☐	☒
6	Young offenders?	☐	☒

7	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
8	People engaged in illegal activities?	☐	☒
9	Others. Please indicate the participants below, and specifically any group who may be unable to give consent.	☐	☐
	Details of any other participant groups:		

	Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
10	How many participants are expected?	Total number of participants are 50. The sample will be collected from 50 respondents who reside in the UK and have online shopping experience from fashion retailers considering AI-powered product recommendations.
11	Who will the participants be?	UK fashion retail consumers
12	How will you identify the participants?	Select participants' as per their online purchasing habits from UK fashion retail companies'

	Information for participants:	YES	NO	N/A
13	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
14	Will you tell participants that their participation is voluntary?	☒	☐	☐
15	Will you obtain written consent for participation?	☒	☐	☐
16	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☐	☐	☒
17	If the research is observational, will you ask participants for their consent to being observed?	☐	☐	☒
18	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
19	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
20	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
21	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
22	If NO to any of above questions, please give an explanation			

	Information for participants:	YES	NO	N/A
24	Will participants be paid?	☐	☒	☐
25	Is specialist electrical or other equipment to be used with participants?	☐	☒	☐
26	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐

27	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☐	☒	☐
28	If YES to any question, please provide full details			

SECTION F: Anticipated Risks

	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them.	
1	Risks to participants For example: sector-specific health & safety, emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information. If you have identified in section D that there are no participants, then enter N/A and go skip to question 3.	
	Risk to participants: Invasion of privacy	Follow the UK data security standard, GDPR.
2	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities	
	The study does not involve sensitive topics such as health, criminal activity, religion, political views, or sexual behaviour. Therefore, no significant emotional or psychological distress is anticipated.	
3	Risks to the investigator For example: personal health & safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest	
	Risk to the investigator: Participants biased outcome	The study will clearly outline participation selection criteria.
4	University/institutional risks For example: adverse publicity, financial loss, data protection	
	Risk to the University: Data privacy and security risks	Maintain end-to-end data encryption and store files on password protected drives.
5	Environmental risks For example: accidental spillage of pollutants, damage to local ecosystems	
	Risk to the environment: No environmental risks are anticipated as the study will be conducted entirely online.	<i>How you will mitigate the risk to environment:</i> The research uses electronic surveys only and therefore does not involve physical activities that could impact the environment.

SECTION G: Feedback, Consent and Confidentiality

If you have identified in section D that there are no participants, then enter skip this section and continue to section H.

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when?
	At the end of the survey, participants will receive a short debrief statement thanking them for their participation. Participants may contact the researcher via email if they wish to receive further information about the study.
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.
	For online questionnaire, a screen will be shown that acts as a consent form and inform participants to click consent button and then go to the NEXT part.
3	Confidentiality / Anonymity Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	Participants name are not collected that helps to maintain confidentiality and anonymity.

SECTION H: Data Protection and Storage

	Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 “GDPR” and the Data Protection Act 2018 “DPA”)?	YES	NO
1	“Personal data” means any information relating to an identified or identifiable natural person (‘data subject’). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person. Any video or audio recordings of participants is considered to be personal data.	☐	☒
	If YES, provide a description of the data and explain why this data needs to be collected:		
2			
	Does it involve special category data (as defined by the GDPR)?	YES	NO
3	“Special category data” means sensitive personal data consisting of information as to the data subjects’ – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes),	☐	☒
	If YES, provide a description of the special category data and explain why this data needs to be collected:		

4	
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	Will data from the research activity (collected data, drafts of the thesis, or materials for publication) be stored in any of the following ways?	YES	NO
5	Manual files (i.e. in paper form)?	☐	☒
6	University computers?	☒	☐
7	Private company computers?	☐	☒
8	Home or other personal computers?	☐	☒
9	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☒	☐
10	"Cloud" storage or websites?	☒	☐
11	Other – specify:	☐	☐
12	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of backup procedures, password protection, encryption, anonymisation and pseudonymisation:		

	Data Protection		
	Will the research activity involve any of the following activities:	YES	NO
13	Electronic transfer of data in any form?	☐	☒
14	Sharing of data with others at the University outside of the immediate research team?	☐	☒
15	Sharing of data with other organisations?	☐	☒
16	Export of data outside the UK or importing of data from outside the UK?	☐	☒
17	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☐	☒
18	Publication of data that might allow identification of individuals?	☐	☒
19	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and Data Protection Act (2018) (and/or any international equivalent):		
20	List all who will have access to the data generated by the research activity:		
	The principal researcher, dissertation supervisor, internal marker and external examiner (where necessary) may have access to the research data.		
21	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	The principal researcher will act as the custodian of the data.		
22	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form.		
22	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtسد.ac.uk/library/research-data-management/)		☒

23	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	☒
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SECTION I: Use of AI tools

Use of generative AI and other AI-based tools		YES	NO	N/A
There are a number of ethical issues relating to the use of generative AI and other AI-based tools, including data security, output bias, and output errors. In general you should assume that any generative AI or other AI-based tool that you pay to use is more secure and accurate than one which is free to use.				
Will the research use AI tools to do any of the following:				
1	Capture data?	☐	☒	☐
2	Generate and/or edit text?	☐	☒	☐
3	Generate graphics?	☐	☒	☐
4	Generate video?	☐	☒	☐
5	Generate sound/music?	☐	☒	☐
6	Generate code?	☐	☒	☐
7	Generate synthetic data?	☐	☒	☐
8	Analyse data?	☐	☒	☐
9	Analyse personal or sensitive data?	☐	☒	☐
10	Classify data?	☐	☒	☐
11	Do you intend to use the free version of any AI tools?	☐	☒	☐
If you have answered YES to any of questions O1-O11, please provide justification detailing why this is necessary for the research.				
12				

SECTION J: Declaration

The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
1	Signature of applicant: Dishantkumar Bipinbhai Patel	Date: 08/07/2026
2	Supervisor: Dr Ghulam Mujtaba Kayani	Date:

3	Signature:		
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Appendix 3: Survey Questionnaire



Survey Questionnaire

The Impact of AI-Powered Product Recommendations on Consumers' Online Purchase Intention in the UK Fashion Retail Industry

When you submit this form, it will not automatically collect your details like name and email address unless you provide it yourself.

* Required

Consent and Background Information

1. Are you happy to take part in this research study? *

☐ Yes

☐ No

2. Which age group do you belong to? *

☐ 18-24

☐ 25-34

☐ 35-44

☐ 45-54

☐ 55-64

☐ 65 or above

3. Do you currently live in the UK? *

- ☐ Yes
- ☐ No

4. How often do you shop for fashion products online? *

- ☐ Less than once every 6 months
- ☐ Once every 3–6 months
- ☐ Once every 1–2 months
- ☐ 2–3 times a month
- ☐ More than 3 times a month

5. Have you seen product recommendations generated by AI while shopping for fashion products online? *

- ☐ Yes
- ☐ No
- ☐ Not sure

Next

Survey Questionnaire

* Required

AI-Powered Product Recommendations

Please select one answer

6. AI-Powered Product Recommendations *

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I find AI recommendations helpful when looking for fashion products online.	☐	☐	☐	☐	☐
The products suggested by AI are usually useful to me.	☐	☐	☐	☐	☐
AI usually recommends fashion products that I would consider buying.	☐	☐	☐	☐	☐
AI recommendations save me time when I am looking for fashion products online.	☐	☐	☐	☐	☐

Back

Next

Never give out your password. [Report abuse](#)

Survey Questionnaire

* Required

Perceived Personalisation

Please select one answer

7. Perceived Personalisation *

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The fashion products recommended to me usually match my personal preferences.	☐	☐	☐	☐	☐
I feel that AI recommendations are tailored to what I am looking for.	☐	☐	☐	☐	☐
The recommendations I receive often match my personal style and interests.	☐	☐	☐	☐	☐

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Next

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Survey Questionnaire

* Required

Trust in AI Recommendations

Please select one answer

8. Trust in AI Recommendations *

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel that I can rely on AI-powered product recommendations.	☐	☐	☐	☐	☐
I trust AI to suggest fashion products that are suitable for me.	☐	☐	☐	☐	☐
I feel confident using AI recommendations when shopping for fashion products online.	☐	☐	☐	☐	☐

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Survey Questionnaire

* Required

Online Purchase Intention

Please select one answer

9. Online Purchase Intention *

	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
I would be likely to buy a fashion product that is recommended by AI.	☐	☐	☐	☐	☐
AI recommendations make me more interested in buying fashion products online.	☐	☐	☐	☐	☐
If AI recommends a fashion product, I would consider buying it.	☐	☐	☐	☐	☐
I would use AI recommendations when making future online fashion purchases.	☐	☐	☐	☐	☐

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Survey Questionnaire

* Required

Overall Experience

10. Overall Experience *

	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
Overall, AI recommendations make my online fashion shopping experience better.	☐	☐	☐	☐	☐

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Appendix 4: SPSS Output

Respondent profile

Statistics

	Age	Shop_Frequency	AI_Exposure
Valid	99	100	99
Missing	1	0	1

Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 18-24	19	19.0	19.2	19.2
25-34	34	34.0	34.3	53.5
35-44	30	30.0	30.3	83.8
45-54	15	15.0	15.2	99.0
55-64	1	1.0	1.0	100.0
Total	99	99.0	100.0	
Missing System	1	1.0		
Total	100	100.0		

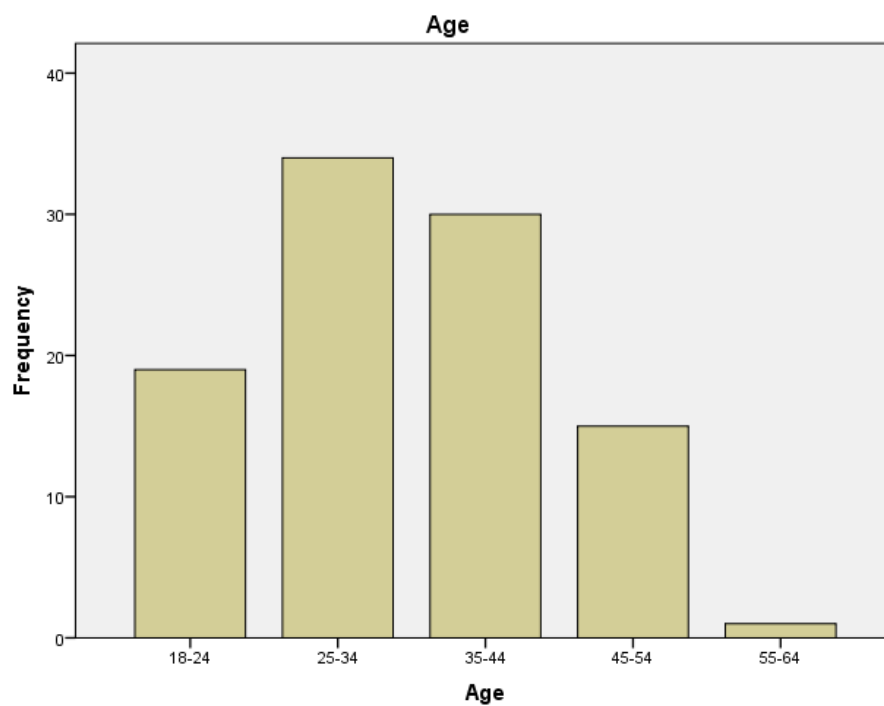
Shop_Frequency

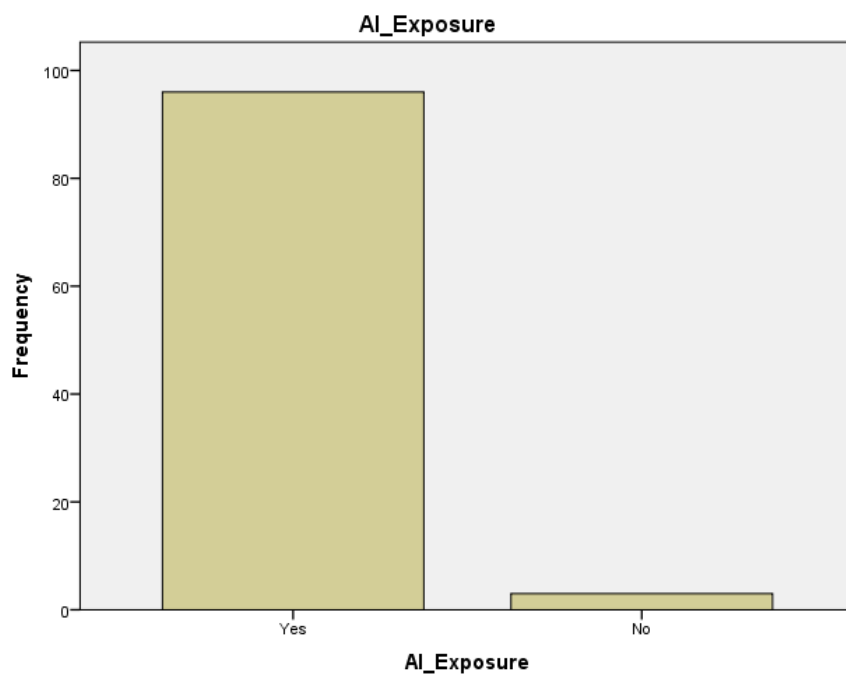
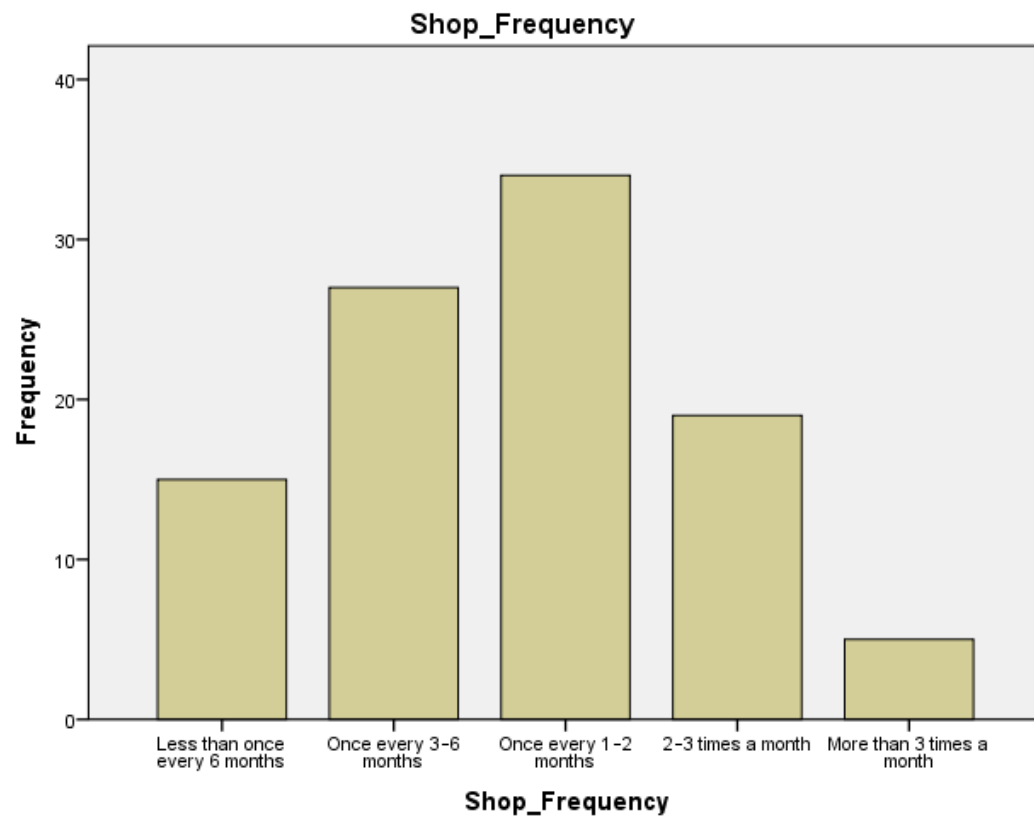
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than once every 6 months	15	15.0	15.0	15.0
Once every 3-6 months	27	27.0	27.0	42.0

Once every 1–2 months	34	34.0	34.0	76.0
2–3 times a month	19	19.0	19.0	95.0
More than 3 times a month	5	5.0	5.0	100.0
Total	100	100.0	100.0	

AI_Exposure

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	96	96.0	97.0	97.0
No	3	3.0	3.0	100.0
Total	99	99.0	100.0	
Missing System	1	1.0		
Total	100	100.0		





Descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PU1	100	1.00	5.00	3.5100	1.15902
PU2	100	1.00	5.00	3.4500	1.07661
PU3	100	1.00	5.00	3.6700	1.02548
PU4	100	1.00	5.00	3.5500	1.05768
PP1	100	1.00	5.00	3.5800	1.24868
PP2	100	1.00	5.00	3.4700	1.08670
PP3	100	1.00	5.00	3.5900	1.19844
TR1	100	1.00	5.00	3.5700	1.14816
TR2	100	1.00	5.00	3.5800	1.13867
TR3	100	1.00	5.00	3.5900	1.05500
PI1	76	1.00	4.00	3.2105	.95660
PI2	78	1.00	4.00	3.2436	.92842
PI3	74	1.00	4.00	3.0676	1.05117
PI4	79	1.00	4.00	3.2025	.86794
Overall_Exp	72	1.00	4.00	3.3194	.90112
Valid N (listwise)	53				

Cronbach's Alpha for Perceived Usefulness

Case Processing Summary

	N	%
Valid	100	100.0
Excluded ^a	0	.0
Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.790	4

Item Statistics

	Mean	Std. Deviation	N
PU1	3.5100	1.15902	100
PU2	3.4500	1.07661	100
PU3	3.6700	1.02548	100
PU4	3.5500	1.05768	100

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PU1	10.6700	6.769	.555	.762
PU2	10.7300	6.704	.646	.714
PU3	10.5100	7.061	.615	.731
PU4	10.6300	7.064	.583	.745

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
14.1800	11.462	3.38559	4

Cronbach's Alpha for Perceived Personalisation

Case Processing Summary

	N	%
Cases Valid	100	100.0

Excluded a	0	.0
Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.732	3

Item Statistics

	Mean	Std. Deviation	N
PP1	3.5800	1.24868	100
PP2	3.4700	1.08670	100
PP3	3.5900	1.19844	100

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PP1	7.0600	3.754	.587	.606
PP2	7.1700	4.446	.551	.652
PP3	7.0500	4.129	.531	.673

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
10.6400	8.152	2.85516	3

Cronbach's Alpha for Consumer Trust

Case Processing Summary

	N	%
Valid	100	100.0
Excluded ^a	0	.0
Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.800	3

Item Statistics

	Mean	Std. Deviation	N
TR1	3.5700	1.14816	100
TR2	3.5800	1.13867	100
TR3	3.5900	1.05500	100

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
TR1	7.1700	3.759	.655	.718
TR2	7.1600	3.853	.636	.738
TR3	7.1500	4.109	.648	.727

Scale Statistics

Mean	Varianc e	Std. Deviation	N of Items
10.7400	7.992	2.82707	3

Cronbach's Alpha for Purchase Intention

Case Processing Summary

	N	%
Valid	57	57.0
Excluded ^a	43	43.0
Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.776	4

Item Statistics

	Mean	Std. Deviation	N
PI1	3.1228	.94624	57
PI2	3.0351	.96297	57
PI3	3.0351	1.01708	57
PI4	3.1579	.81918	57

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PI1	9.2281	4.786	.668	.675
PI2	9.3158	5.077	.563	.732
PI3	9.3158	4.684	.620	.701
PI4	9.1930	5.873	.479	.770

Scale Statistics

Mean	Varianc e	Std. Deviation	N of Items
12.3509	8.446	2.90622	4

Descriptive statistics after Composite variable analysis

Descriptive Statistics

	N	Minimu m	Maximu m	Mean	Std. Deviation
PU_Mean	100	1.00	5.00	3.5450	.84640
PP_Mean	100	1.00	5.00	3.5667	.90825
TR_Mean	100	1.00	5.00	3.5800	.94236
PI_Mean	91	1.00	4.00	3.2601	.75327
Valid (listwise)	N 91				

Correlation Analysis

Correlations

	PU_Mea n	PP_Mea n	TR_Mea n	PI_Mea n
Pearson Correlation	1	.915**	.706**	.718**
Sig. (2-tailed)		.000	.000	.000

PP_Mean	N	100	100	100	91
	Pearson				
	Correlation	.915**	1	.744**	.804**
	Sig. (2-tailed)	.000		.000	.000
TR_Mean	N	100	100	100	91
	Pearson				
	Correlation	.706**	.744**	1	.664**
	Sig. (2-tailed)	.000	.000		.000
PI_Mean	N	100	100	100	91
	Pearson				
	Correlation	.718**	.804**	.664**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	91	91	91	91

** . Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis

Descriptive Statistics

	Mean	Std. Deviation	N
PI_Mean	3.2601	.75327	91
PU_Mean	3.4451	.79390	91
PP_Mean	3.4615	.87174	91
TR_Mean	3.4505	.88244	91

Correlations

	PI_Mean	PU_Mean	PP_Mean	TR_Mean
	n	n	n	n
PI_Mean	1.000	.718	.804	.664

Pearson Correlation	PU_Mean	.718	1.000	.901	.683
	PP_Mean	.804	.901	1.000	.712
	TR_Mean	.664	.683	.712	1.000
	PI_Mean	.	.000	.000	.000
Sig. (1-tailed)	PU_Mean	.000	.	.000	.000
	PP_Mean	.000	.000	.	.000
	TR_Mean	.000	.000	.000	.
	PI_Mean	91	91	91	91
N	PU_Mean	91	91	91	91
	PP_Mean	91	91	91	91
	TR_Mean	91	91	91	91
	PI_Mean	91	91	91	91

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	TR_Mean, PU_Mean, PP_Mean ^b	.	Enter

a. Dependent Variable: PI_Mean

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.815 ^a	.664	.652	.44408

a. Predictors: (Constant), TR_Mean, PU_Mean, PP_Mean

b. Dependent Variable: PI_Mean

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.910	3	11.303	57.316	.000 ^b
	Residual	17.157	87	.197		
	Total	51.067	90			
a. Dependent Variable: PI_Mean						
b. Predictors: (Constant), TR_Mean, PU_Mean, PP_Mean						

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Partial	Tolerance	VIF
1 (Constant)	.744	.217		3.420	.001	.311	1.176					
1 PU_Mean	-.074	.137	-.078	-.535	.594	-.347	.200	.718	-.057	-.033	.184	5.432

PP_Mean	.636	.130	.736	4.889	.000	.378	.895	.804	.464	.304	.170	5.874
TR_Mean	.165	.076	.193	2.157	.034	.013	.316	.664	.225	.134	.484	2.067

a. Dependent Variable: PI_Mean

Collinearity Diagnostics^a

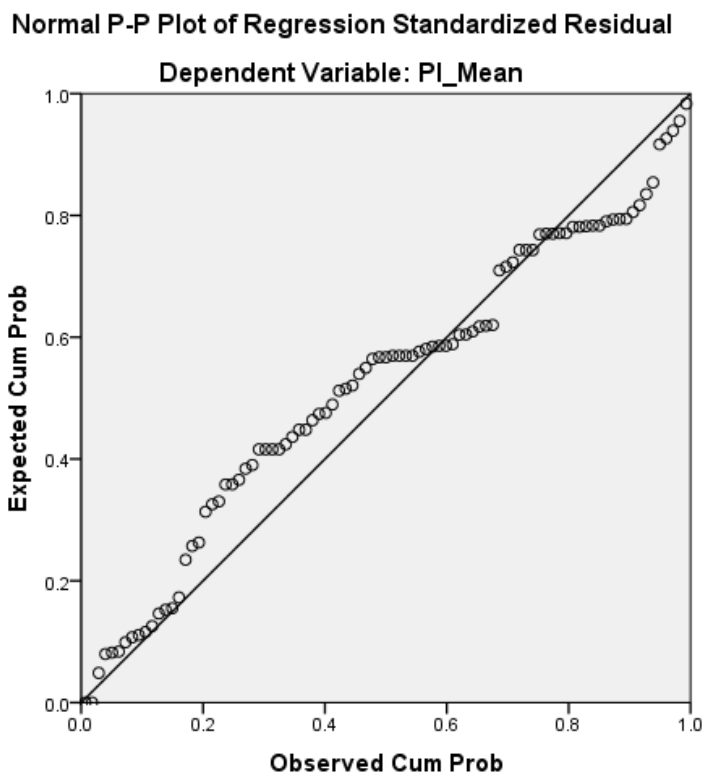
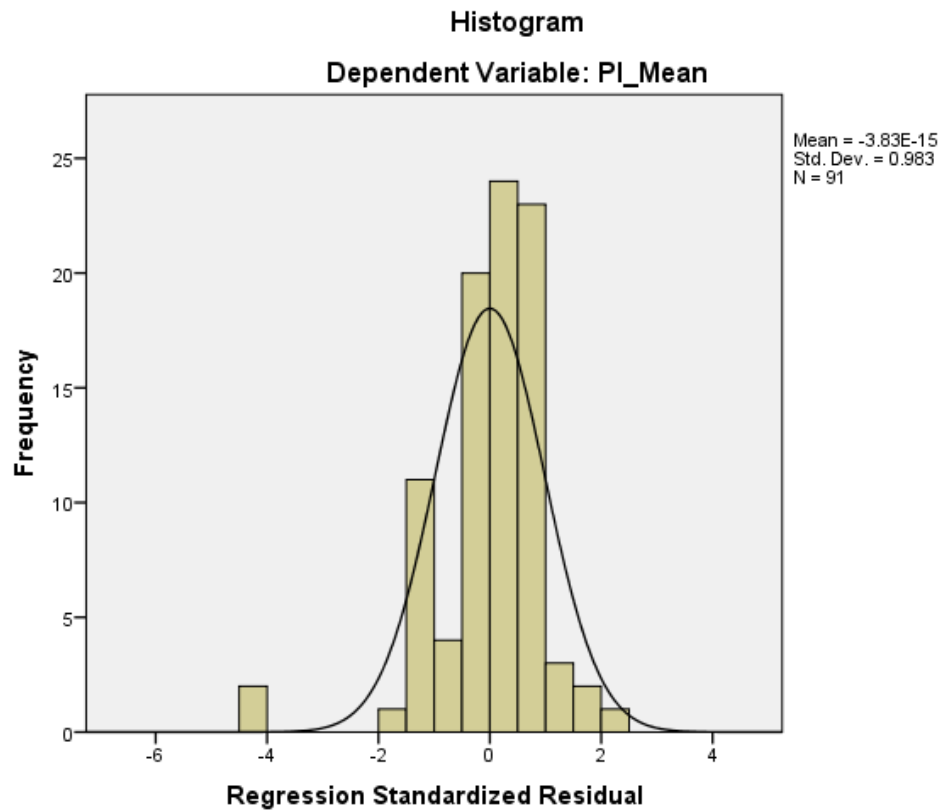
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	PU_Mean	PP_Mean	TR_Mean
1	1	3.937	1.000	.00	.00	.00	.00
	2	.037	10.379	.94	.01	.04	.05
	3	.021	13.551	.00	.07	.07	.93
	4	.005	27.345	.06	.91	.89	.01

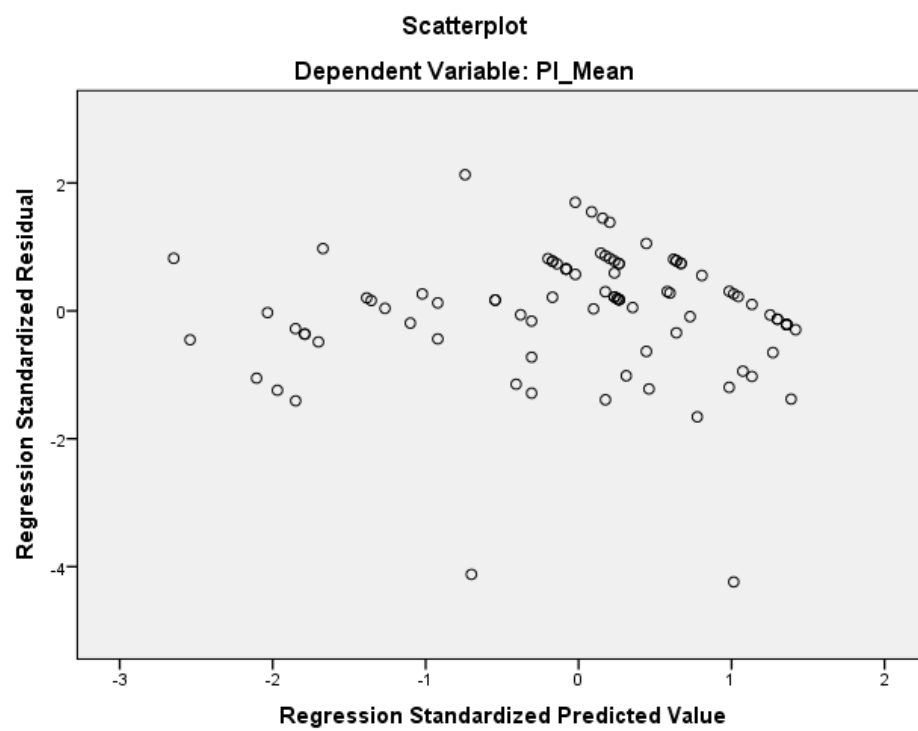
a. Dependent Variable: PI_Mean

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.6352	4.1309	3.2601	.61382	91
Residual	-1.88236	.94571	.00000	.43662	91
Std. Predicted Value	-2.647	1.419	.000	1.000	91
Std. Residual	-4.239	2.130	.000	.983	91

a. Dependent Variable: PI_Mean





Appendix 5

Participation Consent Form

University of Wales Trinity Saint David (c



Participant Identification

Number:

PARTICIPATION CONSENT FORM

(for researcher to fill)

Project Title: THE IMPACT OF AI-POWERED PRODUCT RECOMMENDATIONS ON CONSUMERS ONLINE PURCHASE INTENTION IN THE UK FASHION RETAIL INDUSTRY

Name of Researcher: Dishantkumar Bipinbhai Patel

Name of Supervisor: Dr Ghulam Mujtaba Kayani

Email of Researcher: _2503795_____@student.uwtsd.ac.uk

Aim of Research: The aim of the study is to examine the impact of AI powered product recommendations on online purchase intention among UK fashion retail consumers.

(for participant to fill)		YES	NO
1	I confirm that I have read and understood the information sheet dated _____ for the above study.	✓	
2	I understand there are no material benefits for participating.	✓	
2	I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	✓	

3	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.			✓	
4	I understand that any information given by me may be used in future reports, articles or presentations by the researcher.			✓	
5	I consent for my name and title to be used within this study.			✓	
	Where applicable, I understand that my details will not be anonymous.			✓	
6	I agree to be recorded (audio and/or audio-visual video).			✓	
7	I agree to take part in the above study.			✓	
Researcher's Name (Print)	Dishantkumar Bipinbhai Patel	Signature	Dishantkumar Bipinbhai Patel	Date	22-09-2026
Participant's Name (Print)		Signature		Date	

You may decline to participate in this study. You may end your participation in this study at any time. All data generated from this or any interview will remain confidential. For more information, please view the university's [Research and Data Management Policy](#).

When completed please email a copy to the below address to be kept on the file of the researcher and retain a copy for yourself.

Subject Title: **[NAME OF PARTICIPANT] – Participant Consent Form**

Email: _____@student.uwtsd.ac.uk

Appendix 6

Participant Information Sheet



University of Wales Trinity Saint David (London Campus)

Winchester House, 11 Cranmer Rd,

London SW9 6EJ

Tel: 020 7127 7400

Participant Identification Number:

PARTICIPANT INFORMATION SHEET

Project Title: THE IMPACT OF AI-POWERED PRODUCT RECOMMENDATIONS ON CONSUMERS ONLINE PURCHASE INTENTION IN THE UK FASHION RETAIL INDUSTRY

Name of Researcher: Dishantkumar Bipinbhai Patel

Name of Supervisor: : Dr Ghulam Mujtaba Kayani

Dear Sir/Madam,

My name is ___ Dishantkumar Bipinbhai Patel_____ and I am an undergraduate student in the University of Wales Trinity Saint David, United Kingdom (London campus). Currently, I am conducting research entitled ___ THE IMPACT OF AI-POWERED PRODUCT RECOMMENDATIONS ON CONSUMERS ONLINE PURCHASE INTENTION IN THE UK FASHION RETAIL INDUSTRY _____.

The purpose of this research is to:

[Detail the purpose of your research here.]

The aim of the study is to examine the impact of AI powered product recommendations on online purchase intention among UK fashion retail consumers.

objectives of the study are-

- To examine consumers' perceptions of AI-powered product recommendations in the UK online fashion retail industry.
- To investigate the influence of perceived personalisation on consumers' online purchase intention.
- To examine the influence of trust in AI-powered product recommendations on consumers' online purchase intention.

To identify the key factors that influence the effectiveness of AI-powered product recommendations in the UK online fashion retail sector. This research holds significance because AI is influencing how consumers look for, compare and choose fashion products online. The use of AI-generated recommendations can make shopping easier and less cumbersome for consumers. Nonetheless, these recommendations may not always be accepted by consumers. Consumers may doubt whether the recommended items are accurate, beneficial or reliable. Recent findings indicate that trust, risk perception, and the shopping experience can affect consumers' purchase intention of AI-enabled recommended products.

The significance of the study arises from the fact that personalisation may create benefits and concerns. Customized suggestions can minimize efforts and maximize product discovery. The amount of personal information which retailers collect or use may cause discomfort in consumers. This creates a need for personalised services to complement enhanced privacy, transparency and consumer control. As per recent studies in fashion e-commerce, these factors have an influence on trust and purchase intention.

UK fashion retailers can benefit from this research as it will allow them to gauge the consumer's reaction to AI suggestions. The results can help retailers enhance the quality of recommendations and provide transparent AI-based shopping experiences. It can also help retailers understand why some consumers trust AI recommendations and others may shun them. The research is significant from a

shopper's perspective because e-shopping involves a host of choices. AI can make this less challenging by displaying pertinent products. Nonetheless, before purchasing, they need to trust the recommendations. Consequently, it is important to understand the link between these concepts.

I would like to invite you to participate in my research project by [indicate what activity you want them to do].

Please complete the accompanying consent form. I will [take notes/record audio/record visual-audio] during the interview with your permission.

Please note that the [questionnaire/interview/activity] should not take more than [give timing guidance] to complete but, there is no time constraint. Your participation in the [questionnaire/interview/activity] will be voluntary. You will not receive any remuneration or reward from the researcher. As a participant, you may decide to stop the [questionnaire/interview/activity] at any point of time without any explanation and/or reason.

All data generated from this or any interview will remain confidential. For more information, please view the university's [Research and Data Management Policy](#).

I thank you in advance for your time and participation. If any questions do arise, feel free to contact me at your convenience.

Name of Researcher: Dishantkumar Bipinbhai Patel	Signature of Researcher: Dishantkumar Bipinbhai Patel
Email of Researcher: __2503795____@student.uwtsd.ac.uk	