"Impact of Agentic AI on Luxury Purchase Decisions amongGen Z: A Study of Consumer Trust"

Ishika Fatehchandani[1]

[1]Student, Specialization: BBA Fashion Marketing, Email ID: ishikaf2004@gmail.com

Abstract
In the rapidly evolving landscape of Artificial Intelligence (AI), online consumer behavior is changing, especially with the advent of Agentic AI systems that offer personalised recommendations and support consumers in decision-making processes. The current research focuses on how Consumer Trust in Agentic AI affects Luxury Purchase Decisions made by Gen Z consumers. The study employed quantitative research approach and data were obtained from 250 Gen Z consumers aged 18-29 years through the use of a structured questionnaire. A five-point Likert scale was used to measure Consumer Trust in Agentic AI and Luxury Purchase Decision. Simple random sampling technique was used to select respondents. Data collected was analysed using SPSS 22.6 by frequency and percentage analysis, descriptive statistics, Cronbach's Alpha, Pearson correlation and simple linear regression. The Cronbach's Alpha value for the reliability analysis was 0.860, which demonstrated a good level of internal consistency. The findings showed that there was a strong positive and statistically significant correlation between Consumer Trust in Agentic AI and Luxury Purchase Decision ($r = 0.795$, $p < 0.001$). Consumer Trust in Agentic AI also had a significant and positive impact on Luxury Purchase Decision as revealed by regression analysis (Beta = 0.795, p value < 0.001). The model accounted for 63.2% of the variance in Luxury Purchase Decision. Based on the findings, the study suggests that trust is a crucial element in fostering consumer confidence and willingness to rely on Agentic AI for luxury product purchases. The results offer valuable insights for luxury brands and digital platforms aiming to create trustworthy, transparent, secure, and user-centric AI shopping experiences.

Keywords: Agentic AI, Consumer Trust, Luxury Purchase Decision, Generation Z

Introduction

Artificial Intelligence (AI) has revolutionized how consumers search, compare and buy products. AI does not just influence recommendation systems and virtual assistants, but also conversational shopping tools and more, and is becoming a crucial element in the digital consumer journey. A newer development in this field is Agentic AI, an AI that is able to understand user goals, make decisions, take action, and complete tasks with minimal human intervention. While traditional AI systems focus primarily on recommending or providing information, Agentic AI has the potential to automate various aspects of the purchasing journey, including product identification, comparison, personalisation, and even helping consumers make transactions. A particular aspect of this is online luxury shopping: When buying luxury goods, there is a lot of money on the line, preferences are important, as well as brand and emotional factors. (SRIVASTAVA, 2025)(Chandrakumar, 2024)

Traditionally, the luxury goods market is a field of exclusivity, prestige and quality, craftsmanship and status, and consumer-brand relationship. When they buy luxury products, consumers do not only look at the functional features of the products, but also at the brand image, authenticity, uniqueness, social recognition and personal identity. This forces the question: what about when it comes to luxury, high-priced, and prestigious products, how much do consumers trust AI? This question is becoming more and more relevant when digital technology can minimize the face-to- face contact between consumers and the traditional sales force. Generation Z (Gen Z) is a key segment of consumers in this evolving landscape. As a generation that has been raised on smartphones, social media, shopping apps, and digital technologies, Gen Z consumers know their way around when it comes to technology-enabled shopping. Algorithms, recommendations, personal ads, online reviews, chatbots, and automated shopping support are some of the things they often see. But, that does not imply that people are automatically comfortable with AI. While consumers might value the convenience, speed, and personalization that AI provides, they also might have concerns about the accuracy, privacy, security, transparency, and reliability of automated decisions.(Bunea et al., 2024)(Fitriasari et al., 2025)

Consumer trust thus becomes a pivotal aspect in evaluating their willingness to trust Agentic AI for luxury purchases. When consumers believe that an AI system is reliable, accurate, secure, transparent, and that the AI can understand their preferences, then they are more likely to accept the suggestions and let the AI impact their purchase decisions. However, if the recommendations are flawed, if human interaction is not in the equation, if data privacy is an issue or if consumers do not trust how AI is making decisions, they are less likely to rely on AI. The luxury sector offers a context of particular interest for the study of this phenomenon as the purchase of luxury goods may be more emotionally and symbolically charged than the purchase of a standard product. They can

expect a personalised service, expert advice, authenticity and a sense of exclusivity. As such, this transition from human-assisted purchasing to AI-assisted or AI-led purchasing could result in a trust paradox: while Gen Z consumers may be willing to accept AI as a convenient option, they may not be prepared to hand over the purchasing decision to AI, or to let AI play a strong role in the decision to buy a luxury item.(Guerra-Tamez et al., 2024)(Lady et al., 2025)(Hidayat et al., 2021)

Thus, the current study will be conducted on the effect of Consumer Trust in Agentic AI on Luxury Purchase Decisions, among the Gen Z consumer. Independent variable in the study is Consumer Trust in Agentic AI and the dependent variable is Luxury Purchase Decision. It aims to find out if there is greater trust in Agentic AI, there is greater influence on consumers' luxury buying decision. The study adopted a quantitative approach that was based on the responses of the Gen Z consumers and the relationship and impact between the two variables was examined. The implications of this study are significant as Agentic AI extends the boundaries of digital commerce beyond just recommender systems to more autonomous and personalised purchasing support. By comprehending the trust that Gen Z consumers place, luxury brands, e-commerce platforms, and AI developers can gain valuable insights into creating trustworthy and consumer-centric shopping experiences. It can also be used for academic research to explore the increasing ubiquity of autonomous AI and how it relates to consumer behavior in the luxury sector. (Sipos, 2025)(Amirah Ahmad Suki et al., 2025)

Literature review

(Di Pillo et al., 2025) Gen Z is playing a key role in advancing sustainability efforts by driving climate activism, promoting responsible consumption, and engaging in political discourse. Yet, there is a lack of research into the factors affecting the green purchase intentions of the generation Z and the role of greenwashing perception in this. This study is an extension of the Theory of Planned Behavior (TPB), which introduces greenwashing perception as an additional factor to consider when assessing green purchase intentions, in a sample of Italian Gen Z consumers. To test the proposed hypotheses, a quantitative approach with PLS-SEM is used. The findings reveal that TPB constructs have positive influence on the green purchase intentions while greenwashing perception negatively affects the same, which could offset the effect of pro-environmental constructs. The findings of this study provide important feedback on how to make consumers more sustainable and offer practical implications for companies and policy makers, including the importance of transparent and credible sustainability strategies to ensure consumer trust and to foster the realization of more sustainable consumption habits.

(Jung et al., 2025) This paper explores the impact of perceived artificial creativity on consumer purchase intention via AI quality and advertising attributes in luxury advertising. Based on theories of creativity and models of advertising effectiveness, we investigate the effects of perceived artificial creativity on trust in AI and perceived humanness, and how that influences four characteristics of adverts: informativeness, entertainment, credibility and novelty. We evaluated ChatGPT-3.5, Mid-Journey, and Studio DID-generated luxury brand adverts with 461 respondents who had previous with generative AI. Results show that perceived artificial creativity has a positive impact on trust in AI and perceived humanness. These quality dimensions have important implications for advertising attributes, in turn influencing purchase intentions. Informativeness and novelty had the most positive impact on purchase intentions. The findings of this study offer insights into the impact of AI-generated content on consumer behavior in luxury advertising and its implications for the use of AI in luxury brand communications. This paper examines the relationships between perceived artificial creativity and consumer purchase intention, covering both the AI quality and advertising attributes aspects of luxury advertising. Based on creativity theory and advertising effectiveness models, we look at how perceived artificial creativity influences trust in AI and perceived humanness, which in turn influence four important advertising attributes: informativeness, entertainment, credibility and novelty. We conducted a test using AI- generated luxury brand ads made with ChatGPT-3.5, Mid-Journey and Studio DID with 461 respondents who have previously used generative AI. The results show that the perceived artificial creativity can be positively associated with trust in AI and perceived humanness.

(Borah et al., 2024) A group of individuals born between 1995 and 2010, dubbed Generation Z (Gen-Z), has shown their interest in protecting the environment. On September 20, 2019 for instance, millions of Gen-Zs from more than 150 countries around the world rallied for the protest to push towards the decision-maker and governments to come to their aid and help in saving the planet. These campaigns have led to firms rethinking their operations to ensure that they are 'green' in their production as well as distributing their products. This is not the case for the footwear industry. This research aimed to address the problem of the effects of green consumer knowledge on green purchase behaviour of Gen-Z consumers in the context of footwear and to assess the roles of consumer social responsibility, green advertising and green consumer trust. This study was quantitative and involved an online questionnaire of 559 Chinese Gen-Z consumers. Findings revealed that although green consumer knowledge had a direct effect on green purchase behavior, this effect was partially mediated by consumer social responsibility. Green advertising had a positive moderating effect on the impact of consumer social responsibility on green purchase behavior and green consumer trust as a moderating variable further strengthened the moderating effect of green advertising.

(Theocharis & Tsekouropoulos, 2025) The so-called "Generation Z" is becoming a significant influence on

worldwide consumer habits, especially in the world of digital and technological products. In this study, the brand dimensions of online brand experience, online brand engagement, online brand image, trust, loyalty, awareness, behavioural intentions and brand knowledge are analyzed as to their impact on intention to purchase among Gen Z consumers, with a focus on sustainable consumption. In this context, sustainable consumption is the desire to use tech products that are designed, manufactured and powered in an environmentally responsible way with a low impact. This cross-sectional study adopts a quantitative approach to examine how online brand experience, engagement, image, trust, loyalty, awareness, behavioral intention and knowledge are related to the buying of newly launched technological products that are compatible with sustainability. Convenience and systematic sampling were employed in collecting data from the Gen Z sample and multiple regression analysis was performed to determine the most significant predictors of purchase intention. The findings show that online brand experience, brand image, brand trust and brand loyalty have the most vital roles and have more impact on Gen Z purchase intention, whereas brand awareness and brand knowledge have a role as well. But the impact of brand engagement and behavioral intention is not as strong. As a result, brands that aim to capture the attention of Gen Z should focus on establishing a strong and trustworthy online presence, engaging with them, and emphasizing their sustainability initiatives, and positive digital interactions with a brand can lead to positive image, trust, and brand loyalty, which increase the likelihood of Gen Z consumers purchasing their sustainable products.

(Winarto & Wisesa, 2024) The dynamic landscape of consumer behavior, shaped by technological advances and sustainability considerations, has led to a reassessment of retail strategies, especially in the beauty industry. This study focuses on the intersection of Artificial Intelligence (AI) and sustainability, specifically in relation to consumers of Generation Z (Gen Z) in the beauty industry in Indonesia. It delves into the impact of these influences on the buying habits of Gen Z and provides strategies for brands in the beauty industry to respond. The business environment is complex for Garnier, a subsidiary of the L'Oreal group, which is up against strong competition in the vibrant beauty products sector, particularly in the wake of the appearance of local beauty products. This increases the need to adopt smart decisions to stay competitive in the cosmetics industry. The study aims to evaluate how the application of AI technology, namely Garnier Skin Coach AI, affects Gen Z consumers' purchase intentions of Garnier's skincare products in Indonesia. It also analyzes the impact of sustainability on the preferences and buying behavior of the Generation Z consumers in the beauty market in Indonesia by using Stimulus- Organism-reaction (SOR) model. The study employed a quantitative design with 400 respondents from the Gen Z population, using online surveys with Qualtrics XM and analyzed data with Structural Equation Modeling (SEM) in SPSS AMOS 26.0. The results revealed that the AI technology has a significant influence, particularly on hedonic values. The use of accurate information retrieval and interactive engagement gives elements that make the experience more interesting. Consumers' preferences are influenced by sustainability initiatives through eco- friendly and cruelty-free practices that have a significant impact on preferences, which in turn positively influences purchase intention. A holistic approach is recommended to improve Garnier Skin Coach AI.

Objective of study

- To measure the level of consumer trust in Agentic AI among Gen Z consumers.
- To examine the luxury purchase decisions of Gen Z consumers influenced by Agentic AI.
- To examine the relationship between consumer trust in Agentic AI and luxury purchase decisions among Gen Z consumers.
- To determine the impact of consumer trust in Agentic AI on luxury purchase decisions among Gen Z consumers.

Hypotheses of the Study

- H_{01}: There is no significant relationship between Consumer Trust in Agentic AI and Luxury Purchase Decision among Gen Z consumers.
- H_{11}: There is a significant relationship between Consumer Trust in Agentic AI and Luxury Purchase Decision among Gen Z consumers.
- H_{02}: Consumer Trust in Agentic AI has no significant impact on Luxury Purchase Decision among Gen Z consumers.
- H_{12}: Consumer Trust in Agentic AI has a significant positive impact on Luxury Purchase Decision among Gen Z consumers.

Research Methodology

1.Research Design

In this study, a quantitative, descriptive and analytical research design was used to analyze the effect of Agentic Artificial Intelligence (AI) on luxury buying behavior of the Generation Z consumers. A cross-sectional survey approach was adopted, where the data was collected from the respondents at a particular time point. The research aimed to grasp if there is a link between customer trust in Agentic AI and their luxury buying decisions

as Gen Z consumers.

2.Research Approach

The approach of this study was quantitative since it targets to measure the perception, trust and purchasing decision of the consumers numerically and statistically. The collection of primary data was done by using a structured questionnaire with 5-point Likert scale; 1 =Strongly Disagree, 2=Disagree, 3 =Neutral, 4 =Agree, and 5 =Strongly Agree.

3.Population of the Study

The population of the study was comprising Generation Z consumers who fall approximately within the 18–29 years age group and have experience with online shopping, AI-based recommendations, or digital purchasing platforms. A specific attention was paid to those consumers who have heard about or experienced AI-based product.

4.Sample Size

A sample of 250 Gen Z was used for the study. A sample size of 250 is adequate for descriptive and inferential statistical analysis and for examining the relationship between the study variables.

5.Sampling Technique

The study adopted simple random sampling technique for sampling the Gen Z consumers of age range 18-29 years with a sample size of 250. The respondents were considered eligible as they were online shoppers and had used or interacted with AI for recommendations or with digital shopping tools. This was done on a voluntary basis and the respondents were selected in the defined study population.

6.Sources of Data

The study used primary sources and secondary sources of data. Primary data was gathered directly from 250 Gen Z consumers through a structured questionnaire aimed at capturing their levels of trust in Agentic AI and how this affects their luxury purchasing choices. The questionnaire was a 5-point Likert scale from Strongly Disagree to Strongly Agree. Peer-reviewed research articles, academic journals, books, industry reports, and credible online sources were used for the collection of secondary data pertaining to Agentic AI, consumer trust, luxury consumption, artificial intelligence, digital shopping, and Gen Z purchasing behaviour. These sources gave the theoretical bases and assisted in developing the research framework and questionnaire.

7.Variables of the Study

There was one independent variable (IV) and one dependent variable (DV) in the study. The independent variable was Consumer Trust in Agentic AI defined as the level of trust consumers in the Gen Z segment have in Agentic AI being reliable, accurate, secure, transparent, and able to give the right recommendation with regard to luxury products. The dependent variable in this study was Luxury Purchase Decision, which involved evaluating the extent to which Agentic AI influences consumers' selection, evaluation, and final purchase decision on luxury products.

8.Research Instrument

The main data collection tool used was a structured questionnaire. The questionnaire was divided into 3 parts. Section A gathered demographic data such as age, gender, educational qualification, occupation, monthly income, the frequency of online shopping and experience with shopping or recommendations using AI systems before. Section B surveyed Consumer Trust in Agentic AI which included reliability, accuracy, security, transparency and trust and confidence in AI recommendations. Section C assessed Luxury Purchase Decision, with the effect of AI's recommendation on product selection, the willingness to consider luxury products recommended by AI, the confidence in purchasing luxury products using AI, and the likelihood and effect on final purchase decision. Attitudinal statements were measured on a 5-point scale (from 1 = Strongly Disagree to 5 = Strongly Agree).

9.Data Collection Procedure

A structured questionnaire was used to gather data from 250 eligible Gen Z respondents. The questionnaire can be sent via direct contact with the respondent or an online questionnaire (e.g. Google Forms). Before participation, respondents were informed about the academic purpose of the study and their responses was kept confidential.

10.Data Analysis

Data collected was coded and analyzed with SPSS 22.6. Demographic characteristics of the respondents were summarized using frequency and percentage while for the variables of the study, mean and standard deviation were used. The internal consistency and reliability of the scales in the questionnaire was determined using

Cronbach's Alpha. The Pearson's correlation analysis was conducted with the aim of understanding the relationship between Consumer Trust in Agentic AI and Luxury Purchase Decision. Simple linear regression analysis was performed to find the effect of Consumer Trust in Agentic AI on Luxury Purchase Decision. All hypotheses were tested at a 5% level of significance ($\alpha = 0.05$).

Result and discussion

In the Results and Discussion section, the data collected from the 250 Gen Z participants on their trust and the impact of Agentic AI on luxury buying is presented and discussed. Descriptive statistics, reliability analysis, Pearson correlation and simple linear regression were used for analysis with SPSS 22.6. The results give an understanding of the respondents' demographic characteristics, reliability of the research instrument and level of the two study variables. Moreover, the correlation and predictive effects of Consumer Trust in Agentic AI on Luxury Purchase Decision are examined to test the suggested hypotheses and comprehend the results.

Table 1: Reliability Statistics of the Research Instrument

Reliability Statistics	
Cronbach's Alpha	**N of Items**
.860	29

The reliability analysis yielded a high internal consistency level of the questionnaire items by getting a value of 0.860 for Cronbach's Alpha of 29 items. The value obtained is more than the value of 0.70 which is the threshold of reliability in general, therefore the research instrument obtained can be determined as reliable for further statistical analysis.

Table 2: Age-wise Distribution of Respondents

Age	Frequency	Percent
18–21 years	79	31.6
22–25 years	111	44.4
26–29 years	60	24.0
Total	250	100.0

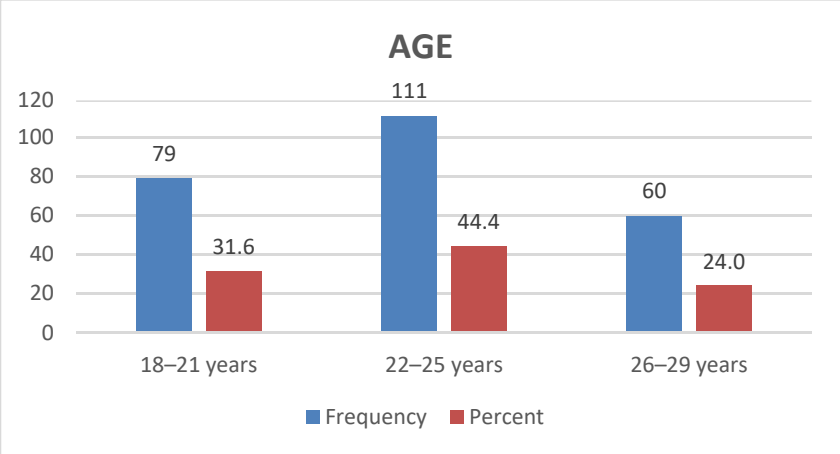

Figure 1: Age-wise Distribution of Respondents

As seen in the age distribution, the highest number of respondents was in the age group 22-25 years with 44.4% (n=111). This was followed by the age group 18-21 years with 31.6% (n=79) respondents. The remaining 24.0% (n=60) were aged 26–29 years. The sample is therefore made up of various age groups in Generation Z, in which the age group 22-25 years was the most dominant.

Table 3: Gender-wise Distribution of Respondents

Gender	Frequency	Percent
Male	155	62.0

Female	95	38.0
Total	250	100.0

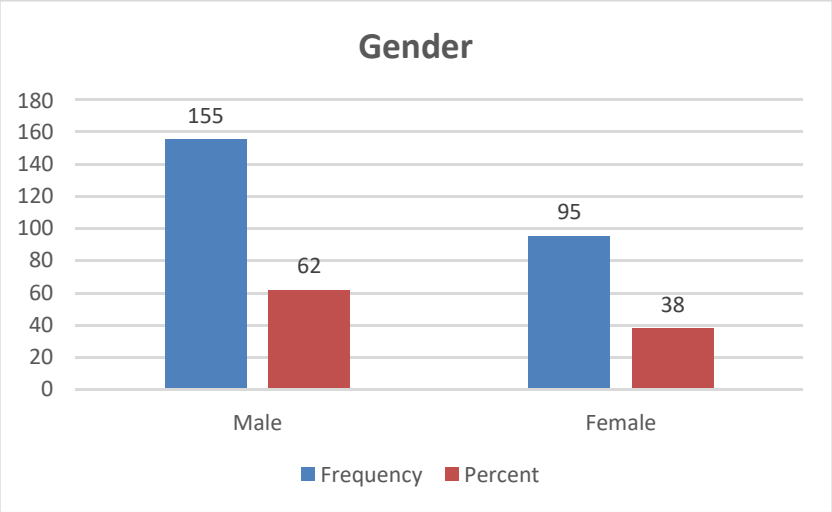

Figure 2: Gender-wise Distribution of Respondents

The result of the gender distribution shows that the male respondents were 62.0% (n=155) and the female respondents were 38.0% (n=95). Thus, there were more male than female respondents. However, the study was well-balanced with a good representation of both males and females. The distribution offers a demographic description of the Gen Z attitudes surveyed about their perceptions of Agentic AI and luxury buying decisions.

Table 4: Educational Qualification of Respondents

Educational Qualification	Frequency	Percent
Undergraduate	80	32.0
Postgraduate	116	46.4
Other	54	21.6
Total	250	100.0

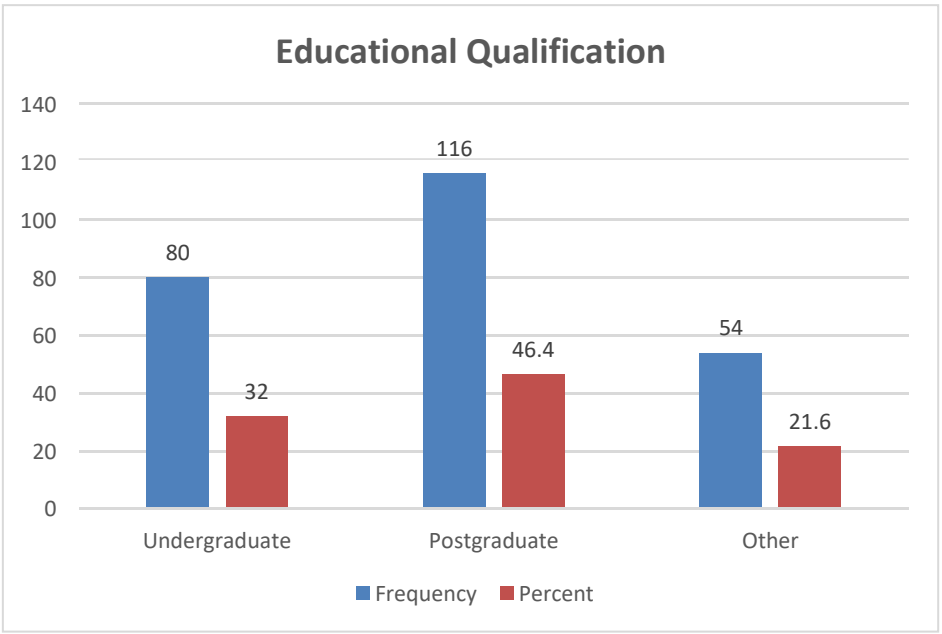

Figure 3: Educational Qualification of Respondents

In terms of education, the highest proportion of respondents at 46.4% (n=116) were postgrade. Thirty-two percent (n=80) of the respondents were undergraduate students and 21.6% (n=54) were in other educational categories. The results show that the respondents had a diverse educational background in the sample. The higher percentage of postgraduate participants indicates that a significant portion of the sample had undergone a higher level of educational exposure, potentially influencing their familiarity with digital technologies and AI applications.

Table 5: Occupational Distribution of Respondents

Occupation	Frequency	Percent
Student	79	31.6
Employed	105	42.0
Self-employed	46	18.4
Other	20	8.0
Total	250	100.0

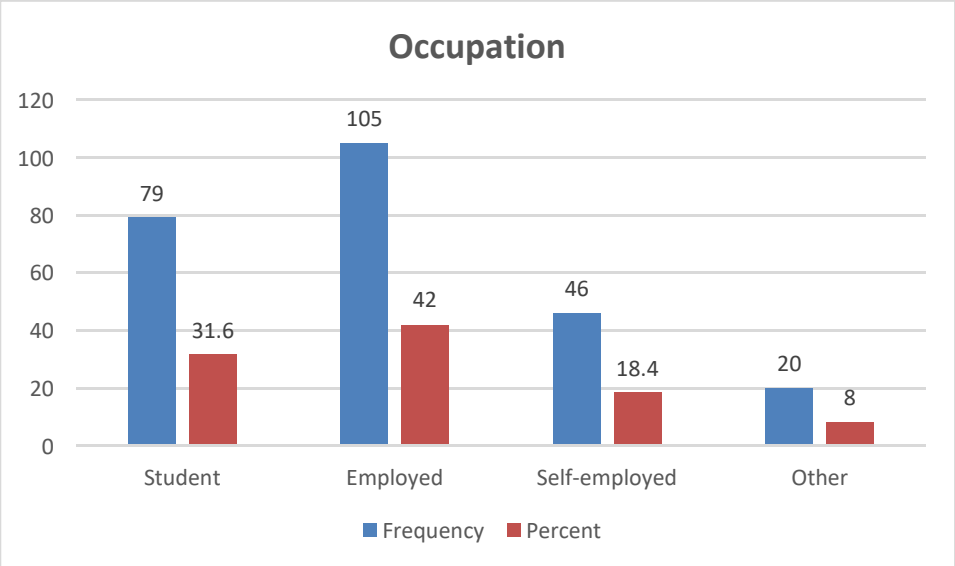

Figure 4: Occupational Distribution of Respondents

The occupational distribution shows that the largest group of respondents were employed (n=105, 42.0%). The largest group of respondents were students (31.6%, n=79), followed by self-employed respondents (18.4%, n=46). The other 8.0% (n=20) were in all other occupational groups. The findings show that the research participants' age cohort, Gen Z, encompassed individuals from diverse job types who offered diverse insights about trusting Agentic AI and how it could impact their luxury buying decisions.

Table 6: Monthly Income Distribution of Respondents

Monthly Income	Frequency	Percent
No income	79	31.6
Below ₹25,000	105	42.0
₹25,001–₹50,000	46	18.4
Above ₹50,000	20	8.0
Total	250	100.0

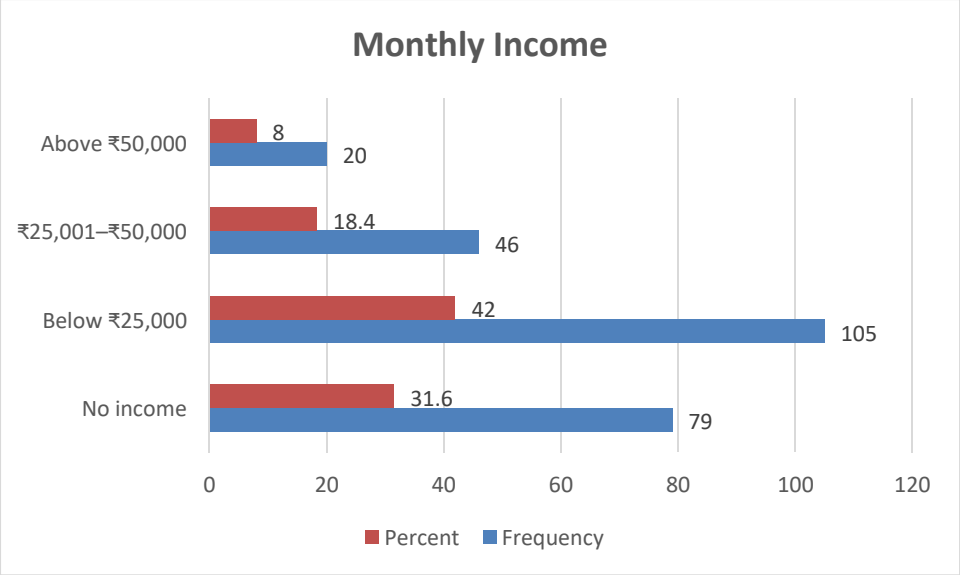

Figure 5: Monthly Income Distribution of Respondents

The monthly income distribution shows that majority of respondents (42.0%, n=105) reported a monthly income of less than ₹25,000. Respondents with no income constituted 31.6% (n=79), while 18.4% (n=46) reported income between ₹25,001 and ₹50,000. Only 8.0% (n=20) earned above ₹50,000 per month. The results show that majority of the respondent had low or no personal income.

Table 7: Frequency of Online Shopping among Respondents

Frequency of Online Shopping	Frequency	Percent
Rarely	79	31.6
Occasionally	105	42.0
Monthly	46	18.4
Frequently	20	8.0
Total	250	100.0

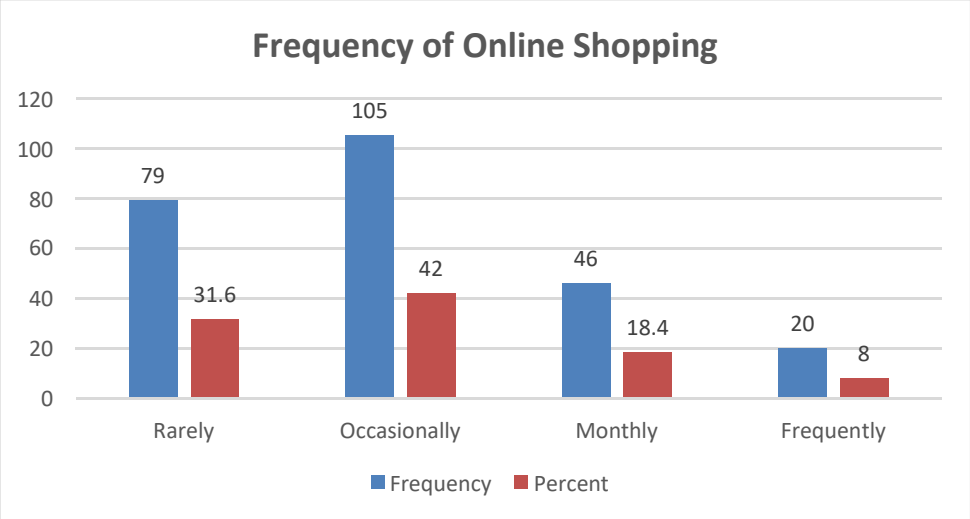

Figure 6: Frequency of Online Shopping among Respondents

The results show that 42.0% (n=105) of the respondents shopped online occasionally as the highest percentage. About 31.6% (n=79) indicated a rare purchase online with 18.4% (n=46) making monthly online purchases. Only 8.0% (n=20) reported that they shop online frequently. The results indicated that, on the whole, respondents had

some level of experience with online shopping, but online shopping was not very prevalent amongst the respondents.

Table 8: Experience with AI-based Product

Have you used or encountered AI-based product recommendations while shopping online?		
	Frequency	**Percent**
Yes	110	44.0
No	140	56.0
Total	250	100.0

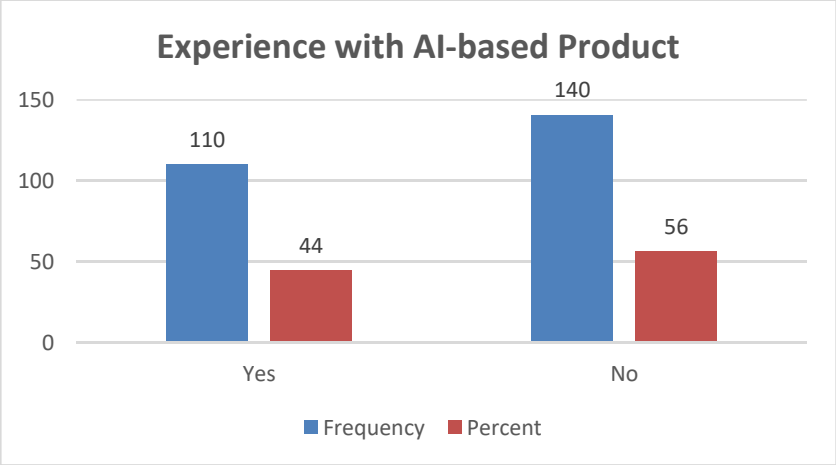

Figure 7: Experience with AI-based Product Recommendations

The results indicated that 44.0% (n=110) of the respondents used or experienced the product recommendation system based on AI when making online purchases, while 56.0% (n=140) did not. As a result, over 40% of the respondents were familiar with at least some AI product suggestions. But most had not personally come across such suggestions. This finding is relevant, since the study focuses on trust in Agentic AI, meaning that the degree of previous exposure to AI- based shopping technologies among the respondents could differ significantly.

Table 9: Descriptive Statistics of Study Variables

Descriptive Statistics					
	N	**Minimum**	**Maximum**	**Mean**	**Std.Deviation**
Consumer Trust in Agentic AI	250	10.0	50.0	30.536	8.9398
Luxury Purchase Decision	250	11.0	50.0	29.168	8.3510
Valid N (listwise)	250				

Descriptive statistics of the two major study variables for 250 valid respondents are shown as follows in table. Consumer Trust in Agentic AI had a mean score of 30.536 and a standard deviation of 8.9398, suggesting that the level of trust is moderate, yet there is significant variation in consumer perceptions. The mean score for Luxury Purchase Decision was 29.168, with a standard deviation of 8.3510, indicating a moderate level of tendency

towards luxury purchase decisions influenced by AI. Consumer Trust scores varied from 10 to 50, and Luxury Purchase Decision scores varied from 11 to 50. As a whole, the results suggest there are significant variations between the respondents.

Table 10: Pearson Correlation between Consumer Trust in Agentic AI and Luxury Purchase Decision

Correlations			
		Consumer Trust in Agentic AI	**Luxury Purchase Decision**
Consumer Trust in Agentic AI	Pearson Correlation	1	.795**
	Sig. (2-tailed)		.000
	N	250	250
Luxury Purchase Decision	Pearson Correlation	.795**	1
	Sig. (2-tailed)	.000	
	N	250	250
**. Correlation is significant at the 0.01 level (2-tailed).			

Table shows Pearson's correlation between Consumer Trust in Agentic AI and Luxury Purchase Decision of 250 Gen Z respondents. The results show a strong positive correlation (r = 0.795) between the two variables, indicating that higher levels of trust in Agentic AI are associated with stronger luxury purchase decisions. The relationship is statistically significant ($p < 0.001$) and this is below the 0.05 significance level. So, the null hypothesis H_{01} is rejected and the alternative hypothesis H_{11} is accepted. The results indicate that there was a significant positive correlation between Consumer Trust in Agentic AI and Luxury Purchase Decision.

Table 11: Model Summary of Simple Linear Regression

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.795	.632	.631	5.0760
a. Predictors: (Constant), Consumer Trust in Agentic AI				

The Model Summary for Simple Linear Regression Analysis of the factors of Consumer Trust in Agentic AI and Luxury Purchase Decision is presented as Table. The obtained R value for the model is 0.795, which is a good positive relationship between the independent and dependent variable. The R Square value of 0.632 indicates that 63.2% of the variation in Luxury Purchase Decision is explained by Consumer Trust in Agentic AI. The value of Adjusted R Square is 0.631, which shows that the model is stable. The standard error of 5.0760 gives an idea of the average error of the prediction of the regression model.

Table 12: ANOVA Results of Regression Model

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	10974.964	1	10974.964	425.947	.000[b]
	Residual	6389.980	248	25.766		
	Total	17364.944	249			
a. Dependent Variable: Luxury Purchase Decision						
b. Predictors: (Constant), Consumer Trust in Agentic AI						

Table shows the ANOVA results for the simple linear regression model that investigated the effect of Consumer Trust in Agentic AI on Luxury Purchase Decision. The regression model was significant with an F value of 425.947 and a p value of <0.001. The significance value is less than
0.5indicating that the overall regression model is statistically significant. This shows that there is a major influence of Consumer Trust in Agentic AI in Luxury Purchase Decision of the Gen Z consumers. Hence, the null hypothesis H_{02} is rejected and the alternative hypothesis H_{12} is accepted and it was found that there is significant influence of consumer trust on purchase of luxury goods.

Table 13: Regression Coefficients for Consumer Trust in Agentic AI

Coefficients								
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95.0% Confidence Interval for B**	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	6.491	1.145		5.67	.00	4.236	8.746
	Consumer Trust in Agentic AI	.743	.036	.795	20.638	.000	.672	.814
a. Dependent Variable: Luxury Purchase Decision								

Table shows regression results for the analysis of the effect of Consumer Trust in Agentic AI on Luxury Purchase Decision. The results indicate that Consumer Trust in Agentic AI positively and significantly impacts Luxury Purchase Decision (B = 0.743, β = 0.795, t = 20.638, p < 0.001). This means that for a unit increase in Consumer Trust in Agentic AI, there is a 0.743-unit increase in Luxury Purchase Decision. The 95% confidence interval for the coefficient is (0.672, 0.814); this interval doesn't contain zero, providing even more evidence that the predictor is significant. Hence, H_{02} is rejected and H_{12} is accepted, indicating that there is a significant and positive relationship between Agentic AI trust and luxury buying among Gen Z.

Discussion

The research results indicated that Consumer Trust in Agentic AI is important to influence Luxury Purchase Decisions among Gen Z consumers. The descriptive results showed that 250 respondents had moderate level of both trust in Agentic AI and the tendency to make luxury purchases. Pearson correlation showed high positive and significant correlation between the variables of Consumer Trust in Agentic AI and Luxury Purchase Decision (r = 0.795, p < 0.001). This discovery suggests that individuals who trust the reliability, accuracy, security, transparency, and dependability of Agentic AI are more inclined to permit AI systems to impact their luxury buying choices. This was further supported by the results of the regression analysis, which revealed a significant and positive relationship between Consumer Trust in Agentic AI and Luxury Purchase Decision (β = 0.795, p

< 0.001). The model accounted for a significant proportion of the variance in luxury purchase decisions (63.2%). The regression coefficient (B = 0.743) also suggests that a higher level of trust corresponds to a higher score on luxury purchase decision. The study is significant in the age of Gen Z, a generation known for their digital adeptness and the growing influence of AI-driven recommendations and personalised online shopping. The results indicate that 56% of respondents were not familiar with AI-based product recommendations before, suggesting that there is still a lack of familiarity with AI shopping technologies. This could be a blessing and a bane for luxury brands using Agentic AI. Trusted AI systems can also help with convenience, personalisation and decision support, but luxury brands will need to grapple with transparency, privacy, security, accuracy, and consumer control. In conclusion, the results corroborate the hypotheses and indicate that trust-building is a pivotal aspect of Agentic AI in luxury e-commerce. Overall, the study shows that technological capability cannot be the only reason for Gen Z consumers to accept AI-assisted luxury purchases – consumer confidence is also a crucial factor.

Conclusion

The current study aimed to explore how Consumer Trust in Agentic AI affects Luxury Purchase Decisions among Gen Z consumers through a sample of 250 respondents. The results show that Consumer Trust in Agentic AI plays a significant part in influencing consumers' luxury buying decisions. The Pearson correlation analysis indicated that the Consumer Trust in Agentic AI had a strong positive correlation with Luxury Purchase Decision ($r = 0.795$, $p < 0.001$). The result of simple linear regression analysis also revealed that Consumer Trust in Agentic AI has significant and positive effect on Luxury Purchase Decision ($\beta = 0.795$, $p < 0.001$). The regression model accounted for a significant portion of the variance of Luxury Purchase Decision with 63.2% explained. Thus, the study supports both of the alternative hypotheses and that more trust in Agentic AI is correlated with more positive luxury purchase decisions by Gen Z consumers. The findings highlight that reliability, accuracy, security, transparency, and confidence in AI recommendations are important considerations in AI-assisted luxury shopping. Digital platforms and luxury brands can prioritize creating trustworthy and user-friendly Agentic AI systems. The study suggests that consumer trust plays a key role in the successful adoption and influence of Agentic AI in luxury purchasing, and that transparent recommendations, ensuring data security, and granting consumers meaningful control over their purchasing decisions are crucial for acceptance.

References

1. Amirah Ahmad Suki, Muhammad Tahir Jan, & Nur Farihah Isamudin. (2025). Online Purchase Intention of Personal Luxury Goods and Mediating Role of Consumer Trust. Environment-Behaviour Proceedings Journal. https://doi.org/10.21834/e- bpj.v10isi26.6808
2. Borah, P. S., Dogbe, C. S. K., & Marwa, N. (2024). Generation Z's green purchase behavior: Do green consumer knowledge, consumer social responsibility, green advertising, and green consumer trust matter for sustainable development? Business Strategy and the Environment. https://doi.org/10.1002/bse.3714
3. Bunea, O. I., Corboș, R. A., Mișu, S. I., Triculescu, M., & Trifu, A. (2024). The Next- Generation Shopper: A Study of Generation-Z Perceptions of AI in Online Shopping. Journal of Theoretical and Applied Electronic Commerce Research . https://doi.org/10.3390/jtaer19040125
4. Chandrakumar, H. (2024). The Use of AI-Driven Personalization for Enhancing the Customer Experience for Gen-Z. Open Journal of Business and Management. https://doi.org/10.4236/ojbm.2024.126225
5. Di Pillo, F., Palombi, G., & Strazzullo, S. (2025). Does Greenwashing Wash Away Gen Z's Green Purchase Intention? Business Strategy and the Environment. https://doi.org/10.1002/bse.70064
6. Fitriasari, D., Riyoko, S., & Roosdhani, M. R. (2025). The Effect of Influencer Popularity on Purchase Decisions Among Gen Z Consumers: Case Study of Scientific Skincare Products. Golden Ratio of Marketing and Applied Psychology of Business. https://doi.org/10.52970/grmapb.v5i2.1092
7. Guerra-Tamez, C. R., Kraul Flores, K., Serna-Mendiburu, G. M., Chavelas Robles, D., & Ibarra Cortés, J. (2024). Decoding Gen Z: AI's influence on brand trust and purchasing behavior. Frontiers in Artificial Intelligence. https://doi.org/10.3389/frai.2024.1323512
8. Hidayat, A., Wijaya, T., Ishak, A., & Endi Catyanadika, P. (2021). Consumer trust as the antecedent of online consumer purchase decision. Information (Switzerland). https://doi.org/10.3390/info12040145
9. Jung, T., Koghut, M., Lee, E., & Kwon, O. (2025). Artificial creativity in luxury advertising: How trust and perceived humanness drive consumer response to AI-generated content. Journal of Retailing and Consumer Services. https://doi.org/10.1016/j.jretconser.2025.104403
10. Lady, Lady, Shevia, S., Melsen, F., Purwianti, L., & Liu, C. (2025). Exploring Gen-Z Online Fashion Purchase Intention Using SOR Model: The Moderating Role of Gender. Jurnal Manajemen Bisnis. https://doi.org/10.18196/mb.v16i2.25591
11. Sipos, D. (2025). The Effects of AI-Powered Personalization on Consumer Trust, Satisfaction, and Purchase Intent. European Journal of Applied Science, Engineering and Technology. https://doi.org/10.59324/ejaset.2025.3(2).02

12. SRIVASTAVA, S. (2025). A Study on the Impact of Influencer's Marketing on Gen Z's Purchase Decision. INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH IN ENGINEERING AND MANAGEMENT. https://doi.org/10.55041/ijsrem50537
13. Theocharis, D., & Tsekouropoulos, G. (2025). Sustainable Consumption and Branding for Gen Z: How Brand Dimensions Influence Consumer Behavior and Adoption of Newly Launched Technological Products. Sustainability (Switzerland). https://doi.org/10.3390/su17094124
14. Winarto, L., & Wisesa, A. (2024). Analyzing the Impact of Artificial Intelligence and Sustainability on Gen Z Consumer Purchase Intentions: A Case Study of L'Oréal Cosmetics Indonesia. European Journal of Business and Management Research. https://doi.org/10.24018/ejbmr.2024.9.5.2241