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THE INFLUENCE OF CAUSAL FACTORS OF BRAND TRUST AFFECTING THE REPURCHASE BEHAVIOR OF OLDER WOMEN IN THE DIGITAL FASHION ERA

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ABSTRACT

Digital fashion products often fail to align with the needs of older female consumers in terms of innovation, design, and value communication, leading to low confidence in product quality, value for money, and reliability. Therefore, entrepreneurs need to develop products and presentation strategies that better match this target segment in order to enhance brand trust and encourage long-term repurchase behavior. The objectives of this study were: (1) to examine the causal relationships among product innovation, design characteristics, perceived value, brand trust, and repurchase behavior; (2) to analyze the influence of brand trust on repurchase behavior; and (3) to develop a causal model explaining the role of brand trust in influencing repurchase behavior. Data were collected through interviews with digital fashion businesses and an online survey of older female consumers who purchase digital fashion products during the period from March to April 2026, with a total sample size of 400 respondents. The results indicate that product innovation, design characteristics, and perceived value have significant positive effects on brand trust. In turn, brand trust has a direct and significant influence on repurchase behavior and mediates the relationships between these factors and repurchases behavior. Among the antecedents, perceived value exerts the strongest effect on brand trust. In conclusion, this study provides valuable insights for entrepreneurs, marketers, and designers in the digital fashion industry. It emphasizes the importance of aligning product innovation, design, and value communication with the specific needs of older female consumers. By doing so, businesses can strengthen brand trust, which serves as a key mechanism in driving repurchase behavior. The findings also support the development of targeted marketing strategies and user-friendly designs that enhance customer confidence, ultimately contributing to improved competitiveness, stronger customer relationships, and the long-term sustainability of digital fashion businesses in an increasingly dynamic digital marketplace.

KEYWORDS: Product Innovation, Design Characteristics, Perceived Value, Brand Trust, Repurchase Behavior.

1. INTRODUCTION

1.1. Background And Importance of the Problem

At the global level, the fashion industry has rapidly transformed into the era of digital fashion, characterized by the integration of digital technologies, online platforms, and social media into product design, brand communication, and distribution processes. This transformation has significantly shifted traditional business models from physical retail stores toward digital platforms that enable broader and borderless consumer access (Varadarajan, 2020). Consumers today are empowered with instant access to product information, allowing them to compare prices, evaluate design characteristics, and review user-generated content in real time. As a result, purchasing behavior has shifted dramatically from offline channels to online environments (Dwivedi et al., 2022). Despite these advancements, the digital marketplace has become increasingly competitive, offering consumers a wide range of alternatives with minimal switching costs. This intensification of competition has made it easier for consumers to switch between brands, thereby reducing customer loyalty. Consequently, brand trust has emerged as a crucial strategic factor for businesses aiming to maintain long-term customer relationships and stimulate repurchase behavior. Brand trust is particularly important in digital contexts where consumers cannot physically examine products before purchase and must rely heavily on brand reputation and perceived reliability (Chaudhuri and Holbrook, 2020; Delgado-Ballester and Fernández-Sabiote, 2020). Furthermore, the global digital fashion market continues to expand at a rapid pace, driven by the growth of e-commerce platforms and digital innovation, reflecting a clear and sustained shift in consumer behavior toward digital consumption (Market.U.S, 2025).

In the Asia-Pacific region, which represents one of the fastest-growing markets for digital fashion, demographic changes toward an aging society have significantly reshaped the structure of consumer markets. Older female consumers, in particular, are becoming an increasingly important segment due to their relatively high purchasing power, accumulated consumption experience, and preference for value, appropriateness, and reliability in products (Kim and Peterson, 2021). Unlike younger consumers who may prioritize trends and novelty, older women tend to focus on product quality, comfort, usability, and trustworthiness, making them a unique and valuable market segment. At the same time, rapid technological advancements have facilitated the adoption of digital platforms among older consumers. Increasing

familiarity with smartphones, social media, and e-commerce platforms has encouraged older women to engage more actively in online shopping (Rather, 2023). However, despite this growing adoption, older female consumers continue to experience several challenges in the digital purchasing environment. These include concerns about product quality uncertainty, misleading or insufficient product information, lack of trust in brand credibility, and potential risks related to online payment security and personal data privacy. Such concerns significantly influence their level of brand trust and ultimately affect their willingness to repurchase products in the long term (Hwang and Choi, 2023; Nguyen et al., 2024). In the context of Thailand, the country is transitioning into a complete aging society, which further amplifies the importance of older female consumers as a key driver of economic activity. This demographic shift has important implications for the digital fashion industry, as businesses must adapt their strategies to meet the needs of this growing segment. Although older consumers in Thailand have increasingly adopted digital channels such as e-commerce platforms, social commerce, and mobile applications, existing academic research has largely focused on younger or working-age populations.

As a result, there is a significant gap in understanding the behavioral patterns, preferences, and decision-making processes of older female consumers in digital fashion contexts (Rather et al., 2023; Liu and Huang, 2024). Moreover, current digital fashion products often fail to adequately align with the specific needs and expectations of older female consumers. In terms of product innovation, many fashion products prioritize aesthetic appeal and trendiness rather than functionality, durability, and comfort, which are critical factors for older users. This misalignment reduces perceived usefulness and fails to create meaningful value for this segment. In addition, design characteristics are often not tailored to the physical and ergonomic requirements of older consumers, such as ease of wear, appropriate sizing, and comfort, which can negatively impact their purchasing decisions. Furthermore, the way products are presented on digital platforms may not effectively meet the cognitive and usability needs of older consumers. Complex interfaces, unclear product descriptions, and insufficient visual representation can create confusion and uncertainty during the decision-making process. This lack of clarity contributes to lower perceived value and increases the perceived risk associated with online purchases.

In addition, ineffective communication of product value, such as unclear pricing justification, limited information on product quality, and inadequate after-sales assurance, further undermines consumer

confidence and trust in digital fashion brands (Ju and Lee, 2020). These challenges highlight the urgent need for digital fashion businesses to adopt a more inclusive and customer-centric approach in product development, design, and marketing strategies. By focusing on functional innovation, user-friendly design, and transparent value communication, businesses can enhance perceived value and build stronger brand trust among older female consumers. Strengthening brand trust is particularly important, as it serves as a key mechanism for reducing perceived risk, increasing customer satisfaction, and fostering long-term relationships that lead to repurchase behavior. From a theoretical perspective, while previous studies have examined individual factors such as product innovation, design characteristics, perceived value, and brand trust, there is a lack of comprehensive research that integrates these variables into a unified causal framework. In particular, limited studies have explored the mediating role of brand trust in linking product-related factors to repurchase behavior, especially within the context of older female consumers in digital fashion markets. Therefore, this study aims to address these gaps by applying system theory to develop an integrated causal model that explains the relationships among product innovation, design characteristics, perceived value, brand trust, and repurchase behavior. By providing both theoretical and empirical insights, this research seeks to contribute to a deeper understanding of consumer behavior in the digital fashion industry and offer practical implications for businesses aiming to enhance competitiveness and sustainability in an increasingly digital and aging society.

1.2. Research Question

Based on the review of relevant theories and empirical studies, this research aims to address the following questions:

- 1) What are the key causal factors of product innovation, design characteristics, perceived value, brand trust, and repurchase behavior in the digital fashion context?
- 2) How do the causal factors of brand trust influence repurchase behavior among older female consumers?
- 3) What is the structure of the causal model explaining the influence of brand trust on repurchase behavior?

1.3. Research Objective

The primary objectives of this study are as follows:

- 1) To examine the causal factors of product

innovation, design characteristics, perceived value, brand trust, and repurchase behavior in digital fashion products.

- 2) To investigate the influence of brand trust on repurchases behavior among older female consumers.
- 3) To develop and validate a causal model explaining the relationship between brand trust and repurchase behavior in the digital fashion context.

2. LITERATURE REVIEW

2.1. Related Concepts and Theories

2.1.1. Product Innovation

Product innovation refers to the development and introduction of new or significantly improved products that create value for customers and enhance competitive advantage (Rogers, 2003). In the context of digital fashion, product innovation includes not only physical product improvements but also digital features such as virtual visualization, customization, and platform integration. According to Ram and Sheth (1989), innovation plays a crucial role in influencing consumer acceptance by reducing resistance and increasing perceived usefulness. For older female consumers, product innovation must emphasize usability, comfort, and practicality rather than solely focusing on trendiness. Studies suggest that when innovation aligns with user needs, it enhances perceived value and positively influences trust toward the brand (Oreg, 2003).

2.1.2. Design Characteristics

Design characteristics refer to the visual and functional attributes of a product, including aesthetics, usability, ergonomics, and overall user experience (Bloch, 1995). In digital fashion, design extends beyond the product itself to include digital presentation, interface design, and ease of navigation. For older consumers, design plays a critical role in reducing complexity and increasing confidence in purchasing decisions. A well-designed product that balances aesthetics and functionality can significantly improve perceived quality and satisfaction (Veryzer, 1995). Additionally, user-friendly digital interfaces can reduce cognitive load and enhance trust in online platforms.

2.1.3. Perceived Value

Perceived value is defined as the consumer's overall assessment of the benefits received relative to the costs incurred (Zeithaml, 1988). It is a key determinant of consumer behavior, particularly in digital environments where physical evaluation of products is limited.

Perceived value consists of multiple dimensions, including functional value, emotional value, and social value (Sweeney and Soutar, 2001). For older female consumers, functional value—such as product quality, durability, and usability—is particularly important. When consumers perceive high value, they are more likely to develop trust and engage in repeat purchasing behavior.

2.1.4. Brand Trust

Brand trust is defined as the willingness of consumers to rely on a brand based on the belief that it will deliver its promised value (Chaudhuri and Holbrook, 2001). In digital contexts, trust becomes even more critical due to the absence of physical interaction and the presence of perceived risks. According to Delgado-Ballester (2004), brand trust consists of two main components: reliability and intentions. Reliability refers to the ability of the brand to fulfill its promises, while intentions relate to the belief that the brand will act in the consumer's best interest. High levels of brand trust reduce uncertainty and increase customer loyalty.

2.1.5. Repurchase Behavior

Repurchase behavior refers to the consumer's intention and actual behavior of buying the same product or brand again in the future (Hellier et al., 2003). It is considered a key indicator of customer loyalty and long-term business success. Repurchase behavior is influenced by multiple factors, including satisfaction, perceived value, and trust. In digital fashion, where competition is high and switching costs are low, trust plays a crucial mediating role in encouraging repeat purchases.

2.2. Literature Surveys

Previous studies have extensively examined the relationships among product innovation, design characteristics, perceived value, brand trust, and repurchase behavior across various industries. Product innovation has been widely recognized as a critical factor influencing consumer perceptions and behavioral intentions. According to Ram and Sheth (1989), innovation enhances perceived usefulness and reduces uncertainty, thereby facilitating consumer acceptance. Similarly, Rogers (2003) emphasized that innovative products create competitive advantage by delivering new value to customers. In digital environments, product innovation not only improves functionality but also enhances user experience, which contributes to building consumer trust. In addition to innovation, design characteristics play a significant role in shaping consumer perceptions. Bloch (1995) suggested that product design influences both aesthetic appeal and

functional performance, which directly affect consumer evaluation and decision-making. Veryzer (1995) further highlighted that effective design integrates usability with visual attractiveness, leading to higher perceived quality. In the context of digital fashion, design characteristics extend beyond physical attributes to include digital presentation, interface usability, and ease of navigation. These elements are particularly important for older consumers, as they help reduce complexity and improve confidence in online purchasing decisions.

Perceived value has consistently been identified as a key determinant of consumer behavior. Zeithaml (1988) defined perceived value as the trade-off between perceived benefits and costs, while Sweeney and Soutar (2001) expanded this concept to include functional, emotional, and social dimensions. Empirical studies have shown that higher perceived value leads to increased customer satisfaction, trust, and loyalty. In digital contexts, where consumers cannot physically evaluate products, perceived value becomes even more critical in influencing purchase decisions and long-term behavioral intentions. Furthermore, brand trust has been widely recognized as a central factor influencing consumer loyalty and repurchase behavior. Chaudhuri and Holbrook (2001) found that brand trust directly affects both attitudinal loyalty and behavioral loyalty. Delgado-Ballester (2004) further explained that trust reduces perceived risk and uncertainty, which are particularly prominent in online environments. In digital commerce, trust serves as a mechanism that assures consumers of product quality, transaction security, and brand reliability. As a result, higher levels of trust lead to stronger customer relationships and increased likelihood of repeat purchases.

Several studies have also emphasized the mediating role of brand trust in the relationship between product-related factors and behavioral outcomes. For example, perceived value and product quality influence trust, which in turn drives repurchase behavior (Hellier et al., 2003). Similarly, design and innovation contribute to trust formation by enhancing perceived performance and satisfaction. This indicates that brand trust functions as a key mechanism through which product attributes translate into consumer loyalty. In addition, prior research has highlighted the importance of repurchase behavior as a critical indicator of long-term business success. Repurchase behavior reflects customer satisfaction, trust, and commitment to a brand (Seiders et al., 2005). In highly competitive digital markets, retaining existing customers is often more cost-effective than acquiring new ones, making repurchase behavior a strategic priority for businesses.

However, despite the extensive body of literature on these variables, most studies have focused on general

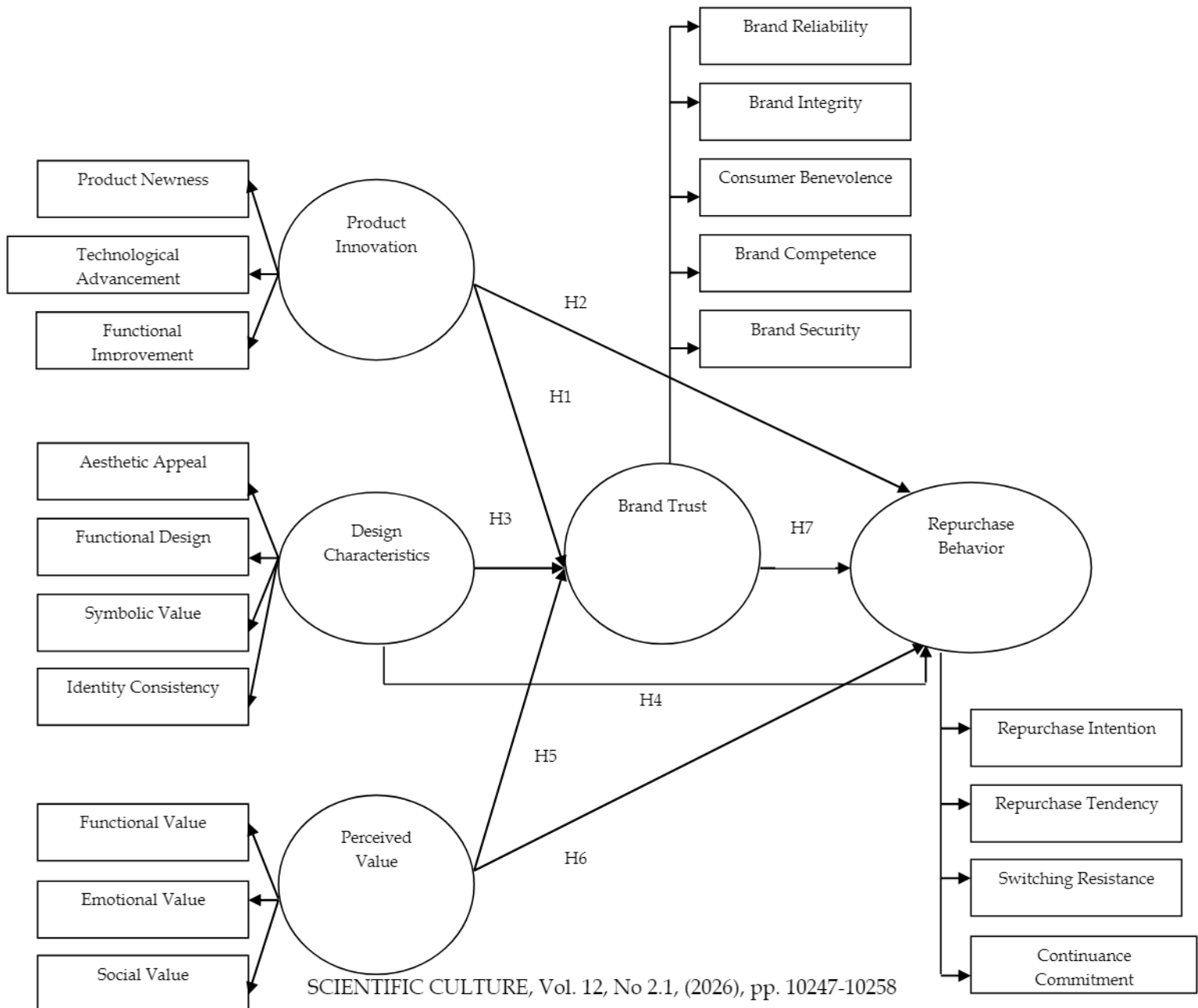
consumer populations or younger demographic groups. Limited research has specifically examined older female consumers, particularly within the context of digital fashion. This segment has unique characteristics, including greater emphasis on product reliability, comfort, and value, as well as higher sensitivity to perceived risks in online environments. Moreover, older consumers may face challenges related to digital literacy, usability, and trust in online transactions. Therefore, there is a clear research gap in understanding how product innovation, design characteristics, and perceived value influence brand trust and repurchase behavior among older female consumers in digital fashion markets. This study aims to address this gap by developing an integrated framework that captures these relationships and provides deeper insights into the decision-making

processes of this important yet under-researched consumer segment.

Figure 1 illustrates the relationships among product innovation, design characteristics, and perceived value as independent variables, brand trust as a mediating variable, and repurchase behavior as the dependent variable. Product innovation, design characteristics, and perceived value are proposed to directly influence brand trust, which in turn affects repurchase behavior. Additionally, these variables indirectly influence repurchase behavior through the mediating role of brand trust. This framework reflects a causal structure in which consumer perceptions of product-related factors contribute to trust formation, ultimately leading to repeat purchasing behavior.

2.3. Conceptual Framework

Figure 1: Research Framework.



2.4. Research Hypothesis

This study proposes a structural model in which product innovation, design characteristics, and perceived value function as antecedents of brand trust. Brand trust is hypothesized to act as a mediating variable that transmits the effects of these factors to repurchase behavior. Therefore, both direct and indirect relationships are examined to provide a comprehensive understanding of consumer decision-making in the digital fashion context.

Based on the literature review and conceptual framework, the following hypotheses are proposed:

H1: Product innovation has a positive effect on brand trust.

Product innovation that emphasizes functionality, usability, and relevance to consumer needs enhances consumers' confidence in the brand, leading to higher levels of trust.

H2: Product innovation has a positive effect on repurchase behavior through brand trust.

Brand trust mediates the relationship between product innovation and repurchase behavior, as innovative products increase trust, which in turn encourages repeat purchasing.

H3: Design characteristics have a positive effect on brand trust.

Well-designed products that balance aesthetics and functionality improve perceived quality and usability, thereby strengthening consumers' trust in the brand.

H4: Design characteristics have a positive effect on repurchase behavior through brand trust.

Brand trust mediates the relationship between design characteristics and repurchase behavior, as effective design enhances trust and leads to increased likelihood of repurchase.

H5: Perceived value has a positive effect on brand trust.

When consumers perceive a product as offering high value in terms of quality, benefits, and price, they are more likely to develop trust in the brand.

H6: Perceived value has a positive effect on repurchase behavior through brand trust.

Brand trust mediates the relationship between perceived value and repurchase behavior, as higher perceived value strengthens trust and promotes repeat purchasing.

H7: Brand trust has a positive effect on repurchase behavior.

Consumers with higher levels of trust in a brand are more likely to engage in repeat purchasing, as trust reduces perceived risk and increases

confidence in future transactions.

3. RESEARCH METHODOLOGY

3.1. Research Design

This study employs a quantitative research design to examine the relationships among product innovation, design characteristics, perceived value, brand trust, and repurchase behavior in the context of digital fashion products among older female consumers. The research is explanatory in nature, aiming to investigate causal relationships between variables based on the proposed conceptual framework. A survey research method is utilized to collect primary data, as it allows for systematic collection of standardized information from a large number of respondents. Additionally, a cross-sectional research design is applied, where data are collected at a single point in time during March to April 2026. Structural Equation Modeling (SEM) is employed as the main analytical technique because it allows the simultaneous examination of multiple relationships, including both direct and indirect effects. SEM is particularly suitable for testing the mediating role of brand trust in influencing repurchase behavior, and in this study, SEM analysis is conducted using Mplus software to ensure rigorous model estimation and evaluation.

3.2. Population And Sample

The population of this study consists of older female consumers in Thailand who have experience purchasing digital fashion products through online platforms, including e-commerce websites, social media, or mobile applications. This population is of particular interest because older female consumers represent a growing segment in the digital fashion market, yet their preferences, perceptions, and repurchase behaviors in the online context remain underexplored. Understanding this population is crucial for businesses and marketers seeking to develop products, services, and digital experiences tailored to their needs. Since the exact population size is unknown, the sample size is determined based on widely accepted guidelines for Structural Equation Modeling (SEM), which recommend a minimum of 200–400 respondents to achieve adequate statistical power and reliable parameter estimation (Hair et al., 2010). To ensure robust analysis and model stability, this study collects data from 400 respondents, providing sufficient representation for the variables under investigation. A non-probability purposive sampling technique is applied to select participants who meet specific inclusion criteria directly related to the research

objectives. These criteria include being female, aged 50 years or older, having prior experience purchasing digital fashion products, and being capable of completing an online questionnaire independently. This method ensures that all participants are relevant to the study's focus, thereby enhancing the validity of the research findings. Additionally, purposive sampling allows researchers to access respondents who are more likely to provide informed and meaningful responses, particularly in the context of digital product usage and online purchasing behavior. To further strengthen the representativeness of the sample, efforts are made to reach participants across diverse regions of Thailand, including urban, suburban, and rural areas. This geographic diversity helps capture variations in digital access, online shopping habits, and consumer perceptions that may influence product evaluation, brand trust, and repurchase behavior. Moreover, demographic factors such as educational background, income level, and frequency of online purchases are considered to ensure that the sample reflects the heterogeneity of the older female consumer population. In summary, the use of a purposive sampling method combined with a sample size of 400 respondents ensures that the collected data are both relevant and sufficient for SEM analysis, allowing the study to accurately test the hypothesized relationships among product innovation, design characteristics, perceived value, brand trust, and repurchase behavior within this specific consumer segment.

3.3. Research Instruments

Data for this study are collected using a structured questionnaire carefully developed based on the constructs and measurement scales identified in the literature review. The questionnaire is divided into two main sections to ensure comprehensive data collection. The first section gathers demographic and background information, including age, education level, occupation, monthly income, and frequency of online purchases, which provides context for understanding respondents' behavior and characteristics. The second section is designed to measure the core constructs of the study, namely product innovation, design characteristics, perceived value, brand trust, and repurchase behavior. Each construct is measured using multiple items adapted from established scales in prior research and carefully modified to suit the specific context of digital fashion products. Responses are captured using a five-point Likert

scale ranging from 1 (strongly disagree) to 5 (strongly agree), which allows for quantifiable evaluation of respondents' perceptions and attitudes. To ensure the validity and reliability of the instrument, several steps are undertaken. First, the questionnaire is reviewed by a panel of experts in marketing, digital business, and consumer behavior to evaluate content relevance, clarity, and appropriateness for the target population. Second, a pilot test is conducted with a small group of older female consumers to assess the clarity of instructions, comprehensibility of items, and estimated completion time. Feedback from the pilot test is used to refine ambiguous or confusing items. Finally, the reliability of each measurement scale is assessed using Cronbach's alpha coefficient, with values exceeding 0.70 indicating acceptable internal consistency. These steps ensure that the questionnaire accurately captures the intended constructs and provides high-quality data for subsequent analysis.

3.4. Data Collection

Data collection is carried out through an online survey, which is particularly suitable given the digital focus of the study and the widespread use of digital platforms among the target population. The questionnaire is distributed via multiple online channels, including social media platforms (e.g., Facebook, Line, Instagram), online communities, and digital interest groups where older female consumers are known to be active. This approach allows the study to reach respondents across different regions in Thailand, enhancing the diversity and representativeness of the sample. Before participation, respondents are provided with a clear explanation of the study's objectives, the voluntary nature of participation, and the measures taken to protect their privacy. Participants are assured that their responses are confidential, anonymous, and will only be used for research purposes. This process is intended to encourage honest and unbiased responses. The data collection period spans two months, from March to April 2026, during which a total of 400 valid responses are obtained. The online format not only allows efficient access to the target population but also reduces costs and logistical challenges compared with traditional face-to-face surveys. To further ensure data quality, responses are screened for completeness and consistency. Questionnaires with incomplete answers or patterns suggesting random or inattentive responses are excluded from the analysis. Additionally, reminders are periodically

sent through online channels to encourage participation and improve response rates. The resulting dataset provides comprehensive and reliable information that reflects the perspectives and experiences of older female consumers regarding digital fashion products, forming a solid foundation for subsequent statistical analysis.

3.5. Statistics Used for Data Analysis

Data analysis is conducted using SPSS version 26.0 and Mplus software. The analysis begins with descriptive statistics, including frequency, percentage, mean, and standard deviation, to summarize respondents' demographic characteristics. Reliability analysis using Cronbach's alpha is performed to assess the internal consistency of measurement scales. Confirmatory Factor Analysis (CFA) is then conducted to evaluate the validity of the measurement model, including construct validity, convergent validity, and discriminant validity. SEM is employed to test the hypothesized relationships among variables in the conceptual framework, examining both direct and indirect effects, particularly the mediating role of brand trust. Model fit is evaluated using several

goodness-of-fit indices, including Chi-square, Comparative Fit Index (CFI), Goodness-of-Fit Index (GFI), and Root Mean Square Error of Approximation (RMSEA). These analyses provide a rigorous and comprehensive examination of the relationships among variables, supporting the validation of the research hypotheses.

4. DATA ANALYSIS AND FINDINGS

4.1. Introduction

This chapter presents the results of the data analysis conducted to examine the relationships among product innovation, design characteristics, perceived value, brand trust, and repurchase behavior. The study applies a mixed-methods approach, integrating both qualitative and quantitative analyses. Quantitative data from 400 respondents were analyzed using descriptive statistics, confirmatory factor analysis (CFA), and structural equation modeling (SEM). Qualitative data were obtained from in-depth interviews with **four experts** and analyzed using thematic analysis.

4.2. Data Analysis of the Qualitative Data

Table 1: Summary of Qualitative Themes.

Theme	Key Insights
Product Innovation	Enhances modernity and perceived competitiveness
Design Characteristics	Influences brand perception and usability
Perceived Value	Reflects quality, usefulness, and emotional benefits
Brand Trust	Built through consistency and reliability
Repurchase Behavior	Driven by trust and positive experience

Table 1 presents the main themes derived from the qualitative interviews. The results indicate that product innovation plays a critical role in enhancing perceived modernity and competitiveness of the brand. Design characteristics were identified as an important factor influencing both usability and brand perception. Perceived value was described as a multidimensional construct, including functional, emotional, and social benefits. Brand trust emerged

as a key outcome derived from consistent product performance and reliability. Finally, repurchase behavior was strongly associated with trust and prior positive experiences. These findings support the conceptual framework and validate the relevance of the study variables.

4.3. Data Analysis of the Quantitative Data

Table 2: Demographic Profile of Respondents (N = 400).

Variable	Category	Percentage
Gender	Male	52.75%
	Female	47.25%
Age	60–64 years	43.75%
	65–69 years	41.75%
	70+ years	14.50%
Education	Bachelor or higher	33.25%
	No formal education	22.75%
Occupation	Freelance / Labor	58.00%
	Retired	17.25%

Table 2 summarizes the demographic characteristics of the respondents. The majority of participants were male, accounting for 52.75% of the

sample. Most respondents were aged between 60–64 years, indicating that the sample is dominated by older consumers. In terms of education, the largest

group held a bachelor’s degree or higher. Regarding occupation, most respondents were engaged in freelance or labor work. Overall, the sample reflects

a diverse group of consumers, providing a reliable basis for analysis.

Table 3: Mean And Standard Deviation of Variables.

Variable	Mean	S.D.	Interpretation
Product Innovation	4.09	0.62	High
Design Characteristics	4.12	0.60	High
Perceived Value	4.18	0.58	High
Brand Trust	4.20	0.55	High
Repurchase Behavior	4.15	0.57	High

Table 3 presents the mean and standard deviation of the main variables. The results indicate that all variables are rated at a high level, with mean scores above 4.00. Brand trust has the highest mean score, suggesting that respondents have strong confidence in the brand. Perceived value and design characteristics also show high levels, indicating that

consumers recognize both functional and emotional benefits of the products. The relatively low standard deviation values indicate consistency in responses across participants. These findings suggest that consumers generally have positive perceptions toward the studied variables.

Table 4: Measurement Model Results.

Construct	Factor Loading	CR	AVE
Product Innovation	0.71-0.88	0.91	0.67
Design Characteristics	0.72-0.87	0.90	0.66
Perceived Value	0.73-0.89	0.92	0.70
Brand Trust	0.75-0.91	0.93	0.72
Repurchase Behavior	0.74-0.88	0.91	0.69

Table 4 shows the results of the confirmatory factor analysis. All factor loadings exceed 0.70, indicating strong relationships between observed variables and their respective constructs. Composite reliability (CR) values are above 0.90, confirming

high internal consistency. Additionally, average variance extracted (AVE) values exceed 0.50, demonstrating good convergent validity. These results confirm that the measurement model is reliable and valid for further analysis.

Table 5: Model Fit Indices.

Index	Value	Criteria	Result
χ^2/df	2.30	< 3.00	Good
CFI	0.95	> 0.90	Good
TLI	0.94	> 0.90	Good
RMSEA	0.048	< 0.08	Good
SRMR	0.039	< 0.08	Good

Table 5 presents the goodness-of-fit indices for the structural model. All values meet the recommended thresholds, indicating a good fit between the model and the empirical data. The chi-square to degrees of freedom ratio is below 3.00,

while CFI and TLI values exceed 0.90. RMSEA and SRMR values are also within acceptable limits. These results confirm that the proposed model is appropriate for explaining the relationships among variables.

Table 6: Hypothesis Testing Results.

Path	Coefficient	t-value	Result
PI → BT	0.44	6.10	Accepted
DC → BT	0.39	5.85	Accepted
PV → BT	0.51	6.95	Accepted
BT → RB	0.58	8.20	Accepted

Table 6 presents the results of hypothesis testing. All path coefficients are positive and statistically significant, indicating that the proposed relationships are supported. The findings show that perceived value has the strongest effect on brand trust, followed by product innovation and design characteristics. In addition, brand trust exerts a

strong influence on repurchase behavior. These results confirm the proposed model, demonstrating that perceived value is the most influential antecedent of brand trust, which subsequently drives repurchase behavior. Overall, the findings highlight the important role of consumer perception factors in shaping trust and behavioral outcomes.

Table 7: Indirect Effects.

Path	Indirect Effect	Result
PI → BT → RB	0.26	Accepted
DC → BT → RB	0.23	Accepted
PV → BT → RB	0.30	Accepted

Table 7 presents the results of mediation analysis. The findings indicate that brand trust significantly mediates the relationships between all independent variables and repurchase behavior.

Perceived value shows the strongest indirect effect, suggesting that its influence on repurchase behavior is largely transmitted through brand trust. These results highlight the critical mediating role of brand trust in the model.

4.4. Summary Of the Results

The findings from both qualitative and quantitative analyses are consistent and mutually reinforcing, providing strong support for the proposed conceptual framework. The qualitative results highlight the importance of product innovation, design characteristics, and perceived value in shaping brand trust and repurchase behavior. These insights reflect real consumer perceptions and confirm the relevance of the study variables. The quantitative findings further strengthen these conclusions by providing empirical evidence of significant relationships among the variables. Descriptive analysis indicates that all constructs are perceived at a high level, suggesting that consumers have positive attitudes toward the products. The results of confirmatory factor analysis demonstrate that the measurement model is both reliable and valid. Moreover, the structural equation modeling results show that all hypothesized relationships are statistically significant. In particular, brand trust emerges as a key mediating variable in the model. The results indicate that product innovation, design characteristics, and perceived value influence repurchase behavior indirectly through brand trust. Among the independent variables, perceived value shows the strongest influence, highlighting its importance in consumer decision-making. Overall, the structural model demonstrates a good fit with the empirical data, confirming that the proposed framework effectively explains consumer behavior.

5. CONCLUSION, DISCUSSION, AND RECOMMENDATION

5.1. Conclusion

This study aims to examine the relationships among product innovation, design characteristics,

perceived value, brand trust, and repurchase behavior using a mixed-methods approach. The findings from both qualitative and quantitative analyses provide consistent and comprehensive evidence supporting the proposed conceptual framework. The qualitative results reveal that product innovation enhances perceived modernity and competitiveness, while design characteristics contribute to usability and brand perception. Perceived value reflects both functional and emotional benefits, and brand trust is developed through consistent performance and reliability. Repurchase behavior is primarily driven by trust and positive consumption experiences. The quantitative findings further confirm these relationships. Descriptive analysis indicates that all variables are perceived at a high level by respondents. The measurement model demonstrates strong reliability and validity, with all constructs meeting the required thresholds for factor loading, composite reliability, and average variance extracted.

The structural equation modeling results show that product innovation, design characteristics, and perceived value significantly influence brand trust. In turn, brand trust has a strong and significant effect on repurchase behavior. Moreover, brand trust plays a mediating role in the relationships between the independent variables and repurchases behavior. Among all factor's, perceived value has the strongest influence on brand trust, followed by product innovation and design characteristics. These findings highlight the importance of delivering value to consumers as a key driver of trust and long-term behavioral outcomes. Overall, the results confirm that the proposed model is appropriate and effective in explaining consumer repurchase behavior through the mediating role of brand trust.

5.2. Discussion

The findings of this study are consistent with existing literature on consumer behavior and relationship marketing, particularly in the areas of innovation, perceived value, and trust. The results indicate that product innovation has a significant positive effect on brand trust, supporting the notion that innovation enhances consumers' perceptions of product quality and brand credibility. When consumers perceive

a product as innovative, they are more likely to trust the brand, as innovation signals competence and forward-thinking capability. Similarly, the influence of design characteristics on brand trust highlights the importance of both functional and aesthetic aspects of products. A well-designed product improves usability while strengthening brand image, leading to higher levels of consumer trust. This finding aligns with prior studies emphasizing the role of design in shaping consumer perception and satisfaction. In addition, perceived value emerges as the most influential factor affecting brand trust. This result is consistent with the value-based perspective, which suggests that consumers evaluate products based on the balance between benefits and costs. When consumers perceive high value, they are more likely to develop trust toward the brand and maintain long-term relationships.

Furthermore, the strong effect of brand trust on repurchase behavior confirms its central role in consumer decision-making. Trust reduces perceived risk and uncertainty, thereby encouraging repeat purchases. This finding is consistent with relationship marketing theory, which identifies trust as a key determinant of customer loyalty. The mediation analysis also provides important insights, showing that product innovation, design characteristics, and perceived value influence repurchase behavior indirectly through brand trust. This suggests that trust functions as a critical mechanism linking product-related factors to behavioral outcomes. These findings confirm the validity of the proposed causal model, in which brand trust serves as a central mediating mechanism linking product-related factors to repurchase behavior. Overall, the study contributes to the existing body of knowledge by integrating multiple factors into a comprehensive framework and highlighting the pivotal role of brand trust in shaping consumer repurchase behavior.

5.3. Recommendation

Based on the findings of this study, several practical recommendations can be proposed for businesses and marketers. Organizations should prioritize product innovation as a strategic tool to enhance competitiveness and build consumer trust, as continuous improvement in product features, functionality, and technology can strengthen brand

positioning in the market. In addition, companies should focus on design characteristics by ensuring that products are both functional and aesthetically appealing, since good design enhances user experience and contributes to a positive brand image, which in turn builds trust. Firms should also emphasize delivering high perceived value to consumers through improving product quality, offering competitive pricing, and enhancing customer experience. Given that perceived value has the strongest impact on trust, it should be considered a key focus area in marketing strategies. Furthermore, businesses should actively manage and strengthen brand trust through consistent product performance, transparent communication, and reliable customer service, as trust-building efforts are essential for encouraging repurchase behavior and fostering long-term customer relationships.

Moreover, this study contributes to the academic literature by integrating product innovation, design characteristics, and perceived value into a unified framework that explains repurchase behavior through brand trust. The findings highlight the mediating role of brand trust, providing empirical support for its importance in consumer behavior models. The study also extends existing theories by demonstrating how multiple antecedents jointly influence trust and subsequent behavioral outcomes. Despite these contributions, several limitations should be acknowledged. The sample is limited to a specific group of respondents, which may affect the generalizability of the findings; therefore, future research should consider a more diverse sample across different demographic groups and geographic regions. Additionally, the study focuses on a limited number of variables, and future studies may incorporate additional factors such as customer satisfaction, brand loyalty, or perceived risk to provide a more comprehensive understanding of consumer behavior. The use of cross-sectional data also limits the ability to examine changes over time, suggesting that future research should adopt a longitudinal approach to better capture dynamic relationships among variables. Finally, future studies could explore the application of this model in different industries to further validate its robustness and generalizability.

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