

UNDERSTANDING FACTORS INFLUENCING ONLINE CONSUMER PURCHASING BEHAVIOR FOR FASHION ACCESSORIES PRODUCTS

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Abstract— Malaysia's e-commerce industry has exploded in recent years and online shopping has become increasingly popular among consumers. However, there is a noticeable lack of factors influencing online shopping behavior in the fashion and accessories sector, especially in the Malaysian context and especially among adults living in the Klang Valley. This study aims to address this gap by conducting an in-depth study of the determinants of fashion and accessory purchasing behavior among Malaysian adults in the Klang Valley region. Based on established theoretical frameworks such as the Technology Acceptance Model (TAM) and related literature on electronic business and consumer behavior, this study forms a strong conceptual framework to guide the study of factors influencing online purchase decisions. These factors include perceived usefulness, perceived ease of use, attitude, perceived risk, trust, website design, vendor characteristics, and purchase intentions. The main purpose of this study is to investigate the relationships between these identified factors and online shopping behavior, which will provide valuable information to online retailers operating in the Malaysian online shopping market. Quantitative research will collect data through structured surveys conducted on a sample of Malaysian adults living in the Klang Valley. Analyzing this data enables a nuanced understanding of how these factors work together and influence consumer behavior when purchasing fashion and accessories online. Using quantitative research, data collected through structured questionnaires from Malaysian adults living in the Klang Valley. Analyzing this data provides insight into the interaction of these factors and how they influence consumer behavior when buying fashion and accessories online. The study helps both theoretically and practically

by providing online retailers with information to improve online shopping and thus promote better customers satisfaction, trust and loyalty. The study, which uses advanced statistical techniques, provides a nuanced understanding of the hierarchical structure that influences online consumer decision-making. The study uses 153 responses collected over two months via Google Forms.

Keywords—B2C E-Commerce, Fashion and Accessories, Consumer Behavior

I. INTRODUCTION

Online fashion and accessories retailing consist very large market share of total online sales in Malaysia. Most of the traditional retailers have recognized internet will become powerful marketing channel with the steady growth of market size (Jai & Tung, 2015). Online consumers expect high standard of online service quality since it is much easier to compare price online thus online service quality play a significant key factor for consumers (Santos, 2003). Prioritizing an in-depth understanding of online service quality or factors influencing consumer online shopping is essential for enhancing the competitiveness of online stores.

There is the involvement of money and personal information when purchase via internet therefore online consumers always concern about safety of the site and protection of customer information (Parasuraman, Zeithaml & Malhorta, 2005). According to Sharma & Sheth (2004), indicated that privacy and security has been a critical issue in online retailing because there is the risk that is related to misuse of personal information and causes people afraid to buy products through internet. Therefore, privacy and security are one of the main factors that influence consumers' shopping outcome (satisfaction and shopping intention).

With the development of the internet as an important business medium, the business world has recently changed tremendously. E-commerce has experienced significant and rapid growth in the current business world. E-commerce refers to web-based commercial transactions (Kotler, 2012). Many companies are attempting to gain competitive advantages by using ecommerce as business platform (Lee & Lin, 2005). The development technology of internet has created unlimited opportunities for e-commerce due to the compelling advantages that offers over conventional bricks and mortar stores such as greater flexibility and market outreach, lower cost structures, broader product line, smoother transaction, convenience, and customization.

However, in recent years one of the most drastic changes in shopping behaviour by most of the consumers in apparel buying have shifted from offline to online. At the same time, more and more apparel retailers are adopting the technology of internet as their major business platform due to lower cost. However, the advance technology development of internet creates intense competition among online

retailers in marketplace. Besides that, easy interaction with customers via online allows the internet-based business to grow tremendously and rapidly. Lee and Lin (2005) stated that most experience and success retailers are beginning to realize that key determinants of success not merely depend on presence of websites and lower price but also includes the online service quality.

Nevertheless, without a proper quality management from its systems, staff, and supplier, it is very hard to satisfy customers due to retailers unable to deliver the appropriate level of service quality (Cox & Dale, 2001). Effectively managing online stores that influence customer satisfaction not only for online retailer but also essential for multichannel retailer due to the reciprocal effects across the channel (Venkatesan, Kumar & Ravishanker, 2007). According to Finn earlier study in 2008 (as cited in Ha & Stoel, 2012) stated those customers who have a bad online shopping experience appear to resist shop through the retailer's other channels. Therefore, customer online shopping satisfaction plays an important role to sustain the growth of not only the online business but also the overall business.

Thus, it is crucial for apparel retailers to understand the determinants of online shopping quality and key factors that influence consumer shopping outcome such as online shopping satisfaction and online shopping intention (Lee & Lin, 2005; Ha & Stoel, 2012). Hence, identifying the online shopping quality dimensions that influence consumer shopping outcomes (e-satisfaction and shopping intention) requires a comprehensive framework.

II. LITERATURE REVIEW

A. Overview of E-Commerce

E-commerce, or electronic commerce, has revolutionized the business landscape by facilitating the online exchange of goods and services (Chaffey et al., 2006). This digital model transcends geographical boundaries, allowing businesses to connect with a global audience and providing consumers the convenience of anytime, anywhere shopping (Turban et al., 2015). The four main types of e-commerce transactions involve businesses selling to consumers (B2C), businesses trading with each other (B2B), consumer-to-consumer exchanges (C2C), and individuals offering products or services to businesses (C2B) (Laudon & Traver, 2020). One of the key advantages of e-commerce is its global reach, enabling businesses to expand their market presence beyond physical limitations (Turban et al., 2015).

B. Application Of E-Commerce In The Fashion Industry

The application of e-commerce in the fashion industry has significantly transformed the way consumers engage with and purchase clothing, accessories, and footwear. Online platforms have become a central hub for fashion enthusiasts to explore a vast array of styles, brands, and trends, offering an extensive catalogue

that traditional brick-and-mortar stores may struggle to match (Bhardwaj & Fairhurst, 2010). E-commerce in the fashion sector has democratized access to fashion, allowing consumers from around the globe to discover and acquire the latest designs and runway-inspired looks with a simple click. Brands and retailers leverage e-commerce to showcase their collections, enabling consumers to browse, compare, and make informed purchase decisions at their convenience (Hines & Bruce, 2007). Moreover, the integration of augmented reality (AR) and virtual try-on features in e-commerce platforms enhances the online shopping experience in the fashion industry. Customers can virtually try on clothing items, ensuring a better fit and reducing the uncertainty associated with online apparel purchases (Choi, 2022). Social media integration further amplifies the impact of e-commerce in fashion, as users share their style preferences, fashion hauls, and reviews, creating a dynamic and interactive online community.

C. Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) explores how users accept and use technology. Research applying TAM demonstrates its efficacy in assessing online transaction intent, perceived web protection, and usability (Hoque et al., 2021). TAM's application in understanding factors such as online shopping design, website reliability, and customer service is also evident.

D. Theories of planned behavior (TPB)

The Theory of Planned Behaviour (TPB), proposed by Ajzen (2020), establishes links between attitude and behaviour. TPB's components, including behavioural beliefs, normative beliefs, and control beliefs, provide a comprehensive understanding of the factors influencing consumer actions.

III. RESEARCH METHODOLOGY

The approach used for this study is quantitative method. Quantitative research permits a researcher to test their hypotheses and depends on numerical data to support their discovery, avoiding speculation, reduce manipulation and bias that happen in interpretative research. The main purpose of this study was to study the factors affecting online purchasing of fashion and accessories among Malaysian Adults from Klang Valley. Thus, we intentionally selected respondents for this study from among Malaysian adults residing in Klang Valley who use the internet to purchase fashion and accessories products. The population refers to any number of attributes or qualities within a group that a researcher uses to make inferences about the subjects in research. This study was to examine on factors affecting online purchasing of fashion and accessories among Malaysian Adults from Klang Valley. Therefore, the population of this study is Klang Valley consumers.

A. Conceptual Framework

Based on TAM and TPB, this research assumes that perceived usefulness, perceived ease of use, attitude, perceived risk, trust, website design, vendor’s characteristics and purchase intention is the factors affecting online purchasing of fashion and accessories among Malaysian Adults from Klang Valley. Therefore, we suggested the conceptual framework as depicted in the Fig. 1.

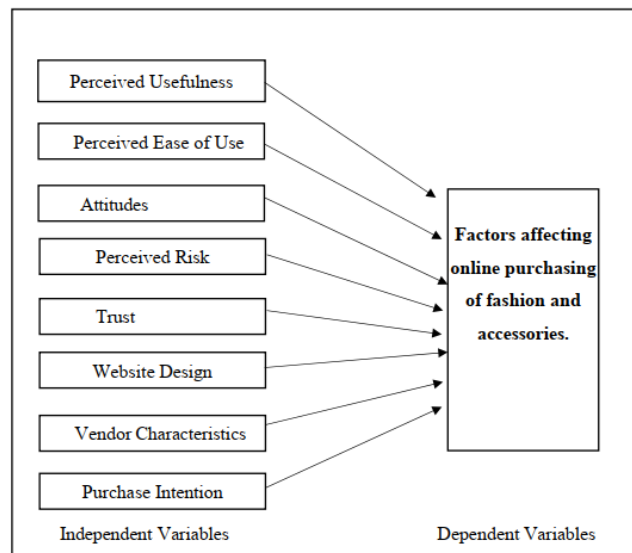


Fig. 1. Conceptual Framework

B. Data Analysis Method

The utilization of SMART PLS 4 software for data analysis was deliberate, leveraging its strengths in handling small sample sizes effectively. The selection of analytical techniques aligns with the research questions and hypotheses, aiming to provide insights into the factors influencing online purchasing behaviour in the fashion and accessories domain among Malaysian adults from Klang Valley.

The choice of SMART PLS 4 software for data analysis was deliberate due to its suitability for handling small sample sizes effectively. Given the study's focus on online purchasing behaviour in the fashion and accessories domain among Malaysian adults from the Klang Valley, where sample sizes may be limit, SMART PLS is well-suited for structural equation modelling (SEM) in exploratory studies. It allows for the examination of relationships between variables without strict adherence to pre-existing theoretical models.

IV. RESULTS

In this section, a descriptive analysis of the results is carried out using the data calculation program SMART PLS 4.

A. Structural Model

The data demonstrates a reliable and well-developed measurement model, indicating that scales measuring attitude, perceived risk, ease of use, usefulness, purchase intention, trust, vendor features, and website design are internally consistent and valid.

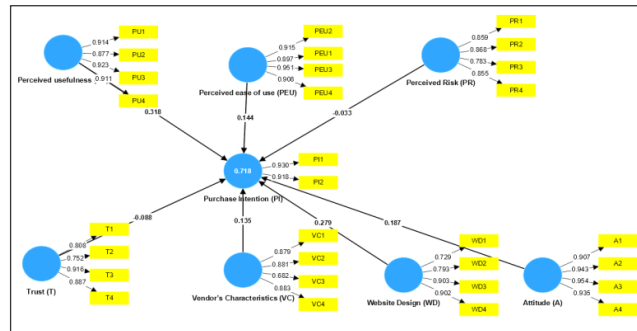


Fig. 2. PLS-SEM Model

B. Structural Model Path Coefficients

After evaluating the validity and reliability of the model, a PLS-SEM analysis of the path coefficient was performed. The path coefficient is one of the methods for studying the structural model. In this study, bootstrapping is employed to evaluate standard deviations, T-statistics, and P-values.

TABLE I. SUMMARY OF STRUCTURAL MODEL PATH COEFFICIENT

	Original sample (O)	Sample mean (M)	Standard deviation	T statistics (O /STDEV)	P values
Attitude (A) → Purchase Intention (PI)	0.187	0.182	0.092	2.040	0.041
Perceived Risk (PR) → Purchase Intention (PI)	-0.033	-0.025	0.054	0.609	0.542
Perceived ease of use (PEU) → Purchase Intention (PI)	0.144	0.145	0.138	1.040	0.298
Perceived usefulness (PU) → Purchase Intention (PI)	0.318	0.314	0.146	2.178	0.029
Trust (T) → Purchase Intention (PI)	0.888	0.885	0.094	0.932	0.352
Vendor's Characteristics (VC) → Purchase Intention (PI)	0.135	0.137	0.065	2.077	0.038
Website Design (WD) → Purchase Intention (PI)	0.279	0.283	0.096	2.912	0.004

The study presents data on the relationship between attitudes, perceived risk, ease of use, and website design in a structural equation model. Attitude has a significant positive effect on purchase intention, with a path coefficient of 0.187, indicating a positive effect. However, the relationship between perceived risk and purchase intention is not statistically significant, with a path coefficient of -0.033 and a non-significant P value of 0.542.

Perceived ease of use has a path coefficient of 0.144, a T-statistic of 1.04, and a non-significant P value of 0.298. Perceived usefulness has a path coefficient of 0.318, a T-statistic of 2.178, and a significant P-value of 0.029. Trust, vendor characteristics, and website design have statistically significant relationships with positive path coefficients, with trust and provider characteristics having T-statistics of 0.932 and 2.077 respectively, while website design has a relatively higher T-statistic of 2.912 and a low P-value of 0.004.

The results provide valuable information about the meaning and direction of the relationships between constructs examined in the structural equation model. The P-value, or probability value, evaluates evidence against a null hypothesis, and the study suggests that businesses should prioritize strategies that enhance and cultivate positive consumer attitudes to positively influence purchasing decisions.

C. Coefficient of Determination

R-squared and adjusted R-squared are statistical measures used in regression analysis to assess the proportion of variance in a dependent variable.

TABLE II. R-SQUARE

	R-square	are adjusted
Purchase Intention (PI)	0.718	0.704

In this scenario, the R-squared value of 0.718 indicates that 71.8% of the variance in purchase intention can be explained by the independent variables in the regression model. This suggests that the model is effective in accounting for observed variability in purchase intention values. The adjusted R-squared value of 0.704 penalizes irrelevant predictors and is slightly lower than the R-squared. A high R-squared value indicates the model can explain the variability in purchase intention values. However, researchers should consider the study context, limitations, and potential improvements in the model's explanatory power.

D. Effect Size

The regression model predicts purchase intention using f-squared values.

TABLE III. F-SQUARE VALUES

	Purchase Intention (PI)
Attitude (A)	0.036
Perceived Risk (PR)	0.003
Perceived ease of use (PEU)	0.013
Perceived usefulness (PU)	0.078
Purchase Intention (PI)	
Trust (T)	0.006
Vendor's Characteristics (VC)	0.029
Website Design (WD)	0.062

The perceived utility (PU) accounting for 7.8% of the variance after controlling for other factors. Website design (WD) also contributes to 6.2% of the variance. Attitude and provider characteristics account for 3.6% and 2.9%, respectively. Perceived risk, ease of use, and trust have smaller effects, each explaining less than 1% of the variance. These f-squared values help researchers and practitioners prioritize influential factors and refine strategies to improve purchase intent.

E. Regression Analysis

Table IV represents the regression analysis of the study.

TABLE IV. REGRESSION ANALYSIS

	Unstandardized coefficients	Standardized coefficients	SE	T value	P value	2.5 %	97.5 %
Vendor's Characteristics (VC)	0.338	0.311	0.066	5.106	0.000	0.207	0.468
Perceived usefulness (PU)	0.216	0.224	0.074	2.911	0.004	0.069	0.363
Trust (T)	-0.132	-0.172	0.073	2.033	0.044	-0.301	-0.004
Perceived Risk (PR)	0.028	0.033	0.043	0.644	0.520	-0.037	0.112
Perceived ease of use (PEU)	0.114	0.112	0.030	1.415	0.159	-0.045	0.273
Attitude (A)	0.315	0.330	0.066	4.782	0.000	0.155	0.445
Website Design (WD)	0.156	0.187	0.070	2.230	0.027	0.018	0.294
Intercept	-0.145	0.000	0.270	0.537	0.592	-0.679	0.389

Unstandardized coefficients represent the change in the dependent variable (DV) for a one-unit change in the independent variable (IV), while standardized coefficients represent the change in the dependent variable in terms of standard deviations for a one-standard-deviation change in the independent variable. These coefficients allow for comparison of the relative importance of different independent variables. The Standard Error (SE) represents the standard deviation of the sampling distribution of a coefficient, used to calculate confidence intervals and T-values. The T-value measures the number of standard deviations a coefficient estimate is from zero, and the P-value is the probability of obtaining a T-value as extreme as or more extreme than the observed one if the null hypothesis were true. The 2.5% and 97.5% values represent the lower and upper bounds of the 95% confidence interval for each coefficient.

F. ANOVA Analysis

Table V represents the ANOVA analysis of the study.

TABLE V. ANOVA ANALYSIS

	Sum square	df	Mean square	F	P value
Total	137.765	153	0.900	0.000	0.000
Error	46.662	146	0.322	0.000	0.000
Regression	91.102	7	13.015	40.442	0.000

This ANOVA analysis evaluates the significance of a regression model by analyzing the Total Sum of Squares (SST), degrees of freedom (df), mean square (MS), F-statistic (F), and P-value. The SST represents the total variability in the dependent variable, while df represents the number of values that are free to vary. The mean square (MS) is the sum of squares divided by its degrees of freedom, with values for Total, Error, and Regression. The F-statistic (F) is the ratio of the mean square for Regression to the mean square for Error, and a low P-value (0.000) indicates that the observed variation in the dependent variable is unlikely to be due to random chance.

V. CONCLUSION

The study explores online fashion and accessories purchasing behavior among Malaysian adults in the Klang Valley using SMART PLS 4 data calculation programs. The descriptive analysis provides a rich demographic profile, while visual representations like pie charts and graphs provide clarity on demographic patterns, online platform preferences, and purchase frequency. The measurement model was evaluated using PLS-SEM, with a focus on reliability, convergent validity, and discriminant validity. The structural model path coefficients reveal the relationships between factors and their impact on purchase intention, with attitude, perceived usefulness, and website design as significant influencers.

The analysis extends beyond statistical metrics to practical implications. The demographic insights and validated measurement model provide a comprehensive understanding that is academically relevant and immediately applicable in real-world scenarios. Businesses can use these findings to tailor their marketing strategies, enhance platform design, and build consumer trust effectively.

The study's combination of statistical rigor, practical insights, and actionable recommendations positions it as a valuable contribution to both academia and industry. The study unveils the intricate tapestry of online consumer behavior, paving the way for further exploration in subsequent chapters.

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