An Entrepreneurial Business of the Beary-x AMR Robots: Antecedents of Factors Affecting Customer Purchase Intention

Anon Mosuwan*
Sirion Chaipoopirutana**

Abstract

This study investigates the antecedents of customer purchase intention toward the Beary-X Autonomous Mobile Robots (AMRs) developed by TESR. Specifically, it examines the impact of three key factors: electronic word-of-mouth (eWOM), product quality, and personal innovativeness. A structured quantitative survey was conducted with 427 respondents who expressed interest in robotics technologies. The data were analyzed using Multiple Linear Regression (MLR) to evaluate the influence of each independent variable on purchase intention. The results reveal that all three dimensions of eWOM quality, quantity, and credibility significantly enhance purchase intention. Among product quality dimensions, performance, aesthetics, and special features show strong positive effects, while durability reveals a surprising negative relationship. Personal innovativeness also plays a crucial role, indicating that consumers with a higher propensity to adopt new technologies are more likely to purchase AMRs. These findings contribute to the theoretical understanding of technology adoption behavior in the robotics industry and offer practical implications for marketers and product developers. Businesses can improve purchase intention by boosting eWOM strategies, refining key product attributes, and targeting innovation-oriented consumers.

Keywords: Electronic Word-of-mouth; Product Quality; Personal Innovativeness; Purchase Intention; Autonomous Mobile Robots

Received: February 10, 2025 | **Revised:** May 11, 2025 | **Accepted:** June 6, 2025

* Master of Business Administration (Entrepreneurship), Institute of Entrepreneurial Science Ayothaya, Bangkok, Thailand, Email: ceo.anoney.potter@gmail.com
** Faculty of Business Administration, Institute of Entrepreneurial Science Ayothaya, Bangkok, Thailand, Email: sirion.c@iesa.ac.th (Corresponding Author).

Introduction

The rapid advancement of robotics technology has positioned it as a transformative industry with applications spanning manufacturing, logistics, healthcare, and consumer markets. As autonomous mobile robots (AMRs) such as the Beary-X (Figure 1) become increasingly sophisticated and accessible, understanding the factors that drive consumer purchase intention is critical for businesses aiming to succeed in this competitive, innovation-driven market.

Purchase intention, defined as the likelihood that a consumer will buy a product, is a widely studied concept in marketing and consumer behavior. However, within the robotics sector particularly for high-tech products like AMRs its antecedents remain insufficiently explored. While prior studies suggest that purchase intention is influenced by product quality, electronic word-of-mouth (eWOM), and personal innovativeness, the combined effects of these variables in the context of robotics represent a critical research gap, especially in emerging markets.

Among these factors, eWOM plays a crucial role in shaping consumer perceptions through digital platforms. Unlike traditional word-of-mouth, eWOM extends across online reviews, forums, and social media, offering broader reach and significant impact. Research by Yu et al. (2019) emphasizes that the quality, quantity, and credibility of eWOM significantly affect purchasing decisions, particularly for unfamiliar or high-involvement products such as robotics. This highlights the need for businesses to strategically manage digital communication and online reputation to foster consumer trust.

Product quality is another essential determinant of purchase intention, particularly in high-tech industries where consumers prioritize functionality, reliability, and performance. According to Luthra and Mangla (2018), product quality encompasses multiple dimensions, including durability, serviceability, aesthetics, and conformance to standards. Robotics products, often seen as long-term investments, demand a high level of quality assurance to minimize perceived risk and build confidence among potential buyers.

Personal innovativeness also plays a vital role in shaping purchasing behavior, especially in the adoption of new technologies. Consumers with high personal innovativeness are more inclined to try novel products, even those that require a learning curve or involve uncertainty. As noted by McLean and Wilson (2016), early adopters significantly influence broader market trends and can accelerate the diffusion of innovation. Therefore, targeting these individuals through tailored strategies can enhance the market potential of robotics products.

Despite the relevance of these variables, their collective impact on purchase intention has not been thoroughly examined in the robotics industry. This study addresses this gap by exploring how eWOM, product quality, and personal innovativeness jointly influence purchase intention toward the Beary-X AMR robot, developed by TESR. The research offers both theoretical and practical contributions by integrating these factors into a unified model and providing evidence-based recommendations for businesses in the robotics sector.

As the robotics industry continues to evolve, businesses must adapt to shifting consumer behavior by focusing on digital engagement, product development, and innovation-oriented marketing. This study contributes to the academic literature on technology adoption and consumer behavior while offering practical implications that can help robotics firms align their offerings with customer expectations and improve market competitiveness.

Figure 1: Beary-x AMR Robot

Literature Review

In the field of consumer behavior, various factors have been identified as important predictors of purchase intention, such as perceived risk, price sensitivity, brand trust, and perceived value (Kotler & Keller, 2016; Wang & Hazen, 2016). However, for high-tech and innovation-intensive products like autonomous mobile robots (AMRs), social influence, product attributes, and individual readiness to adopt new technologies tend to play a more significant role. Therefore, this study focuses on three key constructs electronic word-of-mouth (eWOM), product quality, and personal innovativeness which together capture both external (social and informational) and internal (psychological) influences on consumer purchase intention in the robotics context.

Electronic Word of Mouth (eWOM): Electronic word-of-mouth (eWOM) refers to the exchange of opinions, experiences, and product-related information via digital platforms such as social media, online reviews, blogs, and forums. Unlike traditional word-of-mouth, eWOM transcends geographical boundaries and enables real-time communication among

consumers (Cheung & Thadani, 2012). It has become a core element of the digital consumer decision-making process, particularly for high-involvement or technologically complex products, by offering easily accessible and often perceived-as-unbiased insights from peers (Filieri, et al., 2015).

The credibility of eWOM is frequently regarded as more persuasive than traditional marketing, serving as a form of social proof that enhances consumer trust and reduces perceived risk (Mudambi & Schuff, 2010; Park, et al., 2007). Hennig-Thurau et al. (2004) emphasize that eWOM influences not only brand perception but also purchase behavior. Building on this foundation, Yu et al. (2019) identify three core dimensions of eWOM that shape consumer decisions: quality, quantity, and credibility. Quality concerns the relevance and usefulness of shared content, quantity pertains to the volume of online discussions and reviews, and credibility reflects the trustworthiness of the information source (Awad & Ragowsky, 2008; Park & Lee, 2008).

The integration of these dimensions into consumer evaluation processes is especially critical in the robotics sector, where product unfamiliarity and technological complexity can deter consumers. Therefore, businesses must actively engage in managing eWOM by encouraging feedback, facilitating peer discussions, and collaborating with credible sources. Effectively leveraging these dimensions of eWOM can significantly influence consumer attitudes, enhance brand image, and boost purchase intention, particularly in the context of high-tech products such as autonomous mobile robots (AMRs).

Product quality: Product quality is one of the most extensively studied constructs in marketing and consumer behavior literature, particularly due to its direct link to customer satisfaction, perceived value, and purchase intention (Laroche et al., 2001; Luthra & Mangla, 2018). In high-tech markets, product quality takes on added importance, as consumers perceive technological products as long-term investments and demand performance, reliability, and innovation.

According to existing frameworks, product quality can be assessed across eight dimensions. These include performance (the ability to fulfill its intended function), reliability (consistency over time), and durability (product lifespan under normal usage) (McLean & Wilson, 2016). Additional dimensions such as serviceability (ease of maintenance), aesthetics (visual appeal and design), and conformance to specification (alignment with technical standards) contribute to overall user satisfaction (Bloch, 1995; Kim et al., 2020; Sarkis et al., 2011).

Moreover, perceived quality shaped by prior experiences, brand reputation, and subjective evaluation also plays a critical role in influencing consumer decisions (Filieri et al., 2015). Finally, the presence of special features, such as smart connectivity or advanced technological functions, increases product attractiveness and differentiation (Wang et al., 2013). When considered holistically, these dimensions form the foundation for understanding how consumers evaluate and compare products, particularly those that are innovation-intensive, like robotics.

Personal Innovativeness: Personal innovativeness refers to an individual's willingness to adopt new products, services, or ideas ahead of others. This psychological trait is a key driver in technology acceptance and diffusion (Agarwal & Prasad, 1998; Rogers, 2003). Individuals who score high on personal innovativeness often categorized as early adopters or innovators tend to seek out novel technologies and are more open to experimenting with new solutions despite potential risks or uncertainty (Ciftci et al., 2021).

This trait has particular relevance in the robotics sector, where many consumers may be hesitant due to a lack of familiarity or perceived complexity. Highly innovative consumers not only adopt products earlier but also influence their social networks, acting as opinion leaders who help normalize new technologies (Agarwal & Prasad, 1998). These individuals often rely on eWOM and are more tolerant of early product shortcomings, making them a strategic target segment for businesses. By understanding and identifying consumers with high levels of personal innovativeness, firms can tailor marketing and educational strategies to increase the likelihood of product trial and adoption.

Purchase intention: Purchase intention is defined as a consumer's likelihood or willingness to buy a product or service in the future and is considered a strong predictor of actual purchasing behavior (Amaro & Duarte, 2015; Hansen, 2008). It serves as a bridge between consumer attitudes and action, providing critical insights for businesses seeking to forecast demand and evaluate the effectiveness of marketing strategies (Wang & Hazen, 2016).

While existing literature has extensively explored the role of individual variables such as eWOM, product quality, and innovativeness in influencing purchase intention, there remains a lack of comprehensive research examining their combined influence within the robotics industry. As robotics products involve a unique combination of advanced technology, perceived risk, and long-term investment, it is essential to understand how these factors interact to shape consumer decision-making. Addressing this gap, the present study integrates these constructs into a unified framework, contributing both theoretically to the literature on high-tech product adoption and practically to marketing strategies in the robotics sector.

Literature Review of Hypotheses

The related literature review of eWOM and purchase intention.

The influence of electronic word-of-mouth (eWOM) on consumer behavior, particularly purchase intention, is widely documented in the marketing and information systems literature. eWOM enhances the perceived credibility and relevance of product information by offering real-life experiences and peer insights, often perceived as more trustworthy than traditional advertising (Cheung & Thadani, 2012; Filieri et al., 2015). High-quality eWOM improves perceived value, while the volume and credibility of shared content further strengthen consumer confidence in purchasing decisions (Mudambi & Schuff, 2010; Park & Lee, 2008).

Ismagilova et al. (2017) argue that eWOM credibility plays a particularly critical role, as information from knowledgeable, unbiased sources fosters trust and reduces uncertainty

especially in high-involvement categories like robotics. As such, the quality, quantity, and credibility of eWOM are recognized as key antecedents of purchase behavior. Businesses that encourage authentic user-generated content and manage their digital presence effectively are more likely to convert prospective consumers.

$H1_o$: eWOM in terms of quality, quantity, and credibility are not statistically significant influence on purchase intention.

$H1_a$: eWOM in terms of quality, quantity, and credibility are statistically significant influence on purchase intention.

The related literature review of product quality and purchase intention.

Product quality has long been regarded as a fundamental driver of purchase intention. According to Kotler and Keller (2016), consumers are more likely to purchase products perceived as superior in quality, particularly when it comes to performance, reliability, and durability. Parasuraman et al., (1988) support this view, emphasizing that perceived quality directly enhances consumer value perceptions and increases the likelihood of product adoption.

Product quality is inherently multidimensional. and Laroche, Bergeron, and Barbaro-Forleo (2001) and Luthra and Mangla (2018) suggest that dimensions such as performance, reliability, durability, and serviceability are essential in shaping perceived product excellence. Other key attributes include aesthetics, conformance to specification, and perceived quality each influencing emotional and cognitive responses to the product (Bloch, 1995; Filieri et al., 2015; Sarkis et al., 2011). Furthermore, special features such as advanced functionality, smart integration, and unique design elements offer differentiation and competitive advantage (Wang et al., 2013).

In the context of robotics, which involves high complexity and high consumer expectations, these quality dimensions become even more salient. Understanding which aspects of quality most influence consumer decision-making allows businesses to tailor development efforts toward what matters most.

$H2_o$: Product quality in terms of performance, reliability, durability, serviceability, aesthetics, conformance to specification, perceived quality, and special features are not statistically significant influence on purchase intention.

$H2_a$: Product quality in terms of performance, reliability, durability, serviceability, aesthetics, conformance to specification, perceived quality, and special features are statistically significant influence on purchase intention.

The related literature review of eWom, Product Quality, Personal Innovativeness and purchase intention.

While eWOM and product quality are critical to shaping consumer perceptions and behavior, individual-level psychological traits also play a pivotal role particularly personal innovativeness. Defined as an individual's willingness to embrace and experiment with new technologies (Agarwal & Prasad, 1998; Rogers, 2003), personal innovativeness moderates the

impact of product and market information on behavior. Consumers who are more innovative are also more open to uncertainty and more likely to act on positive eWOM or product cues.

Shanmugavel and Micheal (2022) note that personal innovativeness not only influences early adoption but can also amplify the effects of other stimuli like digital reviews and perceived product value. This is especially relevant in high-tech markets such as robotics, where unfamiliarity and rapid innovation cycles heighten the importance of individual disposition. McLean and Wilson (2016) and Wang et al. (2013) further confirm that consumers with high personal innovativeness are more responsive to performance claims, reviews, and cutting-edge features making them a key segment for influencing overall market behavior.

Therefore, this study proposes that the interaction of eWOM, product quality, and personal innovativeness collectively shapes purchase intention in the robotics sector.

$H3_o$: eWOM, product quality, and Personal Innovativeness are not statistically significant influences on purchase intention.

$H3_a$: eWOM, product quality, and Personal Innovativeness are statistically significant influences on purchase intention.

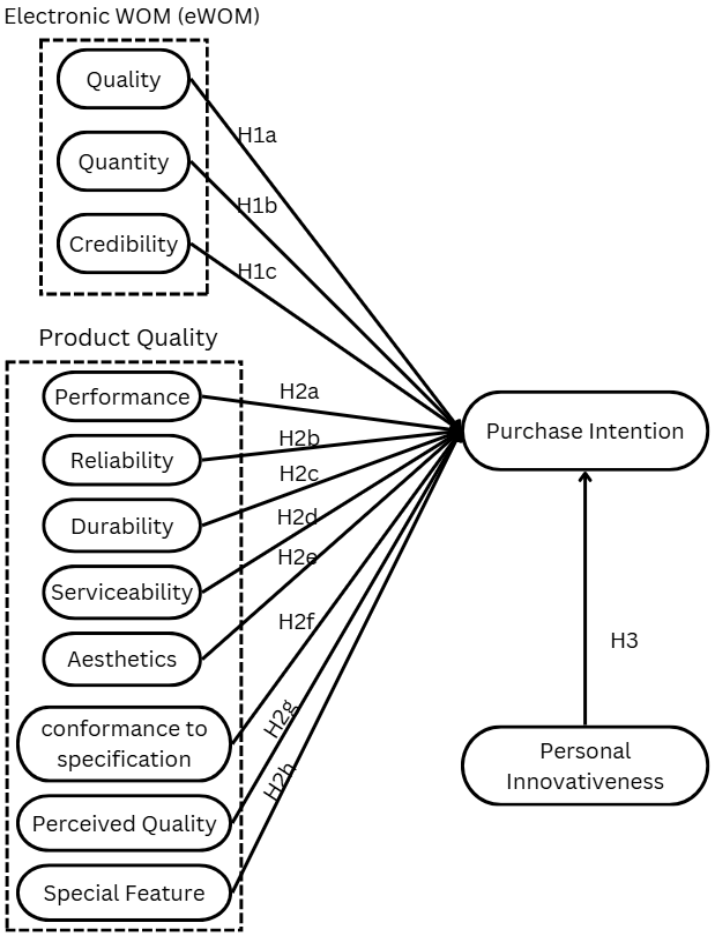

Figure 2: The Conceptual Research Model

Table 1: Comparative Analysis between this Study and Relevant Research

Topic	Scale Dimensions	This Study	Other Relevant Studies	References
Purchase intention	eWOM, Product Quality, Personal Innovativeness	Integrated model tested in robotics context using MLR; New insight: durability showed a negative effect on intention	Studied variables separately in automotive/EV sectors	Yu et al. (2019); Shaharudin et al. (2011); Shanmugavel & Micheal (2022)
eWOM	Quality, Quantity, Credibility	All dimensions significant; Quantity strongest	Found positive effects in car purchase decisions	Yu et al. (2019)
Product quality	Performance, Reliability, Durability, Serviceability, Aesthetics, Conformance to Specification, Perceived Quality, Special Features.	Aesthetics, performance, and features significant; durability negative	Product quality had weak/no effect in motorcycle context	Shaharudin et al. (2011)
Personal innovativeness	Openness to new tech	Strong effect on intention; supports targeting innovators	Influences perceived usefulness and intention in EVs	Shanmugavel & Micheal (2022)
New Knowledge Contributions	Integration of 3 constructs in robotics context Real-user data from robotics market Practical implications for AMR industry	First study combining eWOM, product quality, and personal innovativeness in robotics	-	-

Research Methodology

This study employed a quantitative research approach, which is widely recognized in the social sciences for its ability to systematically measure variables and analyze numerical data to test hypotheses and identify patterns or correlations (Creswell, 2014). A cross-sectional survey design was adopted, enabling the collection of data at a single point in time to assess relationships among key constructs: electronic word-of-mouth (eWOM), product quality, personal innovativeness, and purchase intention.

Data were collected through an online self-administered questionnaire distributed via Google Forms. The questionnaire utilized a 5-point Likert scale ranging from "strongly disagree" to "strongly agree," a widely accepted format for capturing the intensity of respondents' attitudes, perceptions, and behavioral intentions (Joshi et al., 2015). The instrument was designed based on validated constructs from prior studies and adapted to the context of robotics products. To ensure content validity, the questionnaire underwent Item-Objective Congruence (IOC) testing by three academic experts. Revisions were made based on expert feedback to improve clarity and alignment with research objectives.

The target population included individuals who demonstrate interest in robotics and automation, such as technology consumers, engineering professionals, and hobbyists. This population was selected based on its relevance to the study's focus on autonomous mobile robots (AMRs). A non-probability sampling method, specifically convenience sampling, was employed due to its practicality in accessing voluntary participants within the online community. Although this method limits generalizability, it remains appropriate for exploratory and applied business research where the focus is on theory testing rather than population estimation.

A sample size of 427 respondents was obtained, which meets and exceeds the minimum threshold for multiple regression analysis, ensuring adequate statistical power (Hair et al., 2010). The data collection took place over a two-week period, from [insert specific dates if available], to allow sufficient time for participant responses while minimizing temporal bias.

For data analysis, both descriptive and inferential statistical techniques were used. Descriptive statistics summarized respondent demographics and measured central tendencies (means and standard deviations) for each construct. To assess internal consistency reliability, Cronbach's alpha coefficients were calculated for all variables, with results exceeding the acceptable threshold of 0.7.

Inferential statistics, specifically Multiple Linear Regression (MLR), were employed to examine the effects of independent variables eWOM, product quality, and personal innovativeness on the dependent variable, purchase intention. Multicollinearity diagnostics such as Variance Inflation Factor (VIF) and Tolerance were also conducted to ensure model robustness. Prior to regression, basic assumptions including normality, linearity, and homoscedasticity were tested and met, confirming the appropriateness of the analytical technique.

This rigorous methodological approach ensures that the study provides credible, replicable, and meaningful insights into the factors influencing consumer purchase intention in the context of the robotics industry.

Research Findings

This study examined the influence of electronic word-of-mouth (eWOM), product quality, and personal innovativeness on purchase intention toward the Beary-X Autonomous Mobile Robot (AMR). To ensure reliability, Cronbach's alpha coefficients were calculated for all constructs, as shown in Table 2, with all values exceeding 0.70, indicating strong internal consistency. Demographic analysis (Table 3) revealed that most respondents were young males (ages 18–30), educated at the bachelor's level, and earning moderate monthly incomes. This suggests a key market segment of tech-savvy individuals who are highly receptive to robotics products. The descriptive statistics (Table 4) also indicated high mean scores across all variables, with particularly strong responses toward product quality, personal innovativeness, and credibility in eWOM.

To test Hypothesis 1, multiple regression analysis was conducted to examine the effect of eWOM dimensions on purchase intention. The model summary (Table 5) and ANOVA results (Table 6) confirmed that the model was statistically significant. As shown in Table 7, all three dimensions quantity ($\beta = 0.411$, $p < 0.001$), quality ($\beta = 0.250$, $p < 0.001$), and credibility ($\beta = 0.163$, $p = 0.003$) had a significant positive influence on purchase intention. These findings suggest that consumers rely heavily on abundant, relevant, and trustworthy online information when deciding to purchase robotics products, reinforcing the importance of digital engagement strategies for robotics brands.

For Hypothesis 2, the effect of product quality on purchase intention was tested. The model (Table 8) and ANOVA results (Table 9) confirmed statistical significance. As detailed in Table 10, aesthetics ($\beta = 0.495$) and performance ($\beta = 0.369$) had the strongest positive effects, followed by special features ($\beta = 0.114$). Interestingly, durability had a negative impact ($\beta = –0.166$, $p = 0.023$), potentially reflecting concerns over cost or complexity. Other quality attributes such as reliability, serviceability, and perceived quality were not significant. These results highlight that design appeal and functional benefits outweigh traditional durability considerations in consumer evaluation of robotics products.

In Hypothesis 3, a combined regression model tested the integrated effects of eWOM, product quality, and personal innovativeness on purchase intention. The model summary (Table 11) and ANOVA results (Table 12) showed strong statistical significance. As reported in Table 13, eWOM ($\beta = 0.491$, $p < 0.001$) and personal innovativeness ($\beta = 0.412$, $p < 0.001$) were both significant predictors, while product quality was not ($\beta = 0.005$, $p = 0.919$). This suggests that when consumers are exposed to strong social influence and have a tendency to try new technology, product attributes alone may not be the primary decision factor. These insights emphasize the need for businesses to focus on user-driven digital content and to engage innovation-oriented consumers to drive purchase intentions in the robotics sector.

Based on Table 2, the reliability test provides Cronbach's alpha values for all variables, which exceed the threshold of 0.6. Specifically, eWOM scored 0.924, product quality 0.978, personal innovativeness 0.873, and purchase intention 0.909, indicating internal consistency across all constructs.

Table 2: Reliability Test by Using Cronbach's Alpha Test

Variables	Alpha Test (α – test)	N of Items
Electronic Word-of-Mouth (eWOM)	0.924	6
eWOM in terms of quality	0.831	2
eWOM in terms of quantity	0.880	2
eWOM in terms of credibility	0.834	2
Product Quality	0.978	39
Product quality in terms of performance	0.908	8
Product quality in terms of reliability	0.922	8
Product quality in terms of durability	0.897	2
Product quality in terms of serviceability	0.891	5
Product quality in terms of aesthetics	0.914	6
Product quality in terms of conformance to specification	0.826	2
Product quality in terms of perceived quality	0.845	3
Product quality in terms of special features	0.832	2
Personal innovativeness	0.873	3
Purchase intention	0.909	3

Table 3: Summary of Demographic Factors Analysis

Demographics Factor	Characteristics	Frequency	Percentage (%)
Gender	Male	355	83.1%
Age	18-30	305	71.4%
Income per month (Baht)	Less than 30,000	305	71.4%
Education Level	Bachelor Degree	332	84.3%

Table 4: The Summary of the Average Means of Questions of Each Independent Variables and Dependent Variables

Variables	The Average Mean
eWOM	4.471
eWON in terms of quality.	4.545
eWON in terms of quantity.	4.310
eWON in terms of credibility.	4.560
Product quality	4.656
Product quality in terms of performance.	4.615
Product quality in terms of reliability.	4.645
Product quality in terms of durability	4.690
Product quality in terms of serviceability	4.696
Product quality in terms of aesthetics	4.610
Product quality in terms of conformance	4.665
Product quality in terms of perceived quality	4.670
Product quality in terms of special features	4.660
Personal innovativeness.	4.610
Purchase intension	4.473

Based on Table 3, the majority of respondents were male (83.1%), aged 18-30 (71.4%), with a monthly income of less than 30,000 Baht (71.4%), and holding a bachelor's degree (84.3%). These findings indicate that the sample primarily consists of young, educated males with moderate income levels, suggesting a key target demographic for robotics products.

Based on Table 4, the average mean scores for all variables are relatively high, indicating positive respondent perceptions. eWOM scored 4.471, with credibility (4.56) being the highest sub-dimension, followed by quality (4.545) and quantity (4.310). Product quality had a strong overall mean of 4.656, with serviceability (4.696) and durability (4.690) scoring the highest. Personal innovativeness averaged 4.610, while purchase intention recorded 4.473, reflecting a generally strong intent to purchase robotics products.

Based on Table 5, the results show that the Correlation Coefficient (R) is 0.757. The Coefficient of Determination (R^2) is 0.574, meaning that 57.4% of the variance in the dependent variable is explained by the predictor variable. The Adjusted R^2 is 0.571, accounting for the number of predictors in the model. The Standard Error of the Estimate is 0.493

Table 5: **Regression Model Summary of Hypothesis 1**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.757[a]	0.574	0.571	0.493

Notes: a. Predictors: (Constant), eWOM in terms of quality, eWOM in terms of quantity, eWOM in terms of credibility.

Based on Table 6, the ANOVA results indicate that the regression model is statistically significant. The Sum of Squares for Regression is 138.426, representing the variation explained by the model, while the Residual Sum of Squares is 12.866, indicating the variation not explained by the model. The Total Sum of Squares is 241.292, reflecting the total variation in the data. The Mean Square for Regression is 46.142, calculated by dividing the Regression Sum of Squares by its degrees of freedom (df = 3). The Mean Square for Residuals is 0.243, obtained by dividing the Residual Sum of Squares by its degrees of freedom (df = 423). The F-value is 189.744, representing the ratio of the Mean Square Regression to the Mean Square Residual. The significance level is 0.000, which is less than 0.05, indicating that at least one independent variable had a statistically significant influence on purchase intention.

Table 6: **ANOVA Table of Hypothesis 1**

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	138.426	3	46.142	189.744	0.000[b]
Residual	12.866	423	0.243		
Total	241.292	426			

Notes: a. Dependent Variable: Purchase intention
b. Predictors: (Constant), eWOM in terms of quality, eWOM in terms of quantity, eWOM in terms of credibility

Based on Table 7, the regression analysis confirms that all dimensions of eWOM quality, quantity, and credibility significantly influence purchase intention (Sig. < 0.05). eWOM quantity has the strongest impact (β = 0.411, Sig. = 0.000), followed by eWOM quality (β = 0.250, Sig. = 0.000) and eWOM credibility (β = 0.163, Sig. = 0.003). The Variance Inflation Factor (VIF) values range from 2.784 to 2.914, indicating no severe multicollinearity issues. These findings suggest that increasing the quantity and quality of online reviews can significantly enhance consumer purchase intentions.

Table 7: Regression Coefficient Table of Hypothesis 1

Coefficient[a]

Model	Standardized Coefficients Beta	Sig.	Collinearity Tolerance	Statistics VIF
1 (Constant)		0.000		
eWOM in terms of quality	0.250	0.000	0.353	2.829
eWOM in terms of quantity	0.411	0.000	0.359	2.784
eWOM in terms of credibility	0.163	0.003	0.343	2.914

Note: a. Dependent Variable: Purchase intention

Based on Table 8, the regression model summary for Hypothesis 2 indicates a Correlation Coefficient (R) of 0.747. The Coefficient of Determination (R Square) is 0.558, signifying that 55.8% of the variation in the dependent variable can be explained by the model. The Adjusted R Square is slightly lower at 0.549, accounting for the number of predictors in the model. The Standard Error of the Estimate is 0.505.

Table 8: **Regression Model Summary of Hypothesis 2**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.747[a]	0.558	0.549	0.505

Notes: a. Predictors: (Constant), Product quality in terms of performance, Product quality in terms of reliability, Product quality in terms of durability, Product quality in terms of serviceability, Product quality in terms of aesthetics, Product quality in terms of conformance to specification, Product quality in terms of perceived quality, Product quality in terms of special features

Based on Table 9, the ANOVA analysis for Hypothesis 2 evaluates the statistical significance of the regression model. The F-value is 65.944, with a corresponding Significance (Sig.) value of 0.000, indicating that the regression model is statistically significant at the 0.05 level. This confirms that the independent variables in the model collectively influence the dependent variable. The Sum of Squares for Regression is 138.624, representing the variance explained by the model. The Residual Sum of Squares is 106.668, accounting for the variance not explained by the model. The Mean Square for Regression is 16.828, calculated by dividing the regression sum of squares by its degrees of freedom (df = 8), and the Mean Square for Residual is 0.255, derived from the residual sum of squares divided by its degrees of freedom (df = 418). The total variance in the dependent variable is represented by the Total Sum of Squares, which is 241.292. The significance level is 0.000, which is less than 0.05, indicating that at least one independent variable had a statistically significant influence on purchase intention.

Table 9: **ANOVA Table of Hypothesis 2**

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	138.624	8	16.828	65.944	0.000[b]
Residual	106.668	418	0.255		
Total	241.292	426			

Notes: a. Dependent Variable: Purchase intention
b. Predictors: (Constant), Product quality in terms of performance, Product quality in terms of reliability, Product quality in terms of durability, Product quality in terms of serviceability, Product quality in terms of aesthetics, Product quality in terms of conformance

Based on Table 10, the regression analysis indicates that product quality significantly influences purchase intention, with certain dimensions having stronger effects than others. Aesthetics (β = 0.495, Sig. = 0.000) and performance (β = 0.369, Sig. = 0.000) are the most influential factors, suggesting that consumers prioritize the design appeal and functional efficiency of robotics products. Special features also have a significant positive impact (β = 0.114, Sig. = 0.022), highlighting the importance of unique attributes in driving purchase decisions. However, durability (β = -0.166, Sig. = 0.023) negatively affects purchase intention, implying that consumer perceptions of durability might be linked to concerns about cost or trade-offs with other product attributes. Other factors such as reliability, serviceability, conformance to specification, and perceived quality do not show significant effects (Sig. > 0.05). The VIF values range from 2.312 to 5.992, indicating acceptable multicollinearity levels. These results suggest that manufacturers should focus on aesthetics, performance, and special features to enhance product appeal and influence purchase decisions.

Table 10: Regression Coefficient Table of Hypothesis 2

Coefficient[a]

Model	Standardized Coefficients Beta	Sig.	Colinearity Tolerance	Statistics VIF
1 (Constant)		1.220		
Product quality in terms of performance	0.369	0.000	0.237	4.223
Product quality in terms of reliability	0.094	0.237	0.167	5.992
Product quality in terms of durability	-0.166	0.023	0.199	5.014
Product quality in terms of serviceability	-0.012	0.859	0.219	4.570
Product quality in terms of aesthetics	0.495	0.000	0.293	3.408
Product quality in terms of conformance to specification	-0.029	0.613	0.322	3.103
Product quality in terms of perceived quality	-0.091	0.133	0.286	3.493
Product quality in terms of special features	0.114	0.022	0.432	2.312

Note: a. Dependent Variable: Purchase intention

Base on Table 11 demonstrates with R value of 0.821. The model explains 67.3% of the variance in the dependent variable (R Square), and the adjusted R Square of 0.671 further validates the model's reliability. The Standard Error of the Estimate is 0.431.

Table 11: **Regression Model Summary of Hypothesis 3**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.821[a]	0.673	0.671	0.431

Notes: a. Predictors: (Constant), eWOM, product quality, Personal Innovativeness

Base on Table 12 presents the ANOVA results for Hypothesis 3. The regression model is statistically significant, with an F-value of 290.595 and a significance level of 0.000, indicating that the independent variables significantly explain the variance in the dependent variable. The regression sum of squares (162.463) highlights the explained variance, while the residual sum of squares (78.829). The significance level is 0.000, which is less than 0.05, indicating that at least one independent variable had a statistically significant influence on purchase intention. The significance level is 0.000, which is less than 0.05, indicating that at least one independent variable had a statistically significant influence on purchase intention.

Table 12: **ANOVA Table of Hypothesis 3**

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	162.463	3	54.154	290.595	0.000[b]
Residual	78.829	423	0.186		
Total	241.292	426			

Notes: a. Dependent Variable: Purchase intention
b. Predictors: (Constant), eWOM, Product quality, Personal Innovativeness

Based on Table 13, the regression analysis shows that electronic word-of-mouth (eWOM) (β = 0.491, Sig. = 0.000) and personal innovativeness (β = 0.412, Sig. = 0.000) significantly influence purchase intention, indicating that consumers rely heavily on online reviews and recommendations while also valuing their own openness to adopting new technology. However, product quality (β = 0.005, Sig. = 0.919) does not have a significant impact, suggesting that in this context, external influences and individual tendencies play a more prominent role than perceived product quality. The VIF values range from 2.147 to 2.973, indicating no major collinearity issues. These findings highlight the importance of leveraging eWOM strategies and targeting innovation-driven consumers to enhance purchase intention in the robotics industry.

Table 13: **Regression Coefficient Table of Hypothesis 3**

Coefficient[a]

Model	Standardized Coefficients Beta	Sig.	Collinearity Tolerance	Statistics VIF
1 (Constant)		0.353		
eWOM	0.491	0.000	0.414	2.413
Product quality	0.005	0.919	0.336	2.973
Personal Innovativeness	0.412	0.000	0.466	2.147

Note: a. Dependent Variable: Purchase intention

Discussions

Descriptive analysis was employed in this study to examine the demographic characteristics of respondents and the descriptive statistics for each variable. Additionally, inferential analysis was conducted to test the study's hypotheses and explore the relationships between independent and dependent variables. The results of these analyses are discussed below, providing insights into the findings and their implications for both academic research and practical applications.

Analysis of Demographic Factors

In this research, the primary data were collected from 427 respondents with an interest in robotics products, particularly Beary-X AMR robots. The results of the demographic analysis revealed that the majority of the respondents were male (83.1%), aged between 18 to 30 years old (71.4%). Most respondents held a bachelor's degree (77.8%) and earned less than 30,000 THB per month (71.4%).The findings indicate that the majority of individuals interested in robotics products are young, technology-savvy, and highly educated. These respondents are likely to belong to the early adopter group in innovation adoption, showing a strong enthusiasm

for new and advanced technologies. Their age range suggests they are digital natives, familiar with modern technology, and open to experimenting with innovations like robotics. This segment often values functionality, cutting-edge features, and futuristic applications in products, aligning well with the characteristics of robotics like Beary-X AMR robots. Furthermore, the demographic profile highlights a consumer group that tends to be curious, analytical, and driven by problem-solving. Given that a large percentage of respondents hold bachelor's or higher degrees, they are likely to possess a strong interest in science, engineering, and technology-related fields. These individuals may engage in continuous learning and stay updated on technological advancements, contributing to their desire to explore robotics products for educational, professional, or personal purposes.

Lastly, the income level of respondents indicates that while most earn less than 30,000 THB per month, they still exhibit interest in robotics. This suggests that they prioritize value, innovation, and long-term utility when making purchasing decisions. Their nature reflects forward-thinking, future-oriented individuals who perceive robotics products not merely as tools but as solutions to enhance efficiency, solve real-world challenges, and support automation trends. This customer profile emphasizes a market driven by technological aspirations, knowledge-seeking behavior, and a focus on practical applications of robotics in both personal and professional contexts.

Discussion and Implementation of Hypothesis

This study provides a comprehensive analysis of the factors influencing purchase intention for Beary-X AMR robots, emphasizing the roles of eWOM (electronic word-of-mouth), product quality, and personal innovativeness. The findings from multiple regression analyses, descriptive statistics, and collinearity diagnostics offer actionable insights for businesses, particularly in the robotics industry. The integration of these findings into practical applications highlights their significance in driving growth, improving customer satisfaction, and enhancing competitive advantage.

Hypothesis 1: The analysis of eWOM in terms of quality, quantity, and credibility influencing purchase intention

The results show that eWOM quality (β = 0.250, Sig. = 0.000), eWOM quantity (β = 0.411, Sig. = 0.000), and eWOM credibility (β = 0.163, Sig. = 0.003) significantly impact purchase intention. Among these, eWOM quantity exerts the strongest influence with a beta value of 0.411, indicating that the volume of online recommendations and discussions plays a critical role in shaping consumer decisions. This can be directly applied to business strategy by encouraging customers to share reviews, comments, and testimonials across platforms to amplify online presence and visibility. For example, increasing product-related content on platforms such as social media, forums, and e-commerce sites can positively influence purchase decisions and expand market reach. Furthermore, eWOM quality and credibility, with beta values of 0.250 and 0.163, respectively, highlight the importance of ensuring trustworthy, clear, and relevant online information. Businesses can leverage customer engagement strategies such as collaborating with influencers, thought leaders, and satisfied customers to provide high-quality, credible content. These efforts can enhance brand trust and encourage purchase decisions, particularly for high-involvement, technology-driven products like robotics. The VIF values for eWOM dimensions (2.784–2.914) indicate that multicollinearity

is not a concern, confirming the reliability of these relationships. For businesses, this underscores the need to prioritize online reputation management, as a strong eWOM presence can lead to higher market penetration, especially among tech-savvy consumers who rely heavily on peer-generated reviews when purchasing robotics products.

Hypothesis 2: The analysis of product quality in terms of performance, reliability, durability, serviceability, aesthetics, conformance to specification, perceived quality, and special features influencing purchase intention

Product quality was analyzed across eight dimensions, revealing both significant and non-significant relationships with purchase intention. The strongest positive influences were observed for performance (β = 0.369, Sig. = 0.000), aesthetics (β = 0.495, Sig. = 0.000), and special features (β = 0.114, Sig. = 0.022). These results highlight the key dimensions of product quality that significantly drive purchase intention. Performance, with a mean of 4.72, reflects consumers' expectations of responsive, effective, and safe systems. Businesses can meet this expectation through continuous product optimization, robust testing, and ensuring the safety and efficiency of robotics products to enhance customer satisfaction. Aesthetics, with a mean score of 4.65, underscores the importance of design and visual appeal in differentiating robotics products. Investing in ergonomic designs, sleek product aesthetics, and modern visual features can help businesses appeal to both industrial buyers and individual consumers. Similarly, special features, with a mean of 4.67, emphasize the value of advanced functionalities such as IoT integration, innovative customization options, and unique capabilities. These features cater to evolving consumer demands and enhance product appeal in a competitive market. Interestingly, durability showed a negative relationship with purchase intention (β = -0.166, Sig. = 0.023), suggesting that excessive durability may not align with customer expectations. This could reflect concerns about high costs or overengineering that may not translate into perceived value. Businesses should strike a balance between delivering robust, long-lasting products and ensuring affordability to meet customer needs effectively. Additionally, dimensions such as reliability, serviceability, and perceived quality did not exhibit statistical significance, indicating that while important, these aspects may not directly influence purchase intention within the current study's context. The collinearity tolerance values (ranging from 0.167 to 0.432) and VIF values (ranging from 2.312 to 5.992) confirm that the predictors are reliable, with no concerns of multicollinearity. These findings provide actionable insights for businesses looking to enhance product quality. By focusing on performance, aesthetics, and special features, companies can align their product offerings with consumer preferences, leading to higher customer satisfaction, stronger intention to purchase, and improved market competitiveness. For stakeholders such as engineers, marketers, and product managers, collaboration is key to delivering high-quality robotics products that combine functionality, visual appeal, and innovative features to meet diverse consumer expectations.

Hypothesis 3: The analysis of eWOM, product quality, and Personal Innovativeness influencing purchase intention

The findings for Hypothesis 3 revealed that eWOM (β = 0.491, Sig. = 0.000) and personal innovativeness (β = 0.412, Sig. = 0.000) have significant positive impacts on purchase intention, while product quality (β = 0.005, Sig. = 0.919) was statistically insignificant in this model. The high beta value of eWOM (0.491) reinforces its importance as a dominant

predictor, aligning with its critical role in the digital age where consumers rely on peer recommendations and reviews for decision-making. Personal innovativeness also emerged as a key driver, explaining 41.2% of the variance in purchase intention. Respondents with a higher tendency to adopt new technologies showed greater interest in purchasing robotics products. Businesses can target these early adopters through marketing strategies emphasizing innovation, cutting-edge features, and the transformative potential of robotics in daily or industrial applications. The VIF values (2.147 - 2.973) confirm the absence of multicollinearity, ensuring reliable results. These findings suggest that businesses can leverage targeted campaigns focusing on tech-enthusiasts and innovation-driven segments, enhancing purchase intentions through strategies such as early product trials, innovation showcases, and community engagement. By catering to this market segment, businesses can accelerate product adoption rates and build a foundation for long-term growth.

The findings from the three hypotheses highlight the importance of eWOM, key product quality attributes, and personal innovativeness as significant drivers of purchase intention for robotics products. These insights offer valuable guidance for businesses across various areas of the value chain, including product development, marketing strategies, and customer engagement efforts. By effectively leveraging these factors, businesses can enhance their overall performance and market position within the robotics industry.

First, businesses can leverage eWOM by encouraging user-generated content, customer reviews, and recommendations. Positive online visibility and trust can be amplified through platforms such as social media, review websites, and discussion forums. Strategies like incentivizing satisfied customers to share experiences or implementing referral programs can increase the volume, quality, and credibility of online feedback, ultimately boosting purchase intention.

Second, enhancing product quality remains critical, particularly in dimensions like performance, aesthetics, and special features, which were identified as key factors influencing purchase decisions. Businesses should prioritize delivering high-performing robotics products that meet customer expectations for responsiveness, reliability, and safety. At the same time, investing in modern designs and incorporating advanced features, such as IoT integration and customization options, can further differentiate products while maintaining cost-effectiveness. Balancing functionality with affordability ensures that businesses meet market demands and appeal to broader customer segments.

Lastly, targeting innovation-driven customers particularly early adopters presents an opportunity for accelerated market penetration. Campaigns tailored to emphasize cutting-edge technology, unique features, and the transformative capabilities of robotics products can resonate with these segments. Businesses can foster relationships with innovators by creating early-access programs, promoting technological advancements, and sharing real-world success stories to strengthen their appeal.

By integrating these strategies, businesses can significantly enhance purchase intention, improve customer satisfaction, and establish a sustainable competitive advantage. These findings are particularly relevant for marketing managers, product developers, and decision-makers who aim to optimize business performance in technology-driven markets, ensuring long-term growth and success in the evolving robotics industry.

Conclusion

This research investigates the factors influencing purchase intention for Beary-X AMR robots from TESR, focusing on three primary variables: electronic word-of-mouth (eWOM), product quality, and personal innovativeness. The study offers a comprehensive understanding of consumer behavior within the robotics industry, providing strategic insights for businesses to enhance their market positioning. A structured survey was conducted, gathering responses from 427 individuals in Bangkok, Thailand, who exhibited familiarity and interest in robotics products. Data analysis, using descriptive statistics and multiple linear regression, revealed key relationships between the variables and their impact on purchase intention.

The demographic analysis of the respondents indicated that the majority were male (83.1%) and aged between 18 to 30 years (71.4%), highlighting a youthful, technology-oriented market segment. Educationally, 77.8% of respondents held a bachelor's degree, followed by 12.4% with a master's degree. Monthly income data showed that 71.4% earned less than 30,000 Baht, while 13.8% earned between 30,000–60,000 Baht. These results suggest a consumer profile characterized by young, educated individuals with moderate spending power, making them receptive to innovative technology products like robotics. Additionally, 72.4% of respondents were students or professionals engaged in fields such as engineering, IT, and automation, indicating a clear alignment between robotics products and this tech-savvy audience.

For Hypothesis 1, the analysis of eWOM demonstrated significant influence on purchase intention. Among its dimensions, eWOM quantity had the highest beta coefficient ($\beta = 0.411$, Sig. = 0.000), followed by eWOM quality ($\beta = 0.250$, Sig. = 0.000) and eWOM credibility ($\beta = 0.163$, Sig. = 0.003). This result is supported by the mean values presented in Table 5.6, where the highest mean of 4.60 was observed for the statement, "I think online comments, mentions, and discussions about Beary-X AMR robots have sufficient reasons to support the opinions." Meanwhile, eWOM credibility recorded a mean of 4.57 for "The comments about Beary-X AMR robots products are reliable." These findings reflect consumers' reliance on abundant, credible, and high-quality information shared online, with VIF values ranging between 2.654 - 4.320, indicating no multicollinearity issues.

For Hypothesis 2, the influence of product quality dimensions on purchase intention revealed both significant and non-significant relationships. Performance ($\beta = 0.369$, Sig. = 0.000) had the strongest positive effect, aligning with its mean value of 4.72, indicating that respondents prioritize effective, responsive, and safety-focused systems. Aesthetics ($\beta = 0.495$, Sig. = 0.000) also significantly influenced purchase intention, supported by the statement "Based on an advertisement, I think devices installed are complete with sophisticated functions," which recorded a mean of 4.65. Special features ($\beta = 0.114$, Sig. = 0.022) also played a notable role, with a mean score of 4.67, reflecting the importance of advanced functionalities and customization options. Interestingly, durability exhibited a negative relationship ($\beta = -0.166$, Sig. = 0.023), suggesting that excessive durability may not meet consumer needs, possibly due to higher associated costs. The VIF values for product quality dimensions ranged from 2.312 to 5.992, confirming reliable results with minimal redundancy.

For Hypothesis 3, eWOM (β = 0.491, Sig. = 0.000) and personal innovativeness (β = 0.412, Sig. = 0.000) emerged as significant predictors of purchase intention, while product quality (β = 0.005, Sig. = 0.919) showed no statistical significance. The highest mean for personal innovativeness (4.67) was associated with "I had the attitude to experiment with new technology the moment I heard about that." This highlights the openness of respondents to adopt new technology products. Additionally, personal innovativeness plays a critical role in shaping purchasing behavior by fostering confidence and curiosity toward robotics.

The findings collectively highlight that purchase intention is significantly driven by eWOM and personal innovativeness, with selective dimensions of product quality in terms of performance, aesthetics, and special features also playing critical roles. Businesses can leverage these insights by amplifying online reviews and ensuring their reliability, as eWOM significantly boosts trust and reduces uncertainty among potential buyers. Furthermore, product developers and marketers should focus on enhancing product performance and aesthetics, as these attributes align closely with consumer expectations.

By understanding the purchasing behavior of a young, educated, and innovation-driven audience, businesses can optimize their strategies to target key consumer segments. For robotics manufacturers like TESR, implementing these findings across product development, marketing communication, and customer engagement strategies can help secure competitive advantages. Future research could explore additional product attributes or test these hypotheses in broader geographical regions to build a more holistic understanding of consumer behavior in robotics markets.

Limitations and Directions of Future Research

Future research could extend the current model by incorporating additional psychological and behavioral variables such as perceived risk, brand trust, environmental concern, or price sensitivity. These constructs have been widely recognized in the literature as influential factors in technology adoption and may enhance the explanatory power of the current framework. Including them would provide a more comprehensive view of the factors affecting consumer purchase intention, especially in the high-involvement robotics market.

In addition, future studies could explore cross-cultural or cross-industry comparisons to examine how purchase intention varies in different contexts. For example, testing the model in international settings or among consumers of robotics in healthcare, education, or domestic use could uncover sector-specific insights and cultural influences. These comparisons would enhance the generalizability of the findings and help businesses tailor their marketing strategies to diverse consumer groups.

Methodologically, longitudinal studies or experimental designs could be employed to capture how consumer attitudes and behaviors evolve over time or in response to specific stimuli. Unlike cross-sectional approaches, these methods would allow researchers to examine causality and track changes in purchase intention as technology familiarity grows or as product features and eWOM dynamics shift. Such approaches would deepen the understanding of consumer engagement in the fast-changing field of robotics.

References

Agarwal, R., & Prasad, J. (1998). A conceptual and operational definition of personal innovativeness in the domain of information technology. *Information Systems Research, 9*(2), 204–215.

Amaro, S., & Duarte, P. (2015). An integrative model of consumers' intentions to purchase travel online. *Tourism Management*, 46, 64-79.

Awad, N. F., & Ragowsky, A. (2008). Establishing trust in electronic commerce through online word of mouth: An examination across genders. *Journal of Management Information Systems, 24*(4), 101-121.

Bloch, P. H. (1995). Seeking the ideal form: Product design and consumer response. *Journal of Marketing, 59*(3), 16–29.

Cheung, C. M., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision Support Systems*, *54*(1), 461-470.

Ciftci, O., Berezina, K., & Kang, M. (2021). Effect of personal innovativeness on technology adoption in hospitality and tourism: A meta-analysis. In W. Wörndl, C. Koo, & J. L. Stienmetz (Eds.), *Information and Communication Technologies in Tourism 2021* (pp. 162–174). Springer.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications.

Filieri, R., Alguezaui, S., & McLeay, F. (2015). Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word-of-mouth. *Tourism Management*, 51, 174-185.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Pearson Prentice Hall.

Hansen, T. (2008). Consumer values, the theory of planned behaviour and online grocery shopping. *International Journal of Consumer Studies*, *32*(2), 128-137.

Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the internet? *Journal of Interactive Marketing*, *18*(1), 38-52.

Ismagilova, E., Dwivedi, Y. K., Slade, E., & Williams, M. D. (2017). Electronic word of mouth (eWOM) in the marketing context: A state of the art analysis and future directions. *Springer Briefs in Business*, Cham: Springer.

Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology, 7*(4), 396-403.

Kim, S. H., Suh, E. K., & Lee, K. J. (2020). Exploring factors influencing the adoption of service robots: A focus on the hospitality industry. *International Journal of Hospitality Management*, 89, 102517.

Kotler, P., & Keller, K. L. (2016). *Marketing management. Pearson*, *15*(2), 201-230.

Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, *18*(6), 503-520.

Luthra, S., & Mangla, S. K. (2018). Evaluating challenges to industry 4.0 initiatives for supply chain sustainability in emerging economies. *Process Safety and Environmental Protection*, 117, 168-179.

McLean, G., & Wilson, A. (2016). Evolving the online customer experience: Is there a role for online customer support? *Computers in Human Behavior*, 60, 602-610.

Mudambi, S. M., & Schuff, D. (2010). What makes a helpful online review? A study of customer reviews on Amazon.com. *MIS Quarterly, 34*(1), 185-200.

Park, C., Lee, H., & Han, I. (2007). The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International Journal of Electronic Commerce*, *11*(4), 125-148.

Park, D.-H., & Lee, J. (2008). eWOM overload and its effect on consumer behavioral intention depending on consumer involvement. *Electronic Commerce Research and Applications*, *7*(4), 386-398.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(1), 12-40.

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.

Sarkis, J., Zhu, Q., & Lai, K. H. (2011). An organizational theoretic review of green supply chain management literature. *International Journal of Production Economics*, *130*(1), 1-15.

Shaharudin, M. R., Mansor, S. W., Hassan, A. A., Omar, M. W., & Harun, E. H. (2011). The relationship between product quality and purchase intention: The case of Malaysia's national motorcycle/scooter manufacturer. *African Journal of Business Management*, *5*(20), 8163-8176.

Shanmugavel, N., & Micheal, M. (2022). Exploring the marketing-related stimuli and personal innovativeness on the purchase intention of electric vehicles through the Technology Acceptance Model. *Cleaner Logistics and Supply Chain*, *3*(2022), 100029.

Wang, C., Harris, J., & Patterson, P. G. (2013). The roles of habit, self-efficacy, and satisfaction in driving continued use of self-service technologies: A longitudinal study. *Journal of Service Research*, *16*(3), 400-414.

Wang, Y., & Hazen, B. T. (2016). Consumer product knowledge and intention to purchase remanufactured products. *International Journal of Production Economics*, 181, 460-469.

Yu, E., Lee, K., & Roh, T. (2019). The effect of eWOM on purchase intention for Korean-brand cars in Russia: The mediating role of brand image and perceived quality. *Journal of Korea Trade, 23*(5), 102-117.