European Journal of Sustainable Development Research
2026, 10(2), em0370
e-ISSN: 2542-4742
https://www.ejosdr.com/

MODESTUM

Research Article

OPEN ACCESS

The impact of electronic word-of-mouth on brand image and ticket purchase intention for metro as a sustainable urban transport solution: Evidence from Ho Chi Minh City, Vietnam

Le Thi Kim Hoa [1*]

[1] Industrial University of Ho Chi Minh City, Ho Chi Minh City, VIETNAM
*Corresponding Author: lethikimhoa@iuh.edu.vn

Citation: Hoa, L. T. K. (2026). The impact of electronic word-of-mouth on brand image and ticket purchase intention for metro as a sustainable urban transport solution: Evidence from Ho Chi Minh City, Vietnam. *European Journal of Sustainable Development Research, 10*(2), em0370. https://doi.org/10.29333/ejosdr/17838

ARTICLE INFO

Received: 14 Sep. 2025

Accepted: 10 Dec. 2025

ABSTRACT

This study examines the impact of electronic word-of-mouth (eWOM) on brand image (BI) and ticket purchase intention (PI) for the metro system as a sustainable urban transport initiative in Ho Chi Minh City, Vietnam. Data were collected from 425 valid responses of young working adults aged 15-30 and analyzed using SPSS 26.0 and SmartPLS 4.0. The structural model results show that all four dimensions of eWOM–credibility, quantity, quality, and usefulness–positively influence both BI and PI ($p < 0.05$). BI also exerts a significant positive effect on PI ($\beta = 0.287$, $p < 0.001$) and mediates the indirect relationships between eWOM components and PI (β ranging from 0.052 to 0.069, all $p < 0.05$). The model explains 38.2% of the variance in BI ($R^2 = 0.382$) and 57.1% in PI ($R^2 = 0.571$). Although most effect sizes are weak, the strongest predictors–quality, credibility, and BI–play essential roles in shaping consumer perceptions and behavioral intentions. The findings highlight the strategic importance of managing eWOM to strengthen BI and foster metro adoption, offering practical implications for policymakers and transport authorities in promoting sustainable urban mobility.

Keywords: electronic word-of-mouth, brand image, purchase intention, metro train, public transportation, sustainable urban mobility

INTRODUCTION

The digital age has transformed how consumers search for and share information about products and services. Among these changes, electronic word-of-mouth (eWOM) has emerged as a powerful and trustworthy source of information, particularly for experience-based services whose quality is difficult to evaluate in advance (Kotler et al., 2006). Anderson (1998) notes that such uncertainty makes consumers rely more heavily on eWOM when forming service-related decisions.

In Vietnam, especially in Ho Chi Minh City–the nation's most dynamic metropolis–urban challenges such as traffic congestion, air pollution, and road accidents have grown severe, undermining sustainable urban development and quality of life. The government has invested in public transport infrastructure to address these issues, notably metro line no. 1 (Ben Thanh-Suoi Tien), which is expected to reduce emissions and dependence on private vehicles (National Assembly, 2005). However, convincing citizens to adopt this new sustainable transport mode remains difficult. By late 2024, Hanoi's metro system had reached only 10-15% of its projected passenger capacity (Tuoi Tre, 2024; VietnamPlus, 2025), reflecting low public acceptance.

In this context, eWOM represents a crucial tool to shape public perceptions and promote behavioral change. Through its broad reach and perceived credibility, eWOM can enhance the brand image (BI) of metro services and motivate young digital users–who frequently rely on social media reviews–to adopt public transport. While prior studies have linked eWOM to BI and purchase intention (PI) in sectors such as tourism and e-commerce (Ezzat & Abd Elsalam, 2022; Kochar & Bhagat, 2024; Pauliene et al., 2020), little is known about its role in promoting sustainable urban mobility (SUM).

Addressing this research gap, the present study titled "The impact of eWOM on BI and ticket PI for metro as a sustainable urban transport solution: Evidence from Ho Chi Minh City, Vietnam" aims to

(1) examine how eWOM components influence the BI of metro services and

(2) explore the mediating role of BI in shaping young consumers' ticket PIs.

The study contributes theoretically by extending eWOM applications to sustainable transport behavior. It offers practical insights for policymakers and metro operators seeking to enhance public engagement and foster greener mobility in Vietnam.

THEORETICAL BACKGROUND AND RESEARCH HYPOTHESES

Theoretical Background

The role of eWOM

eWOM is a valuable information source that has a significant impact on consumers during the information search and evaluation stages (Dellarocas, 2003). Thanks to its rapid diffusion and lack of spatial or temporal constraints, eWOM content can be viewed, shared, and accessed by anyone, anywhere, at any time (Chen & Xie, 2008). Besides influencing consumer behavior, eWOM also provides strategic value to businesses by influencing purchase decisions, establishing trust, and influencing brand perception (Chevalier & Mayzlin, 2006). According to Alalwan et al. (2017), eWOM is not only a way for people to share their experiences; it is also considered an effective non-commercial promotion method that enables consumers to exchange information about products and brands directly. In the digital age, eWOM has grown in importance as an online communication channel that plays a significant role in influencing consumers' PIs.

BI

BI is the broad impression consumers or the public form via their experiences and interactions with the brand, including the organization's workers and services (Tafolli et al., 2022). Kotler and Armstrong (2018) emphasize that BI is key in differentiating a product or service from competing organizations. BI is defined as the perceptions and associations that customers hold about a brand, formed through elements such as logos, packaging, marketing messages, and how the brand interacts with customers to meet their psychological and social needs (Keller, 1993, 2001). The ability of BI to mirror what consumers feel the brand can give is its primary advantage, according to Keller (1998), making it an intangible asset that directly affects consumer perceptions and behavior, and a communication tool.

PI

The degree of a consumer's commitment to purchase a product or service in the future is known as PI. Kotler et al. (2011) state that consumers evaluate alternative brands during the evaluation stage of the buying process and then form a PI, which is not fixed and may change over time, particularly when consumers are exposed to new information, depending on the usefulness and reliability of that information. The relationship between eWOM characteristics and PI has been the subject of numerous studies. Berger et al. (2010) contend that the volume of customer reviews on digital platforms can impact purchasing decisions. Meanwhile, Beneke et al. (2016) found that products with many positive reviews typically have higher sales. On the other hand, Park and Lee (2008) stress that when negative reviews accumulate, consumers are more likely to remember them, lowering their PI. In today's digital age, PI might be considered a factor heavily impacted by market knowledge, psychological factors, and–most importantly–eWOM. Although eWOM may not have a direct impact on consumer behavior, Kala and Chaubey (2018) concur that it might contribute to the development of a favorable BI, which in turn increases PI. According to Al-Dmour et al. (2021), buyers should look for the Internet reviews as a source of data to help them make decisions.

Theoretical Framework

This study aims to understand better how eWOM influences BI and the intention to purchase metro tickets among young people in Ho Chi Minh City. A number of foundational theories from the fields of consumer behavior and marketing communication, including the theory of reasoned action (TRA), the theory of planned behavior (TPB), the information adoption model (IAM), and consumer behavior theory, provide a scientific basis for explaining the relationships among eWOM components, BI, and behavioral PI.

TRA and TPB

The TRA was created by Fishbein and Ajzen (1975) to describe the elements affecting people's deliberate actions. According to TRA, conduct is determined by behavioral intention, which is impacted by attitude toward the behavior and subjective norms, or a person's view of what other people expect of that behavior. Ajzen (1991) expanded the TPB by including the perceived behavioral control (PBC) component in order to expand on TRA. According to TPB, behavioral intention is influenced by three main factors: PBC, subjective norms, and attitude toward the conduct. TPB offers a theoretical framework for comprehending how eWOM influences the intention to buy metro tickets by forming expectations, perceived control, and trust in metro services. TPB is a crucial theoretical framework in this study that clarifies the connections among young people's intention to buy metro tickets, BI, and eWOM.

IAM

The IAM, put out by Sussman and Siegel (2003), describes how consumers absorb and use information from unconventional sources, such as eWOM and online reviews. IAM offers a good framework for comprehending how eWOM influences BI and, eventually, the desire to acquire a metro ticket through important eWOM characteristics, including perceived usefulness, volume, quality, and credibility. In order to decide whether to accept or reject information, consumers assess it according to its quality, reliability, and usefulness.

Although numerous studies have examined eWOM in various contexts such as e-commerce, tourism, and fast-moving consumer goods, there remains a lack of consensus on how its components influence consumer behavior. Some scholars (e.g., Beneke et al. 2016; Park & Lee, 2008) emphasize the dominance of eWOM quantity, while others (e.g., Chevalier & Mayzlin, 2006; Kala & Chaubey, 2018) highlight credibility and quality as the most decisive factors. Moreover, previous research has largely focused on commercial products and

online retail, whereas the public transportation (PT) sector–especially sustainable mobility solutions like metro systems–has received limited empirical attention. This creates both a theoretical and practical gap, as the mechanisms by which eWOM affects BI and behavioral intentions toward public transport remain unclear, particularly in developing urban contexts such as Vietnam. Addressing this gap, the present study integrates TRA, TPB, and IAM to propose a comprehensive framework linking eWOM components, BI, and ticket PI for metro services.

Research Hypotheses

The relationship between eWOM and BI

Since the Internet and social media have developed rapidly, eWOM has become one of the most influential information sources shaping consumers' brand perceptions (Pauliene et al., 2020). Consumers often seek product or service information online to reduce perceived risk and increase trust (Kotler & Keller, 2016). Empirical studies such as those by To and Nguyen (2025), Slamet et al. (2022), Kumar and Yang (2024), and Kochar and Bhagat (2024) confirm that eWOM has a positive effect on BI.

H1. eWOM has a positive effect on the BI of the metro service.

H1a-H1d. The four dimensions of eWOM (credibility, quantity, quality, and usefulness) each have a positive effect on BI.

The relationship between BI and PI

A favorable BI enhances consumers' trust and preference, influencing their decision-making and willingness to purchase (Keller, 1998; Rosanti et al., 2021). Empirical research has consistently validated this relationship (Nguyen et al., 2022; Saktiawan & Wulandari, 2023; Salem, 2023).

H2. The BI of the metro service has a positive effect on customers' PI.

The relationship between eWOM and PI

eWOM significantly influences consumers' PI by shaping their perceptions, attitudes, and behavioral intentions toward products and services. Kochar and Bhagat (2024) confirmed that consumers' acceptance of eWOM positively correlates with their intention to purchase electronic flight tickets in the Mekong Delta Region. Similarly, To and Nguyen (2025) found that active eWOM engagement on social media enhances online businesses' BI and sales performance. Pauliene et al. (2020) also demonstrated that eWOM serves as a decisive factor guiding consumers' decision-making, particularly in service contexts. Based on these findings, eWOM is conceptualized as a multidimensional construct influencing purchase behavior.

H3. eWOM positively influences the intention to purchase metro tickets.

H3a-H3d. The four dimensions of eWOM (credibility, quantity, quality, and usefulness) each positively influence the intention to purchase metro tickets.

The relationship among eWOM, BI, and PI

BI plays a pivotal role in transforming eWOM into consumer PI. Several studies have identified BI as a key mediating variable linking eWOM with consumer behavior. Kumar and Yang (2024), and Saktiawan and Wulandari (2023) demonstrated that positive eWOM enhances brand perception, which in turn strengthens PI. Similarly, Salem (2023) confirmed that BI mediates the effect of eWOM on purchase decisions across various service sectors. These findings suggest that favorable brand associations act as a conduit through which eWOM drives behavioral outcomes.

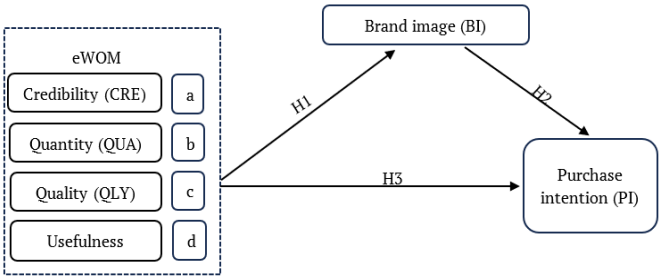

Figure 1. Research model (the author's own elaboration)

H4. BI mediates the relationship between eWOM and the intention to purchase metro tickets.

H4a-H4d. BI mediates the relationships between each dimension of eWOM (credibility, quantity, quality, and usefulness) and PI.

Based on the research hypotheses outlined above, the proposed research model is illustrated in **Figure 1**.

RESEARCH METHODOLOGY

Research Procedure

A preliminary qualitative phase was conducted to validate and adapt the measurement scales to the context of sustainable urban transport. This stage involved two key activities:

(1) expert consultation and

(2) in-depth semi-structured interviews.

Specifically, feedback from six domain experts–including three scholars in marketing and consumer behavior, two specialists in urban transport management, and one policy advisor–was used to evaluate the content validity and contextual relevance of the constructs. In addition, 25 semi-structured interviews were conducted with young residents of Ho Chi Minh City (aged 15-30) who were aware of or intended to use metro services. Insights from these interviews helped refine the wording, eliminate ambiguities, and ensure cultural suitability of the questionnaire.

Following this, a pilot quantitative survey with 50 young respondents was performed to assess scale reliability. All corrected item-total correlations exceeded 0.3 and Cronbach's alpha values were above 0.6, confirming the instrument's internal consistency and readiness for large-scale data collection.

The main survey was distributed online via Google Forms using a non-probability convenience sampling approach. This method was chosen due to the exploratory nature of the study, the lack of a comprehensive sampling frame of metro users prior to the system's official operation, and the practical

Table 1. Descriptive statistics of the respondents (n = 425)

Variable	Category	Frequency (N)	Percentage (%)
Gender	Male	187	44.0
	Female	238	56.0
Age group	15-19	94	22.0
	20-24	223	52.6
	25-30	108	25.3
Occupation	Student	207	48.8
	Office staff	119	28.0
	Self-employed	73	17.1
	Others	26	6.1
Monthly income	Under VND 10 million	191	45.0
	VND 10-15 million	149	35.0
	Over VND 15 million	85	20.0
eWOM reference channel	Facebook	139	32.7
	Zalo	136	31.9
	Others	150	35.3
Total		425	100

constraints of reaching a young digital population. Despite inherent limitations in representativeness, convenience sampling is widely accepted in behavioral and marketing research where the goal is theory extension rather than population estimation (Hair et al., 2022).

A total of 425 valid responses were collected. All items were measured on a five-point Likert scale (1 = strongly disagree with 5 = strongly agree). Data analysis followed a two-step approach: exploratory factor analysis (EFA) and reliability testing using SPSS 26.0, followed by partial least squares structural equation modeling (PLS-SEM) with SmartPLS 4.0 to validate the measurement model and test structural relationships between constructs.

Measurement Scales

The measurement scales were adapted and refined from previous validated studies on eWOM, BI, and PI to ensure conceptual consistency and relevance to the Vietnamese context. The final instrument comprised six constructs and twenty-one observed variables, reflecting the perceptions and behavioral intentions of young consumers toward metro adoption as a sustainable mobility solution.

Data Collection

To ensure data adequacy for multivariate analysis, the study referred to Hair et al. (2022) and Kline (2015), who recommend a minimum of 5-10 observations per indicator variable and sample sizes above 200 for factor-based models. With 21 observed variables, the required minimum sample size was 105, while 300 or more is considered adequate for SEM. Accordingly, 425 valid responses were retained, meeting both statistical and analytical requirements for reliability, validity, and generalizability within the study's scope.

RESEARCH RESULTS

Descriptive Statistics

The demographic profile of the 425 responders is shown in **Table 1**. When it came to gender, women made up the majority (56.0%), while men made up 44.0%. The sample was primarily young adults, as evidenced by the fact that over half of the participants (52.6%) were between the ages of 20 and 24. Those between the ages of 25 and 30 (25.3%) and 15 and 19 (22.1%) were next in line. Nearly half of the respondents (48.7%) were students, followed by office workers (28.0%), self-employed people (17.2%), and others (6.1%). This indicates that the majority of respondents were students and urban knowledge workers. With respect to income, the largest group earned under VND 10 million per month (45.0%), followed by those earning VND 10-15 million (35.1%) and over VND 15 million (20.0%). Finally, eWOM reference channels were relatively balanced, with Facebook (32.7%), Zalo (31.9%), and other platforms (35.3%). Overall, the sample represents a young, urban, and digitally active consumer group, which aligns well with the study's focus on eWOM and sustainable urban transport adoption.

Evaluation of the SEM Measurement Model

All measurement scales exceeded the necessary reliability threshold (Cronbach's alpha > 0.7) and showed adequate construct validity, according to the results of EFA using SPSS 26.0 and scale reliability verification using Cronbach's alpha. The author then used the outer loading values and SmartPLS 4.0 to evaluate the indication reliability. Most observed variables indicated strong correlations with their respective latent constructs, with outer loadings greater than 0.7. All constructs obtained average variance extracted (AVE) values above 0.5 and composite reliability (CR) values above 0.7, indicating satisfactory convergent validity and CR. However, one component (QLY4) had an outer loading of 0.620, which was relatively low and below the acceptable criterion of 0.7 (Hair et al., 2022). As a result, QL4 was eliminated from the model to improve the measurement quality and dependability. After refinement, measurement scales underwent additional evaluation for convergent validity and CR using AVE.

Discriminant validity was assessed using the Heterotrait-Monotrait ratio (HTMT) and the Fornell-Larcker criterion; all HTMT values were below the 0.85 cutoff, as shown in **Table 2**, suggesting discriminant validity between the components (Henseler et al., 2015), and the Fornell-Larcker results further supported discriminant validity by demonstrating that the square root of the AVE for each construct was greater than its correlations with other constructs (Fornell & Larcker, 1981).

Table 2. HTMT discriminant validity of constructs

Construct	QLY	BI	USE	QUA	CRE	PI
QLY						
BI	0.586					
USE	0.5208	0.630				
QUA	0.260	0.535	0.360			
CRE	0.416	0.612	0.635	0.536		
PI	0.572	0.806	0.698	0.670	0.780	

Structural Model Results

In order to evaluate the structural model, the study used path coefficient analysis to look at the direct and indirect relationships between the constructs. The results show estimates of β, confidence intervals, and significance levels that were generated using the bootstrapping method with 5,000 subsamples.

Table 3 and **Table 4** summarize the results of hypothesis testing, demonstrating both direct and indirect effects between the variables.

The results indicate that all components of eWOM–namely credibility (CRE), quantity (QUA), quality (QLY), and usefulness (USE)–have positive effects on both BI and PI. Moreover, BI exerts a direct positive influence on PI. This implies that as the levels of eWOM credibility, quantity, quality, and usefulness increase, consumers are more likely to form a favorable BI, enhancing their intention to purchase metro train tickets. Based on these findings, hypotheses H1, H1a, H1b, H1c, H1d, H2, H3, H3a, H3b, H3c, and H3d are all supported.

Subsequent investigation shows statistically significant ($p < 0.05$) correlations between eWOM components and PI through BI. Thus, the author concludes that all relationships between the independent variables (CRE, QUA, QLY, and USE) and the dependent variable (PI) are mediated by BI. The following normalized coefficients indicate that the indirect effects are statistically significant ($p < 0.05$): QLY → BI → PI = 0.069, USE → BI → PI = 0.063, QUA → BI → PI = 0.061, and CRE → BI → PI = 0.052. Hypotheses H4, H4a, H4b, H4c, and H4d are thus validated. Nine direct effects and four indirect effects are confirmed overall by the PLS-SEM model.

Table 5. R^2

Variable	R^2
BI	0.382
PI	0.571

Table 6. f^2

Path	f^2	Effect strength
CRE → BI	0.031	Weak
QUA → BI	0.057	Weak
QLY → BI	0.077	Weak
USE → BI	0.055	Weak
BI → PI	0.119	Weak
CRE → PI	0.115	Weak
QUA → PI	0.059	Weak
QLY → PI	0.023	Weak
USE → PI	0.032	Weak
CRE → BI → PI	0.052	Weak
QUA → BI → PI	0.061	Weak
QLY → BI → PI	0.069	Weak
USE → BI → PI	0.063	Weak

Chin (1998) and Hair et al. (2022) state that the evaluation of structural models is based on three main criteria: the sufficiency of the path coefficients in the model, statistical significance (p-value), and the coefficient of determination (R^2). The author employed a bootstrapping technique and a sample size of 5,000 people. **Table 5** demonstrates that none of the confidence intervals contains the value zero, and all path coefficients are statistically significant at the 95% confidence level.

While the R^2 indicates the explanatory power of the model, it is also essential to evaluate the effect size (f^2) to understand the contribution of each predictor. The f^2 values provide evidence of the relative strength of individual relationships. **Table 6** presents the f^2 results for both direct and indirect paths in the model.

Table 6 shows that all f^2 fall within the weak range, suggesting that although the relationships among constructs are statistically significant, their individual contributions are modest. The strongest predictors are QLY → BI ($f^2 = 0.077$), BI → PI ($f^2 = 0.119$), and CRE → PI ($f^2 = 0.115$), indicating that

Table 3. Direct effects

Hypothesis	Paths	β	Mean	Confidence interval	Standard deviation	t-statistics	p-value	VIF	Conclusion
H1a	CRE → BI	0.182	0.185	[0.030; 0.318]	0.073	2.493	0.013	1.565	Accepted
H1b	QUA → BI	0.211	0.213	[0.092; 0.316]	0.056	3.768	0.000	1.297	Accepted
H1c	QLY → BI	0.243	0.244	[0.128; 0.347]	0.057	4.263	0.000	1.238	Accepted
H1d	USE → BI	0.221	0.219	[0.097; 0.332]	0.061	3.623	0.000	1.450	Accepted
H2	BI → PI	0.287	0.286	[0.176; 0.397]	0.057	5.035	0.000	1.617	Accepted
H3a	CRE → PI	0.280	0.281	[0.160; 0.394]	0.060	4.667	0.000	1.617	Accepted
H3b	QUA → PI	0.186	0.187	[0.077; 0.289]	0.053	3.509	0.000	1.370	Accepted
H3c	QLY → PI	0.111	0.112	[0.014; 0.208]	0.049	2.265	0.024	1.332	Accepted
H3d	USE → PI	0.145	0.143	[0.037; 0.255]	0.056	2.589	0.000	1.528	Accepted

Table 4. Indirect effects

Hypothesis	Paths	β	Mean	Confidence interval	Standard deviation	t-statistics	p-value	VIF	Conclusion
H4a	CRE → BI → PI	0.052	0.052	[0.010; 0.105]	0.024	2.180	0.029	Accepted	H4a
H4b	QUA → BI → PI	0.061	0.062	[0.025; 0.111]	0.022	2.782	0.005	Accepted	H4b
H4c	QLY → BI → PI	0.069	0.069	[0.034; 0.118]	0.022	3.199	0.001	Accepted	H4c
H4d	USE → BI → PI	0.063	0.062	[0.028; 0.114]	0.021	2.969	0.003	Accepted	H4d

quality and credibility are relatively more influential in shaping BI and PI. The remaining paths exhibit smaller f^2, implying limited but still meaningful explanatory contributions.

All suggested links are statistically significant and moving in the anticipated direction, according to the overall findings of the hypothesis test. The R^2 values show that the model has a good level of explanatory power, explaining 38.2% of the variance in BI and 57.1% of the variance in PI. Even though the f^2 values indicate weak individual effects, taken as a whole, they offer valuable insights into the factors that influence PI and BI. When combined, these results demonstrate the validity of the study model and provide a strong foundation for further discussion and managerial applications.

DISCUSSION OF RESEARCH FINDINGS

Using PLS-SEM, this study tested four main hypotheses (H1-H4) and their sub-hypotheses. All relationships were statistically significant, reinforcing both the theoretical and managerial contributions of the proposed model.

The results confirm H1, indicating that eWOM positively influences the BI of metro services. All four eWOM dimensions–credibility, quantity, quality, and usefulness–significantly affect BI ($p < 0.05$), implying that trustworthy, sufficient, informative, and high usefulness in online communication enhances consumers' perception of the metro brand. These findings are consistent with Kochar and Bhagat (2024), To and Nguyen (2025), and Kumar and Yang (2024), who demonstrated the impact of eWOM credibility and usefulness on service evaluation.

H2 is also supported, revealing that BI has a positive and significant impact on ticket PI ($\beta = 0.288$, $p = 0.000$). This suggests that a strong metro image enhances customers' willingness to use, recommend, and repurchase. The result aligns with Keller (1998), Rosanti et al. (2021), Salem (2023), and Nguyen et al. (2022), who highlighted the cognitive and emotional influence of BI on consumer behavior and loyalty.

The confirmation of H3 demonstrates that eWOM directly affects PI. Specifically, credibility ($\beta = 0.283$), quantity ($\beta = 0.188$), quality ($\beta = 0.112$), and usefulness ($\beta = 0.144$) positively influence PI ($p < 0.05$). This means that consumers who perceive eWOM as credible, abundant, high-quality, and possessing high usefulness are more likely to purchase metro tickets. These findings are consistent with Salem (2023), and Do et al. (2020), while differing from Pauliene et al. (2020), who reported mixed effects. Overall, eWOM–particularly its usefulness–emerges as a decisive driver of adoption for sustainable public transport services.

Finally, H4 confirms the mediating role of BI in the relationship between eWOM and PI. Each eWOM dimension, including usefulness, indirectly influences PI through BI, with significant coefficients ($p < 0.05$). This demonstrates that eWOM enhances PI primarily by improving brand perception. The result supports previous studies (Kumar & Yang, 2024; Nguyen et al., 2022; Salem, 2023), which highlight BI as a crucial mediator linking eWOM and behavioral intention. Extending this literature, the present study underscores that managing the usefulness and credibility of eWOM can effectively strengthen BI and promote metro adoption, contributing to SUM in Vietnam.

Although the f^2 are predominantly small, they still provide meaningful managerial implications. Small effects are common in behavioral research where multiple factors interact in shaping consumer perceptions. This suggests that even minor improvements in eWOM management–such as enhancing message credibility, encouraging more user-generated content (UGC), and improving information usefulness–can cumulatively yield significant real-world impacts. Metro authorities should therefore focus on long-term engagement strategies and consistent communication efforts to strengthen these subtle yet influential drivers of consumer behavior.

CONCLUSION AND MANAGERIAL IMPLICATIONS

Conclusion

This study confirms that the elements of eWOM–credibility, quantity, quality, and usefulness–positively influence BI and PI, both directly and indirectly through BI. The findings highlight a strong correlation between eWOM, BI, and young consumers' intention to buy metro tickets in Ho Chi Minh City, with an adjusted R^2 of 0.571 for the dependent variable. All hypotheses are statistically supported, reinforcing the applicability of behavioural theories such as the IAM, the TRA, and the TPB in understanding consumer responses to new public services.

Beyond theoretical contributions, the results provide practical insights into advancing sustainable urban transport. Metro operators and legislators can increase public acceptance of metro as a dependable and environmentally responsible substitute for private vehicles by using eWOM to improve BI. This promotes the use of the service by youthful customers and advances Vietnam's larger objectives of sustainable mobility, less traffic, and lower emissions. By doing this, the study emphasises how crucial it is to combine sustainability goals with digital communication tactics in order to promote the long-term growth of PT networks in developing nations.

Managerial Implications

BI plays a crucial role in encouraging metro adoption, as evidenced by the result that it strongly mediates the influence of eWOM on PI ($\beta = 0.287$). In order to take advantage of this, metro operators should highlight the metro as a sustainable urban transportation option in addition to concentrating on creating a modern, dependable, and personable image. Visual identity elements, such as the logo, colour scheme, typeface, and slogan, must be used consistently throughout all communication touchpoints, including websites, social media, outdoor advertising, and in-station materials, in order to increase recognition and trust.

Additionally, the metro's role in lowering emissions, easing traffic, and promoting green mobility should be

highlighted on digital channels. Metro can increase trust among young, tech-savvy consumers by fusing sustainability messaging with expert branding. This dual emphasis both elevates brand perception and encourages behavioural change toward sustainable PT in Ho Chi Minh City.

Trustworthiness was the most crucial direct predictor of PI (β = 0.280), underscoring the importance of accurate information in influencing young consumers' choices to use metro services. To support this dimension, operators should encourage genuine users to provide real-life experiences that highlight service quality and the metro's role in sustainable urban travel. Working with reputable key opinion leaders (KOLs), independent organisations, and transportation experts can further boost trust through objective assessments. Additionally, establishing an official, well-maintained information hub that provides transparent updates on schedules, fares, and sustainability benefits–such as reduced emissions and energy efficiency–will allow consumers to validate eWOM circulating on social media. Young customers' willingness to embrace metro as a greener option to private automobiles can be increased by presenting it as both a dependable source of transportation and a force for sustainable urban development. This will increase trust in eWOM material.

The volume of eWOM significantly influences both PI (β = 0.186) and BI (β = 0.211), showing that frequent exposure to others' experiences increases trust and favourable perceptions of metro. Operators should support the production of genuine UGC that emphasises the metro's function as a sustainable urban transportation option in addition to service quality in order to increase this effect. Initiatives that support official hashtags, content-sharing contests, or storytelling contests (like "A day with metro") can encourage community involvement and produce a lot of good eWOM. Young consumers will find digital advertisements with emotional and entertaining components more relatable. At the same time, operators must maintain reliable, official information channels to balance quantity with credibility, preventing misinformation and reinforcing the metro's sustainable positioning. Metro can improve its reputation, build long-term trust, and promote higher use of eco-friendly PT in Ho Chi Minh City by fusing sustainability messaging with a lot of real eWOM.

The utility of eWOM exerts the second-strongest influence on BI (β = 0.220) and also affects PI (β = 0.144). This highlights the importance of providing information that is practical, clear, and decision-oriented. Metro operators should prioritise distributing content that explains ticket purchasing, timetables, transfer options, safety, and the environmental benefits of metro as a sustainable transport mode. Partnerships with local organisations, navigation apps, ride-hailing platforms, and tourism websites can expand access to relevant metro information, such as station amenities and connections to other green mobility services. To improve reach and retention, the operator should diversify content formats–using instructional videos, infographics on routes and fares, and images of modern, eco-friendly facilities. Sharing this content through official websites and social media will maximise visibility among young residents, visitors, and first-time users. By making eWOM more useful and sustainability-focused, metro can reinforce its BI and encourage broader adoption of environmentally responsible public transport.

The best indicator of BI is eWOM quality (β = 0.240), which emphasises the significance of focused, thorough, and authentic material that accurately represents metro customers' experiences. High-quality eWOM indirectly promotes adoption through improved brand impression, but it has no direct impact on PI (β = 0.112). Metro operators ought to foster an atmosphere that supports genuine, in-depth content like trip vlogs, assessments of services, images of environmentally friendly station amenities, and manuals on environmentally friendly commuting techniques. As long as the content is transparent and not unduly promotional, community campaigns, hashtags, or modest awards might encourage people to share. Information credibility will rise with regular updates on scheduling, safety, and environmental advantages, as well as with consistency and clarity. By enhancing eWOM and connecting it to sustainability themes, metro can improve its BI as a cutting-edge, environmentally friendly mobility option, which will increase young consumers' acceptance and encourage longer-term use.

The results highlight how crucial it is for policymakers to include eWOM in more comprehensive, sustainable urban transportation plans. In addition to providing transportation, the metro also acts as a catalyst for lowering carbon emissions, air pollution, and traffic in Ho Chi Minh City. Supportive policies that increase credible eWOM should be created by public authorities. For example, they should work with metro operators to start citywide awareness programs that connect metro use to sustainability objectives. The social and environmental advantages of using metro versus private vehicles can be emphasised in educational programs at colleges and institutions. Policymakers should also ensure transparency by providing real-time, accurate information on metro operations through official digital platforms. By aligning communication strategies with national sustainability agendas and SDG 11 (sustainable cities and communities), regulatory bodies can foster greater trust, encourage behavioral change among young citizens, and accelerate the transition toward greener, more SUM systems.

Limitations and Directions for Future Research

This study has several limitations that should be addressed in future research.

First, the data were collected only from residents of Ho Chi Minh City, which may limit the generalizability of the findings to other regions of Vietnam. Expanding the survey to include participants from other major cities such as Hanoi, Da Nang, and Can Tho would provide a more comprehensive view of consumer perceptions toward metro services nationwide.

Second, the cross-sectional design restricts the ability to observe behavioral changes over time, particularly before and after the official operation of the metro system. Future research could adopt a longitudinal or experimental design to capture dynamic shifts in consumer behavior and validate causal relationships.

Third, this study focused primarily on four dimensions of eWOM (credibility, quantity, quality, and usefulness). Future studies may incorporate additional constructs such as trust,

perceived value, and environmental concern to enrich the theoretical model and explain consumer adoption more comprehensively.

Finally, as the data were collected through self-reported surveys, potential social desirability bias may exist. Future research should consider mixed methods or behavioral data to improve the robustness and validity of the findings.

Funding: No funding source is reported for this study.

Acknowledgments: The author would like to thank the survey respondents for their participation and support during data collection.

Ethical statement: The author stated that the study does not require any ethical approval. The authors further stated that the survey was conducted anonymously, no personal identifying information was collected, and participation was entirely voluntary.

AI statement: The author stated that no generative AI or AI-based tools were used in the writing, analysis, or revision of this manuscript. All content was produced and validated solely by the author.

Declaration of interest: No conflict of interest is declared by the author.

Data sharing statement: Data supporting the findings and conclusions are available upon request from the author.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T

Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., & Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics, 34*(7), 1177-1190. https://doi.org/10.1016/j.tele.2017.05.008

Al-Dmour, H., Aloqaily, A., Al-Qaimari, R., & Al-Hassan, M. (2021). The effect of the electronic word of mouth on purchase intention via the brand image as a mediating factor: An empirical study. *International Journal of Networking and Virtual Organisations, 24*(2), 182-199. https://doi.org/10.1504/IJNVO.2021.114732

Anderson, E. W. (1998). Consumer satisfaction and word-of-mouth. *Journal of Service Research, 1*(1), 5-17. https://doi.org/10.1177/109467059800100102

Arndt, J. (1967). *Word of mouth advertising: A review of the literature*. Advertising Research Foundation.

Beneke, J., de Sousa, S., Mbuyu, M., & Wickham, B. (2016). The effect of negative online customer reviews on brand equity and purchase intention of consumer electronics in South Africa. *The International Review of Retail, Distribution and Consumer Research, 26*(2), 171-201. https://doi.org/10.1080/09593969.2015.1068828

Berger, J., Sorensen, A. T., & Rasmussen, S. J. (2010). Positive effects of negative publicity: When negative reviews increase sales. *Marketing Science, 29*(5), 815-827. https://doi.org/10.1287/mksc.1090.0557

Chen, Y., & Xie, J. (2008). Online consumer review: Word-of-mouth as a new element of marketing communication mix. *Management Science, 54*(3), 477-491. https://doi.org/10.1287/mnsc.1070.0810

Chevalier, J. A., & Mayzlin, D. (2006). The effect of word of mouth on sales: Online book reviews. *Journal of Marketing Research, 43*(3), 345-354. https://doi.org/10.1509/jmkr.43.3.345

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Lawrence Erlbaum Associates.

Dellarocas, C. (2003). The digitization of word of mouth: Promise and challenges of online feedback mechanisms. *Management Science, 49*(10), 1407-1424. https://doi.org/10.1287/mnsc.49.10.1407.17308

Ezzat, M., & Abd Elsalam, M. A. E. (2022). Impact of electronic word of mouth on purchase intention: Mediating role of brand image and brand trust of tourist destinations and hospitality establishments in Egypt. *Minia Journal of Tourism and Hospitality Research, 14*(3), 153-173. https://doi.org/10.21608/MJTHR.2022.170036.1070

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Addison-Wesley.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50. https://doi.org/10.1177/002224378101800104

Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8

Kala, D., & Chaubey, D. S. (2018). The effect of eWOM communication on brand image and purchase intention towards lifestyle products in India. *International Journal of Services, Economics and Management, 9*(2), 143-157.

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing, 57*(1), 1-22. https://doi.org/10.1177/002224299305700101

Keller, K. L. (1998). *Strategic brand management: Building, measuring, and managing brand equity*. Prentice Hall.

Keller, K. L. (2001). Building customer-based brand equity: A blueprint for creating strong brands. *Marketing Science Institute*. https://thearf-org-unified-admin.s3.amazonaws.com/MSI/2020/06/MSI_Report_01-107.pdf

Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.

Kochar, N., & Bhagat, N. (2024). Impact of e-WOM on the brand image and purchase intention of the consumer: An empirical study. In S. Sulaja, K. Nayyar, K. Rojhe, & S. Sharma (Eds.), *Ethical AI and data management strategies in marketing* (pp. 17). IGI Global. https://doi.org/10.4018/978-8-3693-6660-8.ch008

Kotler, P., & Armstrong, G. (2018). *Principles of marketing* (17th ed.). Pearson.

Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson.

Kotler, P., Bowen, J. T., & Makens, J. C. (2006). *Marketing for hospitality and tourism* (4th ed.). Pearson.

Kotler, P., Keller, K. L., Ang, S. H., Leong, S. M., & Tan, C. T. (2011). *Marketing management: An Asian perspective* (5th ed.). Pearson.

Kumar, S., Rajaguru, R., & Yang, L. (2024). Investigating how brand image and attitude mediate consumer susceptibility to eWOM and purchase intention. *Journal of Retailing and Consumer Services, 81*, Article 104051. https://doi.org/10.1016/j.jretconser.2024.104051

National Assembly. (2005, November 29). *Law on Youth No. 53/2005/QH11*. Vietnamese Government Portal. https://thuvienphapluat.vn/van-ban/Van-hoa-Xa-hoi/Youths-Law-No-53-2005-QH11-of-November-29-2005-116836.aspx

Nguyen, V. T., Nguyen, T. N. A., & Ngo, T. X. B. (2022). Impact of brand equity on consumer purchase decision: A case study of mobile retailer in Ho Chi Minh City, Vietnam. *Journal of Eastern European and Central Asian Research, 9*(2), 229-239. https://doi.org/10.15549/jeecar.v9i2.762

Park, D. H., & Lee, J. (2008). eWOM overload and its impact on consumer behavioral intention depending on consumer involvement. *Electronic Commerce Research and Applications, 7*(4), 386-398. https://doi.org/10.1016/j.elerap.2007.11.004

Pauliene, R., Vaiginiene, E., & Abbas, K. (2020). *Relationship between eWOM in social media and customer's purchase intentions in Egypt and Lithuania*. 13th Annual Conference of the EuroMed Academy of Business. https://www.researchgate.net/publication/344548112

Rosanti, N., Salam, K. N., & Panus. (2021). The effects of brand image and product quality on purchase decisions. *Quantitative Economics and Management Studies, 2*(6), 365-375. https://doi.org/10.35877/454RI.jems360

Saktiawan, B., Permatasari, H. I., & Wulandari, T. R. (2023). The influence of brand image on purchase intention in social commerce TikTok Shop: The role of trust. *Sebelas Maret Business Review, 8*(1), Article 10. https://doi.org/10.20961/smbr.v8i1.75851

Salem, M. (2023). The impact of brand image on and purchase intentions: A study of beauty and personal care products. In *AI and business, and innovation research: Understanding the potential and risks of AI for modern enterprises* (pp. 561-569). Springer. https://doi.org/10.1007/978-3-031-42085-6_48

Slamet, S., Prasetyo, B. P. W., & Azmala, I. (2022). The impact of electronic word of mouth and brand image on online purchase decisions moderated by price discount. *European Journal of Business & Management Research, 7*(2), 86-91. https://doi.org/10.24018/ejbmr.2022.7.2.1340

Solomon, M. R. (2018). *Consumer behavior: Buying, having, and being* (12th ed.). Pearson.

Sussman, S. W., & Siegal, W. S. (2003). Informational influence in organizations: An integrated approach to knowledge adoption. *Information Systems Research, 14*(1), 47-65. https://doi.org/10.1287/isre.14.1.47.14767

Tafolli, F., Qema, E., & Hameli, K. (2025). The impact of electronic word-of-mouth on purchase intention through brand image and brand trust in the fashion industry: Evidence from a developing country. *Research Journal of Textile and Apparel, 29*(4), 1160-1176. https://doi.org/10.1108/RJTA-07-2024-0131

Tuoi Tre. (2024). Cat Linh-Ha Dong metro line has operated for over 2 years, but ridership remains low. *Tuoi Tre*. https://tuoitre.vn/cat-linh-ha-dong-metro-line-has-operated-for-over-2-years-but-ridership-remains-low-202412310945067.htm

To, A. T., & Nguyen, K. Q. T. (2025). The role of electronic word-of-mouth in shaping brand image and driving purchase intention. *Journal of Finance – Marketing Research, 7*, 1-xx. https://doi.org/10.52932/jfm.v3i1e.648

VietnamPlus. (2025, January 6). *Ben Thanh–Suoi Tien metro line sees passenger numbers triple initial targets*. VietnamPlus. https://en.vietnamplus.vn/ben-thanh-suoi-tien-metro-line-sees-passenger-numbers-triple-initial-targets-post307848.vnp