



Vietnamese Consumers Shopping Behavior: Adoptions of Shopee and Lazada Using TAM

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ABSTRACT

In recent years, the business market has witnessed a transformative trend driven by the information technology industry, leading to the emergence of e-commerce platforms. Among these platforms, Shopee and Lazada dominates consumption activities in Vietnam, with 60% and 30% market shares, respectively. Despite global research on factors affecting online shopping behavior, Vietnam lacks comprehensive studies addressing the specific factors influencing consumers' intention to shop online. Applying existing theoretical models to Vietnam's unique economic, cultural, and social context may not be entirely suitable. This study employs quantitative research method, adapting relevant theories to develop a customized research model. The investigation focuses on consumers' intention to shop online with the adoption of shopping platforms, namely Shopee and Lazada, drawing insights from a sample of 368 Vietnamese consumers in Vietnam. Key findings reveal five critical factors shaping Vietnamese online shopping behavior: Perceived Usefulness, Perceived Ease of Use, Price, Trust, and Social Influence. The study's implications extend to businesses seeking to enhance online sales and marketing strategies. By addressing these factors, organizations can improve consumers' online shopping behavior while navigating the dynamic e-commerce landscape.

Keywords: Shopee, Lazada, shopping behavior, online shopping, technology acceptance model.

1. Introduction

Vietnam's e-commerce ecosystem witnesses remarkable growth, driven by digital transformation and changing consumer behavior. Statista (2024) and Nielsen (2024) reports that Shopee dominates the market, with approximately 60% of Vietnamese online shoppers using the platform. Its success lies in its social commerce features, allowing users to interact, share product recommendations, and participate in flash sales. Lazada follows closely, capturing around 30% of the market share. It appeals to consumers through its diverse product range, competitive pricing, and reliable delivery services. Tiki.vn caters to specific niches, such as books, electronics, and fashion. Its user base constitutes about 10% of the e-commerce market. Tiki's focus on quality and customer satisfaction contributes to its loyal following. Sendo's social commerce approach resonates with Vietnamese consumers, resulting in an adoption rate of approximately 8%. User-generated content, reviews, and personalized recommendations drive engagement. In summary, Vietnam's e-commerce landscape is dynamic, with Shopee leading the pack. As internet penetration continues to rise, these platforms play a pivotal role in shaping consumer preferences and driving economic growth.

The rapid proliferation of e-commerce platforms in developing economies in general, and Vietnam in particular, sparks significant research interest. Understanding the factors that influence consumers' intentions to adopt these platforms is crucial. Among these factors, perceived usefulness stands out as a pivotal psychological determinant of users' attitudes and behaviors (Davis, 1989). Perceived usefulness, rooted in the Technology Acceptance Model (TAM), represents individuals' subjective assessments of how adopting a specific technology (such as an e-commerce platform) enhances their efficiency and effectiveness in achieving specific goals (Venkatesh & Davis, 2000). According to TAM, perceived usefulness plays a critical role in shaping users' behavioral intentions toward technology adoption (Moon & Kim, 2001). When individuals perceive a technology as helpful in meeting their needs, they are more likely to embrace and integrate it into their daily activities. This foundational concept has undergone extensive study and validation across various technological domains, providing valuable insights into the fundamental mechanisms driving technology adoption (Gefen et al., 2003). In the context of e-commerce adoption in developing economies, the relationship between perceived usefulness and behavioral intentions gains particular relevance. These economies present unique challenges and opportunities due to distinct socio-economic, cultural, and technological factors (Rogers, 2003). At the heart of technology adoption lies the concept of perceived ease of use, an integral facet of the TAM proposed by Davis (1989). This construct captures users' subjective evaluations of a technology's simplicity and user-friendliness. According to the TAM, individuals are more likely to develop positive attitudes toward technology when they perceive it as uncomplicated and easy to use. This positive attitude, in turn, strengthens their intention to adopt the technology (Venkatesh & Davis, 2000). Extensive research across diverse technological domains consistently supports this foundational premise, emphasizing the universal role of perceived ease of use in shaping user behavior. However, the intricate socio-economic and cultural contexts of developing economies introduce unique variables. These contexts influence how users perceive ease of use and subsequently embrace e-commerce platforms (Mathieson, 1991). In summary, the TAM provides a theoretical framework for understanding users' adoption of technology. Within this model,

two critical constructs - perceived usefulness and perceived ease of use - play pivotal roles. Rooted in the TAM, the former reflects users' subjective assessment of how technology enhances their effectiveness in achieving tasks (Davis, 1989). When individuals perceive a technology as beneficial and valuable, they are more likely to embrace it. Prior research consistently highlights the significance of perceived usefulness in predicting users' intentions to adopt technology (Davis, 1989; Legris et al., 2003). Within the TAM, the latter captures users' evaluations of the simplicity and accessibility of using a technology (Venkatesh & Davis, 2000). When a technology is perceived as easy to use, it positively influences users' attitudes and adoption intentions. However, the impact of perceived ease of use varies. While crucial, it may not always exert as pronounced an effect as perceived usefulness (Agarwal & Prasad, 1998). The context of Vietnam economies introduces unique socio-economic and cultural factors that influence these constructs. Investigating how perceived ease of use resonates with users' intentions to embrace e-commerce platforms becomes critical in these dynamic settings. Successful e-commerce adoption strategies must account for these nuances.

In Vietnam, the trajectory of technological adoption unfolds through intricate interactions among individual behaviors, socioeconomic factors, and technological advancements. As individuals engage with e-commerce platforms, they navigate a multifaceted ecosystem of features, services, and interactions. These experiences significantly shape their perceptions and intentions toward the technology (Venkatesh & Bala, 2008). In this context, the interplay between adoption intentions and actual adoption behavior becomes crucial. The unique socio-cultural and economic factors prevalent in developing economies necessitate closer scrutiny of this relationship (Lee et al., 2003). Understanding how adopting e-commerce platforms influences individuals' broader intentions toward digital commerce holds implications for policymakers, businesses, and researchers seeking to harness the transformative potential of online markets. To explore these dynamics, our research paper employs the TAM as the guiding theoretical framework. Within this model, we delve into the intricate relationships among consumers' attitudes and five key variables: perceived usefulness, perceived ease of use, price, trust, social influence, in the two most popular platforms in Vietnam - Shopee and Lazada. By unraveling these connections, we aim to provide actionable insights for effective e-commerce adoption strategies in Vietnam.

2. Research Hypotheses

H1: Perceived usefulness affects platform-adoption shopping behavior

The concept of perceived usefulness, introduced by Davis (1989), occupies a pivotal position within the TAM. It represents users' subjective assessment of how a technology enhances their performance in specific tasks. In the context of e-commerce platforms, perceived usefulness refers to consumers' perceptions of how adopting these platforms would facilitate their shopping needs. Agarwal and Prasad (1998) found that perceived usefulness significantly influenced users' intentions to adopt online shopping platforms. When users perceive e-commerce platforms as beneficial for enhancing their productivity, they are more inclined to engage in online shopping activities. Li et al. (2019) observed that users who perceived e-commerce platforms as applicable were more likely to participate in online shopping. This alignment between perceived usefulness and adoption intentions underscores its critical role. Aichner and Jacob (2015) highlighted that perceived usefulness was a key factor influencing consumers' attitudes toward e-commerce adoption in emerging markets. These markets, characterized by the coexistence of traditional and digital retail channels, emphasize the importance of perceived usefulness in attracting consumers to e-commerce platforms. In terms of contextual considerations, Vietnam faces unique challenges, including limited access to physical stores, infrastructural limitations, and geographical barriers. Consequently, consumers in these contexts often turn to online platforms. The perceived usefulness of e-commerce platforms becomes crucial as users assess whether these platforms effectively address their shopping needs. Extending this perspective to the Vietnam economy, where access to technology and digital experiences might be relatively new for some users, perceived usefulness can be a decisive factor. E-commerce platforms can demonstrate their utility by offering diverse products, convenient shopping experiences, and potentially lower prices. By doing so, they positively influence consumers' intentions to adopt. Consumer behavior theory, as articulated by Ajzen (1991) in the Theory of Planned Behavior, underscores the significance of perceived usefulness in shaping attitudes and subsequent actions. In summary, understanding and leveraging perceived usefulness are essential for successful e-commerce adoption strategies, especially in developing economies where digital experiences are still evolving.

H2: Perceived ease of use affects platform-adoption shopping behavior

The construct of perceived ease of use, as conceptualized by Davis (1989), centers on users' beliefs regarding the effort required to understand and operate a technology. In the context of e-commerce platforms, perceived ease of use refers to consumers' perceptions of how straightforward and accessible these platforms are for making purchase decisions. Venkatesh and Davis (2000) showed that perceived ease of use significantly influenced users' attitudes toward online shopping platforms. When users find e-commerce interfaces intuitive and user-friendly, their adoption intentions increase. Woon et al. (2015) highlighted the role of perceived ease of use in shaping users' intentions to use mobile commerce applications. This underscores the relevance of this construct in technology adoption. Chong et al. (2018) emphasized that perceived ease of use significantly impacted consumers' intentions to adopt e-commerce platforms in emerging economies. Al-maghrabi et al. (2011) similarly indicated that ease of use played a pivotal role in encouraging e-commerce adoption in Saudi Arabia, highlighting its global relevance. Positive user experiences with e-commerce platforms, as found by Suki and Suki (2017), contribute to higher perceived ease of use and increased adoption intentions. The Vietnam economy exhibits varying levels of digital literacy, access to technology, and user experience with online platforms. As such, intuitively designed and easy-to-navigate e-commerce platforms become crucial. Users in these contexts may prioritize practical benefits and utility over concerns about ease of use. The ability of e-commerce platforms to offer a wide range of products, cost savings, and convenience becomes paramount. Platforms that prioritize user-centered design and straightforward navigation are more likely to foster positive behavioral intentions among users. Perceived usefulness, another vital determinant of technology adoption, refers to users' beliefs about how technology enhances their performance. In Vietnam, where practical benefits matter, perceived usefulness encapsulates the value

that e-commerce platforms bring to users' lives. In summary, understanding and optimizing both perceived ease of use and perceived usefulness are essential for successful e-commerce adoption strategies, especially in Vietnam.

H3: Price affects platform-adoption shopping behavior

Price, as the monetary value consumers must pay to acquire desired products or services, significantly shapes purchasing decisions. In the digital age, where e-commerce platforms proliferate, understanding the impact of price becomes crucial, especially in the context of Vietnam economy. Price expectations is important when shopping via an online platform as consumers anticipate that online prices will be more competitive than those in traditional brick-and-mortar stores. This expectation drives their preference for online shopping (Sangadji & Sopiah, 2013). Vietnamese consumers exhibit a price-conscious mindset. They prioritize affordability when making purchase decisions (Tjiptono, 2008). Additionally, online shopping benefits both sellers and buyers. Sellers avoid the costs associated with physical storefronts, while buyers gain access to a wider range of products and potentially better prices (Kotler & Keller, 2016). Hasslinger et al. (2007) highlight that consumers trust online purchases to save them money and enable price comparisons. Customers often rely on price as an indicator of product quality, especially when they cannot physically inspect items online (Jiang & Rosenbloom, 2005). The perceived value derived from price influences consumers' trust in e-commerce platforms (Chong et al., 2018). In summary, price remains a critical factor in shaping consumers' online shopping behavior, transcending geographical boundaries. E-commerce platforms that prioritize affordability, user-centered design, and straightforward navigation are more likely to attract and retain buyers in Vietnam.

H4: Trust affects platform-adoption shopping behavior

Trust plays a central role in online interactions, especially within e-commerce platforms where users share personal and financial information. Understanding the significance of trust is critical for promoting successful e-commerce adoption. Gefen (2000) and McKnight and Chervany (2001) emphasize the importance of trust in shaping users' intentions to engage in online transactions. Trust significantly influences users' willingness to adopt and participate in e-commerce activities. Users' trust perceptions are influenced by various factors, including platform credibility, security measures, and past experiences. Bhattacharjee (2002) proposed a theoretical model highlighting trust as a mediator between perceived usefulness and users' intentions to engage in online activities. Trust acts as a bridge, allowing users to overcome perceived risks and uncertainties associated with online interactions. In Vietnam, where digital experiences may be relatively new, fostering trust becomes essential for encouraging technology adoption. E-commerce platforms can establish trust through transparent policies, secure payment gateways, and reliable delivery mechanisms. Studies in emerging markets by Suh and Han (2002) and McKnight et al. (2002) indicate that trust significantly influences users' intentions to adopt online platforms. In the context of e-commerce platforms in developing economies, perceived trust in online transactions becomes a pivotal factor mediating the relationship between perceived usefulness and behavioral intentions. Trust enables users to navigate uncertainties and confidently engage in online activities. In summary, fostering trust is essential for successful e-commerce adoption, especially in the dynamic Vietnam economy. Platforms that prioritize transparency and security build user confidence and facilitate technology adoption.

H5: Social influence affects platform-adoption shopping behavior

The impact of social networks and interpersonal relationships on technology adoption has garnered significant attention in understanding users' behavioral intentions. Drawing from Rogers' Diffusion of Innovations theory (Rogers, 2003), we recognize the pivotal role of social networks in the adoption process. From a collective behaviors perspective, innovations spread more rapidly through social interactions. Individuals rely on trusted sources within their networks for guidance when considering new technologies (Brown & Venkatesh, 2005). Social influence extends beyond individual preferences, tapping into collective behaviors. Recommendations from peers significantly shape users' adoption decisions. Brown and Venkatesh (2005) found that users who received favorable recommendations from peers were more likely to embrace new technologies. Yang et al. (2012) observed a positive impact of social influence on users' intentions to adopt mobile apps. For e-commerce adoption, Al-Debei and Avison (2010) demonstrated that social influence plays a crucial role in shaping e-commerce adoption behaviors in Jordan. Users are more likely to adopt e-commerce platforms if they receive positive endorsements from their social circles. Sivakumar and Raj (2007) highlighted the significance of social influence in technology adoption within collectivist cultures. In developing economies, characterized by collectivist values, social influence significantly affects individual intentions. Trust and recommendations from close connections play a vital role (Suh & Han, 2002). Social networks act as conduits for information flow, impacting adoption decisions and reflecting broader cultural dynamics. In summary, fostering positive social influence and leveraging interpersonal relationships are essential strategies for successful technology adoption, especially in Vietnam.

3. Sample, Results, and Discussion

3.1. Sample

This study involved surveying 400 individuals from Vietnam to collect survey data. The survey was administered through a questionnaire via Google Forms. The collected information served multiple purposes: assessing reliability and validity, testing the measurement scale, and validating the model. Specifically, the data helped evaluate the reliability and validity of the measurement scale used in the study. By analyzing responses, the study assessed the effectiveness of the measurement scale in capturing relevant constructs. The collected data also contributed to validating the suitability of the proposed model. The process involved several steps, after collecting responses, observations that did not meet the study's requirements were eliminated. The author, then, encoded and entered the survey data for further analysis using SPSS software. To ensure the research sample's representativeness, the author randomly selected individuals in Vietnam. A total of 400 survey samples were distributed, with 377 (94.25%) responses received. Of these, 368 valid

survey samples (accounting for 97.61%) were used for the study. The subsequent analysis relied on these 368 observations. In summary, this rigorous approach allowed the study to explore the Vietnamese's attitudes and behaviors, shedding light on their technology adoption patterns and preferences.

3.2. Data structure

Table 1: Demographic statistics

Characteristics		Number	Percentage (%)
Gender	Male	165	44.84
	Female	203	55.16
Age	Below 20	35	9.51
	21 - 30	214	58.15
	31 - 40	78	21.20
	Above 40	41	11.14
Marital status	Single	245	66.58
	Married	123	33.42
Residency	Hanoi	141	38.32
	Ho Chi Minh City	158	42.93
	Others	69	18.75
Platform	Shopee	121	32.88
	Lazada	72	19.57
	Both	175	47.55
Income	< 10m VND	44	11.96
	10m - 15m VND	70	19.02
	15m - 20m VND	106	28.80
	20m - 30m VND	112	30.43
	30m - 40m VND	23	6.25
	> 40m VND	13	3.53

The data is considered well-structured with a 10.32% difference between genders, the majority being female. Around 58% of respondents age between 21 and 30, 21.20% between 31 and 40, and only 9.51%, and 11.14% below 20 and above 40, respectively, the distribution is considered good. Similarly, the marital status of 66.58% single and 33.42% married describes well the marital status of consumers in Vietnam as consumption activities in general, and online consumption via online platforms in particular, are typically an activity of the singles. In terms of residency, the ratios of 38.32% people from Hanoi, 42.93% from Ho Chi Minh City, and only 18.75% from other cities should represent the population of Vietnamese consumers as Hanoi and Ho Chi Minh City are the two most 'promising' cities for the employment opportunities it offers, they are also the two economic centers of Vietnam with dynamic consumption. Regarding income, the majority (30.43%) earn between 20 to 30 million, followed closely by 28.80% between 15 to 20 million, which is typical for most Vietnamese. Only 44 respondents (11.96%), 70 respondents (19.02%) and 13 respondents (3.53%) receive under 10 million, between 10 and 15 million, and above 40 million, respectively. Of the 368 valid survey samples, the majority (47.55%) answered both the survey sections for Shopee and Lazada, 32.88% only Shopee, and 19.57% only Lazada. Thus, 296 observations available for Shopee regression and 247 for Lazada regression, which is adequate for 25 observed variables in the model. Overall, the data can represent the Vietnamese consumers population in Vietnam and should qualify for regression.

3.3. Measurement overview

Table 2: Reliability & Validity Assessment

Shopee	Lazada
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Variable	Corrected Correlation	Item	-	Total Variable	Corrected Correlation	Item	-	Total
Perceived Usefulness (PU) Cronbach's Alpha = 0.896	PU1	0.734		Perceived Usefulness (PU) Cronbach's Alpha = 0.902	PU1	0.739		
	PU2	0.648			PU2	0.725		
	PU3	0.678			PU3	0.724		
	PU4	0.671			PU4	0.746		
	PU5	0.766			PU5	0.788		
Perceived Ease of Use (PE) Cronbach's Alpha = 0.904	PE1	0.787		Perceived Usefulness (PE) Cronbach's Alpha = 0.928	PE1	0.786		
	PE2	0.812			PE2	0.784		
	PE3	0.658			PE3	0.778		
	PE4	0.691			PE4	0.788		
	PE5	0.842			PE5	0.765		
Price (PC) Cronbach's Alpha = 0.747	PC1	0.661		Price (PC) Cronbach's Alpha = 0.764	PC1	0.704		
	PC2	0.629			PC2	0.698		
	PC3	0.656			PC3	0.682		
	PC4	0.660			PC4	0.688		
Trust (TR) Cronbach's Alpha = 0.725	TR1	0.700		Trust (TR) Cronbach's Alpha = 0.699	TR1	0.682		
	TR2	0.686			TR2	0.688		
	TR3	0.637			TR3	0.671		
	TR4	0.681			TR4	0.690		
Social Influence (SI) Cronbach's Alpha = 0.822	SI1	0.746		Social Influence (SI) Cronbach's Alpha = 0.852	SI1	0.793		
	SI2	0.753			SI2	0.775		
	SI3	0.755			SI3	0.787		
	SI4	0.681			SI4	0.658		
Purchase Behavior (PB) Cronbach's Alpha = 0.881	PB1	0.788		Purchase Behavior (PB) Cronbach's Alpha = 0.798	PB1	0.715		
	PB2	0.774			PB2	0.684		
	PB3	0.781			PB3	0.703		

Cronbach's Alpha test shows that the coefficients of all variables (five independent, one dependent) are greater than 0.6, and the total correlation coefficients of each item greater than 0.3. Thus, no variables are eliminated, the scales are suitable for further analysis.

3.4. Results and Discussion

Table 3 summarizes the linear regression analysis results, which examines the relationship between the five independent variables and the dependent variable. All independent variables are statistically significant and have positive impacts on consumers' purchase behavior on their respective shopping platforms. Price is the most impactful factor on both platforms (0.415 for Shopee and 0.550 for Lazada), followed by social influence for Shopee (0.324). It implies that consumers could find several goods at their most reasonable prices, with discounts, and promotions, ... which stimulate them to purchase on shopping platforms. Shopee appears to out-perform Lazada at promotional pricing (PC4) with its mean of 4.17 compared to 3.50 of its competitor, but Lazada receives a 'better' recognition for price comparison (PC1) and price being reasonable (PC2). Additionally, while the decision to shop online using Shopee is greatly influenced by friends and family, it is not the same for Lazada. The reason can be that Lazada has a smaller network than Shopee, thus, not as beneficial network effect; for example, SI1 (family uses Shopee/ Lazada) and SI2 (family recommends Shopee/ Lazada) record the means of 4.03 and 3.91 for Shopee but only 3.74 and 3.22 for Lazada. The difference is even greater for influence of friends (SI3 & SI4) with the means of 4.48 and 4.40 for Shopee but only 3.68 and 3.32 for Lazada. As expected, perceived usefulness and perceived ease of use share similar impacts on online shopping for Shopee and Lazada, as well as trust. Hence, the key to Shopee's popularity is its broader network, and, in turn, its more beneficial network effect.

Table 3: Linear Regression Results

Shopee		Lazada	
Variable	Standardized Coefficients	Variable	Standardized Coefficients
PU	0.231***	PU	0.227***
PE	0.252**	PE	0.249***
PC	0.415***	PC	0.550***
TR	0.105**	TR	0.113**
SI	0.324***	SI	0.212**
Adjusted R ² = 0.808	** Sig. 5%	Adjusted R ² = 0.711	** Sig. 5%
	*** Sig. 1%		*** Sig. 1%

4. Conclusion

This comprehensive research investigates the adoption of e-commerce in Vietnam, leveraging the Technology Acceptance Model (TAM). By exploring the intricate links between consumers' e-commerce attitudes and various influencing factors, this study yields valuable insights with implications for both academic understanding and practical applications. Key findings shed light on the multifaceted web of elements that shape consumer behavior within the context of e-commerce adoption, from perceived ease of use and usefulness to price, social influence, trust. These variables collectively influence consumers' purchase behavior in e-commerce platforms. The study advances TAM by providing a holistic understanding of these factors, bridging theoretical insights with actionable guidance for businesses and policymakers navigating the dynamic e-commerce landscape in Vietnam. The support for all proposed hypotheses underscores the TAM's robustness in capturing the complexities of e-commerce adoption. While the study focuses on a specific country, Vietnam, it still provides a valuable foundation for further research. By comparing TAM for the two most popular shopping platforms - Shopee and Lazada, the research highlights the importance of building a user network and the network's impacts on the platform itself. In summary, this research serves as a steppingstone toward comprehending the intricate interplay of factors that drive or hinder e-commerce adoption in developing countries.

References

- Agarwal, R., & Prasad, J. (1998). The Antecedents and Consequents of User Perceptions in Information Technology Adoption. *Decision Support Systems*, 22, 15-29.
- Aichner, T., & Jacob, F. (2015). Measuring the Degree of Corporate Social Media Use. *International Journal of Market Research*, 57, 257-275.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Ajzen, I., & Fishbein, M. (1975). A Bayesian Analysis of Attribution Processes. *Psychological Bulletin*, 82, 261.
- Al-Debei, M. M., & Avison, D. (2010). Developing a Unified Framework of the Business Model Concept. *European Journal of Information Systems*, 19, 359-376.
- Ali-Hassan, H., Nevo, S., & Akarahanna, E. (2015). Adoption and Use of Social Media in Small and Medium-Sized Enterprises. *Decision Support Systems*, 67, 260-271.
- Al-Maghrabi, T., Dennis, C., & Halliday, S. V. (2011). The Impact of Website Quality on Customer Satisfaction and Purchase Intentions: Evidence from Saudi Arabia. *International Journal of Information Management*, 31, 647-660.
- Bagozzi, R. P. (1982). A Field Investigation of Causal Relations among Cognitions, Affect, Intentions, and Behavior. *Journal of Marketing Research*, 19, 562-584.
- Bearden, W. O., & Etzel, M. J. (1982). Reference Group Influence on Product and Brand Purchase Decisions. *Journal of Consumer Research*, 9, 183-194.
- Bhattacharya, A., & Srivastava, M. (2020). A Framework of Online Customer Experience: An Indian Perspective. *Global Business Review*, 21, 800-817.
- Bhattacharjee, A. (2002). Individual Trust in Online Firms: Scale Development and Initial Test. *Journal of Management Information Systems*, 19, 211-241.
- Brislin, R. W. (1980). Translation and Content Analysis of Oral and Written Material. *Handbook of Cross-Cultural Psychology*, 2, 349-444.
- Brown, S. A., & Venkatesh, V. (2005). Model of Adoption of Technology in Households: A Baseline Model Test and Extension Incorporating Household Life Cycle. *MIS Quarterly*, 29, 399-426.

- Byun, H., Chiu, W., & Bae, J. (2018). Exploring the Adoption of Sports Brand Apps: An Application of the Modified Technology Acceptance Model. *International Journal of Asian Business and Information Management*, 9, 52-65.
- Chen, L. D., & Tan, W. (2004). Measurement of Technology-Based Service Encounter Quality. *Managing Service Quality: An International Journal*, 14, 377-389.
- Cheung, C. M. K., & Thadani, D. R. (2012). The Impact of Electronic Word-of-Mouth Communication: A Literature Analysis and Integrative Model. *Decision Support Systems*, 54, 461-470.
- Chong, A. Y., Xia, W., & Rong, K. (2018). Understanding the Influencing Factors of Android Mobile App Download Intention among College Students: A Modified TAM Perspective. *Journal of Systems and Software*, 135, 1-10.
- Conner, M., & Armitage, C. J. (1998). Extending the Theory of Planned Behavior: A Review and Avenues for Further Research. *Journal of Applied Social Psychology*, 28, 1429-1464.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13, 319-340.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35, 982-1003.
- Dholakia, R. R., Bagozzi, R. P., & Pearo, L. K. (2004). A Social Influence Model of Consumer Participation in Network- and Small-Group-Based Virtual Communities. *International Journal of Research in Marketing*, 21, 241-263.
- Dogruel, L., Joeckel, S., & Bowman, N. D. (2015). The Use and Acceptance of New Media Entertainment Technology by Elderly Users: Development of an Expanded Technology Acceptance Model. *Behaviour & Information Technology*, 34, 1052-1063.
- Doolin, B., Dillon, S., Thompson, F., & Corner, J. L. (2005). Perceived Risk, the Internet Shopping Experience and Online Purchasing Behavior: A New Zealand Perspective. *Journal of Global Information Management*, 13, 66-88.
- Dutta, A., & Mia, I. (2011). Factors Affecting e-Commerce Adoption in SMEs: An Exploratory Study in Singapore. *International Journal of Information Management*, 31, 360-371.
- Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantinou, I. D., Duan, Y., Edwards, J. S., & Raman, K. R. (2019). Impact of COVID-19 Pandemic on Information Management Research and Practice: Transforming Education, Work and Life. *International Journal of Information Management*, 55, Article ID: 102211.
- Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-Services Adoption: A Perceived Risk Facets Perspective. *International Journal of Human-Computer Studies*, 59, 451-474.
- 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, 39-50.
- Gefen, D. (2000). E-Commerce: The Role of Familiarity and Trust. *Omega*, 28, 725-737.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in Online Shopping: An Integrated Model. *MIS Quarterly*, 27, 51-90.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge Management: An Organizational Capabilities Perspective. *Journal of Management Information Systems*, 18, 185-214.
- Goodhue, D. L., & Thompson, R. L. (1995). Task-Technology Fit and Individual Performance. *MIS Quarterly*, 19, 213-236.
- Hair Jr., J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. *Sage Publications*.
- Hajli, M. N. (2014). A Study of the Impact of Social Media on Consumers. *International Journal of Market Research*, 56, 387-404.
- Harris, L., & Rae, A. (2009). Web 2.0 and Virtual Shoppers: A Discourse Analysis of e-Commerce Retailing Literature. *Journal of Business & Economics Research*, 7, 15-28.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS Path Modeling in New Technology Research: Updated Guidelines. *Industrial Management & Data Systems*, 116, 2-20.
- 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, 115-135.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. In R. R. Sinkovics, & P. N. Ghauri (Eds.), *New Challenges to International Marketing (Advances in International Marketing, Vol. 20)* (pp. 277-319). Emerald Group Publishing Limited.

- Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-Related Values*. Sage Publications.
- Jarvenpaa, S. L., Tractinsky, N., & Vitale, M. (2000). Consumer Trust in an Internet Store. *Information Technology and Management*, 1, 45-71.
- Kesharwani, A., & Singh, B. (2012). Investigating Barriers in Adoption of Mobile Banking in India: A Structural Equation Modeling Approach. *International Journal of Bank Marketing*, 30, 355-373.
- Khan, A. G., Lima, R. P., & Mahmud, M. S. (2021). Understanding the Service Quality and Customer Satisfaction of Mobile Banking in Bangladesh: Using a Structural Equation Model. *Global Business Review*, 22, 85-100.
- Kim, D. J., Song, Y. I., Braynov, S. B., & Rao, H. R. (2005). A Multidimensional Trust Formation Model in B-to-C e-Commerce: A Conceptual Framework and Content Analyses of Academia/Practitioner Perspectives. *Decision Support Systems*, 40, 143-165.
- Kock, N. (2015). Common Method Bias in PLS-SEM: A Full Collinearity Assessment Approach. *International Journal of E-Collaboration*, 11, 1-10.
- Koufaris, M. (2002). Applying the Technology Acceptance Model and Flow Theory to Online Consumer Behavior. *Information Systems Research*, 13, 205-223.
- Lai, P. C. (2017). The Literature Review of Technology Adoption Models and Theories for the Novelty Technology. *JISTEM-Journal of Information Systems and Technology Management*, 14, 21-38.
- Lee, J. N., & Turban, E. (2001). A Trust Model for Consumer Internet Shopping. *International Journal of Electronic Commerce*, 6, 75-91.
- Lee, Y., Kozar, K. A., & Larsen, K. R. (2003). The Technology Acceptance Model: Past, Present, and Future. *Communications of the Association for Information Systems*, 12, 50-66.
- Legrís, P., Ingham, J., & Collette, P. (2003). Why Do People Use Information Technology? A Critical Review of the Technology Acceptance Model. *Information & Management*, 40, 191-204.
- Li, H., Liu, Y., Xu, X., Heikkilä, J., & Van Der Heijden, H. (2019). Why Do People Use Mobile Payment? A Perspective of Perceived Value and Costs. *International Journal of Information Management*, 46, 252-263.
- Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2014). Antecedents of the Adoption of the e-Commerce Services in SMEs. *Journal of Small Business and Enterprise Development*, 21, 547-565.
- Lu, B., Fan, W., & Zhou, M. (2016). Social Presence, Trust, and Social Commerce Purchase Intention: An Empirical Research. *Computers in Human Behavior*, 56, 225-237.
- Mathieson, K. (1991). Predicting User Intentions: Comparing the Technology Acceptance Model with the Theory of Planned Behavior. *Information Systems Research*, 2, 173-191.
- McKnight, D. H., & Chervany, N. L. (2001). What Trust Means in e-Commerce Customer Relationships: An Interdisciplinary Conceptual Typology. *International Journal of Electronic Commerce*, 6, 35-59.
- McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and Validating Trust Measures for e-Commerce: An Integrative Typology. *Information Systems Research*, 13, 334-359.
- Molla, A., & Licker, P. S. (2005). e-Commerce Adoption in Developing Countries: A Model and Instrument. *Information & Management*, 42, 877-899.
- Moon, J. W., & Kim, Y. G. (2001). Extending the TAM for a World-Wide-Web Context. *Information & Management*, 38, 217-230.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). McGraw-Hill.
- O'Reilly, T. (2005). What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software. *Communications & Strategies*, 1, 17-37.
- Pavlou, P. A., & Dimoka, A. (2006). The Nature and Role of Feedback Text Comments in Online Marketplaces: Implications for Trust Building, Price Premiums, and Seller Differentiation. *Information Systems Research*, 17, 392-414.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88, 879-903.
- Qureshi, I. (2016). E-Commerce Adoption in Developing Countries: An Exploratory Study of the Factors Influencing Adoption in Pakistan. *Information Technology for Development*, 22, 654-672.
- Rogers, E. M. (1995). *Diffusion of Innovations* (4th ed.). Free Press.
- Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.). Free Press.
- Saprikis, V., & Markos, A. (2018). Modeling Users' Acceptance of Social Commerce. *International Journal of E-Business Research*, 14, 28-50.

- Sivakumar, K., & Raj, S. P. (2007). Turning Advertising Strategy into Effective Sales Force Action. *Journal of Marketing*, 71, 70-80.
- Smith, R., Deitz, G., Royne, M. B., Hansen, J. D., Grünhagen, M., & Witte, C. (2013). Cross-Cultural Examination of Online Shopping Behavior: A Comparison of Norway, Germany, and the United States. *Journal of Business Research*, 66, 328-335.
- Smith, S. M., Zhao, J., & Alexander, M. (2013). Social Commerce from a Theory of Planned Behavior Paradigm: An Analysis of Purchase Intention. *International Journal of E-Adoption (IJEa)*, 5, 76-88.
- Suh, B., & Han, I. (2002). Effect of Trust on Customer Acceptance of Internet Banking. *Electronic Commerce Research and Applications*, 1, 247-263.
- Suki, N. M., & Suki, N. M. (2017). Predicting Consumers' Intention to Adopt Mobile Commerce: A Cross-Country Empirical Examination between China and Malaysia. *Telematics and Informatics*, 34, 382-397.
- Taylor, S., & Todd, P. A. (1995). Understanding Information Technology Usage: A Test of Competing Models. *Information Systems Research*, 6, 144-176.
- Teo, T., & Liu, J. (2007). Consumer Trust in e-Commerce in the United States, Singapore and China. *Omega*, 35, 22-38.
- Turban, E., King, D., Lee, J. K., Liang, T. P., & Turban, D. C. (2019). *Electronic Commerce: A Managerial and Social Networks Perspective*. Springer.
- Valentine, V., & Gordon, W. (2000). The 21st Century Consumer: A New Model of Thinking. *International Journal of Market Research*, 42, 1-16.
- Van der Heijden, H., Verhagen, T., & Creemers, M. (2003). Understanding Online Purchase Intentions: Contributions from Technology and Trust Perspectives. *European Journal of Information Systems*, 12, 41-48.
- Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model and a Research Agenda on Interventions. *Decision Sciences*, 39, 273-315.
- Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, 46, 186-204.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27, 425-478.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36, 157-178.
- Wambui, C., & Mbarika, V. (2010). E-Commerce Adoption in Developing Countries: A Model and Instrument. *Information Technology for Development*, 16, 246-265.
- Wetzels, M., Odekerken-Schröder, G., & van Oppen, C. (2009). Using PLS Path Modeling for Assessing Hierarchical Construct Models: Guidelines and Empirical Illustration. *MIS Quarterly*, 33, 177-195.
- Woon, Y. K., Yew, S. K., & Chong, A. Y. (2015). Predicting the Adoption of Mobile Social Commerce: Towards an Understanding of the Interplay between Value Drivers and the Moderating Effect of Time Consciousness. *Computers in Human Behavior*, 49, 75-90.
- Yang, Z., Cai, S., Zhou, Z., & Zhou, N. (2012). Development and Validation of an Instrument to Measure User Perceived Service Quality of e-Commerce. *Decision Support Systems*, 53, 669-678.
- Zainab, B., Awais Bhatti, M., & Alshagawi, M. (2017). Factors Affecting e-Training Adoption: An Examination of Perceived Cost, Computer Self-Efficacy and the Technology Acceptance Model. *Behaviour & Information Technology*, 36, 1261-1273.
- Zhang, X., Guo, X., & Lai, K. K. (2011). Examining the Influence of Online Reviews on Consumers' Decision-Making: A Heuristic-Systematic Model. *Decision Support Systems*, 51, 819-828.