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Live Commerce Platforms: A New Paradigm for E-Commerce Platform Economy

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Abstract: Live commerce is creating a new paradigm for e-commerce platform economy. This study aims to provide effective strategies that can be used for live commerce platform operation and management by analysing factors that influence consumer intentions to purchase. As a combination of e-commerce and live streaming, live commerce allows businesses to demonstrate products, answer customer questions, and provide personalized recommendations in a way that replicates the in-store experience. Thus, this study aims to provide effective strategies that can be used for the new e-commerce platform economy and market competition that live commerce platforms build by analysing factors that influence consumer intentions to purchase. This study was conducted using structural equation modeling (SEM) based on a survey of 237 live commerce users. The results of this study lend platform-providers a more comprehensive understanding of the functional and social factors that influence consumers' decisions to make purchases on such platforms. The outcomes can further serve as a basis for improving platforms, providing consumers with a better consumption experience, and offering theoretical support for consumers to use related services rationally and efficiently.

Keywords: live commerce; perceived entertainment; perceived quality; platform; social influence; technology acceptance model



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1. Introduction

Live commerce platforms are opening a new chapter in sales. They have transformed the retail business environment and built a major sales channel in five years. Live commerce involves live-streaming videos to showcase products and engage with customers in real-time. It is a combination of e-commerce and live streaming. It allows businesses to demonstrate products, answer customer questions, and provide personalized recommendations in a way that replicates the in-store experience. Unlike existing static e-commerce platforms, therefore, live commerce has a dynamic appearance. In China, Taobao developed its own live commerce programme, Taobao Live, regional versions of which also emerged in Amazon and India's Budul in 2019. In 2020, due to the impact of the COVID-19 pandemic, live commerce has grown even faster. The pandemic has promoted the further expansion of live commerce and has offered many traditional industries a new way to thrive. Live commerce is not a phenomenon but has established itself as a significant sales channel. In 2020, as an example, the first 30 min of Alibaba's Singles' Day presales campaign on Taobao Live generated an impressive 7.5 billion USD in total transaction value.

Why do consumers love live commerce? Why did consumers switch from traditional e-commerce to new live commerce? Many domestic and foreign studies have examined the attitudes and behavioural intentions of e-commerce platform consumers [1,2]. However, new live commerce models have only appeared in recent years, and the existing research has mainly focused on the construction of such systems. Some scholars have examined

interactions in live streaming [3], but few have conducted research on consumer behaviour based on consumers' cognitive view of live commerce platforms. Therefore, this study applies the consumer acceptance model to live commerce platforms. By expanding the technology acceptance model, we identify factors that influence consumer acceptance and examine the structural relationship between such factors. Unlike existing e-commerce platforms, live commerce platforms are dynamic and different from previous online shopping methods, as they allow the seller and consumer to communicate in real time.

In this study, we examine consumers' intentions to purchase in the recently growing live commerce platforms to understand the new e-commerce platform economy and market competition by elucidating their motivations and the factors that affect their purchase decisions. This study included the following steps: (1) by considering existing studies, variables that could affect consumers' acceptance of live commerce platforms were examined; (2) the structural influence of the construct factors and the corresponding research hypotheses was established; (3) structural equation modelling (SEM) was conducted for factor analysis and reliability verification to test the research hypothesis and structural model analysis; and (4) through the structural equation model analysis, the path between factors influencing the acceptance of the social network game was analysed and verified to provide an interpretation of the model, practical implications and conclusions, and future research directions. The explosive growth of online networks and smartphones means that the live commerce platforms, a form of real-time e-commerce, are attracting attention as the new e-commerce business model. This study examined the factors influencing consumers' intentions to purchase on live commerce platforms by applying the technology acceptance model. The study pool included 237 participants who use live commerce platforms, and the data were collected utilizing structural equation modelling. The results of this study confirmed that the quality and entertainment, social influence, and decision-making process of personal innovativeness affecting consumers' intentions to purchase during online shopping are crucial.

2. Literature Review

2.1. Purchasing Behaviour of E-Commerce Consumers

E-commerce is the production, advertising, sale, and distribution of products via telecommunication networks [4,5]. As people have increasingly used and developed an understanding of e-commerce in recent decades, scholars have conducted much research on the technology. The purchasing behaviour of e-commerce consumers has been a particularly important research area, in which researchers examine the process through which consumers use e-commerce platforms to make purchase decisions. The primary function of e-commerce is to induce customers to use e-commerce applications to make purchases through processes such as demand information inquiry, purchase decisions, and payment transactions. In most research on consumer purchasing behaviour, intentions to purchase are the target variable and represent the probability that a consumer will engage in a type of purchasing behaviour [6]. In recent years, the research models and dimensions of e-commerce have become more abundant. Gao [7] added a variable of trust based on the successful information system model, immersion theory, and a better understanding of the determinants of consumers' continued intentions to purchase. An understandable integration model was proposed, and Hillman [8] investigated the impact of consumer trust concerns in e-commerce shopping through interviews with e-commerce consumers. Other studies explore relevant consumer behaviours by creating models from various perspectives combining several theories, and many studies have been conducted on the mechanisms of consumer purchasing behaviours in e-commerce. Yang [9] introduced two important interaction factors, convenience and entertainment, in mobile-commerce-related research. Cheung et al. [10] built a model to explore the effect of mobile social e-commerce in-app advertising on consumer intentions to purchase using the theory of planned behaviour combined with trust relationship factors. Pantano and Priporas [11] insisted that retailers need to develop new mobile service features to stimulate consumer consumption.

2.2. Technology Acceptance Model

Davis [12] proposed the Technology Acceptance Model (TAM, See Figure 1), while Gefen [13] introduced the TAM model to e-commerce and constructed an online consumer trust model based on TAM theory when studying online shopping purchasing behaviour. Kim [14,15] and Leyton et al. [16] conducted a study on the adoption factors of providers in the platform. Liébana-Cabanillas et al. [17] explored consumers’ adoption of e-commerce by expanding the technology adoption model and introducing other external variables. Cyr et al. [18] and Liu and Guo [19] introduced the perceived entertainment factor based on the technology acceptance model. As a result of the study, the design aesthetics of e-commerce were shown to affect consumers’ perceived usefulness, perceived ease of use, and perceived entertainment, which in turn affects consumers’ loyalty to e-commerce. Ahuja et al. [20] pointed out that perceived entertainment, perceived quality, and trust are the main factors influencing consumer acceptance of use. Their research model pointed out that perceived ease of use, collaboration, entertainment motivation, and personal habits are all important factors influencing consumer use and that Internet familiarity regulates the convenience of using e-commerce applications and the effectiveness of collaboration. Ingham et al. [21] pointed out that the most common additional variables of TAM in the field of e-commerce are trust, perceived risk, perceived entertainment, and social impact in a research review of technology acceptance models in e-commerce shopping applications over the past decade.

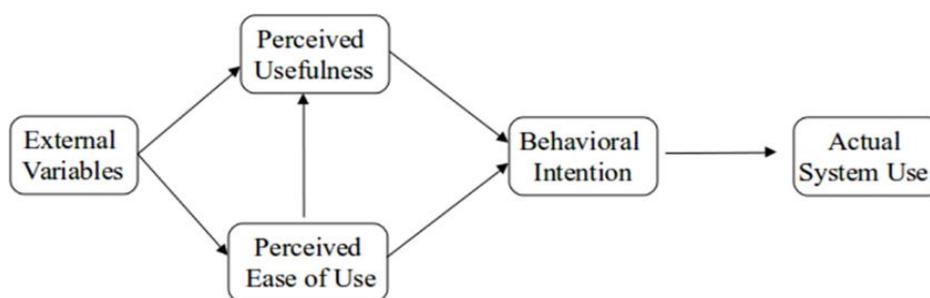


Figure 1. Technology Acceptance Model.

2.3. New Commerce: Live Commerce Platform

The live commerce platforms are the newest type of e-commerce, with functions such as live streaming and real-time interactive comments, which combine the instant purchasing of a featured product and audience participation. In an increasingly digitalised society, this has garnered significant attention [22]. Live commerce has transformed the retail environment and established itself as a major sales channel; thus, there is a lot of interest in industry and academics. Luo et al. [23] analysed live commerce cases on Taobao and pointed out that building a self-participatory community increased consumers’ trust and product exposure, leading to more live consumer engagement and consumer purchasing behaviour. Li et al. [24] pointed out that live streaming has changed from PC to mobile advertisement in the mobile internet era. Ma et al. [25] found that mobile technologies can adapt to time and space, and Sun et al. [26] discussed the effect of live commerce on purchase intention from the perspective of IT affordance theory. Visibility affordance, meta-voicing affordance, and guidance shopping affordance are suggested to influence consumers’ participation and intentions to purchase. Hu and Chaudhry [27] found that social and structural bonds positively affect consumer engagement both directly and indirectly via affective commitment. Cai and Wohn [28] used the satisfaction perspective to examine the intrinsic motivation of buyers to engage in live commerce. Park and Lin [29] suggested that Internet masters positively attract consumers and increase purchase possibilities.

Live commerce platforms and traditional e-commerce platforms differ significantly in their level of interactivity, personalization, social features, and sales conversion rates. Live commerce platforms offer a highly engaging and interactive shopping experience,

with real-time product demonstrations, live chats, and personalized interactions, leading to increased customer satisfaction and loyalty. In contrast, traditional e-commerce platforms offer a more static and impersonal shopping experience, with limited opportunities for customer interaction. As live commerce continues to grow in popularity, it is crucial for businesses to consider incorporating this new form of e-commerce into their overall digital strategy to stay competitive in the ever-evolving online marketplace.

However, existing studies have some drawbacks. First, since live commerce research remains in its infancy, the number of studies on live commerce is insufficient compared to the level of interest in the industry. Most previous studies were conducted as case studies. They contained little quantitative analysis, and although the research focused mainly on system-level or platform-level studies, the analysis from a consumer perspective was relatively incomplete. Therefore, there is a need for further research on the factors and mechanisms influencing the purchasing behaviour of live commerce platforms for consumers. Therefore, this research investigated consumer purchase behaviours on live commerce platforms.

3. Research Hypothesis

3.1. Technology Acceptance Model

Social influence is defined as a change in an individual's thoughts, feelings, attitudes, or behaviours resulting from interactions with other individuals or groups [30]. Social influence theory originates from social psychology and is mainly used to study the formation of individuals' ideas and their influence on the behaviour of others [31]. Chen et al. [32] pointed out that social influences will, to some extent, determine an individual's intention to purchase library books, and Turel et al. [33] found that peer influence is an important part of users' perception of the environment and promotes purchasing behaviour. Therefore, this study established the following hypotheses.

Hypothesis 1: *Social influence has a positive effect on perceived usefulness on live commerce platforms.*

Hypothesis 2: *Social influence has a positive effect on perceived ease of use on live commerce platforms.*

Midgley and Dowling [34] proposed the concept of individual innovation and defined personal innovativeness as the ability and degree to accept new things based on communication with others. Everett [35] found that innovators embrace new things earlier because they try new things, are more adventurous, and are more willing to face more prominent factors beyond their control. Limayem [36] added perceived innovation to online shopping research and confirmed that perceived innovation could influence consumers' purchasing attitudes and intentions to purchase. Therefore, this study established the following hypotheses.

Hypothesis 3: *Personal innovativeness has a positive effect on perceived usefulness on live commerce platforms.*

Hypothesis 4: *Personal innovativeness has a positive effect on perceived ease of use on live commerce platforms.*

3.2. Perceived Service Quality and Perceived Entertainment

Perceived service quality is the customer's judgment about the extent to which the service is efficient. Bou-Llusar et al. [37] found that perceived quality is divided into two dimensions, perceived product quality and perceived service quality, in a study on the relationship between perceived quality and customer satisfaction in a firm, and Delone and Mclean [38] modified and improved the information system success model, introduced ser-

vice quality variables, and emphasised that system quality, information quality, and service quality all significantly influence customer satisfaction. In addition, Kim and Choi [39] confirmed that perceived quality positively affects customer satisfaction in the post-purchase intention study of mobile value-added services. Therefore, this study established the following hypotheses.

Hypothesis 5: *Perceived service quality in live commerce platforms has a positive effect on perceived usefulness.*

Hypothesis 6: *Perceived service quality in live commerce platforms has a positive effect on perceived ease of use.*

Perceived entertainment is an effective intrinsic factor for users to adopt information technology [12]. Crawford and Melewar [37] pointed out that when an environment makes consumers happy and comfortable, it will promote consumer purchases. Rodgers and Harris [38] and Kumar et al. [39] pointed out that users' e-commerce activities will decrease if the perceived emotional benefits are insufficient when users engage in shopping through e-commerce. As users' enjoyment of the online shopping experience increases, they are more likely to conduct longer searches and inquiries and adopt online shopping behaviours [40,41]. Therefore, this study established the following hypotheses.

Hypothesis 7: *Perceived entertainment on live commerce platforms has a positive effect on perceived usefulness.*

Hypothesis 8: *Perceived entertainment on live commerce platforms has a positive effect on perceived ease of use.*

3.3. Perceived Usefulness and Perceived Ease of Use

Perceived usefulness reflects users' internal perceptions of the extent to which the systems and platforms they use can improve their behavioural effectiveness. Live commerce platforms are the primary mode of application of information technology, and technology adoption and extension models are commonly used to describe users' online purchasing behaviour and loyalty [4,13,42]. O'cass and Fenech [43] found that perceived usefulness positively affected attitudes through online retail surveys. Shih [44] and Chen and Tan [45] found that consumers' perceptions of the usefulness of online stores positively affects their shopping attitudes. Mun and Hwang [46] also confirmed that perceived usefulness has a positive effect on perspective. Therefore, this study established the following hypotheses.

Hypothesis 9: *Perceived usefulness in live commerce platforms has a positive effect on consumers' intention to purchase.*

Perceived ease of use reflects users' perceptions of the effort required to use the information technology. Several studies by Moore and Benbasat [47] showed that users follow the rule of least effort when acquiring new skills. Between two information technologies with the same function, the consumer will choose the one that is easier to use. Gefen (2003) emphasised, through an empirical study, that usefulness and intention to purchase are greatly affected by ease of use. Numerous studies have shown that ease of use, whether direct or indirect, is useful through positive influences and influences behavioural intentions [48–50]. Therefore, this study established the following hypotheses.

Hypothesis 10: *Perceived ease of use in live commerce platforms has a positive effect on perceived usefulness.*

Hypothesis 11: *Perceived ease of use in live commerce platforms positively affects consumers' intention to purchase.*

3.4. Technology Acceptance Model

Wu and Chen [51] and Escobar-Rodríguez and Bonsón-Fernández [52] defined intention to purchase as ‘consumer’s will to purchase a specific product at a specific time or in a specific situation’. Gefen et al. [40] pointed out that the premise of intention to purchase is a customer’s subjective perception of a specific product or service. Intention to purchase can be influenced by external factors. Purchasing intent is a subjective tendency of consumers and can be used as a key metric to predict consumer buying behaviour. Schiffman and Kanuk [53] asserted that intention to purchase is closely related to purchasing behaviour, which indicates the likelihood that one will purchase a specific product or service. Armstrong [54] confirmed that purchasing behaviour can effectively be predicted using intention to purchase. Therefore, this study established the following hypotheses.

Hypothesis 12: Consumers’ intention to purchase positively affects their actual purchasing behaviour on live commerce platforms.

Therefore, the research model of this study is as follows Figure 2.

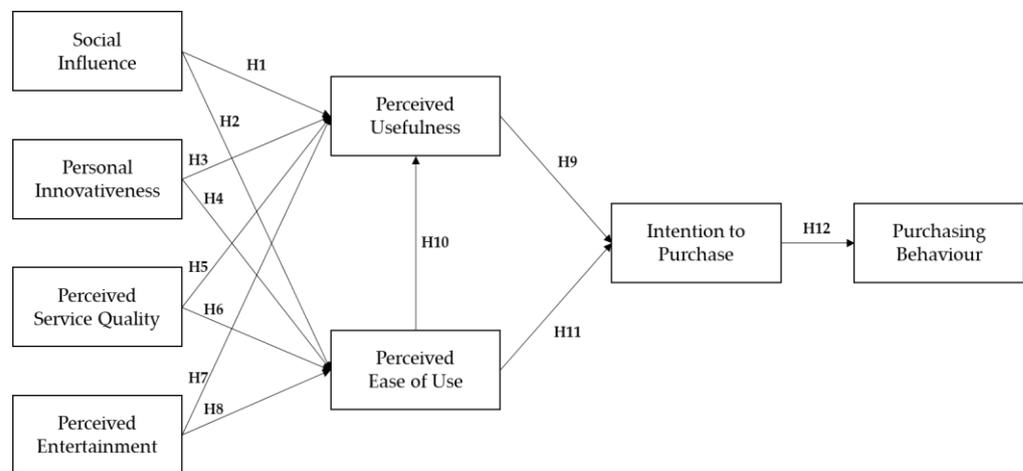


Figure 2. Research Model.

4. Research Method

4.1. Research Design and Data Collection

The survey participants of this study are consumers who have experience using live commerce platforms such as Taobao, JD.com, Amazon Live, Pinduoduo, and Coupang Live. The survey was conducted based on snowball sampling, and the questionnaire was provided and collected online. The demographic characteristics of the respondents show that 45.1% (107 people) were male and 54.9% (130 people) were female. Regarding the age group of the respondents, the highest ratio was found among those who were 20–29 years old (see Table 1).

Table 1. Demographic characteristics (n = 237).

Demographic Characteristics		n	%
Gender	Male	107	45.1
	Female	130	54.9
Age	Under 19	58	24.5
	20–29	73	30.8
	30–39	68	28.7
	40–49	24	10.1
	Over 50	14	5.9

Based on the model proposed in this study, variables and questionnaire items were designed as shown in Appendix A. The survey items were designed and combined with the characteristics of the live commerce platform concerning the mature scale. In this study, a 5-point Likert scale was used for each measurement item.

4.2. Hypothesis and Scalability Testing

Prior to the analysis conducted using structural equation modelling, exploratory factor analysis was performed to examine whether the items presented in the questionnaire were grouped with the relevant factors. SPSS 19.0 was used for factor analysis, and principal component analysis was used for factor extraction. The factor rotation method was Varimax, which eliminates the multicollinearity problem between factors through orthogonal rotation. In addition, a reliability analysis was also conducted to check whether the response of the measurement items grouped by each factor was reliable. Table 2 shows the results of the factor analysis of the questionnaire items. Cronbach's α for each factor calculated to confirm that reliability was 0.8 or higher for each item, indicating a reliable level. Kaiser–Meyer–Olkin's measure of sampling adequacy, which is used to check the possibility of factor analysis, was found to be 0.680, which is higher than the general recommended value of 0.5. For Bartlett's test of sphericity, which checks whether factor analysis is suitable with a high correlation between some variables, the p -value was 0.000, which can reject the null hypothesis that the variables are uncorrelated or independent of each other. Thus, it suggested that the variables are not independent and there is a structure to be uncovered.

A confirmatory factor analysis was performed on the items to confirm their validity. AMOS 24.0 was used. The results showed that all critical ratio (C.R) values were above 1.965 and all p values were below 0.05 (See Table 3). The factor analysis indicated that the fit index of the measurement model was at a good level. Chi-square = 830.129 (df = 751, $p < 0.05$), GFI = 0.862, CFI = 0.990, RMR = 0.022, RMSEA = 0.021, Q (χ^2/df) = 1.105 were recorded.

This study also added a discriminant validity. As can be seen in 'Table 4', all variables have excellent differential validity. We also added a discriminant validity. As can be seen in Table 4, all variables were found to have excellent differential validity.

The model fit results, $\chi^2 = 860.049$, df = 761, $\chi^2/df = 1.130$, RMSEA = 0.023, GFI = 0.858, AGFI = 0.853, CFI = 0.964, NFI = 0.905, and RMR = 0.023, mostly satisfy the recommended level. Thus, we found that the research model is overall well-developed. As shown in Figure 3, all paths were meaningful except social influence for perceived ease of use and perceived entertainment for perceived usefulness.

Hypothesis 1 tested whether social influence affected perceived usefulness, and the p -value was found to be positive. Hypothesis 2 tested whether social influence affected perceived ease of use, and the p -value was 0.67, which was not considered to have a significant effect. Hypotheses 3 and 4 tested whether personal innovativeness affected perceived usefulness and perceived ease of use, and all of them showed that the significance level had a positive effect. Hypotheses 5 and 6 tested whether perceived service quality affected perceived usefulness and perceived ease of use, and all of them were found to positively affect the significance level. For hypothesis 7, regarding whether perceived entertainment affects perceived usefulness, the p -value (=0.09) was greater than the significance level (0.05), so the hypothesis was rejected. Hypothesis 8 tested whether perceived entertainment affected perceived ease of use, and the p -value was found to be positive. Hypothesis 9 showed that perceived usefulness had a positive effect on the intention to purchase. Hypotheses 10 and 11 showed that perceived ease of use positively affected perceived usefulness and intention to purchase. Finally, hypothesis 12, which tested whether the intention to purchase affects purchasing behaviour, was found to have a positive effect (See Table 5).

Table 2. Pattern matrix.

	Factors								Cronbach's α
	1	2	3	4	5	6	7	8	
PQ3	0.808								0.871
PQ4	0.807								
PQ6	0.784								
PQ1	0.773								
PQ5	0.745								
PQ2	0.704								
IP 1		0.829							0.87
IP 5		0.796							
IP 4		0.792							
IP 3		0.790							
IP 2		0.787							
PU5			0.861						0.884
PU1			0.832						
PU3			0.816						
PU4			0.812						
PU2			0.764						
PB4				0.844					0.868
PB2				0.82					
PB1				0.795					
PB3				0.786					
PB5				0.749					
PI1					0.836				0.869
PI5					0.822				
PI2					0.795				
PI4					0.773				
PI3					0.765				
SI3						0.855			0.862
SI2						0.806			
SI1						0.792			
SI5						0.792			
SI4						0.737			
PEOU5							0.839		0.866
PEOU2							0.834		
PEOU4							0.813		
PEOU3							0.771		
PEOU1							0.701		
PE2								0.808	0.840
PE1								0.803	
PE5								0.797	
PE4								0.762	
PE3								0.705	
Extraction Method: Principal Factor Analysis									
Rotation Method: Direct oblimin with Kaiser normalization									
Rotation converged in 7 iterations.									

Table 3. Confirmatory factor analysis results.

	Variable	Estimate	S.E.	C.R.	<i>p</i>	AVE	Construct Reliability
PQ1	Perceived Service Quality (PQ)	0.697				0.5151	0.8642
PQ2		0.722	0.11	10.062	***		
PQ3		0.685	0.107	9.579	***		
PQ4		0.768	0.099	10.635	***		
PQ5		0.695	0.111	9.707	***		
PQ6		0.736	0.111	10.238	***		
IP 1	Intention to Purchase (IP)	0.905				0.8051	0.9538
IP 2		0.896	0.044	21.913	***		
IP 3		0.908	0.044	22.709	***		
IP 4		0.878	0.042	20.806	***		
IP 5		0.899	0.04	22.127	***		
PU1	Perceived Usefulness (PU)	0.919				0.8314	0.961
PU2		0.902	0.042	23.426	***		
PU3		0.914	0.041	24.348	***		
PU4		0.904	0.044	23.575	***		
PU5		0.92	0.043	24.867	***		
PB1	Purchasing Behaviour (PB)	0.898				0.8133	0.9561
PB2		0.9	0.042	21.648	***		
PB3		0.918	0.044	22.82	***		
PB4		0.904	0.048	21.953	***		
PB5		0.889	0.051	21.003	***		
PI1	Personal Innovativeness (PI)	0.758				0.5552	0.8619
PI2		0.762	0.091	11.562	***		
PI3		0.726	0.081	10.975	***		
PI4		0.736	0.086	11.139	***		
PI5		0.743	0.099	11.25	***		
SI1	Social Influence (SI)	0.764				0.5843	0.8754
SI2		0.737	0.08	11.34	***		
SI3		0.781	0.069	12.103	***		
SI4		0.757	0.073	11.692	***		
SI5		0.782	0.084	12.113	***		
PEOU1	Perceived Ease of Use (PEOU)	0.852				0.7178	0.9271
PEOU2		0.845	0.05	16.793	***		
PEOU3		0.88	0.047	18.058	***		
PEOU4		0.822	0.042	16.029	***		
PEOU5		0.836	0.045	16.474	***		
PE1	Perceived Entertainment (PE)	0.748				0.5544	0.8614
PE2		0.761	0.1	11.326	***		
PE3		0.714	0.089	10.609	***		
PE4		0.749	0.097	11.156	***		
PE5		0.75	0.085	11.168	***		

*** *p* < 0.001 ** *p* < 0.01 * *p* < 0.05.

Table 4. Discriminant Validity Results.

	PQ	IP	PU	PB	PI	SI	PEOU	PE
PQ	0.718							
IP	0.681 ***	0.897						
PU	0.737 ***	0.896 ***	0.912					
PB	0.587 ***	0.889 ***	0.786 ***	0.902				
PI	0.556 ***	0.712 ***	0.739 ***	0.635 ***	0.745			
SI	0.493 ***	0.614 ***	0.710 ***	0.575 ***	0.503 ***	0.764		
PEOU	0.666 ***	0.849 ***	0.856 ***	0.839 ***	0.673 ***	0.515 ***	0.847	
PE	0.458 ***	0.607 ***	0.602 ***	0.582 ***	0.497 ***	0.463 ***	0.726 ***	0.745

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.05$.

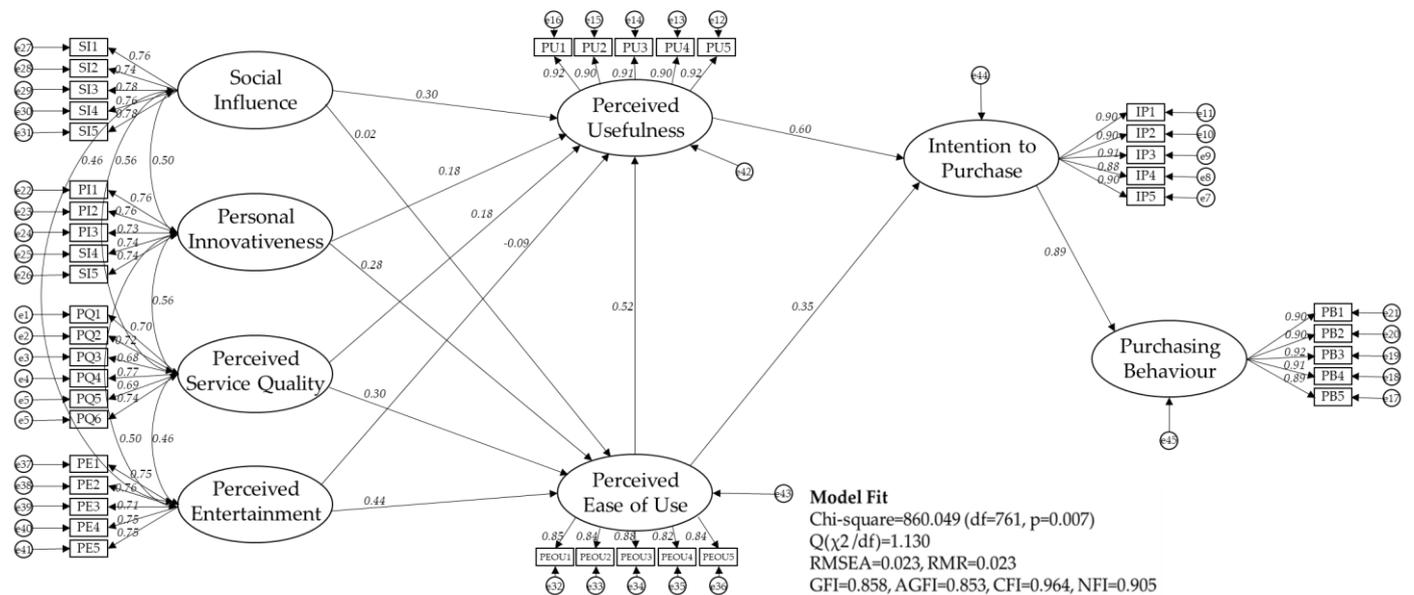


Figure 3. Empirical results.

Table 5. Path analysis.

Hypothesis	Path	Path Coefficient	S.E.	C.R.	p-Value	Result
H1	Social Influence (SI) → Perceived Usefulness (PU)	0.304	0.051	6.688	***	Approved
H2	Social Influence (SI) → Perceived Ease of Use (PEOU)	0.025	0.069	0.426	0.67	Rejected
H3	Personal Innovativeness (PI) → Perceived Usefulness (PU)	0.181	0.066	3.578	***	Approved
H4	Personal Innovativeness (PI) → Perceived Ease of Use (PEOU)	0.28	0.09	4.248	***	Approved
H5	Perceived Service Quality (PQ) → Perceived Usefulness (PU)	0.18	0.074	3.575	***	Approved
H6	Perceived Service Quality (PQ) → Perceived Ease of Use (PEOU)	0.298	0.1	4.553	***	Approved
H7	Perceived Entertainment (PE) → Perceived Usefulness (PU)	-0.091	0.07	-1.694	0.09	Rejected
H8	Perceived Entertainment (PE) → Perceived Ease of Use (PEOU)	0.439	0.089	6.728	***	Approved

Table 5. Cont.

Hypothesis	Path	Path Coefficient	S.E.	C.R.	p-Value	Result
H9	Perceived Usefulness (PU) → Intention to Purchase (IP)	0.599	0.061	8.21	***	Approved
H10	Perceived Ease of Use (PEOU) → Perceived Usefulness (PU)	0.523	0.07	7.177	***	Approved
H11	Perceived Ease of Use (PEOU) → Intention to Purchase (IP)	0.348	0.058	4.831	***	Approved
H12	Intention to Purchase (IP) → Purchasing Behaviour (PB)	0.893	0.062	17.113	***	Approved

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.05$.

5. Findings

This study aims to provide effective strategies that can be used for the new e-commerce platform economy and market competition that live commerce platforms build by analysing factors that influence consumer intentions to purchase. As a result, this study found that platform quality, entertainment, social influence, and personal innovativeness affect consumers' purchasing behaviour on live commerce platforms. We conducted a comprehensive analysis of the factors and mechanisms that influence consumers' purchasing behaviours on live commerce platforms. We aimed to present a strategic direction for building an effective live commerce platform. Therefore, prominent findings in this study are the discovery that live commerce responds to several variables that are somewhat unrelated to existing e-commerce, and that the viewpoints of platform providers and users are different. The results of the analysis of hypothesis 1 indicated that social influence was perceived as useful for live commerce platforms. This can be attributed to crowd psychology; the higher the number of people who advertise that something is useful, the more likely it is that consumers will subconsciously find it useful. As a result of the analysis of hypothesis 2, it was found that there was no significant effect between social influence and perceived ease of use. Thus, social influence does not change the perception of ease of use, even if it is actively promoted by others and mass media. In other words, everyone's ability to embrace technology is different and may be difficult to change using the external environment. The results of the ANOVA analysis considering the difference among the respondents' proficiency in using electronic products according to age indicated a significant difference in the perception of social influence items according to age. The average value of those 50 and older was 2.5, which was much lower than those in their 30s, with the highest average value of 3.1. The order of the scores was in the order of 30s, 20s, 10s, 40s, and 50s. According to the results of the analysis of hypotheses 3 and 4, personal innovativeness was shown to be useful for live commerce platforms. As innovative people like to try new things on their own and are curious and receptive, they can quickly learn how to use live commerce platforms and discover the advantages of such platforms faster than the existing e-commerce platform, to recognise its usefulness and ease of use more easily. The results of the analysis of hypotheses 5 and 6 show that live commerce platform consumers perceived convenience if perceived service quality was higher than that of live shopping. Because the live commerce platform page is easy to use, customer service is considered to be good. The real-time live function is more realistic and comprehensive, so it is judged to be convenient and comfortable if it is useful. As a result of hypothesis 8, live commerce platform consumers felt that perceived entertainment was convenient during live shopping. This is because users of live commerce platforms can interact in real time with BJs and other consumers. Therefore, this real-time question-and-answer method will greatly reduce doubts in the use process and provide consumers with a greater sense of convenience. As a result of the analysis of hypothesis 9, it was found that the live commerce platform consumers' perceived usefulness had a significant effect on their intention to purchase through live shopping. According to the results of hypotheses 10 and 11, there is a significant effect between perceived ease of use, perceived usefulness, and intention to purchase. As with

many previous studies, most studies based on the TAM model produced similar results. From the results of hypothesis 12, it was confirmed that intention to purchase leads to purchase behaviour. According to the structural equation, it can be judged that an individual's ability to embrace innovation outweighs social influence and, in terms of the platform itself, service quality is more important than entertainment.

As a result of the analysis of hypothesis 7, the only rejected hypothesis, it was found that live commerce platform consumers experienced no significant differences between perceived entertainment and perceived usefulness through live shopping. Because the live broadcast time is specified and lengthy, people who need a specific product may choose to buy it directly rather than waiting for a live broadcast or watching a live broadcast for a long time. The findings showed differences in perceptions between male and female consumers. In this study, adding the T-test according to gender shows that there is a significant difference in the perception of entertainment according to gender. The male average was 2.8, which was lower than the female average of 3.0.

6. Discussion and Conclusions

The live commerce platform takes the form of a dynamic e-commerce platform beyond the existing static e-commerce platform. This study used the technology acceptance model to examine the structural relationship between factors affecting consumers' intentions to purchase on live commerce platforms and new e-commerce platforms. The implications of the results of this study are as follows. First, considering the implications from an academic perspective, this study establishes the mechanism of the influence of consumer intentions to purchase through the TAM theoretical model, combined with the main characteristics of the live commerce platform and the dimensional analysis of factors that consider consumer cognition from the perspective of the external environment, revealing their impact on consumption. We show the influence of the quality and entertainment, social influence, and individual innovation of live commerce platforms on the intention to purchase of online shopping consumers. The results of this study thus provide innovative ideas for related research, expand consumer research content on live commerce platforms, and provide research directions for future live commerce platforms and consumer behaviour.

Next, if we consider the implications from a practical perspective, the live commerce industry environment was only recently formed, but there is still a lot of room for improvement for operators. This study provides an effective strategy that can be used for live commerce platform operation and management by analysing the influencing factors, focusing on consumers' intentions to purchase. First, we show that social influence positively affects consumers' perceived usefulness and thus has an impact on consumers' intention to purchase. Live commerce platform operators should pay particular attention to publicity, such as by promoting the platform on social media or holding events that actively encourage existing consumers to recommend live commerce platforms to their family and friends. Second, this study shows that consumers with strong personal innovativeness have more intentions to try new things, feel that platforms are more useful and easy to use, and this positively affects their intention to purchase. Therefore, advertising a platform can ensure the platform's quick development by prioritising specific groups with strong personal innovativeness, such as youth and highly educated people. Third, live commerce platform operators should pay attention to platform system quality, information quality, and service quality management. In this study, the higher the consumer's awareness of platform quality, the higher their awareness of its usefulness and ease of use, positively affecting consumers' intentions to make purchases.

Therefore, live commerce platform operators must strictly manage related systems, information, and customer service quality. Fourth, we found that entertainment perceived by the live commerce platform positively affects consumers' perceived ease of use and intentions to purchase. Sellers of live commerce platforms should attempt to improve the shopping experience by providing a better service to general consumers and better entertainment for target consumers. Finally, looking at the interpretation of the rejected

hypothesis, social influence does not affect perceived ease of use because the receptive capacity for electronic products differs according to age. Therefore, platform operators should encourage young people to help their parents and other, older adults learn how to use new products and features. Tutorials should also be created for seniors, and age options could be added to home pages to guide people in need. This could improve some people’s perception of ease of use to some extent. Further, consumption preferences vary according to gender; women tend to be hedonistic, while men are more pragmatic. Therefore, perceived entertainment does not affect perceived usefulness. Suppliers must prepare different content for consumers of different products and genders. For women’s products, entertainment content can be added, such as jokes to uplift their mood. In the case of men’s products, male consumers’ awareness of the product’s usefulness should be increased by emphasising the functionality, practicality, and direct topic of the product to quickly provide the desired information.

This study has the following limitations. First, there was no classification according to the type and trend of the platform. As the market is growing, live commerce is becoming more diverse; thus, comparative analyses performed in consideration of the type of live commerce platform in the future could derive results with more implications. Second, variables that affect the intention to purchase of live commerce platform consumers are set as social influence, personal innovativeness, perceived service quality, perceived entertainment, perceived usefulness, and perceived ease of use, but other influential variables may exist. Future investigations that consider a broader range of variables could provide more general results. Therefore, in follow-up studies, the above limitations should be considered to provide additional results.

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Appendix A. Metric Variables

Variables	Questions	References
Social Influence (SI)	1. Mass media influences my use of live commerce platforms.	Agarwal & Karahanna [55] Fishbein & Ajzen [56] Koufaris et al. [57] Venkatesh et al. [58] Venkatesh & Davis [59]
	2. The higher the number of people around me who are interested in live commerce, the more it influences my use of live commerce platforms.	
	3. When a celebrity, leader, or someone I admire uses live commerce platforms, it affects my use of these platforms.	
	4. People around me want me to use live commerce platforms.	
	5. I believe that my personal social image can be improved by using live commerce platforms.	
Personal Innovativeness (PI)	1. I am willing to accept new things.	Eastlick & Lotz [60] Hirschman [61]
	2. I am often the first to try new things among the people around me.	
	3. I am always looking for information about strange things.	
	4. I like to try new shopping methods.	
	5. I always ask my friends for advice on where to shop.	

Variables	Questions	References
Perceived Service Quality (PQ)	1. The live commerce platform is easy to operate and use.	Cao et al. [62] Devaraj et al. [63] Mckinney et al. [64]
	2. You can easily find the product you want with guidance on the live commerce platform page.	
	3. The information provided by the live commerce platform matches reality.	
	4. The live commerce platform intelligently provides information tailored to one’s taste.	
	5. The live commerce platform customer service can respond to my inquiries in time.	
	6. The live commerce platform staff can help me solve problems on time.	
Perceived Entertainment (PE)	1. I think the live commerce platform adds to the fun of shopping.	Davis et al. [65] Moon & Kim [48] Mun & Hwang [66]
	2. The process of shopping with a live commerce platform is fun.	
	3. The visual effects of live commerce are fascinating to me.	
	4. The visual effects of live commerce are fascinating to me.	
	5. The recommendation function of the live commerce platform page is fascinating to me.	
Perceived Usefulness (PU)	1. Live commerce platforms allow me to purchase the right product more efficiently.	Chiu [67] Davis et al. [65] Lu & Su [68] Venkatesh & Davis [59]
	2. On live commerce platforms, recommendations can provide me with a more comprehensive understanding of products.	
	3. Live commerce platforms improve my shopping judgments and decision-making abilities.	
	4. Shopping on live commerce platforms helps my consumption.	
	5. Live commerce provides more effective interactions.	
Perceived Ease of Use (PEOU)	1. Live commerce platforms can adapt quickly without consuming a lot of energy.	Davis [12] Fishbein & Ajzen [56] Venkatesh & Davis [59]
	2. I am satisfied with the page design of live commerce platforms.	
	3. The interface of live commerce platforms makes interactions simple.	
	4. It is easy to make purchases and provide payments on live commerce platforms.	
	5. I think live commerce platforms make it easy for me to achieve my goals.	
Intention to Purchase (IP)	1. Live commerce platforms can adapt quickly without consuming a lot of energy.	Boulding et al. [69] Ajzen & Fishbein [56] Fishbein & Ajzen [56]
	2. I am satisfied with the page design of live commerce platforms.	
	3. The interface of live commerce platforms makes interactions simple.	
	4. It is easy to purchase and pay on live commerce platforms.	
	5. I think live commerce platforms make it easy for me to achieve my goals.	
Purchasing Behaviour (PB)	1. I often shop on live commerce platforms.	Venkatesh & Davis [59]
	2. I have recommended live commerce platforms to others.	
	3. Compared to traditional e-commerce platforms, I have recently been shopping more using live commerce platforms.	
	4. I have recently spent a lot of money on live commerce platforms.	
	5. We will continue to make purchases on live commerce platforms in the future.	

References

- Gulfranz, M.B.; Sufyan, M.; Mustak, M.; Salminen, J.; Srivastava, D.K. Understanding the impact of online customers’ shopping experience on online impulsive buying: A study on two leading E-commerce platforms. *J. Retail. Consum. Serv.* **2022**, *68*, 103000. [CrossRef]
- Fedushko, S.; Ustyianovych, T. E-Commerce Customers Behavior Research Using Cohort Analysis: A Case Study of COVID-19. *J. Open Innov. Technol. Mark. Complex.* **2022**, *8*, 12. [CrossRef]
- Li, R.; Lu, Y.; Ma, J.; Wang, W. Examining gifting behavior on live streaming platforms: An identity-based motivation model. *Inf. Manag.* **2021**, *58*, 103406. [CrossRef]
- Gefen, D. E-commerce: The role of familiarity and trust. *Omega* **2000**, *28*, 725–737. [CrossRef]

5. Rosário, A.; Raimundo, R. Consumer Marketing Strategy and E-Commerce in the Last Decade: A Literature Review. *J. Theor. Appl. Electron. Commer. Res.* **2021**, *16*, 3003–3024. [[CrossRef](#)]
6. Li, X.; Zhao, X.; Pu, W. Measuring ease of use of mobile applications in e-commerce retailing from the perspective of consumer online shopping behaviour patterns. *J. Retail. Consum. Serv.* **2020**, *55*, 102093. [[CrossRef](#)]
7. Gao, L.; Waechter, K.A.; Bai, X. Understanding consumers' continuance intention towards mobile purchase: A theoretical framework and empirical study—A case of China. *Comput. Hum. Behav.* **2015**, *53*, 249–262. [[CrossRef](#)]
8. Hillman, S.; Neustaedter, C. Trust and mobile commerce in North America. *Comput. Hum. Behav.* **2017**, *70*, 10–21. [[CrossRef](#)]
9. Yang, K.C. Exploring factors affecting the adoption of mobile commerce in Singapore. *Telemat. Inform.* **2005**, *22*, 257–277. [[CrossRef](#)]
10. Cheung, M.F.; To, W.M. The influence of the propensity to trust on mobile users' attitudes toward in-app advertisements: An extension of the theory of planned behavior. *Comput. Hum. Behav.* **2017**, *76*, 102–111. [[CrossRef](#)]
11. Pantano, E.; Priporas, C.-V. The effect of mobile retailing on consumers' purchasing experiences: A dynamic perspective. *Comput. Hum. Behav.* **2016**, *61*, 548–555. [[CrossRef](#)]
12. Davis, F.D. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quart.* **1989**, *13*, 319–340. [[CrossRef](#)]
13. Gefen, D.; Straub, D. Managing user trust in B2C e-services. *e-Service* **2003**, *2*, 7–24. [[CrossRef](#)]
14. Kim, J. Platform Adoption Factors in the Internet Industry. *Sustainability* **2018**, *10*, 3185. [[CrossRef](#)]
15. Kim, J. Platform quality factors influencing content providers' loyalty. *J. Retail. Consum. Serv.* **2021**, *60*, 102510. [[CrossRef](#)]
16. Leyton, D.; Pino, J.A.; Ochoa, S.F. EB-TAM: Technology acceptance in e-Business environments. *Inf. Syst. e-Business Manag.* **2015**, *13*, 211–234. [[CrossRef](#)]
17. Liébana-Cabanillas, F.; Marinković, V.; Kalinić, Z. A SEM-neural network approach for predicting antecedents of m-commerce acceptance. *Int. J. Inf. Manag.* **2017**, *37*, 14–24. [[CrossRef](#)]
18. Cyr, D.; Hassanein, K.; Head, M.; Ivanov, A. The role of social presence in establishing loyalty in e-Service environments. *Interact. Comput.* **2007**, *19*, 43–56. [[CrossRef](#)]
19. Liu, D.; Guo, X. Exploring gender differences in acceptance of mobile computing devices among college students. *Inf. Syst. e-Business Manag.* **2017**, *15*, 197–223. [[CrossRef](#)]
20. Ahuja, V.; Khazanchi, D. Creation of a Conceptual Model for Adoption of Mobile Apps for Shopping from E-Commerce Sites—An Indian Context. *Procedia Comput. Sci.* **2016**, *91*, 609–616. [[CrossRef](#)]
21. Ingham, J.; Cadieux, J.; Berrada, A.M. e-Shopping acceptance: A qualitative and meta-analytic review. *Inf. Manag.* **2015**, *52*, 44–60. [[CrossRef](#)]
22. Yin, J.; Huang, Y.; Ma, Z. Explore the Feeling of Presence and Purchase Intention in Livestream Shopping: A Flow-Based Model. *J. Theor. Appl. Electron. Commer. Res.* **2023**, *18*, 237–256. [[CrossRef](#)]
23. Luo, H.; Cheng, S.; Zhou, W.; Yu, S.; Lin, X. A Study on the Impact of Linguistic Persuasive Styles on the Sales Volume of Live Streaming Products in Social E-Commerce Environment. *Mathematics* **2021**, *9*, 1576. [[CrossRef](#)]
24. Li, Y.; Wang, C.; Liu, J. A systematic review of literature on user behavior in video game live streaming. *Int. J. Environ. Res. Public Health* **2020**, *17*, 3328. [[CrossRef](#)] [[PubMed](#)]
25. Ma, G.; Wang, Z.; Zhang, M.; Ye, J.; Chen, M.; Zhu, W. Understanding Performance of Edge Content Caching for Mobile Video Streaming. *IEEE J. Sel. Areas Commun.* **2017**, *35*, 1076–1089. [[CrossRef](#)]
26. Sun, Y.; Shao, X.; Li, X.; Guo, Y.; Nie, K. How live streaming influences purchase intentions in social commerce: An IT affordance perspective. *Electron. Commer. Res. Appl.* **2019**, *37*, 100886. [[CrossRef](#)]
27. Hu, M.; Chaudhry, S.S. Enhancing consumer engagement in e-commerce live streaming via relational bonds. *Internet Res.* **2020**, *30*, 1019–1041. [[CrossRef](#)]
28. Cai, J.; Wohn, D.Y. Live streaming commerce: Uses and gratifications approach to understanding consumers' motivations. In Proceedings of the 52nd Hawaii International Conference on System Sciences, Maui, HI, USA, 8–11 January 2019.
29. Park, H.J.; Lin, L.M. The effects of match-ups on the consumer attitudes toward internet celebrities and their live streaming contents in the context of product endorsement. *J. Retail. Consum. Serv.* **2020**, *52*, 101934. [[CrossRef](#)]
30. Wei, M.F.; Luh, Y.H.; Huang, Y.H.; Chang, Y.C. Young generation's mobile payment adoption behavior: Analysis based on an extended UTAUT model. *J. Theor. Appl. Electron. Commer. Res.* **2021**, *16*, 618–637. [[CrossRef](#)]
31. Kelman, H.C. Interests, Relationships, Identities: Three Central Issues for Individuals and Groups in Negotiating Their Social Environment. *Annu. Rev. Psychol.* **2006**, *57*, 1–26. [[CrossRef](#)]
32. Chen, Y.-F. Herd behavior in purchasing books online. *Comput. Hum. Behav.* **2008**, *24*, 1977–1992. [[CrossRef](#)]
33. Turel, O.; Osatuyi, B. A peer-influence perspective on compulsive social networking site use: Trait mindfulness as a double-edged sword. *Comput. Hum. Behav.* **2017**, *77*, 47–53. [[CrossRef](#)]
34. Midgley, D.F.; Dowling, G.R. Innovativeness: The Concept and Its Measurement. *J. Consum. Res.* **1978**, *4*, 229–242. [[CrossRef](#)]
35. Everett, R. *Diffusion of Innovations*; Free Press: New York, NY, USA, 1995.
36. Limayem, M.; Khalifa, M. Business-to-consumer electronic commerce: A longitudinal study. In Proceedings of the ISCC 2000 Fifth IEEE Symposium on Computers and Communications, Antibes-Juan Les Pins, France, 3–6 July 2000; pp. 286–290.

37. Crawford, G.; Melewar, T.C. The importance of impulse purchasing behaviour in the international airport environment. *J. Consum. Behav.* **2003**, *3*, 85–98. [\[CrossRef\]](#)
38. Rodgers, S.; Harris, M.A. Gender and e-commerce: An exploratory study. *J. Advert. Res.* **2003**, *43*, 322–329. [\[CrossRef\]](#)
39. Kim, J.; Choi, H. Value co-creation through social media: A case study of a start-up company. *J. Bus. Econ. Manag.* **2019**, *20*, 1–19. [\[CrossRef\]](#)
40. Gefen, D.; Karahanna, E.; Straub, D.W. Trust and TAM in Online Shopping: An Integrated Model. *MIS Q.* **2003**, *27*, 51–90. [\[CrossRef\]](#)
41. Parboteeah, D.V.; Valacich, J.S.; Wells, J.D. The influence of website characteristics on a consumer's urge to buy impulsively. *Inform. Syst. Res.* **2009**, *20*, 60–78. [\[CrossRef\]](#)
42. Hassanein, K.; Head, M. Manipulating perceived social presence through the web interface and its impact on attitude towards online shopping. *Int. J. Human-Comput. Stud.* **2007**, *65*, 689–708. [\[CrossRef\]](#)
43. O'cass, A.; Fenech, T. Web retailing adoption: Exploring the nature of internet users Web retailing behaviour. *J. Retail. Consum. Serv.* **2003**, *10*, 81–94. [\[CrossRef\]](#)
44. Shih, H.-P. An empirical study on predicting user acceptance of e-shopping on the Web. *Inf. Manag.* **2004**, *41*, 351–368. [\[CrossRef\]](#)
45. Chen, L.-D.; Tan, J. Technology Adaptation in E-commerce: Key Determinants of Virtual Stores Acceptance. *Eur. Manag. J.* **2004**, *22*, 74–86. [\[CrossRef\]](#)
46. Dobre, C.; Milovan, A.-M.; Duțu, C.; Preda, G.; Agapie, A. The Common Values of Social Media Marketing and Luxury Brands. The Millennials and Generation Z Perspective. *J. Theor. Appl. Electron. Commer. Res.* **2021**, *16*, 2532–2553. [\[CrossRef\]](#)
47. Moore, G.C.; Benbasat, I. Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation. *Inf. Syst. Res.* **1991**, *2*, 192–222. [\[CrossRef\]](#)
48. Moon, J.-W.; Kim, Y.-G. Extending the TAM for a World-Wide-Web context. *Inf. Manag.* **2001**, *38*, 217–230. [\[CrossRef\]](#)
49. Hsu, C.-L.; Lu, H.-P. Why do people play on-line games? An extended TAM with social influences and flow experience. *Inf. Manag.* **2004**, *41*, 853–868. [\[CrossRef\]](#)
50. Yu, J.; Ha, I.; Choi, M.; Rho, J.J. Extending the TAM for a t-commerce. *Inf. Manag.* **2005**, *42*, 965–976. [\[CrossRef\]](#)
51. Wu, L.; Chen, J.L. An extension of trust and TAM model with TPB in the initial adoption of on-line tax: An empirical study. *Int. J. Hum-Comput. St.* **2005**, *62*, 784–808. [\[CrossRef\]](#)
52. Escobar-Rodríguez, T.; Bonsón-Fernández, R. Analysing online purchase intention in Spain: Fashion e-commerce. *Inf. Syst. e-Business Manag.* **2017**, *15*, 599–622. [\[CrossRef\]](#)
53. Schiffman, L.G.; Kanuk, L.L. *Consumer Behavior, Global Edition*; P&C Business, 2014.
54. Armstrong, M. Competition in two-sided markets. *RAND J. Econ.* **2006**, *37*, 668–691. [\[CrossRef\]](#)
55. Agarwal, R.; Karahanna, E. Time Flies When You're Having Fun: Cognitive Absorption and Beliefs about Information Technology Usage. *MIS Q.* **2000**, *24*, 665–694. [\[CrossRef\]](#)
56. Fishbein, M.; Ajzen, I. *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*; Addison-Wesley: Reading, MA, USA, 1975.
57. Koufaris, M.; Kambil, A.; Labarbera, P.A. Consumer Behavior in Web-Based Commerce: An Empirical Study. *Int. J. Electron. Commer.* **2001**, *6*, 115–138. [\[CrossRef\]](#)
58. Venkatesh, V.; Morris, M.G.; Davis, G.B.; Davis, F.D. User acceptance of information technology: Toward a unified view. *MIS Q.* **2003**, *27*, 425–478. [\[CrossRef\]](#)
59. Venkatesh, V.; Davis, F.D. A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Manag. Sci.* **2000**, *46*, 186–204. [\[CrossRef\]](#)
60. Eastlick, M.A.; Lotz, S. Profiling potential adopters and non-adopters of an interactive electronic shopping medium. *Int. J. Retail. Distrib. Manag.* **1999**, *27*, 209–223. [\[CrossRef\]](#)
61. Hirschman, E.C. Humanistic inquiry in marketing research: Philosophy, method, and criteria. *J. Mark. Res.* **1986**, *23*, 237–249. [\[CrossRef\]](#)
62. Cao, X.; Liu, Y.; Zhu, Z.; Hu, J.; Chen, X. Online selection of a physician by patients: Empirical study from elaboration likelihood perspective. *Comput. Hum. Behav.* **2017**, *73*, 403–412. [\[CrossRef\]](#)
63. Devaraj, S.; Fan, M.; Kohli, R.; Tan, B.; Yi, C.; Chan, H.C.; Ray, S.; Kim, S.S.; Morris, J.G.; Chintagunta, P.K.; et al. Antecedents of B2C Channel Satisfaction and Preference: Validating e-Commerce Metrics. *Inf. Syst. Res.* **2002**, *13*, 316–333. [\[CrossRef\]](#)
64. McKinney, V.; Yoon, K.; Zahedi, F. The Measurement of Web-Customer Satisfaction: An Expectation and Disconfirmation Approach. *Inf. Syst. Res.* **2002**, *13*, 296–315. [\[CrossRef\]](#)
65. Davis, F.D.; Bagozzi, R.P.; Warshaw, P.R. Extrinsic and intrinsic motivation to use computers in the workplace. *J. Appl. Soc. Psychol.* **1992**, *22*, 1111–1132. [\[CrossRef\]](#)
66. Mun, Y.Y.; Hwang, Y. Predicting the use of web-based information systems: Self-efficacy, enjoyment, learning goal orientation, and the technology acceptance model. *Int. J. Hum. Comput. Stud.* **2003**, *59*, 431–449.
67. Chiu, C.-M. Applying means-end chain theory to eliciting system requirements and understanding users perceptual orientations. *Inf. Manag.* **2005**, *42*, 455–468. [\[CrossRef\]](#)

68. Lu, H.; Su, P.Y. Factors affecting purchase intention on mobile shopping web sites. *Internet Res.* **2009**, *19*, 442–458. [[CrossRef](#)]
69. Boulding, W.; Kalra, A.; Staelin, R.; Zeithaml, V.A. A dynamic process model of service quality: From expectations to behavioral intentions. *J. Mark. Res.* **1993**, *30*, 7–27. [[CrossRef](#)]

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