THE ANTECEDENTS OF E-MARKETS USE BY SMES IN VIETNAM: A PRELIMINARY STUDY

[1]HUU TINH HOANG, [2]VINH V. THAI, [3]TRUONG TON HIEN DUC, [4]KONRAD PESZYNSKI, [5]BELINDA MOLONEY

[1,2,3,4] School of Accounting, Information Systems and Supply Chain, RMIT University, Australia
[5]Research and Innovation Office, Torrens University, Australia
[1]School of Engineering and Technology, Vinh University, Vietnam
E-mail: s3615557@student.rmit.edu.au

Abstract - E-markets are becoming an important channel for enterprises, including small and Medium Enterprises (SMEs), to conduct their business, especially in the context of developing countries like Vietnam. However, research on the post-adoption stage of e-market adopting by SMEs in developing countries is scant. This study therefore investigates the antecedents of the use of e-markets in the post-adoption stage of SMEs. Through a comprehensive and systematic literature review, this paper first presents a conceptual framework of factors affecting the use of e-markets in the context of SMEs, which is then validated with data collected from SMEs in Vietnam through a survey with members of the Vietnam Association of Small and Medium. After data cleaning, 284 valid responses were used for data analysis. The data analysis from the Exploratory Factor Analysis (EFA) shows that one factor, top management support, was removed from the model. Additionally, external pressure split into two distinct factors: competitors' pressure and stakeholder pressure. The EFA results confirm the constructs' discriminant validity. The Cronbach's alpha and composite reliability values of the refined variables strongly support their reliability. Furthermore, the Average Variance Extracted (AVE) values confirm the constructs' convergent validity. This study contributes to the identification of antecedents for the extent of e-market use by SMEs in Vietnam. It provides a conceptual framework for studying the antecedents of the extent of e-market use by SMEs in both Vietnam and other developing countries.

Keywords - E-markets, Small and Medium Enterprise, E-Market Post-Adoption, Developing Countries.

I. INTRODUCTION

E-markets are defined as e-commerce sites where products or services are provided by multiple third-party vendors and transactions are processed by the marketplace operator [1]. Potential benefits of e-markets for enterprises include improved efficiencies, strengthened customer relationships, ease of reaching target markets, reduced costs and increased competitive advantage [2]. E-markets are becoming an essential channel for enterprises to conduct their business, leading e-markets such as Alibaba, Amazon, Pinduoduo, JD, TikTok, Shopee accounting for 57% of e-commerce market share in 2022 base on gross merchandise volume [3].

SMEs can be defined based on the number of employees, revenues, turnover, annual balance sheet total, assets, and capital. In Vietnam, a SME in Vietnam is legally defined as an enterprise with the annual average number of permanent employees not exceeding 300 [4]. SMEs are the backbone of the economy of countries in the world [5]. This sector has a significant contribution to economic growth, job creation, and the development of countries. According to the World Bank, SMEs account for about 90 percent of enterprises worldwide, and more than 50 percent of employment [6]. In Vietnam, SMEs account for 97 percent of enterprises in Vietnam and 45 percent of GDP [7]. SMEs are an important contributor to job creation in Vietnam. SMEs employ about 36 percent of employees in enterprises in Vietnam [8].

Vietnam is a developing country with a population of 99.239 million in Feb 2024, and ranked 16th in the world [9]. The number of Internet users in Vietnam is above 81.48 million in 2023, and is predicted to increase quickly to 100 million in 2029 [10]. This shows that there are some potential advantages for Vietnamese firms to approach their customer via the internet. In addition, Vietnam has signed 16 Free Trade Agreements (FTAs), and Vietnam are negotiating 3 other FTAs [11]. This presents challenges for enterprises in Vietnam since they will compete with overseas competitors in the domestic market. So, the Internet can be an approach for them to improve their competitive advantage. The FTAs are also an opportunity for enterprises in Vietnam to expand their international market share. However, according to a report of Vietnam E-commerce Association, in Vietnam, 44 percent of enterprises have their own website, and 20 percent of enterprises participate in e-markets which means that the use of e-markets by enterprises as well as SMEs in Vietnam is quite low. Resultantly, mechanism of e-markets' benefits has not yet been fully understood by SMEs in Vietnam.

In this connection, many studies have adopted the innovation diffusion theory to examine the adoption stage, especially the first step in innovation diffusion [12-17]. However, only a few studies touch upon 'innovation use' or the 'post-adoption' stage. Besides,

although innovation diffusion represents a complex process, many studies have only focused on the adoption decision and on measures such as "intent to adopt" and "adoption versus non-adoption" [18]. Therefore, there exists a need for a better understanding of the post-adoption variation [19, 20].

This proposed research focuses on identifying factors which may affect the use of e-markets, and thus will contribute to advance the literature of the post-adoption of e-markets. Accordingly, this research proposes to answer the research question: "What are the key factors associated with the extent of e-market use in Vietnamese SMEs?".

The remainder of the paper is presented as follows. The next section reviews previous studies on e-market adoption and its effect on firm performance, followed by a discussion on the theoretical background and elaboration on components of the proposed conceptual framework. The paper concludes with a summary as well as discussion on implications and future research directions.

II. LITERATURE REVIEW

E-markets are considered as a subset of information technology, e-commerce, and e-business. In addition, the adoption and use of e-markets is an innovation within an organisation. New technology adoption in an organisation is a process involving many stages/phases (see Table 1). There is currently no consensus amongst scholars regarding the number of stages used in examining the innovation/information technology (IT) adoption. However, innovation adoption studies can be categorised into pre-adoption and post-adoption research clusters. Most studies investigating the pre-adoption stage tend to focus on the adoption decision and on measures such as 'intent to adopt' and 'adoption versus non-adoption'; however, a better understanding of the post-adoption variations in use are desperately needed [18].

Author(s)	Stages/Phases				
[30]	Un-freezing	Change	Re-freezing		
[31]	Initiation	Adoption	Implementation		
[32]	Knowledge	Persuasion	Adoption	Implementation	Confirmation

Table 1. Various stages in organizational IT adoption

Several significant research studies have focused on the adoption and use of e-market in organisations [2, 12, 17, 21-29], with researchers proposing and developing various models to determine factors affecting e-market adoption and use. It is also suggested in the literature that e-markets can be categorised into two groups including studies in the organisations without consideration of the size of the enterprise and SMEs. The first group of studies can be called as "one size fits all" [30], investigating the factors that influence the adoption/use of e-markets in an organisation. Cloete and Doens [31], extended a technology acceptance model (TAM) to investigate the experience with e-market adoption and the factors preventing organisations from adopting an e-market. The study concluded that perceived benefits and compatibility of the firm's values, culture, preferred work practices, and technology infrastructure are important, while non-adopters of e-market considered lack of personal contact in the e-market as a serious problem. Son and Benbasat [32] investigated the effect of factors on adoption intention and use of e-market by organisations in Canada, citing the impacts of product characteristics, market volatility, mimetic pressures, and normative pressures. Utilising the Technology-Organisation-Environment (TOE) framework, Joo and Kim [33], studied factors affecting e-market adoption in the manufacturing organisations, indicating that organisation size and external pressure are the critical factors for e-market adoption. However, these studies do not differentiate between SMEs and the large organisations in the adoption of e-markets.

Hence, the other studies were designed for SMEs in Australia, Taiwan, India, and Canada. Deng, Gupta [21], proposed a conceptual framework for the evaluation of e-market adoption in SMEs in Australia while Duan, Deng [23] investigated the determinants for SME adoption of e-markets within Australia, with findings indicating that top management support, perceived trust, external pressure and perceived benefit have a significant impact on e-market adoption by SMEs in Australia. Interestingly, factors such as perceived indirect benefit, size of the organisation, and readiness did not show a significant effect on the e-market adoption by SMEs. Upadhyaya, Mohan [25] found that factors such as organisation resources, mimetic pressures and coercive pressures had a significant influence on the adoption of e-market by Indian SMEs. These studies focus on the intention or decision to adopt e-markets with few researchers investigating the post-adoption stage. Furthermore, there is a lack of studies conducted in Vietnam.

In summary, existing studies do not have a general agreement on the factors affecting the use/adoption of e-market by the organisation. Moreover, these existing studies cannot be used for fully explaining the use of e-market by SMEs in Vietnam due to (1) the lack of consideration of the unique characteristics of SMEs in the use of e-market in the previous studies in the "one size fits all" category, (2) the lack of study on the post-adoption stage, (3) lack of consideration of the role of SMEs in using e-market at the users of the platform. To comprehensively investigate the use of e-market by SMEs in Vietnam this study will propose a conceptual framework to study the factor affecting the adoption of e-markets. This framework is then tested and validated with data collected from SMEs in Vietnam.

III. CONCEPTUAL FRAMEWORK

The theoretical background of this study is the TOE framework. The TOE framework is used popularly in previous research to study factors affecting the adoption and implementation of innovations at the organisational level. It explains how the three contexts, including technological, organisational and environmental contexts, influence the adoption and implementation of innovations [34].

Based on the literature review, a conceptual framework is proposed as shown in Fig.1 to study the factors affecting the use of e-markets in Vietnamese SMEs. The conceptual framework is developed by extending TOE framework to measure the factors affecting the level of e-market. The use of e-markets can be considered as a type of innovation within organisations, therefore, the TOE framework is a suitable theory to study factors affecting the use of e-market by Vietnamese SMEs. This study extent the TOE framework by adding the trust factors group. The proposed framework conceptualises that factors affecting the use of e-markets can be categorised into four contexts including technological context, organisational context, Environment context and trust factors. Firstly, the technological context includes the internal and external technologies that are relevant to the firm [35]. Technological factors have always been the central point in innovation adoption [36]. The literature in organisational adoption of e-markets indicates that perceived relative advantage [23] and compatibility [37] are the important factor affecting the use of e-markets. The perceived relative advantage of e-market can be defined as the anticipated benefits that an organisation can derive from adopting and using an innovation [38]. Compatibility can be defined as "the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters" [38]. Further, the usability of Internet-enabled technologies is an important determinant of those technologies' acceptance and use [39]. The New Penguin Dictionary of Computing defines usability as "a property of any complex system in which humans interact with machines that measure how comprehensible and convenient the operator finds the user interface [40]. Therefore, usability will be evaluated in the technological context. As a result, following hypotheses are proposed:

H1.(1a,1b,1c): Technological factors is significantly and positively related to the extent of e-market use of Vietnamese SMEs.

Secondly, the organisational context refers to the organisational characteristics related to the decision to adopt new technology [41]. The successful adoption and implementation of technological innovations within organisations has been often related to the support of top management and organizational readiness [37]. In addition, organisation's governance has significant effect on the use of e-commerce. It affects how well an organization manages the change to the Internet environment and the integration of their activities to the e-business [42]. Furthermore, organisational culture has huge effect on the innovation of an organisation. Problems could be defined and solved in innovative ways if the organisational culture encourages creative solutions [43]. This study uses four dimensions in the organisational context including the organisational readiness, top management support, governance and organisational culture. As a result, following hypotheses are proposed:

H1.(2a,2b,2c,2d): Organisational factors is significantly and positively related to the extent of e-market use of Vietnamese SMEs.

Thirdly, the environmental context refers to the climate in which the organisation conducts its operations [44]. The literature review shows that the important factors for the adoption of e-markets as well as e-commerce are external pressure [37], supporting industries e-readiness and government e-readiness [45]. External pressure is the pressure from the arena in which an organization conducts their business [37]. Supporting industries e-readiness refers the assessment of the presence, development, service level and cost structure of support-giving institutions whose activities may affect the adoption and implementation of e-market. Government e-readiness refers to the assessment of the preparation of the government and government-related organization to support, promote, facilitate and regulate business activities in the online environment and its various requirements [45]. As a result, following hypotheses are proposed:

H1.(3a,3b,3c): Environmental factors is significantly and positively related to the extent of e-market use of Vietnamese SMEs.

Finally, the trust context considers the degree of trust perceived by SMEs in the use of e-markets [23]. In a commercial environment, security means protecting sensitive data and information, transaction involving financial information, corporate secrets and proprietary information need to protected [46]. Potential threats and attacks to which commercial activities in networked environments may be susceptible are accessing unauthorised network resources, destroying information and network resources, altering, inserting or modifying information, disclosing information to unauthorised people, causing networking services disruptions or interruption, stealing information and network resources, denying services received, claiming to have provided services that have not been administered, and claiming to have sent or received information not given [47]. Therefore, trust on e-

market security can be considered as an important factor for the use of e-markets. In addition, trust in the e-market provider is an important dimension of trust in the e-market [48]. E-market provider trust refers the trustworthiness of SMEs on e-market provider in handling transactions, security systems and maintaining relationships when operating the system [23]. Hence, trust dimension in this study includes the trust of e-market security and e-market provider trust. As a result, following hypotheses are proposed:

H1.(4a,4b): Trust factors is significantly and positively related to the extent of e-market use of Vietnamese SMEs.

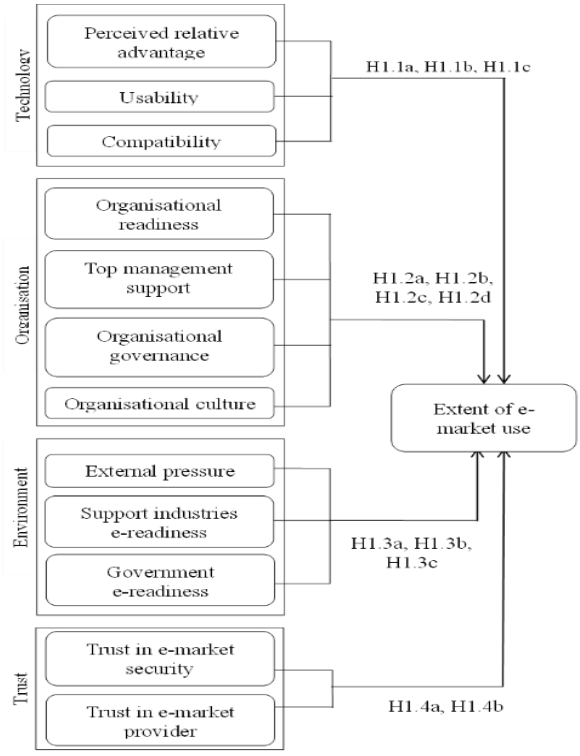


Figure 1 Conceptual framework.

Dimensions	Variables	No of Items	Cronbach's Alpha	Reliability Strength
Technology	Perceived relative advantage	5	.765	Acceptable
	Usability	3	.753	Acceptable
	Compatibility	4	.823	Good
Organisation	Organisational readiness	3	.813	Good
	Top management support	3	.845	Good
	Governance	5	.819	Good
	Organisational culture	5	.831	Good
Environment	External pressure	6	.801	Good
	Government e-readiness	5	.849	Good
	Support industries readiness	4	.770	Acceptable
Trust	Trust in e-market security	5	.834	Good
	Trust in e-market provider	5	.845	Good

Table 2. Cronbach's alpha values in reliability analysis

IV. RESEARCH METHODOLOGY

This study utilises a quantitative approach to gather data. The research data were collected through a survey, with questionnaires completed by top management personnel of SMEs in Vietnam. The sampling frame was sourced from the enterprise directories of the Vietnam Association of Small and Medium Enterprises (VINASME) and Pantala Vietnam Production and Trade Promotion JSC (PVNPTP).

The questionnaire has three parts with closed-ended questions. The first section of questionnaire is the demographic information, which collects the information about the enterprises and the respondents. The second section is the questions to assess the effect of factors on the use of e-market. The final section of questionnaire measures the extent of e-market use and their firm performance. VINASME and PVNPTP help to Delivery the enterprise in their directory for data collection process. After data cleaning, 284 valid responses were used for data analysis.

V. DATA ANALYSIS AND RESULTS

5.1. Respondent profile

The results of the descriptive statistics from the collected data are summarised in Table 5.3. In terms of business sectors, there are four business sectors including (1) manufacturing and/or construction, (2) agriculture, forestry and/or fishery, (3) service sector, and (4) other. The percentage for each of these sectors is 25.7 percent, 3.9 percent, 56 percent, and 19.4 percent respectively. In terms of firm size, 156 respondents (54.9 percent) were from a micro-sized enterprise, followed by the small-sized enterprise with 106 respondents (37.3 percent). Medium-sized enterprises 22 respondents (7.7 percent). In terms of job title, most of the respondents (50.7 percent) were senior managers of enterprises, whereas only 20.1 percent of respondents were non-managerial staff, however, these staffs attended the decision process for the use of e-market in their enterprise.

5.2. Reliability Analysis

Reliability is defined as "an indicator of a measure's internal consistency" [49]. It is also referred to as "dependability or consistency", which indicates that "the same thing is repeated or recurs under identical or very similar conditions" [50]. Internal consistency is commonly used to measure reliability [51]. Internal consistency can be assessed through Cronbach's alpha and item-total correlation [51].

Cronbach's Alpha is considered the most common and widely utilised measure for assessing the internal consistency of the entire scale [52]. In general, a Cronbach's Alpha value greater than a threshold of 0.7 is highly preferred, but as a rule of thumb, an alpha value range of 0.6 can be acceptable and used in exploratory research [52].

5.3. Validity Assessment

A factor analysis was conducted to evaluate the construct validity of the research measurement instrument, by testing the underlying structure among the items of the measurement model. Factor analysis is "an interdependence technique whose primary

purpose is to define the underlying structure among the variables in the analysis" [53]. Construct validity is "the to which a set of measured variables actually represent the theoretical latent construct they are designed to measure" [53].

This study will use both types of factor analysis, EFA and CFA, to examine construct validity. While EFA explores data to identify potential constructs, CFA is used to test or confirm the validity of a theoretical measurement model [53].

The exploratory factor analysis (EFA) with the principal component analysis extraction method and the Varimax rotation method was used. [51] suggested that a minimum observation-to-variable ratio of 5:1, but ratios of 15:1 or 20:1 are preferred. The sample size is 284 which satisfies the minimum observation to ratio of 5:1. The Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity (BTOS) are utilized to assess the factorability of the data. Hair, Black [52] recommend that the index of KMOMSA generally ranges from 0 to 1 and the measure of KMOMSA should be more than 0.5 to be acceptable. The outcome shows that the values of KMO test are in the acceptable range, which is 0.881. The p-value of BTOS (p-value=0.00) also presents that the overall inter-correlations assumptions were satisfied.

Table 5.2 presents the results of EFA for the antecedents of e-market use. 41 items were retained from 53 initial items that were extracted to twelve factors.

	Factor component											
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
ExtPress_4	.804											
ExtPress_3	.800											
ExtPress_5	.789											
ExtPress_6	.757											
OrgGov_2		.717										
OrgGov_4		.701										
OrgGov_3		.672										
OrgGov_1		.615										
OrgGov_5		.554										
Compatibility_2			.799									
Compatibility_3			.746									
Compatibility_4			.703									
Compatibility_1			.660									
GovERea_4				.791								
GovERea_5				.756								
GovERea_3				.711								
GovERea_1				.634								
TrustEMPro_3					.746							
TrustEMPro_4					.744							
TrustEMPro_2					.730							
TrustEMPro_5					.678							
TrustSec_3						.794						
TrustSec_5						.757						
TrustSec_4						.714						
TrustSec_2						.677						
OrgCul_2							.773					
OrgCul_1							.680					
OrgCul_3							.637					
OrgCul_5							.586					
OrgERea_2								.772				
OrgERea_3								.728				
OrgERea_1								.722				
PerReAdv_2									.857			
PerReAdv_1									.740			
PerReAdv_3									.729			
Usability_1										.841		
Usability_2										.821		
ExtPress_2											.841	
ExtPress_1											.781	
SupIndERea_4												.813
SupIndERea_3												.651
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.												
a. Rotation converged in 7 iterations.												

Table 2. The result of factor analysis for antecedents

After running EFA, there is some change in the factor in the model in comparison with the proposed model. Firstly, the top manager support factor was dismissed from the organisational factors. The literature shows that top manager support is a popular factor used in technology adoption studies (see Table 2.6). However, in this empirical study, the result did not confirm the reliability of top management support.

This means that the other factors have a strong and more reliable influence on the extent of e-market use. Secondly, several items removed due to poor loading (OrgCul_4, PerReAdv_4, PerReAdv_5, Usability_3, SupIndERea_1, SupIndERea_2, TrustSec_1, TrustEMPro_1). Thirdly, the external factor is separated into two factors. The first factor separated from external pressure includes two items (ExtPress_2 and ExtPress_1), which ask about the pressure from the use of e-market by competitors. This new factor is called competitor pressure. Competitive pressure is defined as the pressure exerted by a competitive market that induces the desire to be like others by imitating structures, practices, or outcomes [54].

The second factor separated from external pressure includes four items (ExtPress_3, ExtPress_4, ExtPress_5, ExtPress_6), which mention the recommendation from customers, industry associations, government, and government-related departments. This factor is called stakeholder pressure. The stakeholder pressure in this study is defined as the pressure from customers, industry associations, and government and/or government-related departments into the use of e-market.

5.4. Final reliability and validity assessment

The results of the EFA provide evidence supporting the discriminant validity of the constructs. To further evaluate validity, it's essential to assess convergent validity by analyzingthe Average Variance Extracted (AVE) values for each latent construct. Additionally, it's necessary to conduct an assessment of internal consistency for the retained items identified through EFA to ascertain their reliability.

Hence, Cronbach's alpha and composite reliability were utilized for the reliability assessment of the constructs [55, 56]. A summarisy of AVE, Cronback's alpha and composite reliability of 12 construct after the EFA were presented in Table 5.3. The AVE values of antecedent factors are above the cut-point value of 0.5, except for the government e-readiness and organisational governance. Although the AVE of government e-readiness factor (0.497) and organisational governance (0.496) are less than 0.50, it is still acceptable because the CR and Cronback's alpha of these factors are quite good [57, 58]. The

result indicates the adequate reliability of the constructs.

Dimensions	Constructs	No. of items	AVE	Cronbach's Alpha	Composite Reliability
Technology	Perceived relative advantage	3	.605	.744	.820
	Usability	2	.690	.887	.817
	Compatibility	4	.531	.823	.818
Organisation	Organisational readiness	3	.549	.813	.785
	Governance	5	.428	.819	.788
	Organisational culture	4	.452	.797	.766
Environment	Competitor pressure	2	.659	.780	.794
	Stakeholder pressure	4	.620	.843	.797
	Government e-readiness	5	.526	.849	.815
	Support industries readiness	2	.542	.676	.701
Trust	Trust in e-market security	4	.543	.812	.826
	Trust in e-market provider	4	.526	.831	.816

Table 3. Validity measures for antecedents

VI. CONCLUSION

In this paper, a conceptual framework outlining factors affecting the use of e-markets. This framework lays a foundation for researchers to empirically test and understand the factors affecting the extent of e-market use in Vietnamese SMEs. The proposed conceptual framework may be used as a reference for researchers in other countries.

The measurement instrument for the variables in the conceptual model underwent initial testing for reliability and validity using empirical data collected from an online survey of 284 SME managers in Vietnam. After the EFA analysis, top manager support is dismissed from the model, while external pressure separates into two factors called competitor pressure and stakeholder pressure. Twelve factors,including perceived relative advantage, usability, compatibility, organisational readiness, organizational governance, organisational culture, competitor pressure, stakeholder pressure, government e-readiness, support industries readiness, trust in e-market security, trust in e-market provider, will be use in the laterstages of this study to investigate the antecedents of the extent of e-market use by SMEs in Vietnam.

This preliminary study supports an in-deep investigation of the antecedents of the extent of e-market use by SMEs in Vietnam. It, however, has some limitations. First, the number of data collected is small than the expected number of respondents. Therefore, it is better to have a bigger sample size. Second, further analysis, including confirmatory factor analysis, is needed to strengthen the support for the appropriateness of the measurement instrument and ensure the significance of results. Furthermore, variations among respondents from different firm sizes can potentially introduce bias into the empirical results.

REFERENCES

[1] Statista. Online marketplaces - Statistics & Facts. 2019 01/07/2019]; Available from: https://www.statista.com/topics/4827/online-marketplaces/.

[2] Duan, S.X., H. Deng, and B. Corbitt, Evaluating the critical determinants for adopting e-market in Australian small-and-medium sized enterprises. Management Research Review, 2012. 35(3/4): p. 289-308.

[3] Statista. E-commerce market share of leading e-retailers worldwide in 2022, based on GMV. 2023; Available from: https://www.statista.com/statistics/664814/global-e-commerce-market-share/.

[4] Business Insides. The Development of Small and Medium Enterprises in Vietnam. 2011; Available from: http://businessinsides.com/development-vietnam-small-medium-enterprises.html.

[5] Tripathi, A., SMEs In Saudi Arabia-An Innovative Tool for Country's Economic Growth. Sci. Int.(Lahore), 2019. 31(2): p. 261-267.

[6] Joseph, E. and M. Dhanabhakyam, Role of Digitalization Post-Pandemic for Development of SMEs, in Research anthology on business continuity and navigating times of crisis. 2022, IGI Global. p. 727-747.

[7] Thuy-Dung. Business sector to contribute 65-70% of Viet Nam's GDP by 2025. 2023 15/04/2024]; Available from: https://en.baochinhphu.vn/business-sector-to-contribute-65-70-of-viet-nams-gdp-by-2025-111230422095757233.htm.

[8] GSO;. SMEs can have more contribution to supporting industries. 2023 09/04/2024]; Available from: https://www.gso.gov.vn/tin-tuc-khac/2023/05/doanh-nghiep-nho-va-vua-co-the-dong-gop-nhieu-cho-cong-nghiep-ho-tro/.

[9] Worldometers. Vietnam Population. 2024 05/02/2024]; Available from: https://www.worldometers.info/world-population/vietnam-population/.

[10] Statista, Number of internet users in Vietnam from 2014 to 2029. 2023.

[11] VCCI. Summary of Vietnam's FTAs as of August 2023. 2023 09/08/2024]; Available from: https://trungtamwto.vn/thong-ke/12065-tong-hop-cac-fta-cua-viet-nam-tinh-den-thang-112018.

[12] Duan, S.X., H. Deng, and B.J. Corbitt. A Critical Analysis of E-Market Adoption in Australian Small and Medium Sized Enterprises. in PACIS. 2010.

[13] Premkumar, G. and M. Roberts, Adoption of new information technologies in rural small businesses. Omega, 1999. 27(4): p. 467-484.

[14] Mokhtar, N.F., Internet marketing adoption by small business enterprises in Malaysia. International Journal of Business and Social Science, 2015. 6(1).

[15] Teixeira, S., et al. Main factors in the adoption of digital marketing in startups an online focus group analysis. in 2018 13th Iberian Conference on Information Systems and Technologies (CISTI). 2018. IEEE.

[16] Pentina, I., A.C. Koh, and T.T. Le, Adoption of social networks marketing by SMEs: exploring the role of social influences and experience in technology acceptance. International Journal of Internet Marketing and Advertising, 2012. 7(1): p. 65-82.

[17] Noviaristanti, S. and Y.M. Huda. Factor Affecting E-Marketplace Adoption on MSMEs in Bandung, Indonesia. in European International Conference on Industrial Engineering and Operations Management. 2022.

[18] Zhu, K. and K.L. Kraemer, Post-adoption variations in usage and value of e-business by organizations: cross-country evidence from the retail industry. Information systems research, 2005. 16(1): p. 61-84.

[19] Tornatzky, L.G. and K.J. Klein, Innovation characteristics and innovation adoption-implementation: A meta-analysis of findings. IEEE Transactions on engineering management, 1982(1): p. 28-45.

[20] DeLone, W.H. and E.R. McLean, Information systems success: The quest for the dependent variable. Information systems research, 1992. 3(1): p. 60-95.

[21] Deng, H., P. Gupta, and X. Duan. A conceptual framework for evaluating the adoption of e-market for electronic business in small and medium-sized enterprises in Australia. in 2009 International Conference on Information Resources Management. 2009. IGI Global.
[22] Molla, A. and H. Deng, Business participation in third-party controlled e-Marketplace: An exploratory model. International Journal of E-business Management, 2009. 3(1): p. 20.
[23] Duan, S.X., H. Deng, and B. Corbitt. What drives the adoption of electronic markets in Australian small-and-medium sized enterprises?–an empirical study. in ACIS 2012: Location, location, location: Proceedings of the 23rd Australasian Conference on Information Systems 2012. 2012. ACIS.
[24] Upadhyaya, P. and P. Mohanan, Electronic Marketplace Adoption: A case study of manufacturing SMEs. IUP Journal of Management Research, 2009. 8(6): p. 30.
[25] Upadhyaya, P., P. Mohan, and M.P. Karantha, Determinants of B2B E-Marketplace Adoption: An Empirical Study of Indian Small Firms. International Journal of E-Business Research (IJEBR), 2017. 13(4): p. 55-69.
[26] Yu, C.-S. and Y.-H. Tao, Enterprise e-marketplace adoption: from the perspectives of technology acceptance model, network externalities and transition costs. Journal of International Management, 2007. 14(4): p. 231-265.
[27] Tan, X., et al., Factors influencing the adoption of e-marketplaces by small organizations: An empirical investigation. AMCIS 2003 Proceedings, 2003: p. 92.
[28] Zhai, C. and H. Liu. Factors affecting SMEs adoption decision of B2B e-marketplace: A case study in China. in 2013 10th International Conference on Service Systems and Service Management. 2013. IEEE.
[29] Zhai, C. Research on Post-adoption Behavior of B2B E-marketplace in China. in Management and Service Science (MASS), 2010 International Conference on. 2010. IEEE.
[30] Duan, S.X., An integrated solution to the adoption of electronic market in Australian small-and-medium sized enterprises. 2012, RMIT University.
[31] Cloete, E. and M. Doens, B2B e-marketplace adoption in South African agriculture. Information Technology for Development, 2008. 14(3): p. 184-196.
[32] Son, J.-Y. and I. Benbasat, Organizational buyers' adoption and use of B2B electronic marketplaces: efficiency-and legitimacy-oriented perspectives. Journal of management information systems, 2007. 24(1): p. 55-99.
[33] Joo, Y.-B. and Y.-G. Kim, Determinants of corporate adoption of e-marketplace: an innovation theory perspective. Journal of Purchasing and Supply Management, 2004. 10(2): p. 89-101.
[34] Baker, J., The technology–organization–environment framework, in Information systems theory. 2012, Springer. p. 231-245.
[35] Depietro, R., E. Wiarda, and M. Fleischer, The context for change: Organization, technology and environment. The processes of technological innovation, 1990. 199(0): p. 151-175.
[36] Mimosette, M.F.F. and D. Paul, Factors explaining the adoption of mobile marketing in Cameroon: Exploratory study on the use of SMS as method of transmission of social information. African Journal of Marketing Management, 2015. 7(2): p. 20-31.
[37] Scupola, A., SMEs'e-commerce adoption: perspectives from Denmark and Australia. Journal of Enterprise Information Management, 2009. 22(1/2): p. 152-166.
[38] Rogers, E.M., Diffusion of innovations. Free Press. New York, 2003: p. 551.
[39] Lu, M.-t. and W.-l. Yeung, A framework for effective commercial web application development. Internet Research, 1998. 8(2): p. 166-173.
[40] Pountain, D., The new Penguin dictionary of computing. 2002: Penguin USA.
[41] Lippert, S.K. and C. Govindarajulu, Technological, organizational, and environmental antecedents to web services adoption. Communications of the IIMA, 2006. 6(1): p. 14.
[42] Molla, A. and P.S. Licker, Perceived e-readiness factors in e-commerce adoption: An empirical investigation in a developing country. International Journal of Electronic Commerce, 2005. 10(1): p. 83-110.
[43] Lock, E. and S. Kirkpatrick, Promoting creativity in organizations. Creative action in organizations: Ivory tower visions and real world voices, 1995: p. 115-120.
[44] Maduku, D.K., M. Mpinganjira, and H. Duh, Understanding mobile marketing adoption intention by South African SMEs: A multi-perspective framework. International Journal of Information Management, 2016. 36(5): p. 711-723.
[45] Molla, A. and P.S. Licker, eCommerce adoption in developing countries: a model and instrument. Information & management, 2005. 42(6): p. 877-899.
[46] Singh, M., Security management in an e-business environment, in E-business innovation and change management. 2004, IGI Global. p. 231-251.
[47] Adam, N.R., et al., Electronic commerce: technical, business, and legal issues. 1998: Prentice-Hall, Inc.
[48] Son, J.-Y., L. Tu, and I. Benbasat, A descriptive content analysis of trust-building measures in B2B electronic marketplaces. Communications of the Association for Information Systems, 2006. 18(1): p. 6.
[49] Zikmund, W.G., W.G. Zikmund, and W.G.a. Zikmund, Business research methods. 9th ed. ed, ed. W.G. Zikmund. 2013, Mason, OH: South-Western.
[50] Neuman, W.L., Social research methods: Qualitative and quantitative approaches. 2013: Pearson education.
[51] Hair, J.F., et al., Multivariate data analysis.2019.
[52] Hair, J.F., et al., Multivariate Data Analysis.New Jersey, Pearson Prentice Hall.2010.
[53] Hair, J.F., et al., Multivariate data analysis: Pearson new international edition. 2013: Pearson Higher Ed.
[54] Williams, Z., et al., Why all the changes? An institutional theory approach to exploring the drivers of supply chain security (SCS). International Journal of Physical Distribution & Logistics Management, 2009. 39(7): p. 595-618.
[55] Ifinedo, P., Internet/e-business technologies acceptance in Canada's SMEs: an exploratory investigation. Internet Research, 2011. 21(3): p. 255-281.
[56] Chau, N.T. and H. Deng. Critical Determinants for Mobile Commerce Adoption in Vietnamese SMEs: A Preliminary Study. in ACIS2018. 2018. ACIS.
[57] Fornell, C. and D. Larcker, Evaluating structural equation models with unobservable variables and measurement error. Journal of marketing research, 1981. 18(1): p. 39-50.
[58] Lam, L.W., Impact of competitiveness on salespeople's commitment and performance. Journal of Business Research, 2012. 65(9): p. 1328-1334

★★★