

Adoption of E-Commerce by Small and Medium Enterprises in Nepal

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Abstract

This study examines the adoption of e-commerce by small and medium enterprises in Nepal. The dependent variable is adoption of e-commerce by SMEs. Similarly, the selected independent variables are technological readiness, perceived compatibility, government support, competitor pressure, social media influence and security concern. The primary source of data is used to assess the opinions of the respondents regarding the technological readiness, perceived compatibility, government support, competitor pressure, social media influence and security concern for adoption of e-commerce by small and medium enterprises in Nepal. The study is based on primary data of 159 respondents. To achieve the purpose of the study, structured questionnaire is prepared. The correlation coefficients and regression models are estimated to test the adoption of e-commerce by small and medium enterprises in Nepal.

The study showed that technological readiness is positively correlated to e-commerce adoption by SMEs. It means that increase in technological readiness leads to increase in adoption of e-commerce by SMEs. Likewise, perceived compatibility is positively correlated to adoption of e-commerce by SMEs. It implies that increase in perceived compatibility leads to increase in level adoption of e-commerce by SMEs. Similarly, government support has a positive relationship with e-commerce adoption by SMEs indicating that increase in government support lead to increase in adoption of e-commerce by SMEs. Furthermore, competitor pressure has a positive relationship with adoption of e-commerce by SMEs. It implies that competitor pressure leads to increase in adoption of e-commerce by SMEs. Likewise, social media influence is positively correlated to the adoption of e-commerce by SMEs indicating that social media influence leads to increase in adoption of e-commerce by SMEs. Similarly, security concerns have a negative relationship with adoption of e-commerce by SMEs indicating that increase in security concerns lead to decrease in adoption of e-commerce by SMEs.

Keywords: technological readiness, perceived compatibility, government support, competitor pressure, social media influence, security concern adoption of e-commerce by SMEs

1. Introduction

E-commerce (electronic commerce) refers to the buying and selling of goods and services over the internet, as well as the transfer of money and data to complete these transactions E-commerce concerns an internet vendor's website, trading goods or services to the user directly from the platform. E-Commerce entails a company accessing the internet as well as IT, such as the electronic data interchange (EDI). The gateway uses a wireless purchase cart or a purchase basket to pay by credit card, debit card or Electronic fund transfer (EFT) (Jain *et al.*, 2021). According to Kedah (2023), the process of purchasing, offering for sale, or transferring goods, services, and information over computer networks is known as electronic commerce (e-commerce). Kabanda and Brown (2017) stated that e-commerce encompassed not just the buying and selling of products online, but also included the entire online process of developing, marketing, selling, delivering, servicing, and paying for products and services. E-commerce adoption by SMEs represented a fundamental shift in how smaller businesses participate in the modern digital economy. SMEs are defined as enterprises that maintain certain thresholds of employees and annual turnover, though these thresholds vary by country and region (Rahayu and Day, 2015).

Awiagah *et al.* (2016) analyzed that the factors affecting e-commerce adoption

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among SMEs in Ghana. The study stated that electronic commerce (e-commerce) widened the concept of business from a simple transactional approach to a broader and more complex concept of inter-firm co-operation. Similarly, Mohtaramzadeh *et al.* (2018) examined that the B2B e-commerce adoption in Iranian manufacturing companies: Analyzing the moderating role of organizational culture. The study found that the success of e-commerce implementation in small and medium-sized companies is influenced by various effective factors that need careful consideration and strategic planning. Likewise, Yeboah-Boateng and Essandoh (2014) investigated that the factors influencing the adoption of cloud computing by small and medium enterprises in developing economies. The study revealed that small and medium-sized enterprises play a vital role in contributing to employment, job creation, and economic growth across different countries, making their digital transformation particularly significant for economic development. Furthermore, Taiminen and Karjaluo (2015) studied that the usage of digital marketing channels in SMEs. The study showed that the success of e-commerce adoption is closely tied to SMEs' marketing capabilities and their ability to leverage digital marketing channels in their operations. Moreover, Daniel *et al.* (2002) investigated that the adoption of E-Commerce by SMEs in the UK: Towards a Stage Model. The study found that UK SMEs adopt e-commerce in four stages: developing services, using email, creating websites, and enabling online orders and payments. Progress is influenced by industry, exporting, B2B sales, and prior electronic system use.

Octavia *et al.* (2020) studied that the impact on E-commerce adoption on entrepreneurial orientation and market orientation in business performance of SMEs. The study found that implementation of e-commerce has shown significant effects on business performance, particularly in areas of market orientation and entrepreneurial development. Similarly, Zhang *et al.* (2023) examined that the manufacturing firms' e-commerce adoption and performance: evidence from a large survey in Jiaying, China. The study stated that the manufacturing firms that adopt e-commerce have demonstrated improved performance metrics, highlighting the importance of digital transformation in traditional industry sectors. Likewise, Gregory *et al.* (2019) evaluated that the developing e-commerce marketing capabilities and efficiencies for enhanced performance in business-to-business export ventures. The study emphasized that the adoption process is often mediated by digital marketing capabilities, which have become increasingly important for maintaining competitive advantage in the digital marketplace. Further, Scupola (2009) examined the adoption of e-commerce in SMEs from the perspective of Denmark and Australia. The study found that customer pressure, CEO support, and ICT services as major factors influencing e-commerce adoption. Moreover, Olatokun and Kebonye (2010) investigated that the adoption of e-commerce technologies by small and medium-sized enterprises (SMEs) in Botswana. The study found that point of sale system was the most adopted technology and the reasons for adoption were competitive advantage and customer/supplier pressure.

Ghobakhloo *et al.* (2011) examined that the factors within the Technology-Organization-Environment (TOE) framework that influence the adoption of e-commerce (EC) and the extent of EC adoption in small and medium-sized enterprises (SMEs). The study found that e-commerce adoption in SMEs is driven by factors like perceived advantages, compatibility, CEO innovativeness, buyer/supplier pressure, competition, and vendor support. Cost was only a significant barrier for advanced systems like electronic supply chain management. Similarly, Abed *et al.* (2015) examined that an overview of existing literature on the adoption of e-commerce by Small and Medium-sized Enterprises (SMEs)

using social media. The study found that social media provides SMEs with a cost-effective way to market, engage customers, and manage reputations, helping overcome e-commerce adoption challenges. Likewise, Al-Bakri and Katsioloudes (2015) investigated that the factors influencing the adoption of e-commerce in Jordanian. The study revealed that customer pressure and the quality of ICT services were the most important external factors. Within the organization, CEOs' decisions and employee IT knowledge played key roles. The study also found that e-commerce adoption provided benefits like cost reduction and improved communication, barriers such as lack of IT knowledge and vendor lock-in still hindered its full potential. Further, Lim and Trakulmaykee (2018) examined that the factors influencing e-commerce adoption among SMEs in West Malaysia. The study found that perceived barriers had a negative impact on medium-sized SMEs' e-Commerce adoption but were not significant for small-sized SMEs and organization Readiness and Competitor Pressures were significant factors influencing e-Commerce adoption in both small and medium-sized SMEs.

Sombultawee (2020) investigated that the antecedents and consequences of e-commerce adoption for SMEs. The study argued that performance expectancy, effort expectancy, and facilitating conditions significantly influence e-commerce adoption, while social influence does not. E-commerce adoption positively impacts SME financial performance, with facilitating conditions being the most critical factor. Similarly, Mohd Zain *et al.* (2020) investigated the drivers of E-Commerce Adoption Amongst Small and Medium Sized Enterprises (SMEs) in the Business Service Sector. The study found that perceived relative advantage, compatibility, e-commerce knowledge, and competitive pressure significantly influence e-commerce adoption, while external change agents have a negative relationship. Likewise, Costa and Castro (2021) investigated that the e-commerce adoption as a key strategy for improving SME resilience and survival. The study found that e-commerce is vital for SME survival, but adoption is hindered by digital literacy, financial, and technological barriers. Further, Rawash (2021) examined that the e-commerce Adopting TOE Model by SMEs in Jordan. The study revealed that relative advantage, technology readiness, management support, and government support significantly influence e-commerce adoption among SMEs in Jordan. Moreover, Hossain *et al.* (2022) examined that the e-commerce Adoption of Small and Medium-Sized Enterprises during COVID-19 Pandemic. The study showed that perceived complexity, compatibility, management attitude, and knowledge sharing significantly boosted e-commerce adoption among SMEs during COVID-19, with open innovation playing a positive role.

Fonseka *et al.* (2022) examined that the impact of e-commerce adoption on business performance of SMEs in Sri Lanka: Moderating role of artificial intelligence. The study found that e-commerce adoption significantly improves SME business performance, and artificial intelligence (AI) enhances this effect by automating processes and improving customer interactions, leading to better overall performance. Similarly, Okoye *et al.* (2023) investigated that the electronic commerce and sustainability of SMEs in Anambra State. The study demonstrated that electronic commerce significantly boosts the sustainability of SMEs in Anambra State by improving service quality, accountability, and customer reach. Enhanced order delivery systems also enable SMEs to meet customer demands efficiently, emphasizing e-commerce's vital role in performance and competitiveness. Likewise, Gao *et al.* (2023) analyzed that the impact of e-commerce and digital marketing adoption on the financial and sustainability performance of MSMEs during the COVID-19 Pandemic. The study found that e-commerce boosted both the financial and sustainability performance of

MSMEs during COVID-19, while digital marketing improved only financial performance.

In the context of Nepal, Kshetri (2007) investigated that the barriers to e-commerce and competitive business models in developing countries. The study found that organization can overcome economic, sociopolitical, and cognitive barriers by focusing on expatriates, outsourcing critical functions to developed countries, and collaborating with local businesses to offer culturally relevant services. Similarly, Vaidya (2019) examined that the preference and problems in online shopping in Nepal. The study showed that while time-saving and service quality drive online shopping in Nepal, 57% of consumers face issues like poor product quality and delivery errors. Payment security is also a concern, with many preferring cash-on-delivery. Despite its growing popularity, improvements in product reliability, delivery, and secure payments are needed to boost consumer trust. Likewise, Shah and Tiwari (2021) analyzed that the consumers' attitude towards Online Shopping in Janakpurdham. The study revealed that convenience, time-saving, and security are the key factors influencing online shopping. Website design is also important but less significant. Consumers are mainly motivated by ease of purchase, saving time, and access to product variety. Furthermore, Bajracharya and Chatterjee (2023) evaluated that the challenges for online purchase intention in Nepal. The study found that enhancing security, privacy, and IT law and policy measures significantly boosts online purchase intention in Nepal. These factors positively influence customer trust and confidence, encouraging more online shopping.

The above discussion shows that empirical evidences vary greatly across the studies concerning the adoption of e-commerce by small and medium enterprises. Though there are above mentioned empirical evidences in the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The major objective of the study is to examine the adoption of e-commerce by small and medium enterprises in Nepal. More specifically, it examines the effect of technological readiness, perceived compatibility, government support, competitor pressure, social media influence and security concern on the adoption of e-commerce by small and medium enterprises in Nepal.

The remainder of this study is organized as follows. Section two describes the sample, data and methodology. Section three presents the empirical results and the final sections draws the conclusion.

2. Methodological aspects

The study is based on primary sources of data which were gathered from 7 different province of Nepal. For primary data a structured questionnaire was used. This study contains a sample of 7 province of Nepal whose respective data are collected from a total of 159 respondents. The respondents' views were collected on technological readiness, perceived compatibility, government support, competitor pressure, social media influence, security concern and adoption of e-commerce. This study is based on descriptive as well as causal comparative research designs. Convenience sampling has been used for data collection.

The model

The model used in this study assumes that the adoption of e-commerce depends upon various factors. The dependent variable selected for the study is adoption of e-commerce

by small and medium enterprises. Similarly, the independent variables are technological readiness, perceived compatibility, government support, competitor pressure, social media influence and security concern. Therefore, the model to be estimated in this study is stated as follows:

$$EA = \beta_0 + \beta_1 TR + \beta_2 PC + \beta_3 GS + \beta_4 CP + \beta_5 SMI + \beta_6 SC + e$$

Where,

TR=Technological readiness

PC=Perceived compatibility

GS=Government support

CP=Competitor pressure

SMI=Social media influence

SC=Security concern

EA=Adoption of e-commerce by SMEs

Technological readiness was measured using a 5-point Likert scale where respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “SMEs in Nepal have access to reliable internet connections needed for e-commerce”, “The workforce in SMEs is skilled in using digital tools and platforms for online business” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.741$).

Perceived compatibility was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “E-commerce adoption aligns well with the existing business operations of SMEs in Nepal”, “Adopting e-commerce is compatible with the traditional practices of SMEs” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.784$).

Government support were measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “The Nepalese government provides adequate training programs to help SMEs adopt e-commerce”, “There are financial incentives or subsidies available to support e-commerce adoption among” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.812$).

Competitor pressure was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “Competitors who have adopted e-commerce influence SMEs to consider doing the same”, “SMEs feel pressured to adopt e-commerce due to increasing competition in their industry” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.896$).

Social media influence was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “Social media platforms are effective tools for SMEs in promoting their products and services”, “Social media significantly

drives the decision for SMEs to adopt e-commerce” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.736$).

Security concern was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly Agree. There are 5 items and sample items include “Data privacy concerns are significant barriers to e-commerce adoption among SMEs”, “SMEs in Nepal trust online payment systems to process transactions securely” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.752$).

Adoption of e-commerce by SMEs was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly Agree. There are 5 items and sample items include “SMEs in Nepal are likely to adopt e-commerce within next year”, “E-commerce adoption will significantly boost the revenue and growth of SMEs” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.847$).

The following section describes the independent variables used in this study along with hypothesis formulation.

Technological readiness

Technological readiness refers to the ability of businesses, organizations, or regions to adopt, integrate, and utilize technology effectively to enhance their operations, meet market demands, and remain competitive. Technological readiness, as a fundamental organizational characteristic, represents the comprehensive level of technological sophistication and preparedness that determines an organization’s ability to adopt and implement digital innovations (Ramdani *et al.*, 2013). The concept extends beyond mere infrastructure to include the organization’s system integration capabilities, reflecting their ability to seamlessly incorporate new technologies into existing business processes and workflows (Roy and Moorthi, 2017). Similarly, Astuti and Nasution (2014) study found a statistically significant positive relationship between technological readiness and e-commerce adoption. SMEs that scored higher in technological readiness metrics (such as having IT infrastructure, skilled personnel, and openness to technology) were more likely to implement and utilize e-commerce solutions effectively. Based on it, this study develops following hypothesis:

H₁: There is a positive relationship between technological readiness and adoption of e-commerce by SMEs.

Perceived Compatibility

Perceived compatibility, as a critical adoption determinant, refers to the degree to which an innovation is perceived as being consistent with existing values, past experiences, and current needs of potential adopters (Saffu *et al.*, 2012). In the context of technological implementation, perceived compatibility encompasses the extent to which new systems align with an organization’s existing business processes, technical infrastructure, and work culture (Al-Somali and Clegg, 2020). Hossain and Quaddus (2011) highlighted a strong positive relationship between perceived compatibility and the adoption of new technologies like RFID, which parallels e-commerce adoption. SMEs are more likely to adopt e-commerce if they perceive it to be compatible with their existing workflows, infrastructure, and business goals. Based on it, this study develops following hypothesis:

H₂: There is a positive relationship between perceived compatibility and adoption of e-commerce by SMEs.

Government Support

Government support mechanisms typically encompass “direct fiscal transfers, tax incentives, regulatory frameworks, and technical assistance programs designed to address market failures and promote public welfare” (Merhi, 2022). Systematic financial and non-financial assistance mechanisms are implemented by government entities to achieve specific policy objectives while promoting economic stability and growth (Ocloo *et al.*, 2020). The study identified a strong positive relationship between government support and the adoption of e-commerce. When governments provide adequate support, SMEs are more motivated and empowered to embrace e-commerce technologies (Gurure and Takavarasha, 2020). Based on it, this study develops following hypothesis:

H₃: There is a positive relationship between government support and adoption of e-commerce by SMEs.

Competitor pressure

Competitor pressure refers to the intensity of rivalry and competitive forces that firms experience within their market environment (AlGhamdi *et al.*, 2012). According to the study, it manifests as the combined effect of market players’ actions, innovations, and strategic moves that compel organizations to adapt, improve, or risk losing market position (Swilley *et al.*, 2012). Lim and Trakulmaykee (2018) found that competitor pressure has a statistically significant positive relationship with e-commerce adoption. SMEs often adopt e-commerce solutions when they perceive that their competitors are using similar technologies to gain a competitive advantage. Based on it, this study develops following hypothesis:

H₄: There is a positive relationship between competitor pressure and adoption of e-commerce by SMEs.

Social media influence

Social media influence represents the capacity of social media platforms and their content to shape user perceptions, behaviors, and decision-making processes in both online and offline contexts (Maskuroh *et al.*, 2022). Hajli (2013) defined it as a multi-dimensional force that combines user-generated content, algorithmic distribution, and network effects to create significant impacts on consumer attitudes, purchasing decisions, and brand relationships. Singh and Singh (2018) found that social media usage significantly influences SMEs’ adoption of e-commerce. Social media platforms not only serve as marketing and customer engagement tools but also act as gateways for SMEs to transition to more comprehensive e-commerce systems. Based on it, this study develops following hypothesis:

H₅: There is a positive relationship between social media influence and adoption of e-commerce by SMEs.

Security concern

Security concerns involve potential threats or vulnerabilities that can compromise the confidentiality, integrity, or availability of information and systems, posing risks to organizations and individuals alike (Rehman *et al.*, 2020). As cyber threats evolve,

organizations must adopt holistic approaches combining technical safeguards, robust policies, and cultural shifts toward security awareness (Nantembelele and Gopal, 2018). The study by Al-Qirim (2007) found that security concerns had an insignificant impact on the adoption of e-commerce by SMEs in New Zealand. Trust in third-party providers and available security measures likely reduced the influence of these concerns. Based on it, this study develops following hypothesis:

H₆: There is a negative relationship between security concern and adoption of e-commerce by SMEs.

3. Results and discussion

Correlation analysis

On analysis of data, correlation analysis has been undertaken first and for this purpose, Kendall's Tau correlation coefficients along with means and standard deviations have been computed, and the results are presented in Table 1.

Table 1

Kendall's Tau correlation coefficients matrix

This table presents Kendall's Tau coefficients between dependent variable and independent variables. The dependent variable is EA (E-commerce adoption by SMEs). The independent variables are TR (Technological readiness), PC (Perceived compatibility), GS (Government support), CP (Competitor pressure), SMI (Social media influence) and SC (Security concerns).

Variables	Mean	Std. Deviation	EA	TR	PC	GS	CP	SMI	SC
EA SME	3.693	0.449	1						
TR	3.234	0.464	0.130*	1					
PC	3.201	0.489	0.307**	0.170**	1				
GS	2.579	0.594	0.110	0.146*	0.228**	1			
CP	3.025	0.780	0.142*	0.277**	0.054	0.028	1		
SMI	3.879	0.519	0.347**	0.132*	0.256**	-0.066	0.250**	1	
SC	3.499	0.511	-0.196**	0.103	0.305**	0.281**	-0.094	0.170**	1

Note: The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent levels respectively

Table 1 shows the Kendall's Tau correlation coefficients of dependent and independent variables. The study shows that technological readiness is positively correlated to e-commerce adoption by SMEs. It means that increase in technological readiness leads to increase in adoption of e-commerce by SMEs. Likewise, perceived compatibility is positively correlated to adoption of e-commerce by SMEs. It implies that increase in perceived compatibility leads to increase in level adoption of e-commerce by SMEs. Similarly, government support has a positive relationship with e-commerce adoption by SMEs. It indicates that increase in government support leads to increase in adoption of e-commerce by SMEs. Furthermore, competitor pressure has a positive relationship with adoption of e-commerce by SMEs. It implies that increase in competitor pressure leads to increase in adoption of e-commerce by SMEs. Moreover, social media influence is positively correlated to the adoption of e-commerce by SMEs. It shows that increase in social media influence leads to increase in

adoption of e-commerce by SMEs. However, security concerns has a negative relationship with adoption of e-commerce by SMEs. It indicates that increase in security concerns leads to decrease in adoption of e-commerce by SMEs.

Regression analysis

Having analyzed the Kendall's Tau correlation coefficients matrix, the regression analysis has been carried out and the results are presented in Table 2. More specifically, it presents the regression results of technological readiness, perceived compatibility, government support, competitor pressure, social media influence and security concern on adoption of e-commerce by small and medium enterprises in Nepal.

Table 2

Estimated regression results of technological readiness, perceived compatibility, government support, competitor pressure, social media influence and security concerns on adoption of e-commerce by SMEs in Nepal

The results are based on 159 observations using linear regression model. The model is $EA = \beta_0 + \beta_1 TR + \beta_2 PC + \beta_3 GS + \beta_4 CP + \beta_5 SMI + \beta_6 SC + e$, where the dependent variable is EA (Adoption of e-commerce by SMEs). The independent variables are TR (Technological readiness), PC (Perceived compatibility), GS (Government support), CP (Competitor pressure), SMI (Social media influence) and SC (Security concerns).

Model	Intercept	Regression coefficient						Adj. R_bar ²	SEE	F-value
		TR	PC	GS	CP	SMI	SC			
1	2.733 (11.372)**	0.297 (4.035)**						0.088	0.4291	16.28
2	2.472 (11.444)**		0.382 (5.72)**					0.167	0.4101	32.72
3	3.377 (21.42)**			0.123 (2.059)*				0.020	0.4448	4.239
4	3.137 (23.051)**				0.184 (4.218)**			0.096	0.4272	17.789
5	1.802 (8.064)**					0.487 (8.537)**		0.313	0.3725	72.873
6	2.658 (11.374)**						-0.296 (4.477)**	0.108	0.4245	20.045
8	2.031 (7.525)**	0.192 (2.642)**	0.326 (4.737)**					0.198	0.4025	20.473
9	0.270 (7.554)**	0.209 (2.776)**	0.347 (4.748)**	-0.053 (0.867)				0.196	0.4028	13.878
10	7.356 (1.968)*	1.828 (0.144)	4.354 (0.317)	-0.565 (0.034)	2.502 (0.11)			0.223	0.3961	12.327
11	1.142 (4.175)**	0.038 (0.529)	0.227 (3.4)**	0.023 (0.408)	0.042 (1.033)	0.39 (6.257)**		0.377	0.3546	20.135

Notes:

- Figures in parenthesis are t-values.
- The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.
- Adoption of e-commerce by SMEs is the dependent variable.

Table 2 shows that the beta coefficients for technological readiness is positive with adoption of e-commerce by SMEs. It indicates that technological readiness has a positive impact on adoption of e-commerce by SMEs. This finding is similar to the findings of Astuti and Nasution (2014). Similarly, the beta coefficients for perceived compatibility are positive with adoption of e-commerce by SMEs. It indicates that perceived compatibility has a positive

impact on adoption of e-commerce by SMEs. This finding is consistent with the findings of Hossain and Quaddus (2011). Likewise, the beta coefficient for government support is positive with adoption of e-commerce by SMEs. It indicates that government support has a positive impact on adoption of e-commerce by SMEs. This finding is similar to the findings of Gurure and Takavarasha Jr (2020). Further, the beta coefficient for competitor pressure is positive with adoption of e-commerce by SMEs. It indicates that competitor pressure has a positive impact on adoption of e-commerce by SMEs. This finding is consistent to the findings of Lim and Trakulmaykee (2018). moreover, the beta coefficient for social media influence is positive with adoption of e-commerce by SMEs. It indicates that social media influence has a positive impact on adoption of e-commerce by SMEs. This finding is similar to the findings of Singh and Singh (2018). However, the beta coefficient for security concerns is negative with adoption of e-commerce by SMEs. It indicates that security concerns has a negative impact on adoption of e-commerce by SMEs. This finding is consistent to the findings of Al-Qirim (2007).

4. Summary and conclusion

E-commerce, short for electronic commerce, refers to the buying and selling of goods or services over the internet, along with the transfer of data and funds to complete these transactions. The adoption of e-commerce by Small and Medium Enterprises (SMEs) in Nepal is an emerging trend that has the potential to transform the business landscape in the country. SMEs represent a significant portion of Nepal's economy, contributing to employment, innovation, and local economic growth. However, despite the opportunities, several factors such as technological challenges, lack of awareness, and limited access to finance, can affect the adoption process. The future of e-commerce in Nepal looks promising, with growing internet access, a shift in consumer behavior, and government support for the digital economy. As more SMEs in Nepal adopt digital platforms, the e-commerce landscape is likely to become increasingly competitive, which could lead to better products, services, and customer experiences. Additionally, the growing popularity of mobile payments, social commerce, and innovative technologies like AI and AR could further shape the e-commerce ecosystem. SMEs that can overcome current challenges and adapt to this digital transformation are likely to thrive in Nepal's evolving economy.

This study provides insightful information regarding the adoption of e-commerce by small and medium enterprises in Nepal. The study analyzes various significant variables that could impact the adoption of e-commerce by small and medium enterprises in Nepal. These variables include how technological readiness, perceived compatibility, government support, competitor pressure, social media influence and security concern effect the adoption of e-commerce by small and medium enterprises.

This study attempts to examine the adoption of e-commerce by small and medium enterprises in Nepal. The study is based on primary data with 159 respondents.

The major conclusion of the study is that technological readiness, perceived compatibility, government support, competitor pressure and social media influence have a positive relationship with adoption of e-commerce by small and medium enterprises. While security concern has a negative relationship with adoption of e-commerce by SMEs. The study also concludes that social media influence is the most significant factor followed by perceived compatibility and security concern that effect the adoption of e-commerce by small

and medium enterprises in Nepal.

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