

**EXPLORING E-COMMERCE ADOPTION AMONG
RURAL ENTREPRENEURS IN SABAH:
ENTREPRENEURIAL MOTIVES, PERCEPTIONS,
AND FACILITATORS**



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UNIVERSITI MALAYSIA SABAH

**FACULTY OF BUSINESS, ECONOMICS
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UNIVERSITI MALAYSIA SABAH
2023**

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BIBIANAH BINTI THOMAS



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**THESIS SUBMITTED IN FULFILMENT OF
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**FACULTY OF BUSINESS, ECONOMICS
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DECLARATION

I hereby declare that the material in this thesis is my own except for quotations, excerpts, equations, summaries and references, which have been duly acknowledged.

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Bibianah Binti Thomas
29 August 2023

ABSTRACT

Nowadays, almost all aspects of our lives have been transformed through digitalization due to the advancement of technology, including in business. Therefore, it is important for business organizations to shift their operations from traditional to digital-based technology through the usage of e-commerce. Nevertheless, compared to urban entrepreneurs, rural entrepreneurs, especially in Sabah, face major challenges in transforming their businesses. This will have a substantial impact on the rural economy as they are not gaining the advantages provided by the utilization of e-commerce. Previous studies have investigated e-commerce adoption by looking into the factors, barriers, and disadvantages. However, studies exploring how entrepreneurial motives may influence the facilitators of e-commerce adoption remain limited. For that reason, this study aims to meet four research objectives related to e-commerce adoption. The first is to explore the entrepreneurial motives of rural entrepreneurs in Sabah. The second is to explore the perceptions of rural entrepreneurs in Sabah on e-commerce adoption. The third is to explore the facilitators of e-commerce adoption among rural entrepreneurs in Sabah. Finally, this study will seek to understand how the entrepreneurial motives of rural entrepreneurs in Sabah influence their facilitators of e-commerce adoption. In order to address all these research objectives, this study employs an interpretive qualitative method by using semi-structured interviews to gain an in-depth understanding from 25 rural entrepreneurs in Sabah. The results revealed that the rural entrepreneurs were motivated by both push and pull factors. Besides, the rural entrepreneurs highlighted the benefits and challenges they faced while adopting e-commerce. Then, it was proven that the rural entrepreneurs had been facilitated by social expectancy, performance expectancy, effort expectancy, facilitating conditions, and observational learning. Last but not least, it was found that some entrepreneurial motives had influenced the facilitators of e-commerce adoption to some extent. It is hoped that the findings of this study provide useful insights for the relevant stakeholders to ensure inclusivity of all entrepreneurs in the transition into a digital-based economy.

Keywords: E-Commerce, E-Commerce Adoption, Rural Entrepreneurs, Entrepreneurial Motives, Perceptions, Facilitators, Sabah, UTAUT

ABSTRAK

MENEROKA PENGGUNAAN E-DAGANG DALAM KALANGAN USAHAWAN LUAR BANDAR DI SABAH: MOTIF KEUSAHAWANAN, PERSEPSI DAN FASILITATOR

Pada masa kini, hampir semua aspek kehidupan kita telah berubah melalui pendigitalan kerana kemajuan teknologi, termasuk dalam perniagaan. Oleh itu, adalah penting bagi organisasi perniagaan untuk mengalihkan operasi mereka daripada teknologi tradisional kepada berasaskan digital melalui penggunaan e-dagang. Namun begitu, berbanding usahawan bandar, usahawan luar bandar khususnya di Sabah berdepan cabaran besar dalam mentransformasikan perniagaan mereka. Ini akan memberi impak yang besar kepada ekonomi luar bandar kerana mereka tidak mendapat kelebihan yang disediakan oleh penggunaan e-dagang. Kajian terdahulu telah menyiasat penggunaan e-dagang dengan melihat faktor, halangan, dan kekurangan. Walau bagaimanapun, kajian yang meneroka bagaimana motif keusahawanan boleh mempengaruhi fasilitator penggunaan e-dagang tetap terhad. Atas sebab itu, kajian ini bertujuan untuk memenuhi empat objektif penyelidikan yang berkaitan dengan penggunaan e-dagang. Yang pertama ialah meneroka motif keusahawanan usahawan luar bandar di Sabah. Kedua ialah meneroka persepsi usahawan luar bandar di Sabah mengenai penggunaan e-dagang. Ketiga ialah meneroka fasilitator penggunaan e-dagang dalam kalangan usahawan luar bandar di Sabah. Akhir sekali, kajian ini akan berusaha untuk memahami bagaimana motif keusahawanan usahawan luar bandar di Sabah mempengaruhi fasilitator mereka dalam penggunaan e-dagang. Untuk menangani semua objektif penyelidikan ini, kajian ini menggunakan kaedah kualitatif interpretif dengan menggunakan temubual separa berstruktur untuk mendapatkan pemahaman yang mendalam daripada 25 usahawan luar bandar di Sabah. Hasil kajian menunjukkan bahawa usahawan luar bandar didorong oleh faktor tolak dan tarik. Selain itu, usahawan luar bandar turut menekankan manfaat dan cabaran yang mereka hadapi semasa mengguna pakai e-dagang. Kemudian, terbukti bahawa usahawan luar bandar telah dipermudahkan oleh jangka masa sosial, jangka prestasi, jangka usaha, keadaan memudahkan, dan pembelajaran pemerhatian. Akhir sekali, didapati bahawa beberapa motif keusahawanan telah mempengaruhi fasilitator penggunaan e-dagang sedikit sebanyak. Diharapkan hasil kajian ini memberikan pandangan berguna kepada pihak berkepentingan yang berkaitan untuk memastikan keterangkuman semua usahawan dalam peralihan ke dalam ekonomi berasaskan digital.

Kata Kunci: *E-Dagang, Penerimagunaan E-Dagang, Usahawan Luar Bandar, Motif Keusahawanan, Persepsi, Fasilitator, Sabah, UTAUT*

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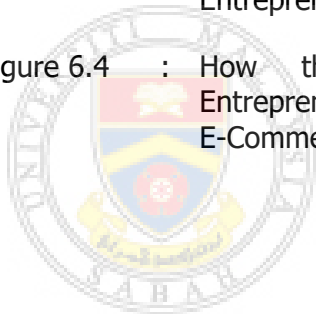


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LIST OF ABBREVIATIONS

DOSM	-	Department of Statistics Malaysia
GDP	-	Gross Domestic Products
ICT	-	Information and Communication Technology
MCMC	-	Malaysian Communications and Multimedia Commission
MDEC	-	Malaysia Digital Economy Corporation
MRD	-	Ministry of Rural Development
SMEs	-	Small and Medium Enterprises
MSMEs	-	Micro and Small Medium Enterprises
UNCTAD	-	United Nations Conference on Trade and Development
UTAUT	-	Unified Theory of Acceptance and Use of Technology



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CHAPTER 1

INTRODUCTION

1.1 Introduction

In this era of globalization, almost everything can be done digitally, from reading, documenting, and storing to buying and selling. As the world is becoming more advanced, various countries have made efforts to encourage technology utilization among their citizens. By using technology, costs can be reduced and work can be done effectively, which will definitely contribute to the economic growth of the country. As the world is moving towards digitalization, those in rural areas are always being left behind compared to residents of urban centers, in terms of not only infrastructures but also technological knowledge, skills, literacy, and support. Even though it is important to ensure that both urban and rural areas are able to embrace digitalization, a gap exists between rural and urban areas that can be considered a digital divide (Bowen & Morris, 2019). As a result, rural entrepreneurs are struggling with the challenges of ensuring their businesses are sustainable in the long term, especially in the era of globalization, in which they have to compete locally and globally. The emphasis on the need to embrace digitalization has become prominent, especially after the COVID-19 pandemic affected the world and forced everything to be done virtually.

Therefore, to ensure that the gap between rural and urban areas can be reduced, more research should be done. All stakeholders, especially the government, must work together to ensure that rural entrepreneurs can move in the same direction as those in urban areas in the effort to exploit the digital economy. By realizing the importance of the digital economy in developing the economy of the country, the researcher decided to explore the adoption of e-commerce from the perspectives of rural entrepreneurs by understanding their entrepreneurial motives,

perceptions of e-commerce adoption, facilitators of e-commerce adoption, and how entrepreneurial motives influence the facilitators of e-commerce adoption among rural entrepreneurs. Therefore, an awareness of the situations in rural areas and the perspectives on e-commerce usage platforms among rural entrepreneurs can enlighten the relevant stakeholders and encourage more rural entrepreneurs to utilize digital platforms in their business operations in the future.

This chapter provides a brief explanation of the background of the study and the existing problems that were the motivations for the study. The research questions and objectives are also explained in this chapter before the significance of the study is outlined. At the end of this chapter, the researcher provides a brief definition of the key terms used in this research.

1.2 Background of the Study

Today, most countries are moving toward digitalization and the internet can be seen as a necessity in our daily lives. The digital era has changed the way people think and act, including the way they conduct business, when embracing the digital economy. According to Ducharme *et al.* (2018), the digital economy is the integration of both internet and data into the current system and process, which makes Information and Communication Technology (ICT) the main element in this type of economy. The impact of the digital economy can be seen when the process of producing products, from the acquisition of raw materials until the product delivery to the end customer, has been transformed from a physical to a virtual process through the usage of the internet. Responding to the emergence of the digital economy, businesses all over the world are switching to the new era of global trade with just a single click. Nowadays, e-commerce has become a vital platform for business owners to use. Based on the research conducted by Nielsen's Global Connected Commerce Report in 2016, "*Shoppers are increasingly looking outside their country's borders, as more than half of online respondents in the study who made an online purchase in the past six months say they bought from an overseas retailer (57%)*" (Nielsen Holdings plc., 2016). Therefore, it can be clearly seen that people nowadays prefer to buy through online platforms as this can give them many advantages; for example, it is

convenient, offers them a variety of choices, and is more economical compared to the traditional way of purchasing goods and services. There is a golden opportunity for SMEs to extend their target market to overseas customers, which can increase their chances of marketing their products at a lower cost.

By realizing the potential and significance of responding to the digital transformation of the economy, United Nations Conference on Trade and Development (UNCTAD) acknowledged that e-commerce is one of the important features of the digital economy. According to the statistics generated by UNCTAD in 2017, there was a drastic increase in e-commerce. Online trade growth increased from 16 trillion (United States Dollar) USD to 22 trillion USD from 2013 to 2015, despite the fact that the growth of global trade had been stagnant in recent years. The trend increased drastically after the COVID-19 pandemic, whereby almost all countries-imposed movement restrictions to reduce the spread of the infection. As a result, it was forecasted that the trend would continuously increase during the post-pandemic era, not only due to the factors of the new norms but also because online trade could contribute to the achievement of the sustainable agenda. Due to the importance of e-commerce in achieving the 2030 Agenda for Sustainable Development, UNCTAD Secretary-General Dr. Mukhisa Kituyi said in E-commerce Weekly (2017) (UNCTAD E-Commerce Week 2017 - Connecting the Dots for Sustainable Development, 2017):

"To make e-commerce a success in the context of the 2030 Agenda for Sustainable Development, we need to connect the dots. All stakeholders must join forces to unleash the potential of digitalization and provide the necessary support to those countries that are less equipped to face the digital transformation"

(Kituyi, 2017).

E-commerce can contribute considerably to the development of economic activity in all nations. Digitalizing the traditional market and transforming it into e-commerce can encourage growth among micro-, small, and medium enterprises (MSMEs), which account for more than 90% of the businesses in developing countries. Looking at the substantial potential of e-commerce to contribute to economic development, developing countries such as Malaysia have started to move

along the same road as developed countries (Lone, 2017). The former Chief Executive Officer (CEO) of the Malaysia Digital Economy Corporation (MDEC) Datuk Yasmin Mahmood said that it was expected that by 2025, the digital economy in Malaysia would have increased significantly by RM 400 billion (Toh, 2018) due to the foreseeable trends of the emerging digital economy in the country. According to the Department of Statistics Malaysia (2017), there was a 4.2% growth in national Gross Domestic Product (GDP) in 2016, to which one of the major contributors was the digital economy, with an 18.2% contribution in that year, while e-commerce contributed 6.1% (1.3% came from the ICT industry, while another 4.8% came from non-ICT industries). Overall, the contribution of e-commerce to the digital economy in 2016 increased significantly, from RM 68.3 billion in 2015 to RM 74.6 billion in 2016. This trend was increasingly significant after the pandemic as people were unable to go out, and most customers had to use e-commerce platforms for buying and selling transactions. Currently, it is estimated that there will be an increase in e-commerce sales in Malaysia with a compound annual growth rate of 16.1% between the year 2022 and 2026 with the expectation to achieve up to RM 69.3 billion (GlobalData UK Ltd., 2022).

In efforts to enhance the digital economy's contribution to the nation, the government and various stakeholders have taken significant steps to encourage e-commerce participation, especially among small and medium-sized enterprises (SMEs). For example, Malaysia Digital Economy Corporation (MDEC) and Pusat Internet Desa (PID) collaborated on the Perkhidmatan eDagang Setempat (PeDAS) program, aimed at supporting rural micro-, small, and medium-sized enterprises (MSMEs) by assisting in areas such as branding, marketing, and online operations (Contact – PeDASPACK, n.d.). Additionally, in the 2021 budget, RM 9.4 billion was allocated to promote increased e-commerce participation among both individuals and industry players (Bernama, 2020). Besides, to address connectivity challenges in rural areas, the Malaysian Communications and Multimedia Commission (MCMC) allocated RM 7.4 billion in both 2021 and 2022 consecutively to enhance broadband penetration in rural regions (MCMC, 2021). Furthermore, in the context of Sabah, RM 21 billion has been allocated for the National Fiberisation and Connectivity Plan (2019-2023), to transform the state into a fully digitized entity by 2025 (Chan, 2020).

These initiatives underscore the government's dedication to bridging the digital divide and promoting widespread digital inclusion across the nation.

E-commerce holds immense potential for adopters, especially those residing in rural areas, as demonstrated by events in China, where Rural Taobao, an e-commerce platform, significantly contributes to meeting the demands of the rural market. This highlights the substantial potential in rural markets, driven by local and agriculture-based products that are sought after both domestically in urban centers and internationally. E-commerce not only addresses these demands but also enhances the performance of rural businesses, improving their productivity and efficiency (Burhanudin *et al.*, 2022). Furthermore, the digitalization of rural businesses amplifies their visibility (Brahma and Dutta, 2020), leading to increased income by tapping into a broader customer base (Kizza *et al.*, 2017; Taher, 2021). By adopting e-commerce as part of their strategy, businesses can overcome geographical barriers, allowing them to operate more independently in immediate markets (Sicat, n.d.). This shift toward digital platforms not only benefits individual businesses but also contributes significantly to the growth and economic empowerment of rural communities.

Despite the benefits offered by e-commerce, entrepreneurs, especially those residing in rural areas, continue to face challenges in its adoption. Therefore, the researcher aimed to explore e-commerce adoption from the perspectives of rural entrepreneurs. This study specifically focuses on the entrepreneurial motives of these entrepreneurs, their perceptions of e-commerce adoption, and the facilitators they encounter when adopting e-commerce. The research also seeks to understand how their entrepreneurial motives may influence their perceptions and the factors that facilitate their adoption of e-commerce.

1.3 Research Problem

Looking at the situation in Malaysia indicates that considerable efforts are being made by the government to encourage entrepreneurs to embrace the digital economy, especially those operating SMEs. This is because business establishments

in Malaysia are dominated by SMEs, which contribute 98.5% of the total number of business establishments. However, despite the fact that small and medium sized enterprises (SMEs) dominate the number of businesses in Malaysia, the contribution they make to Malaysia's gross domestic product (GDP) only accounted for 38.2% in 2020 (Department of Statistics Malaysia, 2020). Corresponding to this concerned statistic, the government realize that the transition towards digital economy especially among SMEs are needed. As they aim to focus on innovative digital economy growth by 2030, the government is determined to incorporate many strategies in the Twelfth Malaysia Plan (12 MP), including in rural areas, to boost the participation of SMEs in digitalization and therefore potentially their contribution to Malaysia's GDP.

Even though Malaysia ranked 31st among 63 countries by the Institute for Management Development (IMD) World Digital Competitiveness Ranking in 2022 (IMD World Digital Competitiveness Ranking 2022, n.d.), digitalization among micro- and small enterprises can still be considered low (*Twelfth Malaysia Plan, 2021-2025*, 2021). This is one of the most significant factors hindering Malaysian industries from going global. As the 12 MP (2021-2025) is being announced, the government are determined to maximize the IR 4.0 era by attracting ASEAN countries to invest in Malaysia. Therefore, to facilitate that, they need to promote the inclusivity of Malaysia in terms of Industrial Revolution (IR) 4.0. Micro- and small entrepreneurs are among those who need to be assisted to embrace this technology era since its establishments reflect a significant percentage of the businesses in the country.

However, despite the determination of the government to embrace the digital economy, it cannot be denied that rural areas have faced major challenges in adopting to e-commerce compared to urban areas. The low adoption among rural entrepreneurs are being contributed by various factors. According to Price *et al.* (2018); Yusoff *et al.* (2018), rural micro-enterprises received the impact of the advancement of the technology, but the impact has been somewhat adverse due to the financial issues and low skills of micro-enterprise players Bartosik-Purgat (2019). Furthermore, personal factors such as their readiness, aspiration as well as their entrepreneurial motives might also play important role in influencing their strategy in running their business (Acs, 2006; Wong *et al.*, 2005).

In the context of Malaysia, digital adoption is still in its infancy compared to other neighboring countries (Perdana, n.d.). This situation is becoming increasingly concerning in rural areas, where people face significant hurdles in embracing e-commerce platforms (Sicat, 2016, cited in HAJI, 2021). One of the major impediments is internet accessibility. Despite Malaysia having one of the highest levels of internet penetration in Southeast Asia, internet accessibility in rural areas remains a critical issue. (*2020 E-Commerce Payments Trends Report: Malaysia Country Insights*, n.d.). This situation has led to a digital divide between rural and urban areas. Statistics conducted by MCMC in 2020 show that internet users in rural areas are lagging behind, accounting for only 24.4% compared to urban areas with 75.6% (*Internet Users in 2020*, 2020). Figure 1.1 below illustrates the distribution of internet users in both urban and rural areas.

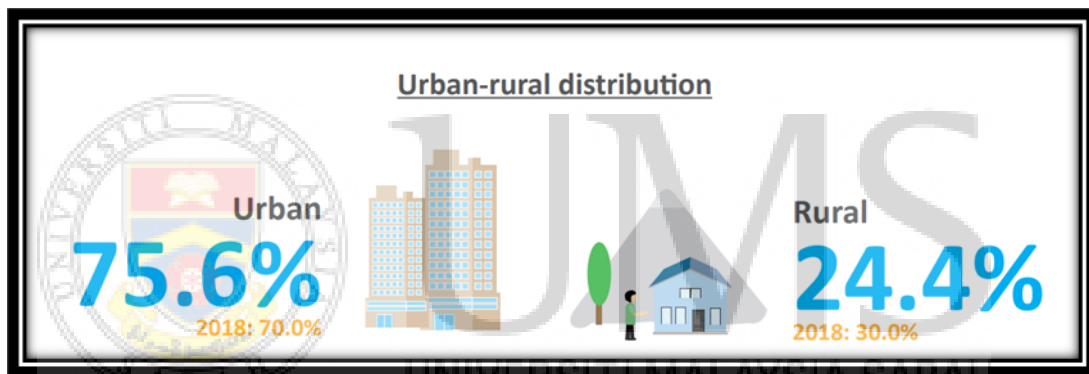


Figure 1.1 : Distribution of Internet Users in Urban and Rural Areas

Source : *Internet Users in 2020* by MCMC (2020)

Physical accessibility and lack of skills are cited as reasons for the Native community in Sabah to face challenges in digital adoption (Fang *et al.*, 2022). Additionally, Yaseen *et al.* (2016) found that ineffective e-commerce adoption is partly due to the lack of government support, as well as lack of awareness Mohan (2019). Although entrepreneurs are increasingly aware of the potential of e-commerce adoption, without adequate support from internal and external factors, the utilization of online platforms is hindered. This aligns with the findings of Sheikh Dawood *et al.* (2019), who discovered that rural entrepreneurs are aware of the potential of ICT in business growth but require assistance in obtaining ICT-related education and upgrading their local facilities. Similarly, Jaganathan (2018)