

# A CONCEPTUAL FRAMEWORK OF ENVIRONMENTAL FACTORS INFLUENCING MOBILE COMMERCE USAGE BY MICROENTERPRISES IN MALAYSIA

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**Abstract:** *This study aims to determine the environmental factors that influence the use of m-commerce in the business activities of microenterprises in Malaysia. Extensive research was conducted based on document analysis literature. The findings indicate that several environmental factors, namely competitive pressure, customer pressure, and government support, influenced the use of m-commerce by Malaysian microenterprises and led to the proposal of a conceptual framework. The findings collected in this study are useful and can guide microenterprises and new entrepreneurs in using m-commerce in the future.*

**Keywords:** *mobile commerce, microenterprises, competitive pressure, customer pressure, government support*

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## INTRODUCTION

The development of the internet has resulted in the rise of mobile commerce (m-commerce) as a platform for business nowadays. As of 2023, the smartphone user penetration in Malaysia is about 98.4 percent (Statista Department Research, 2024). The widespread adoption of smartphones has been a primary driver of m-commerce. As more people own smartphones, they have constant access to the internet and mobile apps, making it convenient to shop online anytime and anywhere (Justino et al., 2022a; Patma et al., 2021; Zhang et al., 2021). Based on Malaysia Digital Economy Corporation in 2020, this is a good start for Malaysians to be involved with m-commerce, which may contribute significantly to leading Malaysia's digital economy forward (Samad et al., 2021). Business owners can employ m-commerce for commercial activities like selling, marketing, online transactions, and online banking in a very efficient way (Wasiq et al., 2022; Maduku, 2021).

In the past, researchers investigated the use of m-commerce in businesses in their studies and all concluded that it is good for companies to use it (Justino et al., 2022b; Parvin et al., 2021). Due to the demand of stakeholders, microenterprises (SMEs) can use m-commerce for daily business transactions (Kulshrestha et al., 2022). Prior studies on m-commerce have

focused on factors affecting the usage of m-commerce by Micro, Small, and Medium Enterprises (MSMEs) in general (Mvogo et al., 2023; Makelana et al., 2022; George & Sunny, 2021). Hence, to address the gap, this article proposes a conceptual framework for determining the factors of Malaysian microenterprises' m-commerce usage in the environmental context. The rest of this article is organized as follows. The following section presents the literature review and the research methodology used in this study. In the next section, the results and discussion are explained. Finally, general conclusions are drawn from this study.

## LITERATURE REVIEW

### *Mobile Commerce*

The mobile environment has created a new way to drive innovation (Chen et al., 2021). The advent of smartphones, tablets, and other mobile devices with high-speed Internet access has created numerous business opportunities (Anwar et al., 2021). Businesses, both current and future, can use mobile devices as a means to expand within their various industries to capitalize on these market prospects. M-commerce refers to the use of wireless devices such as tablets or cell phones for business purposes. These devices are used for online transactions, bill payments, online banking, and product sales and purchases (Fonseka et al., 2022; Shukla et al., 2021).

Companies today offer a wide range of m-commerce services, including mobile shopping, mobile wallets, mobile banking, m-travel, mobile advertising, mobile education, buying movies, songs or games, and mobile health. Consumers can use m-commerce applications anytime and anywhere with their smart mobile devices more easily and comprehensively (Chau et al., 2020). In general, m-commerce offers companies, especially micro-enterprises, several advantages, including the ability to reach target customers directly via mobile applications, reduce advertising and marketing costs, quickly increase brand awareness, have no reach restrictions, and respond flexibly to customers (Fonseka et al., 2022; Nguyen et al., 2022; Salimon et al., 2021).

Despite the enormous potential of the technology, m-commerce is not yet widespread, especially in developing countries. The main reason for this is the lack of understanding of the importance of m-commerce and the obstacles to developing an effective strategy (Anwar et al., 2021). In this study, m-commerce refers to digital platforms that allow microenterprises to carry out business operations including online transactions, bill payments, product sales and purchases, and online banking via wireless devices such as tablets or cell phones. Nowadays, digital wallets (QR Pay, Grab Pay, Shopee Pay), virtual marketplaces (Shopee, Lazada), mobile banking, etc. are the most commonly used m-commerce platforms (Pipitwanichakarn & Wongtada, 2021). Microenterprises can use m-commerce to carry out commercial activities over Internet networks, such as online ordering, payment, and distribution of goods, as well as online advertising, to enhance customer service (Asampana et al., 2022).

### *Microenterprises*

A microenterprise is defined by SME Corporation Malaysia (2020) as an enterprise that employs less than five persons full-time or has an annual turnover of less than RM300,000. All microenterprises in manufacturing, services, construction, mining, quarrying, and agriculture fall under this classification. This study focuses on microenterprises in Malaysia as the number of microenterprises is very high compared to small and medium enterprises. Overall, 77 percent or 693,670 of the total number of MSMEs are microenterprises. Small enterprises account for 21 percent or 192,783, followed by medium enterprises with 2 percent or 20,612 (SME

Corporation Malaysia, 2021). Microenterprises have a vital role in the country's economy, such as reducing unemployment, and contributing toward GDP and innovation (Trianto et al., 2023). Currently, microenterprises face the challenge of competing with large companies. Larger companies are generally more competitive because they have more capital to expand their business. This allows them to use higher technology in their business operations to enhance the promotion and branding of their products (Faradewi Bee et al., 2022).

## **RESEARCH METHODOLOGY**

This study aims to identify the environmental factors that influence the use of m-commerce among microenterprises in Malaysia. To achieve the objective of this study, a document analysis of prior studies was conducted. As a result, this study will guide microenterprises and novice entrepreneurs in using m-commerce in the future. All documents of earlier studies on m-commerce, microenterprises, and environmental factors were examined.

## **RESULT AND DISCUSSIONS**

The following section discusses the findings from the document analysis conducted. The results from the literature review showed that three constructs of environmental factors; competitive pressure, customer pressure, and government support in prior studies contribute to the development of the research framework.

### ***Competitive Pressure***

Competitive pressure refers to the extent of pressure from competitors in the same industry or market as the company. It is a key factor influencing the use of technology in a business (Qalati et al., 2022). In this study, competitive pressure refers to the extent to which microenterprises are influenced by their competitors to use m-commerce in business (Justino et al., 2022; Chau et al., 2020; Tornatzky & Fleischer, 1990). Previous studies state that competitive pressure influences the use of technology when the company recognizes that the use of this technology will lead to a competitive advantage and improve the business's performance (Leong et al., 2023). Similarly, other studies show that companies adopt innovations when competitive pressures increase. Previous researchers pointed out that the pressure on MSMEs has led to unprecedented challenges (Hussain et al., 2020). The leading market players can create industry standards, forcing other market players to follow them. Therefore, to maintain their competitive position, microenterprises must adopt technologies to gain maximum market share at local and international levels. Such activities increase customer confidence and help the company increase its sales, ultimately improving its performance and sustaining the business in the long run (Hussain et al., 2022).

Most researchers have noted the positive and significant impact of competitive pressure on the adoption and use of technology in developing countries, including Vietnam (Nguyen et al., 2022), Pakistan (Qalati et al., 2022), Ghana (Ocloo et al., 2020), and others. This is evidenced in a study conducted by Iuga and Wainberg (2024), which shows that competitive pressure positively impacts the adoption of m-commerce by Romanian MSMEs. In line with Nguyen et al. (2022) study, competitive pressure was found to influence the use of e-commerce in the food and beverage industry in Vietnam. Another study in the manufacturing industry in Pakistan also shows that competitive pressure has a significant positive effect on the use of e-commerce among MSMEs (Hussain et al., 2020). In addition, a study on the construction industry in Nigeria confirmed the positive effect of competitive pressure on technology adoption (Oyewobi et al., 2020). However, Tiwari et al. (2023), Qalati et al. (2022), and Abdullahi Na'umma et al. (2022) came to the opposite conclusion in their study, that competitive pressure is not a determinant of technology adoption.

### ***Customer Pressure***

Customer pressure is the pressure exerted by customers to adopt new technology in business. If a company's regular customers have used a certain technology, they also expect the company to use the same technology to prove its suitability as a business partner (Chau et al., 2020). Customer pressure refers to any type of customer-oriented or customer-driven pressure, such as asking customers to view and interact with brands on social media applications, information sharing, etc. (Qalati et al., 2022). In this study, customer pressure refers to the extent to which microenterprises are influenced by customers to use m-commerce in business (Tornatzky & Fleischer, 1990). Customer pressure is an environmental factor that forces businesses to adopt new technologies to survive and meet ever-changing customer needs (Ezzaouia & Bulchand-Gidumal, 2020). Due to technological advances, customers are becoming more informed and influencing key business decisions (Ali Abbasi et al., 2022). Assessing customer needs can have a positive impact on microenterprises' decisions to adopt new technologies to improve business performance and sustainability (Zaitul & Ilona, 2022).

Meeting customer needs and expectations promotes the positive use of technology by microenterprises. This is because microenterprises must adopt new technologies, otherwise, they will lose their customers and their business will be seen as lagging, which in turn is one of the reasons why customers turn to competitors (Abed, 2020). Previous studies have examined the influence of customer pressure on technology adoption from the perspective of MSMEs. In a study conducted by (Amoah et al., 2023), the relationship between customer pressure and technology adoption at MSMEs was explained in terms of organizational sustainability. Iuga and Wainberg (2024) demonstrated the positive effect of customer pressure on the use of m-commerce at MSMEs in Romania. Furthermore, MSMEs use new technologies such as m-commerce because they believe that their potential customers want it. This is also in line with other studies that show that customer pressure has a significant impact on the use of new technologies for MSMEs in developing countries such as Pakistan (Qalati et al., 2022).

### ***Government Support***

The role of the government in the sustainability of microenterprises is vital. In Malaysia, the government has provided various assistance and support to business owners to improve the economy. Empirical evidence shows the importance of government support for the adoption of technology by companies (Malik et al., 2021). Previous studies found that government support to businesses is in the form of providing funds without requiring a corresponding repayment (Noor Hazlina et al., 2020). In another study by Yoon et al. (2020), government support refers to a company's administrative and financial support to adopt and utilize new technologies. In the context of this study, government support is the assistance and guidance that microenterprises receive from the government to utilize m-commerce in business (Nguyen et al., 2022). Government support through the provision of seminars, training, tax incentives, and legislation can have a major impact on the use of technology (Hasani & O'Reilly, 2021; Justino et al., 2022a; Nguyen et al., 2022).

Several previous studies have confirmed that government support has a significant impact on the use of new technologies such as e-commerce and m-commerce by MSMEs. According to Iuga and Wainberg (2024), government support positively affects the adoption of m-commerce by Romanian MSMEs. This shows that the use of technology in developing countries has improved significantly due to the government's commitment to providing the necessary training, courses, and infrastructure. Government policies that include favorable e-legislation, tax incentives, and affordable internet access will encourage the growth of business-to-business (B2B) e-commerce. In a study on technology adoption, government

support was found to influence MSMEs' decision to adopt e-commerce (Ocloo et al., 2020). In contrast, Hussain et al. (2022) and Hussain et al. (2020) reported in their study that government support has an insignificant impact on the adoption of e-commerce.

### ***Conceptual Framework***

The study found that some environmental factors influence the use of m-commerce by microenterprises. These factors were identified as competitive pressure, customer pressure, and government support. Figure 1.1 below shows the conceptual framework based on the document analysis conducted in this study.

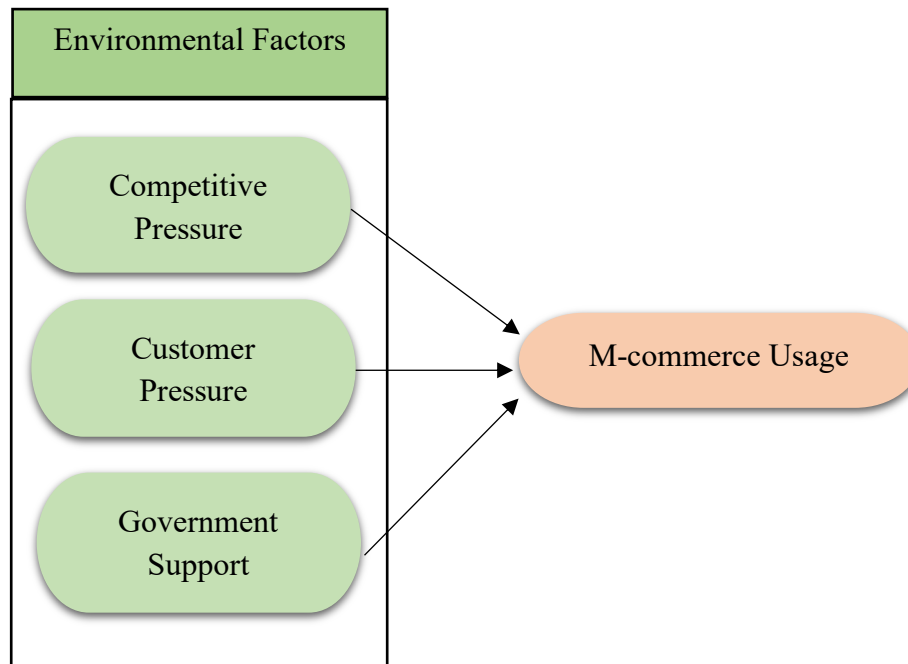


Figure 1.1: Conceptual Framework

### **CONCLUSION**

Through an extensive literature review, this study has illustrated a conceptual framework to describe the relationship between the environmental factors influencing Malaysian microenterprises to use m-commerce for business operations. The document analysis conducted in this study covered a wide range of areas and was not limited to m-commerce and microenterprises. We offer a general knowledge of the m-commerce literature through this study, which is fascinating and practical for m-commerce companies, online business practitioners, entrepreneurs, and academics. Furthermore, this study also contributes to enhancing knowledge and understanding about the m-commerce environment among microenterprises. Malaysian microenterprises should use m-commerce to be more competitive and relevant worldwide. In addition, Malaysian microenterprises can improve their business practices to reflect contemporary trends by using m-commerce.

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