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Research Article

Technology Adoption Readiness Among Fresh Agricultural Traders in Using E-Commerce Platform in Malaysia

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ABSTRACT:
Digitalization has revolutionized the world and impacted almost every industry, organization, and business. Hence, it is a big challenge to introduce e-commerce to agricultural trading. With the current advancements in technology, the implementation of e-commerce in agricultural trading, particularly for fresh produce, has become feasible. Nevertheless, the traders themselves remain the biggest hurdle to embarking on e-commerce and agricultural trading. Thus, it is imperative to determine factors affecting fresh agricultural traders' technology adoption readiness. This study applied the Technological-Organizational-Environmental (TOE) framework and a survey of 651 fresh produce traders registered under the Federal Agricultural Marketing Authority (FAMA) across Malaysia. Data collection was supported by FAMA, which facilitated access to traders through their database and farmer markets as well as assisted in distributing survey questionnaires. The findings revealed that Perceived Related Advantage (PRA) influences the traders to adopt e-commerce for the platform. Furthermore, Organizational Support (OS) must be available internally and externally to allow the e-commerce adoption of fresh agriculture. Lastly, Perceived Customer Pressure (PCUP) influences e-commerce adoption through the demand from the customers. Moreover, this study also discovered eight main problems and challenges faced by fresh agricultural traders in adopting e-commerce platforms. Therefore, this study argued that in ensuring the successful adoption of e-commerce agricultural trading in Malaysia, stakeholders and policymakers must introduce programs allowing agricultural traders to believe in and start using the e-commerce platforms. In short, fresh produce traders must be educated to accept the advantages of using an e-commerce platform and be given all the technological infrastructure support. Finally, the traders must also believe there is a demand from their customers to use the e-commerce platform.

KEYWORDS: Technology Adoption Readiness; Fresh Agricultural; Traders, e-Commerce Platform

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INTRODUCTION

Digitalization has opened up new opportunities for businesses to expand their business model by utilizing technologies in their day-to-day activities. One significant trend that is booming in the business world is e-commerce. E-commerce can be defined as a business relationship that involves Internet usage to carry out financial transactions such as purchases and sales of goods and services (Babenko et al., 2019). E-commerce activities involving customers are searching online for products or services, visiting online retail stores, using shopping apps, and purchasing products online (Kemp, 2020). According to UNCTAD (2021), the total sales generated from e-commerce worldwide in 2019 was $26.7 trillion, with China dominating the retail sales of $1.06 trillion, followed by the United

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States of America (USA) with $519.6 billion, the United Kingdom with $84.0 billion, and the Republic of Korea with $76.8 billion. These figures show that e-commerce plays an essential role in today's business.

Like the rest of the world, Malaysia has followed in the footsteps of other countries regarding e-commerce. Of 26.69 million Internet users in Malaysia, 90% visited e-commerce websites to search for their needed products and services. Another technological advancement that drives the usage of e-commerce is the implementation of Industrial Revolution 4.0 (IR 4.0). IR 4.0 emphasized interconnectivity, automation, machine learning, and real-time data through information technology. The government of Malaysia also supported the implementation of IR 4.0 by creating a national policy known as Industry4WRD (MITI, 2018). This policy is empowering e-commerce through new tools and applications such as the Internet of Things (IoT), cloud computing, big data, blockchain, artificial intelligence (AI), and virtual reality (VR). Furthermore, this effort was strengthened by introducing the National E-commerce Strategic Roadmap (Salleh et al., 2020).

Amidst the hustle and bustle of conducting business operations, the world was shocked by the advent of the COVID-19 pandemic, which has wholly hampered business activities. This inevitable uncertainty forced businesses to use e-commerce to survive this disastrous pandemic. Even though hurdles are faced by many businesses, especially those who still depend on traditional methods, e-commerce has brightened up its way and become hope in ensuring business continuity and survival. However, not all businesses, especially traders in fresh produce, are keen to operate on an e-commerce platform due to the nature of the product and service. Businesses that offer fresh agricultural produce, which consumers usually would like to inspect the product before purchasing, are less likely to adopt an e-commerce platform. However, the agricultural industry is also forced by the COVID-19 pandemic to adopt an e-commerce platform because people fear purchasing in person (Bhatti et al., 2020).

In Malaysia, a statutory body of the Ministry of Agriculture (MOA) and Agro-based Industry (IAT), known as The Federal Agricultural Marketing Authority (FAMA), is the marketing agency responsible for the supervision, coordination, regulation, and improvement of the marketing of agro-food products, including vegetables, fruits, floriculture, and agro-based industry products. As digitalization sparks, FAMA also embarked on e-commerce initiatives known as AgroBazaar and AgroFun. AgroBazaar since 2014. FAMA fully manages these platforms to provide an agro-food virtual marketing platform that connects producers, manufacturers, suppliers, and consumers. During the Covid-19 pandemic in 2020, FAMA also made an effort by collaborating with the two largest e-commerce platforms in Malaysia, Shopee, and Lazada. These efforts are to leap the digitalization of the agriculture sector and assist the traders and farmers in expanding their markets and ensuring business continuity.

However, agricultural industry players, especially traders, are slow to embark on e-commerce `trading (Teng, 2021). Therefore, this paper explores factors affecting fresh agricultural traders' technology adoption readiness.

LITERATURE REVIEW

The technological boom has drastically changed the business world in managing their day-to-day operations. Despite the hurdles, businesses are thriving in tandem with the advent of technologies, especially in business networking and financial transactions. Hence, it connects consumers and businesses regardless of time and place just by the end of their fingertips. The emergence of e-commerce opens new opportunities for businesses to enlarge and diversify their market. In short, all industries started integrating e-commerce into their business process, including the agriculture

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industry. However, the usage of technology requires human intervention to make it work. Therefore, businesses must be aware of technological changes and prepare themselves for technology readiness. Several factors affect the readiness to adopt technology, including technological, organizational, and environmental contexts.

Concept and Definition of Key Component of the Research Area

The concept and definition in this research encompass a dependent variable and three independent variables. The dependent variable of this research is technology adoption readiness, focusing on the e-commerce platform, new agriculture, and traders. On the other hand, the independent variables consist of technological, organizational, and environmental contexts. Hence, this research discussed the relationship between technology adoption readiness in the technological, organizational, and environmental contexts.

Technology Adoption Readiness

Technology adoption readiness refers to the people's propensity to embrace and utilize new technologies to accomplish goals, whether at home or in the workplace (Parasuraman & Colby, 2015). The propensity to embrace technology in business decision-making depends on human readiness and determination (Nugroho et al., 2017). According to Jafari-Sadeghi et al. (2021), the key factors contributing to technology adoption readiness are the availability of technology and the ability of individuals to access information and communication technology (ICT). In addition, Badi et al. (2020) stated that the availability of technology refers to adequate technological infrastructure, such as platforms to enable the usage of technologies. Furthermore, the authors reinforced that employees need to develop knowledge of information technology (IT) to facilitate new applications that can increase quality, reduce cost, and enhance the organization's efficiency and effectiveness. In determining technology adoption readiness, people can be divided into two categories: motivators and inhibitors (Blut & Wang, 2020). Motivators are innovative and optimistic in adopting technology, whereas inhibitors exhibit insecurity and discomfort towards technology, contributing to low technology adoption (Parasuraman & Colby, 2015).

Moreover, a study by Blut and Wang (2020) found that a strong relationship for motivators is influenced by three factors: technology type, human development, and firm characteristics. Technology type can be categorized as hedonic or utilitarian, whereas human development deals with age, education, and experience. Firm characteristics can be described as voluntary or mandatory basis and country context involving gross domestic product (GDP). Nevertheless, this research examined the usage of e-commerce platforms for fresh agricultural produce in Malaysia. The problems traders face in fulfilling the market demand and the possible factors influencing technology adoption readiness among traders. Regardless of the theories discussed, this research measured the readiness level among traders, including the organization and its employees, by adopting the TOE framework comprising three contexts: technological, organizational, and environmental.

E-Commerce Platform

An E-commerce platform can be defined as any business relationship that involves interaction between sellers and buyers, including the financial transactions process of goods and services using Internet technologies (Babenko et al., 2019). According to Adam, Alhassan, and Afriyie (2020), e-commerce shifted the way businesses are conducted worldwide, but the changes differ from one region to another. E-commerce can be categorized based on the entities involved in the transaction: customers, corporations, and government. Babenko et al. (2019) claimed that there are several types of e-commerce exist today including business-to-business (B2B), business-to-customer (B2C), customer-to-customer (C2C), business-to-government (B2G), customer-to-government (C2G) and mobile-commerce (m-commerce). B2B e-commerce refers to business transactions between suppliers and consumers linked through a platform using technology (Ocloo et al., 2020). Next, B2C involves

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businesses and individual consumers (Iankova et al., 2018). C2C engages consumers in selling preloved or unwanted items to other consumers (Lemel, 2020). B2G includes the relationship between businesses and the government through outsourcing. Meanwhile, C2G is the interaction between the government and its people (Babenko et al., 2019) as well as m-commerce that act as a medium to buy and sell goods or services using wireless devices via an Internet connection, for instance, mobile phones (Kale & Rajivkumar, 2018). Hence, this research aimed at B2B and B2C e-commerce platforms between retailers and wholesalers for businesses and consumers.

Fresh Agriculture

Fresh agricultural products consist of vegetables, fruits, meat, and aquatic products (Xin & Jiaying, 2020). Based on Shen et al. (2020), fresh agricultural products are necessary for human life. Usually, fresh agricultural products are perishable and easily spoiled. Thus it needs to be sold within a short period. According to a survey done by Cang and Wang (2020), they found out that consumers preferably buy fresh agricultural products through online platforms. However, selling fresh agricultural products poses challenges due to high retail prices and uneven product quality (Shui & Li, 2020). Therefore, this research investigated the problems traders face in fulfilling the market demand, especially in Malaysia, and the possible factors influencing technology adoption readiness among traders in buying and selling fresh agricultural products through e-commerce platforms.

Traders

According to Singh (2018), traders are defined as people who purchase agricultural products directly from the farmers and sell them to the market later. According to Goeb et al. (2020), traders in agricultural contexts usually engage in various business activities, such as retailers and wholesalers. Li (2017) classified traders as intermediate people who intend to buy and sell according to the market price, which involves the correct transaction using various business services. These parties buy, store, grade, and sell the commodities to the market. Typically, traders have a strong relationship with farmers because they are the ones who provide inputs and credits. This relationship supports by business practices, legal regulations, and the ethical code of business. Hence, these attract traders' attention to use e-commerce platforms as it involves relatively small transaction costs (Alsaad et al., 2018).

On the other hand, the B2C marketplace represents huge potential between traders and consumers to perform sale and purchase activities via electronic transactions (Mađarac & Piroš, 2019). Moreover, the B2C platform allows traders to remotely sell products and services according to their market niche, as it promotes flexibility. Therefore, this research emphasized traders who use B2B and B2C e-commerce platforms in their business.

Although many scholars acknowledge the benefits of technology, people still resist using technology and depend more on traditional methods as they do not view modern technologies as something essential and valuable to them (Ganapathy, 2018). This limitation hinders them from moving their business ahead, and with the current COVID-19 pandemic, many businesses' operation has been affected. Thus, this research discovered the problems faced by traders and the possible factors that made them against technology adoption.

Theoretical Framework of Study

Numerous theories discuss technology adoption readiness, such as Technological, Organizational, and Environmental (TOE), Technology Acceptance Model (TAM), and Technology Readiness Index (TRI). The TOE model was founded by Tornatzky et al. (1990) and emphasized three technological, organizational, and environmental contexts that hinged on its characteristics. TOE model provides a more holistic approach by considering those three aspects (Ullah et al., 2021). The technological context covers internal and external technologies related to the organization, specifically current

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practices, and equipment (Yoon, Lim & Park, 2020). According to Bhuiyan, Othman, and Radzi (2019), the TOE model is excellent for viewing technological usage in organizations.
Nevertheless, the TAM model was introduced by Davis (1989), focusing on the level of individual perception of perceived usefulness and perceived ease of use towards technology adoption. Ajibade (2018) argued that the TAM model was more suitable for individuals than organizations regarding technology adoption. This argument was seconded by Olushola and Abiola (2017) as these authors claimed that the TAM model does not reflect the variety of users. Conversely, Parasuraman and Colby (2015) developed another tool called the TRI model that focuses on individuals' behaviors that measure optimism, innovativeness, discomfort, and insecurity. Jarrar, Awobamise, and Sellos (2020) asserted that the TRI model illustrates people's feelings and attitudes towards the technology but solely concentrates on acceptance rather than competencies. Hence, the TRI model is commonly combined with the TAM model. As stated by Ahmad et al. (2020), the integration of the TAM and TRI model resulted in an excellent combination as these two models complement each other to describe individuals' behaviors in accepting technology. Nugroho and Fajar (2017) supported this statement. Also, they found that the combination of the TAM and TRI model helps to understand the effect of technology readiness toward perceived usefulness, perceived ease of use, and behavioral intention on individuals.

Therefore, this research adapted the TOE model as many scholars have extensively used the framework to understand the relationship between independent and dependent variables. The researchers chose not to apply TAM and TRI models as these models only focus on individuals, while this research aimed at the organizational level. Moreover, this research intended to explore the technology adoption readiness among traders, which involved internal and external factors. Thus, the TOE model was the most appropriate to apply in this research as the determinant represents the independent variables, including technological, organizational, and environmental contexts towards technology adoption readiness as the dependent variable.

TOE Framework

The Technological, Organizational and Environmental (TOE) framework was established by Tornatzky et al. (1990) to determine technological innovation decisions. This framework is used to develop, adopt, and implement innovation within the firm. The TOE framework describes the three elements, which are technological, organizational, and environmental context, and their relationship with each other that contributes to technological innovation. Somehow, these contributions affect an organization's adoption and implementation of innovation (Yoon, Lim & Park, 2020).

The dependent variable from the TOE framework based on past studies is technology adoption readiness. Li (2020) adopted the TOE framework in his study on SME technology adoption readiness. The independent variables in his study comprise technology, organization, and environment towards the dependent variable, Implementation of the Technology Adoption Plan (IMPN). The study showed that all the independent variables contributed positively toward the dependent variable. Abed (2020) also conducted a similar study on behavior intention in adopting technology for SMEs and seconded the result found by Li (2020). In addition, the research done by Patel, Mylonas, and Spyrou (2020) about hospitality firms in Greece towards social media adoption (SMA) also obtained favorable results through the TOE framework. Badi et al. (2020) supported that the TOE framework helped them achieve the study on smart contract use intention. Even though not all hypotheses were proven, there are significant features found in each independent variable. Therefore, the TOE framework is beneficial for measuring the technology adoption readiness in the organization.

Technological Context

Technological context can be defined as internal and external technologies related to an organization. The set of technologies is not limited to the practice that has been integrated into the organization and

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the technology available in the current market (Piot-Lepetit, Florez & Gauche, 2019). In another study by Abed (2020), the technological context has two characteristics: perceived usefulness and security concerns. A study by Patel, Mylonas, and Spyrou (2020) defined technological context from a different point of view, consisting of relative advantage, presence, and interconnections. A similar study investigated technology characteristics similar to previous studies but included additional features such as perceived compatibility, perceived non-complexity, perceived trial ability, and perceived observability (Badi et al., 2020). In short, regardless of the features investigated, technology plays a vital role in influencing the adoption of technological innovation.

Organizational Context

Organizational context refers to the organization's structure, including the relationship between employees, communications, organization size, and resources. In measuring organizational context, Piot-Lepetit, Florez, and Gauche (2019) chose firm scope and farm size as features that influenced TOE. Meanwhile, Abed (2020) focused on top management support and organizational readiness. The features selected by Badi et al. (2020) and Li (2020) also followed the same path as Patel, Mylonas, and Spyrou (2020), which also seconded the study done by Abed (2020). Nevertheless, this study emphasized more on the innovativeness of the organization. Therefore, the organization influences the technology adoption readiness where top management support has been the key player that drove the changes.

Environmental Context

Environmental context can be defined as the industry structure, related service providers, legislation, and regulations contributing to technology adoption readiness. Piot-Lepetit, Florez, and Gauche (2019) found that three factors contributed to organizational context: the chance to try out the technology, the willingness to use the technology, and the available resources. Abed (2020) claimed that consumer pressure and trading partner pressure are the factors that influence the environmental context. On the other hand, Badi et al. (2020) adapted Abed's finding and added another feature, government regulatory support. Patel, Mylonas, and Spyrou (2020) also agreed that external pressure contributed to the environmental context and added an uncertainty factor to their study. Li (2020) had a different view on the environmental context, emphasizing stakeholder participation in the technology adoption readiness. Therefore, external pressure is the common cause that influences technology adoption readiness. Figure 1 shows that the TOE framework influenced the technology adoption readiness.

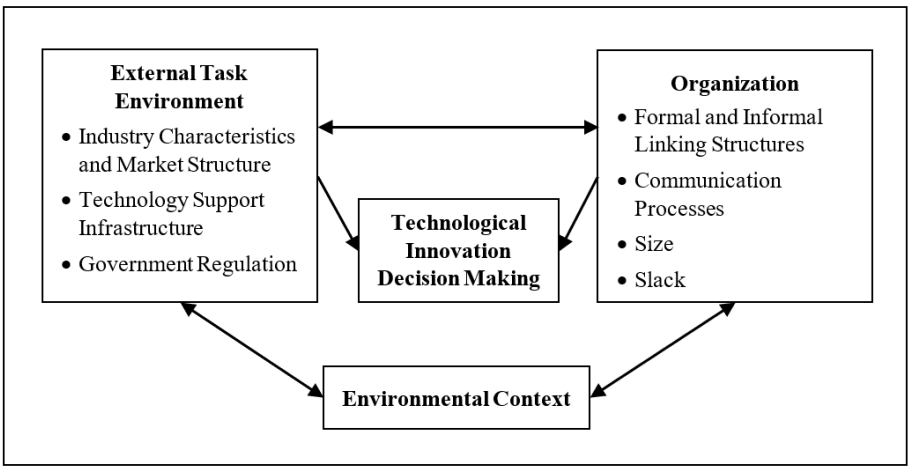

Figure 1: TOE Framework (Tornatzky & Fleisher, 1990)

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Research Framework

From the literature review above, this research adapted the TOE framework used by Abed (2020), Badi et al. (2020), Li (2020), and Pateli, as well as Mylonas and Spyrou (2020). There are three independent variables (IVs) which are technological, organizational, and environmental contexts. In the technological context, two factors measured are perceived relative advantage (PRA) and security concern (SC). Next, organizational context examined two factors: organizational readiness (OR) and organizational support (OS). Finally, the environmental context investigated three factors: perceived government support (PGS), perceived competitive pressure (PCOP), and perceived customer pressure (PCUP). This study's dependent variable (DV) is technology adoption readiness, namely perceived organizational readiness (POR), as indicated in Figure 2.

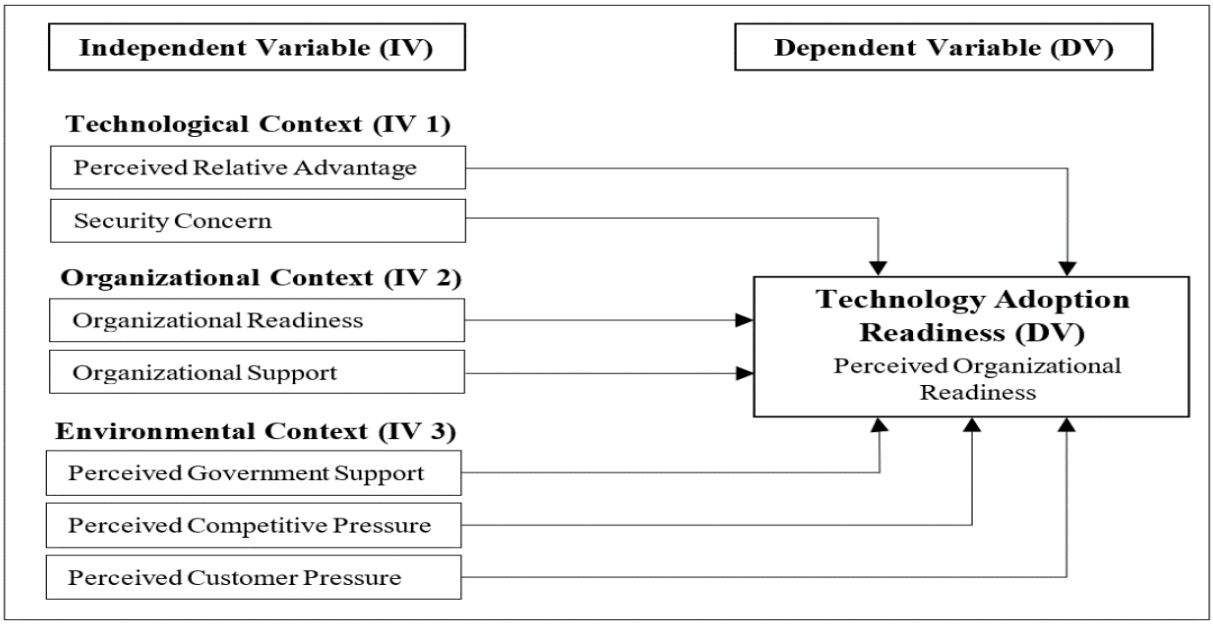

Figure 2: Research Framework

Research Hypothesis

Technological context examines two factors: perceived relative advantage (H1a) and security concern (H1b). Next, organizational context is analyzed on organizational readiness (H2a) and organizational support (H2b). Then, the environmental context explored perceived government support (H3a), perceived competitive pressure (H3b), and perceived customer pressure (H3c).

H1a: There is a significant relationship between technological context (perceived relative advantage) and technology adoption readiness.
H1b: There is a significant relationship between technological context (security concern) and technology adoption readiness.
H2a: There is a significant relationship between organizational context (organizational readiness) and technology adoption readiness.
H2b: There is a significant relationship between organizational context (organizational support) and technology adoption readiness.
H3a: There is a significant relationship between environmental context (perceived government support) and technology adoption readiness.
H3b: There is a significant relationship between environmental context (perceived competitive pressure) and technology adoption readiness.
H3c: There is a significant relationship between environmental context (perceived customer pressure) and technology adoption readiness.

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METHODOLOGY

The methodology used in this research is to determine the technology adoption readiness among traders registered under FAMA by testing three independent variables (IVs), which are technological, organizational, and environmental contexts. Data collection was supported by FAMA, which facilitated access to traders through their database and farmer markets as well as assisted in distributing survey questionnaires. Therefore, sample, procedure, measures, and data analyses were performed as follows.

Sample and Procedure

The sample for this research comprised traders in Malaysia who are registered under FAMA and actively involved in trading fresh agricultural produce. The research utilized convenience sampling to facilitate respondent selection through three methods: an online survey, face-to-face, and telephone survey. The online survey questionnaire was prepared using Google Forms and distributed to the targeted respondents with the assistance of FAMA representatives. For telephone surveys, researchers directly contacted respondents who met the research criteria based on the list provided by FAMA. In addition, face-to-face data collection was conducted at FAMA's Pasar Tani in the Selangor region. Initially, the sample size for this research was 651 (n=651).

Measures

This research adopted a survey questionnaire as the research instrument that comprises five sections, including demographic, technology adoption readiness, technological, organizational, and environmental context. Section A consists of 19 demographic questions concerning respondents' background and organization. The measurement scale for these questions is nominal and ordinal. Next, Section B consists of a dependent variable (DV): technology adoption readiness. There are ten questions asked on organizational readiness (OR). The measurement scale for these questions is the 5-point Likert scale. Then, Section C consists of the first independent variable (IV 1), technological context. Ten questions are associated with perceived relative advantage (PRA) and security concerns (SC). The measurement scale for these questions is the 5-point Likert scale. After that, Section D consists of the second independent variable (IV 2), the organizational context. Ten questions about organizational readiness (OR) and organizational (OS) support were asked. The measurement scale for these questions is the 5-point Likert scale. Finally, Section E consists of the third independent variable (IV 3), which is the environmental context. There are 13 questions, including perceived government support (PGS), perceived competitive pressure (PCOP), and perceived customer pressure (PCUP). The measurement scale for these questions is the 5-point Likert scale. All items were developed based on adopting and adapting techniques using Abed (2020), Badi et al. (2020), Li (2020), and Pateli, Mylonas, and Spyrou (2020).

Data Analyses

This research implemented several analyses to evaluate the relationship between technology adoption readiness and three contexts, namely, technological, organizational, and environmental. It uses descriptive analysis, preliminary data analysis consisting of reliability analysis, Pearson correlation analysis, Factor analysis, and Multiple Linear Regression (MLR) analysis. All data were analyzed using Statistical Package Social Science Version 26 (SPSS V26).

RESULTS

Results of the analyses are presented accordingly, starting with descriptive analysis, preliminary analysis, reliability, factor analysis, and multiple linear regression (MLR).

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Descriptive Analysis

The demographic background of the respondents was divided into two segments, including background of the respondents and background of the organizations using frequency and percentage as presented in Table 1 and Table 2.

Table 1: Background of the Respondents

Background of the Respondents	Frequency	Percentage (%)
Gender		
Male	493	75.7
Female	158	24.3
Age		
Less than 24 years old	29	4.5
25 to 30 years old	68	10.4
31 to 40 years old	176	27.0
41 to 50 years old	177	27.2
More than 51 years old	201	30.9
Educational Level		
Informal education	66	10.1
Primary and secondary school	454	69.7
Diploma	80	12.3
Bachelor's degree	47	7.2
Master's degree	2	0.3
Doctorate	2	0.3
Employment Status		
Owner	539	82.8
Full-time employees	42	6.5
Part-time employees	16	2.5
Paid family members	46	7.1
Unpaid family members	8	1.2
Total	**651**	**100.0**

In Table 1, we present four items of the respondents' background, namely gender, age, educational level, and employment status. Based on the sample size of 651 respondents (100%), males dominated the survey with 493 (75.7%) respondents, which primarily 176 (27.0%) respondents were 31 years old and above who at least obtained their primary and secondary school education of 454 (69.7%) respondents. The majority of the respondents were the owners of the organization.

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Table 2: Background of the Organizations

Background of the Organizations	Frequency	Percentage (%)
Number of Full-Time Employees		
Less than 5 employees	612	94.0
5 to 74 employees	39	6.0
75 to 199 employees	0	0.0
More than 200 employees	0	0.0
Number of Part-Time Employees		
Less than 5 employees	637	97.8
5 to 74 employees	14	2.2
75 to 199 employees	0	0.0
More than 200 employees	0	0.0
Number of Paid Family Members		
Less than 5 persons	650	99.8
5 to 74 persons	1	0.2
75 to 199 persons	0	0.0
More than 200 persons	0	0.0
Number of Unpaid Family Members		
Less than 5 persons	649	99.7
5 to 74 persons	2	0.3
75 to 199 persons	0	0.0
More than 200 persons	0	0.0
Type of Business Ownership		
Sole Proprietor	474	72.8
Partnership	45	6.9
Private Limited	132	20.3
Nature of Business		
Retailer	449	69.0
Wholesaler	90	13.8
Manufacturer	10	1.5
Exporter	0	0.0
Distributor	6	0.9
Entrepreneur	96	14.7
Years of Operation		
0 to 2 years	71	10.9
3 to 5 years	249	38.2
6 to 10 years	151	23.2
11 to 19 years	115	17.7
More than 20 years	65	10.0
Type of Fresh Produce		
Vegetables	232	35.6
Livestock	187	28.7
Fruits	113	17.4
Diaries	89	13.7
Seafood	30	4.6
Location of Business		
Perlis	2	0.3
Kedah	178	27.3
Penang	3	0.5
Perak	82	12.6
Selangor	41	6.3
Kuala Lumpur	8	1.2
Negeri Sembilan	1	0.2
Malacca	3	0.5

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Johore	147	22.6
Pahang	61	9.4
Kelantan	2	0.3
Terengganu	3	0.5
Sabah	5	0.8
Sarawak	115	17.7
Monthly Estimated Sales		
RM10,000 and below	470	72.2
RM10,001 to RM50,000	147	22.6
RM50,001 to RM100,000	26	4.0
RM100,001 and above	8	1.2
Trading Method		
Physical Outlet	239	36.7
Online	19	2.9
Hybrid/Omni	393	60.4
Online Trading Platform		
Facebook	300	46.1
Instagram	68	10.4
Lazada	8	1.2
Shopee	39	6.0
Telegram	62	9.5
Twitter	19	2.9
Whatsapp	371	57.0
Website	33	5.1
FAMA e-commerce platform	116	17.8
Not applicable	239	36.7
Best Online Trading Platform		
Facebook	278	42.7
Instagram	39	6.0
Lazada	2	0.3
Shopee	25	3.8
Telegram	39	6.0
Twitter	8	1.2
Whatsapp	331	50.8
Website	22	3.4
FAMA e-commerce platform	95	14.6
Not applicable	239	36.7
FAMA e-Commerce Platform User		
Yes	116	17.8
No	535	82.2
Reason for not using FAMA e-Commerce Platform		
Age factor	5	0.8
Connectivity issue	1	0.2
Lack of resources	23	3.5
Lack of awareness	428	65.7
Lack of interest	27	4.1
Not suitable	35	5.4
Not sure	10	1.5
Not applicable	116	17.8
Perishable products	6	0.9
Total	**651**	**100.0**

In Table 2, there were 15 items evaluated under the background of the organization, including the number of full-time and part-time employees as well as some paid and unpaid family members, type

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of business ownership, nature of business, years of operation, type of fresh produce, location of the business, monthly estimated sales, trading method, online trading platform, best online trading platform, FAMA e-commerce platform users and reason for not using FAMA e-commerce platform.

Respondents mostly employ full-time and part-time employees with less than five employees. At the same time, almost all the respondents have less than five unpaid family workers working in their firm. Moreover, most respondents have been in business for more than three years (249, 38.2%) and sell vegetables (232, 35.6%), livestock (187, 28.7%), and fruits (113, 17.4%). The respondents earned monthly estimated sales of around RM10,000 and below (470, 72.2%) through the hybrid or Omni method (393, 60.4%). Predominantly, respondents usually communicate through Whatsapp (371, 57.0%) and Facebook (300, 46.1%) for trading matters. However, they mostly use the FAMA e-commerce platform to buy or sell fresh agricultural produce (95, 14.6%). Out of 651 respondents, only 116 (17.8%) respondents found out that these platforms benefit their business. Nonetheless, many respondents (535, 82.2%) felt that the FAMA e-commerce platform is not giving any advantages to their business due to a lack of awareness (428, 65.7%).

Preliminary Analysis

In the preliminary stage, three analyses were conducted: reliability, factor, and Pearson correlation. Nine factors are measured in this section: perceived organizational readiness, perceived employees' readiness, perceived relative advantage, security concern, organizational readiness, organizational support, perceived government support, perceived competitive pressure, and perceived customer pressure.

Reliability analysis was performed to observe the internal consistency reliability among variables. As displayed in Table 3, Cronbach's Alpha demonstrated technology adoption readiness (DV) with a value of 0.919, technological context (IV 1) with a value of 0.968, organizational context (IV 2) with a value of 0.967 and environmental context (IV 3) with the value of 0.958. Hence, overall, internal consistency reliability for the dependent variable (DV) and independent variables (IVs) in this research are considered reliable as the results portrayed an excellent alpha coefficient, which aligned with the theory proposed by Hair et al. (2007).

Table 3: Reliability Analysis Result

Reliability Analysis		
Section	**Cronbach's Alpha**	**Internal Consistency**
Section B: Technology Adoption Readiness (DV)	0.919	Excellent
Section C: Technological Context (IV 1)	0.968	Excellent
Section D: Organizational Context (IV 2)	0.967	Excellent
Section E: Environmental Context (IV 3)	0.958	Excellent

In factor analysis, the variables' suitability was measured using Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity. The factor analysis and factor loadings were measured on all items of the variables to evaluate the significance level based on Hair et al. (1998). The overall results of the KMO test for this research were adequate since the value is above 0.5. This value indicates that all the variables were acceptable, according to Kaiser (1974). In addition, Bartlett's test of sphericity was

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significant for all variables, thus confirming that the sample size for this research was considered appropriate (Pallant, 2016).
On top of that, the percentage of variance for these variables ranged from 80% to 90%. The factor loadings for the eight factors as above-mentioned were significant, and all factors had scores greater than 0.5, with a minimum score of 0.64 and a maximum score of 0.95. The eigenvalue for all factors was greater than one, which implies positive reliability (Kaiser, 1974). All factors were considered acceptable in terms of variance as the percentage was more than 50 percent, as stated by Streiner (1994).

Multiple Linear Regression (MLR)

Multiple Linear Regression (MLR) measured the relationship between technology adoption readiness and technological, organizational, and environmental context. This research used three models to examine the t-value (t), ANOVA, probability, and R-squared, namely Model 1, Model 2, and Model 3, as portrayed in Table 4.

Model 1 investigated seven independent variables (IVs) factors, including perceived relative advantage, security concern, organizational readiness, organizational support, perceived government support, perceived competitive pressure, and perceived customer pressure. In Model 1, four factors recorded significant value, $p=0.000$ with a confidence interval of 99.9% ($p<0.001$), including perceived relative advantage ($\beta=0.421$ and $t=6.28$), organizational support ($\beta=0.370$ and $t=4.82$), perceived competitive pressure ($\beta=-0.416$ and $t=-6.33$) and perceived customer pressure ($\beta=0.462$ and $t=9.68$). Only one factor, organizational readiness, recorded a significant value, $p=0.000$, with a confidence interval of 95% ($p<0.05$) at $\beta=-0.248$ and $t=-3.05$). However, two factors, namely security concern ($\beta=0.92$ and $t=1.48$) and perceived government support ($\beta=0.088$ and $t=1.53$), were not significant at $p=0.000$. In addition, the R-square illustrated significant value between technological, organizational, and environmental context towards technology adoption readiness with $R2=0.547$. The ANOVA value was statistically significant at $p=0.000$, and the F-test value of 113.31. Thus, the result indicated that Model 1 was a good fit for this data.

Model 2 also explored the seven independent variables (IVs), but with an addition of 17 factors comprised of gender, age between 31 to 50 years old, 41 to 50 years old and 51 years old and above, education level, employment status, less than five full-time employees, sole proprietor ownership, retailer, years of operations less than five years, fresh produce of vegetables, livestock and fruits, monthly sales RM10,000 and below, online trading method as well as FAMA e-Commerce platform users. Therefore, three factors under independent variables in Model 2 demonstrated significant value, $p=0.000$ with a confidence interval of 99.9% ($p<0.001$), namely perceived relative advantage ($\beta=0.382$ and $t=6.08$), organizational support ($\beta=0.385$ and $t=5.39$) and perceived customer pressure ($\beta=0.314$ and $t=6.80$). Nevertheless, two factors demonstrated significant value at $p=0.000$ with a confidence interval of 95% ($p<0.05$), namely organizational readiness ($\beta=-0.224$ and $t=-2.94$) and perceived competitive pressure ($\beta=-0.212$ and $t=-3.33$). Subsequently, security concern ($\beta=0.064$ and $t=1.09$) and perceived government support ($\beta=0.061$ and $t=1.14$) were not significant at $p=0.000$. Furthermore, demographic factors examined under Model 2 demonstrated two factors were significant at $p=0.000$ with a confidence interval of 99.9% ($p<0.001$), namely sole proprietor ownership ($\beta=0.135$ and $t=4.92$) and online trading method ($\beta=0.122$ and $t=4.26$). For a significant value of $p=0.000$ at a confidence interval of 95% ($p<0.05$), there are three factors examined, specifically full-time employees less than five employees ($\beta=-0.061$ and $t=-2.36$), retailer ($\beta=-0.054$ and $t=-2.12$) as well as fresh produce, namely vegetables ($\beta=-0.083$ and $t=-2.38$). Only one factor demonstrated a significant value of $p=0.000$ with a confidence interval of 90% ($p<0.10$), which was the FAMA e-commerce platform user ($\beta=0.050$ and $t=1.87$). However, ten factors demonstrated insignificant results at $p=0.000$, namely gender ($\beta=0.008$ and $t=0.33$), age between 31 to 50 years old ($\beta=0.047$ and $t=1.30$), age between 41 to 50 years old ($\beta=0.014$ and $t=0.36$), age of 51 years old and

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above (β=-0.033 and t=-0.84), an educational level lower than Diploma (β=-0.019 and t=-0.72), owner of the business (β=-0.042 and t=-1.57), business operation less than five years (β=0.040 and t=1.54), fresh produce of livestock (β=-0.020 and t=-0.59) and fruits (β=0.002 and t=0.06) as well as monthly sales RM10,000 and below (β=0.002 and t=0.08). Hence, the R-square for Model 2 portrayed significant value with R2=0.620 between technological, organizational, and environmental context towards technology adoption readiness. The ANOVA value showed statistically significant at p=0.000 and the F-test value of 47.10. Therefore, the Model 2 result revealed that the data for this research was a good fit.

On the other hand, Model 3 was performed to determine the consistency of Model 2 results. Thus, Model 3 also analyzed the seven factors of independent variables (IVs) but used similar factors in Model 2 except for gender and age. On the contrary, the control variables for these models were age 30 years old and below, education higher than diploma level, employment status: non-owner, number of full-time employees more than five employees, non-sole proprietor ownership, non-retailer, years of operation more than five years, other fresh produce, monthly sales more than RM10,000, method of trading: non-online and FAMA e-commerce platform non-user. These control variables were excluded from the analysis since it does not significantly affect the result. The independent variables in Model 3 discovered three factors with significant values at p=0.000 and confidence interval of 99.9% (p<0.001), which were perceived relative advantage (β=0.378 and t=6.03), organizational support (β=0.396 and t=5.57) and perceived customer pressure (β=0.315 and t=6.84). Nonetheless, two factors discovered significant value at p=0.000 with a confidence interval of 95% (p<0.05) comprising organizational readiness (β=-0.225 and t=-2.97) and perceived competitive pressure (β=-0.217 and t=-3.40). Consequently, security concern (β=0.068 and t=1.16) and perceived government support (β=0.050 and t=0.94) were not significant at p=0.000. Moreover, two demographic factors, including gender and age, were eliminated in Model 3 to observe the result consistency of data. Thus, the demographic factors examined under Model 3 discovered two factors were significant at p=0.000 with a confidence interval of 99.9% (p<0.001) comprising sole proprietor ownership (β=0.135 and t=4.91) and online trading method (β=0.135 and t=4.77). There are three factors examined having a significant value of p=0.000 at a confidence interval of 95% (p<0.05), which are full-time employees with less than five employees (β=-0.062 and t=-2.38), retailer (β=-0.059 and t=-2.35) as well as fresh produce, especially vegetables (β=-0.079 and t=-2.29). There are two factors discovered that had a significant value of p=0.000 with a confidence interval of 90% (p<0.10), which was business operation less than five years (β=0.048 and t=1.87) and FAMA e-commerce platform user (β=0.046 and t=1.73). Nevertheless, there were five factors discovered that had insignificant results at p=0.000 comprising educational level lower than Diploma (β=-0.029 and t=-1.11), owner of the business (β=-0.040 and t=-1.56), fresh produce of livestock (β=-0.011 and t=-0.33) and fruits (β=0.009 and t=0.27) as well as monthly sales RM10,000 and below (β=0.005 and t=0.18). Henceforth, the R-square for Model 3 represented a significant value with R2=0.618 between technological, organizational, and environmental context toward technology adoption readiness. The ANOVA value showed statistically significant at p=0.000 and the F-test value of 56.34. Thus, the Model 3 result disclosed that the data for this research was a good fit.

In conclusion, the three models assessed for the 651-sample size indicated an excellent fit data of this research. The best model with the highest R-squared value to determine the relationship between technology adoption readiness and technological, organizational, and environmental context was Model 2. Even though Model 3 eliminated two influencing factors as in Model 2, this model still led to a significant result with a slightly lower R-squared value which is different by 0.002 than Model 2. On the other hand, Model 1, which tested solely on independent variables without influencing factors, resulted in the lowest R-squared value compared to the other two models. Regardless of the models, the ANOVA value was significant for all.

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Table 4: Multiple Linear Regression (MLR) Result

Multiple Linear Regression (MLR) Analysis			
	Model 1	**Model 2**	**Model 3**
Perceived relative advantage (PRA)	0.421***	0.382***	0.378***
	(6.28)	(6.08)	(6.03)
Security concern (SC)	0.92	0.064	0.068
	(1.48)	(1.09)	(1.16)
Organizational readiness (OR)	-0.248**	-0.224**	-0.225**
	(-3.05)	(-2.94)	(-2.97)
Organizational support (OS)	0.370***	0.385***	0.396***
	(4.82)	(5.39)	(5.57)
Perceived government support (PGS)	0.088	0.061	0.050
	(1.53)	(1.14)	(0.94)
Perceived competitive pressure (PCOP)	-0.416***	-0.212**	-0.217**
	(-6.33)	(-3.33)	(-3.40)
Perceived customer pressure (PCUP)	0.462***	0.314***	0.315***
	(9.68)	(6.80)	(6.84)
Gender: (0=female, 1=male)		0.008	-
		(0.33)	-
Age: 31 to 50 years old		0.047	-
		(1.30)	-
Age: 41 years to 50 years old		0.014	-
		(0.36)	-
Age: 51 years old and above		-0.033	-
		(-0.84)	-
Education: Lower than Diploma		-0.019	-0.029
		(-0.72)	(-1.11)
Employment Status: Owner		-0.042	-0.040
		(-1.57)	(-1.56)
Full-Time Employees: Less than 5 employees		-0.061**	-0.062**
		(-2.36)	(-2.38)
Business Ownership: Sole proprietor		0.135***	0.135***
		(4.92)	(4.91)
Nature of Business: Retailer		-0.054**	-0.059**
		(-2.12)	(-2.35)
Years of Operation: Less than 5 years		0.040	0.048*
		(1.54)	(1.87)
Fresh Produce: Vegetables		-0.083**	-0.079**
		(-2.38)	(-2.29)
Fresh Produce: Livestock		-0.020	-0.011
		(-0.59)	(-0.33)
Fresh Produce: Fruits		0.002	0.009
		(0.06)	(0.27)
Monthly Sales less than RM10,000		0.002	0.005
		(0.08)	(0.18)

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Method of Trading: online		0.122***	0.135***
		(4.26)	(4.77)
FAMA e-Commerce platform user		0.050*	0.046*
		(1.87)	(1.73)
F Test	113.31	47.10	56.34
Prob > F	0.000	0.000	0.000
R-Squared	0.547	0.620	0.618
Sample Size	651	651	651

Notes:
i) *Significant at 10% (p<0.10), **significant at 5% (p<0.05), ***significant at 1% (p<0.001)
ii) Control Variables: Age 30 years old and below, education higher than diploma level, employment status: non- owner, number of full-time employees more than five employees, non-sole proprietor ownership, non-retailer, years of operation more than five years, other fresh produce, monthly sales more than RM10,000, method of trading: non-online and FAMA e-commerce platform non-user.

DISCUSSION

Based on the research findings, 12 factors influence technology adoption readiness, including organizational support, perceived relative advantage, perceived customer pressure, organizational readiness, perceived competitive pressure, sole proprietor ownership, online trading method, fresh produce of vegetables, the number of full-time employees less than five, retailer, years of operation less than five years and FAMA e-commerce platform users.

The first factor that influences technology adoption readiness is organizational support (OS). Based on the research findings, there was a significant positive relationship between organizational support and technology adoption readiness (β=0.396 and t=5.57) with a confidence interval of 99.9% (p<0.001). This study discovered that top management support significantly correlates with social commerce adoption (p=0.000).

Another study by Li (2020) revealed a significant relationship between individual perception of technology adoption and management support (p=0.000) within 263 SMEs in Hong Kong. On the other hand, Pateli, Mylonas, and Spyrou (2020) disclosed that the top management support factor was significant at p=0.000 towards social media adoption among 106 hospitality firms operating in Greece. Hence, a previous study revealed that organizational support is a significant factor influencing technology adoption readiness. This research also seconded the previous study that organizational support is the crucial factor that can influence technology adoption readiness. This research showed that traders are ready to adopt an e-commerce platform for trading their fresh agricultural produce as if there is support from the organization. Currently, only 196 traders are utilizing e-commerce platforms in trading their fresh produce, while 488 traders have not yet utilized e-commerce platforms as their trading method. Therefore, the organization needs to understand the need to diversify its trading method to increase its product volume, sales, and profits and increase the varieties of fresh agricultural produce to the consumers.

The second factor influencing technology adoption readiness was perceived relative advantage (PRA). There was a significant positive relationship between perceived relative advantage and technology adoption readiness (β=0.378 and t=6.03) with a confidence interval of 99.9% (p<0.001). This result was also supported by the study performed by Pateli, Mylonas, and Spyrou (2020), as these authors revealed that the presence of relative advantage could enhance the degree of social

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media adoption in a firm and show a significant relationship between variables (p=0.000). Apart from that, a study by Li (2020) displayed that technical advantage significantly influenced technology adoption (p=0.000). Thus, the past studies also aligned with the outcome of this research which supported that perceived relative advantage is an influencing factor for technology adoption readiness. This research showed that traders are ready to adopt an e-commerce platform if the platform can ease their business activities, be user-friendly, save money, and payout time. Therefore, traders are more ready to use e-commerce platforms when they recognize the relative advantage that can benefit their business.

The third factor influencing technology adoption readiness was perceived customer pressure (PCUP). There was a significant positive relationship between perceived customer pressure and technology adoption readiness (β=0.315 and t=6.84) with a confidence interval of 99.9% (p<0.001). According to a study done by Tripopsakul (2018), customer pressure has a significant positive relationship with social media adoption as a business platform among 357 entrepreneurial students at the University of Bangkok (p=0.000). Therefore, this research aligned with Tripopsakul (2018) that customer pressure was an influencing factor that encouraged traders to adopt e-commerce platforms. The data analysis generated from this research showed that traders are ready to adopt an e-commerce platform for trading their fresh agricultural produce if they realize the benefits of shifting from traditional to online trading methods in attracting potential consumers. In addition, this pressure is also driven by the customers' demand to utilize e-commerce platforms, mainly due to the current pandemic of COVID-19. Thus, the higher the customer pressures, the higher the level of e-commerce adoption among traders.

The fourth factor influencing technology adoption readiness was organizational readiness (OR). There was a significant negative relationship between organizational readiness and technology adoption readiness (β=-0.225 and t=-2.97) with a confidence interval of 95% (p<0.05). Abed (2020) stated a significant relationship between organizational readiness and social commerce adoption (p=0.000). Li (2020) also supported the study by Abed (2020), as his result showed a significant relationship between organizational readiness and technology adoption. In contrast, Badi et al. (2020) revealed no significant relationship between organizational readiness and the adoption of smart contracts among UK construction practitioners. However, this research revealed that traders are not ready to adopt e-commerce platforms, as data analysis showed that 488 still do not adopt e-commerce platforms in their business operations. Furthermore, out of 488 traders surveyed, 428 declared they lacked awareness of e-commerce platforms. Contradicting results with the past research, it is due to the e-commerce platform providers in Malaysia who do not allow new agriculture to be traded yet using their platform during the study. The leading blocker that hinders this possibility is the appropriate delivery method to carry fresh agricultural produce to the customers.

The fifth factor influencing technology adoption readiness was perceived competitive pressure (PCOP). There was a significant negative relationship between perceived competitive pressure and technology adoption readiness (β=-0.217 and t=-3.40) with a confidence interval of 95% (p<0.05). Based on the study done by Badi et al. (2020) and Tripopsakul (2018) discovered that there is a significant positive relationship between competitive pressure and technology adoption (p=0.000). In addition, Abed (2020) mentioned that trading partner pressure significantly affects social commerce adoption (p=0.000). On the other hand, this research implied that traders are not ready to adopt technology in their business as no competitive pressure existed among the platforms. The main reason for this condition is that the service providers did not support fresh produce on their platforms. Moreover, they claimed that fresh produce attributes, for instance, perishable are not suitable to trade online. Furthermore, traders do not feel pressure from their competitors. All these lead to hesitation in adopting the technology.

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The sixth factor that influences technology adoption readiness is sole proprietor ownership. There was a significant positive relationship between sole proprietor ownership and technology adoption readiness (β=0.135 and t=4.91) with a confidence interval of 99.9% (p<0.001). Based on the finding, out of 651 traders surveyed, 474 businesses (72.8%) were registered as sole proprietors and ready to adopt an e-commerce platform. Since the sole proprietor's business size is relatively small, the owners can decide to adopt technology without discussing it with business partners (Ritz, Wolf, & McQuitty, 2019). However, traders might be encouraged to adopt technology if they know the e-commerce benefits and have enough resources to achieve their competitive advantage.

The seventh factor that influences technology adoption readiness is the trading method. There was a significant positive relationship between trading method and technology adoption readiness (β=0.135 and t=4.77) with a confidence interval of 99.9% (p<0.001). About 412 traders had experience using the online platform in trading fresh agricultural produce, but only 196 of the trader's utilized e-commerce. According to Ritz, Wolf, and McQuitty (2019), the experience of using digital marketing can influence owners to use technology. Therefore, traders who have experience using online platforms are ready to adopt e-commerce platforms in trading their fresh agricultural produce.

The type of fresh produce and vegetables was the eighth factor influencing technology adoption readiness. There was a significant negative relationship between vegetables and technology adoption readiness (β=-0.079 and t=-2.29) with a confidence interval of 95% (p<0.05). About 232 traders (35.6%) who buy and sell vegetables refuse to adopt the e-commerce platform because of the nature of the fresh produce, which is perishable, and their life span is short. Feedback from the traders claimed that their consumers prefer to buy vegetables using the physical method as they want to look closely at them and check up on freshness. According to Wei, Wang, Zhu, Xue, and Chen (2018), customers are very demanding of the quality of products, especially their sweetness and freshness, and they are sensitive to buying fruits through an e-commerce platform. Therefore, the past study aligns with this research, where customers tend to hesitate to implement e-commerce.

The ninth factor influencing technology readiness was the number of full-time employees, less than five. There was a significant negative relationship between the number of full-time employees less than five and technology adoption readiness (β=-0.062 and t=-2.38) at a confidence interval of 95% (p<0.05). This result illustrated that businesses with less than five employees were not ready to adopt an e-commerce platform because of the shortage of workforce, which caused them not to adopt technology in their fresh produce trading activities. Adopting an e-commerce platform requires capital injection and expertise, which becomes a blocker for traders. On top of that, 470 traders (72.2%) earned around RM10,000 monthly and below, which made them decide not to adopt e-commerce.

The tenth factor that influences technology adoption readiness is retailers. There was a significant negative relationship between retailers and technology adoption readiness (β=-0.059 and t=-2.35) with a confidence interval of 95% (p<0.05). According to this data, traders are not ready to implement e-commerce. Since most traders surveyed are sole proprietors who earn less than RM10,000 monthly and below and have less than five employees, they can be categorized under micro business. Thus, this contributes to the negative relationship between the variables.

The eleventh factor influencing technology adoption readiness was less than five years of operation. There was a significant positive relationship between years of operation less than five years and technology adoption readiness (β=0.048 and t=1.87) with a confidence interval of 90% (p<0.10). This data showed that these newly established traders are ready to adopt e-commerce to trade their fresh agricultural produce. This contribution is due to the number of youths participating in the survey. The majority of youth nowadays are IT savvy, and this indicates their readiness for technology adoption.

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The last factor that influences technology adoption readiness is the FAMA e-commerce platform user. There was a significant positive relationship between FAMA e-commerce platform users and technology adoption readiness (β=0.046 and p=1.73) with a confidence interval of 90% ($p<0.10$). This analysis presented that existing traders using the FAMA e-commerce platform are willing to continue their trading activities. Besides, traders perceived FAMA e-commerce as the best e-commerce platform to trade fresh agricultural produce

CONCLUSION

This research identified factors influencing technology adoption readiness among traders using e-commerce platforms. The influencing factors were organizational support, perceived relative advantage, perceived customer pressure, organizational readiness, perceived competitive pressure, sole proprietor ownership, online trading method, fresh produce of vegetables, the number of full-time employees less than five, retailer, years of operation less than five years and FAMA e-commerce platform user. In addition, this research also discovered problems and challenges faced by traders for not using the e-commerce platform, including lack of awareness, lack of resources, perishable products, unsuitable products, age factors, connectivity issues, lack of interest, and not being sure. Therefore, traders who have already utilized e-commerce are ready to adopt an e-commerce platform. In contrast, traders who do not utilize e-commerce are not ready to adopt an e-commerce platform. Hence, this research provides some insight and recommendations to assist FAMA in persuading traders to adopt and experiment with e-commerce platforms by addressing the influencing factors, problems, and challenges. Subsequently, FAMA can provide a better e-commerce platform supporting Malaysia's fresh agricultural produce.

Future research should involve farmers and other stakeholders involved in fresh agricultural produce because farmers are an essential entity within the agricultural ecosystem and could be a driving factor in technology adoption. On the other hand, future research should be conducted on different agricultural products as they might exhibit different characteristics than this research. In addition, future research should consider a qualitative approach to investigate the factors found in this research comprehensively.

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APPENDIX A

Result of Factor Loadings

Factor Loadings									
Items	**POR**	**PRA**	**SC**	**OR**	**OS**	**PGS**	**PCOP**	**PCUP**	**Significant Level**
B1	0.80								Significant
B2	0.64								Significant
B3	0.64								Significant
B4	0.64								Significant
B5	0.81								Significant
B6	0.85								Significant
B7	0.86								Significant
B8	0.81								Significant
B9	0.76								Significant
B10	0.75								Significant
C1		0.84							Significant
C2		0.86							Significant
C3		0.89							Significant
C4		0.89							Significant
C5		0.88							Significant
C6		0.91							Significant
C7		0.91							Significant
C8		0.90							Significant
C9			0.95						Significant
C10			0.95						Significant
D1				0.91					Significant
D2				0.91					Significant
D3				0.90					Significant
D4				0.80					Significant
D5				0.91					Significant
D6				0.90					Significant
D7					0.85				Significant
D8					0.94				Significant
D9					0.92				Significant
D10					0.90				Significant
E1						0.93			Significant
E2						0.94			Significant
E3						0.92			Significant
E4							0.85		Significant
E5							0.83		Significant
E6							0.87		Significant
E7							0.86		Significant
E8							0.92		Significant
E9							0.88		Significant
E10							0.89		Significant
E11								0.88	Significant
E12								0.71	Significant
E13								0.89	Significant
Eigenvalue	5.81	6.26	1.81	4.76	3.25	2.61	5.32	2.08	-
Percentageof Variance	58.12	78.30	90.23	79.34	81.36	86.94	76.03	69.45	-
Cumulative Percentage	58.12	78.30	90.23	79.34	81.36	86.94	76.03	69.45	-

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APPENDIX B

Result of Research Hypothesis

Research Hypothesis		
Hypothesis	**Factors**	**Result**
Technological Context (IV 1)		
$H_0$1a	There is no significant relationship between technological context (perceived relative advantage) and technology adoption readiness.	Reject
$H_1$1a	There is a significant relationship between technological context (perceived relative advantage) and technology adoption readiness.	Accept
$H_0$1b	There is no significant relationship between technological context (security concern) and technology adoption readiness.	Accept
$H_1$1b	There is a significant relationship between technological context (security concern) and technology adoption readiness.	Reject
Organizational Context (IV 2)		
$H_0$2a	There is no significant relationship between organizational context (organizational readiness) and technology adoption readiness.	Reject
$H_1$2a	There is a significant relationship between organizational context (organizational readiness) and technology adoption readiness.	Accept
$H_0$2b	There is no significant relationship between organizational context (organizational support) and technology adoption readiness.	Reject
$H_1$2b	There is a significant relationship between organizational context (organizational support) and technology adoption readiness.	Accept
Environmental Context (IV 3)		
$H_0$3a	There is no significant relationship between environmental context (perceived government support) and technology adoption readiness.	Accept
$H_1$3a	There is a significant relationship between environmental context (perceived government support) and technology adoption readiness.	Reject
$H_0$3b	There is no significant relationship between environmental context (perceived competitive pressure) and technology adoption readiness.	Reject
$H_1$3b	There is a significant relationship between environmental context (perceived competitive pressure) and technology adoption readiness.	Accept
$H_0$3c	There is no significant relationship between environmental context (perceived customer pressure) and technology adoption readiness.	Reject
$H_1$3c	There is a significant relationship between environmental context (perceived customer pressure) and technology adoption readiness.	Accept

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