The Challenges of Starting and Operating an E- Commerce Business in Rural Areas

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ABSTRACT

Many people usually choose to go to a big city to work and study. However, to stop the spreading of COVID-19 pandemic, the government has issued a health regulation to stay at home. So, they have to return to their hometown where many of these hometowns often happened to be in rural areas. In this Covid-19 pandemic era, the major trends of e-commerce have proved that online business is an important tool to accelerate the growth of the economy and cater to consumers' demand. However, e-commerce is very rare and difficult to access in rural areas. So, people have observed that there are opportunities to conduct e-commerce in rural areas. Therefore, this paper outlines the various challenges when people are starting and operating e-commerce in rural areas to raise awareness for the people who want to do e-commerce in rural areas, which are: 1) inefficient and incompetent internet services; 2) logistics services; 3) linguistic barrier; 4) affordability and accessibility; 5) trust issues; 6) security; and 7) legal issue.

Keywords: *Business, challenges, e-commerce, rural areas*

1. INTRODUCTION

According to the World Trade Organization (WTO), electronic commerce, or also well known as e-commerce, is defined as the buying, selling, exchanging of goods and services on the Internet [1]. The transaction can be done between individuals, households, firms, governments and other public or private organizations. It is an integration of information technology and business practices [1]. According to the research done by UN trade and development experts, e-commerce is witnessing a surge in its share of all retail sales from 16 percent to 19 percent in 2020 [2]. In this Covid-19 pandemic era, the major trends of teleworking and e-commerce have proved that online business is an important tool to accelerate the growth of the economy and cater to consumers' demand at the same time [3].

Many people in most countries usually choose to go to a big city such as the capital to work and study. There are various reasons for this occasion to happen so often. One of the reasons is because big cities have much better facilities and wider job opportunities [4]. Schools in big cities are also more variant in the studies that people can choose from. A good accreditation is also one of the main reasons why people choose to go to big cities to work and study since most schools, universities, and companies with excellent accreditation are located in these big cities [5].

However, to stop the spreading of COVID-19 pandemic, the governments from many countries have issued several health regulations. One of the health regulations is to stay at home. That is why according to those regulations, many people are required to stay at home and work from home. The students from various education stages such as kindergarten, elementary school, junior high school, senior high school, until university students are also

required to study from home through online class.

Therefore, many people who work and study in big cities such as the capital have to return back to their hometown. Many of these hometowns oftentimes happened to be in rural areas. However, electronic commerce or e-commerce is very rare and difficult to access in rural areas [6]. This condition makes the workers or employees and the students who have to work from rural areas very troubled in accessing e-commerce and buying things online for their work and school needs which was supposedly easy when they were in a big city.

Since it's difficult to access the e-commerce business in rural areas, it makes working and studying from home difficult for people in rural areas. People have observed this situation and found out that there are business opportunities to conduct e-commerce in rural areas to increase their sales. However, there are some barriers for them to be able to sell products and services to the people who stay in rural areas. Therefore, this scientific paper outlines the various challenges when people are starting and operating e-commerce in rural areas. This scientific paper will also show a deep understanding of the environment of rural areas in order to alert the sellers in implementing the suitable business strategies and developing effective solutions to make e-commerce more feasible in rural areas.

The primary purpose of this paper is to raise the awareness of people before they start making e-commerce businesses in the rural areas in order to prepare strategies beforehand to tackle the issues that arise. After people start opening an e-commerce business in rural areas, the inhabitants of the rural areas, especially those workers and students that used to work and do their study in big cities would be able to overcome the difficulties that were talked about in the previous paragraphs. At the same time, this scientific paper is also beneficial to people in general as it enhances their knowledge on the current situation of e-commerce businesses, particularly in rural areas.

The next section of this paper will discuss the method used to write this scientific paper. After that, the next section will explore the results and discussion from the discovery about the challenges of conducting e-commerce in rural areas. Lastly, the last section will be the conclusion of this scientific paper.

2. METHOD

This paper is done by doing a literature review. A literature review is collecting, then making a broad and thorough summary of literature and earlier research associated with a particular topic [7]. Therefore, in order to execute this paper, a gathering of many scholarly existing literatures, thesis, and research journals through browsing the internet with a complementary topic, which is challenges of e-commerce business in rural areas, were performed.

Generally speaking, the paper was concocted around these questions below.

1. Why is starting and operating an e-commerce business rare and difficult in rural areas?
2. What are the existing barriers that make it hard for rural area inhabitants to approach e-commerce?
3. How does the environment of rural areas exert a hindrance influence to the people who want to start an e-commerce business in the rural areas?

The questions above were addressed to be studied and explored further from the literature sources used for this paper in order to find out the answer of those problems. As such, a deep understanding will be obtained. Thus, the results and discussions are revealed below after gathering the information and discussions.

3. RESULTS AND DISCUSSION

There are many issues that serve as a problem that will make it a challenge to start and operate an e-commerce business in rural areas. These challenges are the existing barriers that make it hard for rural inhabitants to

approach e-commerce in their areas and as the result, e-commerce business is considered rare in rural areas.

These challenges can be generated from external and internal factors. For instance, the external factors are from the environment issue, security issue, legal issue, and so on. Meanwhile, the internal factors are mostly generated from the people of the rural area itself. For example, linguistic barriers, trust issues, cultural problems, and so forth. These challenges will be discussed in more detail in the following passages.

3.1. Inefficient and incompetent internet services

One of the core challenge of conducting e-commerce businesses is the inefficient and incompetent internet services in the rural areas. As a matter of fact, there are some rural areas with no service connection at all [8]. According to a press release by the International Telecommunication Union (ITU), about 38 percent of the households in rural areas are able to access the internet around the world. However, the percentage of households that have internet connection in urban areas is double compared to the rural residents, which is about 72 percent [9].

Townsend et al. noted that the rural areas suffer poor internet connectivity is mainly caused by the problems of inadequate broadband infrastructure [10]. Hindman mentioned that rural areas typically adopt a weaker broadband infrastructure compared to other areas [11]. The rural geographical areas are naturally located outside towns and cities. This natural environment causes the problem of distance and reduces the effectiveness of Internet connectivity. Therefore, a good broadband infrastructure needs to be installed in rural areas in order to remain viable in e-commerce businesses as it helps to bring down the barrier of distance for people living rurally. As such, it connects people and gives accessibility to a wide range of essential and desirable resources successfully [10].

Consequently, this factor becomes the challenge of starting and operating e-commerce businesses in rural areas. For instance, research conducted by Martinez and Esparcia revealed the problem of the community of rural areas having difficulties accessing the Internet shows the internet infrastructures are relatively backward and eventually makes it hard to penetrate e-commerce business in rural regions [12]. The poor connectivity in rural regions might cause errors or technical problems when choosing and purchasing a product or service, and interrupting the e-payment processes which hinders the sellers from implementing online businesses [12].

According to the survey conducted by Ahmed, the citizens of Pakistan, revealed that e-payment is one of the prime reasons to hinder the e-commerce growth as there is unavailability of local payment gateway in Pakistan [13]. Moreover, the slow downloads of the images that showcase the products and services of the sellers on an e-commerce site give rise to the inconvenience to the consumers. Thus, the slow internet speed problem heavily impacted the e-commerce businesses as the internet plays a crucial part in affecting the sales volume, since only the high resolution images can showcase the products and services perfectly [12].

Contrastingly, an efficient broadband infrastructure enhances the connection and definitely prevents the problematic issues to make the transaction smoother. Broadband is important for both parties which are the rural residents and the sellers of e-commerce businesses in order to make e-commerce feasible [10].

In short, the inefficient and incompetent internet services such as weak broadband infrastructure is a challenge for the sellers to implement online businesses to the rural communities.

3.2. Logistics services

Although the logistics services vary across the countries, it is commonly acknowledged

that a delivery for the consumers from rural and more remote areas is costing more money and also more time consuming compared to deliveries inside the city [8].

The high cost of logistics can be caused by complex logistics requirements. The factors that influence the speed of delivery often depend on the size, scale, and location. So, in order to deliver orders expeditiously and efficiently, it demands the use of a specialized freight service which in turn increases the cost of delivery considerably [14].

The time consuming issue is usually caused by the distance of the delivering destination. As the majority of transportation is done by road, especially since rural areas don't have much air transportation, the delivery time is lengthy and has a risk of damaging the goods [14].

But fortunately, this situation is showing an improvement in some countries as they are already working on improving logistics. Private companies and e-commerce platforms in some countries are in the process of manufacturing their logistical chains [8].

3.3. Linguistic barrier

The term "linguistic" is defined as a master of language, one who uses his tongue freely. The linguistic barrier brings substantial effects to the e-commerce industry [15]. This is because English is recognised as an universal language of the internet. Hence, this language becomes the success factor of e-commerce adoption to act as the medium of communication in the marketplace. According to Kenny, the majority of the web content and software are written in English language. However, most of the population in developing countries, and more so the rural inhabitants, are unable to read or write English language and eventually this situation leads to the low engagement in e-commerce unless the contents in the website are provided in native language [16].

This study even intensifies the challenge of starting e-commerce in rural areas because

rural inhabitants are proven to have a lack of foundation in English language skills. This is because the rural communities face difficulties in learning English such as the unprepared state to learn this language and the lack of professional training on the teachers [17]. As the proficiency of English in rural communities is poor, this is the challenge of implementing e-commerce businesses in rural areas.

Lack of capability in English language or unavailability of web content in native language results in lower e-commerce adoption rate. Thus, the contents are needed to be readable by the rural inhabitants in order to make online businesses feasible successfully.

3.4. Affordability and accessibility

One of the significant challenges is the affordability and accessibility of the rural areas inhabitant, such as to afford and to access the digital platform services [8]. The cost of digital platform service might be considerably high for the people from rural areas where the financial situation is not very good. Other than the digital platform service, the electronic device itself is not something that everyone from rural areas possess. After all, the price of the device to access e-commerce such as smartphone, tablet, PC, or laptop, the billing, and the maintenance they need in the long run is not low.

3.5. Trust issues

Traditionally, people will have a direct face-to-face contact between the customer and the seller while shopping [6]. The customer can personally see, touch, and hold the products they want to consider buying. They also can converse with the seller to ask directly about the products, and maybe with a bit of haggling. After that, they are able to pay either with cash, credit card, e-money, or any other paying methods, then bring the paid products home.

However, as stated before, e-commerce is a shopping or an exchanging goods activity where the transaction is done using the internet. Hence, the buyer and seller don't have direct contact. While it is a great thing in this Covid-

19 pandemic era where people should distance themselves and avoid direct contact with other people, rural area inhabitants who are used to the traditional way of shopping may be having a lack of trust toward this e-commerce business.

These people who are used to the traditional way of shopping might be concerned about the quality of the product as they cannot see the product directly. They also might be afraid of fraud where the seller didn't send the product after the buyer transferred the money. They need some kind of a guarantee to trust this e-commerce business. So, lack of trust and guarantees act as the barriers that make rural area inhabitants hesitate to approach e-commerce.

3.6. Security

Due to the rapid development of e-commerce technology, some irresponsible people want to get detailed data of customer's informations by attacking the firewall e-commerce system. People in rural areas might not be aware of this and have a high risk of falling victim to these attacks. These data will later be used to harm the users. Therefore, every company must improve the security system or reduce the risk of security threats, such as by knowing where systems are vulnerable to attack. That's why knowing the types of threats on the web is recommended, such as the types below [18].

1. Viruses: have the ability to copy and spread to computer files.
2. Worms: they spread into computers and often rely on action and vulnerabilities.
3. Bots: can install computer applications secretly and can reply or command back to attackers.
4. Browser parasites: can monitor and change browser settings of the users.

3.7. Legal issue

With the large number of e-commerce users, surely e-commerce cannot be separated from fraud and internet scam. There is a risk of crime over the internet when the buyers and sellers do not know each other and cannot even see each other. Since some of the people who live in rural areas aren't attentive to these legal issues, the risk of being scammed in e-commerce makes them afraid to do e-commerce shopping. These are some legal issues of e-commerce that usually occur [19]:

1. Fraud on the internet: internet scams have increased by leaps and bounds. This is a huge problem for online merchant;
2. Copyright protection issue: copyright law protects intellectual property in its many forms, and cannot be used freely. But, it's very difficult to protect intellectual property in e-commerce;
3. Privacy issues: protection is a significant issue for both the sellers and customers. The customers share their data with the online sellers and they assume that sellers would keep their data private. With only one little mistake and leak of data information about the customers, not only the seller will lose future potential customers, the shop's image and reputation also will be questioned.

4. CONCLUSION

E-commerce is defined as the buying, selling, exchanging of goods and services on the internet. In this Covid-19 pandemic era, the major trends of teleworking and e-commerce have proved that online business is an important tool to accelerate the growth of the economy and cater to consumers' demand at the same time.

Many people in most countries usually choose to go to a big city to work and study. However, to stop the spreading of COVID-19 pandemic, the government has issued a health regulation to stay at home. To comply with this regulation, many people are required to work and study from home. Therefore, many people who work and study in big cities have to return back to their hometown, where many of these

hometowns oftentimes happened to be in rural areas.

However, e-commerce is very rare and difficult to access in rural areas. This condition makes the people who have to work from rural areas very troubled in accessing e-commerce and buying things online for their needs which was supposedly easy when they were in a big city. Since it's difficult to access e-commerce in rural areas, it makes working and studying from home difficult for people in rural areas.

People have observed this situation and found out that there are business opportunities to conduct e-commerce in rural areas. Therefore, this paper outlines the various challenges when people are starting and operating e-commerce in rural areas. So, the purpose of this paper is to raise awareness for the people who want to start or are doing e-commerce businesses in the rural areas so they can make strategies to overcome the challenges.

After doing many literature reviews, the challenges of e-commerce in rural areas are inefficient and incompetent internet services, logistic services, linguistic barrier, affordability and accessibility, trust issues, security, legal issue.

The inefficient and incompetent internet services such as weak broadband infrastructure is one of the core challenge for the sellers to do e-commerce businesses in rural areas. For logistic services, a delivery to rural areas costs more money and also is more time consuming than to common cities. In regard to the linguistic barrier, rural communities are incompetent in English language skill and thus lowers the adoption rate of e-commerce businesses.

Another significant challenge is about affordability and accessibility of the rural areas inhabitant. The financial situation in rural areas is usually not very good, so the people from rural areas might not be able to afford the cost of the digital platform services and the electronic devices that in turn make them unable to access e-commerce.

Also, as e-commerce is a shopping without direct contact, lack of trust and guarantees act as the barriers that make rural area inhabitants hesitate to approach e-commerce. Due to the rapid development of the internet, some irresponsible people are using viruses, worms, bots, and internet parasites to attack the firewall e-commerce system. People in rural areas might not be aware of this and have a high risk of falling victim to those attacks.

Lastly, some of the people who live in rural areas aren't attentive to legal issues such as fraud and privacy issues. Thus, the risk of being scammed in e-commerce makes them afraid to do e-commerce shopping.

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