From Traditional Trade to E-Commerce: Case Analysis on Empowerment of Conventional Market Traders in Yogyakarta

Aziz Muslim (a)*
(a) UIN Sunan Kalijaga Yogyakarta
* Corresponding Author, Address: Post-graduate of UIN Sunan Kalijaga, Jl. Laksda Adisucipto, Papringan, Caturtunggal, Kec. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55281, Email: aziz.muslim@uin-suka.ac.id

ABSTRACT

Conventional markets are increasingly marginalized by consumers in the era of modernization, particularly during the COVID-19 pandemic. Therefore, this study aimed to examine the strategies used to empower conventional market traders in increasing their income through the implementation of an e-commerce transaction system. A qualitative design was also adopted with interviews and observations, while the data analysis was conducted using interactive techniques. The results showed that the development of an e-commerce transaction system in conventional markets was conducted with a strategy of assessing market potential, socializing e-commerce concepts, and training on website management. At the implementation level, the role of universities and financial support from the local government contributed to the success of the program. Furthermore, the inhibiting factors included the social motivation of consumers in shopping and the cost of shipping goods. The efforts to develop an e-commerce transaction system were ineffective in increasing the income of traders, while the loyalty of consumers to shop at the market had a positive effect.

Introduction

COVID-19 pandemic is responsible for the decline in the income of conventional market traders (Sharma & Sharma, 2020), and this economic
recession is connected to the government’s public health measures, such as social distancing to reduce the transmission of the virus (Syamsul & Masyita, 2021). Furthermore, the anxiety regarding the potential contraction of the virus has prompted consumers to stay indoors and purchase items through their smartphones, bypassing direct visits to conventional markets (Dannenberg, et al., 2020). This shift in behavior has resulted in the reduction of customers and income of traders.

Traders who market their products online during the pandemic showed an increasing trend of income (Donthu & Gustafsson, 2020). However, online trading was not demanded by consumers before the pandemic, particularly in developing countries (Bhatti, et al., 2019). In Pakistan, e-commerce which started in the 2000s was only demanded by 3% of consumers from the total population but the demand increased by 15% during the pandemic (Bhatti, et al., 2020), indicating that online trading promotes income. However, the challenge lies in creating awareness among traders who are hesitant to embrace this approach due to various factors, including concerns related to financial security, product quality, and convenience (Kalinic, 2015). Additional examples include traders’ apprehensions on the failure to receive payment for delivered goods and hacking incidents when bank account numbers are requested during payment transactions (Franco & Regi, 2016). Therefore, it is necessary to improve the traders’ awareness through intensive empowerment to eliminate fear.

The process of building traders’ awareness was examined to develop a goods sales model from conventional to modern techniques through an e-commerce platform. This was focused on building strategies, supporting and inhibiting factors related to awareness, as well as the results obtained from the process. Moreover, no previous study discussed this problem since some literature only examined the development of online businesses individually or in groups. For example, Çela (2015) examined online business development in large and small companies. Plotka and Witkowski (2016) also emphasized the virtualization of work in global supply. According to Attaran and Woods (2019), the performance of small businesses can be improved by using the internet. Meanwhile, the model of buying and selling transactions using e-commerce platforms, specifically efforts to change traders’ awareness from conventional to modern business
practices has not been examined.

**E-commerce Advantages**

COVID-19 has affected consumer behavior in goods shopping. This is consistent with the findings of Bhatti et al. (2020), where 52% of consumers refrained from visiting markets and crowded areas as a response to the spread of the virus, while 36% expressed their reluctance due to not being vaccinated. The use of internet during this period has improved and promoted consumers to shop online (United Nations, 2020).

The impact of the sheer volume of online shopping has threatened the sustainability of traditionally managed conventional markets. Fitriano and Saribu (2020) stated that income, consumers, and traders or store employees decreased by 40%, 25%, and 37% due to the rise of e-commerce. This condition certainly demands a change in conventional market management, which is certainly difficult because the traders are less skilled with low knowledge or education (Prihatminingtyas, 2017). The individuals are rigid as it takes patience to build their awareness and sufficient time to improve skills (Rogers, 1983).

Wrihatnolo and Dwidjowijoto (2007) and Muslim, et al (2014) stated that the steps to adequately run the empowerment process for maximum results were to build awareness, improve skills, provide independent confidence, and build partners. Building awareness among beneficiaries is very important, particularly for those with low knowledge or new to the innovations.

E-commerce is also described as an innovation for conventional market traders. Bhatti (2019) stated that business actors were reluctant to switch to this form of marketing due to the risks of transacting without a physical meeting. Traders and consumers who are new to online transactions often experience discomfort when engaging in these transactions. Consequently, there is a sense of apprehension concerning sending goods, making payments, or encountering situations where goods have been paid for but not delivered. This is primarily attributed to the absence of physical interaction between traders and consumers, resulting in a relatively low level of mutual trust. According to Apau and Koranteng (2019), the proliferation of cybercrimes, including fraud and illicit money transfers facilitated by hacking techniques, has increased the reluctance to
engage in transactional processes including electronic transfers. This apprehension is specifically prevalent among individuals who lack proficiency in technology and digital literacy. Furthermore, confidential information could be leaked through the hacker system, increasing traders’ reluctance to switch to online systems.

There are several advantages for conventional market traders in conducting online transactions, such as range of services. The online and conventional markets have a wide and short range of services (Attaran & Woods, 2019), and the distance from the consumers’ residence to the market is below 3.5 km (Sadino & Syahbana, 2014). Furthermore, the online market does not require a large and strategic place or business location to show merchandise (Alcañiz, et al., 2019). Consumers no longer require physical presence at a location to browse, select, and make direct purchases due to the availability of online platforms. Therefore, traders and consumers can effectively avoid large gatherings, particularly during outbreaks of infectious diseases.

**Method**

This study was carried out with a case study approach in Yogyakarta province of Indonesia. The location was selected because the province had conventional markets developed with an e-commerce platform, namely the Sambilegi, Colombo, and Panggungharjo Village Markets. Conversely, the Provincial government, represented by the Industry and Trade Office promoted the development of other conventional markets into online with e-commerce platforms.

The main informants were market traders, managers, assistants, or facilitators of market trader empowerment consisting of the Center for Community Economic Studies, Faculty of Social and Political Science, Gadjah Mada University, and the non-governmental organization “Market School”. Meanwhile, supporting informants were related government agencies and market consumers selected using a criterion technique. The criteria for the main informants were traders, managers, and facilitators who actively participated and carried out empowerment activities in conventional markets, traders in business for at least 5 years at the time of the empowerment activities, and those without side business. The criteria for the supporting informants were government agencies that were actively included in empowering market traders.
and the surrounding community.

The sample size for the main and supporting informants was determined based on the saturation of the information. Therefore, sampling for key and supporting informants is terminated when the expected new information is no longer obtained. Based on this technique, a total of 31 people became informants, consisting of 19 main and 12 supporting informants. The names of the informants were kept secret and replaced with initials to maintain their identities as agreed in the data collection.

In this study, the data were obtained by interviews and observations by following health protocols according to the rules set by the government and market managers. Data from interviews with the 31 informants and observations were noted, recorded, and validated. The validity was carried out through triangulation by checking the data obtained from interviews or other results and comparing the results with the observation. Furthermore, the valid data were analyzed using the interactive technique of Miles and Huberman (1984). The step started with data reduction in two stages, namely when in the field using triangulation as described above and at home by selecting data to be analyzed. The selected data were presented and examined for the relationship or connection with the problem.

Result
E-Commerce-Based Conventional Market Trader Empowerment Strategy

Switching to an e-commerce transaction system by examining market potential is an initial strategy to build awareness of conventional market traders. This study was carried out in a group discussion, consisting of the Center for Community Economic Study, the Faculty of Social and Political Sciences, Gadjah Mada University, the District Industry and Trade Office, as well as the non-governmental organization “Market School”. Based on the following Market School team, Mz explained that:

“Before building a market with an online shopping platform there were small discussion activities on the condition of traders continuously experiencing a decline in income, specifically during the COVID-19 pandemic. The participants were from the Market School, the Center for Populist Economics Studies, and the Faculty of Social and Political Sciences, Universitas Gadjah Mada. During the
discussed, a proposal was made to build a market with an online shopping platform, and the idea was strengthened in subsequent discussions. Furthermore, to finalize the market development plan with an online shopping platform, a focus group discussion was held by presenting the Department of Industry and Trade or assessing the market potential."

The potential study discovered important assets, such as the market with a merchant association or savings and loan cooperative, the existence of a government agency, protecting the market, and a strategic location. These potentials were very supportive of building a conventional market based on e-commerce. Therefore, during the inter-institutional group discussion, several important points were obtained, including the Sambilegi conventional market being used as a pilot project for the development of e-commerce, funding, socializing activities to stakeholders, and internet management training. The group also decided on the division of tasks and functions of each institution, such as the Department of Industry and Trade to finance website operations. Meanwhile, the non-governmental organization Market School had to socialize the activities, and the technical training to develop capacity building for market managers. This was expressed by Dm from the Faculty of Social and Political Sciences, Gadjah Mada University below:

"Sambilegi was developed into a conventional market with an online shopping platform based on the potentials that were successfully explored during inter-institutional discussions. The strength of the community, cooperatives, and smooth internet network at the location supported the development of the market with an online shopping platform. The advantages and disadvantages were discussed, such as the power of the market association to support the development, and the duties of the Market School team."

Theoretically, exploring market potential is the right strategy for Asset Based Community Development (Green & Haines, 2002). Assessing potential is the first step considered before raising awareness or empowering the community. The potential assessment aimed to exploit the market’s strengths for sustainable development. This is different from problem-solving theory which attempts to solve by identifying the problems or the primary causes and finding the appropriate solution (Sulaeman, et al., 2017).
The subsequent strategy is to socialize the concept of conventional e-commerce-based markets to the managers and traders. Based on the group discussion between the institutions, the task was assigned to the Market School team. The first step was to invite and convey the e-commerce concept to market managers consisting of associations and cooperative administrators in a limited meeting. The concept of a conventional market with an e-commerce platform is a shopping application and a liaison actor between traders and consumers, acting as an officer who receives shopping lists from consumers, and delivers goods to the destination. Meanwhile, traders and consumers remain in their respective positions without leaving the market to deliver or pick up goods. This was explained by Fr from the following Market School team below:

“The market with an online shopping platform is an application used to showcase merchant products sold in conventional markets. Therefore, buyers can view, select, and order the type of goods preferred through the application from their homes. Traders and buyers do not meet each other since the application is managed by three officers who play an important role, namely those who receive orders from buyers, spend, and deliver goods. The price of the item is as stated in the application and the clerk cannot conduct a manipulation. Meanwhile, the buyer is required to pay an additional fee for shipping costs depending on the distance.”

After the e-commerce concept was understood by the association and cooperative management, the Market School team formed socialization classes for the market traders. This was handed over to the association and cooperative management to facilitate socialization since there was an emotional closeness between the cooperative and the market traders. This method was effective since socialization can run smoothly, and the concept was gratefully accepted by participants. Below is Mg’s statement as the manager of the Colombo Market:

“The socialization with the market association management and the cooperative was carried out by the Market School team, due to their closeness. Meanwhile, the socialization with market traders was conducted by association and cooperative management, accompanied by the Market School team. This process was efficient because the parties trusted each other, and the material presented was understandable and well-received. However, there was always a low turnout when merchants were invited due to tight schedules.”
Socialization with this gradual system is consistent with the innovation adoption theory developed by Rogers (1983). The community was divided into 5 groups in terms of accepting or rejecting innovations. First, the innovator is the first person to adopt the innovation and the group consists of approximately 2.5% of the total population, characterized by bravery, adventure, and intelligence. Second, early adopters are pioneers in accepting innovation and the group is roughly dominated by 13.5% of the total population, consisting of community leaders, respected persons, and role models in society. Third, the early majority group is dominated by 34% of the total population and the characteristics are fully considered in decision-making. Fourth, the late majority is the final follower to accept the innovation and the group is dominated by 34% of the total population characterized as being skeptical and overly cautious. Lastly, laggards with an approximate population of 16% are the old-fashioned or traditional people with limited insight. Based on this theory, the Market School team considered the association and cooperative management as role models for market traders, and their words were followed to carry out socialization stages effectively. Conversely, the theory implies that the lack of market traders’ enthusiasm to participate in the process is because the group was dominated by the early or late majority, who are considerate, skeptical, and too careful.

The socialization of the e-commerce concept is conducted through the distribution of brochures to consumers in service areas or market coverage. Currently, vegetables and meat are rarely offered through online media since several consumers do not know and are not used to buying goods in online conventional markets. The socialization brochure contains conventional market information based on e-commerce as well as easy and practical shopping guides. The guide covers how to select or add a list of items to the shopping cart and write the full address for delivery on the application. This is consistent with Wd’s statement as the manager of the Sambilegi Market below:

“The association managers practice socialization with both market traders and consumers. Technically, flyers are distributed to the market’s residents and consumers shopping to deliver to their families or close neighbors.”
Socialization of conventional markets with e-commerce platforms to consumers is a smart action to promote the market products. According to Farahdiba (2020), a business strategy should be possessed to achieve the institutional goals properly and correctly. The market manager is not only tasked with regulating the smoothness, order, and convenience of the market but also has to market the products or services of the traders. Socialization of e-commerce-based markets is one of the business strategies of market managers, which is the implementation of the main tasks. However, the process is certainly less effective when brochures are only distributed to consumers.

Another strategy is capacity building in the form of training on internet use for marketing media. This training is classified into groups of market managers and traders, where the former consists of divisions of website, shopping, and goods delivery officers. The website officer was trained to operate the market website by selecting and uploading photos of traders, answering incoming chats or serving consumers, and conveying their orders to shopping officers. Shopping officers were trained to place consumer orders according to the standard prices listed on the website, arrange shopping evenly distributed for all traders, and hand over the goods to the delivery officer. Furthermore, goods delivery officers are trained by the market school team to deliver goods to consumers with full responsibility.

Groups of market traders were trained on the techniques for taking pictures of products, giving descriptions or prices, and sending pictures to market managers. This training was conducted by Community Service (KKN) students and the Market School team by visiting merchant stalls when there are no buyers or in between buying and selling activities. This is explained by Sj as a Panggungharjo Village Market trader below:

“KKN students taught me how to take pictures and sell goods online as they patiently and painstakingly educate me even when a buyer is available. I was also taught how to practice on my own.”

Wrihatnolo and Dwijowijoto (2007) and Sakulsri (2020) stated that training was important based on the main tasks and functions of each division. This was to improve the ability, skills, and responsibilities of each member by preparing
for real activities in the field. According to Wrihatnolo and Dwidjowijoto (2007), the process was conducted after the awareness of the target group (beneficiaries) was achieved or before carrying out their independence process. The goal was to reach the independence level for the target group in the community empowerment process due to the absence of dependence on outside parties.

Factors Driving the Success of E-Commerce Development

The factor that can promote the success of e-commerce strategy is the role of universities and village governments. Universities play an important role in the development of online marketing and this successful role was proven by Gadjah Mada University which was represented by the Center for Economic Democracy Studies, as well as the Faculty of Social and Political Sciences. The institution also created appropriate technology for online business applications in the markets. Universitas Gadjah Mada trained market managers as experts in operating the technology for market-related activities and organized stakeholders to carry out their respective roles. Therefore, the role of the institution was clear in encouraging the development of e-commerce and this was explained by Mz from the following Market School team:

“The success of conventional market managers with online shopping platforms cannot be separated from the role of the Center for Economic Democracy Studies, as well as the Faculty of Social and Political Sciences at Gadjah Mada University. This is because the initial idea started from the two institutions which mobilized relevant government agencies to be included. The application used for market operations is also provided by the agency and Pasar School team acts as technical implementers in the field.”

The statement above indicates that universities have a strategic role in encouraging the development of conventional markets. This is in line with Pickernell, et al (2009) where universities were promoted to take a leading role in the development of the economy, such as micro, small, and medium enterprises (MSMEs). Gadjah Mada University has become an initiator or pioneer in the development of e-commerce by building innovations, such as technology, knowledge, and skills in the form of buying and selling, application use training, and organizing stakeholders to carry out their respective roles. The
University brings changes to the traders with these three innovations, as proven by Pickernell, et al (2009) statement.

The village government plays an important role in the development since the conventional market is built and managed by the local governments, private sector, State-Owned or Regional-Owned Enterprises (Indonesian Presidential Regulation Number 112 of 2007). The programs planned or initiated by internal parties for market development receive adequate financial support. Meanwhile, external parties for the development of the market funding are often unclear and create responsibilities for each other, even though the program benefits internal parties. The development program also initiated by an external party (University of Gadjah Mada), did not receive financial support since the concept was managed by the authorized Industry and Trade Office. The Department of Industry and Trade of Sleman Regency which was controlled by the Sambilegi market did not budget the cost of managing the website for this market, hence, the operation was stagnant and less effective. Panggungharjo Village and Colombo Markets received financial support from the local village government through the operational funds of the Village-Owned Enterprises to efficiently run the website management. Therefore, support from the government was important for the successful development of conventional markets with e-commerce platforms. This was in line with Bakhri (2017), stated that financial support from the local government increased the competitiveness of conventional markets.

Inhibiting Factors of E-Commerce Development

Customer motivation in shopping includes both economic and social requirements. In social needs, the success of e-commerce-based conventional market development has been hindered. This is because customers who share close familial or friendly bonds with traders find online purchases unsatisfactory due to the inability to engage in physical meetings and communication. This was described by Wt as a customer of the Colombo market below:

“Shopping at the market is more comfortable than through an application due to the direct meeting where I can meet friends or relatives’ traders. I can chat casually, clear homesickness or boredom, hence, my reason is more towards friendship than just shopping.”
Several consumers were dissatisfied with buying goods from traders who are not close friends, family, or customers for quality reasons. Meanwhile, the shopping application used for transacting in these three markets could not select the desired traders. This was stated by Mn as a customer in Panggungharjo Village below:

“I prefer to come directly to the market than using the application to select goods according to the price and quality. I already know and memorized the traders with low prices and good quality. Even though I have been a regular customer for a long time, I cannot take goods through the application and can only determine the price. This makes me dissatisfied with shopping through the application.”

Mn’s statement was confirmed by Sk as a trader at Sambilegi market as follows:

“Regular customers often come here directly to the market instead of shopping through the application. I once asked a customer who had not shopped for a long time “Why have you not shopped for a while, did you shop through the app?”. She answered, “No, it is nice to come directly to the market because I can select the goods”. Meanwhile, the old reason for not coming to the market is because there was no urgent need.”

The expressions indicate that customers prefer to come to the market directly rather than shopping online. Anamthawat (2009) emphasized that this is because spending motivation is driven by a stronger social need, such as meeting or communicating with peers. Conversely, Soderlund (2002) stated that this is due to satisfaction with the services, and customers prefer to repeat shopping. This social motivation becomes an obstacle to the development of e-commerce in the conventional market.

The shipping cost which depends on the distance of delivery is also a challenge in the e-commerce development since the customers feel unpleasant with the burden of the costs from online platform. Furthermore, direct shopping is better than online as a means of exercise for those living close to the market, and the shipping costs can be used for other needs. Meanwhile, for people who live far from the market, the shipping cost may be better when compared to vehicle fuel. This was expressed by Jm who is a customer of the Sambilegi market, as follows:
“My home is not far from the market, not even a kilo, hence, I walk while exercising and the shopping is not much or heavy. It is paramount to exercise and take a walk to be healthy. I usually ride a motorbike when spending a lot of money and I once shopped through the app, but the shipping cost was expensive, now I am used to walking directly to the market.”

This was also expressed by Rm as a customer of the Sambilegi market as follows:

“I ride my motorbike when the shopping items are much since I live far away but shop nearby when the items are few. I once used the application, and the shipping cost was not expensive. However, I prefer going directly to the market, where there is no need for shipping cost, just pay IDR 2,000.”

“The statements indicated that the shipping costs in online shopping were perceived as an additional burden, hence customers objected and preferred direct shopping. Chen and Ngwe (2018) stated the importance of waiving the shipping cost with a minimum purchase of a certain nominal and a fixed fee below the limit. Customers can decide to engage in online shopping or directly go to the market with this technique.”

Customer Loyalty as a Form of Successful E-Commerce Development

The success of e-commerce development for the three locations has not been stated, specifically the effect on increasing income. Traders argued that the hectic online market caused fewer customers to visit the market and during periods of market inactivity, their products were consistently sold daily. This was possible through the distribution of ordered goods by the shopping officer, facilitated by the online market manager, ensuring equitable allocation. However, traders remained dissatisfied with this development due to insignificant growth and this was expressed by Ng at Colombo market below:

“I feel that the online market has not influenced the increasing income and in my opinion, the customers are the same people. This can be seen when the online shop is crowded, and the market becomes inactive. Based on my perspective, the presence of online shops has not affected income.”
The online shop was crowded with customers when the government implemented a large-scale social restriction policy due to the COVID-19 pandemic. However, the situation started to decline along with the easing of the restriction policy. Customers gradually left the online market and returned to conventional ones to shop directly after the social distancing policies were eased. The market was deserted but the lack of customers did not mean that e-commerce development efforts failed since the purpose was to improve service and make customers feel comfortable. In a direct and online service system, customers were increasingly pampered to shop easily in conventional markets. The dual-service system was effective in building customer loyalty and this was proven by Id’s statement as a market customer in Panggungharjo Village below:

“The online system in this market allows me to shop directly while refreshing. However, I usually shop through the application when there is no opportunity as it is easy and the price is the same with an additional shipping cost.”

A similar statement was conveyed by Pw as a customer of the Sambilegi market below:

“I always go to this market, specifically when shopping is facilitated with the provision of online facilities. However, I use the application when I do not have time to come directly or during the lockdown.”

The statements by Id and Pw were confirmed by Wd as the manager of the Sambilegi Market, as stated below:

“Since the government eased the lockdown policy, the online market began to decline even though there were still few online customers. The customers prefer to come directly to the market for various reasons. Interestingly, they were satisfied with the online shopping facility at Sambilegi and were not bothered looking for other places to shop.”

The statements above indicate that the development of e-commerce can improve service to consumers. This improvement has an impact on consumer loyalty to become market customers. Furthermore, this approach prevents customers from shifting to alternative markets, despite the limited impact on increasing the income of traders. Consumer loyalty plays an important role in
the revenue of the traditional market since devoted customers often support and promote traders (Khan, 2013; Mardalis, 2005).

**Discussion**

One of the community empowerment principles stated that the concept should be able to protect or support weak people and prevent unequal competition (United Nations, 2012). Based on this principle, an inactive conventional market as a result of reduced consumers needs serious attention to protect traders from experiencing losses. The markets need to be maintained and reorganized to keep the consumers, while the traders can still survive. This prompted the Center for Community Economic Study, the Faculty of Social and Political Sciences, Gadjah Mada University, and the non-governmental organization “Market School” to empower traders in conventional markets. The institutions attempted to incorporate a marketing system into a modern strategy by following the times and the development of community behavior.

The empowerment strategy carried out by the three institutions started with exploring the potential, improving awareness, developing skills, and promoting traders to apply the skills. This step was considered appropriate according to the empowerment theory by Muslim, et al (2014), stated that there were four stages of community empowerment to obtain maximum results, namely building public awareness, improving capacity building and power supply, as well as developing partnerships.

The stages that were not implemented with the right strategy are the inhibiting factors for empowerment. The strategy of promoting or socializing as market managers by only distributing brochures was an example of failure and this was proven by the decline in consumers’ population as perceived by traders. Therefore, the implementation of the e-commerce socialization concept to consumers required a variety of strategies to change their views on shopping motivation.

A budi (2012) stated that the failure of promotion or socialization in marketing goods was caused by several factors. These included inability to socialize, interest in socializing, understanding of the value and benefits of socialization, as well as the wrong perspective without immediate benefits. The e-commerce
socialization concept carried out through the distribution of brochures by market managers showed that the importance of promotion in the marketing of goods was not understood. Therefore, the role of the three institutions that empower market traders, specifically the universities, is indispensable in socializing the e-commerce concept.

The cost of shipping goods determined by the distance between the market and the place of order needs to be reviewed. Some consumers objected to the postage policy and desired to visit the market for direct shopping or avoid the burden of shipping costs. This result was in line with Forrester Consulting survey (2011), where 44% of online shopping customers left the cart because of the high shipping cost. Therefore, a review of the postage cost was urgent for actors, empowering traders in this market.

Conclusion

In conclusion, the development of e-commerce in conventional market management was unable to increase the income of traders. However, this development did not indicate failure because consumers were retained. The factor that caused the decline in traders’ income was the lack of an effective e-commerce socialization concept, which was limited by the distribution of brochures to active consumers. Consequently, this influenced the number of additional consumers, which had an impact on the decline of income. The existence of a shipping cost based on the distance of consumers also influenced the reluctance to transact through online applications.

The results showed that the conventional markets need to increase the role of companions, specifically universities to improve e-commerce development. The institution should be included in strategy formulation and implementation for e-commerce socialization. Furthermore, universities, non-governmental organizations, and relevant government agencies were expected to review the shipping cost policy. The view of Chen and Ngwe (2018) on shipping costs also reduced the inconvenience felt by consumers due to charging costs of the distance in shipping goods.
Acknowledgement

This manuscript is part of the author’s work as a postdoctoral fellow at Sunan Kalijaga State Islamic University. Therefore, the author expresses gratitude to Prof. Dr. Phil. Al Makin, S.Ag., M.A. and Prof. Dr. Iswandi Syahputra, S.Ag., M.Si. who provided direction and input for the impressiveness to this manuscript.

Author’s declaration
Authors’ contributions and responsibilities
The authors made substantial contributions to the conception and design of the study. The authors took responsibility for data analysis, interpretation and discussion of results. The authors read and approved the final manuscript.

Funding
No funding information from the author

Availability of data and materials
All data are available from the authors.

Competing interests
The authors declare no competing interest.

Additional information
No additional information from the authors.

References