

CONSUMER BEHAVIOR | RESEARCH ARTICLE

## The Utilization of E-Commerce and QRIS as Digital Payment Tools to Improve Sales Performance through Competitive Advantage in MSME

Nanang Wahyudin<sup>1\*</sup>, Novita Herlissha<sup>2</sup>, Christianingrum<sup>3</sup>, Dwi Rizki Aldiesi<sup>4</sup>

**Abstract:** The national contribution of MSMEs in supporting economic growth did not only occur during the 1998 monetary crisis but also during the COVID-19 pandemic in Indonesia. The pandemic also impacts economic activity, which causes every business actor to be able to create a competitive advantage in his business. In 2020 the President of Indonesia assigned his cabinet to prioritize the potential of the digital economy to drive economic growth. With competitive digitalization, MSMEs utilize information technology through e-commerce and support Bank Indonesia in accelerating the digitization of the payment system as the implementation of the Indonesian Payment System Blueprint (BSPI) 2025 through the Quick Response Code Indonesia Standard (QRIS). This study aims to determine whether using e-commerce and QRIS as digital payment tools can affect or improve the sales performance of MSMEs in Belitung through competitive advantage. This research used quantitative with a survey approach of 150 respondents. The study's results partially show that e-commerce and QRIS positively and significantly affect sales performance and competitive advantage. The results of the study simultaneously showed that the F-value was greater than F-table ( $52.220 > 3.02$ ), and the probability was significant ( $p < 0.05$ ). The simultaneous usage of e-commerce and QRIS significantly affects the sales performance of MSMEs in Belitung through competitive advantage.

**Keywords:** competitive advantage, e-commerce, MSMEs, QRIS, sales performance

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### PUBLIC INTEREST STATEMENT

Micro, Small and Medium Enterprises (MSMEs) in Belitung are feeling the impact of digitalization due to changes in lifestyle after COVID-19. Business actors are required to be able to compete using online stores or using digital payment systems. The presence of e-commerce and alternative non-cash payments with QRIS provides a solution for MSME players in Belitung. The challenge felt by MSMEs, both owners and employees, is that there is still a lack of knowledge about the optimal use of e-commerce and QRIS.

This research reveals, if the use of e-commerce and QRIS can be carried out optimally, this can be used as a competitive advantage strategy in the current digitalization era and is certainly expected to improve the sales performance of MSMEs in Belitung. So that it can improve the economy in Belitung after the pandemic.



## 1. Introduction

The world experienced a sporadic pandemic known as the Coronavirus or COVID-19 at the end of 2019. The COVID-19 outbreak was first detected in Wuhan City, Hubei, China, on December 31, 2019, and was designated a pandemic by the World Health Organization on March 11, 2020. The efforts to prevent the spread of the coronavirus include travel restrictions, quarantine, postponement, cancellation of events, and the closure of public facilities. The Indonesian government is implementing the Large-Scale Social Restriction (PSBB) policy in stages that are indicated to accelerate the spread of COVID-19. This policy significantly impacts limited community activities because they cannot carry out activities in the outside environment as usual. People are prohibited from gathering or holding events that cause crowds. Some examples of activities that have changed are the implementation of work from home for company employees, school activities being limited and they have to learn from home, and many shopping centers and transportation facilities being closed and temporarily suspended. This pandemic forces humans to change old habits that are dominantly carried out conventionally into new habits (new normal) by conducting online activities to minimize meeting or face-to-face activities and always maintaining a distance so that the transmission of the COVID-19 virus can be stopped.

Economic, social, cultural, and other sectors are forced to quickly adapt to new habits (new normal). New Normal leads to lifestyle changes that focus on technology and digitalization as an alternative solutions in efforts to limit distance. Businesses that do not adopt digital marketing or do not keep up with technological developments will be displaced by themselves in market competition. One of the reasons is that the current market or consumer needs are adjusting to the policy rules for limiting activities, so businesses that still want to run must be sensitive to phenomena or problems. This is because the economy is experiencing a recession due to the COVID-19 pandemic, resulting in tight competition in the business world. So for business actors who cannot adapt to market needs, their business cannot survive in the competition in the post-pandemic period. In 2020, the Indonesian President assigned his cabinet to prioritize the potential of the digital economy to drive economic growth. MSMEs are the government's target to be able to take advantage of the digital economy. The trend of using technology in the current digital economy era is the usage of e-commerce and finance technology in the form of QR codes for payment systems.

E-commerce is a place that brings together sellers and buyers by utilizing the internet. Opportunities obtained from using e-commerce for MSMEs are more comprehensive market coverage or not limited by distance and time than conventional stores. Buyers or consumers no longer need to go to the store to find or see the needed items. Using the internet, buyers can choose and search for the goods or services they want whenever and wherever. E-commerce is a marketplace that provides many goods or services according to consumers' needs and wants. E-commerce can be a suitable business strategy during the COVID-19 pandemic by offering easy and practical purchasing activities for consumers without having to meet or meet face-to-face. Using e-commerce by MSMEs can optimize marketing during the COVID-19 pandemic and become a competitive advantage over its competitors so that e-commerce can be used as a strategy in business and increase competitive advantage (Syafarudin & Aulia, 2021).

In addition, the COVID-19 pandemic has also resulted in the creation of new habits in transaction activities, namely using digital money to suppress the spread of COVID-19 through cash. Bank Indonesia accelerated the digitization of the payment system by implementing the Indonesia Payment System Blueprint (BSPI) 2025. The payment system industry developed the Quick Response Code Indonesia Standard (QRIS) with Bank Indonesia (BI) to make processing transactions with QR codes easier, faster, and faster and more efficient. Since its launch in August 2019, Bank Indonesia has carried out a massive campaign to use QRIS as the only standard used in Indonesia, both nationally and in various regions, mainly for MSMEs, traditional markets, and academia. Consumers get many benefits from using non-cash

payments, namely, faster, more efficient payments and providing benefits through discounts that specific merchants can use. QR codes also allow service collaboration in promoting business and increasing business revenue quickly for business people as merchants. Therefore, many consumers or customers prefer to use non-cash payments in the form of QRIS by taking into account the benefits. As stated by Saputri (2020) that the perceived benefit factor has a significant effect on interest in using QRIS. Some of the benefits that consumers can get are a recent, fast, practical, and safe transaction experience; besides, transactions using a QRIS or QR code can prevent the spread of the COVID-19 virus through cash.

Belitung is an archipelagic area with economic resources for its people derived from commodity crops such as pepper, tin mining, tourism, and MSME businesses. The highest number of MSMEs in Belitung occurred in 2020, as many as 21.388 units. The COVID-19 pandemic has undoubtedly impacted MSME business activities in Belitung, especially MSMEs related to the tourism sector who feel the impact of the PSBB policy. So that MSMEs or other business actors must have innovation and competitive advantage to quickly adapt and survive with competitive conditions during the recession due to the COVID-19 pandemic and this digitalization era. From a geographical point of view, Belitung has a small area and population. Considering and looking at the existing market coverage in Belitung, MSME business actors who still use conventional business strategies or stores will find it very difficult to face competition during the COVID 19 pandemic. However, e-commerce in market expansion and QRIS as a current payment can undoubtedly be solutions for MSMEs in Belitung. This strategy can be used by MSMEs in Belitung as a competitive advantage to face competition and improve their sales performance. This is in line with Yadnya and Santika (2017), which stated that competitive advantage positively and significantly affects business performance in SMEs in Purwokerto. This is also in line with consumer behavior and their needs which are still adjusting to the PSBB policy. However, there are still the biggest obstacles to utilizing E-Commerce, namely technological constraints, including the mastery of information technology for MSME business actors. Noerlina and Hiererra (2013), in their research, stated that there are still many MSME business actors who encounter obstacles, such as difficulties in monitoring transaction payment processes, internet access costs which are still relatively expensive, and more time and energy to understand e-business technology for business people. In addition, the existence of QRIS as a transaction method is still relatively new, so both in terms of education, mastery of technology, and the availability of QRIS by MSMEs in Belitung are still unknown.

Based on the background of the problem in this study, the researchers raised the theme of the study with the title "The Utilization of E-Commerce and QRIS as Digital Payment Instruments to Improve MSME Sales Performance Through Competitive Advantage". This study aims to determine and examine the relationship between the Usage of E-commerce and the Usage of QRIS on the sales performance of MSMEs in Belitung through competitive advantage.

## **2. Literature Review**

### **2.1 Micro, Small, and Medium Enterprises (MSMEs)**

According to the 1945 Constitution, it was later strengthened through TAP MPR NO. XVI/MPR-RI/1998 concerning economic politics in the context of economic democracy, micro, small, and medium enterprises need to be empowered as an integral part of the people's economy that has a strategic position, role, and potential to realize a more balanced people's economy is developing, and a just national economic structure. Furthermore, the definition of UMKM or MSME was made through Law Number 9 of 1999, and due to increasingly dynamic development conditions, it was changed to Law Number 20 Article 1 of 2008 concerning Micro, Small, and Medium Enterprises, the definition of UMKM or MSME. Therefore, micro-enterprises based on Law Number 20 of 2008 concerning MSMEs (Small and Medium Enterprises) are productive businesses owned by individuals or entities that meet the criteria for micro-enterprises as stipulated in the law.

## **2.2 Utilization of E-commerce**

The utilization of e-commerce is a method, process, or act of utilizing computer/internet networks to carry out buying and selling transactions of products or services and services provided, be it marketing, development, payment, or delivery, to increase income (Ernawati, 2021). Based on the results of previous studies, it was concluded that e-commerce positively affects competitive advantage (Syafarudin & Aulia, 2021). However, other researchers argue that what is done (Varadarajan & Yadav, 2002) using e-commerce with competitive advantages tends to influence negatively. MSME business actors still encounter obstacles, for example, difficulties in monitoring transaction payments, internet access costs which are still relatively expensive, and more time and energy to understand e-business technology for business people. The usage of e-commerce can help reach a wider range of consumers than conventional stores. Hendrawan et al. (2019) concluded that the value of sales performance will increase if the use of digital marketing is increased in Asti Gauri Bantarsari Cilacap SMEs.

## **2.3 Utilization of Quick Response Code Indonesia Standard (QRIS)**

The payment system industry developed the Quick Response Code Indonesia Standard (QRIS) with Bank Indonesia (BI) to make the transaction process with the QR Code easier, faster, and safer (Pancawati, 2020). Previous research by Saputri (2020) stated that the perceived usefulness factor had a significant effect on interest in using QRIS, while other perceptual factors had no significant effect on consumer interest in using QRIS. Non-cash payments are also faster in completing payments, are efficient, and provide benefits in the form of discounts that can be used by specific merchants (Ahriana, Yani, & Maruf, 2016). The usage of QR codes also enables service collaboration in promoting business and increasing business revenue quickly.

## **2.4 Competitive Advantage**

Competitive advantage is the ability of business actors to create competitive advantages in order to compete with competitors (Dalimunthe, 2017). Porter's strategy explains that competitive advantage is the heart of business performance in facing competition. Research Nurtiah (2016) stated that competitive advantage positively and significantly affects marketing performance. Marketing performance is a measure of achievement obtained from the overall activities of the marketing process of a company or organization as measured by three indicators, namely sales volume, customer growth, and profitability. The study results of Li, Ragu-Nathan, Ragu-Nathan, and Rao (2006) showed a positive influence between competitive advantage and marketing performance as measured by sales volume, profit level, market share, and return on investment.

## **2.5 Sales Performance**

Swastha (2005) in Saputri and Triyono (2018) stated that performance in sales is determined by the perception of increasing sales volume, developing company profits, and supporting company growth. Sales volume is the number of goods or services sold in the exchange process (Pradiani, 2017). Yulimar (2008) examined the relationship between e-commerce adoption and company performance where empirical evidence is obtained that the relationship between the two variables is proven, namely, the higher the adoption of e-commerce, the company's performance will increase. Fatmariansi (2011) shows different results, namely the effect of e-commerce adoption on the performance of MSME to increase competitiveness, and the growth of MSME in Palembang City is only 18%. These results indicated that e-commerce adoption's effect on MSME performance is still low. Several studies stated that competitive advantage could improve company performance (Yadnya & Santika, 2017) which stated that competitive advantage has a positive and significant effect on business performance in MSME in Purwokerto.

### 3. Conceptual Framework

Based on relevant previous research, the framework of thought refers to the researcher's questions regarding the usage of e-commerce and QRIS in improving the performance of MSMEs in Belitung through competitive advantage. The framework formed is presented in Figure 1.

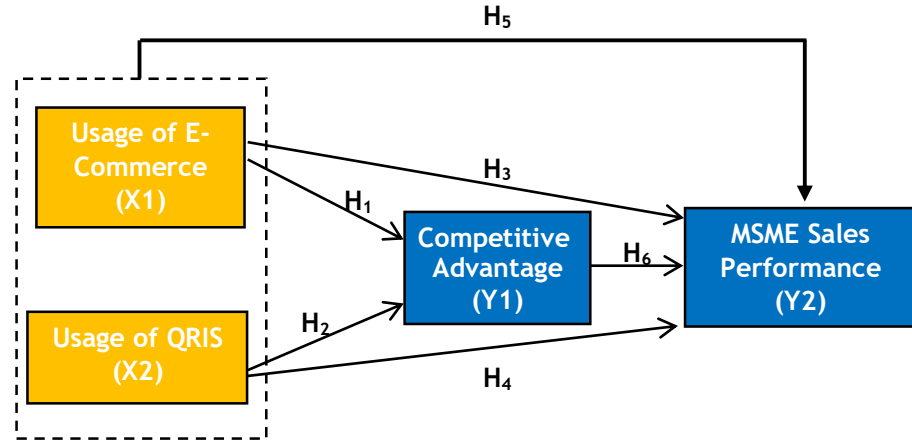


Figure 1. Conceptual Framework

Research hypotheses:

H1: The usage of e-commerce affects the competitive advantage of MSME.

H2: The usage of QRIS affects the competitive advantage of MSME.

H3: The usage of e-commerce affects the performance of MSME sales.

H4: The usage of QRIS affects the sales performance of MSME.

H5: The usage of e-commerce and QRIS affects sales performance.

H6: The usage of e-commerce and QRIS affects the performance of MSME sales through competitive advantage.

### 4. Methods

#### 4.1 Participants

The population in this study are all MSMEs that have used e-commerce and provide a digital payment method in the form of QRIS in the Belitung area. The sample of this study was chosen by non-probability sampling, specifically accidental sampling. Data were collected using tools in the form of questionnaires with 150 respondents whom researchers met.

#### 4.2 Measurement

The source of data in this study is primary data obtained from respondents' responses to questionnaires with closed questions. The measurement of each research instrument applied a Likert scale with five alternative answers, namely: "Strongly Disagree (STS), Disagree (TS), Disagree (KS), Agree (S), and Strongly Agree (SS)." The variables of this study are the usage of e-commerce, the usage of QRIS, competitive advantage, and sales performance.

The utilization of e-commerce is a method, process, or act of utilizing computer/internet networks to carry out buying and selling transactions of products or services and services provided, be it marketing, development, payment, or delivery, to increase income (Ernawati, 2021). The measurement of e-commerce utilization used four dimensions adopted from research (Artana, Suardhika, &

Hendrawan, 2021). The dimensions include internet access, ease of information, human resource capabilities, and managerial responsibilities.

QRIS is a Payment QR Code Standard set by Bank Indonesia to facilitate payments in Indonesia (Wahyuni, Widodo, Zulianto, & Islami, 2020). The measurement of e-commerce utilization used four dimensions adapted from research conducted by Saputri (2020). The dimensions include perception convenience, perception of trust, perception of usefulness, and risk perception.

Competitive advantage is the value the company creates to define itself from competitors (Petzer & Steyn, 2008). Measuring e-commerce utilization used three dimensions adapted from research conducted by Widiarta et al. (2020). The dimensions include product uniqueness, product quality, and competitive price.

Performance in sales is determined by the perception of an increase in sales volume, the development of the company's profits, and support of the company's growth (Swastha, 2005 in Saputri & Triyono, 2018). Measurement of the usage of e-commerce using three dimensions adapted from research conducted by Ferdinand (2000) in Susilowati (2008). The dimensions include sales volume, sales growth rate, and customer growth.

#### 4.3 Analysis

This study used SPSS for data processing. The data analysis method was carried out by testing research instruments, namely validity and reliability. Three tests were carried out in the classical assumption test: normality, multicollinearity, and heteroscedasticity. In this study, the t-test and path analysis was carried out in hypothesis testing.

### 5. Findings

Respondents in this study were owners or employees of MSME businesses in Belitung. MSME owners or employees are suitable to be a source of information regarding E-commerce and QRIS as a competitive advantage to improve sales performance. There are various types of MSME businesses in Belitung, ranging from culinary businesses, drinks or snacks, typical Belitung souvenirs, souvenirs, and much more. Figure 2 shows that the most dominant respondents are MSME, with 52 percent of businesses in the culinary field and 48 percent MSME in fashion and souvenirs or souvenirs. This is influenced by the geographical advantages of the island of Belitung, which has a high potential for the tourism industry, so many culinary, fashion and souvenir businesses have sprung up. Consumers are local and foreign tourists who deliberately visit Belitung. In addition, due to activity restrictions, MSMEs make this an opportunity. Many new businesses, especially culinary ones, are making online stores or selling e-commerce during the pandemic. Because of the consumer trend during this pandemic, many people use e-commerce to find and buy their needs and wants.

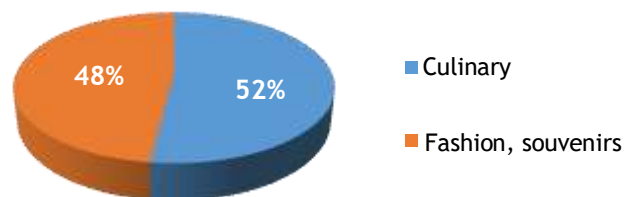


Figure 2. MSME's business type

Figure 3 shows the respondents in this study had a mean age of 17-30 years (66 percent), 19 percent at the age of 31-40 years, and 14 percent at the age of more than 45 years. This shows that the dominant respondents are in the age range of 17-

30 years, the millennial generation who is close to using e-commerce and modern payment systems such as QRIS or online payments. MSMEs in Belitung, especially culinary MSMEs, use e-commerce in the form of Gojek, Facebook Add, and Whatsapp Business. MSMEs use these applications as e-commerce platforms by adjusting applications that consumers often use.

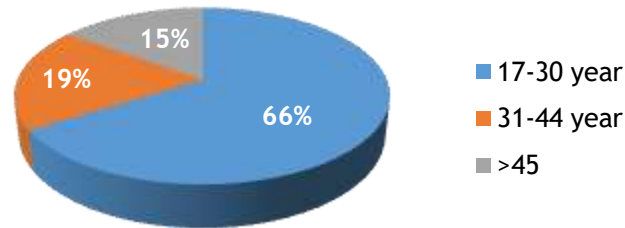


Figure 3. Respondant's age

Respondents said that consumers who use e-commerce, such as Shopee, Tokopedia, Instagram, or websites, are from outside the region. On the other hand, consumers who are local people of Belitung mostly use Gojek, Facebook Add, and WhatsUp Business. With the existence of e-commerce, consumers feel very helpful, especially consumers who are immigrants or from outside the region. Using e-commerce, consumers can order the desired food, goods, or services and know the store's location, and communication with MSME owners is also more accessible.

On average, MSMEs in Belitung have the same QRIS merchants, namely Link Aja, Banks (BCA, Mandiri, Sumsel Babel, BNI, BRI), OVO, Gopay, and Dana. Because the trend of payment transactions using QRIS is still being campaigned, not many consumers use QRIS. In addition, some MSME owners or employees don't understand how to use QRIS. However, QRIS is already available in all MSMEs that the researchers met.

A validity test is used to measure the accuracy of each instrument and whether the instrument can be known whether the instrument is valid or not. If the r-count for each question item is positive and greater than the r-table, then the item is valid. For example, Table 1 shows that each indicator is valid because all items have an r-count greater than the r-table. Therefore, the instrument does not need to be removed.

Table 1. Validity test results

Variables	Symbol	Pearson Correlation	R	Result
Usage of E-commerce (X1)	X1.1	0.944	0.1348	Valid
	X1.2	0.922	0.1348	Valid
	X1.3	0.944	0.1348	Valid
	X1.4	0.845	0.1348	Valid
	X1.5	0.954	0.1348	Valid
	X1.6	0.898	0.1348	Valid
	X1.7	0.902	0.1348	Valid
	X1.8	0.860	0.1348	Valid
Usage of QRIS (X2)	X2.1	0.880	0.1348	Valid
	X2.2	0.837	0.1348	Valid
	X2.3	0.874	0.1348	Valid
	X2.4	0.948	0.1348	Valid
	X2.5	0.882	0.1348	Valid
	X2.6	0.840	0.1348	Valid

Table 1. Validity test results (continue)

Variables	Symbol	Pearson Correlation	R	Result
Usage of QRIS (X2)	X2.7	0.953	0.1348	Valid
	X2.8	0.752	0.1348	Valid
Competitive Advantage (Y1)	Y1.1	0.782	0.1348	Valid
	Y1.2	0.879	0.1348	Valid
	Y1.3	0.920	0.1348	Valid
	Y1.4	0.819	0.1348	Valid
	Y1.5	0.887	0.1348	Valid
	Y1.6	0.826	0.1348	Valid
Performance in Sales (Y2)	Y2.1	0.839	0.1348	Valid
	Y2.2	0.903	0.1348	Valid
	Y2.3	0.912	0.1348	Valid
	Y2.4	0.855	0.1348	Valid
	Y2.5	0.692	0.1348	Valid

The reliability test in this study used the Cronbach Alpha analysis technique. Table 2 shows the results of all variables having a reasonably alpha coefficient above 0.60, so it can be said that all the measurement concepts of each variable from the questionnaire are reliable, meaning that the questionnaire used in this study is reliable.

Table 2. Reliability test result

Variables	Cronbach Alpha	Result
Usage of E-commerce	0.970	Reliable
Usage of QRIS	0.953	Reliable
Competitive Advantage	0.921	Reliable
Performance in Sales	0.891	Reliable

Based on Table 3, which shows the Kolmogorov Smirnov normality test results, it can be seen that the Asymp. Sig. (2-tailed) > 0.05 which is 0.054 for competitive advantage and 0.200 for sales performance. Thus it can be concluded that the data is normally distributed or taken from a normal population.

Table 3. Normality test result

	Unstandardized Residual (Y1)	Unstandardized Residual (Y2)
N	150	150
Asymp. Sig. (2-tailed)	0.054	0.200

This study used descriptive statistics on the independent and dependent variables, which are then classified to the number of respondents' scores. The study was conducted by compiling a frequency distribution table to determine whether the level of F-value (score) of the research variables was categorized as: very low (1.00 - 1.80), low (1.81 - 2.60), moderate (2.61 - 3.40), high (3.41 - 4.20), and extremely high (4.21 - 5.00).

Table 4 shows that the usage of e-commerce by MSMEs in Belitung is generally included in the high category with a value of 4.12. According to MSME owners or employees, the network to access e-commerce is easy to reach, reasonable, and fast. Furthermore, MSMEs can also easily share product information through e-commerce. In addition, MSME actors and employees already understand how to use and operate e-commerce and can make decisions according to the conditions needed for a competitive strategy through e-commerce.

In using QRIS, respondents also rated the average value in the high category with a value of 3.87. MSMEs find it easy to use and operate QRIS. MSME owners or employees can also be trusted in serving payments using QRIS. Therefore, MSMEs



feel that payments using QRIS are safe and profitable. However, transactions using QRIS are not very popular with consumers.

Table 4. Descriptive test result

Variables	Number	Mean	Category	Total Mean
Usage of E-commerce (X1)	1	4.11	High	4.12
	2	4.19	High	
	3	4.19	High	
	4	4.08	High	
	5	4.12	High	
	6	3.98	High	
	7	4.11	High	
	8	4.17	High	
	9	3.75	High	
	10	4.01	High	
Usage of QRIS (X2)	11	4.03	High	3.87
	12	3.86	High	
	13	3.82	High	
	14	3.79	High	
	15	3.85	High	
	16	4, 00	High	
	17	4.01	High	
	18	4.01	High	
Competitive Advantage (Y1)	19	4.33	Extreme High	4.13
	20	3.99	High	
	21	4.13	High	
	22	4.33	Extreme High	
Performance in Sales (Y2)	23	3.8	High	3.83
	24	4.04	High	
	25	3.83	High	
	26	4.03	High	
	27	3.47	High	

The respondents rated the competitive advantage with an average of 4.13 and included in the high category. MSMEs in Belitung have product characteristics, and the prices offered to follow the product's quality. This is a competitive advantage for MSME products in Belitung, used as a marketing strategy in e-commerce. With competitive and affordable product prices, the product is in great demand by consumers.

Respondents assessed the sales performance of MSMEs in Belitung in the high category with a value of 3.83. By using e-commerce, the number of MSME sales in Belitung has increased. However, because it is still during the COVID-19 pandemic, the increase in profit every month has not been seen. There are still a few new customers coming. The number of MSME customers making payment transactions using QRIS is still small. Many customers still use cash as a transaction method or use a debit card. This is due to the habits and convenience of customers in the payment transaction method.

Table 5 shows that the usage of e-commerce is proven to affect competitive advantage because the t-value of 4.975 is greater than the t-table = 1.976, and the p-value is 0.000, more diminutive than 0.05. Therefore, MSMEs in Belitung increase their competitive advantage by utilizing e-commerce during the COVID 19 pandemic. Furthermore, e-commerce has also been shown to affect sales performance through competitive advantage because the t-count-value is 2.220, which is greater than the table, and the p-value is 0.028, which is smaller than 0.05. So that by utilizing e-

commerce as a competitive advantage, MSMEs in Belitung can improve sales performance.

Table 5. The direct impact

	Construct	t-value	F-value	p-value	R square
Y1	Usage of E-commerce (X1)	4.975	59.758	0.000	0.448
	Usage of QRIS (X2)	4.962		0.000	
Y1 through Y2	Usage of E-commerce (X1)	2.220	52.220	0.028	0.508
	Usage of QRIS (X2)	4.018		0.000	
	Competitive Advantage (Y1)	4.620		0.000	
T-table	1.976				
F-table	3.02				

The usage of QRIS is proven to affect competitive advantage because the t-value of 4.962 is greater than the t-table = 1.976, and the p-value of 0.000 is smaller than 0.05. So that MSMEs in Belitung increase their competitive advantage by utilizing QRIS during the COVID 19 pandemic. Furthermore, the usage of QRIS has also been empirically proven to affect sales performance through competitive advantage because the t arithmetic value of 4.018 is greater than the t-table and the p-value of 0.000, which is smaller than 0.05. So, utilizing QRIS as a competitive advantage for SMEs in Belitung can improve sales performance.

Competitive advantage is proven to have a significant effect on sales performance. Because the calculated t-value of 4.620 is greater than the t-table = 1.976, and the p-value of 0.000 is smaller than 0.05. The conclusion is that the higher the competitive advantage, the higher the sales performance of MSMEs in Belitung.

The results of the R square test showed that e-commerce and QRIS simultaneously affect the competitive advantage of 44.1 while the remaining 55.9 percent affect the variables not examined. The results of the path analysis show that there is a direct effect of the use of e-commerce on the sales performance of MSMEs (0.170). In addition, e-commerce indirectly influences MSMEs' sales performance through their superior sales performance (0.134), as shown in Figure 4 with a calculation of  $0.375 \times 0.358 = 0.134$ . Since the value of direct influence is greater than the value of indirect influence, these results indicate that the usage of e-commerce through competitive advantage has a significant direct influence on the sales performance of MSME.

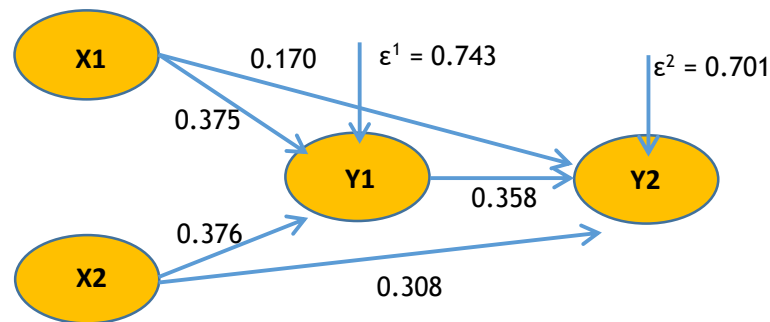


Figure 4. Path chart

The value of the direct influence of the usage of QRIS on the sales performance of MSMEs is 0.308. While the indirect effect of using QRIS through competitive advantage on the sales performance of 0.135 is obtained from the calculation results of  $0.376 \times 0.358 = 0.135$ . Because the value of direct influence is greater than the value of indirect influence, these results indicate that the usage of QRIS through competitive advantage has a significant direct influence on the sales performance of MSMEs.

## 6. Discussion

With e-commerce, companies can gain profits that are used as an alternative source of competitive advantage so that companies can provide the best and fastest service for their customers (Rahmidani, 2015). In addition, e-commerce can be used as an alternative strategy of excellence in facing competition and the impact of the pandemic phenomenon. This research proves that during the current COVID-19 pandemic, e-commerce has positively and significantly impacted the competitive advantage of MSMEs in Belitung. Furthermore, the results show that better usage of e-commerce will increase the competitive advantage of MSMEs in Belitung. This is also in line with Syafarudin and Aulia's (2021) research, which concluded that e-commerce positively affects competitive advantage.

The new payment method that is currently a trend is using non-cash payments or using a QR code. Bank Indonesia released QRIS as a national payment QR code designed to be easy, fast, and secure. Using QRIS, it is also hoped that the spread of the COVID-19 virus through cash can be minimized. This study proves that the Usage of QRIS positively and significantly affects the advantage of MSMEs in Belitung. The better the usage of QRIS, the more competitive advantage of MSMEs in Belitung will be. However, the community's usage of QRIS has not been optimal due to the lack of education and the community, in terms of QRIS getting a positive response in terms of benefits. This aligns with Saputri's (2020) research that the perceived usefulness factor significantly influences interest in using QRIS.

Using e-commerce in the MSME business can provide opportunities to expand the market outside the region. During the COVID-19 pandemic, e-commerce is the best choice to reach a broad market, and e-commerce is also an alternative to long-distance communication without having to meet face-to-face. So that buyers and sellers are not required to meet and can prevent the transmission of the COVID-19 virus, this study proves that better usage of e-commerce will increase the sales performance of MSMEs. The usage of e-commerce has a positive and significant effect on the sales performance of MSMEs. Previous researchers agreed that e-commerce adoption positively and significantly impacts MSMEs' average sales growth rate (Supardi & Ie, 2019).

MSME may use QRIS for non-cash payments when business through e-commerce is the prima donna during the COVID-19 pandemic. Non-cash payments are also faster in completing payments, are efficient, and provide benefits in the form of discounts that can be used by specific merchants (Ahriana et al., 2016). The results of this study indicate that better usage of QRIS will increase the sales performance of MSMEs. This study proves that using QRIS positively and significantly affects the sales performance of MSME in Belitung. Previous researchers also agreed that QRIS facilitated the payment transaction process for MSME in Blimbingsari and as a step to building competitive advantage in the era of the industrial revolution 4.0 (Rahmat, 2020).

Increased sales are the representation of winning the competition with similar businesses. During the COVID-19 pandemic, where the economy is sluggish, a competitive advantage strategy is crucial in improving sales performance, mainly to keep the business running. This study proves that competitive advantage positively and significantly affects the sales performance of MSME in Belitung. The results of this study indicate that the better the competitive advantage will increase the sales performance of MSMEs. In line with this, Yadnya and Santika (2017) stated that competitive advantage positively and significantly affects business performance in MSMEs in Purwokerto. This study also proves that using e-commerce and QRIS directly affects the sales performance of MSME in Belitung through competitive advantage.

## 7. Conclusions

The policy limiting activities due to COVID-19 did not cause a total loss for MSME business actors. Researchers found that many MSMEs in Belitung suffered losses and

went bankrupt, but MSMEs still had the opportunity to survive and increase sales through e-commerce and QRIS. The results of this study answer the curiosity of researchers regarding the Usage of E-commerce and QRIS as a competitive advantage to improve the sales performance of MSME in Belitung. In this study, it is proven that there is a positive and significant influence between the variables studied. This study also proves a direct influence between e-commerce and QRIS through competitive advantage on the sales performance of MSME in Belitung.

The utilization of e-commerce is a competitive advantage and solution for MSME in Belitung so that they can remain competitive in the face of the COVID-19 pandemic and improve their sales performance. QRIS is also a solution in preventing virus transmission through cash and is a competitive advantage that still has to be optimized as a current payment method and can increase sales. However, there are still some limitations to this research. Limitations in obtaining data on MSMEs that already own and utilize e-commerce and MSME that become QRIS merchants. Relevant agencies that have assisted researchers still do not have valid data regarding the number of MSMEs that match the criteria of the respondents that the researchers want.

## 8. Recommendations

To improve sales performance, MSME in Belitung must continue considering e-commerce and QRIS as a competitive advantage. Thus, the overall hypothesis in this study can be accepted. The results of this study can be used as a reference for further research. Developing a modeling model for further research is recommended, using other variables or researching from the perspective of MSME consumers in Belitung. This research is recommended with theoretical, academic, and practical benefits.

This research can be used as a theoretical basis to add and broaden knowledge conceptually and theoretically about the problem under study. This research can also be a written reference for all readers from various academic backgrounds, such as students, lecturers, and future researchers. In addition, this research can be used as a reference for practice or MSME competitive advantage strategies by using e-commerce and QRIS to improve MSME sales performance in Belitung.

### Citation information

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