The Impact of E-Commerce Development on Conventional Merchants’ Income (case study: Medan central market)

Eri Yanti Nasution
University of Muhammadiyah Sumatera Utara, Indonesia
Correspondence Email: eriyanti@umsu.ac.id

ABSTRACT

The development of technology, buying and selling with conventional method or face to face method is an old habit that is starting to be abandoned by consumers. This is because e-commerce in Indonesia is growing rapidly. As of 2016 total online sales in Indonesia are around Rp 4.49 billion. The development of e-commerce will affect the existence of conventional sales. The study aims to analyze the impact of the development of e-commerce on the conventional merchants’ income. The data in this study are primary data by distributing questionnaires to clothing merchants in Medan central market. Data analysis methods used are simple regression analysis and sampling techniques using accidental sampling. The results showed that the development of e-commerce did not have an impact on conventional merchants’ income in Medan central market. This is caused conventional merchants having a strategy to survive in digital era.

Keywords: e-commerce, income, Medan

Introduction

The dynamics of the economy are inseparable from the development and progress of technology, innovation, productivity and infrastructure. Current technological advances are inevitable in life. Many new innovations have sprung up since the technological change has accelerated. Along with technological developments, people's lifestyles also experience significant changes. Today’s lifestyle and mindset of society has changed from traditional to instant, which is assisted by technology. This is inseparable from technological developments in Indonesia. Technology has also been widely used in various fields including commerce, companies, banking, education and health which will be more efficient and cut costs. In trading activities changes in the use of information media cause shifts and changes in the paradigm of the traditional trading system into an electronic trading system. This form of electronic commerce leads to the sale and purchase of goods and services online, known as e-Commerce. Consumptive behavior of the community will increase purchasing power especially with facilities that are increasingly easy to shop and without obstacles. With e-Commerce, the people slowly began to shift their economic activity behavior by preferring online shopping, ranging from clothing shopping, food shopping to household needs shopping has been widely available in electronic commerce. This is because online shopping has more choices and doesn’t waste time and the price is not much different from the prices on the market. Only by using a smartphone, people can buy goods easily and just wait for orders to come to the house. This is very easy and makes it more efficient and effective for people who do not have time to visit traditional markets.

Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>1,04 Milyar</td>
</tr>
<tr>
<td>2013</td>
<td>1,8 Milyar</td>
</tr>
<tr>
<td>2014</td>
<td>2,6 Milyar</td>
</tr>
<tr>
<td>2015</td>
<td>3,56 Milyar</td>
</tr>
<tr>
<td>2016</td>
<td>4,49 Milyar</td>
</tr>
</tbody>
</table>

Sumber : statista

Based on the table from Statista (Statista, 2018), it can be seen that online sales in Indonesia have increased every year. At the beginning of 2012 total sales of around USD 1.04 billion, the following year experienced an increase and in 2016 had increased drastically which is four
This data proves that the development of e-commerce in Indonesia is increasing. In the end, there is a change in marketing trends because the development of information technology brings changes in the business system both the tastes or needs and desires of the people and business patterns. Models of marketing products and services are also beginning to shift from conventional marketing to online marketing. But there are still many merchants who stick with the conventional business system that they lived before the online business developed.

**E-Commerce**

According to E. Turban (Turban, King, Lee, Liang, & Turban, 2012) e-commerce is a process of buying, selling, transferring, or exchanging products, services or information through computer networks, including the internet. Meanwhile, according to Kotler (Kotler, 2012) e-commerce is a buying and selling process that is supported by an electronic system. Jony Wong (Jony, 2010) also believes that e-commerce is the buying, selling and marketing of goods or services through electronic media such as television, radio, internet. The use of e-commerce for marketing and sales is currently growing in Indonesia. Sales is an overall system of business activities aimed at planning, pricing, promoting and distributing goods, services, ideas to the target market in order to achieve organizational goals. A new utilization by using internet facilities makes a support or opportunity for middle-down entrepreneurs to start a business without using any capital at all. Utilization of the internet, which is a source of information and also a promotional media can be used as an opportunity. The advancement of technology and information is a great opportunity for business people who are already running their business to be used as supporting media for promotion, or can be used by beginners or users who want to do a business without requiring a large amount of capital.

E-commerce dapat dilakukan berbagai pihak, Jenis umum dari transaksi e-commerce dijelaskan menurut Kotler (Kotler, 2012):

<table>
<thead>
<tr>
<th>No</th>
<th>Type</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B2B (Business to Business)</td>
<td>Business transactions between business people with other business people. Can be specific agreements that support business smoothness</td>
</tr>
<tr>
<td>2</td>
<td>B2C (Business to consumer)</td>
<td>Activities carried out by producers to consumer directly</td>
</tr>
<tr>
<td>3</td>
<td>C2C (Consumer to Consumer)</td>
<td>Business activities (sales) conducted by individuals (consumers) to another consumer</td>
</tr>
<tr>
<td>4</td>
<td>C2B (Consumer to business)</td>
<td>C2B is a business model wherein consumers create and shape the value of business processes</td>
</tr>
<tr>
<td>5</td>
<td>B2G (Business to Government)</td>
<td>Is a derivative of B2B, the difference this process occurs between business people and government agencies</td>
</tr>
<tr>
<td>6</td>
<td>G2C (Government to Consumer)</td>
<td>Is a relationship or interaction between government and society. Consumer in this type the community can be easily reach the government so get ease in service daily</td>
</tr>
</tbody>
</table>

**Government Regulations**

Data from the Minister of Communication and Information Technology and Electronic Information Act, namely Act No. 19 of 2016 which is a change from Act No. 11 of 2008 concerning information and electronic transactions consisting of 45 articles. In Presidential Regulation Number: 74 of 2017 concerning the Road Map of the Electronic-Based National Trading System (Road Map E-Commerce) of 2017-2019 SPNBE Road Map 2017-2019. The contents of regulation No. 74 of 2017 Presidential Regulation issued with consideration of electronic-based economy has high economic potential for Indonesia, and is one of the backbone of the national economy, and in order to optimize the use of electronic-based economic potential, the Government considers it necessary to accelerate and develop an electronic-based national trade system (e-Commerce), start-up business, business
development, and logistical acceleration by establishing an integrated National Road Trading System Road Map (e-Commerce Road Map).

Based on these considerations, on July 21, 2017, President Joko Widodo signed Presidential Regulation Number: 74 of 2017 concerning the Road Map of the Electronic-Based National Trading System (Road Map E-Commerce) for 2017-2019. Roadmap for Electronic-Based National Trade System (e-Commerce Road Map) for 2017-2019 hereinafter referred to as 2017-2019 SPNBE, 2017-2019 SPNBE Road Map as referred to includes the program: a. Funding; b. Taxation; c. Consumer protection; d. Education and human resources; e. Communication infrastructure; f. Logistics; g. cyber security; and g. Establishment of 2017-2019 SPNBE Road Map Implementing Management. "The 2017-2019 SPNBE Road Map functions as: a. Reference for the Central Government and Regional Governments to determine sectoral policies and action plans in the framework of accelerating the implementation of the Electronic-Based National Trading System (e-Commerce) in their respective areas of duty contained in the development planning document; and b. Reference for stakeholders (stakeholders) in carrying out the Electronic-Based National Trade System (e-Commerce), ". In the framework of implementing the 2017-2019 SPNBE Road Map as referred to, according to this regulation, the 2017-2019 SPNBE Road Map Steering Committee was formed. The membership structure of the Steering Committee referred to consists of: a. Chair: Coordinating Minister for the Economy; b. Deputy Chair: Coordinating Minister for Political, Legal and Security Affairs.

Income
According to Kieso et al (Kieso, Weygandt, & warfield, 2017) income is the gross inflow of economic benefits during the period of arising in the ordinary activities of an entity when those inflow results in increases in equity, other than increases in contributions from equity contributors. Similarly, Stice, et al (Stice, Stice, & Skousen, 2009) define income as cash inflows or other increases in the assets of an entity or the repayment of its debts or a combination of both that results from the delivery or production of goods, the provision of services, or activities others which are the main ongoing operations of the entity. In business, revenue is the amount of money received by a company from its activities, mostly from the sale of products and / or services to customers. For investors, income is less important than profits, which is the amount of money received after deducting expenses. Revenue and sales are two different things. One difference between sales and income in the treatment of accounting lies in the user as recognition of the sale of goods or services. In general, sales are only used by trading and manufacturing companies to record transactions for the sale of products in the form of goods only. In fact, besides recording sales of merchandise, the meaning of sales itself can also be interpreted in the sales activities in the form of service products.

While revenue, is used in service companies because revenue is used only to record sales in the form of service products, or sales that are not directly related to the main activities of the company in the profit and loss statement.

Methodology and Data
This type of research used in this research is associative research. According to Sugiyono (Sugiono, 2012) associative research is research that connects two or more variables to see between the variables formulated in the research hypothesis. In this case the researcher wants to find out and analyze the impact of the development of e-commerce on conventional merchants’ income in Medan central market. The population in this study are clothing merchants who sell at the navel of the Medan market with a total sample of 100 people. Source of data used in this study is primary data where primary data is data obtained directly from the source by distributing questionnaires to respondents who have been selected as samples. The sampling method uses the accidental sampling method. Accidental sampling method is a method by taking samples by chance or anyone who happens to meet with researchers. The data analysis method used is a simple regression analysis by looking for the impact of the development of e-commerce on conventional merchants’ income.

Findings
Digital economics is a complex and emerging phenomenon related to aspects of microeconomics, macroeconomics, and organizational and administrative theories. Digital economy will explain the development and economic growth of the coming decades. The components of the digital economy that were identified for the first time were the ICT industry,
e-Commerce activities between companies and individuals, digital distribution of goods and services, support for sales of goods, especially systems and services that use the internet. As a country with a population of more than 250 million, Indonesia has enormous digital economic potential. Increased public internet literacy driven by widespread use of smartphones (smartphones) and fixed-broadband is an important component for digital economic growth, in addition to the availability of various applications or content that supports, the readiness of small and medium businesses (SMEs) to be able to make products that standardized and reliable logistical network support. The government has also seen the great potential that exists and declared Indonesia as the largest digital economy in Southeast Asia in 2020. With the development of e-commerce, the existence of conventional merchants has begun to diminish. Evidenced by the many consumers who have switched to online purchases.

Simple regression analysis is used to see the impact of e-commerce on conventional merchants' income:

Table 3
Analisis Regresi sederhana

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>24.994</td>
<td>2.691</td>
<td>9.288</td>
<td>.000</td>
</tr>
<tr>
<td>e-commerce</td>
<td>.060</td>
<td>.146</td>
<td>.042</td>
<td>.416</td>
<td>.679</td>
</tr>
</tbody>
</table>

a. Dependent Variable: income

Based on the results of data processing in the table above, a simple regression equation model can be formulated:

\[ Y = a + bX + e \]

\[ Y = 24.994 + 0.060X + e \]

Based on these equations can be described:

1. Constant (a) = 24,994 shows a constant value where if the e-commerce variable is 0, then the income is 24,994
2. Coefficient X (b) = 0.060 indicates that the e-commerce variable has no effect on income as evidenced by the value of t smaller than t table. Decision making criteria if \( t_{\text{result}} > t_{\text{table}} \) there is an influence between e-commerce variables on income variables. Based on the tests carried out, the table of 1.99844> \( t_{\text{count}} \) 0.416 and the significance level of 0.679 exceeds 0.05 as a significant level.

Table 4
Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.042a</td>
<td>.002</td>
<td>-.009</td>
<td>3.58637</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), e-commerce

The determinant test (R2) is conducted to see how far the model's ability to explain variations in independent variables. The value is 0-1, if R2 gets closer to zero then the independent variable doesn't explain the dependent variable and vice versa. From the results of the determinant test conducted, R square of 0.002 which means that only 0.2% of e-commerce variables are determined by income variables. This shows that the development of e-commerce does not affect the income of conventional merchants in Medan central market

Based on the tests conducted, the development of e-commerce does not affect to conventional merchants' income. This can be caused by conventional merchants already have strategies in dealing with the advancement of this technology by following the development of e-commerce and starting to wrestle the system. The entrepreneurial spirit of conventional merchants in Medan central market has made them able to survive in this digital age. According to Maya (Sari, 2014) that entrepreneurship is the ability to change things into something better that can be measured by self-success, tolerance for risk and freedom of work. Freedom of work and risk tolerance are strategies that conventional merchants also use as proven by their ability to survive in this digital age. Nuryanti (Nuryanti, 2013) as well has the same opinion in his writings.
which states that increasingly fierce business competition in the era of globalization requires companies to restructure their business strategies and tactics. Companies in this case can also be types of businesses that are not up to the size of the company, but the type of business that demands the existence of a strategy to survive. Medan central market is also a clothing center that sells wholesale or large parties; therefore, merchants already have their own regular customers and also new merchants or so-called start-ups in e-commerce may also shop at the central market in large parties and resale to customers who buy online. In business, there are many strategies for promotion, one of them is the word of mouth (WOM) method. This method is a method that continues to be used by conventional merchants in Medan central market. Many consumers who do not fully believe in the application system in buying their needs, especially clothing. However, with word of mouth promotion, consumers who do not trust the application will directly visit conventional merchants with a much higher level of trust than online shopping because it has been proven from the mouths of people who deliver information. This is consistent with the opinion of Samson et al (Samson, Mehta, & Chandani, 2014) which states that although the current media that is influential is digital communication, but the most effective source of information for influencing others is useful and trusted media such as television advertisements and word of mouth (WOM) promotion. Some conventional merchants in Medan central market have also started selling online, which is assisted by sales who come to offer entry services to e-commerce applications such as Tokopedia, Shopee and others. Based on Iprice 2018 data (Iprice, 2018) that Tokopedia is the number one e-commerce in Indonesia with about 65,953,400 web visitors. The second position is shopee with 55,964,700 web visitors. However, for application visitors, the first place with the most application visitors is shopee. The development of e-commerce is also highly supported by the government. The Government's seriousness in moving the economy can also be seen from the economic policy packages volume 1 to 14 issued by the government. Although not all policies are effective yet, this gives good hope for the digital business world especially in the economic policy package volume 14. This package, which is an e-Commerce roadmap, was issued by the government because the government targets Indonesia to become the largest digital economy in Southeast Asia in 2020. The potential of the digital economy in Indonesia is supported by the number of users' internet which is 132.7 million people. Smartphone users in Indonesia are also growing very fast and is estimated to reach more than 150 million people by the end of 2016. By encouraging the ease of use of digital applications will make a real contribution to the development of Indonesia's economy in the form of the growth of creative industries, such as the fashion industry, culinary, film, design, architecture, and others, which require digital infrastructure to accelerate its growth rate. Where this potential will be the foundation for Indonesia to become the largest digital economy in Southeast Asia. In line with the promising development potential of the digital economy, the telecommunications industry in Indonesia. The Indonesian telecommunications expenditure will continue to grow in line with the increasing purchasing power of the people due to the stable macroeconomic conditions by the government. The development of e-commerce will have a positive impact in improving the Indonesian economy. The same thing was conveyed that online shop or online trading is very helpful for the Indonesian economy, because it is effective and efficient and can be done by all levels of society regardless of the level of the economy (Yulianto et al., 2015).

Conclusion:
1. The development of e-commerce has no effect on conventional merchants’ income at Medan central market. This is due to conventional merchants in Medan central market that already have their own customers and more merchants who sell in large parties to small merchants who are in small areas in North Sumatra.
2. The resulting determination coefficient is 0.002 which explains that the development of e-commerce can only be explained or effect on conventional merchants’ income in the Medan central market by 0.2%. The value is very small influence and under 1% of the x variables affect the Y variable.

References