



Obstacles to E-Commerce Implementation in Indonesian Communities

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ABSTRACT

Technology today is very developed and has produced many transformations in various fields of human life activities. The internet has facilitated business development and opened up many opportunities in the economic sector. The presence of technology is increasingly important and encourages to always act quickly, practically, effectively and efficiently, especially in conducting transaction processes. E-Commerce is one of the growing business opportunities in the field of information technology. The concept of e-Commerce provides many conveniences for users. This convenience benefits many parties. Although with the many conveniences provided by e-Commerce, it does not mean there are no obstacles encountered. This journal comes from a variety of information that we obtain from various literary books, journals and websites. The final goal of writing this article is to know the obstacles that have been found in the development of E-Commerce, especially in Indonesia.

Keywords: Internet, e-commerce, barriers.

INTRODUCTION

The information system that was originally intended to automate clerical tasks turned out to be used to gain a strategic advantage in winning competition. The internet as a form of information technology presence has also been widely used to increase competitiveness (Laudon and Laudon, 1998). (Anggayasta, 2011)

Internet users in Indonesia are in the sixth position of the world from 25 countries in the world surveyed by this institution (eMarketer, 2014). With the increasing number of internet users in Indonesia, this can become a market opportunity for businesses to use the virtual world as a land to develop their business. (Firmansyah, 2017)

The use of the internet in business has changed from a function as a tool for electronic information exchange to a tool for business strategy applications, such as: marketing, sales, and customer service

In the past, humans carried out business activities in a conventional manner. They need a physical place that requires high costs for procurement and management. (Yuliana, 2000)

Business owners must have a shop and employ employees to run their business. Consumers who want to buy the items needed, must go to physical store outlets. Consumers must sacrifice their time and energy to go to store outlets the physicality. The business process is very time and energy consuming, especially in the field of marketing.

With the internet, business people no longer have difficulty in obtaining any information, to support their business activities, even now it tends to be able to obtain various kinds of information, so information must be filtered to obtain appropriate and relevant information. The development of this technology gave rise to a variety of new terms such as e-business, e-commerce, e-learning, e-university, e-book, e-banking. A very well-known concept until now is e-commerce.

E-commerce has a very big impact in the business world, especially in the process of perfecting the company's marketing in order to achieve the goals of the company itself. E-commerce has such a strong appeal that many individuals or organizations are interested in running this business. (Aco & Endang) E-Commerce in Indonesia is still lacking. These shortcomings are hampering the implementation of E-Commerce. These deficiencies start from inadequate infrastructure and information technology and internet networks, regulations / regulations that still do not reach comprehensively, to the problem of collecting taxes on e-commerce transactions. (Firmansyah, 2017)

LITERATUR REVIEW

Internet

The internet is an extraordinary phenomenon. Starting from a United States military experiment, the internet has developed into a "need" for more than tens of millions of people worldwide. This is a consequence of the increasingly low cost required for computing and communications technology and the availability of software that is easy to operate. In addition, of course, because of the involvement of the interests of large companies in the development of these technologies. (Simamora)

Internet History

Around 1969

The Department of Defense of the United States (US Department of Defense) through the Advanced Research Projects Agency (ARPA) pioneered a network system called ARPANET. The initial mission of this network system was for military purposes. The goal is to connect

computers in various regions, enable data storage in many places and maintain the security of data belonging to the United States so that it is not easily leaked to other places. (Yasha , 2018)

Around 1977

There are more than one hundred mainframes and mini-computers connected to ARPANET, most of which are still at university. With this facility, it allows lecturers and students to share information. (Yasha , 2018)

Around 1980

Internet began to be used by certain circles. The function of the Internet is to connect various universities in the United States. The internet is growing exponentially. (Yasha , 2018)

Around 1982

Standard protocols from TCP / IP are starting to be made public. DARPA (Defense Advanced Research Projects Agency) funds a project that implements the TCP / IP protocol into BSD and UNIX. (Yasha , 2018)

Around 1985

There are 6 domains that have been registered in the world. The first domain in the world is symbolics.com. Symbolics.com is the domain of symbolic inc (computer manufacturer from Massachusetts). (Yasha , 2018)

Around 1990

ARPANET is lowered. The creation of a graphical display-based service, known as WWW (World Wide Web) developed by CERN. Then, InterNIC was established so that it can serve domain registrations for the public. The internet entered Indonesia. (Yasha , 2018)

E-Commerce

Electronic Commerce (e-commerce) is the process of buying, selling or exchanging products, services and information through a computer network. E-commerce is often interpreted as electronic commerce. (Yuliana, 2000) According to Kalakota and Whinston (1997) defines e-Commerce from the following perspectives :

1. Communication Perspective: e-Commerce is the delivery of information, products / services, or payments through telephone lines, computer networks or other electronic advice. (Maryam, 2013)
2. Business Process Perspective: e-Commerce is a technology application towards the automation of transactions and company workflows. (Maryam, 2013)

3. Service Perspective: e-Commerce is a tool that meets the desires of companies, consumers and management in cutting service costs when improving the quality of goods and speed of service. (Maryam, 2013)

4. Online Perspective: e-Commerce relates to the capacity of buying and selling products and information on the internet and other online services. (Maryam, 2013)

The Uniqueness of E-Commerce Technology

Traver & Laudon (2014) gives the categories into eight unique identities from the application of e-Commerce technology, namely as follows:

1. Ubiquity

E-Commerce is available everywhere and all the time. This is what distinguishes it from traditional trade which refers to the existence of a physical form to be visited to be able to conduct trade transactions. (Firmansyah, 2017)

2. Global Reach

E-Commerce technology enables cross-cultural trade transactions, regional and national boundaries and is cost effective compared to traditional trade. In addition, the total consumers of e-commerce business customers can be calculated. (Firmansyah, 2017)

3. Universal Standards

It is different from traditional trade which will differ from one country to another. (Firmansyah, 2017)

4. Richness

e-Commerce has more complex information and varies in content compared to traditional markets. (Firmansyah, 2017)

5. Interactivity

The available technology makes it possible to communicate interactions between sellers and consumers. (Firmansyah, 2017)

6. Information Density

Improve the quality of available information both in terms of quantity, timeliness, and accuracy. (Firmansyah, 2017)

7. Personalization and customization

Allows to personalize messages conveyed to individuals and groups. It is also possible to change the products or services that are sent based on previous choices or behavior. (Firmansyah, 2017)

8. Social Technology

Developing users to be more social by providing users to create and share information content with other communities. (Firmansyah, 2017)

History of e-Commerce

Around 1994

First introduced e-Commerce. At first this e-commerce in the form of electronic banners used for promotional and advertising purposes on a web page. (ekonomi , 2017)

Around 1996

E-Commerce has emerged in Indonesia, with the founding of Dyviacom Intrabumi (D-Net) as a pioneer of online transactions. Launched by Bhinneka.com (only showing company profile and a few other basic things), as well as the presence of the first online bookstore in Indonesia, namely Sanur.com. (ekonomi , 2017)

Around 1999

The presence of the Kaskus forum. In addition, news startups also appeared in the form of Detik portal. (ekonomi , 2017)

Around the year 2000

The growth of e-commerce sector and citizens' economic behavior. Marked by the emergence of new startups, who generally still play in the field of buying and selling products. Noted there are glodokshop.com, datakencana, FastnCheap, LippoShop, Iklanbaris.co.id, gadogado.net. There is a media portal namely kopitime.com which has successfully penetrated the Jakarta Stock Exchange (JSX). However the success of kopitime.com only lasted 2 years, then went bankrupt. (ekonomi , 2017)

Around 2005, many Internet users traded privately using public forums, which became the forerunner of a structured managed marketplace. One that emerged from Bali was Tokobagus.com. E-commerce ecosystem that continues to grow, encouraging the launch of various payment services. Thus, Doku emerged as an electronic money service. (ekonomi , 2017)

Around 2010 the presence of Go-Jek was a breakthrough and opened up insights and views of the people of Indonesia regarding the magnitude of the impact of e-commerce. Go-Jek proves it that advancements in telecommunications technology enable changes in many fields. Several international marketplaces were also present, such as Bukalapak, Rakuten, Tiket.com and Zalora. (ekonomi , 2017)

Around 2012 For the first time, e-commerce in Indonesia had its own "celebration", the National Online Shopping Day (Harbolnas). The aim is to expand the interest of Indonesians in digital shopping and increase public trust in online shopping. In 2012, ideA (Indonesian E-Commerce Association) was formed into an association that houses Indonesian e-commerce players, in order to improve Indonesia's e-commerce ecosystem and its reputation in the world. (ekonomi , 2017)

Around 2014 Tokopedia became the first startup to receive investment with a value of USD 100 million (the biggest achievement in the history of e-commerce in Indonesia). In the same year, Elevenia (shaded by XL Axiata and SK Planet) was present as a competing marketplace. (ekonomi , 2017)

Around 2015 Tokobagus.com and Berniaga were acquired by OLX Indonesia which focused on buying and selling used commodities. Also present were MatahariMall.com, Shopee and JD.id. Bhinneka.com as the oldest e-commerce in Indonesia announced that it has received an investment of USD 22 million from Ideosource. And through LKPP (Government Service Goods Procurement Policy Institute) Bhinneka.com partnered with the government in the procurement of goods for the government budget. (ekonomi , 2017)

Around 2016 Several e-commerce companies were forced to quit, such as Lamido, Paraplou, Valadoo, Wearfable, Foodpanda and Rakuten.co.id. Aside from that the acquisition continues. Lazada Indonesia was acquired by Alibaba. The government released the Indonesian e-commerce roadmap, which was outlined in the form of Presidential Regulation No.774 in 2017 on the Road Map of the Electronic-Based National Trade System (SPNBE) which contained 8 aspects (ekonomi , 2017), namely:

1. Funding
2. Taxation
3. Consumer Protection
4. Education and HR
5. Logistics
6. Communication Infrastructure
7. Cyber Security
8. Formation of Implementing Management

The role of e-Commerce for Micro, Small and Medium Enterprises (MSMEs)

E-commerce lately favored by both large and small producers and retail sellers in general. This is because promotion through online media is easier to reach consumers in terms of introducing

or selling their products. E-commerce makes it easier for consumers and producers to make transactions.

Along with the intense competition in business, development in the MSME sector began to attract the attention of the government so as not to be excluded and ignored along with the challenges of this era and the complexity of MSME competition in the global market.

One of the government's efforts to develop MSMEs is by providing capital assistance and training to MSME actors. In addition, because of the very important role of MSMEs in the nation's economy, some from a group of State-Owned Enterprises such as Bank BRI, BNI, Mandiri, BTN, Pertamina, Telkom and PLN establish BUMN Creative Houses or abbreviated as RKB to develop business capabilities and business capacity in the sector the. (Helmalia and Afrinawati , 2018)

Constraints in Adopting e-Commerce for MSMEs

According to Govindaraju & Chandra (2012) dividing the obstacles in e-commerce adoption for SMEs into 3 factors as follows:

1. Push Factor

There are 2 factors driving the use of e-commerce, internal and external. For internal factors, the role of MSME owners to encourage the use of e-commerce is very important. While external factors, namely competing factors that use e-commerce apparently did not make SMEs then use e-commerce to support its operations. (Febriantoro, 2018)

2. Humans

Human factors as internal obstacles can be overcome through the recruitment of qualified IT human resources, human resource capacity building and attending workshops and e-commerce training organized by the government (Febriantoro, 2018)

3. Information Sources

Sources of information require the involvement of governments and other stakeholders in making public information media that contains e-commerce knowledge. (Febriantoro, 2018)

Advantages of E-Commerce

The attraction of e-commerce for the business world is that it has the following advantages:

1. Efficient

Companies can obtain efficiency both in terms of marketing, labor, and overhead costs. For example, they do not need to print a new catalog every time and send it (faxcimile) to each

consumer because consumers can see directly on the website about changes in the type and price of goods from second to second. (Achjari, 2000)

2. Effective

The internet makes it possible to reach consumers more broadly and quickly. This is possible because the company can open a 24-hour non-stop virtual shop by displaying information about products and purchasing procedures on line on the internet. Prospective customers can be spoiled with a charming graphical display even with animations / videos that can be run with certain software for example: Real Player. (Achjari, 2000)

Benefits of e-Commerce for Organizations, Consumers and the Broad Community:

1. Expanding the market to include national markets and global markets, so that the company can reach more customers, choose the best suppliers and establish relationships with business partners who are considered the most suitable (Irmawati, 2011)
2. Reducing costs for compiling, processing, distributing, storing and accessing paper-based information (Irmawati, 2011)
3. Enables companies to realize highly specialized businesses (Irmawati, 2011)
4. Reducing inventory costs and overhead by facilitating the management of “pull” value chain whose processes start from customer orders and use just-in-time manufacturing. (Irmawati, 2011)
5. Pressing the time between payment and receipt of product / service (Irmawati, 2011)
6. Increase employee productivity through business process reengineering (Irmawati, 2011)
7. Reducing telecommunications costs. (Irmawati, 2011)

Lack of E-Commerce

1. Direct financial loss due to fraud. A fraudster transfers money from one account to another or has replaced all available financial data. (Irmawati, 2011)
2. Theft of valuable confidential information. Disturbances that arise can reveal all confidential information to parties who are not entitled and can cause great harm to the victim. (Irmawati, 2011)
3. Lost business opportunities due to service interruptions. This error is a non-technical error such as a sudden power outage. (Irmawati, 2011)

4. Unauthorized use of access to resources. For example a hacker program (hacker) who managed to break into a banking system and then move a number of other people's accounts to his own account. (Irmawati, 2011)
5. Loss of trust from consumers. This is due to various factors such as the deliberate efforts of others trying to bring down the company's reputation. (Irmawati, 2011)
6. Unforeseen losses. Caused by deliberate disruption, dishonesty, improper business practices, human error, human error or system error (Irmawati, 2011)

Barriers to Implementation of e-Commerce Against Users

1. Trust

Is the most basic obstacle to implementing e-commerce in Indonesia. People in Indonesia (e-commerce buyers) are accustomed to traditional trade.

According to Sholekan (2009; 14) traditional trade is basically the act of companies selling goods and / or services to generate income in money, which in turn generates net income from the difference in income minus market prices plus operational costs. a survey conducted by CommerceNet buyers have not put their trust in e-Commerce, they cannot find what they are looking for in e-Commerce, there is no easy and simple way to pay. In addition, surfing in e-Commerce is not yet very smooth, e-Commerce customers are still afraid of credit card thieves, their personal information secrets will be exposed, and network performance is not good. (Nuryanti, 2013)

Generally, buyers are still not convinced that it will benefit by connecting to the Internet, searching for shopping sites, waiting for image downloads, trying to understand how to order things, and then having to fear whether their credit card numbers are taken by hackers. (Aco and Endang)

2. Security

Piracy of digital content that is able to have an adverse and detrimental effect on the owner. Protect works or online businesses through Intellectual Property Rights (IPR). IPR can be an important asset and monopoly right to prohibit other parties to use it without the permission of the owner. Wilson (1997) argues that e-commerce security includes four things: authenticity, integrity, non-repudiation and confidentiality (Achjari, 2000). This opinion is also supported by Ratnasingham (1998) who added several factors as the basic requirements needed for e-Commerce security, namely:

1) Authorization

The person making the transaction is truly the person in authority. (Achjari, 2000)

2) Authentication

The transaction is genuine and not fictitious. One way to ensure the authenticity of transactions at e-commerce is with a digital signature. In practice there is a trade-off between security (to maintain authenticity) and comfort. Procedures that are too strict or too long besides expensive will also cause discomfort. While the ease of obtaining comfort will result in a weakening level of security (Coffee, 1998). Weber (1999, p. 399) provides two examples of digital signatures, namely: Public-Key Approaches and Arbitrated Schemes. The first approach only involves two parties, namely the sender and recipient of documents or transactions. So both parties rely on cryptosystems, both private-key or public-key. The second approach involves a third party who will verify the documents and the sender. This third party will later send the recipient documents digitally as well. (Achjari, 2000)

3) Integrity

Transactions received are in accordance with what is desired or sent by the customer without any changes either during transmission or processing. (Achjari, 2000)

4) Confidentiality

Guarantee that data can only be accessed by interested parties. (Achjari, 2000)

5) Availability

Guaranteed availability of official access to services or information. (Achjari, 2000)

6) Non-repudiation

Mechanisms to resolve problems that arise if there is a party who denies having carried out a witness or communication. (Achjari, 2000)

7) Privacy

Information or data of all parties conducting transactions must not be open to the public or disseminated to unauthorized parties. (Achjari, 2000)

3. Crime

Advances in technology have brought rapid development in business. In the use of e-Commerce applications, frequent theft and falsification of owner data. Lack of protection for consumers.

Crimes that can pose threats in the world of e-Commerce must be understood from an early age. Online fraud is an act carried out by several people who are not responsible for providing false information for personal gain. (Gunawan, 2014)

METHODS

Research Stages and Methods

The research method we use is literature review. We collect various kinds of journals and also other sources such as books, websites, articles, conference proceedings and others. Subjects are examined, data is collected, and the required data sources are collected. (Hidayat, 2012) After the sources are collected, we read the sources and extract the essence from each source. We have read about 20 journals and have chosen 10 journals as the main source in compiling this literature review.

Stage Determining Topics

In determining the topic of discussion that we will discuss in this literature review, we discuss it together. And we agreed to focus on discussing "Barriers to the Implementation of e-Commerce Against Indonesian Communities."

Phase of Searching and Collecting Reference Resources

In this section, we collect reference sources from search results on the Internet. Our reference sources come from several journals, books, websites, articles and conference proceedings.

Analysis Phase Reference Resources

After we get the reference source, we analyze it by reading and understanding the contents of the reference source. Then, we quote information related to the topic of our literature review discussion from these reference sources.

CONCLUSION

Technology from time to time has increasingly developed. The internet was previously only used for certain parties, now internet technology has been widely used by humans to help their activities. Especially in the economic world. E-commerce has a huge potential in Indonesia. Apart from the already very high internet usage in Indonesia, we can also see from the sale and purchase transactions through e-commerce which has increased from year to year. E-commerce offers a lot of advantages that can help humans. E-commerce can help small businesses such as MSMEs (micro, small and medium enterprises) in running and developing their businesses. But despite the benefits offered, E-commerce in Indonesia has not been fully implemented. That is because there are obstacles that impede the implementation. These barriers such as trust, security and crime.

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