The Role Of Information Technology In E-Commerce

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Abstract: Information technology has the power to develop the industry and transform how business is run. Internet in business is used for information exchange, media promotion, electronic mail, mailing lists, dialogue, discussions, consulting with consumers online. There are two electronic commerce applications, namely: business-to-consumer and business-to-business commerce. Information technology has the power to develop the industry and transform how business is run. The main obstacle in the use of information technology is the enormous cost of making an online network and supplying devices. The use of information technology plays an important role in trade and national economic growth to achieve public welfare.

Index Terms: Information Technology, E-Commerce, Role, Commerce, E-Business, E-Business Transaction, Decision Making

1 INTRODUCTION
Progress in the field of technology, computers, and telecommunications supports the development of internet technology. With the internet business people no longer have difficulty in obtaining any information, to support their business activities, even now tend to be able to obtain various kinds of information, so information must be filtered to get the right and relevant information. The use of the internet has experienced tremendous developments in the business sector, especially in large scale companies. Since the discovery of internet technology in the 1990s its use has expanded because it is seen as providing enormous benefits for the smooth running of the business or business activities. Motivation and benefits of e-commerce in improving service to customers as well as increasing the competitiveness of companies in this case become the point of view of the author which is used as an object in this study. The application of e-commerce technology is one of the important factors to support the success of a product from a company. To accelerate and increase sales quickly, by looking at the rapid development of information technology, we can utilize an on-line service in the form of e-commerce. So far, the sales system of customers used by companies is only in writing and manual, which often tends to be misleading. With the existence of e-commerce services that can be quickly enjoyed by customers and companies themselves, all services desired by customers can be immediately followed up as quickly as possible, so that the company will be able to provide the best and fastest service for customers. E-commerce, is the use of communication networks and computers to carry out business processes. Mostly e-commerce, occurs between businesses, and not between business and consumers. The development of the use of technology through electronic networks in daily life has covered various aspects, including trade activities. Since ancient times humans have been familiar with cross-country trading activities, which are carried out by exploiting continents around the world with simple vehicles or transportation. Technology development very helpful to humans and make human life easier.

Trading through electronic networks is all business transaction activities carried out by using internet network access via a computer. There are 3 reasons why businesses have built information technology: (1) Business Operations Support; (2) Supporting Managerial Decision Making; (3) Supporting Competitive Advantage Strategies. Information technology influences the process of developing marketing strategies because information technology provides more information to managers through the use of a decision-making system (Decision Support System or DSS). Information technology has the ability to integrate various different parts of the organization and provide a lot of information to managers. For example, executive information systems (executive Information System or EIS) affect the flow of information vertically within the company. Top management parties have greater access to information and reduce the dependence of information sources on middle management. Telecommunication networks allow information to flow easily and quickly between different departments and divisions. Information technology also influences organizational interfaces with the environment, such as customers and suppliers.

2 LITERATURE REVIEW
E-commerce is the distribution, purchase, sale, marketing of goods and services through electronic systems such as the internet or television, www, or other computer networks. E-comerce can involve electronic funds transfers, electronic data exchanges, automated inventory management systems, and automated data collection systems. The information technology industry sees e-commerce activities as the application and application of e-business (e-business) related to commercial transactions, such as: transfer of funds electronically, SCM (supply chain management), e-marketing (e-marketing), or online marketing (online marketing), online transaction processing, electronic data interchange (EDI), etc. E-commerce or e-commerce is part of e-business, where the scope of e-business is broader, not just commerce but also includes collaborating business partners, customer service, job vacancies etc. In addition to www network technology, e-commerce also requires database or database (e-mail) technology, e-mail, and other forms of non-computer technology such as the shipping system, and payment instruments for this e-commerce.

E-commerce is divided into two types, namely: business-to-consumer (B2C) e-commerce refers to transactions that occur between a business and the final
consumer of the product e-commerce business to business (business-to-business-B2B) refers to inter-business transactions where no party becomes the final consumer, involves relatively few people, and the parties involved are highly trained in using information systems and getting to know business processes.

**Trade Through Electronic Networks**
Some people define electronic commerce (e-commerce) narrowly, namely trade, which only covers business transactions that relate to customers and suppliers. This definition means that only transactions that only cross company boundaries can be classified as e-commerce. If a transaction remains within the company boundary, these people will call it an electronic business transaction. Limiting internal versus external transactions will not offer much help, because most people consider electronic business and electronic commerce to be the same thing.

**Key Success Factors in E-Commerce**
In many cases, an e-commerce company can survive not only on the strength of the product, but with a reliable management team, timely delivery, good service, good business organization structure, network infrastructure and security, website design good, several factors include:

- Providing competitive prices
- Providing responsive, fast and friendly purchasing services
- Provide the complete and clear information about product and service
- Provide many bonuses such as coupons, special offers, and discounts
- Give special attention such as the proposed purchase
- Providing a sense of community for discussion, input from customers, and others
- Facilitate trading activities

**Benefits of trading via electronic networks, namely:**
Companies do e-commerce to achieve overall organizational improvement. This improvement is expected to be the result of the 3 main benefits that will contribute to the company's financial stability and enable it to compete better in the business world that applies computer technology, namely:

- Better customer service
- Better relations with suppliers and the financial community
- Returns on investment in shareholders and owners increases

In terms of grouping benefits, can be seen from:

**Benefits for the company**
Expansion of network of business partners. In traditional trade, it is very difficult for a company to find the geographical location of its business partners in other countries or other continents. Efficient. It is considered very efficient, because every company does not need equipment to run this business, and only needs internet. And reduce all levels of operational costs, so that it doesn’t seem expensive. Because it is run through online channels. Market expansion. The reach will be increasingly very broad, because it is not limited by the geographical location wherever the company is located. Shortening Distance. Companies can get closer to consumers. By just clicking on the links on the sites. consumers can go to companies wherever they are.

**Benefits for consumers**
Effective. Consumers can obtain information about products or services needed and transact in a fast and inexpensive way. Physically safe. Consumers do not need to go to the store where the company sells its goods and this allows consumers to trade safely because in certain areas it may be very dangerous to drive and carry very large amounts of cash. Flexible. Consumers can make transactions from various locations, both from home, office, internet cafe or other places.

Benefits for the government
Reducing Pollution and Environmental Pollution.
Open New Job Opportunities.
Profitable Academic World.
Improving the Quality of Human Resources
Customer service improvements before, during, and after sales
Improving relations with suppliers and the financial community.

**Strategy Business-to-Consumer (B2C) Fof E-Commerce**
The increasing number of products and services available for digital shipping and the increasing number of customers are able to overcome their reluctance to make purchases using the web. The faster speed of communication from home computers has also made the delivery of digital products more practical.

1. **Digital Products**
Certain products and services can be sent to consumers directly through the internet. Examples of digital products such as songs, movies, software. Products and services can be directly consumed after downloading.

2. **Physical Products**
Certain products and services that cannot be directly consumed via the internet, but must be sent to consumers. Sales and payment orders can be received through the internet, after which they are sent to the buyer.

3. **Sales of Maya Versus Mixed**
Virtual sales are sales made by a company that does not operate a physical selling place. With virtual sales, there is no shop where customers can enter and buy products. Hybrid sales occur when a company has a place to sell physically and a website where customers can buy products. These two retail sales strategies need to inform customers of product costs and features, manage customer payments, and produce product shipments. Virtual sales are most often used when companies cannot build a place to sell physically or find a place to sell economically feasible physical sales. Mixed sales are sometimes referred to as brick-and-click operations. Most companies have a place to sell because usually this is needed for their business plans. The most popular example at this time is the sale of products through social networks such as Facebook or other sites such as www.kaskus.us, where the sales they do are usually virtual sales or mixed sales.

4. **Electronic Governance**
The government can also benefit from e-commerce. Electronic government or e-government is the use of information technology by the government to provide information and
services to its citizens, business affairs, and other matters relating to government. E-government can be applied to the legislature, judiciary, or public administration, to improve efficiency internal, deliver public services, or democratic governance processes. The main delivery model is government-to-citizen or government-to-customer (G2C), government-to-business (G2B) and government-to-government (G2G). The most expected advantage of e-government is increasing efficiency, comfort, and better accessibility of public services. The challenge for e-commerce is more than just the type of goods offered. Many customers are more comfortable using cellular phones than using computer keyboards.

Mobile Trade
Mobile commerce is the use of cellular telephones and personal digital assistants (PDA) to conduct wireless e-commerce. Along with the development of cellular telephone technology from analog generation to the digital generation, the term third generation telecommunications (third generation-3G) has loosely used for wireless technology capable of transferring data.

Classy Wireless Business in All Places
Cable internet hot spots are sufficient for both public and private Web use, but checking e-mail at a Starbucks coffee shop is an inadequate way for business professionals. Because the dependence on cable communication connections and the small coverage distance by a wireless access point makes continuous wireless access impossible. Wireless communication with sufficient speed through the same communication service provider as cellular phones will enable the creation of business-class wireless computing in almost all businesses in almost all places. Verizon offers a broadband access plan that runs at speeds ranging from 400 to 700 kilobits per second, but this service is available in many metropolitan areas and is not limited to the closest access points for a network using cables.

3 DISCUSSION
E-Commerce in Indonesia is more or less certainly related to the development of e-commerce in developed countries, such as the United States. With thousands of innovative shopping methods presented by merchants, US citizens are increasingly facilitated to get the items they want easily, quickly and safely. Information Technology (IT) has played an important role in human life today. The development of information technology has followed with the progress of human development. The development of information technology is very rapidly triggered by the information needs quickly, precisely and up to date. Information technology has become a major facility for the activities of various sectors of life which contribute greatly to fundamental changes in the structure of operations and management of the organization. Those who understand E-Commerce can see good opportunities in the world of online business. Because there are many advantages or advantages in online business. These business people do not need to find a place to do business, do business online only with computers and internet connections, no need to pay employees, and many more benefits. With the existence of electronic commerce (e-commerce) services, customers can access and place orders from various places. With the advanced technology era, customers who want to access e-commerce don't have to be somewhere. E-Commerce plays an important role in the development of business in Indonesia which can also improve the economy in this country. But the number of internet accessers in Indonesia has only reached around 3% of Indonesia’s population. This percentage is relatively small compared to other Asia Pacific countries. The benefits that can be obtained from doing business via the internet are cost savings reaching 35%, consumer services reaching 32%, increasing income reaching 18%, marketing reaching 13%, and others reaching 2%. Whereas the advantage of business strategy in winning the competition that can be obtained is that global communication in the business becomes truly alive, faster, cheaper, and easier; interactive communication as a means to show the company's attention to its customers; provide information and services in accordance with the needs of each consumer; enhance cooperation between teams; The EC makes it possible to open new markets, products or services; can integrate outside activities and business processes within the company on-line.

Expected benefits from E-commerce
Companies implement e-commerce to achieve overall organizational improvement. These improvements are expected to be the result of three main benefits:
• Improved customer service before, during, and after sales
• Improved relations with suppliers and the financial community
• Increased economic returns on shareholders and investment owners

E-commerce constraints
In implementing e-commerce, of course there are obstacles that are usually encountered, namely, among others:
• High costs
• Concern about security issues (access to personal data / information)
• Software that is not yet established or not yet available

The scope of E-commerce
E-commerce Issues in Indonesia
Apparently, Indonesia is not only famous for its large mobile market, but also anything related to social, e-commerce and games. Many people who are interested in e-commerce in Indonesia, last year was the year of e-commerce, marked by the launch of more than 20 e-commerce companies. And of course many of them later failed, leaving established players like Rakuten, TokoBagus, Plasa, Berniaga, Kemana, Tokopedia, etc. But so far, there has not been enough success in this very wide and opportunity-filled market. There are a number of problems they face in running their businesses, including behavior, payment facilities, mobile, logistics facilities, and regulations.

4 CONCLUSION
E-Commerce in Indonesia is more or less certainly related to the development of e-commerce in developed countries, such as the United States. With thousands of innovative shopping methods presented by merchants, US citizens are increasingly facilitated to get the items they want easily, quickly and safely. The internet has no impact on customers, but lower prices and better customer service made possible by B2B are what make
business organizations competitive. The next e-commerce step is to run business-class wireless and mobile trading everywhere. The business to consumer strategy is a strategy that refers to transactions that occur between a business and the final consumer of the product. the basic difference between e-commerce and e-business is that the purpose of e-commerce is oriented to how to get profits, while e-business is oriented to long-term interests and abstract characteristics such as consumer trust, service to consumers, work rules, relations between business partners and handling other social problems. Aside from the differences between the two, it turns out that both of them also have the same goal of advancing the company into a larger company than before.

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