E-COMMERCE TECHNOLOGY USING MARKET PLACE FOR GENERATION X

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ABSTRACT

The use of the internet and the development of digital data technology in marketing and sales in recent years has grown rapidly. Business competition that occurs today is very tight. In the era of globalization, information moves very fast and becomes a business actor to win the competition. The internet through e-commerce opens opportunities for Small and Medium Enterprises (SMEs) to market and grow business networks throughout the business world. With the internet marketing and sales process can be done anytime without being bound by time and space. However, for generation X, who were born in 1961-1980, they experienced difficulties using the internet. This is due to a lack of knowledge about internet technology and its development. Therefore, this research will create an e-commerce application that is easy to use for generation X.

KEYWORDS: Technology, E-Commerce, Generation X

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1. INTRODUCTION

The use of the internet and the development of digital data technology in marketing and sales in recent years has grown rapidly. Business competition that occurs today is very tight. In the era of globalization, information moves very fast and becomes a business actor to win the competition. The internet through e-commerce opens opportunities for Small and Medium Enterprises to market and grow business networks throughout the business world.

E-commerce is a technology that is a fundamental requirement for any organization engaged in the trade sector. E-commerce is a way for consumers to be able to buy the desired goods by utilizing internet technology. The use of e-commerce technology can be felt by consumers (business to consumer) and by business people (business to business).

Many e-commerce sites exist today. Although now the internet has spread to all circles of society in Indonesia, it is still not being implemented by business actors. Especially for the X generation of people who were born in 1961-1980. Lack of knowledge and difficulty in carrying out the stages of selling online using the marketplace are obstacles for generation X to take advantage of e-commerce technology.

Therefore, this study will build an e-commerce application that can make it easier for generation X to be able to carry out sales activities online easily.

2. LITERATURE REVIEW

1. Definition of Information Systems
According to O'Brien (2005), information systems are any regular combination of people, hardware, software, computer networks and data communications, and databases that collect, modify and disseminate information in an organizational form.

2. Definition of E-Commerce
According to Laudon (1998) E-Commerce is a process of buying and selling products electronically by consumers and from company to company with computers as an intermediary for business transactions. The media that can be used in e-commerce activities is the World Wide Web internet.

3. Types of E-Commerce
The classification of e-commerce is generally carried out based on the nature of the transaction. According to Laudon (2008), the classification of e-commerce is divided as follows:

1. Business to Consumer (B2C),
2. Business to Business (B2B).
3. Consumer to Consumer (C2C).
4. Peer-to-Peer (P2P).
5. Mobile Commerce (M-Commerce)

The buying and selling process in the e-commerce system that distinguishes it from the traditional buying and selling process is all processes starting from finding information about the goods or services needed, placing orders, to making

payments electronically via the internet media. According to Meier and Stormer (2009), the trading mechanism in the e-commerce system is explained through the value chain in e-commerce as follows:

• E-Products and E-Services
• E-Procurement
• E-Marketing
• E-Contracting
• E-Distribution
• E-Payment
• E-Customer Relationship Management.

3. RELATED RESEARCH

Research on e-commerce has been researched. Shabur Miftah, Heru Susilo, Riyadi takes the title of the Implementation of E-Commerce as an Online Sales Media. The purpose of this research is to implement an e-commerce website that functions as a promotional media and electronic sales. As well as knowing the obstacles faced in implementing e-commerce websites. This type of research is qualitative. The results of research using the implementation of e-commerce using open cart software at the Malang shop will be able to help reduce costs incurred and can convey detailed and fast information about the product to customers.

Research conducted by Hani Atun Mumtahana, Sekreningsih Nita, and Adzinta Winerawan Tito examines "Utilization of Web E-Commerce to Improve Marketing Strategies". This study aims to determine the impact felt on the use of e-commerce technology in increasing production marketing strategies. E-commerce technology is built using website-based applications, so that business actors can easily promote business results. The main target of using e-commerce technology is the leather craft industry in Magetan. Users of this application are administrators who have full rights to application processing, operators or owners are shop owners who have the right to enter product data, users who have the right to choose and order products. The results of trials and evaluations conducted on the student cooperative of STT Dharma Iswara Madiun, show that utilizing e-commerce technology fulfills product marketing strategies that can have an impact on increasing income.

Ambo Aco and Andi Hutami Endang conducted a research on "E-Commerce Business Analysis for Alauddin State Islamic University Students in Makassar". There are also many e-commerce sites that are trusted by the public but there are still some users who commit fraud. However, most people already believe in online transactions, this is actually an opportunity for the e-commerce industry to develop. However, there are still classic problems that need to be fixed, such as security issues, overcoming fraud and the process of returning goods in case of a discrepancy. However, the potential for online transactions is still wide open when viewed from the percentage results on the questionnaire questions.

4. RESULT & DISCUSSION
1. Benefits and Challenges of Using E-Commerce in the Business World

In many cases, an e-commerce company can survive not only by relying on product strength, but with a reliable management team, on time delivery, good service, good business organizational structure, network infrastructure and security, good website design, good, there are benefits in using e-commerce:

1. Using an easy-to-use user interface
2. Provide competitive prices
3. Providing responsive, fast, and friendly purchasing services.
4. Provide complete and clear information on goods and services.
5. Provide many bonuses such as coupons, special offers, and discounts.
6. Give special attention such as a proposed purchase.
7. Provides a sense of community for discussion, customer input, and more.

The benefits felt by the company, especially in implementing e-commerce technology, include:

• Getting new customers. By utilizing e-commerce technology, it can enable companies to get new customers, both from domestic and foreign markets.
• Attract consumers to stay. By providing facilities that are applied to e-commerce technology, it can make consumers stick to the products that the company sells.
• Improve service quality. With the existence of e-commerce allows companies to improve services by making more personal interactions so that they can provide information according to what consumers want.
• Serving consumers indefinitely. Customers can make transactions and take advantage of the services of a company without having to be tied to the closing or opening times of a company.

2. Impact of E-Commerce in the Business World
• E-Commerce has an impact on the accelerated growth of direct marketing which is traditionally based on mail order (catalog) and telemarketing. The emergence of e-commerce has had several positive impacts on marketing activities, including:
• Facilitate the promotion of products and services in an interactive and real time manner through direct communication channels via the internet.
• Creating new distribution channels that can reach more customers in almost all parts of the world.
• Provides significant savings in the cost of sending information and digitalized products (e.g. software and music)
• Reduce cycle times and administrative tasks (especially for international marketing) from ordering to product delivery.
• More responsive and satisfying customer service, because customers can get more detailed information and respond quickly online.
• Facilitating mass customization that has been applied to a number of products such as cosmetics, cars, homes, computers, greeting cards, and various other products.

- Make it easy for one-to-one or direct advertising applications that are more effective than mass advertising.
- Save time and costs in handling orders, as the electronic ordering system allows for faster and more accurate processing.
- Presenting a virtual / virtual market (marketplace) as a complement to traditional markets (marketplace).

Positive impact:
- A new revenue stream that may be more promising that cannot be found in traditional transaction systems.
- Can increase market exposure (market share).
- Lowering operating costs (operating cost).
- Extend the reach (global reach).
- Increase customer loyalty.
- Improve supplier management.
- Shorten production time.
- Improve the value chain (chain of income).

Negative impact:
- Losing a direct financial position due to fraud. A fraudster transfers money from one account to another or he has replaced all existing financial data.
- Theft of valuable confidential information. Interference that arises can expose all confidential information to unauthorized parties and can result in huge losses for the victim.
- Lost business opportunities due to service disruption. This error is non-technical in nature, such as a power failure.
- Unauthorized use of access to resources by parties. Suppose a hacker program who managed to break into a banking system and then transferred a number of other people's accounts to his own account.
- Loss of trust from consumers. This is due to various factors such as deliberate attempts by other parties to try to tarnish the company's reputation.
- Unforeseen losses. Caused by deliberate interference, dishonesty, improper business practices, human factors error, human factors error or system error

3. E-Commerce Process in the Business World
In the e-commerce process, companies need several main components so that the operation and management of e-commerce activities run well. The main components that have an important role in the e-commerce process in the business world are shown in the following figure:

Figure 1: E-Commerce Process

1. Access control and security: E-commerce sites must provide trust and secure access for various parties in e-commerce transactions, for example by means of a password, encryption key, certification, or digital signature. Then there is access authorization that is only for certain parts so that only registered customers can access existing information and applications. Access control and security is necessary to protect the resources of e-commerce sites from various threats such as hackers, theft of passwords or credit card numbers, or avoid system failure.
2. Creating profiles and personalization: The process of profiling and personalizing using profiling tools such as registration, cookie files, web behavior tracking software and user responses. These profiles are used to identify us as individual users, provide personalized views, product suggestions and web advertisements. The purpose of this profile creation process is for the purpose of account management, payments, collecting data regarding customer relationship management, marketing planning, and for the management of the website itself.
3. Search management: e-commerce software should include a website search engine component to assist its customers in finding certain products and services they want to be evaluated or purchased.
4. Content and catalog management: E-commerce contents are mostly in the form of multimedia catalogs containing product information so that creating and managing catalogs is the main part of content management. The content management software works with the aforementioned profiling tools. Content management software will assist e-commerce companies to develop, generate, transmit, update, and store text data and multimedia information on e-commerce websites. Furthermore content and catalog management can be expanded to include a product configuration process that will support web-based self-service and mass customization of the company's products.
5. Workflow management: The e-business workflow system is used to help employees electronically work together to complete work tasks using a workflow software engine. This system ensures that the right transactions, decisions and work activities are carried out, and the correct data and documents have been sent to employees, customers, suppliers, and stakeholders.
6. Activity notification: The event notification process plays an important role in the e-commerce system because this system is used to monitor all e-commerce processes and record all relevant activities, including sudden changes or when in trouble. This system will notify customers, suppliers, employees and stakeholders about all transaction activities related to their status by means of electronic messages such as e-mail, newsgroup, pager, or fax.
7. Cooperation and trade: The main objective of e-commerce is to support cooperation agreements and trade services needed by customers, suppliers and other stakeholders. As in e-business, e-commerce systems also focus on growing communities of online interests to improve customer service and build loyalty.
8. Electronic payment process: payment as a real and important process in e-commerce transactions. Today most

of the e-commerce systems involved in the web and B2C businesses use the payment process by credit card.

4. Factors for the Success of E-Commerce in the Business World

In creating a successful and sustainable e-commerce company, in general, companies must find ways to build satisfaction, loyalty, and good relationships with online customers so that they keep returning to our company's web store. The key to the success of an electronic retail company is when the company is able to optimize several e-commerce success factors such as the following:
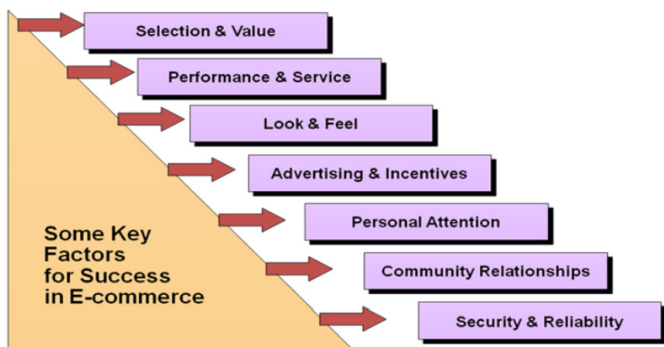
Figure 2: E-Commerce Success Factors

- Selection and Value, choice factors and values include attractive product choices, competitive prices, satisfaction guarantees, and customer support after sales.
- Performance and Service, Performance and service fact ors including navigation, shopping processes, and purchases as well as fast and easy delivery confirmation. Look and Feel, Appearance and taste factors which include web displays, websites, shopping areas, multimedia products, catalog pages and interesting shopping features.
- Advertising and incentives, Advertising factors and incentives including: targeted web and email promotions and special offers, including advertisements on various affiliate sites.
- Personal attention. Personal attention factors include personalized web pages, personalized product suggestions, web advertising and e-mail notifications, and interactive support for all customers.
- Community relationship, the relationship factor with the community includes the virtual community of customers, suppliers, company representatives, and others through newsgroups, chat rooms, as well as various links to related sites.
- Security and Reliability, security and reliability factors include the security of customer information and transactions on the website, reliable product information, and reliable order fulfillment.

5. E-Commerce Weaknesses and Constraints

From the survey results, buyers / shoppers 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. E-commerce customers are still afraid of credit card thieves, their confidential personal information will be exposed, and

network performance is poor.

Most buyers are still not convinced that it will be profitable to connect to the Internet, search for shopping sites, wait for images to download, try to understand how to order something, and then have to fear that hackers will take their credit card number. Therefore we need an e-commerce application that can overcome the obstacles faced by customers.

The following is a display interface of an e-commerce application with a user interface for generation x can be seen in the following figure:
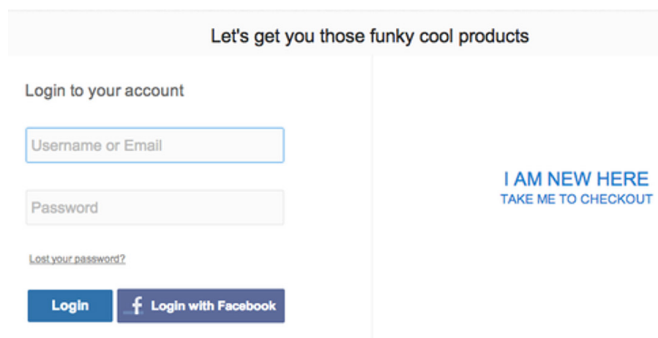

Figure 3: Login page

The first login page appears when a user accesses the e-commerce application. Users must authenticate by entering a username and password, only registered users can log in. On the login page, there is a username and password that must be entered in order to enter the e-commerce application catalog.
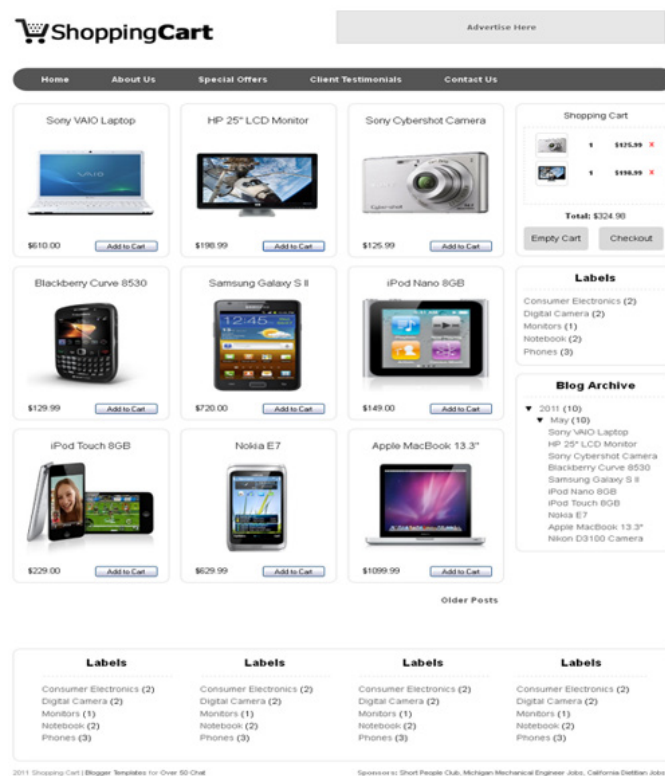

Figure 4: Catalog / Shopping Cart page

A catalog or shopping cart page displays the items contained in the sales database. The buyer can choose the item he wants and it will be processed after making the payment.

Figure 5: Payment page

On the payment page, there is data that must be filled in, starting from the name of the recipient, address, and payment method.

5. CONCLUSION

Based on the above discussion, it can be concluded that:

1. Utilization and use of internet technology is expected to provide great benefits to the competitive business world, especially for generation X.
2. With this electronic commerce service, customers can access and place orders from various places.
3. With the current era of sophisticated technology, customers who want to access e-commerce do not have to be in one place.

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