

E - COMMERCE TO SUPPORT MARKETING IN ASRILOKA WONOSALAM

Hendra Maulana^{1*}, Ronggo Alit², Diana Aqidatun Nisa³

¹Faculty of Computer Science, UPN "Veteran" Jawa Timur, Indonesia

²Faculty of Engineering, Universitas Negeri Surabaya, Indonesia

³Faculty of Architecture and Design, UPN "Veteran" Jawa Timur, Indonesia

Article Info

Article History:

Received 2 Agt. 2023

Accepted 20 Okt, 2023

Keywords:

computer technology

e-commerce

marketing activities

ABSTRACT

The internet is an electronic tool that can be used for various activities such as communications, research, business transactions and others. Internet technology connects thousands of computer networks individuals and organizations around the world that internet technology is so popular. As is the sophistication of computer technology, all limitations in facilities, distance and transaction time can be overcome with ease. With just a "click" customers can get the items they want, they can find out what they want as desired and can carry out transactions with anyone without being limited by time and distance. In supporting its effectiveness, these sites continue to update and improve their features so as to make it easier for sellers to advertise their products and services, such as easy to access via Android and Blackberry mobile smartphones. The convenience offered making more and more sellers want to become members to market their goods and services. In product or service marketing activities, the focus required by the seller is subsequent promotion determine the channel to use. Advertising on e-commerce site channels is certainly expected have a positive impact on sellers. Effective marketing channels will be able to provide benefits and positive impacts in achieving the goals of marketing activities themselves. Besides that allows for the cultivation of relationships between sellers and buyers to interact with each other sustainable.

This is an open access article under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license



Corresponding Author

Hendra Maulana

Email: hendra.maulana.if@upnjatim.ac.id

INTRODUCTION

A marketing strategy is basically a plan comprehensive, integrated and united in the field of marketing, which provide guidance on the activities to be carried out to achieve a company's marketing objectives. In other words, a marketing strategy is a series of goals and objectives goals, policies and rules that give direction to efforts in company

marketing over time, on each level and reference and allocation, especially as a response to companies in facing the environment and competitive conditions which are always changing (Anggraini, 2018). The success of a company is largely determined by the success of marketing efforts. In other words, the aim of marketing activities is, of course, so that the product being marketed gets a positive response from consumers, so that it also has a positive impact on sellers. Based on the function and purpose of marketing it self, media and channels are needed to market products or services. Not only conventional businesses need it, but online businesses also need to determine media and what channels can provide benefits and positive impacts for their business. With marketing online anytime and anywhere everyone can make transactions without having to spend a lot of time to leave the house. Online marketing will continue to develop along with the development of the internet, as well with online marketing channels. Currently online marketing can utilize one of the interesting channels on the internet, namely through websites (Safira *et al*, 2017).

Since the introduction of websites, more and more business organizations have started their businesses on the internet by utilizing WWW (World Wide Web) technology. Large companies and individuals can create websites to offer their products or services through addresses with the domain "dot com" (.com). The domain address is designed based on the company's needs as a channel for buying and selling activities often called an e-commerce site. The development of e-commerce sites is increasingly intensive with the number e-commerce sites originating from abroad or locally. These sites compete with each other for attract the attention of sellers and buyers. As for e-commerce sites originating from abroad, including Amazon.com, Ebay.com, Lazada.com, Gmarket.com, Reveneve.com, and others. Meanwhile the site e-commerce originating locally, including TokoBagus.com, Belanja.com, Bukalapak.com, Berniaga.com and many more. (Aberg, J. dan Shahmehri, N., 2000).

The rapid development of information technology places information systems as an important element in daily activities. One of the trends in Information technology is the use of the internet. Internet as a network Global computers have an important function, namely as an information medium telecommunications, as a medium for electronic commerce and so on. The network connects computer resources geographically distributed throughout the world. The internet is also one Information technology is important at this time and is an urgent issue widely discussed starting in the 1900s.

Wonosalam Village has an area of 15.85 km, with a population of 8,080 people. The daily activities of the people of Wonosalam Village are divided into several professions, including entrepreneurs, numbering 1,007 people, farmers, 1,470 people. Agricultural land and plantations in Wonosalam are dominated by rice fields and fruit gardens. The Wonosalam area is a hilly area, therefore there are many training and outbound places as well as resorts, one of which is Asriloka Wonosalam, a company that has several business fields including educational tourism / environmental education, training and outbound centers and resorts, which stand on land. covering an area of 2 hectares and 50% of the land area is used as a typical Wonosalam fruit plantation area, namely snake fruit plantations, durian, coffee as well as Clanceng honey bee farming. Apart from the types of business above, Asriloka Wonosalam also has processed food products in the form of chips made from banana, snake fruit and durian.

It is hoped that in the future, Asriloka Wonosalam can become a forum for marketing local MSMEs and can become one of the souvenir centers in the Wonosalam area,

Jombang Regency. So it can also be a medium to improve the economy of local residents / MSMEs. With the business potential that has been developed by Asriloka Wonosalam, there needs to be more structured and professional management so that everything can be recorded properly.

LITERATURE REVIEW

E-Commerce

Electronic Commerce (e-commerce) is purchase, sale or exchange process products, services and information via networks computer. e-commerce is part of e-business, where the scope of e-business is more broad, not just business but also includes collaboration with business partners, customer service, job vacancies etc. In addition to www network technology, e-commerce also requires database technology or database (database), e-mail or letter electronic (e-mail), and non-technological forms other computers are like systems delivery of goods, and means of payment for this e-commerce (Siregar, 2010) According to Rahmati (2009) E-commerce is an abbreviation of Electronic Commerce, which means marketing system or with media electronic. This e-commerce includes distribution, sales, purchasing, marketing and service of a product carried out in an electronic system such as the Internet or any form of computer network another. E-commerce is not a service or an item, but is a combination of services and goods. Ecommerce and related activities through the internet can be a driving force for improving the domestic economy through liberalization of domestic services and accelerating integration with global production activities. Because e-commerce will integrate domestic trade with trade world, various forms of conversation or negotiations will not only be limited in aspects of world trade, but how domestic policy on surveillance in a country, especially in the field telecommunications, financial services, and delivery and distribution. Electronic Commerce is defined as the process of purchasing and selling products, services, and information carried out electronically by utilizing computer networks. One of the networks used is the internet. Electronic Commerce (Electronic Commerce), as part of Electronic Business (business carried out by using electronic transmission (Hildamizanthi. 2011).

In implementing e-commerce available a value chain integration of infrastructure, which consists of three layers. First, distribution system infrastructure (flow of good); second, payment infrastructure (flow of money); and third, infrastructure information system (flow of information). So that can integrate the supply chain system from suppliers, to factories, to warehouses, distribution, services transportation, up to the customer then enterprise system integration is required for creating supply chain visibility. There are three factors that factors are observed by us if want to build an e-commerce store namely: variability, visibility, and velocity (Sukmajati, 2009).

E-commerce will change all activities marketing and also cutting at the same time operational costs for activities trading (trading). The processes in E-commerce are as follows :

1. Electronic presentation (website creation) for products and services.
2. Order directly and availability of bills.
3. Securely automate customer accounts (both account number and number Credit card).
4. Payments made by Direct (online) and handling transaction.

According to Hoffman and Fodor (2010), e-commerce can run well if run based on the 4C principle: connection, creation, consumption (consumption) and control (control).

These principles can motivate consumers leads to the company's return on investment (ROI), which is measured by active participation such as consumer feedback or reviews, and sharing or recommending to users other. As mentioned above, technology currently allows us to do so any marketing with the help of the internet. Therefore, the world recognized the new concept business activities, namely online. One of the advantages of using sources The internet for connecting with customers is the fast delivery of data and information between the people involved (Kozinets et al., 2010).

Six dimensions of information system success according to DeLone and McLean (2004). can also be applied to the e-commerce environment are as follows:

1. System Quality in the Internet environment, the characteristics of e-commerce systems can be measured according to usability, availability, reliability, adaptability, and response time (for example, download and data processing times)
2. Information quality in capturing e-commerce content issues. Content networking is a must personalized, complete, relevant, easy to understand, and safe if potential buyers or suppliers initiate transactions over the internet.
3. Quality of service. Overall support is delivered by the service provider, regardless from whether the support is delivered by the information systems department or unit new organization or perhaps outsourcing to an internet service provider.
4. Usage. Measured by visits to the website and navigation within the site for search for information and execution of transactions.
5. User Satisfaction. This is an important way to gauge customer opinion in an e-commerce system and must cover the entire customer experience within the cycle of purchasing, paying, until receiving products and services.
6. Benefits. This is also important, as it is important to capture a balance of positive impacts and negative consequences of e-commerce on customers, suppliers, employees, organizations, markets, industries, economy, and even society as a whole.

E-Commerce Perspective

E-commerce (electronic commerce) is a term used by companies to sell and buy things products online. E-commerce is defined from several perspectives (Kalakota and Whinston (1997) is based on communication, business processes, services and online. The definition of e-commerce is based on several perspectives:

1. Communication Perspective, according to this perspective, e-commerce is the delivery of information, products/services, and payment through the line telephone, computer network or facilities other electronics.
2. Business Process Perspective: According to this perspective, e-commerce is an application of technology towards automating transactions and company work flow.
3. Service perspective, according to This perspective e-commerce represents one tools that meet the desires of companies, consumers, and management within Cutting service costs while improving product quality and accuracy service.
4. Online Perspective (Online), According to This perspective of e-commerce is related to the capacity of buying and selling products and information on the internet and online services other.

Scope Of E-Commerce

If we look at the scope, then ecommerce is part of Electronic Business as described below:

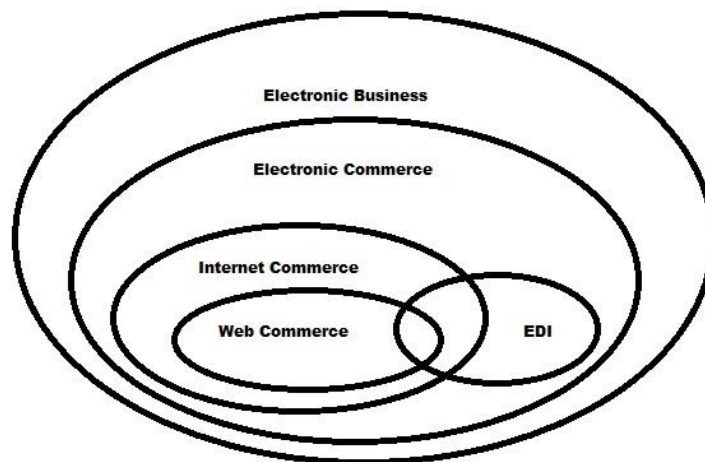


Figure 1. Scope Of E-Commerce, (Sugeng, 2018)

With the picture above, electronic Business is the scope of trade electronically, which includes:

1. Trading via the internet (internet commerce)
2. Trading with internet web facilities (Web-commerce)
3. Trading with an exchange system
4. electronically structured data (Electronic Data Interchange/EDI).

E-commerce classification

Laudon and Traver (2017: 22-27) classify e-commerce into six types of models, namely:

1. Business-to-Consumer (B2C) ecommerce can be defined as types of electronic commerce in where there is a company (business) that does direct sale of goods to buyers (consumer). Company example world class who have implemented B2C is Amazon.com, Ecommerce whose sellers are companies and buyers is an individual online shop mechanism (electronic shopping mall), i.e. transactions between e-merchants with ecustomers and their nature open to the public, so every individual can access it via a web servers.
2. Business to Business (B2B) is online business communication system between business people. Ecommerce the seller and the buyer are organization/company on Generally transactions are carried out by existing trading partners familiar with the data format which has been mutually agreed upon
3. Consumer-to-Consumer(C2C): Ecommerce where a sell products or services to people another, is a system communications and business transactions between consumers to fulfill specific needs at the time certain. Examples have been implementing C2C is <http://www.bidhere.com/>, <http://www.ebay.com/> , <http://www.munyie.com/>.
4. Mobile Commerce: Mobile Commerce makes it possible use of E Commerce without cable, such as accessing the internet via cellphone, PDA, etc. Basically, this is M-Commerce is a combination of ecommerce and mobile computing. Therefore, it could be said that M-Commerce is ECommerce within wireless environment. Example: mobile banking service.
5. Social e-commerce, is e-commerce that uses social networks and social media. Examples include Facebook, instagram, youtube etc. Social ecommerce is often

connected with mobile e-commerce because more and more users social network access the network via a mobile device. Social e-commerce process involves the use of applications mobile message processing such as Facebook Messenger, WhatsApp, BBM, etc. as media interaction between sellers and consumer

6. Local e-commerce, namely a focused form of e-commerce to engage consumers based on current geographic location This. Local traders use various online marketing techniques to encourage consumers to their shop. Local e-commerce is a combination of mcommerce, social e-commerce, and local ecommerce driven by many interests to local on demand services such as Uber, and GOJEK.

RESEARCH METHODS

In this study using a software engineering approach using Waterfall as the system development method. The Waterfall system development method is a method that takes specific basic process activities, development, validation, and evolution. In this method must plan and schedule all process activities before starting work (Sommerville, 2011). The stages of the Waterfall development method can be seen in figure 2:

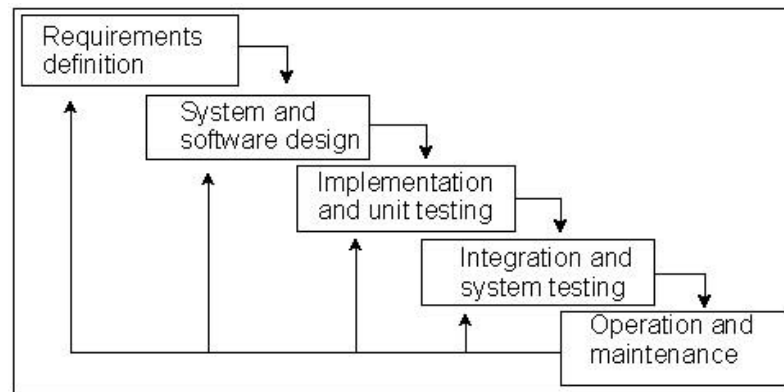


Figure 2. Waterfall System Development Method (Sommerville, 2011)

In this study using software engineering methods with the Waterfall development method, the following stages of the research procedure were carried out: Requirements definition, in this stage data collection was carried out by making observations, interviews at Asriloka Wonosalam so that data and sales information needed to analyze the system were obtained. In addition, a literature study related to the research carried out was carried out. System and Software Design, this stage is carried out system design which is modeled with context diagrams, Data Flow Diagrams (DFD), Entity Relationship Diagrams (ERD), table relationships, and interface design as a user interface design of the system built. Implementation and Unit Testing, this stage is carried out making coding or programming with PHP and MySQL programming languages as database management and system testing is carried out with black box testing. Integration and System Testing, at this stage, each program unit is carried out.

The software development is carried out using the waterfall method with work steps according to the following figure:

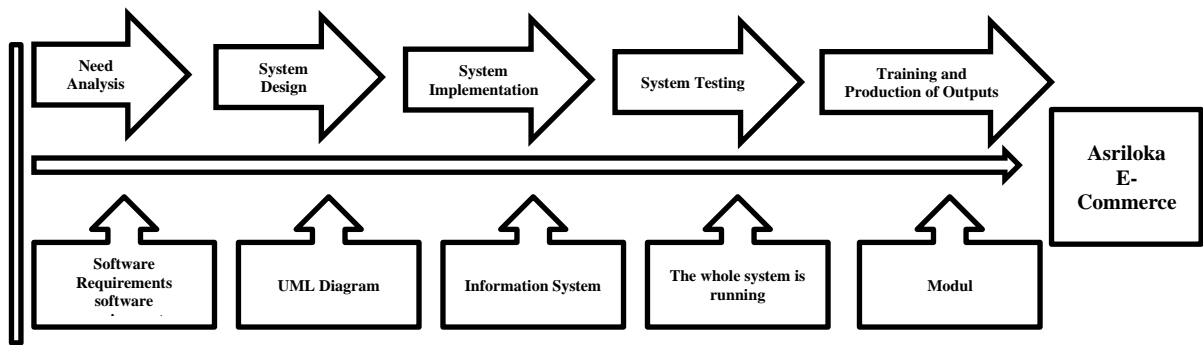


Figure 3. Asriloka Wonosalam E - Commerce System Work Flow

1. Needs Analysis, the first stage carried out in system development is to carry out a needs analysis according to the needs of partner users and surrounding MSMEs. Needs analysis is carried out through FGDs either online or offline. The result of this stage is a system requirements document which is the basis for the development of similar applications that have been previously developed by the proposing team.
2. System Design: The entire information system is built based on a website using an object oriented programming approach and a NoSQL database which has advantages in terms of speed of performance and good ability to handle large amounts of data. To produce a good system, before implementing the system in software, a system design process is carried out which will produce a UML diagram as a guide in creating program code.
3. System Implementation, The design results will then be implemented in program code by a team of programmers. At the end of the activity a Marketplace application will be produced.
4. System Testing, To ensure that all systems built are running according to user requirements, system testing scenarios are created and system testing uses the black box method.
5. Training and Production of Outputs, system users, in this case partners, must be able to operate all information systems that have been created. Therefore, several system use training and digital marketing training will be carried out.

RESULTS AND DISCUSSION

In an effort to expand the market share of Asriloka and surrounding business actors / MSMEs, an e-commerce system was developed. In Asriloka Wonosalam e-commerce, products from the creations of business actors / MSMEs and products produced by Asriloka Wonosalam will be displayed. The Marketplace system includes sales processes, payments and sales data reports. The payment transaction system by customers is carried out by interbank transfer method by sending proof of transfer through the application or Cash On Delivery (COD). The stages of e-commerce Asriloka Wonosalam can be seen in figure 4:

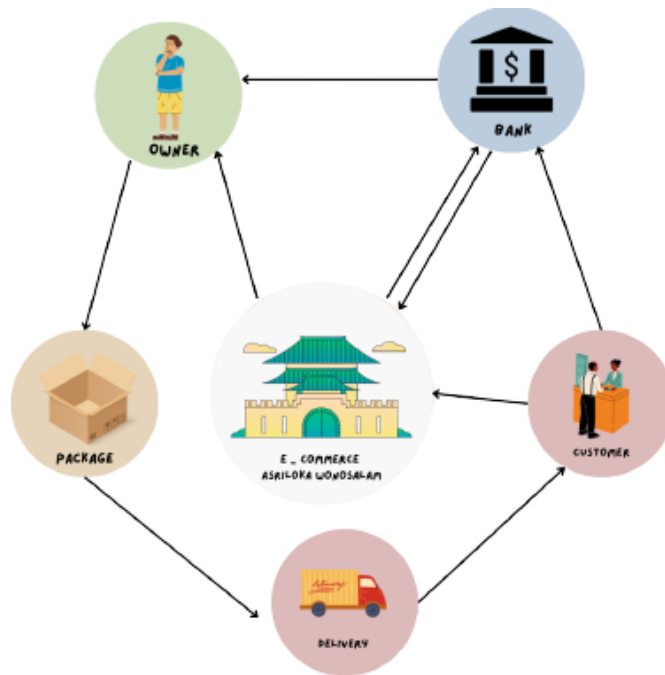


Figure 4. Asriloka Wonosalam Marketplace Flow

System Implementation

The home page is the initial page for customers to visit the Asriloka Wonosalam E-Commerce website. On this page visitors can see the available products. The home page is shown in Figure 5

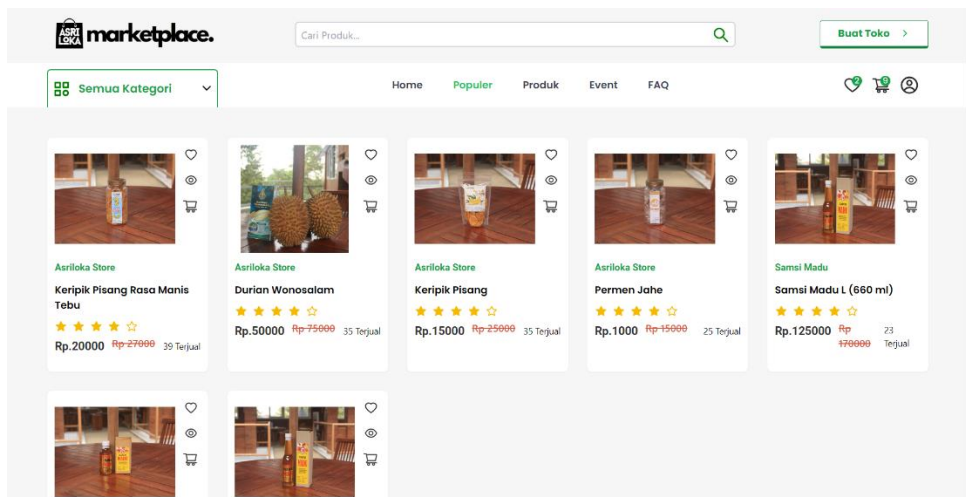


Figure 5 . Asriloka E - Commerce home page

The shopping cart page is used by customers for order transactions. On this page you will see product details ranging from product types to complete photos of products. The shopping cart page is shown in Figure 6.

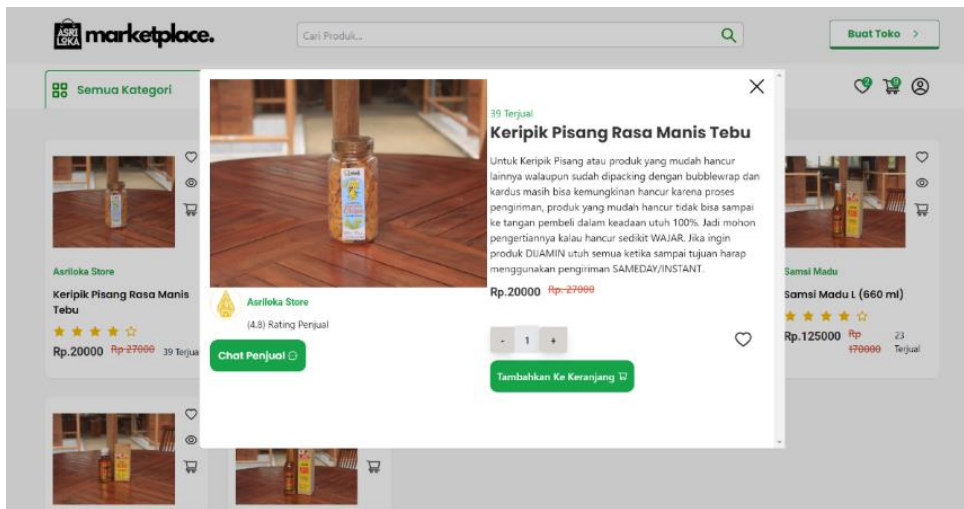


Figure 6. Asriloka E - Commerce Shopping Cart Page

The order page contains the product information that the customer has ordered on the shopping cart menu. On the order page there is information about the product ordered and there is a pay button to upload proof of payment and a receive item button to confirm that the item has been received. The Order Page is shown in Figure 7

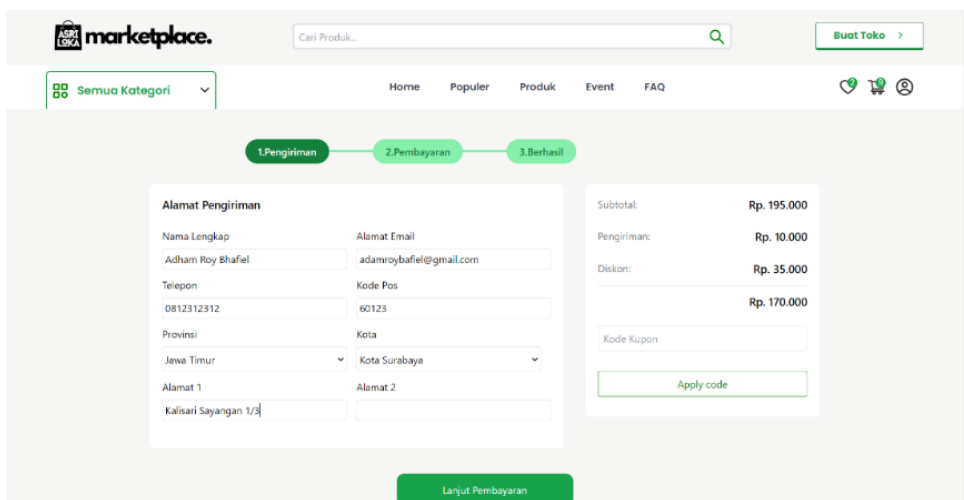


Figure 7. Asriloka E - Commerce Booking page

CONCLUSION

Based on the research that has been done, it can be concluded that E-Commerce has been successfully built on Asriloka Wonosalam. The system that is built can be accessed by more than one user, namely managers, owners and customers. With the system built, it makes it easier to improve sales services, expand marketing, simplify the transaction process, facilitate storage and make it easier to get information. The system built is able to manage product data in realtime, manage sales transaction data and the reports needed include product reports, order reports and sales reports.

REFERENCES

- Aberg, J. dan Shahmehri, N. (2000). *The Role of Human Web Assistants in E-Commerce: an Analysis and a Usability Study*, *Internet Research: Electronic Networking Applications and Policy*, 10 (2): 114-125.
- Anggraini, Devi. (2018). “Penerapan E-Commerce untuk Meningkatkan Penjualan pada UMKM”. IAIN Kudus
- Delone, W. H., dan Mclean, E. R. (2004). Measuring e-commerce success: Applying the DeLone dan McLean information systems success model. *International Journal of Electronic Commerce*, 9(1), 31-47.
- Hildamizanthi. (2011). <http://blogs.unpad.ac.id/hildamizanthi/2011/05/05/penerapan-e-commercemakalah/>
- Hoffman, D. L., dan Fodor, M. (2010). *Can you measure the ROI of your social media marketing?*. MIT Sloan Management Review, 52(1), 41-49.
- Kalakota, R and Whinston, A.B. (1997). *Electronic Commerce: A Manager's Guide*. New Jersey: Addison-Wesley Professional.
- Kozinets, R. V., De Valck, K., Wojnicki, A. C., dan Wilner, S. J. (2010). Networked narratives: Understanding word-of-mouth marketing in online communities. *Journal of marketing*, 74(2), 71-89.
- Laudon, K., dan Laudon, J. (2009). *Management Information Systems: International Edition*, 11/E. Pearson Higher Education, 2009.
- Rahmati. (2009). Pemanfaatan E-commerce Dalam Bisnis Di Indonesia <http://citozcome.blogspot.com/2009/05/pemanfaatan-ecommerce-dalam-bisnis-di.html>.
- Safira, Rizqi Cindy Farah dkk. (2017). “Analisis Kualitas Layanan Website Bukalapak terhadap Kepuasan Pelanggan Menggunakan ES-QUAL.” *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer* 1, no.12
- Siregar, Riki R. (2010). *Strategi Meningkatkan Persaingan Bisnis Perusahaan dengan Penerapan E-commerce*. <http://blog.trisakti.ac.id/riki/2010/03/12/strategi-meningkatkan-persainganbisnis-perusahaan-dengan-penerapane-commerce/>.
- Sommerville, I. (2011). *Software Engineering ed. 9 th*. Boston: Pearson Education, Inc
- Sukmajati, Anina. (2009). *Penerapan Ecommerce untuk Meningkatkan Nilai Tambah (Added Value) bagi Perusahaan*. <http://aninasukmajati.wordpress.com>.
- Sugeng, S. (2018). E-Commerce Sebagai Pendukung Pemasaran. *JSI (Jurnal Sistem Informasi) Universitas Suryadarma*, 4(1), pp.143-156.