

Design and Build Online Store Website at Toko Mas Djanoko

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Abstract— Sources of information and media for communication are incredibly simple for us to obtain and use in the development of technology in the era of digital transformation as it is today. The internet is one example of how quickly information and communication technology has advanced. There is little doubt that this has a significant impact on many areas, including the business sector. Businesses can expand quickly in their ability to perform trading activities thanks to technology improvements. Even though technology has evolved and changed, many firms are still unable to keep up with new developments. Toko Mas Djanoko is one illustration. This jewelry store continues to sell its goods using traditional strategies. Toko Mas Djanoko is undoubtedly not benefiting from this too much. By developing a store website that is connected to the marketplace, this study aims to offer Toko Mas Djanoko a solution for marketing and introducing their items. It is intended that this website would make Toko Mas Djanoko more successful at selling their goods. adopting the System Development Life Cycle (SDLC) approach to system development. The study's findings show that Toko Mas Djanoko's items may be successfully and widely marketed thanks to the website system that was developed.

Keywords— digital transformation, e-commerce, Information and Communication Technology, website system, business

I. INTRODUCTION

Consumer behavior is an action taken by customers to satisfy their desired needs. Two things influence customers when they engage

in this activity. Need factors and want factors are elements that affect consumer behavior.

Humans depend on and value the need factor in order to maintain and improve their quality of life (primary). The desire factor, in contrast to the need factor, is a less significant and less crucial aspect that is brought on by the need factor (secondary). The desire factor influences customer behavior and makes them prefer to engage in the activity of purchasing.

The decisions that consumers make when buying are influenced by a variety of factors. How the producers execute their marketing plan in order to promote these goods is one of the elements. There are obviously many identical products in product marketing operations, but the only thing that sets them apart are the brands. In this instance, Toko Mas in Tegal City has other jewelry stores in addition to Toko Mas Djanoko.

Therefore, an e-commerce information system will be created here using the rapidly evolving information and communication technology side, which will be applied to Toko Mas Djanoko in order to maximize the performance of marketing their products to consumers. This system is also anticipated to make it easier for customers to make decisions when transacting in the market for jewelry products.

E-commerce is a type of trade or business activity that involves making sales, purchases, and promotions while utilizing information and communication technology, with the goal of accelerating the dissemination of information to the general public and customers [2, 10].

This website system will be in the form of an information website system [3] that

disseminate continuous information to customers [4].

Website system [9] which will be addressed to Toko Mas Djanoko will use the PHP (Hypertext Preprocessor) programming language [5, 6], HTML dan Javascript [7] as well as using the codeigniter framework [8] so it's hoped that website system will be able to work responsively.

II. METHOD

Primary Data Source

Primary data sources were obtained from interviews and also direct observation with the manager of Toko Mas Djanoko Tegal.

Secondary Data Source

Secondary data sources were obtained from several trusted scientific journals regarding information systems/e-commerce websites and several references to related information system websites.

Data Gathering Methodologies

Interview Method

In order to obtain accurate information regarding the issues experienced by the parties involved, this method involves directly posing questions to the manager of Toko Mas Djanoko.

Literature Review

This approach involves doing direct research and gathering hypotheses from reputable books and journals that are pertinent to and can help this investigation.

Website Development Methodology

The website system that will be developed is a web-based, marketplace-connected e-commerce sales system website that is designed for Toko Mas Djanoko to be able to conduct transactions and disseminate information about their products online. It is anticipated that this system will assist and facilitate Toko Mas Djanoko's business operations.

The waterfall method will be used in the design of the e-commerce system. Because system developers frequently employ the waterfall method, it was decided to apply it. This approach is systematic because each

stage is carried out in turn; in other words, each stage must be finished before moving on to the next stage. By carrying out each stage in turn, it is anticipated that faults in accessing the system will prevent repeating stages.

Before starting the development of a website system, the first thing to do is to design a research flowchart about developing a website system. This flowchart is designed to give developers a mindset to build the website system. Here is the research flowchart:

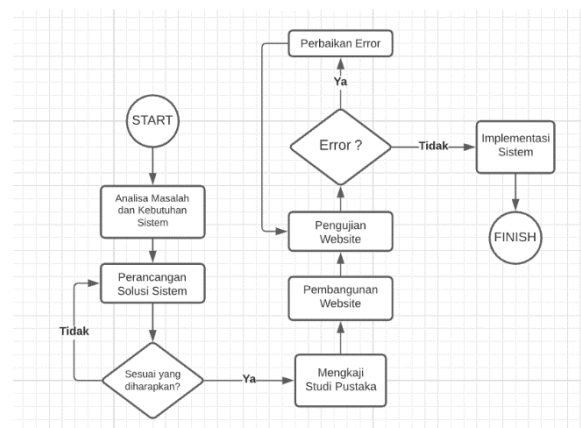


Figure 1 Flowchart Of Research

In the research flow chart, there are also stages of testing and implementing the program. This testing stage is very important to do in order to avoid errors found in the website system that will be created later. So, it is hoped that after implementing the system, the condition of the system runs well without any errors that hinder the running of the system

III. RESULT AND DISCUSSION

System Web Design

After logging in, a dashboard will be available on the Djanoko Online Store website. There will be two pages in the dashboard: an admin page and a customer page. When the dashboard has create, read, update, and delete (CRUD) features, the admin will be able to properly administer the website and its products from the admin page. Additionally, this website will eventually be linked to the sales website so that clients may conduct business easily and safely.

The website system will be built using the System Development Life Cycle (SDLC) method and using the Waterfall model.

System Website Development

The website system development will use the PHP programming language and is supported by the Codeigniter3 framework. The Codeigniter framework has a structure that implements MVC. By using CodeIgniter, the lines of code that will be built will be neater and structured because of the *model, view, control (MVC)* that exists in the CodeIgniter framework.

The user interface development will use the dashboard view. The user interface will be designed using html, css, and javascript. In order to better support the appearance of the website to make it more attractive and responsive, this website will use the bootstrap framework.

Database Structure

Using MySQL, the database structure was created. The database's structure includes data about users and Toko Mas Djanoko's products.

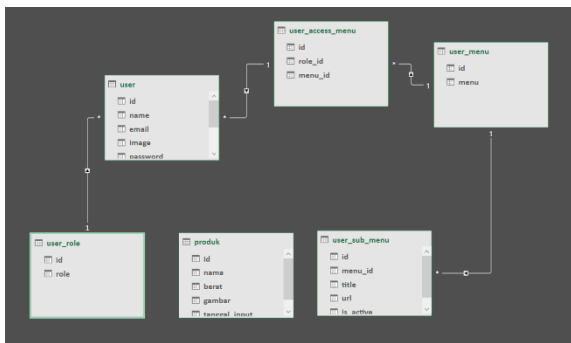


Figure 2 Entity Relationship Diagram

Website System Flowchart

In Figure 3 as below, is a flow diagram of the web system that will be made as a solution to the problems faced by the shop. This flowchart is a reference for developers as a basis for what is needed in building the Toko Mas Djanoko web system.

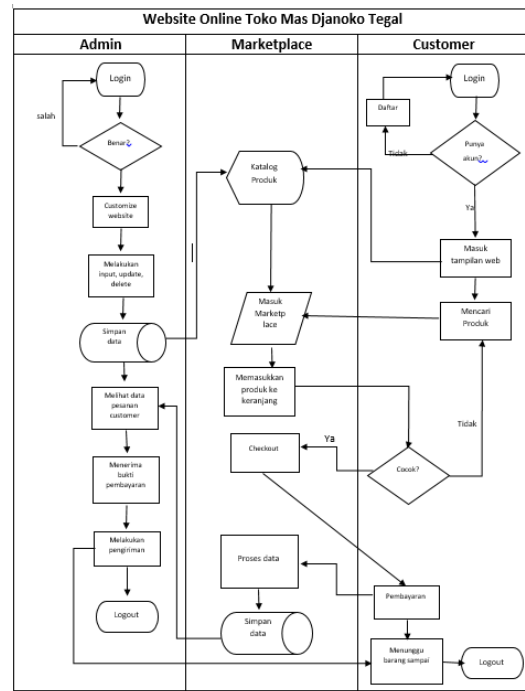


Figure 3 Flowchart Sistem

Website System User Interface

The system website that is intended for Toko Mas Djanoko is an information system website that provides convenience in delivering information about products and matters relating to Toko Mas Djanoko, of course in the jewelry sector to customers.

Figure 4 depicts a card that lists the name of the jewelry item produced by Toko Mas Djanoko as well as information in the form of product photographs. Regarding the link that opens the marketplace page.

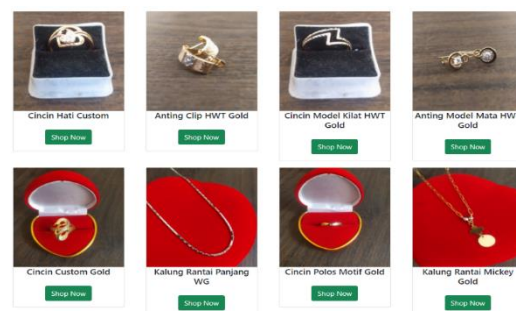


Figure 4 Card Product

Figure 5 is a display of the Toko Mas Djanoko admin dashboard page. The admin dashboard display has a sidebar menu that functions to control the web system.

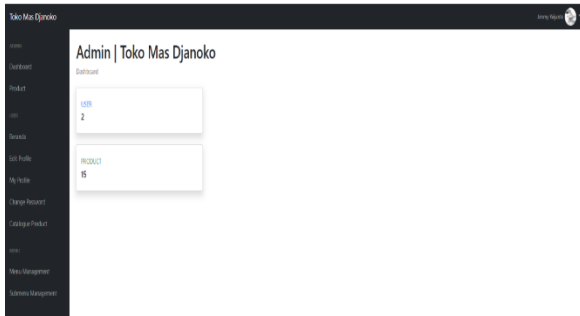


Figure 5 Admin Dashboard

Figure 6 is an admin product dashboard display that is used to control store jewelry products on the web system. The admin can add, change and delete products.

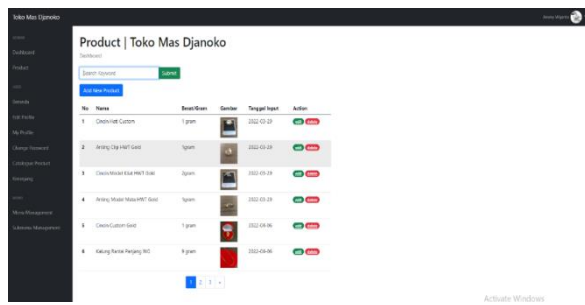


Figure 6 Admin Product Dashboard View

Figure 7 is a management menu dashboard display. this page contains information about management menu controls. The management menu helps and makes it easier for admins to manage the menus on the Toko Mas Djanoko dashboard. In the management menu, store admins can add menus, change menus, or delete menus.

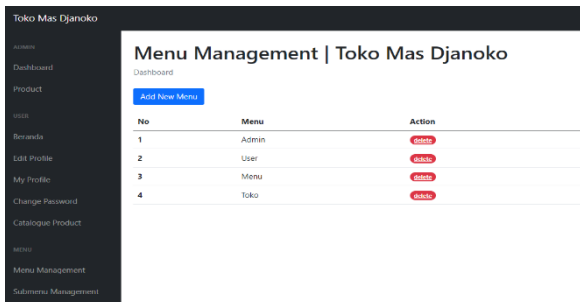


Figure 7 Dashboard Menu Manajemen

Figure 8 is a submenu page display that contains information about the sub menu on the sidebar and serves to adjust the appearance of the submenu on the admin dashboard.

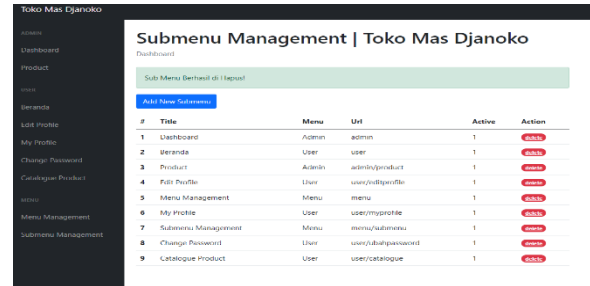


Figure 8 Submenu Admin Dashboard View

Website Testing

The results of testing the web system using the blackbox approach on the features owned by the store website are displayed in the list from table 1 below. Software testing is done using the "blackbox" method, which is based on the software's functionality. This test examines the input and output data from the software under examination.

This test results that the features on the djanoko web system are running well and will continue to be monitored if there is a problem with the web system.

Table 1 Pengujian Web Sistem

Pengujian			
Feature	Testing Scenario	Result	
1	Home Page	Display The Home Page of The Website	Works correctly
2	Login / Register	Login Action	Works correctly
		Registration Action	Works correctly
3	Password	Change Password	Works correctly
4	Contact	Connect to Social Media	Works correctly
5	Product	Add New Product	Works correctly

Pengujian			
Feature		Testing Scenario	Result
		Delete Product	Works correctly
6	Market Place	Connect to Market Place	Works correctly
7	Menu	Add New Menu	Works correctly
		Delete Menu	Works correctly
8	Sub Menu	Add New Sub Menu	Works correctly
		Delete Sub Menu	Works correctly

IV. CONCLUSION

By utilizing technological advances and digital transformation, it can be concluded several things related to the web system built for Toko Mas Djanoko.

Associated with the construction of this website, Toko Mas Djanoko is able to direct the use of technology in a more useful and productive direction.

In addition, this website system provides convenience in promoting products to customers effectively and efficiently.

This certainly has a positive impact on Toko Mas Djanoko in carrying out business activities.

REFERENCES

- [1] P. Scroll, "Perilaku Konsumen : Teori dan Penerapannya dalam Pemasaran," pp. 1–3, 2011.
- [2] P. Cofta, "Convergence and trust in eCommerce," *BT Technol. J.*, vol. 24, no. 2, pp. 214–218, 2006, doi: 10.1007/s10550-006-0063-4.
- [3] R. M. Alzedan, "Sistem Informasi Management," 2019, doi: 10.31219/osf.io/tdh8v
- [4] S. E. Ullah, T. Alauddin, and H. U. Zaman, "Developing an E- Commerce Website," 2016.
- [5] R. S. Tiara Dewi, Muhammad Amir Masruhim, *Pro PHP Programming*, no. April. 2016.
- [6] G. Pomaska, "PHP Hypertext Preprocessor," *Webseiten-Programmierung*, pp. 175–250, 2012, doi: 10.1007/978-3-8348-2485-1_6
- [7] *An Introduction to HTML and Javascript.*
- [8] T. Phuong, *Code Igniter for Rapid PHP Application Development.*
- [9] J. E. M. van Nierop, P. S. H. Leeftang, M. L. Teerling, and K. R. E. Huizingh, "The impact of the introduction and use of an informational website on offline customer buying behavior," *Int. J. Res. Mark.*, vol. 28, no. 2, pp. 155–165, 2011, doi: 10.1016/j.ijresmar.2011.02.002.
- [10] A. Molla and P. S. Licker, "ECommerce adoption in developing countries: A model and instrument," *Inf. Manag.*, vol. 42, no. 6, pp. 877–899, 2005, doi: 10.1016/j.im.2004.09.002.
- [11] E. Portals, "Dashboards' Role in a business Intelligence Solution," *Bus. Dashboards*, pp. 7–10, 2015, doi: 10.1002/9781119197904.ch2
- [12] S. S. Gaikwad and P. Adkar, "A Review Paper on Bootstrap Framework," *IRE Journals*, vol. 2, no. 10, pp. 349–351, 2019
- [13] F. Fauziyah, "Tantangan UMKM dalam Menghadapi Revolusi Industri 4.0 Ditinjau dari Aspek Marketing dan Accounting," *JMK (Jurnal Manaj. dan Kewirausahaan)*, vol. 5, no. 2, p. 155, 2020, doi: 10.32503/jmk.v5i2.1008
- [14] P. J. Driscoll and P. Kucik, "System Life Cycle," *Decis. Mak. Syst. Eng. Manag. Second Ed.*, pp. 65–93, 2010, doi: 10.1002/9780470926963.ch3
- A. Adel and B. Abdullah, "A Comparison Between Three SDLC Models Waterfall Model, Spiral Model, and Incremental/Iterative Model," *IJCSI Int. J. Comput. Sci. Issues*, vol. 12, no. 1, pp. 106–111, 2015.