

## **ABSTRACT**

### **WEB BASED INFORMATION SYSTEM TECHNOLOGY IMPLEMENTATION IN DATA MANAGEMENT WITH CASE STUDY AT METROPOLITAN CAR RIMS WORKSHOP**

By

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*The spread of digitalization to various sectors, along with the rapid development of technology, is a sign that the Industrial-4.0 era has started. Digitalization brings easiness to humans, whether individuals, organizations or companies, especially in the trade sector which is the theme of this research. This research is about the development of web-based Metropolitan car rims workshop information system software. The use of technology in the form of a web-based information system was chosen as a form of digitalization in the Metropolitan car rims workshop which are still manual in data management. With this technology, data has been digitized and stored in databases, so that data management can be better with the help of computerization. Accessing data is also made easier without limitations on certain platform because it implements web-based technology. The prototype method was chosen as a guidelines in the development process of information system software, to be able to produce a web-based information system in this research that is customized according to user needs, as a solution to the research problems. The development process begins with the communication stage, then quick plan using Balsamiq-Wireframes software, then quick design with Draw.io, and then the construction stage with CodeIgniter framework technology based on the PHP programming language along with Visual-Studio-Code software, Web Browser, and the XAMPP-Control-Panel web-development-environmental packages with phpMyAdmin database-management-system and MySQL-based MariaDB database inside it. In the final stage, system functionality testing is carried out using the blackbox method to ensure that all functionality of the system has been built is running normally. The test result are in the form of a percentage success rate of system functionality which is scored 100%, showing that all the functionality of the system has been built is functioning well, so it can be concluded that the information system has been built has answered the user's needs to replace the previous system which was still manual in managing its various data into a digitalized data form.*

**Keywords: Information System, Web, Data, Technology, Digitalization**