

ABSTRACT

The rapid advancement of digital technology demands Micro, Small, and Medium Enterprises (MSMEs) to adapt and leverage information technology to enhance business competitiveness. iGamerWorld Surabaya, a retail store specializing in computer hardware sales and custom PC assembly services, is currently facing several challenges within its existing sales system. The ordering process for custom PC assembly is still conducted manually through messaging applications such as WhatsApp, and there is no integrated system in place to support transactions and personalization services. Furthermore, the previous website has been repurposed into a company profile and no longer facilitates sales, thereby limiting operational efficiency and market reach. This study aims to design and develop a website-based e-commerce system specifically tailored to support the sales of computer components and custom PC assembly services. The system was developed using the Extreme Programming (XP) method, chosen for its flexibility in meeting user needs and its support for rapid and structured development. The technologies implemented include Laravel for the backend and React.js for the frontend, with system modeling based on the Unified Modeling Language (UML). To ensure the system functions as intended, testing was conducted using Black Box, White Box, and User Acceptance Testing methods, focusing on evaluating functionality, program logic, and user acceptance without directly examining the internal code structure. The result of this research is a website-based e-commerce system that enhances operational efficiency, simplifies transaction processes, and provides an improved shopping experience for customers. With an integrated system, iGamerWorld Surabaya is expected to strengthen its presence in the digital market and more effectively meet consumer needs.

Keywords— *E-Commerce, MSMEs, Extreme Programming, iGamerWorld, Website, Laravel, React.js, Custom PC.*