

ABSTRACT

CV. Handi Group is a company specializing in the provision of ship valves and ship service solutions. In supporting its sales operations, which are currently based on traditional methods, the company faces several key challenges. The first challenge is the reliance on conventional sales methods, which hinder efficiency and market reach. The second challenge is the difficulty in managing and storing order data for valves from various business partners, leading to potential errors and inaccuracies in data management. Additionally, the owner still places orders via WhatsApp, resulting in missing order reports and frequent data management errors. Therefore, this study aims to design and implement a sales website to modernize the sales process and data management for CV. Handi Group. The study adopts the Extreme Programming (XP) method, consisting of four main stages: planning, design, coding, and testing. Initially, interviews were conducted with CV. Handi Group to identify problems in valve sales and report management. Based on these findings, opportunities were identified to develop a web-based application to support online sales and efficient report storage for CV. Handi Group. Following the interviews, the researcher created user stories to outline the desired features, allowing for easier feature identification without further interviews. In the design phase, the information system was planned using an object-oriented approach, including the creation of Use Case Diagrams, Use Case Scenarios, Activity Diagrams, Sequence Diagrams, Robustness Diagrams, Entity Relational Database, and Class Diagrams to identify system functions. The coding phase involved implementing the models into a user interface using PHP, with the website being designed for various devices, utilizing PHP, CSS, and JS programming languages, and the Laravel and Bootstrap frameworks. The testing phase involved validating the application to ensure it met the design specifications, with testing conducted using Black Box Testing and the boundary value technique, focusing on identifying errors from both internal and external aspects of the software. The study resulted in three iterations in the development of the website using the Extreme Programming method. From these iterations, a sales website was successfully developed with two user types: Customer and Admin. The website features tools that facilitate customers in purchasing valves

and ordering service solutions securely and conveniently. Additionally, the system includes an Admin user, who aids CV. Handi Group in efficiently managing transactions and service orders. The Admin can also add new products and upcoming port locations and can always check stock levels without manually inspecting each item. The development of this website provides a more effective solution compared to previous traditional methods. The final outcome of this study is a website that successfully addresses the existing challenges and significantly supports the growth of CV. Handi Group's business.

Keywords— Website Valve Metode Extreme Programming, Valve, Extreme Programming, Conventional Sales, Sales Website.