ABSTRACT

DESIGN AND DEVELOPMENT OF A WEB-BASED INDUSTRIAL LIGHT SALES APPLICATION USING THE WATERFAL METHOD (Case Study: PT CAKRA ELECTRIC)

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This research focuses on the design and development of a web-based industrial lighting sales application for PT Cakra Electric using the Waterfall method in the Software Development Life Cycle (SDLC). The research began with an in-depth analysis of the company's needs, which included the application's ability to display products and stock, carry out online transactions, manage products and stock, as well as manage orders and create sales reports. Based on this needs analysis, the system was designed using Unified Modeling Language (UML) with various diagrams such as Use Case, Activity, Sequence, and Class Diagram. This design process was accompanied by the development of a user-friendly user interface and application implementation which was tested using Black Box Testing to ensure the quality and performance of the application. The test results show that the application operates efficiently and optimally, in accordance with the initial objectives of facilitating PT Cakra Electric customers in making purchases easily, managing stock effectively, and producing accurate sales reports. Thus, this application is expected to significantly increase the company's operational efficiency and support strategies to remain competitive in an increasingly tight market by adopting appropriate and innovative technology.

Keyword: Aplication, Sales, Industrial Light, Waterfall Method