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## DESIGN AND DEVELOPMENT OF MANUFACTURING INFORMATION SYSTEM IN PALLETIZING PROCESS USING PROTOTYPING METHOD (STUDY CASE: XYZ COMPANY)

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## **ABSTRACT**

Work efficiency and effectivity are important matters in production process of manufacturing industry. Hence, manufacturing company adopt manufacturing information system to enhance both. Basic process in manufacturing industry are raw material purchase, production, packaging, up to selling. In packaging process, most Indonesia's manufacturing company often use pallet for final packing process. To manage a big company, it requires manufacturing information system which can support manufacturing process in order to give the top management full focus on expansion and evaluation. Technology growth accelerate information system development for manufacturing industry. Starting from basic elements such as communicating through e-mails, worker's attendance, constructing marketing strategy using data mining, up to big data utilization in analyzing weather statistic before raw material delivery carried out. The technology development has been significantly affecting industry growth. In addition, evolution of programming language also smooth the way for manufacture information system design and development. From various web programming language, for instance JavaScript, Java, Swift, including Ruby, one of them that is frequently used is PHP (Hypertext Preprocessor). There's a great number of user and documentation in regard to this programming language assist users progress in information system development. More often than not in designing or development of an information system, prototyping method are used. Where the method goes from analyzing requirement, quick design, building prototype, ends with evaluation and improvement. Therefore, to enhance work efficiency and effectivity in manufacturing industry predominantly in palletizing process, Author design and develop a PHP web based information system using prototyping method.

**Keywords:** system, manufacturing, palletizing