

## Development of Web Application for Warehouse Management System: A Case Study of Ceramics Factory

**Authors :** Thanaphat Suwanaklang, Supaporn Suwannarongsri

**Abstract :** Presently, there are many industries in Thailand producing various products for both domestic distribution and export to foreign countries. Warehouse is one of the most important areas of business needing to store their products. Such businesses need to have a suitable warehouse management system for reducing the storage time and using the space as much as possible. This paper proposes the development of a web application for a warehouse management system. One of the ceramics factories in Thailand is conducted as a case study. By applying the ABC analysis, fixed location, commodity system, ECRS, and 7-waste theories and principles, the web application for the warehouse management system of the selected ceramics factory is developed to design the optimal storage area for groups of products and design the optimal routes of forklifts. From experimental results, it was found that the warehouse management system developed via the web application can reduce the travel distance of forklifts and the time of searching for storage area by 100% once compared with the conventional method. In addition, the entire storage area can be on-line and real-time monitored.

**Keywords :** warehouse management system, warehouse design method, logistics system, web application

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