## KPI and Tool for the Evaluation of Competency in Warehouse Management for Furniture Business

**Authors:** Kritchakhris Na-Wattanaprasert

Abstract: The objective of this research is to design and develop a prototype of a key performance indicator system this is suitable for warehouse management in a case study and use requirement. In this study, we design a prototype of key performance indicator system (KPI) for warehouse case study of furniture business by methodology in step of identify scope of the research and study related papers, gather necessary data and users requirement, develop key performance indicator base on balance scorecard, design pro and database for key performance indicator, coding the program and set relationship of database and finally testing and debugging each module. This study use Balance Scorecard (BSC) for selecting and grouping key performance indicator. The system developed by using Microsoft SQL Server 2010 is used to create the system database. In regard to visual-programming language, Microsoft Visual C# 2010 is chosen as the graphic user interface development tool. This system consists of six main menus: menu login, menu main data, menu financial perspective, menu customer perspective, menu internal, and menu learning and growth perspective. Each menu consists of key performance indicator form. Each form contains a data import section, a data input section, a data searches - edit section, and a report section. The system generates outputs in 5 main reports, the KPI detail reports, KPI summary report, KPI graph report, benchmarking summary report and benchmarking graph report. The user will select the condition of the report and period time. As the system has been developed and tested, discovers that it is one of the ways to judging the extent to warehouse objectives had been achieved. Moreover, it encourages the warehouse functional proceed with more efficiency. In order to be useful propose for other industries, can adjust this system appropriately. To increase the usefulness of the key performance indicator system, the recommendations for further development are as follows: -The warehouse should review the target value and set the better suitable target periodically under the situation fluctuated in the future. -The warehouse should review the key performance indicators and set the better suitable key performance indicators periodically under the situation fluctuated in the future for increasing competitiveness and take advantage of new opportunities.

**Keywords:** key performance indicator, warehouse management, warehouse operation, logistics management **Conference Title:** ICMSE 2015: International Conference on Manufacturing Science and Engineering

**Conference Location :** Berlin, Germany **Conference Dates :** September 14-15, 2015