

Suphattra Ketsarapong 2011: Developing an Approach to Validate Performance Indicators: Case Application for University Classification and National Research University (NRU) Initiatives. Doctor of Engineering (Industrial Engineering), Major Field: Industrial Engineering, Department of Industrial Engineering. Thesis Advisor: Associate Professor Kongkiti Phusavat, Ph.D. 393 pages.

The study focuses on applying the methodology of performance measurement to identify key performance indicators to be used to select Research Universities (RUs). RUs are expected to play an important role in graduating well-educated workers who are essential for the country's innovation and its long-term global competitiveness. By extending the current performance-measurement methodology, this research shows that the Thailand Higher Education Classification Model (THEC Model) can be developed and is applicable for possible future use.

The THEC Model consists of: (1) research funding; (2) medical programmes; (3) level of instructional programmes; (4) instructors and research staff body and (5) student body. These criteria have significantly statistically influenced research performance in three dimensions; (1) research output (2) citations, and (3) research awards. The findings are generally consistent with the classification by the Office of the Higher Education Commission's (OHEC) 2009 announcement and provide benefits to policymakers, university administrators, educators, and industrial engineers interested in performance measurement.

The research highlights the development of a validated performance indicator process as an extension to the current performance-measurement methodology in order to ensure the validity and credibility of key performance indicators to be utilized by manufacturing and service firms. This approach in validating these indicators represents the theoretical contribution of this research.

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Thesis Advisor's signature