Independent Study Title Information Technology Standard Selection

Approach by Analytic Hierarchy Process (AHP).

Case Study: A Printing Company.

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Abstract

A key objective of this research, Information Technology Standard Selection Approach by Analytic Hierarchy Process (AHP), is to select a proper information technology (IT) standard for a selected printing company in order to increase effectiveness and efficiency of IT operation. The current IT operation problems in the organizations are the lack of 1) process and system for internal cooperation 2) issue resolution process and 3) the increasing of system requirement from users worsen the service level delivery, not meet the user satisfaction target.

A study for selecting a standard system for a sustainable solution is developed in order to increase the effectiveness of operation and service. There are two standard systems chosen in the study, IT Infrastructure Library (ITIL) and ISO 20000, with many criteria for the selection. Therefore, Analytical Hierarchy Process (AHP) as a tool for Multi-Criteria Analysis (MCDA) is used for IT standard selection for the organization.

In this work, in-depth interviews are developed with 11 interviewees whose work related with IT within the organization. By using information from interviews the major criteria of choosing standards of IT management are identified. The related parties will consider the following criteria; the effectiveness of information technology, the

providing service of information technology, the security of information, risk management, knowledge management and so on.

From the result and evaluation of the study by using Expert Choice 11.5 program for comparing the IT standard, finally, ITIL with the highest average score 0.507 is the appropriate standard of information technology management for the organization.