

THESIS TITLE	IT GOVERNANCE MATURITY MODEL AND PERFORMANCE ASSESSMENT SYSTEM BASED ON THE SUFFICIENCY ECONOMY PHILOSOPHY IN THAI HIGHER EDUCATION INSTITUTIONS
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ABSTRACT

The purposes of this research are: 1. to explore the overall aspects of IT governance in Thai higher education institutes, 2. to develop the conceptual framework and indicators for IT governance based on the sufficiency economy philosophy in Thai higher education institutions, 3. to develop the IT governance maturity model on the basis of sufficiency economy philosophy, and 4. to develop the performance assessment system based on the sufficiency economy philosophy in Thai higher education institutions. This research is divided into 2 main parts. The first part is the qualitative research. In this part, the researcher has conducted an interview with experts and luminaries who are senior IT executives from 20 Ministries and 20 IT executives of higher education institutions. Then, the appropriateness and consistency of indicators is confirmed by conducting the interview with 12 experts, divided into 6 members of IT expert and 6 members of expert in sufficiency economy philosophy. The second part is quantitative research and is intended to develop information system evaluation. Data are collected randomly by using

the population as administrator and faculty in higher education institutions in Thailand. The collected data from 500 participants has been performed by exploratory factor analysis and confirmatory factor analysis in order to find the appropriate model for measuring the performance of IT governance based on the philosophy of sufficiency economy.

The results reveal that for the situation of the IT governing and managing in the institution of education in Thailand, the executives strongly agree that IT governance should apply as a framework in the institution of education. For the obstacles found that the executives are lacking of the clear knowledge and understanding about the IT governance, and they also have the limitation of budget for supporting IT governance. Furthermore, the results also show that the conceptual framework of IT governance based on the sufficiency economy philosophy in Thai higher educations consists of 7 components: 1. IT/business strategy alignment and value creation from IT resources, 2. IT project investments, 3. IT budget management, 4. IT human resource management, 5. Green IT, 6. Quality assurance in IT department, and 7. IT for university social responsibility.

However, the researcher has discovered 7 key components from a total of 39 indicators. By performing confirmatory factor analysis, the statistical indicators can be identified as follows: 1. Normed Fit Index (NFI) at 0.95, 2. Comparative Fit Index (CFI) at 0.98, 3. Goodness of Fit Index (GFI) at 0.92, 4. Adjusted Goodness of Fit Index (AGFI) at 0.91, 5. Root Mean Square Error of Approximation (RMSEA) at 0.03, and 6. Chi-Square per Degree of Freedom at 1.32. All statistical indicators pass their acceptance criteria. It is considered that the developed model is consistent with data collected from the samples at a good level; appropriate theoretical measure can be found.

The researcher has adopted the measure as a maturity model for IT governance based on the philosophy of sufficiency economy. The IT governance maturity model is presented into two parts: 1. the generic characteristics of the five maturity levels, and 2. the indicators provided in each maturity level. The researcher also develop the performance assessment system for evaluating the level of IT governance based on the sufficiency economy philosophy in Thai higher education institutions in order to demonstrate the formal application for using the philosophy of sufficiency economy in actual practice.