

**INVESTIGATING THE STATE OF REQUIREMENTS
ELICITATION IN THAILAND**

By

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the degree of Master of Engineering**

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CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

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ABSTRACT

This research is aimed at investigating the state of requirements elicitation in Thailand in order to increase the understanding of the area of requirements elicitation in the country. This research is based on Thailand where the culture is different from Western countries. This relates to the previous research of Thanasankit (2002) that the hierarchical culture of Thai influences the decision making process and requirement elicitation. This hierarchical structure of Thai organization also contributes to a bureaucratic, elongated decision-making process during information systems development. Therefore, understanding the influence of power in Thai culture on requirement elicitation will assist multinational information systems consulting organizations to select, adopt, better manage, or change requirement elicitation process methodologies.

The research also identifies some of the problems encountered during the requirements elicitation process and elicitation techniques used in Thailand. Finally the results from this research are compared with best practice reported in literature review in order to provide useful suggestions and future research in this area.

To achieve the aim of the research, a questionnaire survey was employed. The researcher chose 30 construction firms and 30 software development firms in Thailand to provide the data for analysis. The firms were medium- and large-sized firms. The data from these firms were analysed with Statistical Software Packages for the Social Sciences (SPSS) version 12.

The results of the survey in this research showed:

- Software development firms were more likely to be involved with projects related to system and software development than construction firms, whose main work involved with supervising the building work.
- Construction firms seemed to have more problems or difficulties than software development firms while software development firms had better performance in requirement elicitation than did the construction firms.

- The most important source of requirements identified by both software development and construction firms was the same, namely customers or users' needs. The second important source of knowledge for both types of firms was also the same, namely domain information.
- The problem most often confronted with by both software development and construction firms was vague requirements.
- Requirement elicitation techniques information from both software development and construction firms implied that the current requirements elicitation techniques might not be appropriate. Engineers, managers and supervisors of the firms did not indicate awareness of whether the requirements elicitation techniques they used were dated or not.

The recommendations from this research are:

- Software development and construction firms in Thailand need to be more proactive and improve all stakeholders' requirement elicitation.
- Both types of firms should take the problem of vague requirements into consideration seriously when they carry out any system development. Requirement analysis techniques should be employed to facilitate this.
- It is suggested the efficiency and effectiveness of the techniques Engineers, managers and supervisors of the firms currently use for requirement elicitation be evaluated and analyzed for improvement in the RE process.