

**INSTITUTIONAL AND RESOURCE DEPENDENCE
DETERMINANTS OF ENVIRONMENTAL MANAGEMENT
SYSTEM ADOPTION IN THAI MANUFACTURING FIRMS**

By

Pornlert Arpanutud

**A Dissertation Submitted in Partial
Fulfillment of The Requirements for the Degree of
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School of Public Administration
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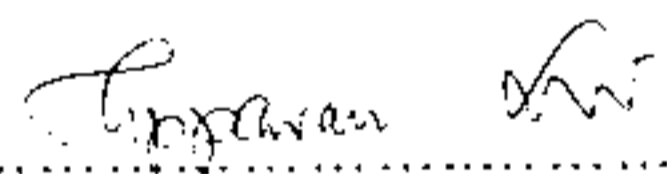
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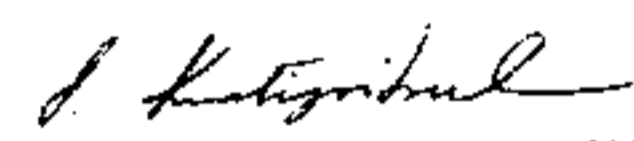
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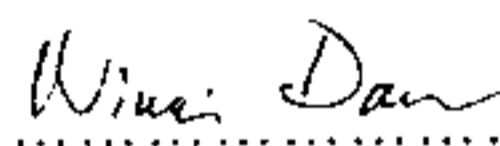
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ABSTRACT

Title of Dissertation : Institutional and Resource Dependence Determinants of Environmental Management System Adoption in Thai Manufacturing Firms

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The increase in environmental problems has generated an increasing pressure by the public. The pressure is directed mostly towards industry because it is considered to be the main source of pollution and environment problems. This study explores and identifies groups of manufacturing firms in terms of the extent of their environmental management practices and investigates factors influencing level of environmental management system (EMS) adoption of manufacturing firms in responding to the environmental pressures. Based on an integration of institutional theory and resource dependence theory and literature reviews on environmental management, a conceptual model was developed showing that motivational, contextual and organizational factors are the main factors influencing the level of environmental management system adoption in manufacturing firms. Eleven hypotheses were posited to test the model.

Of the 588 manufacturing firms that were mailed surveys, 239 (40.9%) returned completed questionnaires. Cluster analysis was used to classify the respondent manufacturing firms and multiple regression analysis was used to test the model. Results of cluster analysis indicated that the respondent firms were statistically classified into three groups with significant differences in terms of level of their efforts in implementing environmental management practices. The three groups are labeled as reactive firms, adaptive firms, and proactive firms. Results of

the survey research indicated that these firms employed different environmental strategies in responding to environmental pressures. This study proposes that manufacturing firms may adopt the strategies of proactive, acquiescence, compromise, avoidance or defiance in response to the environmental pressures. The results of the survey research showed that reactive firms are likely to pursue a combination of avoidance and defiance strategies. On the other hand, adaptive firms pursue a compromise strategy and proactive firms pursue a combination of acquiescence and proactive strategies.

Results of hypotheses testing indicated that the level of environmental management system adoption of manufacturing firms in responding to the environmental pressures is significantly predicted by expected gain of social legitimacy, expected gain of economic competitiveness, perceived importance of external stakeholders (government, community, environmental organizations, and media), top management commitment on environmental management, firm size, and amount of export sales. It is also predicted by the degree of interconnectedness or the extent to which firms exchange environmental knowledge with others in an organizational field.

The results of the hypotheses testing and field research consisting factory visits and personal interviews suggest that government formulate environmental policies in favor of educating top management in manufacturing firms of the potential benefits of environmental management practices for their firms and how to achieve more successful implementation of the practices, increasing effectiveness in monitoring and enforcing environmental regulations, allocating attention and resources toward the smaller firms that have limited resources, using incentives to encourage manufacturing firms to adopt EMS and subsidizing their efforts in EMS implementation through grants, loans, tax credits and electricity cost reduction, and accelerating the adoption by recognizing and rewarding firms that move beyond compliance in their enforcement of regulations.

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