

Development and application of a framework for assessing Environmental Management Accounting implementation

- A case research at Shimadzu Corporation –

Takayoshi Kato

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Background

Environmental Management Accounting (EMA) is a tool for environmental activities of firms, which aims at supporting firms' decision making by providing quantitative data of both cost and environmental impact.

Today, many previous studies about EMA theory have clarified the theoretical benefits of EMA. However, in order to further promote the adoption and implementation of EMA, the proper actions should be considered and implemented, bridging gaps between theory and practice.

This study attempts to develop a framework for clarifying factors that influence adoption and implementation success of EMA, and to make theoretical contribution to the diffusion of EMA practices. Another purpose of this study is to demonstrate a practical benefit of the framework for EMA practice by applying it to the case at Shimadzu Corporation.

Research Question

The research question of this study is “ what is a useful framework for evaluating EMA adoption and implementation?”

In order to establish the framework, the aforementioned question consists of 2 more questions which are ways how to integrate 1) longitudinal analysis and 2) comprehensive factors promoting adoption and implementation of EMA, including task characteristics, organizational, individual, external factors etc, into the framework.

Conclusion

As a result of the investigating previous researches, it has become clear that previous case researches on the introduction of EMA have focused on mainly technical aspects of the methodology. However, recent researches on IT system and management accounting, as well as theoretical researches about EMA, have shown the importance of considering the more factors described above and longitudinal analysis.

Based on the survey research, this study succeeded to establish the framework, containing longitudinal analysis and the comprehensive factors that have rarely been considered in the previous researches about EMA.

By applying this framework to Shimadzu, it was demonstrated that, in addition to technical factors, task-characteristics, organizational, individual, and external factors also influenced the implementation success of EMA at Shimadzu. Also, longitudinal analysis has clarified when each factor influenced the implementation most significantly. Furthermore, detailed evaluation of result of the analysis, it was also shown how those factors have interacted with each other. This result suggests that this framework visualizes bottlenecks of introduction and implementation of EMA so that firms carry out tasks related to EMA more efficiently. Considering the facts described above, it can be said that this study has made considerable contributions to the study and practice of EMA adoption and Implementation.