

Activity Of Liposomal-Oleic Acid On Drug Resistant Strains Of Pseudomonas Aeruginosa Isolated From Clinical Specimens

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Abstract: Achieving sustainability is the ultimate goal of any organization and the role of the effective implementation of ISO 14000 EMS towards achieving sustainability is neglected in the current research. Technical aspects of the organization can contribute to the implementation of an EMS. Hence this study aims to investigate whether technical aspects have an impact on the implementation of ISO 14000 EMS among manufacturing organizations in Malaysia and how does such implementation have influence on gaining sustainability within an organization.

Type of Paper: Conceptual

Keywords:--Corporate Sustainability; Implementation; ISO 14000 EMS; Malaysia, Technological Aspects.

I. INTRODUCTION

Since economies have taken the path towards globalization, the importance of management standards such as an EMS continues to increase as proved by significant rate of their implementation and adoption. Management standards have created extensive interest within both practitioner and academic literature and mostly the focus of such literature has been on the motives for adoption and the performance impact of adoption (Gray and Sinha, (1). The research findings are not clear whether and when the certification affects corporate sustainability. Organizations need to be reminded that ISO 14000 is a voluntary system, hence it would not take the place of the current regulations. Yet it offers direction and flexibility in confronting both "environmental and business issues"(Zutshi and S. Sohal,(2).The international success of ISO 14000 has led to extensive research focusing on different aspects and matters related to its adoption and implementation (Marjanovic et al. (3); Nawrocka and Parker, (4). Hence, the objective of this paper is to investigate the impact of technological aspects on the implementation of the ISO 14000 EMS and to examine the influence of the implementation on the sustainability of manufacturing organizations in Malaysia.

II. LITERATURE REVIEW

EMS is mostly defined as an outline which is used for implementing environmental management into an organization's activities, products and services (Meade & Pringle, (5). Furthermore, some scholars also articulate the point that the implementation of an EMS can have both financial and non-financial benefits for the organization such as improved company image (Kirk. D, (6); Mensah. I, (7). EMS via the ISO 14000 standard is defined as "a part of the overall management system which includes the organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing implementing, achieving, reviewing and maintaining the environmental policy" (ISO, 1996). Nowadays, due to the continuous deployment and foundation of environmental management system and also the relevant standards ISO 14000 has gained an increased attention. It is also established that the purpose of such standards are reliable on supervising development and also solving and decreasing the outcome of the environmental issues.

2.1 Technological Aspects

As mentioned by ISO 14001 standard and confirmed by Elefsiniotis and Wareham, (8); "In order to achieve environmental objectives, an EMS should encourage organizations to consider implementation of the best available technology, where appropriate and where economically viable."According to Govindarajulu and Daily

(9), the particular literature in regards to the environmental management systems specify that the technical aspects mostly guarantee the effectiveness of this system. Several studies have pointed out the advantageous impacts of the standard on “technological innovation, improvements in safety procedures and decreases in the risk of environmental mishaps” (Shin and Chen (10);Boiral, O. and Henri, J.-F.(11). According to E. Claver, (12), where there is a lack of information and technology is neglected, the adoption and implementation of environment protection actions will become difficult. Moreover, in some studies technological aspects are defined as “production process enhancement, monitoring and measuring equipment, and environmental specialist assistance” (Hessami (13);Sambasivan (14).

2.2 Implementation of ISO 14000 EMS

ISO 14000 is a management standard applied by organizations to lessen the environmental influence of their actions, thus improving their environmental performance (Marjanovic [3]). Huarng et al. (15)perceivedthe way the adoption of standards was enabledvia information technology through the use of standardized numeric coding to manage materials, computers to manage documents, and a computerized quality control.Boiral (16) also specified that for the environmental management to be successful technical aspects and green technologies are necessary.As highlighted by Sambasivan&Fei (14), technical aspects of an EMS includes the vital changes that should happen during the production procedure to assist in improving the environmental performance of the organization. Hence, the ISO 14000 EMS effective implementation in Malaysian manufacturing industries is dependent on “integrating it with technical aspects”.

2.3 Corporate Sustainability

Sustainability is an imperative perception regarding the efforts to lessen the harm to the environment, “an idea which gained importance because of the publication of Our Common Future” according to Daub &Ergenzinger, (17). Sustainable development is described addressing the current needs with taking into consideration facilitating the ability of future generations in meeting their needs (Hobson & Essex (18). When an organization tends to be competitive and remain the business competition, sustainability measures must become a part of the organization’s long term strategies. As highlighted by Siebenhuner and Arnold (19), for an organization to achieve sustainability, changes should be made including the “introduction of resource-efficient technologies, sustainability reporting schemes, and providing sustainable products, services, and product-service

combinations”.Since the last decade, corporate sustainability as a highly ignored concept, has received an exponential attention among both practitioners and academicians (Bansal, (20). According to “the World Commission on Environment and Development (WCED)”, sustainable development declares the inner reliability of “environmental, economic, and social principles”. It is an ultimate objective of a management in any organization to achieve the three pillars of sustainable development which is defined as attaining “economic growth, environmental protection, and social equity”Qi, G et al. (21).

III. RESEARCH METHODOLOGY

The objective of this paper is to examine the relationship between technological aspect and ISO 14000 EMS implementation and to test whether such implementation would lead to the sustainability of the organization. The method of research is quantitative and a research questionnaire will be developed to test the hypothesis. The data will be distributed among 200 ISO 14000 certified manufacturing organizations in Malaysia through email. Top managers are the targeted respondents of this study while the organization is the unit of analysis.

IV PROPOSED FRAMEWORK

Figure 1. Presents the framework proposed in this study;



Figure 1. Conceptual Framework

4.1 Development of Hypothesis

H1. There is a significant relationship between technological aspects and ISO 14000 EMS implementation.

H2. The relationship between Implementation of ISO 14000 EMS and corporate sustainability is positive and significant.

V. CONCLUSION

This paper has sought to extend an understanding of the adoption and implementation of ISO 14000 EMS and how technological aspect will influence such implementation

International Journal of Science, Engineering and Management (IJSEM)
Vol 1, Issue 4, August 2016

within Malaysian manufacturing industries. This study highlighted the importance of technology on the adoption and implementation of an EMS which will ultimately contribute to the sustainability of manufacturing organizations in Malaysia. Malaysian organization within manufacturing industries will benefit from this paper through gaining an extensive understanding on how the implementation of an EMS and taking the technical aspects into the consideration will help the organization and the managers to become sustainable and increase the environmental performance of the organization.

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