

Challenges and Implementation of Environmental Management System



R Balamurugan, K Srinivasan, S Balakumar, R Rajendran, R Sivakumar

Abstract: This research aims to evaluate the challenges and implementation of environmental management system. Especially the environment management system creating a new culture sustainability to awareness of society. Also the most important of the process, training and communication of the researcher. The respondents selected sample size 200 for stratified random sampling method. The researcher statistical tools used for t-test and F-test. Further the result reveals that respondent's differ in their level of challenges and implementation of EMS based on organization operating. Hence, the below 5 years of organization operating have high level. Therefore it is concluded that different level of commitment to each of the contributing factors to success the performance, wherever it is noted that the respondents are satisfied awareness of the environmental management system.

Keywords: Environmental Management System Implementation, Challenges, Factors.

I. INTRODUCTION

The researcher select for this environmental management system, to manage the environment wherever it is focus on the indirect but nonetheless effective, the managing an organization's activities give them some rise impact to the environment. After the respondent's standards are designed and develop to the establish of management process, they have some activities, products and services to reduce the risks ensuring compliance and other constraint related to environment. This study will give importance to consider the challenges confronting organization especially an environmental management system.

According to Sammalisto, (2007) identical EMS are planned not only to increase competence of process or focus on customer requirement but also to facilitate communication between the organization and interested parties directly or indirectly involved in the organization's activities.

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This research important of EMS for organization is becoming widely known across all the business division. Some organization decided to adopt the EMS due to the external pressures like to government regulation, community sharing and market require, the respondent's expectation and their perception about the present studies the major motive for organization to EMS to improve their corporate image. Also all organization has been different motive in the adopting EMS.

Components of Environmental management system

The three primary process of an organization method are including. They are:

1. The environmental aspects and impact of significant differ on core process and their outputs identification.
2. Also key sustaining process such as maintaining awareness of legal requirement and ensuring competency of worker, providing infrastructure, communicating to relevant EMS monitoring information to evaluating environment performance.
3. Therefore the EMS supporting process to such as, document control, record control and internal auditing.

II. LITERATURE REVIEW

Bansal Deepak (2015) conducted a study on benefits of implement an environmental management system. The environmental awareness among the industry to increasing the various factors like to customer requirement, market pressure, image, social responsibility and operational efficiency. The company are facing various challenges are include availability of time resources, corporate attitude of working environment. Result found that benefits to like reduction in manufacturing cost are increased compliance with legal requirement. Therefore it is observed from the statistically proved various industries during the implement as well benefit of the EMS.

Vasile Burja (2012) describes a study on environment management system and sustainable performance. The present work support to the literature action direction company can be used for correct management of the environment issues. The study also used sampling method, so it possible to select a limited respondents. Also the statistical proved the environment management system is to be lead to solving problems and economy nature to increase the economic performance.

III. RESEARCH METHODOLOGY

Hypothesis

- There is no significant difference between challenges of environmental management system based on years of organization operating.
- Respondents significantly differ in their level of challenges environmental management system based on departments.
- There is no significant difference between challenges of environmental management system based on industrial sector.
- Respondents significantly differ in their level of awareness environmental management system.

Sample size

200 samples are selected based on stratified random sampling method.

Data Collection

The researcher selected for primary data are to be collect and interview methods resolve be used. The respondent's will be interviewed and using questionnaire to the data collection.

Statistical tools used

The statistical tools used for

- t-test
- F-test

IV. RESULTS AND DISCUSSION

Table.1 Respondent's opinion about challenge of environment management system based on organization of operating

| Years | Mean | S.D | F-value | P-value |
|----------------|------|------|---------|----------------------|
| Below 5 years | 8.94 | 2.58 | 6.39 | 0.001 Significant |
| 6 to 10 years | 9.17 | 2.79 | | |
| 11 to 15 years | 4.38 | 1.35 | | |
| Above 16 years | 2.19 | 1.02 | | |

The table 1 exhibits the details of Mean, S.D. and F-value for respondent's opinion about challenge of environmental management system based on organization of operating. It is observed from the calculated F- value is significant at 0.001 levels. Therefore the stated null hypothesis is rejected and alternate hypothesis is accepted. So, it is concluded that respondents differ in their level of EMS based on organization operating. Hence it is below 5 years group have larger than of EMS.

Table 2 reveals that respondents level of challenge and EMS based on department. The statistically proved on F-value there is a significant level of 0.01. But the null hypothesis rejected and alternate hypothesis is accepted. So, it finished that respondents differ in their level of EMS based on department. Therefore the most of the respondents are using EMS in marketing.

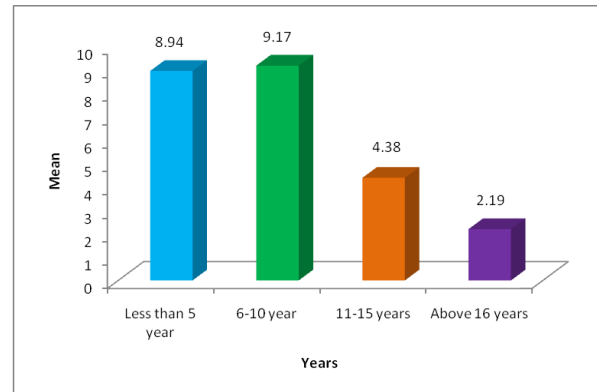


Fig.1 Level of EMS

Table.2 Respondents level of challenges of environmental management system based on departments

| Departments | Mean | S.D | F-value | P-value |
|----------------|------|------|---------|---------------------|
| Administration | 5.42 | 1.21 | 4.80 | 0.01 Significant |
| Operations | 3.16 | 1.37 | | |
| HSE | 7.14 | 2.04 | | |
| Marketing | 12.6 | 2.63 | | |
| Others | 5.89 | 1.39 | | |

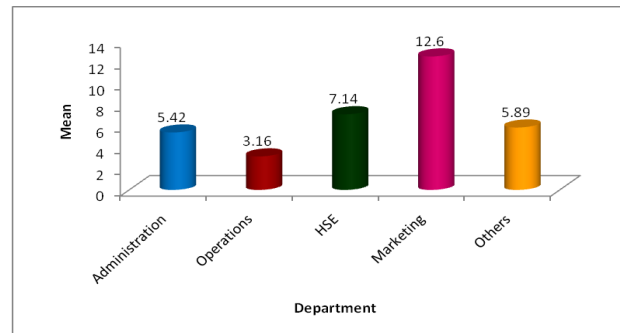


Fig.2 EMS in Marketing

Table.3 Showing Mean, S.D. and F-value for respondents level of challenges and environmental management system based on industrial sector

| Industrial sector | Mean | S.D | F-value | P-value |
|-----------------------|------|------|---------|----------------------|
| Mining | 9.02 | 3.39 | 7.19 | 0.001 Significant |
| Energy | 3.52 | 1.33 | | |
| Chemical and paints | 3.17 | 1.26 | | |
| Food | 1.78 | 0.52 | | |
| Financial institution | 1.85 | 0.56 | | |
| Education | 4.23 | 2.15 | | |
| Construction | 2.63 | 1.08 | | |
| Health | 4.97 | 2.46 | | |
| Agriculture | 1.65 | 0.31 | | |
| Others | 8.60 | 3.10 | | |

The above table shows that the details of Mean, S.D. and F-value for respondent’s level of challenges and environmental management system based on industrial sector. It is inferred from the obtained F-value there is a significant difference in respondent’s level of challenges and environmental management system based on industrial sector. Since the calculated F-value (7.19) which is significant at 0.001 level. Therefore the stated null hypothesis is rejected and alternate hypothesis is accepted. Therefore it is concluded that respondents differ in their level of challenges and implementation of environmental management system based on industrial sector.

Table.4 Showing Mean, S.D. and t-value for respondents awareness of environmental management systems

| Awareness | Mean | S.D | t-value | P-value |
|-----------|------|------|---------|---------|
| Yes | 14.9 | 3.80 | 6.51 | 0.001 |
| No | 3.66 | 1.07 | | |

The table 4 reveals the details of Mean, S.D. and t-value for respondent’s awareness of environmental management systems. It is observed from the obtained t-value there is a significant difference in respondent’s awareness of environmental management systems. Since the calculated t-value (6.51) which is significant at 0.001 level. Therefore the stated null hypothesis is rejected and alternate hypothesis is accepted. Therefore it is concluded that respondents differ in their awareness of environmental management systems. So, the majority of the respondents are satisfied have high level of awareness.

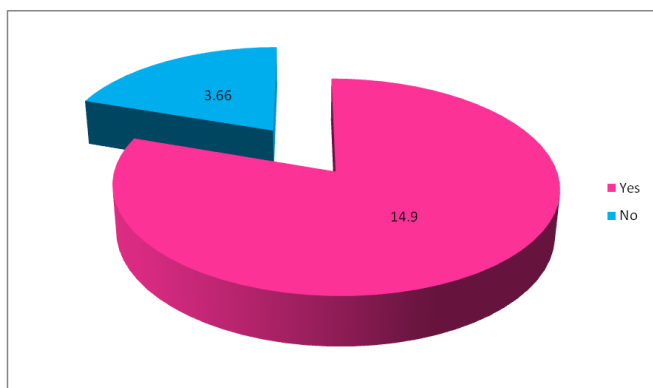


Fig.3 Awareness Level

V. CONCLUSION

In this research work, the challenges and implementation of environmental management system are evaluated. Especially the environment management system creating a new culture sustainability to awareness of society. Also the most important of the process, training and communication of the researcher. The respondents selected sample size 200 for stratified random sampling method. The researcher statistical tools used for t-test and F-test. Therefore it is concluded that using a performance excellence diagram, the different level of commitment to each of the contributing factors for a successful EMS implementation has been established and used. Further it is result completed that respondents differ in their awareness of environmental management systems. So,

the majority of the respondents are satisfied awareness.

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