

THE IMPLEMENTATION OF SAFETY MANAGEMENT: CONSTRUCTION PARTIES PERSPECTIVE

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ABSTRACT This study intends to investigate on the implementation of an effective safety management and to enable the Malaysia construction industry to meet its Occupational Safety and Health obligations. This is due to the construction accidents which cause many human tragedies, de-motivate workers, delay project progress and adversely affect the overall cost of the project, productivity and reputation of the construction industry, safety aspects should be strictly emphasized especially within the construction site and the employees. In meeting the objectives of the study, the research and data collection will be pointed out and the perspective of the construction parties, such as developers, quantity surveyors, architects, engineers and contractors in managing the safety. On top of that their opinions in terms of improving safety management have been gathered. Questionnaire surveys were distributed in the area of southern region (Johor) and central region (Selangor) of Peninsular Malaysia. From the surveys it revealed that the implementation of safety management is generally not satisfactory and construction parties still have rooms for improvement. Successful implementation needs modification of organizational culture and a safety management attitude. The management and employees must employ the participation or involvement approach to improve their workplace by focusing on psychosocial factors, health and safety risks in the workplace and reward and incentive schemes.

Keywords: Safety Management, Occupational Safety and Health, Management and Employees.

1. INTRODUCTION

The Occupational Safety and Health Act (OSHA) 1994 requires employers to perform minimum duties to ensure the safety, health and welfare of their workers, and joint responsibilities between employer and employees in all industries in Malaysia, including government organizations are expected to ensure safety in a workplace[1].

Recently, the construction sector achieved a vibrant growth of 18.5 per cent, which was recorded by the construction sector in 2012. Besides, there is a record which attain an increase of 10.2 per cent quarter-on-quarter to RM22.7 billion in the total value of construction work done in the second quarter 2013. The year-on-year percentage change also recorded an increase of 11.6 per cent as compared to the corresponding quarter 2012 shown in Table 1.0.

Table 1. Performance of the Construction Sector

Quarter	No. of Projects	Value of Construction work done (RM '000)	Percentage change (%)	
			(QoQ)	(YoY)
Q2/2013	9392	22,717,500	10.2	11.6
Q1/2013	8719	20,613,411	-7.1	16.3
Q2/2012	8818	20,348,855	14.8	35.3

Reference: Quarterly Construction Statistics, 2013

As stated by Flight Safety Foundation [2], "safety management is defined as a systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures". The primary aim of introducing the safety system is to become a "motivation-driven" to the safety matter in order to further reduce the incident rate.

Due to the increased complexity of construction projects coupled with the increased spatial restrictions present on-site [3], effective safety management is crucial to be applied. This is because such an adverse working environments for personnel can result in high fatality figures, reduced productivity [4], improper site layout planning resulting in increased travel time and the requirement for effective scheduling and programming to reduce conflict.

On analyzing the various literatures available on health and safety of construction sites, majority of sources fail to acknowledge the increased managerial burden on it in relation to confined site construction. However, by complying with Occupational Safety and Health Act, developing an awareness of the Act among workers, assessing the nature of hazards, introducing and maintaining effective control and evaluation measures as well as organizational accident prevention programs, work-related accidents and diseases are preventable. This study examines the models that can be used to overcome these problems:

- a. Occupational health and safety management system
- b. The integration of management systems
- c. Model of safety management.

2. RESEARCH METHODOLOGY

A total of 43 questionnaires were distributed to the construction parties as the questionnaire survey respondents are from the southern region (Johor) and central region (Selangor) of Malaysia. Only 35 usable returns were used for analysis representing a total response of 81.40%. The data analysis was done using statistical analysis from the Google Drive and Microsoft Excel. Data is presented in the form of tables, histograms, graphs and pie charts to get a clearer picture. The results of the analysis, processing and findings obtained in accordance with the objectives of the study, the facts obtained will be presented in order of priority.

3. FINDINGS AND DISCUSSION

A five-point Likert scale was subjected to the competence and training in safety evaluation. Each statement was designed to gain respondents' opinions, with point 1 representing 'strongly disagree' and point 5 representing 'strongly agree' regarding the responses in relation to the variables grouped under competence and training in safety.

Most of the respondents agreed that their company provides them with safety training programme. 17 numbers of respondents which are 49% of them have agreed with the statement 3. This is because safety training provides knowledge of safety given to employees in order for them to work safely with no danger to their wellbeing [5]. None of the respondents has strongly disagreed and strongly disagreed with that.

Likert scale was subjected to the safety satisfaction evaluation. Each statement was designed to gain respondents' opinions, with point 1 representing 'strongly dissatisfied' and point 5 representing 'strongly satisfied'. Some of the reasons for the dissatisfaction from the observations were:

- i. No continuous education and training on safety
- ii. Lack of awareness training
- iii. Personal protective equipment (PPE) not of good quality
- iv. Sharing of safety information is lacking
- v. The role of a supervisor is not consistent
- vi. No effective safety communication
- vii. Exposure to dangerous substances without enough protection
- viii. Cooperation among top management and employees is neglected
- ix. Staff are experiencing more work stress
- x. Improper disposal of waste
- xi. Safety rules not displayed

The third objective is to recommend on the practical strategies for the implementation of safety management in construction industry. To comply with the Occupational Health and Safety legislation, the management and employees must employ the participation or involvement approach to improve their workplace environment focusing on the followings:

- i) Psychosocial factors especially the mental stress of workers so that employees are motivated to work in more relaxed way and be optimistic and adapt to changes in working life without treating health and safety issues. Examples of psychosocial risks are such as work stress, violence, sexual harassment and other forms of harassment at work.
- ii) Health and safety risks in the workplace due to an increase in hazards. Both management and employees must take preventive measures so as to minimize health and safety risks and ensure employees are only exposed to acceptable risk limits.
- iii) Rewards and incentive schemes in terms of financial incentive or non-financial incentive like praise and awards to promote employee involvement to deal with safety effectively.

4. CONCLUSION

In conclusion, the government should improve the Occupational Health and Safety outcomes in construction industry as revealed by this study's findings by focusing on two crucial elements. They are mainly the management leadership and action and employee involvement and agreement. Then, a risk assessment should be undertaken through plan-do-check-action (PDCA) strategy to deal with hazards at the workplace.

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