The Perk of Safety Management System: A Meticulous Description



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1 Introduction

Management culture improves the condition for working and at the same time guides the employees' characteristics and etiquette in minimizing the accidents and hazards in the workplace. The inadequacy of a safety management system became the main ground for a great deal of industrial calamities and accidents during the early times. After investigating the Bhopal disaster, it was said that three types of errors constituted to the tragedy which were the man-made error, technological error and system error. (Bowonder and Linstone 1987). The management for safety associates with the plan of purpose, practice and steps involved to be safe (Vinodkumar and Bhasi 2010). The main motto is to speculate the outgrowth like, loss time injuries and accidents such that rectification can be done by the companies so that the safety of the employees is improved a lot (Cox and Flin 1998; Mearns et al. 2003).

OHSM systems have no peculiar definition in terms of managing systems. This is mainly the lack of clear partitions between OHS proceedings, OHS management and OHS systems (Robson et al. 2007). Safety management systems are either obligatory or honorary. The obligatory OHSMSs emerge from government laws which impose their use by fines, inspections, etc. The voluntary or honorary OHSMSs rises by private organizations, groups of employers, agencies of the government, professional enterprises, etc., which may or may not be inter-linked to the administrative requirements. But the honorary OHSMS plans and schemes promoted through public agencies keep an eye even on smaller companies apart from their large company stalking (Frick 2000).

In all the countries in the world particularly developing countries, small and medium organizations are more important (Unnikrishnan et al. 2015). These make up 7% of India's overall domesticated products or GDP—gross domestic products.

They comprise of 90% of the industrial sectors and units in the country and also pave way for nearly 35% of the exports in India. The SME is called the pillar of Indian economy which has contributed to industrial result of 45% and for the employment to nearly 60 million employees, constituting 1.3 million jobs each year and nearly 8000 products are manufactured for the Indian and international markets (Dhar 2014).

Safety performance is the most important issue for industries to grow into a world-class giant for this rapid globalization. Occupational accidents might pose to permanent/temporary disabilities and may even lead to deaths and/or economic loss or even both (Dağdeviren and Yüksel 2008). These accidents can be mitigated through measures that could prevent them like training, assessment of hazard, proper house-keeping and good protective equipment (PPE). To promote a good safety culture, the behavior of the workers and their mentality should be refurbished by acquiring changes in work culture and practices. Managers find it very easy in formulating the organizational policies by predicting the various types of accidents and hazards. This can mainly improve the safety performance (Beriha et al. 2012).

The foremost intention of this study is to look into the methods and the extent of safety management practices in SME's. A peripheral thought has been to analyze the practices in safety and to hold onto the leading practices in that specific sector.

2 Behavioral Safety

This safety model was presented by (Neal and Griffin 1997) mainly proposing theories depending on performance of a job (Borman and Motowidlo 1993; Campbell et al. 1993). It individualizes all the types of components based on their performance. In the aspect of safety, pliability of safety and participation of safety can be considered to be behavioral safety (Griffin and Neal 2000). In another study, (Pousette et al. 2008) restrained three safety behaviors to achieve self-related safety behavior. They were called as structural behavioral safety (linked with the involvement of organized safety behavior), interactive behavioral safety (linked with communication between the co-workers and the board of management regarding daily work-related safety activities) and personal behavioral safety (linked with the measurement of behavior with personal protection).

The constituents of safety performance are assumed to be taken from the safety behaviors like safety compliance and participation in safety. The employee's behavior which might have the prospective to increase their own safety and health is safety compliance. The behavior of an employee which has the capacity to increase the safety and health of the organization as well their fellow workers are meant to be safety participation (Hagan et al. 2015). Since, these measures outline the same result and the authors have compiled them into a single behavioral safety measure.

3 Practices for Safety Management

Management in terms of safety is related to the true operation, duties and tasks linked in being safe (Kirwan 1998). These are generally considered to be an auxiliary structure of the whole management for an organization. They are perpetrated through the industry's system of management in accordance with safety and health. Hence, they are said to be the systems that are contraptions cohesive within the organization that have been contrived to control anything that might be a peril to the workman's safety and health (Labodová 2004). These practices mainly denote the scheme, plan, program and approach aimed in promoting safety for the workers which have been followed and enacted by the organization for long periods of time. These maybe the necessary ingredient allowing the management to be vital and are said to satisfy with the ongoing legislations which are said to apply for the organization. The point till which these practices can be brought into an organization will be expressed by the different types of actions and deeds of the management and can be transparent to the people within the company. Hence, these systems can be considered as precursory of the company's climate of safety.

Many attempts have been seen in order to find out the practices for specific management and their performance. Many companies with minimal accident rates have been distinguished with few factors like: high ranked safety officers; safety activities had the involvement of the management personally; new employees were trained by their superiors; the existing workers had to undergo regular training frequently; all hazards were properly displayed in the form posters; the employees and their supervisors had a daily communication regarding the hazards and safety; regular inspections; in-depth analysis of accidents; emancipation of workforce (Cohen 1975; Griffiths 1985; Shannon et al. 1997; DePasquale and Geller 1999; Cohen 2013). The participation of workers, training, practices, systems that give incentives and rewards, feedback mechanisms should be started for giving better results in terms of safety and health (Vredenburgh 2002).

Among the first analysis concerning safety climate, it was found that the commitment of the management regarding safety affects the rise of an organization (Zohar 1980). The involvement of the hierarchy of the company in safety must not only be verbal but it should also prevail through their actions (Hofmann et al. 1995). An employees' point of view will exactly depict the value of safety in an organization (Griffin and Neal 2000). The involvement of the management in high risk and hazardous environments is continuously emphasized (Flin et al. 1996; Cox and Cheyne 2000). The adherence of the management as a part of the management practices is also included in this study. It is calculated with the ternaries associated with the management's priority for safety, the rectification actions, safety meetings attended by the safety manager, analysis of near miss/accidents and providing proper PPE's.

Safety training is the priority element for any reigning organization for preventing accidents. It helps in improving the behavioral expertise, knowledge related to them and/or point of approach. It helps to make accidents more predictive. For maintaining a healthy work environment and hazardous threats to workers, all employees and

members of the management should be implemented with this training by bringing a mentor and by using buddy system for orienting fresh employees regarding the works, health and safety. Organizations with less accident were found to be undergoing proper safety training (Ostrom et al. 1993; Lee 1998; Tinmannsvik and Hovden 2003). So, training in safety is said to be a management implementation were several practices and training were given to new and old employees regarding emergency conditions and situations. They were encouraged to join in this training regularly and to attend these programs'.

To promote the motivation aspects, various types of communications are used to amplify its effect toward the employees. The most effect way of communication may be toward the system of two-way or double-way communication where its coverage and influence are higher. There should be routine communication on the event of issues regarding safety between the management, managers, supervisors and employees for a healthy environment and to maintain a safe workplace. Feedbacks should be welcomed and additional communication in the form of surveying by interrogation for different categories of employees helped to form an organized work system. This has made to accept that feedback and communication have been forms of safety management by this study. It has been restrained by using reports related to hazard system, safety issues in terms of open door theory, safety targets and achievements among managers and co-workers and discussion of issues in safety during meetings.

Among all of the supreme elements with regard to management of safety is the point to which the company is able eradicate the use of drugs and liquor consumption during a workers shift and hours of work (O'Toole 2002). But in this study, it has been totally removed due to the difficulty of the fact that only honest response can be considered from the particular employee rather than the actions that show them. Hence, all these above-mentioned practices for safety management are contemplated to be the precursors for the safety performance in an organization.

4 Safety Culture (SC)

It is a constituent ingredient regarding an organizational refinement, which takes major responsibility in affecting employees' behavior and attitude to a company's performance based on health and safety (Cooper 2000). Safety culture is often recognized, for example, by injuries from disaster, etc., which mainly contains behaviors, attitudes, responsibilities which are personal and also for HR features for training and development (Glendon and Stanton 2000). This concept is gaining its reputation as it takes in the concept of learning from numerous sources of research and organization. Hence, this is proving to stimulate others in learning its complex systems through adaptation and interactive features. This also unveils the progress underway and the obstacles that have to be dealt with as many analysts and specialists have made ample efforts hoping that the conception is made significant for organizations that tend to

take behavioral transformation as a method for developing and improving the safety performance (Baram and Schoebel 2007).

Workplace safety improvisation with behavioral-based approach was done by (Komaki et al. 1978) which says that behavioral-based safety programs provoked and made them act safely. Similarly, studies were made by (Cooper et al. 1994; Krause et al. 1999; O'Dea and Flin 2001) showing that safety leadership can be motivating to team members making them work harder and also to promote high levels of safety performance. Hence, without an exceptional leadership there cannot be any kind of safety performance. The Federal Safety Commissioner has highlighted that senior managers can gain safety leadership only through planned safety culture which can gain effectiveness in elevating organizational safety (Lu and Yang 2010).

5 Safety Climate (S. Cl)

It is basically the exhibition of culture in safety fund in the attitude and behavior expressed among the employees (Cox and Flin 1998). There can be an intellectual confusion when it comes in differentiating safety culture and safety climate in terms of management systems. (Kennedy and Kirwan 1998) uphold that management of safety and climate of safety are at gradations low of presumption. They are taken up to be the exposition of the whole culture of safety. Generally, it is the safety culture that rescues from boundless level of conjectures, operable safety like this has led to an escalation in scales and each has posed to analyze the climate of safety. The aggregate of facets for S. Cl still is said to be impugn, but recurring chapters among safety climate surveys have been commitment of management, adequacy of supervisors, over production priority in safety and pressure because of time (Cox and Flin 1998; Flin et al. 2000)

S. Cl elements rise up to be forecasters for accidents or unsafe behavior in a number of versions (Guastello 1989; Tomás et al. 1999) and has been undertaken that a fitting S. Cl is required for carrying out any maneuver safely. Mainly this is by promoting safety awareness and also by carrying safe behaviors in the presence of supervisors. This is a strategy which helps to give way for involvement of management. Hence, the decision-making has been made clear because of the involvement of workforce (Simard and Marchand 1994). These notions had led in the philosophy for safety of higher management and the SMS. In this aspect, attitudes of management and behavioral safety impregnate from the industry or organization onto the employees.

6 Safety Management Questionnaire (SMQ)

This is mainly set out to be a tool for audit. It was mainly formulated to analyze and evaluate the management procedures on each installation. The indicators called leading and lagging were able to sort out the performance. The weaknesses were

identified due to the advantages of leading indicators which could easily exhibit the risks before they breach out as accidents. Many such significant indicators have been found out in organizations as weakness in safety practices (Blackmore 1997; Fuller 1999).

The grasp of the workers about the practices for management of safety and the behavioral safety must be calculated by terms of questionnaires. This should be constructed in regard to the evaluation of the literatures and theories that they had been guided with. It must contain questions must overlay the field of commitment with management, training, involvement of the workers, rules and steps to be taken in safety, communication of safety and its feedback, behavioral safety and safety policies (Cheyne et al. 1998). So they should be organized using certain themes like:

6.1 Policy Regarding Health and Safety

It includes the disclosure on safety and health, the position and number of the staff for safety and, conveying the policies of safety and health, corrective actions.

6.2 Organizing and Categorizing Safety and Health

Mainly the goals for safety and health have been the major topic. Office visits, allotment of responsibilities, evaluation, registering and gathering training necessities, rewarding for performances are the sub-topics to be taken into note then and forth.

6.3 Managerial Adherence

The safety performance of the management and its contractors, the cause and amount of senior panel visits, the precedence of safety during scheduled managerial meetings are some of the topics.

6.4 Involvement of Manpower

Percentage of workers getting orderly training in assessment of risks, the number of workers attending safety meetings, persistence of distinctive training or orientation disposed to all the representatives of safety, connivance of manpower in mounting objectives toward safety and health, analyzing risk control methodologies, etc.

6.5 Audit of Health and Safety

The proportion and number of audits performed, the evaluation process, rectification closed out after analysis, number of goals attained and targets in safety inspection reached.

6.6 Health Monitoring and Propaganda

The amount of ongoing health aid programs, discussion related to health issues and the point until any health plan gets achieved.

6.7 Connection Between Organizers-Operator

Clarification of all the shared operations both by the organization and also by the third party companies helping the organization in health and safety schemes, agreeing to a much unified proposition that administers the names and titles of all the staff based on their jobs in a company or a particular department showing how they are linked with each other, initiate key liabilities and also their responsibilities, conventional communication agreements, analyzing hazards to health for the combined activities, corroborate proficiency of the staff concerned with the shared pursuit and the aggregate contract company visits to the organization.

These maybe some of the themes regarding the questionnaires for safety management and these are very useful of any kind of job during audits and investigation. The grasp of the workers about the practices of management in safety and the behavioral safety must be calculated in terms of questionnaires. This should be constructed in regard to the evaluation of the literatures and theories that they had been guided with. It must contain questions must overlay the field of commitment with management, training, involvement of the workers, rules and steps to be taken in safety, communication of safety and its feedback, behavioral safety and safety policies (Cheyne et al. 1998).

7 Conclusion

This study has given an insight on the safety management techniques for organizations, elaborating a more valid and trustworthy measure in managerial safety across miscellaneous sectors. As an administrative tool, the scale of safety management can be used to benchmark the various activities of the company or industry. A cluster of practices is captured by these tools to analogize the safety performance positively so

that it does not lack in its performance. These are as a checklist through the questionnaires by the managers by granting them scores 1–5 depending on the frequency of its occurrence and existence. These scores can be used to compare with other organizations and could help them to develop their own firm knowing where they stand. Furthermore, applying these scales simultaneously with safety climate can give a better perception on safety culture in the organization, also seeing an advance toward operationalization of the notion of the results because of these management systems will be able to provide organizations with inducement so that the working conditions are improved. Correspondingly, the engagement of the safety management concept helps in introducing them into more immense models, inspecting antecedents and the outcomes of these systems. Hence, it might be possible to learn about the association between the behavior of the individuals and the management system with the attitudes of the world wide, organizational degree, determining whether the systems are definitely a predecessor to that of the safety climate of the organization. At last, the organizational factors could be analyzed with the scale developed during the work that may be benevolence or restrict the enforcement of safety management system in the organization.

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