

Training to Manage Risk: Focusing on the Essential

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Abstract—Despite the acceleration of intervention in advanced technologies, the human element is still considered as a cornerstone to efficient running and provision of business in organizations. It is this role, with the concept of human awareness, which is fundamental to the risk management process. Risk, as it is usually referred to, is an awareness-related issue, and depends, extremely, on those who deal with it and are responsible for controlling its adverse impact. Indeed, risk awareness is extensively responsible for the ways in which people interpret and systematize potential risks, and thus, the way they deal with these risks. Therefore, for an effective risk management system to be realized, organizations need to build and set up appropriate programs that help employees improve their management skills in dealing with potential risks. One way this can be done is through training. However, the main challenge of implementing effective training is to decide where and what training should actually focus on. This paper examines the role of training in improving risk management among employees. The focal point of the paper is to tackle where training should be allocated for the effective controlling of risk. The paper suggests that training is likely to be most effective in terms of managing risk if it, initially, targets the awareness of employees towards risk rather than focus on technical procedures of dealing with risk.

Index Terms—training, risk management, awareness of risk

I. INTRODUCTION

The responsibility of controlling risk is carried out by every person who works in the organization, although managers are theoretically liable for establishing an appropriate system to eliminate or minimize risks [1]. The role of staff in running businesses within organizations is the cornerstone of a successful daily operation and provision of corporate services. This role is more significant in the risk management process, where human aspects and awareness are key elements. The presence of uncertainty, as the main element of risk, stimulates researchers to link risk with awareness, as people, in general, rely on their awareness to estimate risk and/or the potential negative consequences occurring

thereafter. In this regard, Marsh and Toft ask the following interesting question: If you go to an Asian country where you can walk between coconut trees or you can go and swim in the sea, would you be more concerned about sharks or falling coconuts? They found that unless you had heard this before, you would probably say the sharks. But in truth, deaths as a result of falling coconuts are about 10 times more common than deaths from shark attacks. So, it is a matter of knowledge and awareness [2].

Therefore, for an effective risk management system to be realized, employees need to develop an accurate awareness and consciousness that enables them to predict and identify potential risks as well as their likely harms and negative consequences. Consequently, establishing appropriate programs that help employees improve their awareness in dealing with potential risks are crucial in strengthening their proficiency to understand and interact with their internal and external contexts, Hence their responsiveness to the surrounding possible risks. This is essential for minimizing risk and mitigating the undesired impact on these organizations. Through many strategies, an active way to address risk is through training. Training plays a significant role and has become an essential component for any effective management system, including risk management [3].

II. TRAINING CONTRIBUTIONS TO RISK MANAGEMENT

Training has become an essential activity and a strategic procedure for organizations rather than a routine process or just a part of an induction program for employees. Educating employees and improving their knowledge and awareness is necessary to increase their adeptness in their work, and also to improve the superiority and quality of service provision [3]. In terms of risk management, Lazzarini and Pistolesi found that training has key contributions to the risk management process as it develops and reinforces safe behavior and is associated with competence [4]. Such training, in many instances, is also required by law; as accountability is usually derived from a fully informed, well-trained, and aware workforce [5]. Other benefits training may bring to the risk management process involve: stirring employees through improving their competency; help in mitigating

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the severity of negative impacts as employees become more familiar with risk management; and helping people to understand and cope with their context [6]. However, one main challenge that management may face when implementing training for managing risk is where to place it, and where training should focus.

In a workplace, any potential risk is important and should be considered, as risks that seem less apparent at the time may become major hazards in the future [7]. However, unless employees feel they are in dangerous situations, they will not be able, in many instances, to recognize and, then, be aware of potential risks [8]. Therefore, rather than traditional training that focuses mainly on technical aspects in dealing with risk, training that is related to the risk management process needs to simulate the risk of employees and should emphasize more on the development of critical thinking. Furthermore, it needs to help the employee gain higher levels of skill in identifying potential risks and their undesired consequences even before they occur. Indeed, when training is realistic and focuses on the core of the problem, it becomes more effective and valuable.

Training employees on the process of risk management and safety procedures is important. However, nowadays, where business is associated with the rapid growth of technology, inventory of specific types and sources of risks and then training employees in dealing with such risks is no longer an optimal training approach. Dror notes that the crucial element in determining an action is not regulation, but how one perceives, interprets, and evaluates the situation [9]. This means training efforts should not be limited to technical skills and safety regulations; rather it should focus more on the core of the risk management process, which is awareness. Unless some frames are acknowledged around risk assessment, the identification of risks may develop an infinite list that makes risk management more complicated. In this case, it is also difficult to put specific procedures to deal with all potential types and sources of risk. Creating a universal manner of thinking and developing awareness of risk could limit this dilemma. Therefore, training needs firstly to be placed on areas that improve the way employees recognize and become aware of risk.

III. RISK AWARENESS

How people construe and recognize risk shapes, in many instances, their reaction, interaction, interpretation and awareness of it. Risk awareness, in itself, generates the ability to recognize, analyze, and understand objects; including risk. Moreover, developing a certain behavior in a certain way depends widely on the status of awareness.

Definitions of awareness demonstrate its incorporation with all senses, feelings, behavior, and mental activities during human interaction with the surrounding environment. Without improving ones abilities in awareness, it is difficult to get a well developed response and understanding of contexts [10]. This significant part of development has an inherent connection with the

development of employees' abilities and skills, and their performance and behavior in general, in dealing with objects. However, in some fields, such as risk management, this notion becomes more precise, as risk, among other issues, is a matter of awareness. Many researchers point to the connection between risk and risk awareness in such way that they deny distinguishing between both of them. They deal with risk awareness and risk itself as one term or entity [11]. Even those researchers who refuse this notion still reckon that people rely on their awareness in estimating the potentiality of risk or its consequences.

Risk, in general, is identified beyond its traditional definition which is the probability of undesired outcomes such as a loss. Rather, risk is described as the extent of uncertainty that is supposed and professed by an individual. Hence, risk can be different from one person to another. This is due to the fact that people are unique in their feelings, cognition, clarification, and interpretation, and thus their awareness, of certain contexts. Consequently, without developing awareness and the perceptive abilities of employees toward risk, it is difficult to get a well-developed aptitude of it. The correlation between risk and risk awareness is apparently knotted in such way that makes margins among both terms ambiguous [11]. Therefore, the main method for identifying risks is brainstorming that results from awareness. Awareness is an essential element in acting upon and carrying out any task [12].

Risk awareness, as Borrell-Carrió and Epstein note, consists of more than just recognizing hazards; it also concerns assessing the weightiness of these hazards in terms of their potential negative consequences [13]. Thus, risk awareness involves perceiving perils and threats, the process of assessing the seriousness of the hazards, and recognizing how to take steps to control or prevent these threats and hazards. In many instances, it is neither acceptable nor ethical to deal with risk as a reaction or as a sporadic result when a staff member finds him or herself in a hazardous situation. Employees should be able to predict, identify and recognize potential dangers in advance and before they exist [14]. Therefore, training to manage risk should, initially, identify aspects and circumstances where people need to have a better knowledge and hold necessary information to make proper decisions and successful choices. This does not contradict with the fact that risk management consists of a series of processes and procedures, alongside calculations regarding the potential occurrence and the extent to which certain outcomes or their gravity could occur.

Although risk specialists tend to be more objective when taking decisions about accepting or rejecting a particular type of risk through considering computational and mathematical calculations of risk, they admit that part of their decisions is subjective [14]. In fact, as risk is defined in general as the possible occurrence of undesired outcomes, uncertainty is seen as the key element that differentiates risk from any other issues including perils and hazardous. Therefore, the roles of expectations,

personal experience, personal knowledge and awareness are crucial in the anticipation process of risk and in estimating its consequences. Risk awareness, in particular, gives better understanding of risk, and develops the consciousness system that enables employees to intentionally manage risk in an effective manner that secures the best outcomes [7].

IV. THE MECHANISM OF AWARENESS AND TRAINING

The relationship between training and awareness is intertwined as training starts with awareness which thus gives growth to learning and education [5]. It is noteworthy that both awareness and training are vital in providing employees with the needed information and the suitable attention necessary for effective performance. However, awareness is not training, and vice versa. Training, in general, endeavors to teach skills, improve abilities, and builds knowledge to allow employees to perform a specific function efficiently and effectively, while awareness focuses on an individual's attention on how and when to use these skills and abilities and under what circumstances and conditions [5]. Hence, awareness is the foundation route through which people maximize their gain from training. Moreover, awareness serves as a spark that makes people benefit from fuel to have fire. In the case of risk management, training plays the tool of developing and improving risk awareness. Awareness itself, on the other hand, is seen as a vehicle for developing a critical context of thinking that generates basic skills for foreseeing potentiality and forms of possible risks that are related to the entire business, as well as, the job within the organization [4].

Cognitive abilities of people, through which the understanding and recognition process of objects is formed and developed, are outcomes of awareness. Parts of these cognitive abilities involve understanding work context, the nature of a job, an organizations' internal and external environment, previous incidents, and expected outcomes of operations. In addition, stimulating responsiveness and deepening knowledge among employees about proper rules, procedures and behavior, which should be followed in each circumstance, form a significant part of the development process of risk awareness [5], [15]. Once an organization has decided to set up a training program that increases the efficiency of risk management processes among employees, the general level of risk awareness and vigilance should be, basically, targeted. In fact, improving and maintaining of a robust awareness of risk is the main step for developing employees' skills and abilities of dealing with risk.

Consistent with the Personal Construct Theory, people imitate reality and put up an internal model of actuality in accordance with their awareness and knowledge in order to understand and give explanation to the world around them [7]. This model, which is usually based on observation, is often defined by words, although in some situations can also be non-verbal (as in deep emotions). Therefore, many misestimating cases of risk are related more to lack of awareness and knowledge than to the inability to manage or dealing with risky situations [7].

Applying teaching and training strategies, that strengthen risk awareness among employees, to detect the inappropriate situations and potential hazards, as well as detecting the factors that increase ambiguity, are essential for the effective management of these risks. Indeed, constant training that supports self-awareness and generates attention can aid in building risk awareness and responsiveness to a spontaneous sense-related habit in recognizing and managing risk [13]. Development of awareness through training helps in finding out potential risks in advance, especially when employees find themselves in unusual situations or facing new challenges, rather than waiting for new experiences to arrive [11]. In fact, there are ways in which people can develop their risk awareness on their own, but acquiring knowledge and developing awareness by experienced people can be a much better way of helping people develop their own behavior, actions and reactions objectively.

In many instances, it is not easy that people be objective when they assess themselves. How people see themselves and weigh up their knowledge and capabilities can be quite different from what people actually are, and what their real capabilities are and the extent of their knowledge. Therefore, training can be an optimal choice for developing awareness in such way that improves employees' skills in dealing with surrounding risks. Trainers can play a crucial role in developing awareness as they are outside observers who are theoretically more qualified individuals in their fields than others [11], [13].

V. DISCUSSION

The significance of awareness in dealing with and controlling risk, as illustrated above, draws attention to the fact that risk management progress will be as good as an employees' awareness with skills in differentiating between varied sources and types of risk, in terms of the degree of uncertainty and potential consequences of risk. This includes anticipating at what time and under which conditions risk may take place. Otherwise, unqualified employees may, expectedly, rely only on their own improper awareness, rather than on the reality of the situation's requirements [13]. This prelude is necessary to shine the spot light on the critical role of awareness in dealing with risk. For this reason, it is not a surprising thing that the effectiveness of the risk management process, as well as its initiatives including training, depends mainly, and should focus widely, on the awareness of people who are supposed to deal with and control risk.

Traditionally, training, usually, focuses on improving the technical skills of employees to ensure safety and to minimize risk. However, in the risk management field, it is important that training should focus on evolving other issues that are more crucial. This is due to the fact that employees foresee risk and its potential occurrences, as well as its likely outcomes, according to their alertness and awareness [16]. Awareness may well be built by experience and practice. People can learn from their mistakes as well as from predicaments or complex

situations in which they find themselves in. In many instances, people rely on their previous behaviors to simulate a particular case to realize hazardous conditions. However, although experience is a great factor in the learning process which works effectively to maintain and form attitude, the fees are, usually, high [10]. Instead of gaining knowledge through experience, or what is named trial and error, there is another option that may seem more effective and efficient; this is training. Through training the organization uses other's experiences and benefits from a professionals' practices and knowledge, to reinforce the awareness of its employees for the effective management of risk. This is done by helping participants/employees make judgments about what may happen in the future [12].

If training involves merely technical and administrative procedures of dealing with risk, as most programs demonstrate, this may produce qualified staff in managing risk after its occurrence but with limited skills of how to expect, forecast and observe risk in advance. Educating employees about techniques and strategies in how to respond to risks when they occur is essential. However, listing all types and sources of risk that face organizations can be overwhelming if not impossible. Therefore, drawing on a thinking manner through which definition, listing, and recognition of potential risk in the organization is more effective and reliable way. This is inherently based on the way that people think, as well as, their knowledge and experiences regarding risk. Asnar and Zannone found that employees, fundamentally, behave according to their awareness rather than to the other issues [17]. Even when a particular risk is identified and listed, and a predetermined procedure for dealing with it is scheduled, the carrying out or implementation process depends on the human element and their awareness and attitudes [18].

Therefore, when designing and accomplishing risk management training programs; attention should be given, initially, on how to enhance the awareness of staff. Blanchard and Thacker, in this regard, found that educating employees to be more aware through training can serve as an effective strategy that works to develop a positive attitude among employees, fortify their abilities and knowledge, and perk up their cognition and competency [19]. As such, training would strengthen an employee's efforts and performance on how to identify, assess, and control potential risks effectively. Awareness is usually described as a dynamic and complicated process through which personal knowledge, experience, and context are organized [20]. Training, as Patnaik, Satpathy and Panigrahi state, works to change behavior and improve performance of employees in the organization through improving components of the awareness system [10].

Nowadays, there is an apparent transformation in the risk management process from emphasizing technical issues to reduce risk to paying more attention to the perceptual dimension of those who deal with risk. In the field of automotive traffic, as an example, authorities have become more conscious regarding the sensitive role

of awareness in reducing the frequency and severity of traffic accidents rather than focus attention on the personal skills of drivers. Consequently, traffic campaigns have become more focused on stimulating personal values and cognition about possible hazards and social damage of traffic incidents by encouraging drivers to slow speed and be more cautious while driving, rather than focusing on traditional safety procedures and knowledge of drivers about the skills involved in driving, traffic rules and regulations [21].

The importance of considering awareness in any risk management training program comes from the importance of awareness itself in the risk management process. However, awareness and cognition are not mirrors that reflect the situation as it is. Indeed, according to their cognition and consciousness, employees make subjective assumptions and impose order and interruption on the objective reality [9]. Consequently, judgments and decisions people make about the characteristics, forms and severity of a risk are subjective. Training should work to modify employees' cognition and awareness, and the way they view potential risk in the workplace.

On the other hand, risk tolerance as well as identifying an event as risky or safe, in other words the risk attitude, is influenced mainly by the extent of the awareness employees have in a risk. Due to the differences in the awareness of risk between employees, risk that is considered serious for one employee may be considered minor for another [17], [22]. In addition, employees' decisions to take or avoid risk rely, in many instances, on their awareness of risk. However, awareness of risk is not a one-way road that involves negative impact or undesired consequences. It, also, involves opportunities that should be considered and taken. Otherwise, another form of risk could arise from neglecting potential benefits [23]. Training has noteworthy contributions in modifying attitude and developing an appropriate awareness of risk. These contributions include the extent of tolerance with risk that can be accepted. Nevertheless, training should focus on developing a sense of risk with the intention of creating a balanced culture of risk that prevents an underestimation or overstatement of risk.

Developing an awareness to manage risk does not mean solely improving the extent of knowledge in anticipating potential risks; it also involves other significant factors, such as: ordering risks in a priority list according to their potentialities and severity, as well as, reinforcing the engagement process of employees in this list are also important for effective risk management process. Therefore, when the improvement of risk awareness is directed by training these two factors should be considered. In many instances, the significance it is not the identification of potential risks; rather it is the actual categorization process of these risks [2]. An important property of awareness is the capacity to construct and develop the sensory system that helps in re-identifying risks in such way that facilitates determining which risks should be given more attention than other sorts of potential risks. This step also requires a team framework that supports the brainstorming process

towards a comprehensive definition and an accurate list of risk; whether in terms of identifying forms, sources, and types of likely risks or in setting an effective classification, thus the ordering of these risks within this list.

Researchers, like Konopaske, Ivancevich and Gibson, found that awareness can be modified, developed or even entirely changed [24]. They mention that awareness, attitude, and behavior are caused and are goal directed and oriented. An important part of managers and risk authorities' jobs in the organization, is to direct training programs for controlling risk toward these variables to get desired results and an effective responsiveness of risk. Skills, in general, are task-related competencies that are needed to be developed in a continuous basis to perform job successfully; including managing risk [25]. Anticipating risk and forecasting its potential consequences, rather than inaccurate guesswork, are among these skills that should be matched and developed. Risk awareness is a cognitive process that helps employees in selecting, recognizing, organizing, memorizing, and interpreting a consequential and consistent picture of the event [7], [11]. Each one of these steps is significant and crucial in forming the behavior and attitudes of employees in their perspectives toward risk and in dealing with risk. In fact, awareness is the main sensor that directs the way employees see an event or object, thus, how they deal with it. The center of attention, therefore, should be initially used up and spent on awareness when designing training to improve the risk management process.

VI. CONCLUSION

This paper outlined training as an initiative for controlling risk and discussed where training programs should be placed. Training is basically intended to speed up the process of acquiring a certain skills in dealing with things in practice. In many instances, people rely on their personal beliefs, attitudes, experiences, and context; in other words, their awareness to estimate risk and the seriousness and potentiality of negative consequences occurring. Indeed, it is not possible to identify, count and assess each possible risk. Consequently, it is not possible to develop a list of procedures about potential risks. Although there are general guidelines, key policies and processes regarding dealing with risk or the way employees should behave when some sort of risk takes place, the effective way of behavior, in many instances, relies on the situation itself. In other words, every case has unique characteristics and conditions that require using personal feelings and awareness rather than just being predisposed to pre-prepared standard procedures. Therefore, the paper suggests that training is likely to be more effective in terms of managing risk if it is designed to improve the awareness of employees towards risk rather than focusing mainly on the actual technical procedures of dealing with risk.

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