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Concept of Knowledge Sharing Practices on Operational Safety of Construction Firms in Nigeria

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ABSTRACT

This study discussed the concept of knowledge sharing practices operational safety of construction firms in Nigeria. The review discovered that knowledge sharing practices had significant relationship with operational safety of construction firms. Thus, the result obtained from the analysis showed that the introduction of organization environmental factor moderately, affected the relationship between knowledge sharing and operational safety and that the relationship between community of practice and minimization of accident is weak. However, it concluded that if adequately considered knowledge sharing practice will enhance operational safety, construction firms that invested in the employee training, management development and encourage community of practice as a way of knowledge transfer, records high level of productivity and fewer vices that will lead to loss of man hour and high level of organizational sustainability. It is pertinent to state that the level of zero accident recorded in the organization operations in the use of knowledge sharing practices technology is highly dependent on the implementation of organization environmental factor (firm safety culture) of the firm. Based on the findings of this study, it was recommended that for the organization to increase their turnover and reduce loss of man hour to accident and payment of compensation, they should invest more on strategies that will encourage employee training and retraining and promote management development and pay attention to community of practice system of learning to achieve competitive advantage.

Key Words: concept, knowledge, sharing, practices, operational, safety, construction, firms

Introduction

The value of knowledge sharing in an organization is well known, yet much of the knowledge within an organization remains unshared. This research focuses on the important role knowledge sharing in an organization plays in facilitating operational safety within organization. It takes into cognizance the role of knowledge sharing and how it impacts on the operation of safety within the organization and the organizational members in construction firms and make recommendations that can be used to increase knowledge sharing activities within organizational teams and enhance safety awareness. Ketvirtis, (2011), organizational leaders, managers, and professionals can utilize the recommendations to help organizations enhance team performance and strengthen their competitive advantage by leveraging on the minimization of accident, protection of equipment, and preservation of environment. Ipe, (2013) opined that in an ever increasing competitive business environment organizations must develop capabilities that will provide them with a sustainable competitive advantage. These capabilities must be very unique in such a way that other organizations cannot imitate them easily.

The degree to which an organization is capable of handling its operations successfully, devoid of any accident or fatality will portray the organization with a decent public image and reputation and place them ahead of its competitors, which are dependent on knowledge sharing practices inherent in the organization (Almahamid, 2010). Knowledge sharing is an activity through which knowledge such as information, skills, or expertise is exchanged among people, friends, peers, families, communities, employees, or within or between organizations. Knowledge sharing is also a part of the knowledge management process. Thus, taking an insight on the different dimensions and measures and how its interactions will bring about the effective and efficient implementation of operational safety in construction firms to enable the organizations actualize their objectives.

Incorporated in the operational safety and Management System (OPS-MS) are the means to meet the requirement of an organization's safety policy and commitment that are inherent in the mission statement of some selected construction firms. Recognizing the goal and objective of knowledge sharing in the industry which are to enhance, promoting growth, increasing and improving occupational methods and procedures leading to increased safety awareness which will lead to minimization of accident or total eradication, environmental preservation, protection of equipment, and generally, health security and welfare among employees in the industry. This can be achieved through an adequate knowledge sharing practices which are functions of knowledge management process.

Concept of Knowledge Sharing

Knowledge sharing been a combination of words, can be viewed from different perspectives. Knowledge is not a concept that can be easily explained as there is no precise consensus on what it is. Sometimes the terms information and knowledge are used interchangeably. Indeed information is a means mediating formation of knowledge. On the other hand, knowledge is defined as combination of experience, values, information, professional's perception that enable assessing and integration of new information. However, sharing (Philip, 2013) opined that is the process of giving out of one's personal thoughts, feelings or experience.

It is understood that knowledge sharing is a critical component of knowledge management. Knowledge management is generally referred to as the way an organization creates, retains and shares knowledge. Knowledge sharing can also occur between individuals, within teams and across the organization. Research supports the idea that cognitive resources available within a team will be underutilized if knowledge is not shared. However, predictor variable of the subject under study which is represented as knowledge sharing has its dimensions as employee training, community of practice and management development.

Thus, this study shall seek to find out how employee training, community of practice and management development will influence and enhance operational safety practices in an organization. Therefore knowledge sharing is a critical team process that involves members interacting to share ideas, information, and suggestions relevant to the teams task at hand. Knowledge sharing is a behavior to spread knowledge to other members, by the indicator of interaction, willingness, ability, and knowledge quality (Liao, 2017). Knowledge sharing is the process by which individuals exchange tacit and explicit knowledge in order to create new knowledge. Accordingly, in order for knowledge sharing to occur, the organization will have to enable it through its organizational strategy and it must be actively encouraged or be facilitated. Knowledge sharing is a key enabler of knowledge management process.

Benefits of Knowledge Sharing in an Organization

Therefore, it's obvious that managing knowledge properly can bring a lot benefits to an organization. Below you can find a list with some of those we consider as the most important and able to influence the way organization works, in a positive way (Dalkir, *2015*).

1. Making the organization's best problem-solving experiences reusable:

Dalkir, (2105), argued that once an organization develops an effective solution to an issue and it turns out to be the best, it allows members of your organization to use it in all future situations. Trying to avoid redundant effort by managing knowledge properly saves a lot of time and budget, not to mention that it can importantly streamline work and keep employees' morale up. Knowledge sharing also improves communication among employees, both intradepartmental and interdepartmental, according to "The Benefits of Knowledge Management and some empirical evidence" study. The members of an organization can improve their relationship significantly by sharing and managing knowledge properly, no matter if they work in the same department or different departments.

2. Creating better and faster decision making:

When customers are facing problems or you have to solve an internal issue, analyze trends, understand competition or plan new strategies, you tend to look for information and resources in order to support such activities. Information overload can make this process difficult (Gurteen, 2015). Though using knowledge again and again in repositories allows decisions to be based on the actual experiences of the members in your organization. All these tasks can be performed efficiently if it's easy to find what you need and most importantly, when actually you need it.

3. Stimulation of innovation and growth:

Prusak (2018) argued that most businesses have the main purpose of increasing customer's confidence and increase organizations revenue, but this can be a bit difficult when competition increases. By managing knowledge properly, employees gain access to valuable information and deliver better results. The organization stimulates innovation and, directly, achieves growth a lot easier when they choose to put knowledge sharing principles into practice.

   i.   Improve delivery to customers:

   ii. Customers appreciate a company that can demonstrate its widespread expertise and the ability to use it in their benefit. Also, the ability to deliver on time is essential and can help a company differentiate itself among its competitors (prompt service or project delivery). Sharing knowledge and innovation can definitely reduce the time required to deliver a project or a particular service, which results in increased win rates or increased customer confident and, of course, satisfied customers (Emil, 2018).

   v. Reducing the loss of know-how (knowledge):

Know-how is another important asset in each company and it should be exploited and managed properly. Dalkir, (2015) asserts that through knowledge sharing organizations can capture explicit and tacit knowledge and eventually reduce their losses. It's also an avenue to make scarce expertise and knowledge widely available to the entire organization. Classic tools like forums, training events, presentations, white papers, etc was previously used, but more dynamic and peer-to-peer centred knowledge sharing Q&A platforms are making information more easily accessible presently. However, other school of thought also postulated some variant benefits of knowledge sharing.

Dimensions of the Predictor Variable (Knowledge Sharing)

Prusak (2018) asserted that the predictor variable which is also known as the independent variable of the study, which is knowledge sharing, and it has the following dimensions as: employee training, community of practice and management development.

Employee Training

Employee training has been defined by different scholars and researchers of management. Thus, some important definitions of employee training are as follows: Dale (2018) in his assertion, states that employee training is simply the organized procedure by which people learn knowledge and improve skill for a definite purpose." Thus, it will be pertinent to state that as the operation continues, technology evolves in the sector, to enable the workers (employees) to meet up the required or expected result. Since most of the operations carried out in the construction sector are human based, they also requires training to meet up the demand and remain competitive in the industry. Employee training has a way of motivating the personnel to enable them give out their best.

Ipe, (2013) postulate**s** that employee training is the act of increasing the knowledge and skill of an employee for doing a particular job. However, as events unfolds, new technologies are been introduced in the industry, all channelled towards how to execute organizational operations promptly and effectively. This makes it mandatory for the operators of these equipments to be trained to enable them execute the tasks. Dale, (2018) sees employee training as the process by which manpower is filled for the particular job it has to perform. Every operation requires a particular skill to suit operation, making the need for training a compulsory exercise in the organization. For every innovation technology wise, training is required to match the operation with the exact skills from the employee.

However, in the words of Michael (2019), employee training is a process by which the aptitudes, skills and abilities of employees to perform specific jobs are increased. Thus, by increasing the skills and abilities of the employee, it also creates room for high productivity and prompt delivery of projects. In a simple and generalized term, to provide ability to the employee to perform a specific job is called training. Thus, the art of knowledge and skill to accomplish a specific job in a specific way is called training. At all levels of organization employee training programmes are needed in order to make qualitative improvement in the work of the employees. John (2019), employee training is the process for providing required skills to the employee for doing the job effectively, skilfully and qualitatively. Training of employees is not continuous, but it is periodical and given in specified time. Generally training will be given by an expert or professional in related field or job.

Employee training is required at every stage of work and for every person at work. To keep oneself updated with the fast changing technologies, concepts, values and environment, training plays a vital role. Training programmes are also necessary in any organization for improving the quality of work of the employees at all levels (John, 2019). It is also required when a person is moved from one assignment to another of a different nature. Taking into account this context, this unit aims at providing insight into the concept, need and methods of training, also areas of evaluation of training, retraining and dimensions of organizational learning. According to Dale (2018), employee training is a process of learning a sequence of programmed behaviour. He went on to posit that it is the application of knowledge and gives people some awareness of rules and procedures to guide their behaviour. It helps in bringing about positive change in the knowledge, skills and attitudes of employees. Michael (2019), argued that employee training is an investment which is geared towards getting more and better quality work from your talent. Thus, training is a process that tries to improve skills or add to the existing level of knowledge so that the employee is better equipped to do his present job or to mould him to be fit for a higher job involving higher responsibilities. It bridges the gap between what the employee has and what the job demands.

John, (2019) asserts that since training involves time, effort and money from an organization, the organization should be very careful at the designing stage of any training program. The objectives and need for training should be conspicuously identified and the method or type of training should be chosen according to the needs and objectives established. As soon as this task is carried out accurately, the organization should take a feedback on the training program from the trainees in the form of a structured questionnaire so as to know whether the amount and time invested on training has turned into an investment or it was a total expenditure for an organization. Almahamid (2010) postulated that for any organization to carry out any form of training within the organization system such training must be able to serve the following purposes:

Skill Development: It has been observed that for any organization to achieve success or failure, it will be dependent on the productivity of the employee's. Since achieving high level of productivity from every worker is the main target for introducing training program. Almahamid went on to say that a skilled employee is generally very productive. An employee who has the necessary skill for his job sees himself as a professional and act accordingly.

Attitude Modification: A very good employee training program should be able to influence an employee's attitude towards his job and the organization. Emil (2018) asserts that it is achieved by identifying the factors that appear to make up his attitude. Going on, he stated that an employee's attitude is modified as he is taught to help himself and achieve greater things in and out of the organization.

Education: Emil (2018) opined that one of the aims of employee training program is to educate the employee about the working of the organization which he is a part of.

Development: Training helps the employee to perform a specific task, whereas a training program that aims at employee development should encourage the employee to arouse in him the desire for self development.

Thus, stating different concepts of training and its objectives, it will be pertinent to say that there are targets for the training on the employees within the organization. Trainings are needed in all levels of the organization in order to make qualitative improvement in the work of the employees. However, employee training can be seen in different ways or dimensions, but for the purpose of this study we are looking at two different ways, which are on-the-job training and off-the-job training, which also serve as the indicators to the dimensions of the independent variable. Amah (2016), asserts that training is the teaching of lower level employees on how to perform their current tasks or jobs. She went further to ascertain that it is aimed at acquiring specific knowledge and skills for the purposes of an occupation or task. Almahamid, (2010) postulated specifically, the need for training and they are as follows:

1. Environmental changes: Due to the drastic emergence of technological innovation such as the mechanization, computerization, and automation which has resulted in many changes that requires the services of trained staff with adequate skills. The organization should endeavour to train the employees to equip them with the latest technology, knowledge and skills to enable them fit in to the dynamics.

2. Organizational complexity: With the arrival of modern inventions, innovations, technological up gradation, and diversification practices, management of organizations have become very complex. Thus, this has contributed to the problems of coordination. In order to meet up with the complexities, training has now become a mandatory exercise.

3. Human relations: Maintenance of good human relations by management has made training one of the basic tools to deal with human problems within the organization.

4. Matching employee specifications with the job requirements and organizational needs: An employee's specification may not exactly suit the requirements of the job and the organization, irrespective of past experience, knowledge, and skills (Amah, (2016). There is always a gap between an employee's present specifications or qualifications and the organization's requirements. For the organization to bridge the gap, training is highly required. (Amah, 2016)

5. Change in the job assignment: Training is also necessary when the existing employee is promoted to the higher level or transferred to another department. Training is also required to equip the old employees with new techniques and technologies to be able to operate the new equipment."

Community of Practice

Alberta Regional Professional Development Consortia (ARPD), explained in their article that communities of practice are formed by people who engage in a process of collective learning in a shared domain of human endeavour: a tribe learning to survive, a band of artists seeking new forms of expression, a group of engineers working on similar problems, a clique of pupils defining their identity in the school, a network of surgeons exploring novel techniques, a gathering of first-time managers helping each other cope. Generally, we can deduce from the various articles read, that communities of practice are voluntary groups of people who, sharing a common concern or a passion, come together to explore these concerns and ideas and share and grow their practice within a given field. Wenger (2014), opined that community of practice is referred to as a group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.

Wenger (2014), postulated that a community of practice is simply a voluntary group of people who share a common concern or a passion, come together to explore these concerns and ideas and share and grow their practice. Thus, it is also perceived that the concept of community of practice can be used to understand how a group of individuals may engage in a process of collective learning in a shared domain of human endeavour. According to Nickols (2012), he asserts that communities of practice (CoP) are groups of people in organizations that come together to share what they know, to learn from one another regarding some aspects of their work and to provide a social context for that work. However, in the foregoing context, community of practice can be viewed as a system for people to acquire and polish existing skills rather than to create new ways to complete a task. Thus, it is considered that, the concept of a community of practice can be used to understand how a group of individuals may engage in a process of collective learning in a shared domain of human endeavour.

Amah, (2016) opined that there are some basic concept of community of practice, and he went on to elaborate on where these concepts will be applied. Enumerating some areas where they can be applied such as: business, organizational design, government, education, professional associations, development projects, and civic life:

Organizations: Baird, (1986) in his assertions, opined that this concept has been mostly used by people in business because of the awareness that knowledge is a critical asset that needs to be strategically managed. Initial efforts of knowledge management had placed many emphases on information systems with less positive results. He also argued that communities of practice tend to provide some new approaches, which focused on people and on the social structures that enable them to learn with and from each other.

Government: Baird, (1986) like business designs, government organizations are faced with knowledge management challenges with increasing complexity and scale. They adopted communities of practice for much the same reasons, though the formality of the bureaucracy in the system can come in the way of open knowledge sharing within the organization.

Education: John, (2019) argued that schools and provinces are organizations in their own right, and they have their own knowledge management challenges. He opined that the first applications of communities of practice have been in teacher training and in providing isolated administrators with access to colleagues. There is an increased interest in these peer-to-peer professional development activities. He also stated that there are three ways in which community of practice affects education and they are:

1. Internally: How to organize educational activities that introduces school learning in practice through participation in communities around the subject matters.

2. Externally: Linking the experience of students to actual practice through peripheral forms of participation in bigger communities beyond the walls of the school.

3.Over the lifetime of students: How to serve the entire learning needs of students by way of organizing communities of practice focused on topical issues of continuing interest to students outside the original school period.

Associations: According to John, (2019) a growing number of associations, professional bodies and other groups, are seeking ways to focus on learning through reflection on practice.

Social sector: In the civic domain, there is an emergence of interest in building communities among practitioners.

However, she went on to state that theadvantages of considering the aforementioned features of a community of practice when designing and implementing an experiential learning activity include one awareness of the benefits of collaborating with a like-minded group and adding structure to experiential learning. Though, it is also understood that students tend to perceive better the process of collaborative learning in the creation of new knowledge. While Community of Practice also facilitates the positioning of learning in communities or the "social arena", in which they asserts that the open learning space helps students to receive the most appropriate support from the best specialist or person with the necessary knowledge and experience.

Dale (2018), in his position about the term community of practice, observed and opined that communities of practice are voluntary groups of people who, sharing a common concern or a passion, come together to explore these concerns and ideas and share and grow their practice. However, he also went on to develop a theoretical framework for the idea of a community of practice, where he investigated the reasons why this form of social learning, as described above by him, is particularly relevant to the higher education sector in the light of contemporary change and upheaval in society and the university world and an increasing emphasis on a scholarship of learning and teaching.

Liao (2017) postulated that the history and defining features of a community of practice, as developed by Wenger is explained as well as the more recent thought on landscapes of practice by the Wenger-Trayner partnership Wenger (2014), in their findings, opined that new organizational forms are springing up that promises to complement the entire existing structures and radically galvanize knowledge sharing, learning, and change all to impact positively to the actualization of organizational objectives. And this is also called the community of practice, since it has to deal with galvanizing of knowledge sharing. According to Harvard Business Review (HBR) in their investigations discovered that communities of practice are fundamentally informal and self-organizing, which benefits from cultivation. Thus, like gardens (varieties), which respond to attention that respects their nature. HBR stated that one can't tug on a cornstalk to make it grow faster or taller, and you shouldn't yank a marigold out of the ground to see if it has roots. You can, however, till the soil, pull out weeds, add water during dry spells, and ensure that your plants have the proper nutrients. And while you may welcome the wildflowers that bloom without any cultivation, you may get even more satisfaction from those vegetables and flowers you started from seed (Harvard Business Review).

Wenger, (2014) in his further investigation, also discovered that communities of practice are formed by people who engage in a process of collective learning in a shared domain of human endeavor: a tribe learning to survive, a band of artists seeking new forms of expression, a group of engineers working on similar problems, a clique of pupils defining their identity in the school, a network of surgeons exploring novel techniques, a gathering of first-time managers helping each other cope. Wenger (2014) in their effort to give a stance on the subject matter (CoP) argued that CoP is vaguely defined as 'groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis

Wenger (2014), postulated some characteristics of community of practice, and they are namely: 1. The Domain. 2. The Community and 3. The Practice.

1. **The domain:** According to Wenger (2014) they assert that community of practice is not just a club of friends, relatives or a network of connections between people. It has an identity that is defined by a shared domain of interest. Membership therefore implies a commitment to the domain, and therefore a shared competence that distinguishes members from other people. (You could belong to the same network as someone and never know it.) The domain is not necessarily something recognized as "expertise" outside the community. A youth group or body may have developed all sorts of ways of dealing with their domain: such as surviving on the street and maintaining some kind of identity that they can live with. They value their collective competence and learn from each other, even though few people outside the group may value or even recognize their expertise in different ways or dimension.

2. **The community***:* In the course of pursuing their interest in their domain, members of the community can engage in joint activities and discussions, collaborate with each other, and also exchange information. They set up some sorts of relationships that will enable them to learn from each other or share ideas within them; they care about their standing with each other. A website in itself is not a community of practice. Having the same job or the same title does not make for a community of practice unless members interact and learn together. The claims processors in a large insurance company or students in American high schools may have much in common, yet unless they interact and learn together, they do not form a community of practice. But members of a community of practice do not necessarily work together on a daily basis. The Impressionists, for instance, used to meet in cafes and studios to discuss the style of painting they were inventing together. These interactions were essential to making them a community of practice even though they often painted alone. (HBR)

3. **The practice:** A community of practice is not just a community of interested people that like some certain kinds of concepts. Members of a community of practice are practitioners (Wenger, 2014). They develop a shared repertoire of resources: experiences, stories, tools, ways of

addressing recurring problems, certainly, a shared practice. It also takes time and sustained interaction. A good interaction between persons on a journey in same ride may create in you some sorts of interesting knowledge, but it does not in itself amount to a community of practice. The development of a shared practice may sometimes amount to self-consciousness. By contrast, group of nurses who meet on a regular basis for lunch in a hospital canteen may not understand that their lunch meeting discussions are one of their main sources of knowledge sharing about how to care for patients. Still, in the course of all these conversations, they have developed a set of stories and cases that have become a shared repertoire for their practice.

Concepts of Operational Safety in Construction Industry

The protection of workers against work related injuries, sicknesses and accidents form the core part of the health and safety procedures of any organization (construction). Unfortunately research has proven that irrespective of the high level of awareness and investment channeled into safety in construction operations, findings has it that the accident record is still on the high side considering the amount of investment. According to International Labour Organization (ILO) 2001, it is summarized as "decent work", decent work is safe work. Thus, safe work is also a positive factor for productivity and economic growth. Presently, technological advancement and intense competitive pressures bring about rapid change in working conditions, work processes and organization of the work. Therefore, organizations must also be able to tackle health and safety challenges continuously and build effective responses into dynamic management strategies targeted towards the enhancement of productivity, and reducing the effect of occupational illnesses and accident. Occupational illness as defined by British American Tobacco Nigeria as "those diseases or sicknesses other than one resulting from occupational injury, caused by or aggravated by environmental factors present in the workplace" (environment).

Thus, under the general safety, an organization can decide to create a section which will be responsible for the activities of the safety, mainly for the operation of the organizational machineries when in motions and the state of the operational mechanisms. These, will lead to the creation of operational safety (OPS) section.

Operational Safety (OPS) Section

The Operational Safety Section (OPS) according to (ICAO) will be responsible for the development of basic standards, the recommendation of basic practices, making available procedures and materials for guidance related to the operation, certification and airworthiness of aircraft and heavy duty equipments, including instrument procedures design, the licensing and training of personnel and the safe transport of dangerous goods by air, by sea or by road (Rail inclusive). Thus, in order to effectively manage operations and meet commitments to customers, the company will provide the Principles, leadership, and training to promote Operational Safety, as well as the appropriate equipment, facilities, policies, and practices to enable safe, secure and environmentally responsible operations.(Crarisk.com)

However, operational safety risks management, Philip (2015), is simply an articulated integrated approach which is use to identify and manage safety risk in the operational environment and it is also used in defining and implementing changes that can affect the entire construction system safety, while ensuring safety risks arising from human factors are minimized to the barest minimum. Walter (2012), opined that Operational Safety Risk Management involves explicit consideration of the following: Operation and maintenance of rolling stock on any network; Operation and maintenance of network infrastructure, including track, electrical, communications, signaling, civil and facilities; Interfaces with all other organizations whose major operations could affect the mainline railway (construction).Thus, this will lead us to Operational Safety Excellence which focuses on implementing continuous improvement in safety performance by automating safety execution, safety control, and safety assurance in the heart of construction operations.

Operational safety as the criterion variable has some basic concepts as the measures, and these measures are as follows: Protection of environment, preservation of equipments and minimization of accidents. These measures and their underlying indicators, that buttresses on their relatedness with the dimensions of the topic under research.

Measures of Operational Safety (Criterion Variable)

According to Prusak (2018), they opined that protection of environment, preservation of equipments and minimization of accidents are the major areas that will be considered in this study. Thus, they went on to elucidate on the major measures that were considered.

Protection of Environment

Construction managers are said to have a number of crucial responsibilities, which ranges from the point of been responsible for ensuring that their clients' projects are completed on time and that they must ensure that their workforce (personnel) have a safe job site, and making sure the project is kept within its budgetary constraints is another essential obligation. For there to be a proper protection of the environment wherever construction operation is to take place or be operational, the Environmental Protection Agency (EPA, 2014) will have to be consulted to enable the agency make their rules available and clearly understood, since it is clearly stated that the protection of the environment should come first at the outset of any construction project. This means the organization will have the responsibility to inform all of their personnel (staff and contractors) working in the site that these rules should be followed and that your firm takes the protection of the environment seriously (Wilcox & Jessop, 2010). And one major and vital responsibility that has become much more prevalent in recent years in construction sector is limiting the environmental impact of construction activities.These rules, or

snapshots of which, can be incorporated into your contractor orientation process. With reference to the Code of Regulations that are available, many of which can be quite intricate but helpful, and ensure you adapt them into your daily talks, meetings, and overall training processes. However,

Nickols (2012), opined that with the emergence of laboratories located throughout the nation, EPA works to assess the visible environmental conditions and to identify, to understand, and to solve current and future environmental problems that may arise. Amah (2016), argues that it integrates the work of scientific partners such as nations, private sector organizations, academia, and other agencies; and provides leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management. These also gave rise to several legislations on environmental protection, which for the purpose of this study we can enumerate some of these legislation and its impact on environmental protection on construction work site.

Hodgson (2010) postulated that environmental protection is a global issue with a profusion of protective legislation, which are enacted as transnational and national regulations and guidelines within the sector, which is aimed at sustainable use of soil, air, water, and biomass. Hodgson agreed that these laws are applied not only to the individual polluter of the environment but also to national institutions, governments, and other organizations. However, they are designed to protect human health and ecosystems from the effects of the released chemical contaminants from the operation, to guarantee the quality of natural resources, e.g., potable water and to facilitate the recovery of degraded environments, e.g., contaminated land and sea.

Preservation of Equipment

Gurmu (2017), assert that the productivity of a construction organization can be enhanced by the implementation of a good management practices. Gurmu (2017), postulate that with the emergence of heavy construction equipment and the approach of multi dimensional system and large construction company of transforming the construction sector to a more mechanized and more organized sector has made it a compulsory obligation for maintaining and preserving the multiple types of equipments ever present in the organization to be able to perform to its optimum capacity. Going by the measures and its indicators (predictive and reactive maintenance) we can now understand how important preservation of equipment is, in the major concept of the subject under research. Equipment is acquired to perform some basic and desired activities. During its operation, there will be policies that are set to regulate its performance and also for keeping it in good shape and to prolong its economic life.Thus, heavy machinery and large sized equipment succinctly became an integral part of any construction activity, while plants and machinery now form a substantial aspect of the construction operation.

Preservation of equipment, is seen as a general upkeep and repair of equipment or plant, by which to maintain a productive and safe operating state, help in prolonging the working life span and residual value of the equipment or plant. Thus, it has been ascertained that lack of equipment preservation or maintenance do not only amount to direct costs of equipment downtime (non-functional), but also creates an indirect costs which may result as a form of delay to productivity, which might also lead to the client loosing goodwill, confidence, and most ultimately, warrant reduced margins. Preservation of equipment is the protection, and preventive maintenance carried out on equipment and systems before it is taken into use or during use.

Bloch (2015), argues that preservation of equipment can be the maintaining of spares and redundant machinery which are in a prime state, ready for operation, which can be a daunting proposition, precisely, given that most of the environment is covered with substances that have the potential to attack these stored and standby equipments or machines. Protection of Equipment during storage will not only help in reducing the costs but also makes it easier for reinstating the equipment. Preservation of equipment which comprehends the transit process, storage, temporary shut-down, construction, or long-term mothballing is essential to ensuring they can be reinstated and operational as quickly and cost-effectively as possible.

Employee Training and Operational Safety

While reviewing the available literature, it becomes very obvious the importance of employee training and its impact on the actualization of organization's zero tolerance on accident and near misses. According to Amah (2016), she asserts that training is the teaching of lower level employees on how to perform their current tasks or jobs. Not stopping at that, she went further to ascertain that it is aimed at acquiring specific knowledge and skills for the purposes of an occupation or task, stating directly that achieving ones target safely, can be termed to be an achievement to the individual and organization. It is believed that at the end of the training embarked upon by any employee, it is expected that the employee's performance to job will improve, thereby, eliminating the possibility of low performance by the employee. Michael (2019), on his position stated that employee training is an investment which is targeted towards getting more and better quality work from the talent of an employee, and aiming towards eliminating operational hazards and maintain safety operation.

Thus, one can be able to decipher the comparatively importance between the outcomes of making employee training an integral part of the organization strategy for achieving a long term policy for internal growth while paying less attention for training might likely lead to escalation of poor operation and exposing of hazardous features that are tantamount to accident and loss of man hour. Walter (2012), postulated that for any organization to carry out any form of training within the organization system such training must be able to serve the following purposes which are also targeted towards the improvement of the organization's operation with safety consideration:

Skill Development: this has been observed that for an organization to achieve success or failure, it will be dependent on the productivity of the employee's towards the adherence of stated operational rules and procedures. Achieving high level of productivity from workers is the main target for introducing employee training program. Nwachukwu went on to state that a skilled employee is generally very productive. An employee who has the necessary skill for his/her job sees himself as a professional and act accordingly, by following rules and procedures.

Attitude Modification: A very good employee training program influences an employee's attitude towards his job and in the organization. Gurteen (2015) asserts that this can be achieved by identifying the factors that appear to make up his attitude. Going on, he stated that an employee's attitude is modified as he is taught to help himself and achieve greater things in and out of the organization. Thus, these attitude most times goes beyond the official practices and are extended to our individual homes for practical implementation.

Education: Gurteen (2015) opined that one of the aims of employee training program is to educate the employee about the working of the organization which he or she is a part of. Education they say is power.

Development: Training helps the employee to perform a specific task, whereas a training program that aims at employee development should encourage the employee to arouse in him the desire for self development. Finally, the target is solely domiciled in the ideology of making employee training a basic factor which will lead to equipping the employee on how to be knowledgeable enough to carry out the expected task, by been able to manipulate the equipment, use the technological innovations available for information dissemination (information technology), and also be conversant with the modern ideology and current happening in the area of operation. All targeted towards achieving zero accident on the personnel, equipment and environment. In turn, employee training is basically viewed as a strategy that is also required to equip both the old and new employees with new techniques and technologies on how to identify hazards and eliminate accident and maintain environmental balance (Amah, 2016).

Conclusions

Conclusively, it is stated that a well structured knowledge sharing practice in any organization should be able to impact positively on the overall safety system. However, the principal officers of the organization such as the supervisors, safety officers/managers and the operation's managers should incorporate knowledge sharing practice as an integral part of the organization systems while encouraging the employee training, community of practice and management development model of learning as an acceptable way of enhancing knowledge sharing practice. However, the application of the various dimensions will lead to strategically proactive system, which will enable the organizations to have a very sound record on the operational safety practices. Thus, this will lead to a very high standard of environmental protection, promising culture of equipment preservation and a drastic approach of accident minimization to zero level. It is also imperative for the construction firms to ensure that their knowledge sharing practices are effectively institutionalized and supported by adequate policies, programs and cultural frameworks. Knowledge sharing in an organization not only occurs at the individual level but also at the collective level (organizational). Going further, Obembe stated that an organization's capacity for knowledge sharing is very crucial factor, since it possesses the ability to generate new knowledge as well as its ability to utilize the resources and capabilities of the organizational members.

Suggestions

The following recommendations are premised on the conclusions of the study, and as such are structured to buttress on the adoption of knowledge sharing practices in a way it will address the operational safety targets of the organization:

1. Organizations should make regular training of personnel (employee training) as part of the organizational strategy for actualization of competitive advantage and elimination of hazardous operation.

2. Employee training should not only be seen as abond that ties together all human resource practices, but also as an instrument for establishing when and how operational practices should change, allowing employees of construction firms to play the role of organizational change agents.

3. Organizations should recognize community of practice as a veritable concept in the promotion of knowledge sharing practice and formalize it within the system, since individual ideas and contributions forms the basic foundation of the exercise within the organization leading to reduction of accident.

4. Construction companies should depend less on safety supervision and create a self compliance mechanism where every personnel can strive to always operate within.

5. Construction companies should make it a compulsory obligation to make available operators manual for every machine available in the worksite.

6. Organizations should make available a certified operators checklist to every operator which is to be strictly followed before, during and after every operation for compliance sake.

7. Construction firms should adopt preventive maintenance strategy to reduce the impact of mechanical error or unsafe condition which has been diagnose as been the major cause of accident leading to fatality.

8. Management of organizations (Construction) should make the benefits (incentives & rewards) of knowledge sharing practice within the organization a strategy to encourage personnel, and dissuade other personnel from hoarding their experiences or expertise within the organization's personnel.

9. Construction firms in its culture having high level values attached to knowledge sharing and a standardized system of operational safety should create a high level of indoctrination (induction) policy to always keep its workforce (old/new) on check to always avert unsafe act.

10. Management of construction firms should see management development as a system that is routinely used to match the personnel with the desired operation to actualize the organization target and remain competitively advantage.

11. Finally, organizations should see knowledge sharing as an integral part or, an internal way of achieving an accident free operation that will lead to sound operational safety system.

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