

Impact of Occupational Health and Safety Management System (OHSMS) Implementation across Commercial Banks in Nigeria

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Abstract

This research examined the implementation level of occupational health and safety management system (OHSMS) and the benefits of OHSMS in the Nigerian Banking Sector, using banks in Lagos State as a case study. 355 participants were randomly selected from six commercial banks. A descriptive survey design was used with questionnaire as research instrument for data collection. The questionnaire was designed to a 5 Point Likert scale to tally with the objectives of the study. The reliability of the survey data collected was tested using test-retest method, producing a value of 0.84. Data were analyzed using descriptive statistics of percentage, frequency distribution, mean and standard deviation and presented in tables and charts. The findings revealed that First Bank and FCMB completely implemented all the key components of OHSMS and as result, rated 100 % respectively, while Fidelity Bank and Union Bank were rated 99% respectively. Providus Bank and UBA were rated 97%. Furthermore, the study captures that the most ranked benefit of OHSMS to the commercial banks is improvement in the safety culture with the criterion mean of 4.1127. Other benefits are ability to sustain and improve profit (4.0507), strong governance and capacity to manage occupational health and safety hazards and risks (4.0256 and 3.8841; respectively) while the least benefit based on the bank worker's perceptions is improved productivity with criterion mean of 3.8761.

Keywords: Occupational Health and Safety Management System, Awareness, Implementation, Benefits, Nigerian banks, Bank Workers

1. Introduction

The banking industry is a major financial center in the world. Banks aim at building up capital gains and eliminating losses as much as possible. Commercial banks play an important role as a key component of the financial system, mobilizing funds from savers to borrowers in an efficient manner. They provide specialized financial services which help to make the overall economy more efficient (Econ, 2001). The banking sectors currently assist the government and its agencies to ease the challenges of the nation's public deficit by assuring a strong and effective steady flow of government revenue and Nigeria's bank are helping to get the economy back on track. It is no doubt that the Nigerian banking sector contributes greatly to the nation's Gross Domestic Product (GDP) due to its financial intermediation role and as well the social role it plays through employment.

Despite the contribution of the banking sector to economic growth in Nigeria, the sector faces internal challenges such as work-related accidents. Nigeria as a developing country is making a conscious effort to prevent or curb work-related accidents and injuries in order to increase productivity and improve performance. In this situation, the causes of accidents in the banking sector according to research studies are characterized by some of the following factors: Poor occupational health and safety (OHS) characters and behaviours of the organization, lack of Personal Protective Equipment (PPE), workers disregard for OHS policies and regulations, mistakes by workers based on the lack of understanding of the OHS manuals, lack of trainings or education on safety programs, instructions, lack of risk management assessment, lack of risk monitoring devices and detectors (Sewu et al., 2019). In other words, the causes of accidents in the banking sector are characterized by lack of managerial control and also negligence by employees to adhere to safety precautions. Nigeria as a

developing country recently, has a rapid growth in the banking sector but the banking sectors do not practice OHS thoroughly because a careful attention is not given to OHSM systems. Accidents and injuries can be alleviated or lessened by the banking sectors by implementing OHS policies, rules and regulations, safety standards and also enacting it by management in order to reduce accidents and risks which will minimize a lot of damages to the organization's financial strength and stability (Sewu et al., 2019).

Employees are not only obliged to the organization; they expect management to address their health and safety needs first by implementing good and sound policies (Amponsah-Tawiah and Mensah, 2016). The banking sectors play an active and enormous role in boosting the economy in Nigeria. The banking sectors in this situation must play a vital role in OHS for sustainable development and long-term survival, with ILO statistics reporting that approximately 317 million occupational accidents occur worldwide each year and about 6,300 people die of it (Gopang et al., 2017). The World Health Organization (2016) reported that the rate of input by the global workforce contributes to about USD 21.6 trillion per year of the global gross domestic product (GDP). A report from the International Labour Organization (2015) showed that millions of workers worldwide are exposed to risk of various types of work-related hazards. The situation of OHSMs in organizations changes from time to time and varies from country to country, and injuries and fatalities are widespread in most developing countries.

From a financial point of view, the superfluous incurred cost associated with occupational accidents, injuries and illnesses are definitely not anticipated by firms. There is loss of incomes, medical treatment cost, pain and reduced quality of life for employees. The employer also has to bear the cost of monetary compensation, damage to equipment or facilities, losses in the form of production interruptions etc. Besides, the replacement and training of the new employee if an

employee is due or disabled is another type of expense incurred by the employer. All such costs can be minimized by enhancing occupational health and safety conditions (Thomason and Pozzebon, 2002). OHS management is a part of the organizational management performed by the top management through security measures with aim of preventing accidents at work and injuries. This improves workplace conditions (Vinodkumar and Bhasi, 2011). OHSMS provide safer working environment that lead to increased productivity, reduced costs, improved profitability and performance. Bottani et al. (2009) have shown the consequences of not using safety management systems on organization's performance.

Research studies are still being conducted to know the impact of occupational health and safety management system (OHSMS) in the Nigerian banking sector. Occupational health and safety practices have generally been given little research attention. As a result, occupational health and safety has continued to remain outside mainstream organizational and management researches (Barling et al., 2002), therefore this study aims at assessing the implementation level of OHSMS and the benefits of OHSMS in Nigerian banking industry using Lagos State as a case study.

2. Research Methodology

2.1 Research Design

The study used a descriptive survey research design method. Descriptive survey research design method was considered appropriate as it is efficient, fast, accurate and less expensive method of extracting information from a population and has been used in similar studies carried out by Desa et al. (2013), Eberendu et al. (2018), Ajayi (2018) and Girisa et al. (2018). This study was carried out to assess the implementation level of OHSMS and the benefits of OHSMS in Nigerian commercial banks.

2.2 Study Area

The study area for this research is Lagos, the fifth largest economy in Africa, located in the south west region of Nigeria and circumscribed by Ogun state to the north and east, west by Republic of Benin and to the south, by the Atlantic Ocean. The choice of Lagos as the study area is premised on its commercial nature, advance urbanization, and vast population.



Figure 1: Study Area
Source: Google Map (2021)

Lagos which lies on geographic coordinates of 6 35N and 3 45 E spreads over 3,577 kilometers accommodates head offices of most banks in Nigeria, multinational organizations, embassies, and supermarkets and is also known to support new businesses and commerce, and has twenty local government areas, and a GDP of \$91 billion. All commercial banks except one have their headquarters in Lagos and several branches operating across Lagos. They all have centralized operations driven by technology and have accessible branches.

2.3 Study Population

Twenty-three commercial banks are licensed to render financial services in Nigeria by the Central Banks of Nigeria, the regulator of banks in Nigeria. Workers in six banks namely United Bank of Africa, First Bank of Nigeria, Union Bank of Nigeria, Fidelity Bank Plc, First City Monumental Bank Plc and Providus Bank Limited were sampled.

Table 1 shows the population size of the workers in the selected commercial banks. The population consists of different categories of bank workers including Branch Manager, Branch Operation Manager, Relationship Manager, Operation Executives, Occupational Health and Safety Management System Coordinators and Customer Service Officers.

Table 1: Population of staff in the six selected commercial banks

SN	Tier	Name of Bank	Population	Percent
1	1	First Bank	800	25.26
2	1	UBA	900	28.42
3	1	Union Bank	780	24.63
4	2	Fidelity Bank	382	12.06
5	2	FCMB	180	5.68
6	3	Providus Bank	125	3.95
Total			3167	100.00

Source: Field Survey (2020)

2.4 Sampling Technique

The study used three sampling techniques namely disproportionate stratified random sampling, purposive sampling and simple random sampling techniques. 25% of the commercial banks in Nigeria were purposively selected for the study based on their brand value and visibility, spread, transactional volume, accessibility and willingness to participate in the study. The six banks thus

selected were from all the three tiers of the commercial banks, another form of categorization of the commercial banks by rating firms including the Central Bank of Nigeria. In addition, disproportionate stratified random sampling technique was utilized at the discretion of the researcher on the population which had three distinct categories of commercial banks into Tier 1, Tier 2 and Tier 3 and based on history of corporate performance of the banks over the years, size of business, asset base, management competence, credit rating and brand value among others. The disproportionate population selected was in the ratio 3:2:1.

Lastly, simple random sampling technique which gives room for equal chance of selecting bank workers was used for the selection of respondents in the study. The bank workers selected by simple random sampling technique provided information on the occupational health and safety hazards and risks in the bank.

2.5 Data Collection

Questionnaire was used as the main instrument for the collection of primary data for this study. A well-structured questionnaire modelled after the ISO 45001 occupational health and safety management system standard and similar to the instrument used by Girisa et al. (2018) and Mohammadfam et al. (2016), were randomly distributed to staff of the banks within the study area. 355 respondents participated in the study. The respondents were chosen from different areas of the banks and occupied roles vital to the banks operations.

2.6 Data Analysis

Data analysis was performed using SPSS software version 22. Data gathered were presented via tables and charts and analyzed using frequencies, mean, percentages and standard deviation.

3. Results

Figure 2 shows the demographic response from participants. From Figure 2, 54.1% of the respondents have spent 1-3 years in the banks sampled, corresponding to 192 respondents while 40% of the respondents, corresponding to 142, have spent between 4 -10 years in the banks. Only 5.9% of the respondents, equivalent to 21 respondents have spent more than 10 years in the banks.

Furthermore, the Figure illustrates the functional areas of the respondents in the banks. 57.7% of the respondents are operations department staff, while 28.2 % of the respondents are staff of marketing department. 8.2% and 0.8% of the respondents are staff of IT and HR/Admin departments respectively.

Additionally, 20% of the respondents were Relationship Managers, 36.9% of the respondents were Customer Relationship Officers ,1.7% of the respondents were Branch Operation Managers, 0.8% of the respondents were Branch Managers and 0.6% of the respondents were Principal Managers and 0.3% were General Managers. However, 51.8% of the respondents work more than 40 hours every week, while 13.8% of the respondents work for an average time of 40 hours weekly. 15.2% of the respondents put in between 21 and 37.5 hours weekly, 6.2% of the respondents work for 20 hours weekly and 13% of the respondents work less than 20 hours weekly.

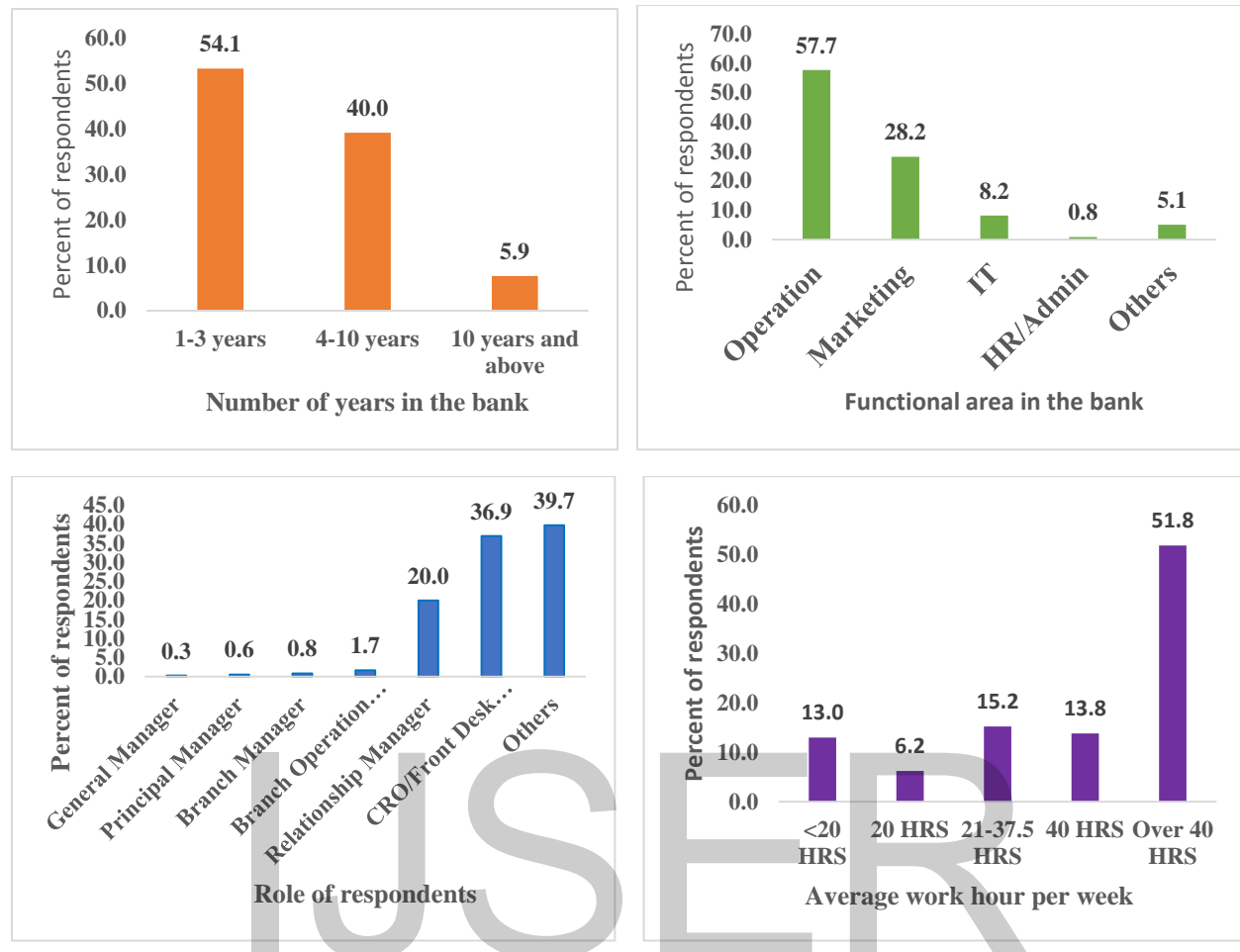


Figure 2: Demographic Responses from Participants

Figure 3 shows that 51.5% of the respondents stated that the banks use ISO 45001 Occupational Health and Safety Management System (OHSMS) standard to manage occupational health and safety concerns, while 17.5 % of the respondents felt that the banks use OHSAS 18001 OHSMS standard. 31.0% of the respondents seems not aware of the exact International Organization for Standardisation (ISO) standard in use.

In addition, Figures 4 presents the respondent's perception of the value of the occupational health and safety management system implementation in the banks. Based on Figure 4, the value of OHSMS implementation to the banks was rated very important by 56.9% of the respondents, while 33.0% rated the value of the implementation as important. 9.6% of the respondents stated

scored the value of the OHSMS as moderately important and 0.6% of the respondents rated the value of the implementation of OHSMS as slightly important.

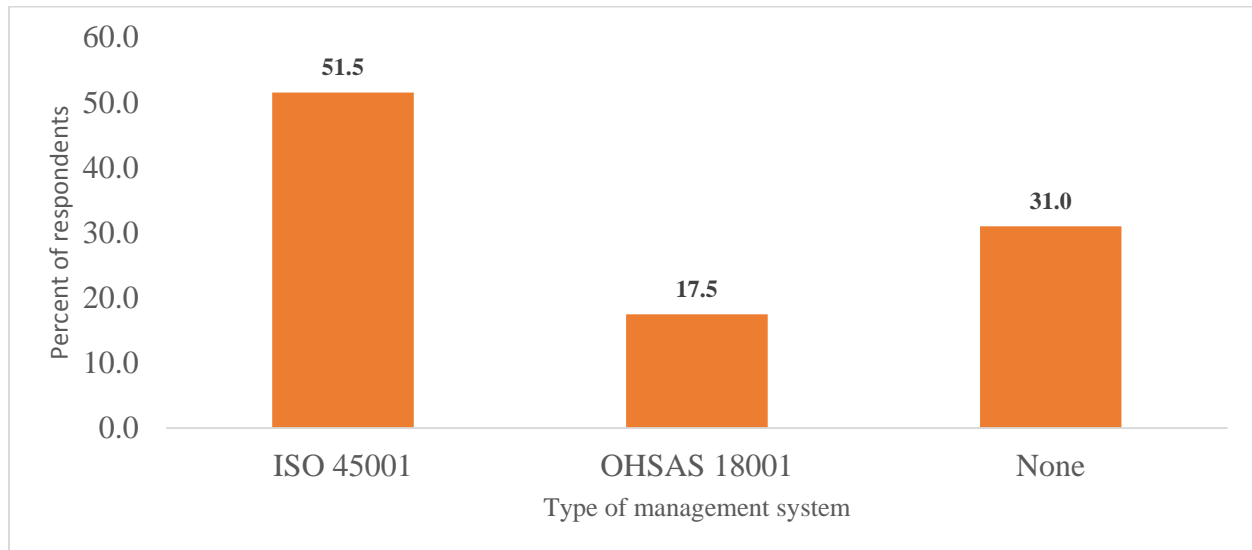


Figure 3: Type of Occupational Health and Safety Management System in Nigerian Banks

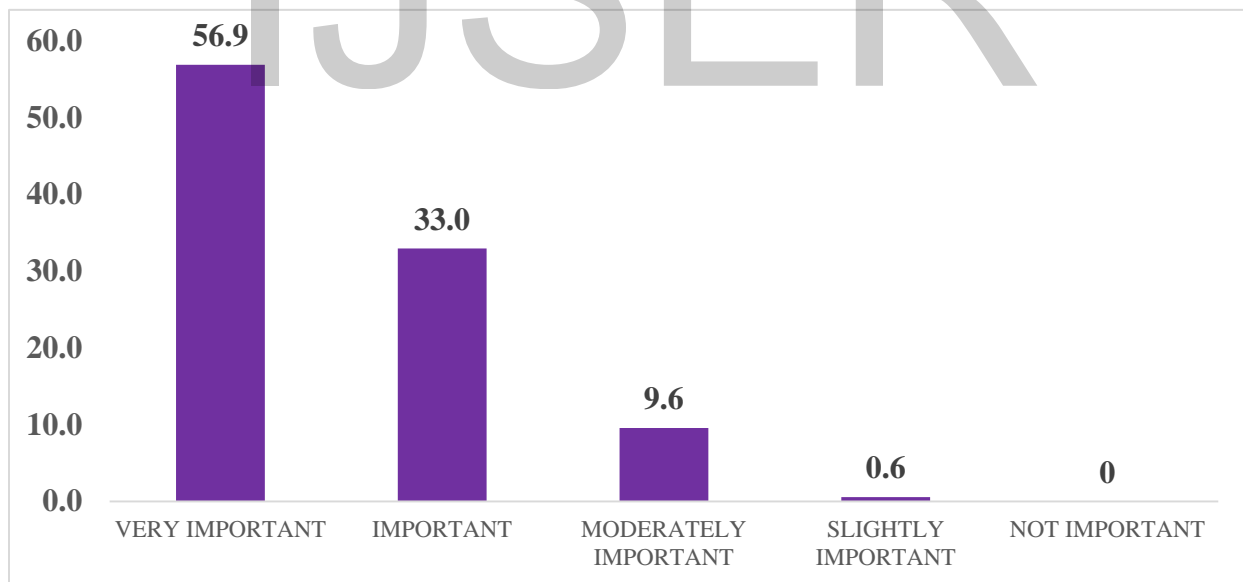


Figure 4: Overall Value of Occupational Health and Safety Management System in Banks

Figure 5 shows the percent extent of implementation of OHSMS by the six commercial banks within the study area. However, Figure 5 revealed that First Bank and FCMB completely implemented all the key components of OHSMS and as result, rated 100 % respectively, while Fidelity Bank and Union Bank were rated 99% respectively. Providus Bank and UBA were rated 97%.

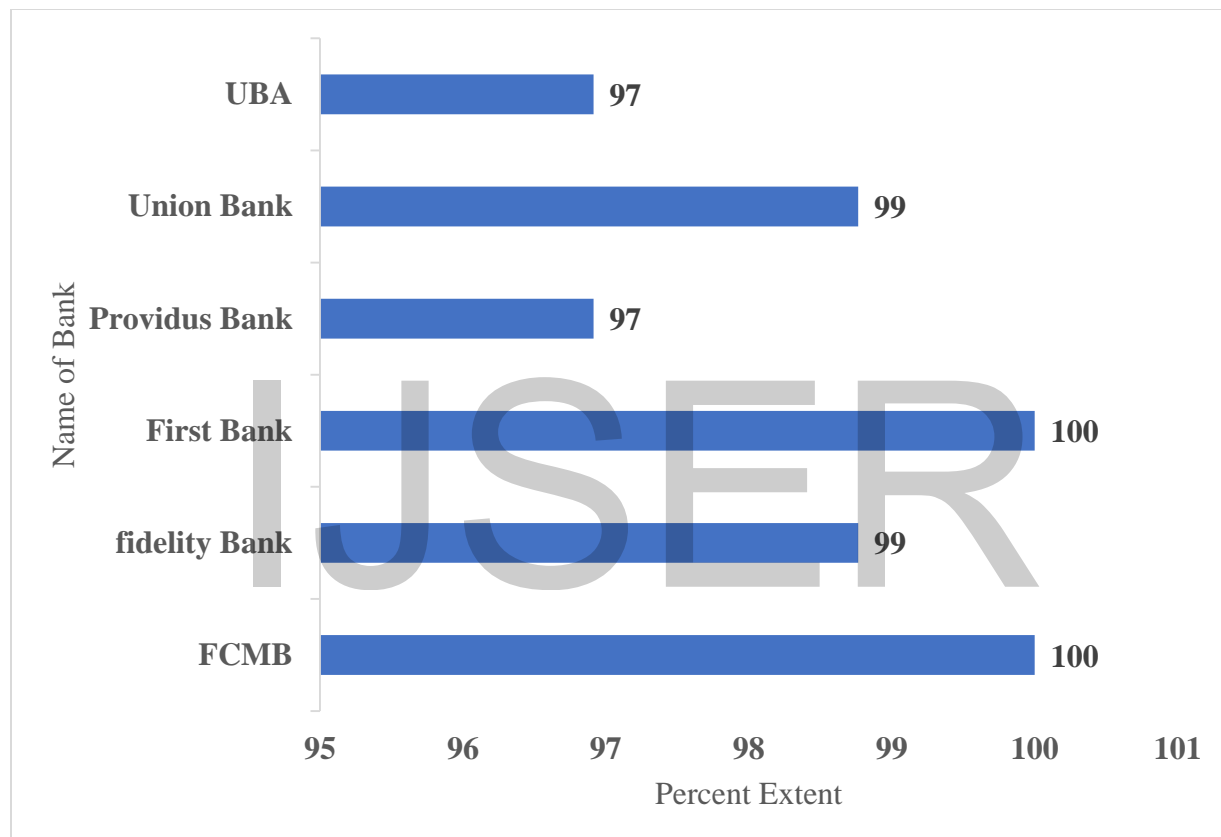


Figure 5: Percent Extent of Implementation of Occupational Health and Safety Management System (OHSMS)

Table 1 shows the ranking of the benefits derived from OHSMS implementation based on the perceptions of the respondents and captures the most ranked benefit to the commercial banks as improvement in the safety culture with the criterion mean of 4.1127. Other benefits are ability to sustain and improve profit (4.0507), strong governance and capacity to manage occupational

health and safety hazards and risks (4.0256 and 3.8841; respectively) while the least benefit based on the bank worker's perceptions is improved productivity with criterion mean of 3.8761.

Table 1: Benefits of Occupational Health and Safety Management System (OHSMS) implementation to the Commercial Banks

Benefits of Occupational Health and Safety Management System to the Banks	N	Minimum	Maximum	Criterion Mean	Std. Deviation
Safety culture in the bank is improved and all parties including customers are secured.	355	1	5	4.1127	0.9397
Customers get more value and are happier with us.	355	1	5	4.0620	0.9414
The organization is able to sustain and improve profit.	355	1	5	4.0507	0.8867
A strong governance structure for occupational health and safety management and for protection of workers from harm and ill health is achieved.	355	1	5	4.0254	0.9235
Occupational health and safety risk associated with outsourced processes such as cleaning, cash movement, transportation, security, IT infrastructure installation, etc are better managed.	355	1	5	4.0225	0.8846
3rd party certification and continued audit of the occupational health and safety management system of the bank helps increase workers awareness of their occupational health and safety responsibility.	355	1	5	3.9127	0.9105
Implementing ISO 45001/OHSAS 18001 occupational health and safety management system standard in the bank helps improve health and safety performance of the organization.	355	1	5	3.8930	0.9928
The organization is able to eliminate occupational health and safety hazard and minimize occupational health and safety risk	355	1	5	3.8845	0.9761
The productivity of the workers improves when an organization like ours implements occupational health and safety management system based on ISO 45001 or OHSAS 18001	355	1	5	3.8761	0.9591

4. Discussion

According to Doru et al. (2017), employers have responsibility for ensuring all persons that work for their organizations and at their locations are safe, free from ill health and injuries at all times, irrespective of the nature of the business and for these reasons, organizations are expected to coordinate the process of a sound Occupational Health and Safety practices in a workplace and assign the role for coordination and management to responsible persons. Absolute implementation of all elements of the Occupational Health and Safety Management System result in an effective OHSMS capable of delivering overall intention of top management and consistent protection of key asset of an organization. Though there are factors that influence effective implementation and much of these have been investigated and reported in literatures (Alli ,2008; Wurzelbacher ,2006; Chen et al.,2009; Nordlof et al.,2017; Djibran and Riyanto, 2020).

However, this study found out varying degrees of implementation of the Occupational Health and Safety Management System. The banks within the study area were rated against the framework of the Occupational Health and Safety Management System based on ISO 45001 standard and from the Figure 5, the extent of implementation of the Occupational Health and Safety Management System across the commercial banks varied from 97% to 100%.

Successful implementation of a management system is strongly affected by top management support and effective communication with the stakeholders (Mohammadfam et al., 2016; Crumbley, 2014; Gallagher et al.,2003; Latif and Vang, 2021). The absence of OHSMS might lead to poor result obtained in the bank. The weak points for the bank that recorded the least scores are in the consultation and participation of workers in the design of the OHSMS, poor awareness and communication processes and performance evaluation. More so, the other weak

point was in the improvement elements. The study showed that the size and age of the banks as well as tiers they are categorized do not influence extent of implementation of the occupational health and safety management system. However, the study further shows that there is significant positive association between the top management commitment to the implementation of the occupational health and safety management and the ability of the banks to eliminate hazards and minimize risk which is the ultimate outcome of the OHSMS implementation.

The benefits of OHSMS implementation on commercial banks in Nigeria was investigated using six commercial banks as representative sample, and benefit measured in each case on a scale of 1 to 5, with perception rating of no extent as 1 and great extent as 5. The perception rating of no extent was recorded from less than 2% of the respondents on all measure of benefits as presented in Table 2. Benefits that recorded high perception ratings included: OHSMS implementation helps improve Occupational Health and Safety performance. This received 90.18% perception rating and with the criterion mean of 3.8930. This finding from the study therefore agrees with conclusion of Anaya-Aguilar et al. (2018) that Occupational Health and Safety performance of an organization is improved when OHSMS is implemented. The banks, as a result, benefits from the implementation of OHSMS and also enjoys the benefits of lowered premium on insurance and reduced incidents as reported in the study carried out by Konstantinos and Ioannis (2013).

92.12% of the respondents responded based on personal experience that the commercial bank is able to eliminate occupational health and safety hazards and risks as a result of the adoption and implementation of OHSMS, with criterion mean of 3.8845. Furthermore, the commercial banks also benefited from improved productivity as a result of OHSMS implementation based on ISO 45001. Moreover, 90.71% of the respondents recorded very high perceptions with respect to increase in productivity with the criterion mean of 3.8761. Thiede et al. (2015) submitted that the

benefit of the OHSMS implementation includes decline in injury, increase in jobs and job security.

5. Conclusion

The study showed that the implementation of OHSMS affects the organization positively. The banks have improved Occupational Health and Safety performance, increased productivity, better management of Occupational Health and Safety hazards and risk and emerging Occupational Health and Safety hazard such as COVID 19.

Conflict of Interest

The author(s) declare no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

References

- Ajayi, S. (2018). Effect of Stress on Employee Performance and Job Satisfaction: A Case Study of Nigerian Banking Industry.
- Alli, O. B. (2008). Fundamental principles of occupational health and safety. 2nd Edition. International Labour Office. Geneva. http://www.ilo.int/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/article/wcms_098126.pdf
- Amponsah-Tawiah, K., & Mensah, J. (2016). Occupational health and safety and organizational commitment: Evidence from the Ghanaian mining industry. *Safety and health at work*, 7(3), 225-230.
- Anaya-Aguilar, R., Suarez-Cebador, M., Rubic-Ramero, C., & Galindo-Reyes, F. (2018). Delphi assessment of occupational hazards in the wineries of Andalusia, in Southern Spain. *Journal of Cleaner Production*. 196, 297-303.
- Barling, J., Loughlin, C., & Kelloway, E. K. (2002). Development and test of a model linking safety-specific transformational leadership and occupational safety. *Journal of applied psychology*, 87(3), 488.
- Bottani, E., Monica, L., & Vignali, G. (2009). Safety management systems: Performance differences between adopters and non-adopters. *Safety Science*, 47(2), 155-162.

Chen, C., Wu, G., Chuang, K., & Ma, C. (2009). A comparative analysis of the factors affecting the implementation of occupational health and safety management Systems in the printed circuit board industry of Taiwan. *Journal of Loss Prevention in the Process Industry*. 22(2), 210-215.

Crumbly, J. (2014). Management Commitment In Occupational Safety And Health As It Relates To Federal Agency Programs. Online Theses and Dissertations. 207. <https://encompass.eku.edu/etd/207>

Desa, A., Habidin, N., Hibadullah, S., Fuzi, N. & Zamri, F. (2013). OHSAS 18001 Performance Efforts and OSHA Performance in Malaysian Automotive Industry. *Journal of Environmental Science, Computer Science, Engineering and Technology*. 2(2). 217-227

Djibrin, M., & Riyanto, S. (2020). The effect of job training, work motivation, and health and work safety on employees performance at PT Bank Negara, Indonesia. 1-17.

Doru, C., Anca, E., & Costica, B. (2017). Key elements on implementing an occupational health and safety management system using ISO 45001 standard. *MATEC Web of Conference*, 121, 1-7.

Eberendu, I. F., Agu, G. C., Ihekaire, D. E., Obioma, J. E., Ozims, S. J., Obasi, C.C., Nwanjo, H. U., Amah, H. C., Nwosu, D.C., Amah, C. C., Uchehgbu, U., Obeagu, E. I & Ibanga, I. E. (2018). Workplace Health Risk Associated Diseases and the Practice of Workplace Health Promotion in Nigerian Banking Sector. *J Biomed Sci Appl*, 2(1), 1.

Gallagher, C., Underhill, E., & Rimmer, M. (2003). Occupational safety and health management systems in Australia: barriers to success. *Policy and Practice in Health and Safety*. 1(2), 67-81.

Girisa, D., Gatabe, E., & Njogu, P. (2018). Current occupational safety and health practices within selected banks in Nakuru County, Kenya. *International Journal of Advanced Research*. 6(8), 845-857.

Gopang, M. A., Nebhwani, M., Khatri, A., & Marri, H. B. (2017). An assessment of occupational health and safety measures and performance of SMEs: An empirical investigation. *Safety science*, 93, 127-133

Konstantinos, P & Ioannis, T. (2013). The Economics of Health and Safety at Work : An interdisciplinary review of theory and policy. *Journal of Economic Surveys* (2013) Vol. 27, No. 1, 167-20

Latif, M. & Vang, J. (2021). Top management commitment and lean team members' prosocial voice behaviour, *International Journal of Lean Six Sigma*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJLSS-01-2020-0002>

Mohammadfam, I., Kalalinia, M., Momeni, M., Golmohammadi, R., Hamidi, Y., & Soltanian, A. (2016). Developing an integrated decision making approach to assess and promote the

effectiveness of occupational health and safety management systems. *Journal of Cleaner Production*. 127, 119-131.

Nordlof, H., Vadra, B., Hogberg, H., & Westerling, R. (2017). A Cross Sectional study of factors influencing occupational health and safety management system practices in companies. *Safety Science* .95, 92-103.

Sewu, G. J. A., Gyabeng, E., Dadzie, A. A., & Nkrumah, N. K. (2019). The effect of occupational health and safety management on performance in the banking sector, Ghana. *International Journal of Business and Management*, 14(10).

Thiede, I., & Thiede, M. (2015). Quantifying the costs and benefits of occupational health and safety interventions at a Bangladesh shipbuilding company. *International Journal of Occupational and Environmental Health*, 21(2), 127–136.

Thomason, T., & Pozzebon, S. (2002). Determinants of firm workplace health and safety and claims management practices. *ILR Review*, 55(2), 286-307.

Vinodkumar, M. N., & Bhasi, M. (2011). A study on the impact of management system certification on safety management. *Safety science*, 49(3), 498-507.

World Health Organization. (2016). Second Regional Forum of WHO Collaborating Centres in the Western Pacific, Manila, Philippines, 28-29 November 2016: meeting report, Manila: WHO Regional Office for the Western Pacific

Wurzelbacher, J. S. (2006). Criteria for evaluating an occupational safety and health program. Degree of Doctor Dissertation, University of Cincinnati. ProQuest Dissertations Publishing