

# Employee motivation, safety, and environment protection in Oil & Gas industry

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## **ABSTRACT**

Society owes a great debt to the oil and gas industry for providing the power needed to advance and grow. At the same time, aspects of the oil and gas industry have been problematic because of various health concerns. This research paper investigates health and safety in the oil and gas industry and how to improve environmental conditions. The paper analyzes how employee motivation through effective human resources methods can improve the safety of the working area for employees and increase environmental safety practices. To achieve the study's objectives, qualitative and quantitative research methodologies to reach the objectives involving survey and secondary data analysis. An Average Index and Relative Index (RII) will be employed for the and the underneath equation used in aftereffects discoveries. The expected study research outcome is to find areas in which health and safety can be optimized in the oil and gas industry. The study implication is that uncovering the types of insights such as organizational optimization, pragmatic policies, and approaches can be pursued to potentially enhance health and safety in the oil and gas industry while protecting the environment using human resources.

**Keywords:** *Employee Motivation; Employee Protectio; Employee safety; Environmental Safety Practices; Human health; Oil Industry*

## INTRODUCTION

### Background and Context

As someone who works in the oil and gas industry, I have been aware of catastrophic incidents ranging from fires and explosions to oil spills. Most of these incidents "have been attributed to organizational and operational human factor errors" (Theophilus et al., 2017, p.168). That is important because it reveals potential improvements, underscoring the need to explore further health, safety, and the oil and gas industry environment. There are a few difficulties the oil and gas industry faces considering worker motivation, human resources, employee well-being, and security issues. The main challenge this industry goes through is the ignition of the gas, which is a training utilized by organizations when oil stores blend with gas and are considered more productive to consume. Dangerous effects on the climate and localities outflows gases (Suripno et al., 2014). Subsequently, the ignition gas is hurtful to the networks' well-being, and climate lives close to issues and is bound to foster malignant growth. Thus, this paper will examine the consequences of particular flexible employee motivation and human resources policies and recommend changes better to regulate the health and safety of the environment, which will protect the environment, population, and workers, thus encouraging employee motivation through improved respect and safety protocol.

### Problem Statement

Ecological contemplations are a greater amount of issues concerning land-based energy creation. Seaward, the ecological effect of even a small oil spill or delivery can be catastrophic to laborers and the environment. Thus, reinforcing norms concerning land-based ecological effects regarding the safety of workers and the environment within the oil and gas industry is paramount. All the more innovatively progressed work measures should be created to entice hydrocarbons from their resting place and protect worker and environmental safety. Safety management should advance as these innovations and perils are experienced. These issues are not the only contemplations that will emerge in modern society. In the mid-1970s, there needed to be more commonsense or specialized information on the risks of substances like benzene or asbestos. As time advances, the world will find data on previous obscure risks to the worker and environmental safety in the oil and gas industry and see they need to be more understood. The synthetics utilized in oil and gas may create side effects later, much as benzene has been demonstrated to cause malignant growth. New well-being cycles should be created to battle these issues, using human resources to increase worker motivation, improve employee safety, and protect the environment. Safety management should develop to address these difficulties by utilizing human resources to increase employee motivation, bolster worker safety on the job, and protect the environment. This paper addresses how the oil and gas industry's human

resources should develop to react to these always-expanding dangers and rouse the organizations and workers to advance better security principles for themselves and the climate, an examination gap in the field.

### Research Questions

- What can the oil and gas industry's human resources do to reduce the ever-increasing hazards that affect the safety of its workers?
- What can the oil and gas industry do to reduce the ever-increasing environmental hazards?
- How can the employee and gas industry corporations utilize human resources to increase employee motivation to bolster worker safety?

### Relevance and Importance of the Research

Currently, the oil and gas industry lacks a safety system for its workers, and given the hazardous nature of this work, this is troubling. There needs to be more research focusing on fixing this issue, especially within human resources, increasing employee motivation to improve worker safety and protect the environment. Also, increasing worker motivation to emphasize safety is another research gap to address.

### LITERATURE REVIEW

In recent decades, "the oil and gas industry has been beset with several catastrophic accidents" (Theophilus et al., 2017, p. 168). As someone who works in the oil and gas industry, I have been aware of catastrophic incidents ranging from fires and explosions to oil spills. Most of these incidents "have been attributed to organizational and operational human factor errors" (Theophilus et al., 2017, p. 168). That is important because it reveals potential improvements, underscoring the need to explore further health, safety, and the oil and gas industry environment. Also, utilizing human resources techniques to increase worker motivation could bolster employee safety and better protect the environment.

Local and international experts have amazingly denounced global oil associations in Nigeria and other parts of the world as ignoring or not properly enforcing overall pressing environmental, worker, and population safety standards. The failure of many gas and oil organizations to consider the environment and worker safety has already devastated the environment, achieving expansive ecological agitating impacts, along with pollution from channel line spills, penetrating fluids alongside the pollution also caused by plants preparing plants for gas and oil creation and recycling. The substances released by this production that

harm the environment contain a combination of harmful substances, such as benzene and dioxin, that cause corrosive downpours.

Populaces experiencing exposure to these oil and gas burnings endure respiratory problems, lung issues, land degradation, and the aggravation of the normal climate domain during exposure to oil and gas tasks. Concerns about oil and gas affecting the global climate developed quickly into full-scale worry that affected output in various constructions and oil and gas associations. Dissent and concern about oil and gas impacting the environment are shown by media and political assaults on seaward and inland oil frameworks that deter effective production and cause gas and oil close-downs, tediously increasing prices. Hence, the populace feels a pocket pinch at the pump, and those working for oil and gas companies feel discouraged by the pessimistic media exposure related to their line of work. These outspoken dissenters have actuated a climate of vulnerability in the division of oil and gas in addition to inspiring oil and gas companies to spend more on the state of the art issues of security, well-being, and populace safety alongside working with environmental organizations to ensure less harm to the environment (Ellte, 2004). Workers for these companies are exposed to these comments, which disrupts their motivation and feelings of safety and upsets their loyalty to their companies.

In this way, security and well-being using the seaward movement of oil and gas originally happened with no acceptable guidelines and standards to ensure its use is safe for the environment. Before governments moved to impose safety standards covering the transport of gas and oil by ship, the managers whose business increments might achieve gains by compromising on safety in the name of prosperity were allowed to do so through their interpretations of the poorly defined regulations. Much of this ignored the safety of the workers doing the necessary tasks, which demotivates their effectiveness by making them feel unsafe and not respected by others in the population due to the nature of their work. The DPR (Department of Petroleum Resources), which maintains well-being and safety measures in the oil and gas division, is moreover the body that oversees the monetary guideline of the business, later giving space for conflict of speculation. Unfortunately, there is still room for monetary benefits over safety standards in several laws that should protect the environment's safety over the oil and gas industry. The PIB (Petroleum Industry Bill) needs to update this anomaly. Its formation created chaos by making two bodies – the Inspectorate and the workplace coordinate the Upstream and the downstream regions separately instead of a single body –the DPR. That invalidates the current world philosophy, which is composed of establishing a free body only for the execution of security, safety, and health alongside environmental guidelines, contrary to the current organization of the board that deals with the monetary progression of the

business. The country's laws on security and health regarding safety for the environment when transporting oil and gas are outdated, which simplified it so executives could ignore the principles.

Stressed regarding security, the populace's health, and environmental well-being, gas, and oil suppliers, both foreign and domestic, should work alongside environmental organizations. For example, Nigeria's oil and gas industry, which features a native association, realized through its governing body that environmental agencies promote safety. Even countries like Nigeria that bolster income by heavily relying on oil and gas comprehend the essence of slack environmental practices and how the poor publicity demotivates their workers and creates widespread media problems. All acting corporations worldwide dealing with oil and gas have parts to ensure well-being and prosperity in oil and gas regions used to access these vital natural resources. To forestall seaward security fiascos, oil-bearing governments have endeavored to set up the seaward authoritative blueprints for overseers in the business to adhere to so environmental safety is considered. Subsequently, the guidelines should be made ready without considering too much flexibility, which has been problematic. Many oil and gas companies and transport corporations have discovered loopholes and flexible modifying tactics that have allowed them to ignore relevant health and safety standards for years. Thus, removing this abused power of flexibility and, enforcing a unified committee with standard regulations, and utilizing human resources to inspire employee loyalty motivation, increase worker safety, and better protect the environment would solve regular troubles in seaward petrol and gas transport methods that affect the population, workers, and environmental safety (Taiwo, 2010).

### **Key Debates and Controversies**

The area for interpretation often used as a loophole is the outdated wording in today's current safety and environmental laws when drilling or transporting oil or gas. When society and the industry's workers feel unsafe and associate job duties with environmental harm, this creates demotivating effects on employee productivity. Thus, human resources within this industry must assess a way to inspire employee motivation, increase worker loyalty, bolster worker safety, and better protect the environment. The licensee or occupier who fails to keep the well-being and safety law is subject to a fine or confinement conviction. This event emphasizes that the law on well-being and safety is outdated, just as it requires a complete review to uncover present factors. Occasions of a preventable accident in seaward technique In recent years, a few preventable seaward tasks occurred in Nigeria, which is acknowledged that would have been evaded if there were real security shields.

In 2012, oil bursts broke out on Chevron's Funiwa Northern Apoi over shallow water infiltrating the rig, which was viewed as the most horrible gas crisis in Nigeria. Not only did this harm the environment, but several on board were also killed in the crash, with many others wounded (Woolfson, 2012). Moreover, TOPCON had 146,000 barrels of oil spilled into the ocean during the fourteen days. In 2012, The Amni International's Armada Perkas, FPSO, stated the spill occurred as a delayed consequence of using the secret phrase system for the system closure (Woolfson, 2012). Late in 2013, a team investigated the seaward oil spill from Nigeria's Escravos. The investigators felt at the hour of performing towing that if the supervisors of the boat had redesigned its safety standards as per regular expectations, the tragedy could have been avoided. The command was given out, and full appropriateness was expected, but, at this point, the holders of the towing boat failed to update security necessities. Chevron, on its part, also failed to ensure such appropriate safety measures were being set up before using the vessel to prevent an environmental disaster related to oil and gas transport that also sacrificed the safety of the workers and the local population.

The upsetting occurrence caused the world to notice the importance of the order for safety standards and preserving the crew's lives and well-being. Harsh criticism followed about the managerial body's ability to execute its rules and approaches effectively and quickly. Moreso, the request doesn't obligate any consent in a case of a default, thus making the following health and safety standards only discretionary and open to interpretation without standardized requirements.

The DPR should ensure that attempts are directed towards continuous detailing of safety measures through the chairmen, conducted acceptable noticing and transport safety-checks to ensure consistency and self-sufficient untouchable evaluation of the blueprint and advancement of vessels, wells, and other gas and oil equipment satisfies the rule that adequate safety efforts to turn away hydrocarbon releases and genuine safety measures are taken. By taking these safety measures, worker motivation would likely increase, and employee loyalty could be cultivated. That would produce better overall results for the personnel and corporations handling oil and gas safety issues.

### **Gaps in Existing Knowledge**

A free association separate from the DPR that coordinates the money-related guidelines of the division should be made to coordinate seaward security, prosperity, and biological measures as per the back-and-forth movement best practices when transporting oil and gas to ensure safety for personnel, the local populace, and the environment. The regulator should set

up a submitted web destination for circulating Health and Safety Regulations, Directives, and Standards for straightforward access. This event would uphold studies and assessments, which will ultimately make a difference in the current system, making the population and environment safer while companies transport and move oil and gas. Once proper safety measures are applied, an increase in employee productivity and motivation will likely occur by utilizing the human resources departments of these organizations. When workers feel valued, they are more likely to value their workplace, which is true in any industry, including oil and gas entities.

The managerial body should conduct examinations of seaward vessel safety to ensure that techniques are safe as resource needs and that the directors continually assess transport. Considerations should ensure seaward experts are ready to build capability on prosperity and safety measures and master the transport stream in the oil and gas business. Workforce consideration in seaward well-being and safety alongside environmental checking and utilization should be invigorated through an authentic design. The regulator should ensure counsel and composed exertion with the business to ensure that prosperity, security guidelines, and commands are persistently realized with no trade-off (Taiwo, 2010). Governments should set up an analytical warning gathering to make quick work of the justification of any accident that occurs during seaward transport of oil and gas, intending to move prosperity and safety efforts from the occasions that have occurred in the past.

### **Research Framework**

There are a few difficulties the oil and gas industry faces considering their well-being and security issues. The main challenge this industry goes through is the ignition of the gas, a training utilized by organizations when oil stores blend with gas and is considered more productive to consume dangerous effects on the climate and localities outflows gases (Suripno et al., 2014). Subsequently, the ignition gas is hurtful to the networks' well-being, climate, and living close to issues and is bound to foster malignant growth. Thus, this study will interview oil and gas industry employees to assess their perspectives on how human resources can increase worker motivation and safety (Dahl & Kongsvik, 2018). Also, these workers will examine the consequences of flexible policies and recommend changes better to regulate the health and safety of the environment while also bolstering employee motivation, which will protect the environment, population, and workers, thus encouraging employee motivation through improved respect and safety protocol.

This research aims to focus on areas in which health and safety can be optimized in the oil and gas industry. By uncovering these types of insights, including but not limited to organizational optimization, pragmatic policies and approaches can be pursued to enhance health and safety in the oil and gas industry while protecting the environment using human resources. My goal is to build upon existing research on health, safety, and the oil and gas industry environment and better understand how important aspects of the industry can be enhanced to protect human beings and the environment. Thus, gaps in change management theory and employee motivation theory will be addressed.

## **RESEARCH DESIGN AND METHODS**

A survey was given to the oil and gas industry workers to be used as primary data. Data was gathered from that information, as well as some different analysts for secondary research.

### **Methods and Sources**

The exploration strategy utilized in this examination is a survey. Utilizing surveys to review results from the immediate reaction and input should be possible by messaging or e-mailing the survey. A pilot study will be coordinated with similar oil and gas employees to answer the poll. The last survey will be overhauled by incorporating the remarks and reactions from the respondents by utilizing the survey. The survey comprises two areas. The first segment will feature current human resources usage; the second area will comprise the significance of having motivational human resource options. A four-point Likert Scale will be utilized to examine the averages and responses of the workers. The survey has been coordinated with a small gathering of 25 workers in the oil and gas industry. Securing and taking apart the results of the pilot overview, calculated particular and various issues or issues have been observed.

### **Data Analysis**

The overview examination is finished by the Average Index and Relative Importance Index (RII) technique. Aftereffects of the discoveries will be determined utilizing the underneath equation and changed over to significance records.

CURRENT HUMAN RESOURCE PRACTICES	Average Index
Training and Development	3.42
Compensation	3.24
Work Environment	3.23
Performance Appraisal	3.18
Employee Empowerment and Ownership	3.01

Normal Index =  $\sum w N$  Relative significance/trouble record =  $\sum w AN$  Where w is the weightage given to every angle by the respondents, with a reach from 1 to 4, while An is the most noteworthy weight (i.e., 4 in the examination) and N is the amount of the examples of components.

Figure 1 Effectiveness of HR safety and motivation

The first part of the survey was dissected according to the respondents' points of view and noted in figure 1. Considering the table above, which inputs from the survey, the top HR tool is practice and training, followed by compensation, work environment, and performance appraisals. Each cause's Average Index that the respondents identified is recorded below. The best HR practice and its use were recognized and discussed from the positioning relegated to each training. However, the respondents felt that their freedom, motivation, and empowerment were last in HR's eyes. Thus, this indicates an area for improvement that can increase worker motivation, bolster employee safety, and protect the environment.

Importance of Effective HR Utilization	Relative Importance Index
Training helps to define job roles more clearly	0.89
Best HR practices helps in optimizing the effectiveness of HR towards achieving organization goals	0.89
Training enhance the employee's skills and improve performance	0.88
Effective work environment can help to increase employee's productivity	0.88
Empowerment and ownership develops confidence and sense of worth	0.88
Effective compensation strategy helps to retain employee in organization	0.88
Comfortable and safe work environment helps to retain employee in organization	0.87
Empowerment provides employee sense of freedom	0.86
Performance appraisal helps to tracks whether employee needs extra training and development	0.86
Performance appraisal provides recognition for work efforts	0.81
Good compensation strategy makes employee to take on more responsibility to job	0.80

Figure 2: Successful HR Utilization in the Oil and Gas Industry

In figure 2, the second part of the survey's input was processed and introduced as significance files utilizing the Relative Importance Index (RII). In this segment, the positioning was allocated to every significance, which implies the higher the RII esteem, the more significant the models. As per the table above, the respondents indicated that training was HR's

current focus. Training does not include safety and motivational training to improve worker safety and protect the environment. The outcome shows that the scope of RII creates an incentive to bolster employee motivation and worker safety and increase environmental protection. Useful HR techniques help in enhancing the viability of HR towards accomplishing association objectives' and have the most elevated RII worth of 0.89. The least RII with 0.80 is employee compensation.

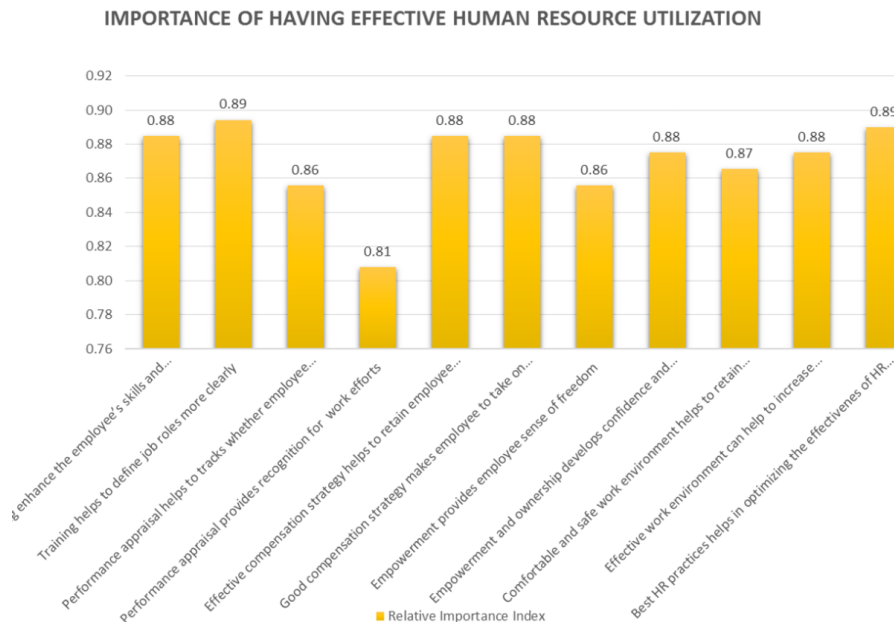


Figure 3: Importance of having effective human resource

Table 1

Best HR Practices helps in Optimizing the Effectiveness of HR towards Achieving Organization	RII
Training and Development	0.89
Performance Appraisal	0.89
Employee Empowerment and Ownership	0.93
Compensation	0.92
Work Environment	0.84

Figure 3 demonstrates HR use and RII esteems introduced utilizing a bar outline. The most noteworthy RII esteem is an assertion with training and accomplishing organization objectives as shown in table 1. That demonstrates that the respondents unequivocally concur that training preparation can assist with characterizing their jobs to increase motivation and safety among workers, and this compares with what has been expressed by Suripno et al. (2014) in their article that proposes training and motivation is an esteemed activity for further developing staff execution and upgrading abilities just as limiting position pressure since it can characterize jobs all the more plainly to representatives. That would mean protecting workers

and bolstering environmental safety in the oil and gas industry. In light of the outcomes, most respondents concur that viable representative use, empowerment, and motivation can assist with accomplishing the association's objectives and bolster worker and environmental safety. As indicated by Theophilus et al.'s (2017) research, associations with motivated workers perform better than their opposition by up to 202%. Also, representative strengthening and proprietorship can cause employee work to stay in the association and accomplish their hierarchical objectives while increasing worker motivation and employee and environmental safety.

Theoretical implications from the survey results above indicate that the current HR uses are training, but not employee safety, and employee motivation and empowerment ranking last. For instance, employee motivation and empowerment practices should generally be allowed to improve worker motivation and safety and enhance the protection of the environment. For instance, although the association doesn't completely use employee empowerment and motivation, the outcome shows that the representative knows how significant this training is in creating and forming singular self-assurance and assisting with accomplishing hierarchical objectives, bolsters employee motivation and safety. Other than that, from the contextual analysis, it is shown that the association's work is mindful of the significance of having powerful HR usage in seeking accomplishment in the oil and gas industry and accomplishing authoritative objectives.

The techniques for tending to the use of human resources indicate that some alleviation techniques must be created focused on worker motivation, employee motivation, and environmental protection in the oil and gas industry. The proposed techniques won't be foolproof. However, all things being equal, they are created to improve and successfully use human resources to improve employee motivation, enhance worker safety, and protect the environment. More should be done to empower representative inspiration through HR to ensure the security of the workers and the climate.

## **CONCLUSION AND RECOMMENDATION**

High-innovation hardware is futile in the oil and gas industry because it needs the right HR or representatives to deal with the gear. Successful human resource use is significant to bolster worker and environmental safety and increasing employee loyalty and motivation. One could apply a larger sample size in the future for increased validity. Likewise, the objective respondent's extension ought to be extended by having individuals from different organizations from various perspectives. Other than that, further developed and inescapable exploration

should be directed to get more explicit outcomes. If parts of this examination are considered 'too broad,' they can be made specific within the extent of the study by adding more human resources practices to be concentrated with more investigation destinations.

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