



## **MOTIVATION FACTORS' IMPACT ON CONSTRUCTION EMPLOYEES' PERFORMANCE AT A SAUDI COMPANY**

**Faisal A. Obaied**

Department of Industrial and Systems Engineering, University of Jeddah  
Jeddah, Kingdom of Saudi Arabia  
eng.faisal.abo@gmail.com

**Mostafa F. Fawzy, Ph.D.** 

Department of Industrial and Systems Engineering, Dar Al-Hekma University  
Jeddah, Kingdom of Saudi Arabia  
dr.mostafafawzy@gmail.com

### **Abstract**

*This study investigates the effect of motivation on the level of work performed in one of the Saudi construction companies. The study was conducted in two phases. The first phase led to determining the level of employees' performance in the selected company, a focus group was created to affirm the study's findings. The group conducted a SWOT analysis and used the voting technique to understand the company environment from both internal and external perspectives. In addition, the group discussed the possible root causes of the current performance problems. The result of this phase shows that the performance level is low based on the group evaluation. In addition, the result shows that the low motivation of the employees is the primary cause for this low performance at this Mega Construction Company. The second phase of this work focused on investigating the effect of motivation on the work performed level. This phase involved identifying, prioritizing, and studying the motivator and hygiene factors that motivate employees in the Mega Construction Company. Motivation and hygiene factors were identified based on their frequency in the literature review. Next, data were collected through an online survey and then analyzed using Microsoft Excel to study these factors' impact on the employees' performance. The result of this phase shows that the salary has the highest impact*

*on employee work performance, followed by career advancement. Therefore, to maximize employees' performance, it is recommended that the company provide fair and competitive salaries and financial benefits. Moreover, developing a career advancement system that leads to a better salary and a higher position in the company is recommended.*

*Keywords: Motivation factors, Work Performance, Construction, Herzberg's Motivating and Hygiene Factors*

## **INTRODUCTION**

The construction industry is considered one of the most responsive and dynamic sectors in any country. Through inter-sectoral linkages between other sectors, the construction sector plays a great role in fostering economic growth (Durdyev & Ismail, 2012). The construction industry produces goods and services that all other industrial sectors of the economy depend on, such as electricity lines, roads, and the construction of buildings (Boadu, Wang, & Sunindijo, 2020). As per the General Authority for Statistics, the annual growth rate of this sector in Saudi Arabia in 2019 was 8%. In addition, most construction projects create new job opportunities that help to reduce the unemployment rate in Saudi Arabia. According to the General Authority for Statistics of the Kingdom of Saudi Arabia (2022), the number of employees in this sector reached more than 3.5 million employees in 2018. In general, the most important asset of any organization in the 21st century is human resources (Hafiza, Shah, Jamsheed, & Zaman, 2011). Human resource is key to the success of organizations in the current business environment because of their contribution to organizations' productivity (Kuranchie-Mensah & Amponsah-Tawiah, 2015). Therefore, motivation is considered essential to have maximum positive performance outcomes.

Recently, the management in one of the mega construction companies in Saudi Arabia noticed that employees' work performed is decreasing, causing delays in the work of one of the company's megaprojects in Jeddah city than the planned time for deliverables. A slowed work performance led to the project being delayed and having several other drawbacks. These delays led the company to incur significant losses. Yet, the performance level is not scientifically investigated in this company.

Due to the company's preference and research ethics code by respecting the company's privacy, this research will not mention the company's real name. Instead, the company will be called "Mega Construction Company" in this study. This research focuses on understanding the company's internal and external environments. Then, investigates the root causes of the current level of employees' work performance. In detail, this research investigates the effect of several

motivation factors on employees' work performance. Several studies have been undertaken on employee motivation, confirming the importance of employee motivation as a subject. However, there is still a significant lack of adequate research on the impact of motivation on the performance of the Saudi-based construction company. This research aims to identify and prioritize the motivator and hygiene factors influencing employees' performance in Saudi construction companies. In addition, this study proposes solutions, and recommendations, that can enhance employees' performance in the studied company and similar organizations in the same industry. Thus, a selected company is used as the case study for this work to determine the motivator and hygiene factors that affect the employees' work performance. As mentioned this company will be called a Mega Construction Company in this research. As a result out of this work, the effect of the motivation factors on employees' work performance will be clarified. Moreover, these motivation factors will be ranked based on the employees' perspectives.

## LITERATURE REVIEW

Baron (1983) defined motivation as an accrual of various practices that direct and affect behavior to achieve a certain goal. Additionally, motivation can be identified as an internal and external drive that enhances employee's energy and desire to be continually committed to their tasks and to achieve set goals and objectives by exerting constant effort and maintaining their focus on the desired output (Mathis, Jackson, Valentine, & Meglich, 2012). Depending on the prevailing circumstances, employees can be positively or negatively motivated, and their motivation level can be influenced by several factors (Zailani, Ibrahim, & Bahago, 2020). According to Deci and Ryan (2000), these factors fall into two categories: Extrinsic and Intrinsic factors. Intrinsic factors are the motivators that emanate from within the employee. It consists of the desire and passion for performing one's work effectively to produce great results. Extrinsic factors are the external motivators such as a reward used to increase the employee's desire to work and meet a particular objective (Badubi, 2017). Furthermore, Zailani (2020) elaborates that extrinsic factors are tangible rewards, such as extra pay and healthcare plan, while intrinsic factors are the motivation that is emerging within the individual as self-esteem, feelings, recognition, and accomplishment.

On the other hand, Maslow came up with a five-stage theory based on human beings' basic physical, biological, social, and psychological needs (Uhl-Bien, Piccolo, & Schermerhorn, 2020). This theory places the needs of the individual in different categories and prioritizes their attainment. Figure 1 shows the categories of Maslow's theory: physiological needs, safety and security needs, social and belonging needs, esteem needs, and self-actualization needs.

Maslow's theory depends on the fact that people desire to increase what they want to achieve in life, and their needs are prioritized based on their importance to them (Smith & Cronje, 1992).



Figure 1: Maslow's Hierarchy of Needs

Herzberg's two-factor theory mostly relies on meeting employees' needs (Amzat, Don, Fauzee, Hussin, & Raman, 2016). Jones (2011) states that Maslow's hierarchy of needs influenced the two-factor model of work motivation and developed the motivation-hygiene theory by Herzberg, Mausner, and Snyderman. Furthermore, Alshmemri (2017) posits that the core of the two-factor theory lies in the difference between motivation and hygiene factors or intrinsic and extrinsic factors. Herzberg considers motivation factors as intrinsic to the job and operates to only increase and improve job satisfaction. In contrast, extrinsic factors are considered hygiene, which reduces job dissatisfaction (Alshmemri, Shahwan-Akl, & Maude, 2017). According to Amzat (2016), for the employees to be productive and satisfied, motivators and hygiene factors are necessary. Motivator factors encourage employees to work harder. On the other hand, the absence of hygiene factors contributes to the low work performance and productivity of employees (Amzat, Don, Fauzee, Hussin, & Raman, 2016). According to Herzberg (1959), for employees to have great work performance, the company should provide and enhance the hygiene factors and apply motivator factors to motivate employees to achieve the highest performance level. Gebremedhin (2017) states that applying the motivational package from Herzberg's Two-Factor Theory greatly impacts employees' performance. One of the advantages of Herzberg's Two-Factor Theory is that it provides integration of persons' intrinsic and extrinsic motivation factors that can perfectly cover other motivation theories (Yusoff, Kian, & Idris, 2013). Therefore, this study focuses on applying this theory to the mega construction company. Especially, none of the Saudi construction companies used this theory based on the reviewed literature as will be explained in the following section.

Ong and Mahazan (2020) defined employee performance as the result of accomplishment arising from employees' effort to perform work, while job performance can be described in terms of how the employees allocate the available resources to achieve the task and how well they perform the work. To find the relation between motivation and performance, around 26 scientific papers and publications have been reviewed. All these reviewed publications are about the impact of motivation on employee performance. Also, all the reviewed works were published between 2003 and 2021. As an initial result of this review, the motivation factor impacts the performance differently depending on the following:

- Organization's geographic location and activity.
- The employee level of education, gender, age, and status.

The reviewed research related to the construction industry indicates a positive relationship between motivation and employee productivity. As a review result, Salary and financial reward take the first as the most motivational fact that influenced the construction industry employees' performance as shown in Table 1. However, non-financial factors also have a positive impact on employees' performance. Recognition and work condition can be efficient tools to improve employees' performance too. Moreover, motivational communication enhances worker productivity more than functional communication, and both motivator and hygiene factors are requirements to enhance employees' productivity.

Yet, none of these papers addressed the motivation and hygiene factors of the management of engineering staff for construction companies in Saudi Arabia. Thus, this work aims to fill this gap by applying Herzberg's two-factor theory to the construction industry in Saudi Arabia.

As mentioned, 26 scientific research were reviewed. Out of the 26 research, 15 research have mentioned the motivation and hygiene factors and their impact on performance. The frequency of these factors has been calculated as shown in Table 1. Some of these factors were identified with different names in the reviewed work. Therefore, in this research, the factors have been grouped under one factor's name which refers to the same meaning. Next, by using Pareto analysis, four factors were identified as the most important factors which represent around the top 20% based on their frequency as shown in Table 1. As a result, out of this stage, the top four frequent factors are selected, which are Salary, Recognition, Advancement, and Work condition. Work condition has a very close frequency to Recognition and Advancement. Also, it is partially within the top 20%. Therefore, this research includes the Work condition as a fourth selected factor for future investigation.

Table 1: Pareto analysis of the factors' frequency

#	Factor	Frequency	Pareto
1	Salary	13	Approximately 20%
2	Recognition	8	
3	Advancement	8	
4	Work condition	7	
5	Job Security	6	Approximately 80%
6	Relationships	6	
7	Supervision	5	
8	Achievement	5	
9	Growth	4	
10	Responsibility	3	
11	The work itself	2	
12	Company policies	2	
13	Other (Medical insurance)	1	
14	Other (Sense of belonging)	1	
15	Good Home life	1	
16	Status	0	
	Total	72	100%

As the selected top four factors will be investigated in this research, more literature reviews and elaboration on each one of those four factors' details are conducted as follows:

- 1- **Salary:** Wages include salaries, bonuses, salary increases, and how it manages (Khanna, 2017). To have a high work performance and satisfaction, the salary should be suitable to the employee's work effort and comparable to the competitors and other industries (Khanna, 2017). According to Khanna (2017), all employee wages should be paid on time. Phama (2020) considered money as a scorecard through which workers can assess their importance to the organization compared to other organizations.
- 2- **Advancement:** Individual promotion plays an important role in influencing job performance (Igbaria & Baroudi, 1995). Career advancement that leads to a better salary and a higher position income can positively motivate employees to perform better (Phama & Nguyen, 2020).
- 3- **Recognition:** The purpose of recognizing employees in the workplace is to foster particular behaviors, activities, or practices that result in high work performance (Phama & Nguyen, 2020). When the employees succeed, supervisors and peers should provide praise and recognize their effort (Herzberg, 1959). Recognition can motivate the employees to give their best performance.
- 4- **Work Condition:** Involves all surrounding physical factors, including the amount of work, space, air ventilation, tools, temperature, and safety. A good environment makes employees perform better (Alshmemri, Shahwan-Akl, & Maude, 2017).

In summary, this research is based on reviewed 26 scientific papers related to the impact of motivation on employee performance. Out of the 26 scientific papers, 15 papers have mentioned the motivation and hygiene factors and their impact on employees' performance. The frequency of these factors has been calculated. Then, using Pareto analysis, the top four frequent factors, which are Salary, Recognition, Advancement, and Work condition have been selected. As mentioned, the availability of hygiene factors is a necessity in the workplace. Their absence affects negatively employees' work performance (Amzat, Don, Fauzee, Hussin, & Raman, 2016). Therefore, organizations should ensure the availability of these factors. Furthermore, motivator factors should be practiced in the workplace after the availability of the hygiene factors to achieve high work performance (Amzat, Don, Fauzee, Hussin, & Raman, 2016). These factors have different effects depending on the geographical location of the organization, work type, education, and employee in the organization.

## METHODOLOGY

This research relays on the literature in the first phase of the work. Thus, the theoretical framework has been designed based on the selected motivator and hygiene factors from the literature. Figure 2 shows the designed theoretical framework for this research. As shown in Figure 2, the research will study the relationship between the motivator and hygiene factors from one side and employee work performance from the other side. In addition, the research ranks these motivator and hygiene factors based on employees' perspectives at the targeted Saudi construction company.



Figure 2: Research theoretical framework

As noticed by the company's managers, low work performance has been a significant problem for the targeted construction company. This research demonstrated the fact of a significant drop in work performance noticed in 2016 at the targeted company. The company's managers claimed that this issue has continued for years without any noticeable improvement in work performance and scientific analysis of the situation. To have a better understanding of the actual problem and its root causes of it, this research is conducted in two phases. The first

phase focuses on understanding the problem and its root courses. Then, the second phase work on studying the impact of the selected motivator and hygiene factors on the employees' performance at work.

Phase one studied the problem via the focus group. The group conducted a SWOT analysis to understand both the internal and external environments of the company. The analysis for understanding these environments also used the voting technique to nominate the top important points at each corner of the SWOT analysis. SWOT stands for strengths, weaknesses, opportunities, and threats. It is a tool that can determine and understand these aspects of the company. A SWOT analysis consists of Information derived from internal issues and external issues (Hosseini, Sadighi, Mortazavi, & Farhadian, 2019). The SWOT analysis identifies what can help the company achieve its objectives and what problems should be overcome to accomplish the goals (Sabha, 2017).

Phase two, as mentioned, investigated the motivator and hygiene factors that impact the employees' performance at the targeted Mega Construction Company in Saudi Arabia. As mentioned, selected motivator and hygiene factors were based on their frequency in the reviewed literature. To complete this phase and to study the effect of these factors on the employees' work performance, an online survey is distributed to collect data from a calculated sample of the targeted population.

## **Phase One: Investigate the performance problems**

### SWOT Analysis

To understand the problem and to conduct the SWOT analysis for this research, a focus group from the targeted company is used to gather the required data for this analysis. The goal of this part of the work was to evaluate the company's situation and to determine the causes of the claimed low work performance at the Mega Construction Company. The targeted participants in this study are the employees from the Mega Construction Company. Specific employees include administrative staff and engineers from the targeted company. The number of participants in the focus group was 12 administrative staff and engineers. The discussion started by asking them some critical thinking questions such as:

- What are the company's competitive advantages compared to the other construction company?
- What are the required improvements for the company to achieve its goals?
- What are the possible obstacles that the company may face?
- What are the opportunities that the company should focus on?

The focus group session took around one hour. By the end of the session, enough data were gathered to create the SWOT analysis table and identify the reasons for low work

performance. The data were then filtered and ranked using the voting technique to present the top important points in the final SWOT analysis table.

## Phase Two: Investigate the motivation effect on the low performed level of work

### Population and Sampling

The population can be defined as a complete group of things like people or events that the researcher desires to investigate (Sekaran, 2003). The target population for this study is the 600 administrative staff and engineers from the Mega Construction Company. Sekaran (2003) further defined random sampling as the sample where every individual in the population has an equal chance to be selected. Additionally, Acharya (2013) defined random sampling as the sample where every individual in the population has an equal chance of being selected to participate in the study. This method is characterized by high validity, easy to analyze data, and requires minimum knowledge of the population (Acharya, Prakash, Saxena, & Nigam, 2013). Therefore, this research used Random Sampling Technique for the second phase of the work with survey responses. Using the SurveySystem website, the sample size was determined with a 95% confidence level, as shown in Figure 3. A 95 percent confidence level will help give dependable results. Also, in research, a 10% margin of error is acceptable (Hashim, 2010). Therefore, the margin of error of this study was determined to be 10%. Using the determined confidence level and confidence interval, the sample size for this study is calculated to be 83 employees as shown in Figure 3.

The image shows a web-based calculator titled "Determine Sample Size". It has the following fields and controls:

- Confidence Level:** Radio buttons for 95% (selected) and 99%.
- Confidence Interval:** A text input field containing the value "10".
- Population:** A text input field containing the value "600".
- Buttons:** "Calculate" and "Clear" buttons.
- Output:** A text input field labeled "Sample size needed:" containing the value "83".

Figure 3: SurveySystem website calculator

### Data Collection and Analysis

According to Sekaran (2003), an online questionnaire is easy to administer and has a low cost compared to other methods for collecting data. It enables the researcher to access groups and individuals who would be difficult to reach through other methods in a short amount of time (Wright, 2017). Therefore, this study used an online questionnaire to collect the needed data from the calculated sample size. The online survey is designed using Google

Questionnaire. The questionnaire was divided into two parts. The first part is about questions related to the employee demography. The second part includes questions related to motivation and hygiene factors and their relationship with the employee's work performance.

For the second phase of this research, a pilot study was conducted to test the reliability and suitability of the questionnaire. Three ex-employees participated in the pilot study. They were requested to evaluate and identify whether the questions were clear to them. Also, the time for their response is calculated. As a result, they found that most of the questions were clear. Minor adjustments were made in some questions' language to clarify the exact meaning of the questions. The adjustments were based on the feedback obtained from the participants in the pilot study. Next, the link to the final version of the questionnaire was distributed to the employees by using the WhatsApp application and emails. The responses were collected and then analyzed using Microsoft Excel.

## ANALYSIS AND RESULTS

### Phase One: The Finding from the SWOT Analysis

As mentioned, as a result of the focus group session, the SWOT analysis table is completed. Table 2 shows the company's strengths, weaknesses, opportunities, and threats.

Table 2: SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Technology Advancement</li> <li>• Skillful and Experienced Employees</li> <li>• Huge Fleet of Equipment</li> <li>• Strong Communication System</li> <li>• Huge Number of Employees</li> <li>• Strong Connection With suppliers and subcontractors</li> </ul>	<ul style="list-style-type: none"> <li>• Irregular Salaries Payment</li> <li>• Unmotivated Employees and Poor Motivations</li> <li>• Contracts conflict</li> <li>• Technical Drawing Issues</li> <li>• Social Loafing</li> <li>• Economic Problems</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Government Support</li> <li>• Rise of New Projects due to the KSA 2030 Vision</li> </ul>	<ul style="list-style-type: none"> <li>• Hard to Recruit New Talent</li> <li>• Financial Condition</li> <li>• Information Security</li> <li>• Approval of The Work</li> <li>• Competitors</li> </ul>

The weaknesses mentioned in the SWOT analysis are considered the reasons for the claimed low performance. This research then used the score voting method to determine the impact of each weakness point on the employees' performance, from the focus group's perspective. Score voting can be defined as a voting system where the participants rate the nominated items on a scale (Electionscience, 2011). Each member in the focus group has been

assigned a number for each weakness point. The number ranged from one to five, where five is considered the maximum weight or highest important score. The weight percentage is then calculated from the averages of these scores. The weights present the impact of each weakness point on the employee's performance from the focus group perspective, as shown in Figure 4.

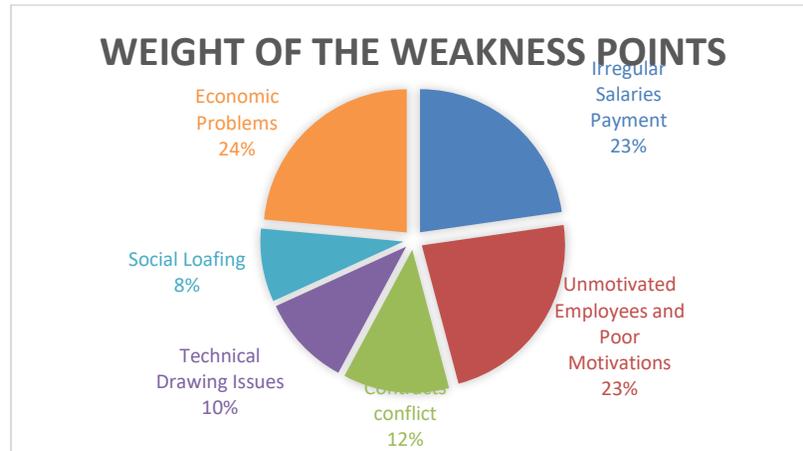


Figure 4: Percentage / Weight of the Weaknesses

The finding shows that unmotivated employees and the absence of proper motivators are important factors causing low work performance. Also, economic problems including salary amounts and financial motivations are other factors causing low work performance. The regular salary payment can be considered a hygiene factor. Thus, the absence of motivators and hygiene including the irregular salary payment or instability of payment contributes around 46% to the low work performance of the employees. This is considered the highest percentage compared to other causes. Therefore, this study focuses on identifying the factors that should motivate the employees and increase their work performance. Moreover, this research determines the suitable motivator and hygiene factors that will have a positive impact on work performance in phase two of this work.

### Phase Two: Results Related to The Motivation Effect on the Employees' Work Performance

As mentioned, this phase covers two main parts. The first part is about the result of the demographic information. This part includes information about the employees' age, education level, position, work experience, and income. Understanding the norm in these areas enhances

researchers' ability to analyze companies' situations. It also helps in providing better recommendations.

The second part covers the descriptive statistics. In this part more in-depth analysis takes place. This part focus on investigating the employees' perspective on the impact of the targeted motivation factors on their work performance.

## Demographic Information

### Age

Figure 5 illustrates the distribution of respondents based on their age. The categories were selected based on ORASA (2014) research and then modified to suit the situation of the Mega Construction Company. As shown in Figure 5, the results show that 17% of respondents are between 18 and 25 years, 34% of respondents are between 36 and 45 years, 31% of respondents are between 18 and 25 years, 12% of respondents fall between 46 and 55 years, and 6% of respondents were over 55 years. Thus, the results show 65% of Mega Construction Company employees, are in their most productive and active age of 26-45 years. Therefore, it is expected to have the highest performance level of work at this period of age. They would be expected to perform their work to the fullest.

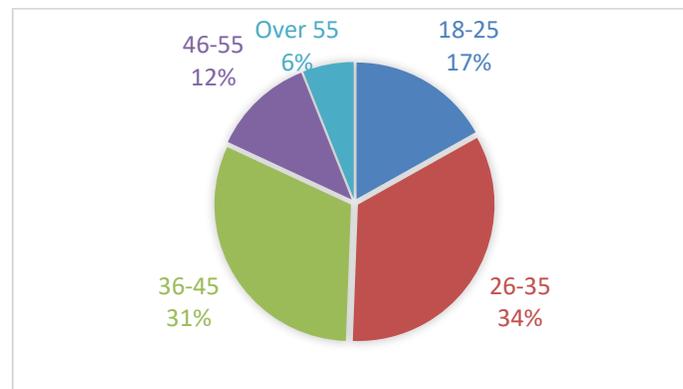


Figure 5: Age of the Respondents

### Education Level

Figure 6 illustrates the distribution of respondents based on education level. The results show that 6% of respondents have high school degrees, 16% of respondents have Diploma degrees, 60% of respondents have Bachelor's degrees, 16% of respondents have Master's degrees, and 5% of respondents have Ph.D. degrees. This indicates that most of the Mega Construction Company employees are well educated to fulfill their job requirements, where around 80% of the employees have at least a bachelor's degree.

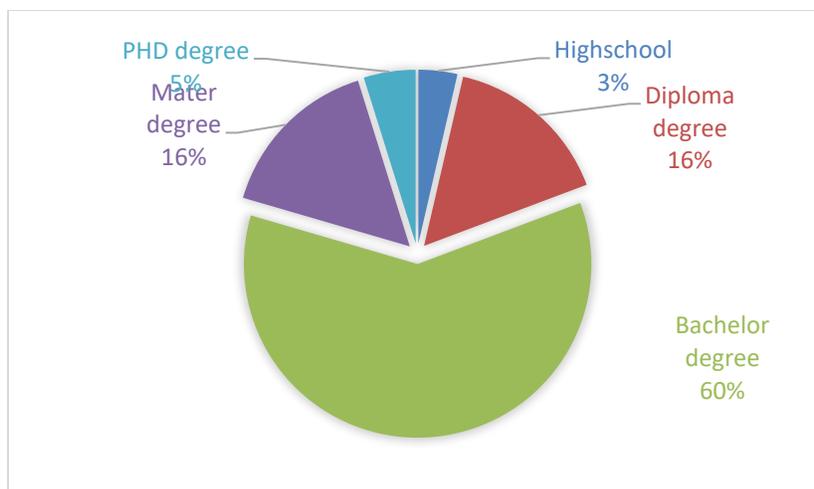


Figure 6: Education Level

### **Job Position**

Figure 7 illustrates the distribution of respondents based on the job position. The categories were selected based on the target audience of this research. The results show that 20% of respondents are administration workers, 11% of respondents are construction managers, 10% of respondents are coordinators, 13% of respondents are documents controllers, 30% of respondents are engineers, 12% of respondents are Project Managers, and 4% of respondents have other job position. Thus, most of the Mega Construction Company job positions were occupied by engineers, followed by administration staff. This is why the priority should be by satisfying these two categories of employees.

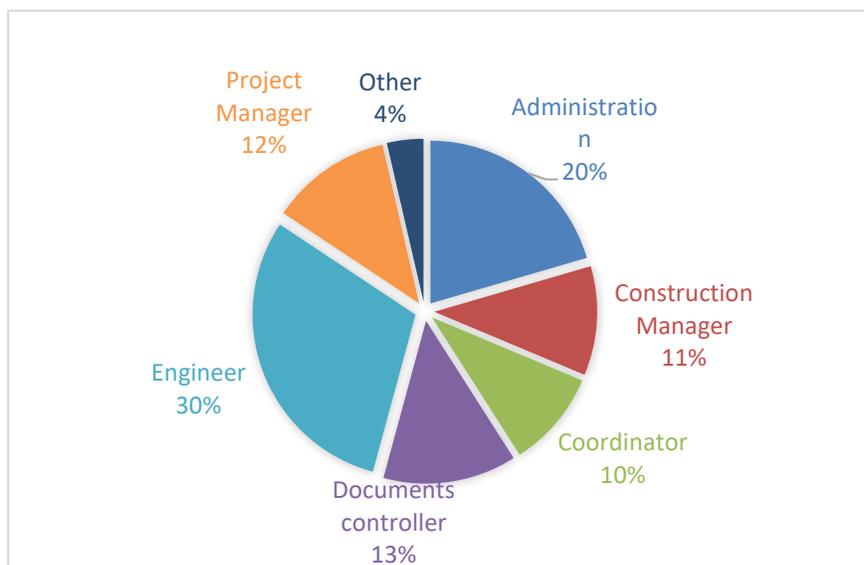


Figure 7: Job Position

### ***Years of experience***

Figure 8 illustrates the distribution of respondents based on working years of experience. The categories were selected based on ORASA's research and modified to suit the Mega Construction Company's needs (ORASA 2014). As a result, Figure 8 shows that 16% of respondents have work experience of between 1 and 3 years. 30% of respondents have work experience between 4 and 10 years. 54% of respondents have work experience above ten years. Thus, the results show that 84% of Mega Construction Company employees have outstanding work experience of above four years. So, losing expert employees will be costly for the company. Moreover, with such an experience the performance is expected to be at its highest level.

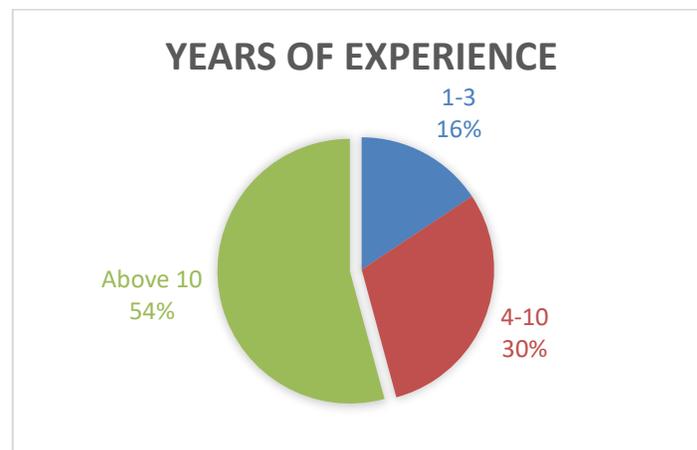


Figure 8: Years of experience

### ***Monthly Income***

Figure 9 illustrates the distribution of respondents based on their monthly income ranges. The categories were selected based on ORASA (2014) research and modified to suit the situation of the Mega Construction Company. The results show that 43% of respondents have income between 3,000-9,999 SAR, 31% of respondents have income between 10,000-19,999 SAR, 16% of respondents have income between 20,000-30,000 SAR, and 10% of respondents have income more than 30,000 SAR. These results indicate that most of Mega Construction Company's employees are paid at the minimum national monthly salary wage. In addition, according to the head of the HR department of the mega construction company (personal communication, December 2021), the employees in this company receive less salary than other companies in the same industry

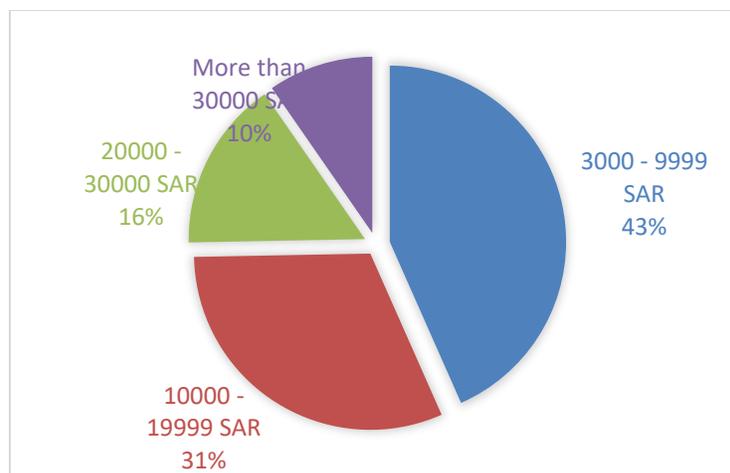


Figure 9: Monthly income distribution

### Descriptive Statistics

According to Sekaran (2003), most researchers perform descriptive statistics to know the frequency of certain phenomena and the mean value of the collected data. In this research, the questions of motivator and hygiene factors and their impacts on work performance were investigated. Factors and their relationships with the performance were rated using a 5-point Likert scale. The mean score is used to determine the work performance and to rank the targeted motivator and hygiene factors based on the employees' perspective at the Mega Construction Company. To give the mean results a verbal description, this research used the intervals shown in Table 3 which is previously used in the literature (Pimentel, 2010).

Table 3: The Interval of mean results

The Interval of mean results	Verbal Description
More than 4.21 - 5.00	Strongly Agree / Strongly motivated
More than 3.41 - 4.20	Agree / Motivated
More than 2.61 - 3.40	Average
More than 1.80 - 2.60	Somewhat Disagree / Unmotivated
Less than 1.80	Strongly Disagree / Strongly unmotivated

Both Table 4 and Table 5 show the frequency of responses and the mean value for each question related to employees' motivation status in their work environment, and the motivation impact on their work performance at the mega construction company. Also, both Table 4 and Table 5 show the verbal description of the mean values which was explained based on the interval of mean results in Table 3. As shown in Table 4, employees at the mega construction company believe that the motivation level at their company is very low. It is almost not available

from their point of view. The mean value is 2.13 which is verbally described as “Unmotivated” from the employees’ perspective.

Table 4: Frequency of responses regarding motivation level at work

Statement	Strongly Motivated	Motivated	Average	Unmotivated	Strongly Unmotivated	Mean	Verbal Description
	5	4	3	2	1		
How motivated are you at work?	4	11	10	25	33	2.13	Unmotivated

Table 5 shows that employees at the mega construction company believe that motivation is positively correlated to their performance. The mean value is 4.71 which is verbally described as “Strongly Agree”. It means that from the employees’ point of view, their work performance will increase if they are motivated more at their work. From the sample employees’ perspective, the relationship between motivation and workers’ performance is a strongly positive one.

Table 5: Frequency of responses regarding motivation’s impact on work performance

Statement	Strongly Agree	Agree	Average	Somewhat Disagree	Strongly Disagree	Mean	Verbal Description
	5	4	3	2	1		
Do you think your work performance will increase if you're more motivated at your work?	60	22	1	0	0	4.71	Strongly Agree

Table 6 shows motivation and hygiene factors’ ranking based on their impact on work performance from the respondents’ perspectives. To determine the effects of motivation and hygiene factors on employees’ performance, the participants were requested to answer the statement about each of the selected motivation factors. The Motivation and hygiene factors were be ranked according to the mean values as follows: Salary (mean=4.89), Advancement (mean=4.77), Work Condition (mean=4.39), and Recognition (mean= 4.24).

The results show that all mean values for the four statements shown in Table 6 are verbally described as “strongly agreed”. This indicates that each of the four motivation factors, which are investigated in this study, has a strong positive relationship with the employees’ performance. Yet, due to the variation of responses, the factors are ranked based on their mean values as mentioned before.

As shown in Table 6, salary and financial rewards become the first and most important factor that increases employees’ performance at work from the employees’ perspective. This result supports the finding of Cong and Van (2013) who found that salary and promotion are the most motivational factors that positively impact employee performance. This result is also aligned with Ikechukwu, Hart, Ezeh, Bridget, and Jude-Peters’ (2019) outcome which mentioned that salary and financial rewards can maintain employee motivation towards higher job performance. Thus, the strong positive relationship between financial motivators and employees’ work performance is clear from the response frequency shown in Table 6 as well as the results of previous research (Okoth and Florah, 2019; Spakovska, Ballarin, Vanek, and Chlopecky, 2015).

Also, recognition is the second most important factor that increases employees’ performance at work from the employees’ point of view as shown in Table 6. This result supports the findings of previous research stating that non-financial factors such as recognition have a positive impact on motivation (Ikechukwu, Hart, Ezeh, Bridget, and Jude-Peters, 2019). Recognition has positively correlated with employee performance (Okoth and Florah, 2019). So, recognition has a strong positive relationship with the employees’ work performance.

In addition, working conditions or environment is also one of the important motivation factors that increase employees’ performance at work from employees’ perspective, as shown in Table 6. Working conditions affect the employee’s performance but not on the same impact as salary and promotion (Cong and Van, 2013). The absence of hygiene factors, such as a good work environment, contributes to employees’ low work performance and productivity (Amzat, Don, Fauzee, Hussin, and Raman, 2016). Therefore, the impact of working conditions and the work environment should be considered and improved to increase employees’ work performance.

In general, these results correspond to the previous research that concludes that the mentioned motivation factors positively impact work performance. Yet, the ranking of the factors in this previous research is not the same as in this work. A reason for the different ranking of the factors could be the difference in work environments and cultures since previous research was conducted on different organizations outside Saudi Arabia (Zailani, 2020; Phama, 2020).

Table 6: Frequency of responses and ranking of motivation and hygiene factors' impact on work performance

Statement	Strongly Agree	Agree	Average	Somewhat Disagree	Strongly Disagree	Mean	Verbal Description	Rank
	5	4	3	2	1			
	Frequency							
Your work performance will increase if you have a suitable salary and financial rewards . <b>(Salary)</b>	74	9	0	0	0	4.89	Strongly Agree	1
Your work performance will increase if your works are recognized and praised by others in the organization. <b>(Recognition)</b>	41	27	10	4	1	4.24	Strongly Agree	4
Your work performance will increase if you have opportunities to grow in your organization. <b>(Advancement )</b> .	67	13	3	0	0	4.77	Strongly Agree	2
Your work performance will increase if your working environment is comfortable and provides a suitable amount of work hours, the tools to perform your tasks, ventilation, safety. <b>(Work Condition)</b>	50	24	2	5	2	4.39	Strongly Agree	3

In addition to the focused motivation factors in this study, the survey despondence asked for a high level of job security. Job security can be defined as the degree to which an employee could keep his job for more time (Delery & Doty, 1996). The employees should feel that their job is secure and not under the continual threat of being laid off. Moreover, the participants in this study asked for enhancing the medical insurance system. Finally, the participated employees in this study asked the company to offer several courses to develop their professional and soft skills.

## CONCLUSION

### Summary

This study aims to examine selected motivation factors that impact on work performance of construction company employees. The study recommendations contribute to enhancing the employees' performance at the targeted company. A Focus group was created to understand the problem by using SWOT analysis technique. The goal of the SWOT analysis was to identify the root causes of the work performance level. The result of the SWOT analysis shows that the low motivation of the employees was one of the root causes of the low performance. The data was collected from a sample of employees working at a mega construction company in Saudi Arabia. The motivator and hygiene factors were identified based on the literature review. The top motivator and hygiene factors were selected based on their frequency in the literature review. An online survey was designed and tested using a pilot study. Then, the survey was distributed, and the data were

collected. After that, data were analyzed using Microsoft Excel. The findings of this research are summarized as follows:

- Based on the focused group, the problem is identified as the low work performance. Also, from the employees' perspective, the root cause of this problem is the low motivation level in their company.
- From the literature review, salary, advancement, recognition, and work condition are the top frequent motivation factors. Thus, these four factors were selected for further investigation in this research.
- From the perspective of the focus group participants, salary is the most important factor affecting their work performance.
- The employees strongly agreed that salary, advancement, recognition, and work conditions positively affect their work performance.

### **Recommendations**

- As shown in the result, salary positively impacts employee performance. Also, the employees in the targeted company receive less salary than other companies in the same industry (Head of the HR department, personal communication, December 2021). Therefore, the company should review its salary and promotion system to provide a fair and competitive salary and financial benefit to its employees which should increase employees' performance. The company should develop a career advancement system that leads to a better salary and a higher position income for employees. The system should be clear and applied to all different levels of employees. Moreover, the employees should be paid on time without any delays.
- The absence of hygiene factors contributes to employees' low work performance and productivity (Amzat, Don, Fauzee, Hussin, and Raman, 2016). So, the company should enhance the work environment and provide their employees with the needed tools to perform their jobs.
- Recognition motivates employees to perform better at their work. Therefore, supervisors and peers should praise and recognize employees' efforts when the employee succeed. The company should host events to recognize hardworking employees. The purpose of the event is to motivate successful employees for their hard work and encourage other employees to work harder to achieve the same recognition their co-workers receive. The company should initiate a recognition and praise system.
- Job security is one of the hygiene factors mentioned many times in employees' recommendations in the survey. Therefore, it is recommended to include this factor in

future research. The employees want to feel that their job is secured and they are not threatened with dismissal or unemployed situation.

- The study was limited only to a group of employees at a Saudi mega construction company. Therefore, it is recommended that future studies should include several organizations in the same field.
- The research focused on investigating the problem from the employees' perspective. It is recommended to expand the work by exploring the other stakeholders' perspectives too.

## REFERENCES

- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and How of it? *INDIAN JOURNAL OF MEDICAL SPECIALITIES*.
- Ahmed, S., & Ali. (2009). The impact of reward and recognition programs on employee's motivation and satisfaction: An empirical study. *International Review of Business Research Papers*, Vol. 5, no. 4.
- Al-Ahmadi, H. (2009). Factors affecting performance of hospital nurses in Riyadh Region, Saudi Arabia. *International Journal of Health Care Quality Assurance*.
- Alamzeb. (2012). Compensation methods and employees' motivation (with reference to employees of National Commercial Bank Riyadh). *International Journal of Human Resource Studies*, Vol. 2, No. 3.
- Algahtani, S., & Javed, U. (2021). Employee Motivation And Its Impact On Work In The Organization In Saudi Arabia. *palarch's journal of archaeology of egypt/egyptology*.
- Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Herzberg's Two-Factor Theory . *Life Science Journal*, 12-16.
- Amzat, I. H., Don, Y., Fauzee, S. O., Hussin, F., & Raman, A. (2016). Determining motivators and hygiene factors among excellent teachers in Malaysia. *International Journal of Educational Management*, 78-97.
- Badubi, R. M. (2017). Theories of Motivation and Their Application in Organizations: A Risk Analysis . *International Journal of Innovation and Economic Developme*, 44-51.
- Bakar, R. A. (2013). *Understanding Factors Influencing Employee engagement: A study of the financial sector in Malaysia*. Available at : Retrieved from [https://researchbank.rmit.edu.au/eserv/rmit:160447/Abu\\_Bakar.pdf](https://researchbank.rmit.edu.au/eserv/rmit:160447/Abu_Bakar.pdf).
- Barg, J. E., Ruparathna, R., Mendis, D., & Hewage, K. N. (2013). Motivating Workers in Construction. *Journal of Construction Engineering*.
- Baron, R. A. (1983). *Behaviour in organisations*. New York: Allyn & Bacon, Inc. .
- Boadu, E. F., Wang, C. C., & Sunindijo, R. Y. (2020). Characteristics of the Construction Industry in Developing Countries and Its Implications for Health and Safety: An Exploratory Study in Ghana. *International Journal of Environmental Research and Public Health*.
- Chien, G. C., Mao, I., Nergui, E., & Chang, W. (2020). The effect of work motivation on employee performance: Empirical evidence from 4-star hotels in Mongolia. *Journal of Human Resources in Hospitality & Tourism*, 473–495.
- Cong, N. N., & Van, D. N. (2013). Effects of Motivation and Job satisfaction on Employees' Performance at Petrovietnam Nghe an Construction Joints Stock Corporation (PVNC). *International Journal of Business and Social Science*, 212 -217.
- Deci, E., & Ryan, R. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemp. Educ. Psychol.*
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. . *Academy of management Journal*, 39(4).
- Deressa, A. T., & Zeru, a. G. (2019). Work motivation and its effects on organizational performance: the case of nurses in Hawassa public and private hospitals: Mixed method study approach. *Deressa and Zeru BMC Res Notes*, 12:213.
- Doghan, M. A., & Albar, a. S. (2015). A Study on Influence of Motivation Factors on Employees Performance in Private Schools in Saudi Arabia. *Journal of Human Resource and Sustainability Studies*.

- Duke, K. M., & Sneed, J. (1989). A research model for relating job characteristics to job satisfaction of university foodservice employees. *Journal of The American Dietetic Association*, 1087-1091.
- Durdyev, S., & Ismail, S. (2012). Role of the construction industry. *Energy Education Science and Technology Part A: Energy Science and Research*, 883.
- Electionscience. (2011). Retrieved from The Center for Election Science: <https://electionscience.org/library/score-voting/>
- F.D.K, F., & Aduwumwaa, B. (2008). What Factors Motivate Construction Workers In Ghana ? An Exploratory Study. *Journal of the Ghana Institution of Surveyors Vol. 1*.
- Faletar, Jelačić, Sedliačiková, Jazbec, & Hajdúchová. (2016). Motivating employees in a wood processing company before and after restructuring. *BioResources*.
- Funso, A., Sammy, L., & Gerrysom, M. (2016). Impact of Motivation on Productivity of Craftsmen in Construction Firms in Lagos, Nigeria. *International Journal of Economics and Finance*, 271 - 276.
- GEBREMEDHIN, M. (2017). The Impact Of Motivation-Hygiene Factor On Employees' Performance: The Case Of Commercial Bank Of Ethiopia. St.Mary's University.
- Gogtay, N., & Thatte, U. (2017). Principles of Correlation Analysis. *Journal of The Association of Physicians of India*.
- Hafiza, Shah, Jamsheed, & Zaman. (2011). Relationship between rewards And employee's motivation in the non-profit organizations of Pakistan. *Business Intelligence Journal*.
- Hashiguchi, N., Sengoku, S., Kubota, Y., Kitahara, S., Lim, Y., & Kodama, K. (2021). Age-Dependent Influence of Intrinsic and Extrinsic Motivations on Construction Worker Performance. *International Journal of Environmental Research and Public Health*.
- Hashim, Y. A. (2010). Determining sufficiency of sample size in management survey research activities. *International Journal of Organisational Management & Entrepreneurship Development*, 119-130.
- Herzberg, F. (1959). *Herzberg's Motivation-Hygiene Theory (Two Factor Theory)*. London: Arab British Academy For Higher Education.
- Herzberg, F. (1966). *Work And The Nature Of Man*.
- Hosseini, F., Sadighi, H., Mortazavi, S. A., & Farhadian, H. (2019 Vol. 21). An E-Commerce SWOT Analysis for Export of Agricultural Commodities in Iran. *J. Agr. Sci. Tech.*, 1641-1656.
- Igbaria, M., & Baroudi, J. J. (1995). The impact of job performance evaluations on career advancement prospects: An examination of gender differences in the is the workplace. *Mis Quarterly*, 107-123.
- Ikechukwu, N. P., Hart, R. I., Ezech, J. I., Bridget, I., & Jude-Peters, A. (2019). Employee Motivation and Job Performance of Selected Construction Companies in Rivers State. *International Journal of Engineering and Management Research*, Volume- 9, Issue- 4.
- Jehanzeb, K., Rasheed, M. F., Rasheed, A., & Aamir, A. (2012). Impact of Rewards and Motivation on Job Satisfaction in Banking Sector of Saudi Arabia. *International Journal of Business and Social Science* .
- JESUMOROTI, C., & DRAAI, W. (2018). A Study Of Construction Workers Motivation In The South African Construction Industry. *Postgraduate Conference South Africa* (pp. 191-197). Construction Industry Development Board.
- Johari, S., & Jha, K. N. (2020). Impact of Work Motivation on Construction Labor Productivity. *Journal of Management in Engineering*.
- Jones, T. L. (2011). Effects of motivating and hygiene factors on job satisfaction among school nurses. . *PhD thesis, Walden University, Minneapolis, MN* .
- Joseph, O. B. (2015). The effect of employees' motivation on organizational performance. *Journal of Public Administration and Policy Research*, 62-75.
- Khanna, V. (2017). Measuring Job Satisfaction Of Academicians Using Herzberg Theory. *Delhi Business Review*.
- Kuranchie-Mensah, E. B., & Amponsah-Tawiah, K. (2015). Employee Motivation and Work Performance: A Comparative Study of Mining Companies in Ghana. *Journal of Industrial Engineering and Management*, 255.
- Mathis, Jackson, Valentine, & Meglich. (2012). *Human resource management*.
- Okoth, V. A., & Florah, O. M. (2019). Motivation and Employee Performance at Avenue Hospital Kisumu County-Kenya. *Business Management Dynamics*, 20-36.

- Ong, J. O., & Mahazan, M. (2020). Model of Employee Performance: Ability, Motivation, and Opportunity in Manufacturing Company. *Talent Development & Excellence*, Vol.12, No.2s 1019-1031.
- ORASA, G. J. (2014). Effect Of Motivation Factors On Employees' Job Performance In Public Primary Healthcare Facilities: A Case Of Ilemela District, Mwanza City. Digital Library Of Open University Of Tanzania.
- Parkin, A. B., Tutesigensi, A., & Büyükalp, A. I. (2009). Motivation Among Construction Workers In Turkey. *Procs 25th Annual ARCOM Conference* (pp. 105 -114). Nottingham, UK: Association of Researchers in Construction Management.
- Phama, H. V., & Nguyen, H. T. (2020). The effect of motivation and hygiene factors on employees' work motivation in textile and apparel enterprises. Hanoi, Vietnam: Faculty of Human Resources Economics and Management, National Economics University.
- Pimentel, J. L. (2010). A note on the usage of Likert Scaling for research data analysis. *USMR & D*, 109-112.
- Riggio, R. E. (2014). Introduction to Industrial/ Organizational Psychology. Upper Saddle River, NJ: Prentice Hall.
- Ruthankoon, R., & Ogunlana, S. (2003). Testing Herzberg's two-factor theory in the Thai construction industry. *Engineering, Construction and Architectural Management*, 333 - 341.
- Sabha. (2017). SWOT Analysis of Business or Electronic Commerce (E-Commerce). . *INT. J. Edu. Res*, 105-112.
- Sekaran, U. (2003). *Research Methods for Business (4thed)*. United State of America: John Wiley & Sons, Inc.
- Shahzadi, I., Javed, A., Pirzada, S. S., Nasreen, S., & Khanam, F. (2014). Impact of Employee Motivation on Employee Performance. *European Journal of Business and Management*, 159 - 166.
- Smith, P., & Cronje, G. ( 1992). *Management principles. A Contemporary South African edition*. Kenwyn: Juta & Ltd.
- Spakovska, K., Ballarin, M., Vanek, M., & Chlopecky, J. (2015). Influence Of Motivation On Work Performance And Loyalty Of Employees In Industrial Enterprises. *15th International SGEM GeoConference on Exploration and Mining*.
- Springfield, U. o. (2022). Retrieved from University of Illinois Springfield: <https://www.uis.edu/cas/thelearninghub/writing/handouts/research-methods/literature-review/>
- The-General-Authority-for-Statistics. (2019). Retrieved from The General Authority for Statistics of the Kingdom of Saudi Arabia: [https://www.stats.gov.sa/sites/default/files/file\\_manger/Tables%20of%20GDP%20national%20accounts%20indicators%20for%202020%20Q2\\_%20%20%28E%29.xlsx](https://www.stats.gov.sa/sites/default/files/file_manger/Tables%20of%20GDP%20national%20accounts%20indicators%20for%202020%20Q2_%20%20%28E%29.xlsx)
- Uhl-Bien, M., Piccolo, R. F., & Schermerhorn, J. R. (2020). *Organizational behavior*. John Wiley & Sons.
- Wright, K. B. (2017). Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services. *Journal of Computer-Mediated Communication*.
- Yusoff, W. F., Kian, T. S., & Idris, M. T. (2013). Herzberg's Two-Factor Theory on Work Motivation: Does it Works for Today's Environment? *Global journal of commerce and management perspective*.
- Zailani, M. B., Ibrahim, A. G., & Bahago, Y. (2020). Critical Motivational Factors For Enhancing Employee Performance In Construction Firms Based On Correlation And Principal Component Analyses. *Nigerian Journal of Technology (NIJOTECH)*, 647.