HUMAN RESOURCE PLANNING AND ORGANIZATIONAL PERFORMANCE IN OIL AND GAS FIRMS IN PORT HARCOURT

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ABSTRACT
This work tends to empirically test human resource planning as it concerns forecasting manpower demand and strategic action on organizational performance of oil and gas firms in Port Harcourt. It tries to make available solution to the relationship between human resource planning and organizational performance. 5(five) firms were selected using stratified sampling technique in oil and gas firms in Port Harcourt. The Taro Yamane was used to determine the sample size which aggregate of 70 managers and supervisors was derived. Using the spearman rank order correlation coefficient, we found out that there is a significant relationship between human resource planning and organizational performance and that the relationship between the variables is moderated by organizational structure. From the findings, we recommended that oil companies and their human resource managers should continually carryout manpower audit and planning to determine in advance the demand and supply situation in the labor market prior to recruitment of employees. Finally, conclusion and contribution to knowledge was provided.

Keywords: Human resource, planning, manpower, strategic action and organizational performance
1.0 Introduction

Increasing and intense competitiveness in the market has made performance the most important issue for profit and non-profit organizations for businesses. It comprises of three specific areas of firm outcome which includes financial performance, product market performance and shareholder return (Richard, Simon & Brut, 2009). It is very vital for managers to know which factors influence an organization’s performance in order for them to take appropriate steps to initiate them. Organizational performance guarantees the continuity of the organization to be competitive in a global market place. Organizational performance can be seen as a multi-dimensional construct consisting of more than simply financial performance (Baker & Sinkula, 2005). It describes the extent to which the organization is able to meet the needs of its stakeholders and its own needs for survival (Griffin, 2003). In this sense, organizational performance depicts that an organization is achieving its mission and goals.

Kaplan and Norton (1992) defined organizational performance as a set of financial and non-financial indicators capable of assessing the degree to which organizational goals and objectives have been accomplished. The challenge for any organizational performance is generally indicated by the effectiveness of an organization to achieve its objectives and efficiency to use the resources properly, satisfaction of employees and customer innovation, quality products and services and thereby ability to maintain unique human resource pool (Dyer & Reeves, 1995; Katou & Budwar, 2007).

Human resource planning has to do with forecasting demand for manpower based on its business needs and employing strategies required to meet these needs. The dimensions for the study include forecasting manpower demand and strategic action. Forecasting manpower demand involves the estimation of the number and type of human resource required at different levels in different departments in an organization (Pradeesh, 2011).

Strategic actions for human resource entails staffing activities carried out in order to achieve organizational success in the long run. It is a disciplinary and creative process for determining where the organization should be in the future and how to take to the future with the help of human resource staffing activities (Graf, Hemmasi & Strong, 1996).

There must be a proper utilization of human resources in organizations in order to achieve high performance standard (Lunenburg, 2012). Organizations may have adequate non-human resources like machines; materials and money but inadequate human resources cannot achieve high performance. Human resources are the main asset of an organization.

1.2 Statement of problem

Human resource planning encompasses the process that identifies the number of employees a company requires in terms of high quality and quantity; hence it seen as an ongoing process of regular and structured planning. This planning process confirms that employees are in the right number as required i.e. there is neither a surplus of manpower nor a shortage. Parker and Caine (2006) states that it is important for organizations to have the right number of manpower in order to avoid unwanted situation i.e. issue of shortage and excess of manpower. Hassan (2003) states that failure to properly articulate and implement the three fundamental functions of human resource planning which include labor forecast, managing demand for employees and available supply in market and keep a balance between labor supply and demand predictions will pose a great problem to oil firms in terms of cost and
expertise (skilled personnel) thereby reducing their competitiveness. Gould (1984) holds that in order to gain competitive advantage over the competitors, different advantageous ways are found out using strategic human resource functions, thus showing that these functions play a critical role in making a company competitive. Human resource planning if not systematically carried out cannot bring to equilibrium demand and supply of manpower in organizations (Armstrong, 2006).

Oil and gas firms are unable to meet their human resource needs. There is a problem of inadequate right number of people to carry out the essential duties in the firm. They lack sufficient employees in the organization for production and render delivery of services as demanded by the customers in terms of service delivery, industrial production, capacity utilization and drilling operations which affects the performance of the firm negatively. Shortfall of human resource needs delay in the production process and reduces the profit of the organization. Shortfall of human resource needs in oil firms might result to poor completion of task and assignment, extra workload, increase in fatigue, high stress intensity, and decrease in the firm’s ability to meet set goals (Flippo, 1984). By having the right number of human resources at a specific time to carry out organizational services, it will help the organization to increase in their performance and productivity which in turns helps to achieve the strategic objectives and goals of the organization very easily.

1.3 Objectives of the Study

i. To examine if there exists any relationship between forecasting manpower demand and customer satisfaction in oil and gas firms in Port Harcourt.

ii. To ascertain if there exists any relationship between forecasting manpower demand and productivity in oil and gas firms in Port Harcourt.

iii. To examine if there exists any relationship between strategic action and customer satisfaction in oil and gas firms in Port Harcourt.

iv. To ascertain if there exists any relationship between strategic action and productivity in oil and gas firms in Port Harcourt.
1.4 Hypotheses for the Study

**H₀₁**: There is no significant relationship between forecasting manpower demand and customer satisfaction in oil and gas firms in Port Harcourt.

**H₀₂**: There is no significant relationship between forecasting manpower demand and productivity in oil and gas firms in Port Harcourt.

**H₀₃**: There is no significant relationship between strategic action and customer satisfaction in oil and gas firms in Port Harcourt.

**H₀₄**: There is no significant relationship between strategic action and productivity.

2.0 Theoretical framework

The theoretical foundation of this study is anchored on resource base view theory, contingency theory and AMO (Ability, Motivation and Opportunity) theory. This is because most empirical studies have relied heavily on these theories as the baseline theory when discussing human resource planning and organizational performance (e.g. Schuler & Jackson, 1987; Delery & Doty, 1996; Boselie et al, 2005; Fleetwood & Hesketh, 2008).

Resource base view theory refers to how competitive advantage can be achieved through the possession of valuable and rare resources that other competitors cannot imitate (Takeuchi, Lapak, Wang & Takeuchi, 2007). Competitive advantage comes from the internal resources (human resources) that the organization has. It establishes the need for organizations to build a valuable set of human resources and bundling them in a unique way in order to achieve firm success. Resource base view has long provided an essential theoretical rationale for human
resource potential role. It has to do with resource features that contribute to the creation of sustainable competitive advantage. Barney (1991) identified four criteria of resources which are valuable, rare, and inimitable and without substitutes. Human resources are the sustainable competitive advantage that a firm have and should be taken seriously. He also suggested that sustainable competitive advantage is attainable when firms have a human resource pool which cannot be imitated or substituted by competitors. Resource base view firms in order to ensure sustained competitive advantage should often evaluate their human resources to ensure that the right people with the right skills are in the right place. The theory also opines that the major strength or weakness of a firm has to do with the caliber of people employed into the organization. Boxall (1998) suggests that in order for firms to generate human capital advantage, they should recruit and retain exceptional individuals. Technology and capital can be acquired any time for a price by most firms but it is not easy to acquire highly qualified and motivated employees. Companies need to be careful when selecting employees.

2.1 Human Resource Planning
Organizations need to know how many people and what sort of people they need to meet present and future business requirements. Human resource planning is one of the most important elements in a successful human resource management program (De cenzo & Robbins, 1988). Human resource planning is the core of human resource management. It determines that the right number of people with the right skills, in the right job position at the right time is employed in the organizations. Human resource planning aids organizations to forecast, recruit and retain competent workforce in order to meet the organizational goals.

Walker (1980) defines human resource planning as analyzing organization’s human resource needs under changing conditions and developing the activities necessary to satisfy these needs. Vetter (1967) also defines human resource planning as the process by which management determines how organizations move from current position of manpower to its desired state. Human resource planning is an ongoing process that is not static involving many interrelated activities which must be modified and updated as conditions require.

2.1.1 Forecasting manpower demand
Armstrong (2012) defined forecasting manpower demand as the process of estimating the future numbers of people required and the likely skills and competencies they will need. The traditional approach of calculating demand is characterized by making use of ratios to devise strategy in order to confront opportunities and threats from external environment (Pradeesh, 2011). A greater utilization of technology helps to analyze competitive forces that could reflect an increase or reduction in employees’ levels. Forecasting manpower demand involves a practical level determination size of personnel and type of workers that company will require in the future. The demand for the organization’s product or service is integral part of the optimization. Therefore it is imperative to project beforehand markets and sales figures. This will determine the personnel needed to serve the projected capacity.

Noe (2012) mentioned other factors that influence forecasting demand for personnel which include budget constraint, turnover due to resignations, contract terminations, transfers and relocations, retirement, new technology in the field, decisions to upgrade the quality of services provided and minority hiring goals. Failure to anticipate future manpower needs leads to last minute decision making which is not always advisable for managers in organizations. It is proper that managers take their time to forecast future manpower needs which helps to save money and time in future. Noe (2012) explained that when it comes to
the human resource planning context, a mathematical formula is used to project future demands of human resources based on an established relationship between an organization’s employment level and some measurable factors of output such as revenue, sales or production level.

2.1.2 Strategic action
Strategic actions are human resource actions taken in order to enable an organization achieve its goals. It is a disciplinary and creative process for determining where the organization should be in the future and how to take to the future with the help of human resource staffing activities (Graf, Hemmasi & Strong, 1996). Strategic actions for human resource entails staffing activities carried out in order to achieve organizational success in the long run. Strategic actions tend to take an organization from where it is to where it wants to be. It is a series of action initiated to form human resource strategy. Strategies which are used to meet human resource needs include restructuring strategy, training and development strategy, recruitment strategy and outsourcing strategy.

2.2 Organizational Performance
Performance has been the most important issue for profit and non-profit organization. Barney (2001) asserts that researchers have different beliefs and thoughts about organizational performance but it still remains a controversial issue. Performance means quality, condition or function. Non-profit organizations view their performance in terms of how they meet their missions and goals. Performance refers to the degree of achievement of the mission at work place that builds up an employee job. Researchers mostly use performance to express the range of measurements of transactional efficiency and input and output efficiency (Stannack, 1996). Organizational performance involves a construct perspective in which the focus is on the definition of the concept in terms of assessment and conceptualization (Goodman, Pennings & Associates, 1977).

Organizational performance is a general structure which refers to the operations of enterprise. Daft (2000) states performance as the same as efficiency and effectiveness for a specific program or activity. Daft (2000) states that organizational performance is an effective and efficient manner for organization’s activity to achieve goals by using resources.

2.2.1 Customer satisfaction
Customer satisfaction is one of the most important issue concerning business organizations of all types which is justified by the customer oriented philosophy and the principles of continuous improvement in modern organizations (Arokiasamy, 2013). It is generally accepted that satisfaction is a psychological state that results from consumer experiences after consumption (Pleshko & Heins, 1996). It deals with how customers are satisfied with the product or service of a company. Customer satisfaction is the individual’s perception of the performance of the product or service in relation to his or her expectations. Customer satisfaction is a feeling of satisfaction of a product or service by the customer. It is a part of consumption evaluative judgement concerning a specific product or service. It is also the result of an evaluative process that contrasts pre purchase expectations with perceptions of performance during and after the consumption experience. If the goods and services received from the customer meet his or her benefits, he or she is satisfied. If the goods and services are lower than the customers’ expectations, he or she is dissatisfied. Customer satisfaction means that the customer is entitled to give his money for goods that the goods meet his demands and
desires because he wants the goods to meet his or her demands not for other issues and survival in the current world (Kavusi, 2008).

2.2.2 Productivity
Productivity is the relationship between units of labor input and unit of output (Nwachukwu, 2007). Its measurement serves as a score card of an effective use of resources. It is the driving force behind an organization’s growth and profitability. It has become a major goal in every organization (Daft, 2000). Productivity is the relationship between output of goods and services of workers in organization and input of resources, human and non-human used in the production process. However, productivity is the ratio of output to input. Hellriegel et al (1999) define productivity as efficiency in the employment of factors of production such as land, labor and capital to produce higher output. The higher the numerical value of the ratio, the greater the productivity (Onah, 2010). Productivity is the measure of how well resources are brought together in organization and utilized for the accomplishment of a set result. Productivity means reaching the highest level of performance with the least expenditure of resources. It can be applied at any level, individual level or work unit level or organizational level. Efficiency in production can be assessed by the following factors; (a) increase in the size of the production (b) lesser time in the production of a unit of output (c) lesser wastage in resources including defective output (d) the use of same or less factor inputs per more output than before.

2.3 Human resource planning and organizational performance
Empirical researches have presumed connection between human resource management practices and organizational performance. There is a growing body of work on human resource practices and organizational performance which shows linkage between human resource practices and organizational performance. Mursi (2003) states that there is a significant and positive relationship between human resource planning and organizational performance. Hiti (2000) posits that human resource planning have a positive relationship with organizational performance. Human resource planning contributes to organizational success because it ensures that organizations always have a concept of the job market and how it relates to its failure. A company that refuses to engage in human resource planning in order to be proactive may find itself with a number of unfilled positions. Human resource management practices significantly contribute to organizational performance. Human resource management practices are set of practice used by organization to manage human resources through facilitating the development of competencies that are firm specific, produce complex social relation and generate organization knowledge to sustain competitive advantage. Human resource functions such as motivation process, human resource planning, education program, employees’ relation, compensation, rewards and benefits, performance appraisal, education and development affect organizational performance from various aspects such as replacement, productivity and financial performance (Huselid, 1995).

3.0 Research methodology
A total of eighty-five (85) managers and supervisors make up the accessible population size as shown below:
Table 3.1 Distribution of Managers and supervisors.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Selected organization</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Keverner oil field products(KOP) oil and gas Nig. Ltd</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>Coolper Cameron oil and gas Nig. Ltd</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Drill-quip oil and gas Nig. Ltd</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>Vetco-gray oil and gas Nig. Ltd</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>FMC technologies oil and gas Nig. Ltd</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>85</strong></td>
</tr>
</tbody>
</table>

Sources: Desk Research, 2017.

In determining the sample size for the study, the Taro Yamane’s (1967) formula was adopted (Baridan, 2001). The formula for determining the sample size is:

\[ n = \frac{N}{1+N(e)^2} \]

Where;
- \( N \) = population size
- \( n \) = sample size
- \( e \) = level of significance (0.05)

\[ n = \frac{85}{1+85(0.05)^2} \]

\[ = \frac{85}{1+85(0.0025)} \]

\[ = \frac{85}{1 + 0.2125} \]

\[ = \frac{85}{1.2125} \]

\[ = 70 \]

Therefore, the sample size is 70 Managers and Supervisors.

Bowley’s (1926) proportional allocation technique used to estimate the sample size for each of the firm. The formula is:

\[ nh = \frac{nNn}{N} \]

Where;
- \( nh \) = number of respondents in each sub group
- \( n \) = sample size
- \( Nh \) = number of unit allocated to each sub groups
- \( N \) = population size
In testing the hypotheses, the spearman rank order (Rho) test was used to determine the relationship among the variables. Rho assumes any value from -1 to +1 indicating perfect correlation and 0 no relationships. The formula is:

\[ r_s = \frac{6\sum d^2}{n(n^2-1)} \]

Where, \( \sum d^2 = \) summation of total value
\( n = \) number of cases or items sampled
\( d = \) difference in ranks for any two corresponding items
\( r = \) rank correlation coefficient

The statistical package for social sciences (SPSS) version 21 was used to conduct the analyses.
4.0 Data analyses

Correlations

<table>
<thead>
<tr>
<th></th>
<th>Forecasting Manpower Demand</th>
<th>Strategic Action</th>
<th>Customer Satisfaction</th>
<th>Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecasting Manpower Demand</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
<td>.291</td>
<td>.413**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td>.024</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Strategic Action</td>
<td>Correlation Coefficient</td>
<td>.291*</td>
<td>1.000</td>
<td>.495**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.024</td>
<td>.</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>Correlation Coefficient</td>
<td>.413**</td>
<td>.495**</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.001</td>
<td>.000</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Productivity</td>
<td>Correlation Coefficient</td>
<td>.210</td>
<td>.607**</td>
<td>.604**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.017</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: SPSS 21 Output.

Hypothesis One – Relationship between Forecasting Manpower Demand and Customer Satisfaction
The result of the analysis shows a significant level $p < 0.05 \ (0.001 < 0.05)$, $\rho = 0.413$. This means that there is a significant positive relationship between forecasting manpower demand and customer satisfaction. The null hypothesis, there is no significant relationship between forecasting manpower demand and customer satisfaction in oil and gas firms in Port Harcourt, is rejected.

Hypothesis Two – Relationship between Forecasting Manpower Demand and Productivity
The result of the analysis shows a significant level $p < 0.05 \ (0.017 < 0.05)$, $\rho = 0.210$. This means that there is a significant positive relationship between forecasting manpower demand and productivity. The null hypothesis, there is no significant relationship between forecasting manpower demand and productivity in oil and gas firms in Port Harcourt, is rejected.

Hypothesis Three – Relationship between Strategic Action and Customer Satisfaction
The result of the analysis shows a significant level $p < 0.05 \ (0.000 < 0.05)$, $\rho = 0.495$. This means that there is a significant positive relationship between forecasting manpower demand and customer satisfaction. The null hypothesis, there is no significant relationship between forecasting manpower demand and customer satisfaction in oil and gas firms in Port Harcourt, is rejected.

Hypothesis Four – Relationship between Strategic Action and Productivity
The result of the analysis shows a significant level $p < 0.05 \ (0.000 < 0.05)$, $\rho = 0.607$. This
means that there is a significant positive relationship between strategic action and productivity. The null hypothesis, *there is no significant relationship between strategic action and productivity in oil and gas firms in Port Harcourt*, is rejected.

### 5.1 Conclusion

In conclusion, human resource planning has a strong influence on organizational performance in forecasting future demand of business and environmental factors which help to manage human resource demand as required. Having a required number and qualified personnel in organization helps to achieve firm’s success. Specifically, in oil and gas firms, the implementation of human resource planning has led to employee productivity, machine efficiency, customer alignment and satisfaction, quality and quantity of service.

From the result of the analyses, it was concluded that the dimensions of human resource planning has a significant correlation with organizational performance in oil and gas firms in Port Harcourt. The following specific conclusions were made that forecasting manpower demand has a positive significant influence on customer satisfaction and productivity in oil and gas firms in Port Harcourt. Also, strategic action has a positive significant influence on customer satisfaction and productivity in oil and gas firms in Port Harcourt.

### 5.2 Recommendations

Going by the findings and conclusions of this study, following recommendations are made to oil and gas firms:

1) Oil companies and their human resource managers should continually carry out manpower audit and planning to determine in advance the demand and supply situation in the labor market prior to recruitment of employees.
2) Oil companies and their human resource managers should train their employees to prepare them to fill positions in the future.
3) Oil companies should collaborate with training institutions to develop custom tailored programmes to suit their manpower needs.
4) Oil companies should create or change their structures in order to promote good performance of the individuals that work for them.
References


company.


