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Training and development contributions to technological transfer among Nigerian employees using a study of Saipem Contracting Nigeria Limited.

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Abstract

This study examined how the Human Resource Management(HRM) practice implemented by Saipem Contracting Nigeria Limited contribute to Organisational growth of Saipem in terms of technological transfer to Nigerian Employees. The use of descriptive type of survey research design. This design helped in examining the relationship HRM practices have with Organisational growth of Saipem Contracting Nigeria Limited in terms of technological transfer to Nigerian employees. Stratified random sampling technique was used to select respondents from the study area. Both primary and secondary sources were used in collecting data. Of 458 targeted respondents, 416 completed the survey questionnaire, a 90.82% response rate. In analysing the responses from the questionnaire, descriptive statistics were used. Two statistical tools were used in test of the hypotheses such as : Chi Square $\chi 2$ and One-Sample t-test to assess the level of acceptance or otherwise the null hypotheses. It was found that several practices such as training and development to enhanced technological transfer to Nigerian employees. It is seen from the findings that Nigerians are given first consideration for training in this company; however, it is recommended among others that Local Content initiatives should be listed in the training plan of Saipem; this should help the HR Manager fulfil a report on the training activities to Nigerian Content Development and Monitoring Board(NCDMB). This information should be conveyed to the Corporate Training Department of Saipem, which prepares the Saipem Group Training Activities Report.

Keywords: Training and development, Technological Transfer, Saipem Contracting Nigeria Limited

1.0 Introduction and the problem

Saipem with many years of operation in Nigeria and vast exposure to training and development of its employees, many employees left the company either in respect to unfair treatment or due to biases in training selection. Organisational growth is evident where employees technological transfer is maintained. Experienced employees retained and motivated to achieving organisational set targets.

Saipem Contracting Nigeria Ltd (SCNL) is an Italian oil and gas construction company. The Company has been in oil and Gas related business for over 50 years in Nigeria. Saipem came into Nigeria in 1967 with headquarters located at the Ark towers building, plot 17, Ligali Ayorinde Street, Victoria Island Lagos, Nigeria. Saipem Operational Base is located at Rumuolumeni, a community about 10 km from Port Harcourt main town in Obio / Akpor L.G.A. of Rivers State, Nigeria.

Over the years, training and development of Saipem employee have been taking place in Saipem to enhance technological transfer. Despite the presence of Nigerian Content Development and Monitoring Board (NCDMB) in place as law to regulate HRM practices in the industry, it still seems that there is inadequate progress in the organizational growth of Saipem since there are perceived cases of unfairness or bias in training selection. These no doubt arouse employees' perception of organizational injustice which in turn affects technological transfer.

In response to these problems, this research investigated how training and development programmes conducted by Saipem bring about technological transfer to Nigerian employees in Saipem, and training programmes are conducted based on the training needs of the industry.

The purpose of this paper is to investigate the significant relationship between training and development plan (TDP) and technological transfer to Nigerian employees of Saipem. This paper has been written on the basis of analysis of primary and secondary data sources from questionnaire and Saipem Intra-net. However, the observation and experience of the authors helped in enriching this paper. The paper started with identifying the concept of training and development and the benefit of training and development to enhancing technological transfer to Nigerian Employees of Saipem.,

1.2 Research Questions

In what ways do training and development programmes contribute to technological transfer to Nigerian employees of Saipem?

1.3 Objectives of the study

Investigate how training and development plan (TDP) contributes to technological transfer among Nigerian employees of Saipem.

2.0 Training and Development

Training and development strategy represents the approach an organisation adopts to ensure that now and in the future, training and development activities support the achievement of its goals by developing the skills and capacities of individuals and teams. It can be described similarly as strategic human resource development. According to Walton (1999) Strategic human resource development involves introducing, eliminating, modifying, directing and guiding processes in such a way that all individuals and teams are equipped with the skills, knowledge and competences they require to undertake current and future tasks required by the organisation.

Armstrong (2011) holds that training and development activities make a major contribution to the successful attainment of the organisation's objectives, and investment in them benefits all the stakeholders of the organisation. Everyone in the organisation should be encouraged and given the opportunity to learn – to develop their skills and knowledge to the maximum of their capacity.

As Salami and Omole (2015) comment that the notion of the learning organisation remains persuasive because of its 'rationality, human attractiveness and presumed potential to aid organisational effectiveness and advancement'. Training and development are HR management functions that include new-employee orientation, job skills training, leadership training and professional development. These activities improve employees' job skills in their current positions and equip them with skills and expertise for cross-functional work that can increase their value to the organization.

2.1 Contributions of Training and Development to Employee technological transfer

Studies on the relationship between training and development activities and organisational growth have included those by Agarwala, (2008) which holds that it has not yet yielded enough clear evidence of a direct link between individual learning and improvements in organisational growth. To achieve something a person must have the requisite skills and knowledge. The importance of training and development in the quest to enhance the employee's technological expertise and employees retention cannot be overemphasized. According to Nwachukwu (2009), the emphasis placed by any organisation on the training and development of its employees, is implicit on retention of the employees and technological transfer. Any organisation that fails to accord training and development its pride of place in the scheme of things is encouraging the obsolescence of employees and inflexibility in the organisation with its attendant dissatisfaction and high level of employee turnover. Employee's retention has been found to be positively and significantly related to training (Morrow 2014).

Becker (2010) postulates that through training, an employee is investing time and he anticipates higher wages as a result of the additional skills he has acquired in the training. This potentially leads to an increase in commitment and retention. The investment of time and effort expended during the training process is one such factor that will enhance an employee's retentions and relations. Krueger and Rouse (2017) found that general training and specific skills are many times embedded in one another. They found that employees that attended training, regardless of its specificity, became more invested and will be willing to remain in such organisation than employees that never attended any training. The "general skills" training program which was paid completely by the employer essentially led to less employee turnover. It can be argued that the expenditure of effort and time led these employees to become more committed to be retained, and transfer technology to other employees.

Black and Lynch (2011) suggest that through training, an employee many develop a "sense of debt" toward the organisation. Training that achieves reciprocity in the employee will foster an employees' retention to the organisational and help in technological transfer to Nigerian employees of Saipem. Employees many times view general training as a "gift". Barrett and O'Connell (2016) view this "gift" as being a type of self-fulfilling prophecy. Organisations that invest in and provide general training make the participants feel like "insiders". The sense of being an "insider" is displayed in the employee's exertion of more effort, improved work ethic, and increased reasons for them to be retained.

There is a significant body of literature that suggest that an individual's identity is closely related to their employment. In turn, training that serve's to increase an employee's identification with the organisation is likely to produce a more retained workforce in the organisation. Upon hire, training is typically one of the first human resource practices that organisations like Saipem offer to their new employees. Training plays an integral role in the socialisation process for many employees. Employees enter the employment relationship with many expectations and desires. When these expectations and desires are fulfilled, then the employee is able to better identify with the company and will be willing to remain. The result is an employee that becomes more committed towards achieving the organisation's objectives in order to meet client set target. In turn, when a training program fails to meet these expectations, then there is usually a negative attitude change which may lead to employees' not willing to remain in the organisation. These unmet expectations can lead to a decrease in commitment and a greater likelihood of turnover (Garcia, 2015).

According to Scholl (2011) training can be utilised as a tool that serves to entrench the employee deeper into a particular social identity. Doing so will make it more difficult for the employee to change and more committed overall.

2.2 Technological Transfer: Impacting of required skill and expertise to Nigerian Employees and allowing the trained Nigerian employees of Saipem function in the position of acquired skill, in terms of Pipe welding and fitting, scaffolding and erection, Health, Safety and Environment, Quality Control and Assurance, Sub-sea engineering, just to mention a few.

2.3 Saipem Organisational growth and Sustainability Best Practices in Nigeria

Saipem is committed to adding value to Nigerian society, especially its host communities. It focuses on building human resource and social capacities in Nigeria, with the organisation of training programme for the youths of host communities on welding and fitting, dimensional control, mechanical, electrical, Health, Safety and Environment (through National Examination Board in Occupational Safety and Health - NEBOSH) etc in all areas of its operations. So far, Saipem trained over 500 youths in various states in these disciplines in 2015. (Saipem sustainability magazine; July, 2017:8-19).

Here below are the lists of the most recent sustainability initiatives developed in Nigeria: (Saipem sustainability magazine; July, 2017:8-19).

Educational projects (Industrial training for University students): Over 360 students benefitted from Saipem training programs (between 2006 and 2015) cutting across over 25 Universities, 15 polytechnics and 12 institutes.

Training for young unemployed graduates: in project activities by providing adequate training and entry level experience. This training is open to youths in Nigeria. Since the beginning of the program in 2008, Saipem has trained 14 Nigerian graduates and 50 are still undergoing training in various projects.

3.0 Methodology

Scope of the study covered both geographical and concept scope. The entire areas of research, the company's location and boundaries are the geographical scope. The Company operational Base is in Rumuolumeni; a community about 10 km from Port Harcourt main town in Obio / Akpor Local Government Area of Rivers State.

This work adopts descriptive/diagnostic type of survey research design. The relationship between HRM practices variables, here observed as composite independent variables as against a composite of organisational growth variables in Saipem. This design helps in seeing how the HRM Variables (independent variables) significantly affect organisational growth (dependent variables) of Saipem in terms of technological transfer to trained Nigerian employees of Saipem. The population comprised Management and staff of Saipem contracting

Nigeria. The population size of Saipem is 4,580 (Sources: Saipem Sustainability Magazine, 2016. Sampling is done by choosing 10% of the total Saipem population of 4,580. In this study, a total of 458 employees were selected with the objective of gaining completion of at least 400 to 450 copies of the questionnaire. However, 416 copies of the questionnaire were returned. The sampling technique that was used in this research is the probability sampling technique. The probability sampling technique used is limited to only Proportionate Stratified Random Sampling. This type of sampling technique is used because it enables the researcher to include the sub-strata of workers in the area of study. It gave ample opportunity to every worker in Saipem of being selected in the study.

4.0 Data analysis

In analysing the responses from the questionnaire, descriptive statistics was used (frequency distribution and percentage methods). Packages for Social Sciences (SPSS) software Version 22 was used to run tests on collated data. The data analyses involves the following: Measures of central tendency-frequency distribution and percentages was used to analyze some responses from the questionnaire such as socio-demographic data. Chi–square was used to analyse questions on training and development responses in order to test the association between training and development with technological transfer to Nigerian employees.

Use of the Chi-Square Statistic in a Test of Association between training and development plan (TDP) and organisational growth of Saipem

Fig 4.20 Test of Hypotheses on there is a significant relationship between training and development plan (TDP) and technological transfer to Nigerian employees of Saipem using Chi-Square				
O	E	O-E	(O-E)2	(O-E)2/E
149	149/3576 X 416 = 17.3	149-17.3 = 131.7	17344.89	1002.6
168	168/4032 X 416 = 17.3	168-17.3 = 150.7	22710.49	1312.7
52	52/1248 X 416 = 17.3	52 – 17.3 = 34.7	1204.1	69.6
47	47/1128 X 416 = 17.3	47 – 17.3 = 29.7	882.1	50.9
TOTAL				**2435.7**

Therefore: Chi Square $\mathbf{x^2 = \Sigma \frac{(O-E)^2}{E}}$

Chi Square $\chi 2$ (Cal) = 2435.7

How Observed Value was calculated: Total response on each of likert scale divided by column total(total number of questions)

How expected Value was calculated: Observed/Total Response on each Likert scale(Column) x Row Total

Expected Value for Strongly Agree = 149/3576 X 416 = 17.3

Expected Value for Agree = 168/4032 X 416 = 17.3

Expected Value for Disagree = 52/1248 X 416 = 17.3

Expected Value for Strongly disagree = 47/1128 X 416 = 17.3

Thus, Table value at 95% probability with 1 df (n-1) is = 13.09

Where X^2 (calculated) = 2435.7
Level of significance = 95%
Degree of freedom = n-1 = 24-1 = 23; where n = Total number of row (total number of questions asked on how training and development plan (TDP) influences organisational growth in Saipem Contracting Nigeria).
X^2 = 13.09 (table value) at 1 degree of freedom (95%) level of significance.

DECISION RULE:

Since x^2 calculated value (2435.7) is greater than tabulated value 13.09 required for 95% of significance for two degree, the null hypotheses is rejected and the alternate hypotheses is accepted.

DECISION
Based on the above analysis, the researcher rejects the null hypothesis (Ho) and accepts the alternate hypothesis (H1) we therefore conclude that there is a significant relationship between training and development plan (TDP) and technological transfer to Nigerian employees of Saipem.

5.0 Findings
It was also found that assessment of training and training need is included in Saipem training and development programme. This comprised both in-house training, on-the job training and external training. The results of the data collected revealed that majority (317 respondents with equivalent of 76.1%) of the respondents held the view that training and manpower development has enhanced employee retention and contributed to technological transfer from expatriates to Nigerians working in Saipem. Saipem is committed to adding value to Nigerian society, especially its host communities. It focuses on building human resource and social capacities in Nigeria, with the organisation of training programme for the youths of host communities on welding and fitting, dimensional control, mechanical, electrical, safety (NEBOSH) etc. in all areas of its operations. So far, Saipem trained over 500 youths in various states in these disciplines in 2015. However, What is missing in Saipem is that most of the trainers have not been trained themselves in training methods. Additionally, there is the risk that bad or even dangerous working practices can be passed on to the new employees. Findings from FGD show that all participants have it that "*training in this company is based on the training need and programmes and are very effective*" **(FG3).** One participant stated that "*Saipem employs training and manpower development strategies that are: (a) On the job training, (b) In-house training, (c) External training and that these training are relevant and indispensable to the organization's higher growth*"(**FG10).** From these comments, it shows that training and manpower development has enhanced employees' retention in Saipem.

Decision:
Following the total responses and their percentage, it is decided that training and development plan in Saipem has significant relationship with Organisational growth in terms of technological transfer to Nigerian Employees in Saipem.

6.0 Conclusion

HRM practices of Saipem has enhanced organisational growth in the areas of technological transfer to Nigeria Employees working in Saipem. It was demonstrated by the study that training and development programmes contribute to technological transfer to Nigerian employees of Saipem. The interesting thing about this study is that it has established that there is a significant relationship between training and development plan (TDP) and technological transfer to Nigerian employees of Saipem. Human resource management variables used by Saipem in bringing organizational growth are through the provision of training.

7.0 Recommendations
It is seen from the findings that Nigerians are given first consideration for training in this company; however, the following are recommended:
First: it is recommended that Local Content initiatives should be listed in the training plan of Saipem; this should help the HR Manager fulfill a report on the training activities supplied and the balance sheet of the related costs to NCDMB. This information should be conveyed to the Corporate Training Department of Saipem, which prepares the Saipem Group Training Activities Report.
Secondly, it was found that what is missing in Saipem training and development plan is that most of the trainers have not been trained themselves in training methods. By this, there is the risk that bad or even dangerous working practices can be passed on to the new employees. It is therefore recommended that all trainers in Saipem be certified train the trainer.
Thirdly, there is also the need to consider using a training need of the employees to prepare training schedules. Also, fairness in selecting employees to be trained should be adopted by HR department of Saipem. Wider representative sample should be made when selecting employees to be trained.

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