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Effects of Human Resource Development Strategies on the Performance of Construction Industry in Rwanda: A Study of Five Selected Construction Companies in Rwanda

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Abstract:

The palpable contribution of Human Resource Development to the growth of an economy cannot be overstated. The Construction industry provides infrastructure that supports the other sectors of the economy. Unfortunately, the industry is saddled with numerous challenges varying from internal weaknesses to external threats that affect and influence its performance. The study was aimed at determine the effect of human resource development strategies on performance of construction companies in Rwanda. The research used two data collection approaches - structured interviews and physical surveys. The sample of the skilled workers was selected randomly from the total number of the workers from each of the five construction companies. The target population for this study was senior members of staff and skilled workers in current projects from the most active construction companies within Kigali namely; NPD-Cotraco, Real Contractors, ROKO Construction, Fair Contraction and Ets Kazoza & Company. Total sample size for the study was 183 respondents. Questionnaires were used to collect primary data. Data collected was analyzed through SPSS version 21. Data analysis involved statistical computations for averages, percentages, and correlation and regression analysis. From the study it was found that the findings revealed that management culture, employees training and resource availability positively and significantly correlated to companies' performance. It was therefore concluded that the three independent variables has potential to improve the companies' performance if addressed.

Keywords: Human Resource Development, performance, Construction companies.

1. Background

In today's world, project-based forms of organizing are replacing traditional line staff structures and divisional structures in a number of organizations and sectors of development: growth industries, be it consulting, media and IT, seem to operate in projects on a continuous basis (Sydow, *et al.*, 2004; Whitley, 2006).

In developing countries, the construction industry may account for anywhere between 1.8 and 11 per cent of GDP (Wells, 2001). The industry also provides the infrastructure that supports other sectors of the economy. Thus, construction plays an important role that goes beyond its share of national output in the development strategy of any country or region. However, construction as an industry often faces many difficulties ranging from internal weaknesses to external threats that affect and influence its performance (Ofori, 2000). In both developing and developed countries, according to Jayawardane and Gunawardena, (1998) these weaknesses and difficulties are usually compounded by the lack of skilled and qualified operatives which often results in cost and time overruns, as well as quality shortfall

Challenges besetting the industry that could stem from lack of quality skilled operatives include avoidable rework, waste, idle resources, accidents, claims, disputes and bankruptcies (Kumaraswamy, 1997). More so, Rowings *et al.*, (1996) argued that many of the problems faced by the industry arise from a need to maintain a skilled and competitive workforce. It is also noted that productivity and quality levels are dependent on the performance of construction workers at all levels. Upgrading the knowledge and skills of all the workers in the industry, including crafts people are therefore required to improve productivity and quality of work (Kumaraswamy, 1997).

Having a powerful human resource development (HRD) organization is a worthwhile asset of companies, and an enterprise's efficiency is closely connected to human capital's managerial and developmental systems (Chen *et al.*, 2003). Currently, human

capitals play an impressive role in order to success an organization. Consequently, people with high skills and expertise increase their chances of being at work (Wilson 1999). Thus, successful companies and/or organizations will be those that are able to engage, educate, develop and retain highly skilled employees. In order to do so, developing a learning environment is, therefore, essential to the future of HRD. Human resource (HR) can create values for an enterprise by finding ways to improve work force managements that have a positive impact on performance. Since HR has a significant influence on the overall management system, it is well positioned to create substantial benefits. Nowadays, it is a common belief in both the business and the academic world that the HRs of an organization can be a source of competitive advantage and one of the hidden forces behind growth, profits and lasting value of the firms. The importance of involving HR in development, planning, and implementation of competency strategies has been emphasized by researchers (Chen *et al.*, 2003).

HRs is becoming the most important asset of an organization if they are adequately nurtured, educated and developed (Buyens *et al.*, 2001). In this regard, the dynamic external environments within which many businesses currently operate requires that they develop a capacity for training and learning faster than competitors, to find solutions to novel and complex problems and to enhance the quantity of what they do through effective training and development practices (Garavan *et al.*, 2002). Sriyen (1997) found human resource development as the process of increasing knowledge, skills, and the capacity of people in society. Frederick and Charles (1999) argued that the process of human resources development unlocks the door to modernization. The economist Alfred Marshall wrote in his book "Principles of Economics"; "that the most valuable of all capital is that invested in human beings (Michael, 2000)." The reason for the increased importance of HRD in achieving socioeconomic development lies largely in the emergence of knowledge work, technological advancement and the demand for information and their relationship to globalization is supported by Drucker (1992). One major trend with implications for HRD is globalization. It is fostered not only by technological change and the continually falling costs of communication and transport but also by the decisions of developing countries like Pakistan to embrace market oriented development strategies and to open their countries increasingly to the world economy. The world is thus, very quickly becoming one interdependent global market place (ILO, 1996).

Competitiveness of both nations and enterprises will be on an international basis. World-wide competition has increased and resultantly the pace of economic change has accelerated and the process of development has become less predictable. Competitiveness will be decided on a country's or an enterprise's capacity to add value to global economic products, services and processes (Reich, 1991). A key contributor in this regard is the knowledge and skills of the workforce. In fact the education and skills of the workforce will be the key competitive weapon for the 21st century (Thurow, 1992). Thus compared to the past, enterprises will need to update much more regularly the skills mix of their employees to respond to the opportunities or threats created by globalization and rapid technological change (Mufti, 1998). Indeed intense global competition is reconfiguring the market place. Enterprises increasingly have to compete by differentiating themselves from their competitors by the quality of the human systems and processes behind their products and services. The attitudes, knowledge and skills of the workforce of the enterprise and its contractors and suppliers will determine the quality of the human system and the processes behind its products and services (Meister, 1994).

The construction industry has been considered to be one of the most dynamic and complex industrial environments (Loosemore *et al.*, 2003). It is a project-based industry within which individual projects are usually custom-built to client specifications (Bresnen, 2000). The dynamic environment and changing demands of construction activities required the formation of the teams each time a new project is committed (Raiden and Andrew, 2006). This is particularly appeared in larger contractor companies, which are focused on managing the construction phases and the processes with a few directly employed managers and professional staff in order to lead the outsource teams (Druker and White, 1995). Most importantly, however, the external sources of workforces are very common in the industry (Loosemore *et al.*, 2003). Whilst the increasing use of external sources of labor has allowed the managing contractors to pass on risk and achieve greater flexibility, it has also made employee development and project co-ordination more complex, with a requirement for more highly skilled and experienced management (Druker and White, 1995).

Despite these challenging characteristics of the industry, literature on HRD within large construction organizations is scarce and much of the evidence relies on data gathered over last decades (Druker and White, 1995). For instance, Raiden *et al.* (2001) found that the companies demonstrated significant commitment toward strategic HRD with the benefits of staff retention and improved organizational performance. On the other hand, the success of an organization, particularly a construction organization, is largely dependent upon the quality and morale of its people (Clough *et al.*, 2002). HRD provides an influential approach to the development of people in many business sectors (Beardwell, 1997). In this regard, the construction industry, however, presents a challenging environment for the effective management and development of human resources due to the dynamic and fast changing organizational, project and skill requirements.

The construction industry is indispensable to the development of Rwanda's economy and comprises the building, transport and civil engineering sectors. It provides the physical infrastructure, which is fundamental to the development of our country. There has been increasing efforts by the Government of Rwanda to improve the effectiveness and efficiency of public services (MININFRA, 2009). However, contractors and consultants in Rwanda's construction industry lack the capital, management expertise and trained manpower that would enable them to effectively realise their potential in the construction industry. Although tremendous achievements in building construction have been made, the past initiatives to develop local firms were not sufficiently backed by Government policies and strategies to sustain continued growth of the construction industry. Under these circumstances, the industry relies heavily upon the services of foreign firms, even for repair and maintenance work that could otherwise be performed by local firms (MININFRA, 2009).

Understanding and identifying the challenges facing HRD in any industry or organization is important in attempting to improve HRD activities in any industry. The study aimed at identifying challenges facing human resource development in construction industry in Rwanda with an aim of building a strong work force in line with vision 2020 (GoR, 2000).

1.1. Statement of Problem

Human Resource development strategies is the backbone of the success in every organization. Mahroum (2007) suggested that Human Resource development strategies is about three key capacities; the capacity to develop talent, the capacity to deploy talent, and the capacity to continuously attract talent from elsewhere. Collectively, these three capacities form the backbone of any company's human capital competitiveness.

Lack of human capital development makes it difficult for contractors to deliver the quality of products that more discerning customers require. Currently in Rwanda, the demand from clients for higher quality building is also causing concern amongst contractors about lack of skills and should lead to a new interest in training. Again, the influx of foreign contractors who are setting higher quality standards (with many high-rise buildings and other complex roads and civil works) which means that local contractors may have no choice but to raise their standards and quality of work.

The construction industry plays a significant role in the socio-economic development of the nation. It provides the physical infrastructure that is central to the country's economic development. Its activities create business for suppliers and manufacturers and it provides employment to professionals, semi-skilled and unskilled labor. However, the nation's construction industry is underdeveloped and plagued with a host of problems, which includes a lack of management, technical capacity, access to credit facilities and work opportunities (MININFRA, 2009).

Although tremendous achievements in building construction have been made, the past initiatives to develop local firms were not sufficiently backed by Government policies and strategies to sustain continued growth of the construction industry. These left the construction sector with no strong local workforce to propel development of the industry. As result the industry relies heavily upon the services of foreign firms, even for repair and maintenance work that could otherwise be performed by local firms (MININFRA, 2009). Various human resource development activities such as training (Meister, 1994) need to embrace by various construction companies in order to increase performance and boost the economy of the country.

One of the main causes of project failure is the lack of effective human resource development (Berg & Karlsen, 2007; Ellemers, et al., 2004; Schmid & Adams, 2008). The need for effective human resource development (HRD) practices is accepted among academicians and practitioners of project management. This study will add to the existing body of project oriented HRD research by investigating how HRD practices influence project-oriented organization performance in Rwanda?

This study determined the challenges that hindered such resource development and recommended ways of addressing the realized challenges.

1.2. General Objective

The general objective of this study was to determine the effect of human resource development strategies on performance of construction companies in Rwanda.

1.3. Specific Objectives

This study was guided by the following three specific objectives:

- i. To evaluate the effect of management culture on performance of construction companies in Rwanda.
- ii. To determine the effect of employee training on performance of construction companies in Rwanda.
- iii. To determine the influence of resource availability on performance of construction companies in Rwanda.

2. Literature Review

2.1. Conceptual Framework

The conceptual framework for this study is derived from the literature review that has identified the key challenges facing Human resource development in the construction industry. There are challenges in the management culture, in training and in resource availability. This research evaluates the effects of these challenges on the construction works performance parameters of time and client satisfaction.

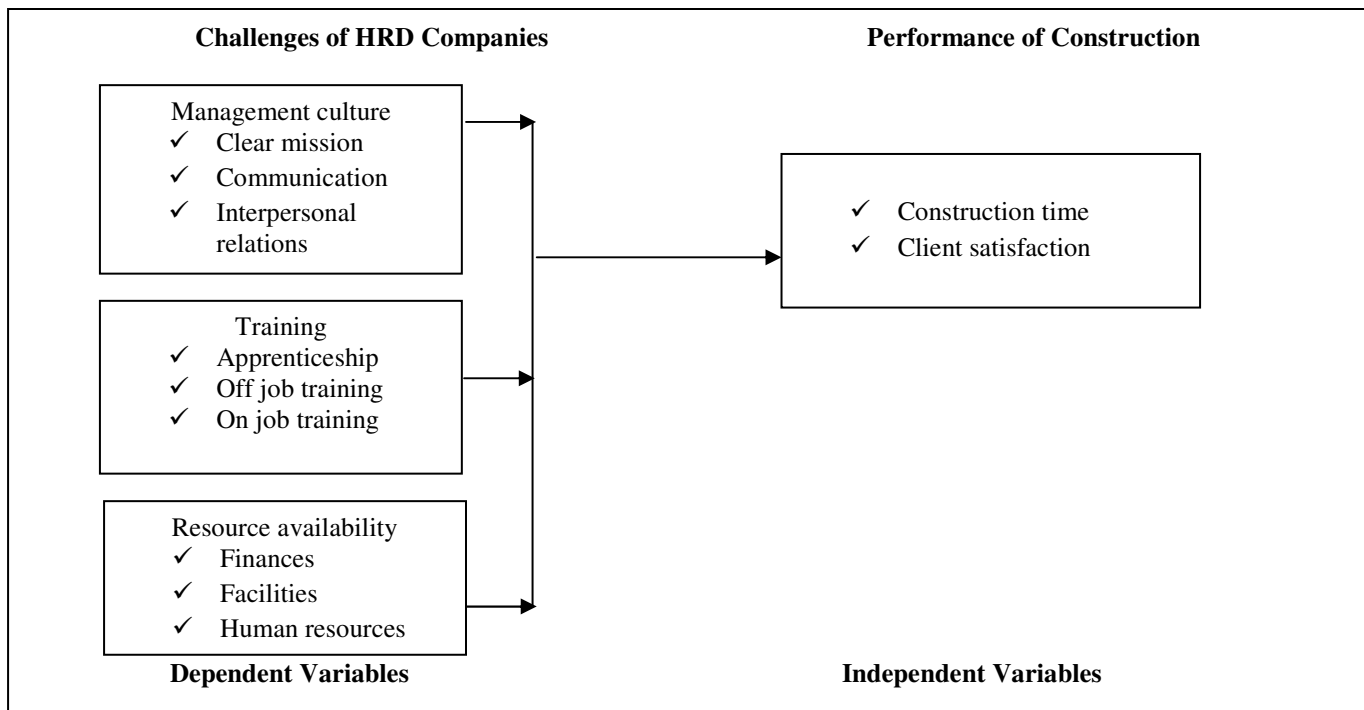


Figure 1: Conceptual framework

3. Research Design

Since data collected through a variety of techniques could be more reliable, a qualitative case study approach was preferred in this research project as it supports and accommodates triangulation. According to Denzin and Lincoln (1998:73), triangulation allows the researcher to use several methods in different combinations, so that one method may complement another. In this qualitative research approach the researcher used multi-methods strategies and the main source of data was interactive strategies (questionnaire and interview) and non-interactive strategy (review of documents). According to Orodho (2003), descriptive case study is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals.

3.1. Target Population

Mugenda and Mugenda (2003) define a population as a complete set of individuals, cases or objects with some common observable characteristics. According to Cooper & Schindler (2008) a research population is the total collection of units about which the study wishes to make some inferences. The target population for this study was 197 members of staff obtained from the 5 selected construction companies within Kigali namely; NPD-Cotraco, Real Contractors, ROKO Contraction, Fair Contraction and Ets Kazoza& Company.

3.2. Sample Size Determination

The research sample was selected in two stages. First, 5 construction companies were selected on a purposive basis, according to the judgment of the researcher as to who could provide the best information to achieve the objectives of the study (Kumar, 2005). Secondly, the HR staff was stratified in two categories namely senior staff and skilled workers. Since the senior staff was very few in each selected company, the sample included the whole population of the senior staff. The whole population of the senior staff was 10. The sample of the skilled workers was selected randomly from the total number of the workers from each of the five construction companies.

The formula below was used in determination of sample size for each company. The total was added to the sample population of the senior staff which was the sample size of the whole population for the study.

$$S = \frac{X^2NP(1-P)}{d^2(N-1)+X^2P(1-P)}$$

s = required sample size.

X² = the table value of chi-square for 1 degree of freedom at the desired confidence level(3.841).

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (0.05).

4. Research Findings and Discussion

4.1. Demographic Characteristics of the Participants

The findings of the study conducted to determine the effect of human resource development on performance of construction industries in Rwanda. The target population for this study was 197 members of staff obtained from the 5 selected construction companies within Kigali namely; NPD-Cotraco, Real Contractors, ROKO Contraction, Fair Contraction and EtsKazoza& Company. A sample size of 183 respondents was randomly selected from a list of all the employees. Questionnaires were used to collect primary data from the selected employees. Drop and pick method was used in administering the questionnaires to avoid inconveniencing the employees. Collected data was cleaned and analyzed using SPSS to generate frequency tables and correlation analysis

| | Gender | Frequency | Percent (%) |
|--|------------------------|------------------|--------------------|
| | Male | 140 | 77 |
| | Female | 43 | 23 |
| | Total | 183 | 100 |
| | Age | | |
| | 20-30 | 38 | 21 |
| | 31-40 | 74 | 40 |
| | 41-50 | 48 | 26 |
| | Above 51 | 23 | 13 |
| | Total | 183 | 100 |
| | Education Level | | |
| | Primary | 5 | 3 |
| | Secondary | 85 | 46 |
| | University | 93 | 51 |
| | Total | 183 | 100 |
| | Position | | |
| | Carpenter | 15 | 8 |
| | Plumber | 27 | 15 |
| | Site engineer | 27 | 15 |
| | IT Technician | 41 | 22 |
| | Welder | 35 | 19 |
| | Mason | 38 | 21 |
| | Total | 183 | 100 |

Table 1: Demographic characteristics of the participants

Male respondents constituted 77% while female respondents constituted 23%. Most of the respondents 40% aged between 31-40 years, 21% age 20-30, 26% aged between 41-50 years while 13% of the respondents aged above 50 years. Majority 51% had college/university education, 46 had attained secondary education while 3% of the respondents had primary education. Carpenters constituted 8% of the respondents plumbers 15%, site engineer 15%, IT Technicians 22%, welders were 19% while masons constituted 21% of the total respondents

4.2. Effect of Management Culture Organizational Performance

Most of the respondents 91% stated that they face challenges in agribusiness while 9% did not. 88% of the respondents stated that there were benefits of youth involvement in agribusiness while 12% did not see any benefit. 57% stated that motivation strategies existed while 43% of the respondents felt that there were no motivation strategies in place. 77% of the respondents felt that training influence the performance of youth in agribusiness while 23% felt different. Motivation was considered by 57% of the respondents to influence the performance of youth in agribusiness while 43% didn't have the same opinion. 55% stated that the level of youth performance in agribusiness was high as opposed to 45% which felt otherwise

| Statement | Yes (%) | No (%) |
|---|----------------|---------------|
| Face challenges in agribusiness | 33 | 67 |
| There are benefits of youth involvement in agribusiness | 88 | 12 |
| There are motivation strategies in place | 57 | 43 |
| Training influence the performance of youth in agribusiness | 77 | 23 |
| Motivation influence the performance of youth in agribusiness | 57 | 43 |
| The level of youth performance in agribusiness is high | 55 | 45 |

Table 2: Distribution of responses with "yes" or "no" as the response

Regression analysis was done to determine the effect of recruitment and selection strategies and performance and the following results were obtained. The results of the analysis are shown in table

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .521 ^a | .411 | .385 | .65724 |

a. Predictors: (Constant), management culture strategies
Table 3: Model summary showing management culture strategies

Further analysis of the management culture strategies obtained an adjusted R 38.5%. This implies that the simple linear model with management culture strategies as the independent variable explains 38.5 % of the variations in performance. This means that when management culture strategies were used the performance of Construction Company changed by 38.5 %.

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 42.431 | 1 | 40.431 | 11.388 | .000 ^a |
| | Residual | 142.688 | 52 | .617 | | |
| | Total | 1.953 | 53 | | | |

b. Dependent Variable: Performance of the company
c. Predictors: (Constant), Management culture.

Table 4: ANOVA results showing the effect of Management culture on performance ANOVA^b

A regression analysis was done to determine the effect of management culture strategies on performance of Construction Company in Rwanda. From the analysis a p-value less than 0.05 (p-value =0.0000) was obtained. This implies that the simple linear model with management culture as the only independent variable is significant.

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|--------------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .693 | .231 | | 5.973 | .000 |
| | Management culture | .539 | .062 | .444 | 8.815 | .000 |

a. Dependent variable: Performance of the construction

Table 5: Coefficient results showing the relationship between Management cultures on performance Coefficients (a)

Correlation coefficients show that management culture strategies (X1) is significant (p-value = 0.0000) in influencing performance (Y). The results of the analysis are shown in Table 4.5. The fitted model from this analysis is shown below:

$$Y = 0.693 + 0.539X_1$$

4.3. Effect of Employees Training on Company Performance

Most of the respondents 89% strongly agreed with the statement that employees training have influence on company performance while 11% just agreed with the statement. Majority (56%) of the respondents disagreed with the statement that employees are offered trained on their relevant area of operation, 36% just agreed, 4% strongly agreed while 4% strongly disagreed with the statement. The table also shows that 27% strongly agreed with the statement that the company had a proper system for performance evaluation to identify those in need of training, 35% just agreed while 38% disagreed with the statement.

These findings are supported by the positive and significant relationship between training and company performance that was revealed through correlation analysis in this study.

| Statement | Strongly agree | Agree | Disagree | Strongly disagree |
|--|----------------|-------|----------|-------------------|
| Employees training has influence on company performance | 89 | 11 | | |
| Employees are offered trained on their relevant area of operation | 4 | 36 | 56 | 4 |
| The company has a proper system for performance evaluation to identify those in need of training | 27 | 35 | 38 | |

Table 6: Effect of employees training on company performance

Regression analysis was done to determine the effect of employee training strategies on performance.

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .472 ^a | .229 | .219 | .63724 |

a. Predictors: (Constant), Employee training

Table 7: Model summary showing training strategies

This analysis of the employee training strategies obtained an adjusted R 21.9%. This implies that the simple linear model with training strategies as the independent variable explains 21.9% of the variations in performance of Construction Company. This means that when employee training strategies were used the performance of construction companies in Rwanda changed by 21.9%.

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 42.431 | 1 | 40.431 | 11.388 | .000 ^a |
| | Residual | 142.688 | 52 | .617 | | |
| | Total | 1.953 | 53 | | | |
| b. Dependent Variable: Performance of Organization | | | | | | |
| c. Predictors: (Constant), Employee training strategies | | | | | | |

Table 8: ANOVA results showing the effect of Training Strategies on performance ANOVA^b

A regression analysis was done to determine the effect of training strategies on performance of construction companies in Rwanda. From the analysis a p-value less than 0.05 (p-value =0.0000) was obtained. This implies that the simple linear model with employee training strategies as the only independent variable is significant.

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|------------------------------------|-------------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .554 | .441 | | 4.373 | .000 |
| | Employee training | .772 | .067 | .487 | 5.815 | .000 |
| a. Dependent variable: Performance | | | | | | |

Table 9: Coefficient results showing the relationship between Training strategies and performance Coefficients (a)

Correlation coefficients show that employee training strategies (X2) is significant (p-value = 0.0000) in influencing performance (Y). The results of the analysis are shown in Table 13. The fitted model from this analysis is shown below:

$$Y = 0.554 + 0.772X_2$$

4.4. Effect of Resource Availability on Company Performance

Majority of the respondents (98%) strongly agreed with the statement that resource availability influences the performance of Construction Company 2% however only agreed. The table also showed that 91% of the respondents strongly agreed with the statement that resource availability affects the quality of construction while 9% of the respondents just agreed with the statement. Majority of the respondents 56% just agreed with the statement that there were sufficient resources for staff development in their company, 24% strongly agreed while 20% disagreed with the statement. Most of the respondents 82% disagreed with the statement that funds for construction companies are easily accessed while 18% just agreed.

| Statement | Strongly agree | Agree | Disagree |
|--|----------------|-------|----------|
| Resource availability affects the company performance | 98 | 2 | |
| Resource availability affects the quality of construction | 91 | 9 | |
| There is sufficient resources for staff development in our company | 24 | 56 | 20 |
| Funds for construction companies are easily accessed | | 18 | 82 |
| Available resources are well utilized during construction | | 73 | 27 |

Table 10: Effect of resource availability on company performance

Regression analysis was done to determine the effect of resource availability on performance. This analysis of the resource availability strategies obtained an adjusted R 25.1%. This implies that the simple linear model with resource availability strategies as the independent variable explains 25.1% of the variations in performance. This means that when resource availability strategies were used the performance of Construction Company changed by 25.1 %.

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|--|-------------------|----------|-------------------|----------------------------|
| 1 | .514 ^a | .254 | .251 | .66865 |
| a. Predictors: (Constant), Resource availability | | | | |

Table 11: Model summary showing resource availability

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|--|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 42.431 | 1 | 40.431 | 11.388 | .000 ^a |
| | Residual | 142.688 | 52 | .617 | | |
| | Total | 1.953 | 53 | | | |
| b. Dependent Variable: Performance of Organization | | | | | | |
| c. Predictors: (Constant), Resource availability | | | | | | |

Table 12: ANOVA results showing the effect of Resource availability on performance ANOVA^b

A regression analysis was done to determine the effect of Resource availability on performance of construction companies in Rwanda. From the analysis a p-value less than 0.05 (p-value =0.0000) was obtained. This implies that the simple linear model with Resource availability as the only independent variable is significant.

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|------------------------------------|-----------------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.501 | .450 | | 4.373 | .000 |
| | Resource availability | .481 | .040 | .665 | 5.815 | .000 |
| a. Dependent variable: Performance | | | | | | |

Table 13: Coefficient results showing the relationship between employee training and performance Coefficients (a)

Correlation coefficients show that resource availability strategies (X3) is significant (p-value = 0.0000) in influencing performance (Y). The results of the analysis are shown in Table 17. The fitted model from this analysis is shown below:

$$Y = 1.214 + 0.541X_3$$

5.1. Conclusion

The first objective of the study was to evaluate the effect of management culture on performance of construction companies in Rwanda. The study concluded that management culture significantly affects the performance of construction companies in Rwanda. Staff development was found to be the priority of management in construction companies. However, there was no effective interpersonal relation within the company. Although the company had a clear mission, employees were not committed to the mission of the company.

The second objective was to determine the effect of employee training on performance of construction companies in Rwanda. The study concluded that employee training influences the performance of construction companies in Rwanda. Training employees has a potential to improve the performance of construction companies. Employees were however not being offered trained on their relevant area of operation and this may affect the performance. Construction companies had a proper system for performance evaluation to identify those in need of training.

The third and last objective was to determine the influence of resource availability on performance of construction companies in Rwanda. The study concludes that there was a relationship between resource availability and performance of construction companies in Rwanda. Presence of sufficient resource leads to improved performance of Construction Company. The quality of construction also is influenced by the availability of resources. According to the findings companies had sufficient resources for staff development. Accessing funds for construction companies' projects however was not easy

5.2. Recommendation

The entire Rwanda society should encourage women to embrace construction work as a source of generating income. The community should not perceive the construction jobs as a job for men only but should encourage women also to get involved. The government through the right channels should offer incentives to women to encourage them to undertake courses and trainings that will enable them to equally take part in construction industries. Such incentives may include free training or having reserved vacancies for women in the university enrolment for technical courses or in polytechnic within the country. Construction companies should embrace and ensure effective interpersonal relation within the company in order to enhance conducive working environment for better performance.

5.3. Area for Further Study

Further to that a study that will look at the challenges to the effective management of human resource training and development activities in Rwanda construction industry is also a recommendation of this study. Shortage of intellectual HRD professionals to manage HR T&D activities as well as coping with the demand for knowledgeable workers should be considered. Findings from such study may provide HR professionals with a clear understanding and awareness of the various challenges in managing effective HR training and development. Hence, relevant and appropriate policies and procedures can be developed and implemented for an effective management of HR T&D in Rwanda construction industry.

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