EVALUATING THE IMPACT OF HUMAN RESOURCES MEASUREMENT AND PRACTICES ON BUSINESS RESULTS -A STUDY OF PZ CUSSONS NIGERIA PLC, ABA

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Abstract

Human Resources Practices across most organizations in Nigeria show little or no comprehension of the concept of HR Measurement. Often, questions are asked as to what to measure, How to measure, Where to measure. These probing questions make measurement of Human Resources difficult. With paucity of information on the subject matter, this study was therefore undertaken to evaluate the impact of Human Resources Measurement and Practices on business results. Studying a sample size of 255 PZ Cussons workers in a survey, results obtained from a data analysis procedure that employed the multiple regression technique indicate the following: (i) Every unit increase in employee training had a 0.231 increase in business results (ii) For every unit increase in employee performance appraisal, there is a 0.335 increase in business result (iii) Every unit increase in compensation had a 0.190 increase in business results. Overall, HR Measurement accounts for 36% of the business results in PZ Cussons Plc, Aba. It was recommended that management teams of organizations should ensure that employees are adequately trained on a continuous basis; appraise the performance of employees and tie compensation to performance if they are to build and retain a profitable workforce for the desirable organizational growth.

Keywords: Human Resources, HR Measurement, Business Results, Balanced Scorecard, HR Practices, HR Professionals.

Human resources (HR) practice is perceived as having significant effect on business results. The concern of HR professionals is often to have an idea of their level of contribution to meeting the overall business objectives. This concern is being addressed by studies designed to effectively measure the values human resources add to organizations (Deranna, Fombrun, and Tichy, 1981; Dyer, 1984 and 1985).

Human resources measurement has become a key aspect of HR studies in the recent time. This holds true an old business maxim which suggests, “You cannot manage what you cannot measure”.

Consider a business scenario where the General manager asks for inputs from divisional managers on what the plans should be for the business: The Assistant General Manager (AGM), finance, a member of senior management team, reports the economic requirements of the business and talks about key financial indicators, including: inventory, margins, product turnover, revenue, expense, debt, and other financial indicators of success.

The Assistant General Manager (AGM), marketing, reports the customer requirements of the business and talks about measures of customer service, market share, customer focus groups, customer retention, and other indicators of customer satisfaction. The Assistant General Manager (AGM),

manufacturing, reports operating efficiencies, product quality, and volume indicators. The question now is: what measures does the Assistant General Manager (AGM), Human Resources (HR) bring to this table of corporate planning?

Traditionally, the HR executive could talk abstractly and conceptually about employee morale, turnover, and commitment. To fulfill the business partner role of HR, concepts need to be replaced with evidence, ideas with results, and perceptions with assessments. This paper shows how and why HR adds value to business decisions and occupies a vantage position in the management structure of any business. First, as Ulrich (1997) notes, evidence is emerging which demonstrates the impact of HR practices on business results. Second, HR issues are being woven into business measures around a balanced scorecard. Third, HR assessments are being carried out on practices, professionals, and departments or functions, (Arnold and Feldman, 1982).

Problem Statement

Most organizations do not seem to have an understanding of the value employees add to the enterprise. Where this happens to be the case, negative effects are inevitable. Ordinarily, if a hard working person in any organization perceives that such hard work is not adequately recognized, neither is it considered to be of good value to the enterprise, the individual will become demoralized and unsatisfied with the job. The result is often poor performance at the initial stage, and ultimately, a decision to leave the organization.

Cases like this develop into such problems as high labour turnover, low productivity of workers, poor organizational performance among others.

Objectives of the Study

Measuring human resources may however help organizations better comprehend the value employees add to the enterprise. This paper concerns itself with human resources measurement and how it does affect business results. However, the specific objectives that guided this study include:

i. To examine the impact of training on business results.
ii. To determine the relationship between employee compensation and business results.
iii. To find out the impact of performance appraisal and promotion on business results.

Research Questions

This study was guided by the following research questions:

i. How does the training of employees affect business results?
ii. To what extent does compensation of employees correlate business results?
iii. How does performance appraisal impact on business results?
iv. To what extent does HR measurement correlate business results?

Research Hypotheses

This study tested the following hypotheses:

Ho1: Training does not have significant effect on business results.
Ho2: Compensation does not significantly correlate business results.
Ho3: Performance appraisal does not have significant effect on business results.
Ho4: Human resources measurement does not significantly correlate business results.

Conceptual Framework

The relationship between HR practices and business results is built on a rather simple premise: better deployment and use of HR practices should correlate with higher business results. Arthur (1994) bemoans that while many early HR strategy writers assumed this relationship, relatively little evidence

existed to actually validate it. In the 1980s a number of such validating test efforts were made (Deranna, Fombrun, and Tichy, 1981; Dyer, 1984 and 1985; Fombrun, Tichy and Devema, 1984).

Susan Nkomo examined the correlation between how much firms invested in HR planning processes and business results. She found no correlation; investment in HR planning did not correlate with business performance (Nkomo, 1986 and 1987). Dave Lewin and his colleagues (1988 – 1989) published similar results from their large scale survey of HR practices and financial results sponsored by the U.S Department of Commerce (Delaney, Lewin and Ichniowski, 1989; Delaney, Lewin and Ichniowski, 1988). Both of these studies were based on cross-sectional survey data.

Ulrich, Geller and Desouza (1984) reported that a research project called Organization and Strategic Information Service (OASIS) was undertaken as a joint venture among Strategic Management Associates, Hay Consulting, and the University of Michigan. The results of OASIS showed some relationship between specific HR practices such as distribution of compensation systems and business results. However, the research results did not produce overall indicators of how HR practices affect business performance.

Two large scale surveys involving many organizations were conducted to find such relationships: Survey 1 – between strategy and HR, and survey 2 – between HR and Financial performance.

In survey 1, Randall Schuler and Susan Jackson collected data from a large cross section of firms and showed how under different strategic conditions, HR practices would vary (Jackson, Schuler, and Rivero, 1989; Schuler and Jackson, 1987; Schuler, 1987). This work presented empirical evidence of the strategy – HR alignment, but did not link this alignment to business results. In Survey 2, Arthur Yeung, Wayne Brockbank, Dale Lake and Dave Ulrich found that HR practices not only varied by strategy, but that the alignment of HR and strategy had an impact on business performance. (Ulrich, Brockbank, Yeung and Lake, 1993; Yeung and Ulrich, 1990). Among other findings, this team of researchers discovered that under environmental conditions of low change, attention to HR practices had little impact on business results, but under environmental conditions of high change, executive attention to HR practices had a large impact on business results.

In the 1990s, extended assessment of HR practices and financial performance was carried out. The interest in quantifying the impact of HR practices on financial performance led to a number of studies which linked the impact of HR practices to specific firm outcomes. Turnover, for example, has been linked to job security, presence of a union, compensation level, culture, and demographic as reported by Arnold and Feldman (1982); Baysinger and Mobley (1983). Productivity has been linked to HR practices of "transformational" labour relations (those emphasizing cooperation), quality of work life programmes, quality circles, training, extensive recruiting efforts, and incentive compensation systems, write Cutcher-Gershenfeld (1991); Katz, Kochan and Keefe (1987), and Weitzman and Kruse (1990). In the same vein, Russell, Terborg and powers (1985) and Terpstra and Rozell (1993) reported that investments in various HR practices have been linked to firm financial performance.

Other studies have focused on HR practices and financial performances in specific industries. Studies have shown relationships between progressive HR practices and firm performance in manufacturing according to Delaney (1996). Ichniowski, Shaw and Prennushi (1993) reported relationship between cooperative and innovative HR practices and organizational productivity in steel plants. Similarly, MacDuffie (1995) reported that relationship exists between bundles of integrated HR practices and higher productivity and quality in automotive plants.

A comprehensive study of the relationship between human resource practices and firm performance was conducted by Mark Huselid, a professor at Rutgers University and his colleagues. They

drew on research which identified high-performance work practices across a number of firms. They worked to show relationships between HR practices and financial performance of large publicly traded firms. Data were ultimately collected on 968 firms (with 28% of those sampled).

They examined the impact of higher work performance practices on three organizational performance measures: turnover, productivity, and financial results. For turnover, they found that a one standard deviation increase (about 25%) in work performance reduces turnover, 7.05% on per employee basis. For productivity, they found that each standard deviation increase in work performance practices equaled a 16% increase in productivity (measured by sales per employee). For financial performance, they found that a one standard deviation increase in work practices yielded $27,044 in sales, $3,814 increase in profits.

While this research does not specify which management actions most impact these financial outcomes, their findings are compelling and do demonstrate that the confluence of HR practices used by a firm clearly relates to firm outcomes of turnover, productivity, and financial performance. There may be many intervening variables, but this type of empirical assessment demonstrates that HR practices do relate to firm results.

Ideas from these reviewed studies are beginning to move the HR profession towards a sound empirical base. Evidence now exists to show that investment in HR practices impacts business results, both financially and in terms of the market value of firms. Obviously, these findings provide the basis for continued exploration of HR measurement issues.

Human resources measurement, otherwise human capital measurement has been defined by Institute of Development Studies, IDS (2004) as being about finding links, correlations and ideally, causation between different sets of HR data, using statistical techniques.

Becker, Huselid, and Ulrich (2001) stated that: “The firm manages and measures the relationship between the HR system and the larger organizational system as they work to enhance the firm’s performance. A high performance work system is a crucial part of this approach they mention. This study focuses on the sub-variables of the human resources measurement, such as training, compensation and performance appraisal in business results. Business result measures include work volume and quality / productivity and profit. Previous scholars such as Ulrich, Greller and Dusoktza (1984), Harold and Feldman (1982), Baysinger and Mobley (1983), Weetzman and Kruse (1990), Russel, Terborg and Powers (1985), Terpstra and Rozell (1993), Delanan (1996), Ichniowski, Shaw and Prennushi (1993), MacDufue (1995) have used such indicators to investigate similar variables that were of interest to the researchers.

Human Resource (Employee) Measurement as Part of Balanced Scorecard

Notably, every business has multiple stakeholders. The balanced scorecard as coined from the stakeholder model (Kaplan and Norton, 1992 and 1993) is built on the logic that for a business to be considered successful, it must satisfy the requirements of three stakeholders: investors, customers and employees. Investors require financial performance, measured in a variety of ways but focusing on economic profitability, market value, and cashflow. Customers who use products require quality and service which can be measured through market share, customer commitment, customer retention, and other customer-focused issues. Employees of a firm want the firm to be a healthy place to work as measured by employee and organizational actions.

A number of firms have begun to use the balanced scorecard to assess overall business performance. As they have done so, of the three stakeholders, employees are often the most difficult to measure specifically. Employee measures are often less accepted and less rigorous than are investor and

customer measures. As a result, much experimentation is occurring in integrating employee measures into the balanced scorecard.

METHODOLOGY

Research Design

This study used descriptive survey research design because it allows for numerical data to be collected within a short time for systematic analysis in order to test null hypothesis; describe the characteristics of particular individuals or a group and provide numerical data of the population.

Area of Study

This study was carried out in PZ Cussons Nigeria Plc, Aba sited along 12 factory road, Aba.

Study Population

PZ Cussons Industries Plc, Aba has seven hundred staff including five expatriates. The key respondents from this company include the staff of the company ranging from the highest to lowest staff.

Sample Size and Sampling Technique

Simple random sampling was used to select 255 workers of PZ Cussons Nigeria Plc, Aba. This sampling technique was used to eliminate bias and give each respondent equal chance to participate in the study (Will, 2010).

Data Collection Instruments

The researchers used structured questionnaire to collect data from the sampled workers/employees. The questionnaire had 5 Point Likert Scale, where the respondents were requested to tick answers based on statements given. The scale had 1 indicating strong disagreement and 5 Strong Agreement to the statements. Questionnaire was used because it is easy to analyze and can collect data rapidly from a large sample who are literate (Orodho, 2008).

Reliability of Research Instrument

A method of internal consistency reliability known as Coefficient Alpha or Cronbach's Alpha was used to test for the reliability of the research instrument with a result of 0.91.

Data Analysis Procedure

The researchers first conducted normality test using descriptive statistics in the SPSS before testing the hypothesis. The purpose of this analysis was to indicate the characteristics, shape and symmetry of the distribution. This was done by computing mean, standard deviation, variance, skewness and Kurtosis. The inclusion of skewness was to determine the asymmetry of the distribution while Kurtosis was to measure the extent to which the observations cluster around a central point. After conducting the normality test, the researchers correlated the dependent variable (Business results) with the independent variable (Human resource measurement). Correlation statistics was necessary for this study because the researchers wanted to establish the strength and direction of the relationship between different sets of data (Baguley, 2012). The means of the business results and human resources measurement were used to calculate the correlation.

The researchers adopted multiple regression model because it predicts the value of one variable from the values of two or more variables Field, 2009). In this multiple regression model, the researchers intended to find out relationships between human resources measurement (independent variable) and business results (the dependent variable). In order to achieve this, the researchers first calculated the mean of all the business results sub- variables which was then used to compute the regression coefficients.

In this model, the collinearity statistics was included since the researchers wanted to further test the correlation among the predictors in the regression as it facilitates the separation of predictors if they are redundant (Field, 2009).

Durbin-Watson statistic was included because the researchers wanted to test the presence of social correlation among the residuals or auto collinearity among the variables with values ranging from 0 to 4, with values close to 0 indicating a strong positive correlation and those close to 4 indicating a strong negative correlation.

F value was also included in order to measure the likelihood of the model as a whole to describe the relationship that emerged by chance with the basic assumption that the lower the F-value, the greater the chance that the relationships in the model are real.

Model specification:

The Regression Equation was:

$$X = a + \beta 1.\gamma 1 + \beta 2.\gamma 2 + \beta 3.\gamma 3 + \mu$$

Where a = A constant or intercept
$\gamma 1$ = Employee training
$\gamma 2$ = Employee performance appraisal
$\gamma 3$ = Employee compensation
μ = error or the noise

FINDINGS AND DISCUSSIONS

Questionnaire Return Rate

A total of 255 structured questionnaires were issued out to the sampled employees in PZ Cussons Nigeria Plc, Aba. A total of 250 questionnaires were returned for analysis of data. This was 98% return rate on the questionnaire. Jack (2012), and Drauglas and Plaza (2012) assert that questionnaire response rate that is equal or greater than 50% is considered adequate to yield a valid and reliable data. Since the response rate for this case was 98%, it is thought to yield a valid and reliable data and is within the range of better response rate.

Descriptive Statistics

The results of the descriptive statistics were tabulated and analyzed as follows:

Table I: Human Resources Measurement

Statement	Mean	St. Dev.	Variance	Skewness	Kurtosis
i. Organization's annual training programme of an average worker is adequate	3.92	1.578	1.735	0.33	-1.11
ii. Organization's performance appraisal procedures across the organizational hierarchy	3.94	1.441	1.124	0.006	-.40
iii. Adequacy of Employees' compensation package	3.68	1.206	1.588	-.482	-.774
iv. Human Resources Measurement N : 250	3.847	1.408	1.482	-0.049	-0.765

Source: Survey data, 2015.

In table I, the response on statement:

Adequacy of organization's annual training programme of an average worker has a mean of 3.92. This falls within the positive category and implies that majority of the respondents agree with the issue of training. The skewness (0.33) here is positive hence along right tail in the normal distribution curves. Kurtosis (-1.115) is negative hence presence of Platy Kurtic data values.

The statement that: Our organization has a clear performance appraisal procedures across the organizational hierarchy attracted a mean of (3.94), skewness (0.006) and Kurtosis (-0.405). This finding is a replica of the previous finding on employee training. This implies that most of the respondents were satisfied with the organizational performance appraisal procedures.

For adequacy of Employee compensation package offered by the organization, there is a mean of 3.68, skewness (-.482) and Kurtosis (-.774). This implies that the majority of the respondents agreed to the statement though the mean is lower than the rest, indicating that workers will continue to demand for higher pay irrespective of the current level of compensation.

Table 2: Correlation between Human Resources Measurement and Business Results

	Business Results	**Training**	**Appraisal**	**Compensation**
Business Results	1.00			
Training	0.329^^	1.00		
Appraisal	0.412^^	0.351^^	1.00	
Compensation	0.281^^	0.292^^	0.231^	1.00

Correlation is significant of the 0.01 level (2-tailed) N = 250, Source: Survey Data, 2015

The data in table 2 indicates that a positive correlation (r = 0.329) exists between employee training and business results. Performance appraisal accounts for 41.2% of the business results whereas employees' compensation is positively correlated to business results by 28.1%. These findings support the research work done by Ulrich, Geller and Desouza (1984) titled Organization and Strategic Information Service (OASIS). These findings further assert that when employees are adequately rewarded the business results in terms of profit margin and share capital increases. These findings are in line with what happened in PZ Cussons where in 2005, 2006 and 2007, it declared profit after tax as ₦4.5 billion, ₦5.8 billion and ₦5.3 billion respectively.

Multiple Regressions for Human Resources Measurement and Business Results

The findings of the regression statistics were tabulated as follows:

Table 3: Multiple Regression Model

	Unstandardized Coefficients		**Standardized Coefficients**			**Collinearity Statistics**	
(Constant)	1.714	.245		6.7170	0.000		
Training	0.231	0.058	0.148	2.7250	0.000	0.912	1.144
Appraisal	0.335	0.045	0.366	7.118	0.000	0.928	1.272
Compensation	0.190	0.039	0.138	2.707	0.004	0.815	1.087

Model Summary

R Square …….……..…….…… 0.356
R-Adjusted ……..…….. 0,347
Durbin Watson……..……..…..…….. 1.411
F-Charge……..28.076
Sign……..0.000

Source: Survey Data, 2015

In table 3, the results show that the training of employee is positively and significantly related to business results (P = 0.000). Performance appraisal has P = 0.000 which is less than 0.005. This implies that performance appraisal affects business results. Employee compensation has P 0.004 meaning that employee compensation is statistically significant.

The overall R-square value is 0.356 and Adjusted R is 0.347, meaning that Human Resources Measurement accounts for 36% of the business results. Durbin Watson value of 1.411 is serial correlations.

X 1.714 + 0.231γ1 + 0.335γ2 + 0.190 γ3 + μ.

This equation indicates that for every unit increase in employee training, there is a 0.231 increase in business results. For every unit increase in employee performance appraisal, there is a 0.335 increase in business results. Again, for every unit increase in employee compensation, there is a unit increase of 0.190 in business results.

These findings are in line with studies conducted by Vamoah (2013) who discovered statistically significant relationship (P = 0.002) between compensation and business results (productivity) and those done by Kwenin (2013) which reveal that Human resources measurement significantly (P = 0.007) affects job satisfaction and retention of employees. In another study Scot Dow and Memullen (2010) observed that human resources practices correlate employee performance, turnover and absenteeism by 42% (γ = 0.42). These findings imply that when human resources measurement (practice) is effectively used it impacts on business results by over 50%.

All these findings corroborate the findings of this study and affirm that human resources measurement and practices correlate business results.

Concluding Remarks and Recommendation

In conclusion, the study revealed that human resources measurement (practice) significantly affects business results as all the null hypothesis were rejected since the probability was less than 0.05. The study therefore concludes that when human resources practices are aligned to the overall strategic objectives of the organization, there is an equivalent increase in business performance.

Based on these findings, the study recommends that:

- **i.** Management of the organization should ensure that workers' condition of employment are clearly spelt out and vigorously pursued so as to enable performing employees feel motivated and increase productivity

- **ii.** Again, management should ensure that employees who portray exemplary performance are rewarded by issuing them with letters of commendation or recognition apart from the special promotion offered. This should be done in consultation with other stakeholders to make the process participatory and inclusive.
- **iii.** Compensation should be tied to performance in order to retain hard working people.
- **iv.** More empirical studies on Human Resources Measurement should be encouraged by organizations thereby, focusing the manager's attention to values or deliverables that can be quantified financially.

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