

OPERATIONALIZING HUMAN RESOURCE OPERATIONAL SYSTEMS ON ORGANISATIONAL PERFORMANCE IN MANUFACTURING FIRMS IN RIVERS STATE

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ABSTRACT

This study investigated the relationship between human resource operational systems and organisational performance in manufacturing firms in Rivers State. The specific objectives of the study were to assess the relationship between human resource strategic systems and organizational performance. Data was obtained from 82 respondents from the population of 22 manufacturing firms in Rivers State using the questionnaire instrument. The Spearman's rank order correlation tool was utilized in the test for the relationship between the operational system systems and the measures of organizational performance. Evidence revealed that there is a significant relationship between strategic systems and product. Based on this analysis, all previous hypotheses were rejected. In conclusion it was stated that the adoption and application of operational systems in the functionality and processing of human resource activities drives organizational long-term goals and offers a repositioning of human resource functions and behaviour which enhances the product offerings of manufacturing firms in Rivers State

Keywords: Human Resource, Operational Systems, Organizational Performance

INTRODUCTION

Drummond and Stone (2007) identified human resource information system as a contributing factor in the performance of SMEs in the United States. Their study was hinged on identifying the features of human resource information systems which enhanced the creativity, proactiveness and competitiveness of SMEs. The evidence from their investigation revealed that the size of the organization played a critical role in determining the effect of human resource management information systems on the performance of the SMEs. This outcome signified a positioning of organizational factors as contributing extraneously to the effectiveness of human resource information systems in driving and enhancing the outcomes of the organization. This also suggests that such organizational factors could have an impeding effect or positive impact on the relationship between the variables; suggesting possible inconsistencies in results as a function of the impact of organizational factors such as size. The study by Stair and Reynolds (2017) accentuates this point as it identified existing organizational technological infrastructure as negating the effect on human resource information system on the innovativeness of service firms in the US as well.

Extant literature suggests that a wide review of studies that have attempted to investigate the relationship between human resource information systems are premised within more advanced technological and economically developed nations (Kaufman, 2001; Reid, & Adams, 2001; Bashir, 2011). Furthermore, most of these studies are domiciled within the service industry and focus on knowledge work systems that support virtual work settings far more advanced than what is applicable within the Nigerian work settings. This is as Ibrahim (2010) stated that the disparities between the Nigerian business settings and those of more developed countries emphasizes on the adoption of tailored research models and designs specifically suited to addressing the unique experiences and challenges of the organizations within these settings. These observations signify a gap in research with regards to the nature and investigation of the relationship between human resource information systems and organizational performance within Nigerian based-firms.

In view of the stated gap, this study departs from previous research as it investigates the relationship between human resource information systems and organizational performance of manufacturing firms in Rivers State, Nigeria. The study by this purpose is geared towards identifying and addressing the specific challenges of manufacturing firms in Nigeria, and also examining the manifestations and

role of human resource information systems in the performance outcomes of the firms. In the same vein, given the noted extraneous influences of organizational factors such as size, the study will also examine the impact of organizational structure and size as possible moderators of the relationship between human resource information systems and organizational performance.

Research Hypotheses

The following hypothetical statements offer an operational but tentative position on the relationship between the variables of the study

HO₁: There is no significant relationship between operational systems and product offering of manufacturing firms in Rivers State

HO₂: There is no significant relationship between operational systems and resource utilization of manufacturing firms in Rivers State

Operational systems

The third system and dimension of human resource information systems which as noted by Lengnick-Hall and Lengnick-Hall (2007) comprises activities related to workforce planning, skills assessment and payroll control is that system or functionality that transforms the way human resource operations are performed in order to keep up with new technology and reducing the number of employees. Delivering human resource services online supports more efficient collection, storage, distribution and exchange of data (Dery, Grant & Wiben, 2009). This is corroborated by Lengnick-Hall and Lengnick-Hall (2007), who attest that human resource information system provides a comprehensive database; which enables organizations to provide structural connectivity across units and activities and increase the speed of information transactions more particularly in recruitment processes. They observe that in so applying information system in recruitment makes the whole process easy and reducing of recruitment coats. Hegel (2012) argued that salary administration, salary review procedure are important functions of HRM. The beginnings of human resource technology arose with the need to process large numbers of employee pay-slips, make salary forecasts and plan for workers which prior to 1960s was predominantly a manual or clerical exercise. The advent of use of technology to manage payroll signified the first major application of technology to an HR related problem. At the same time, it was recognized that such payroll systems often held a useful repository of employee information, including data about jobs, pay, cost, absence levels and personal data. When integrated with payroll management, HRIS payroll interface can calculate salaries and provide a range of supporting functions such as preparing pay-slips and payroll reports. A HRIS may be closely linked to or even a component of an integrated financial management system (IFMIS). With a comprehensive payroll pay card, an organization can offer its employees 24/7 access to funds and on-time pay no matter what, for instance employees on vacation or sick leave and the like), elimination of time-consuming trips to the bank, and more (Hagel, 2012). Employee turnover, which is the total of the number of employees who resign for whatever reason, plus the number of employees terminated for performance reasons, and that total divided by the number of employees at the beginning of the year. This may be measured by analysing the records that human resource information systems contain of each employee. The separation section lists reason and date of separation for each employee; monthly or when requested; the HRIS group will query the database and provide departmental heads with turnover reports by posting graphs of each report on the intranet. It is only a handful of firms which have embraced this level of HRIS such as that the workforce analytics module in human resource information systems can be used to give crucial information about return on investment on employees. All this information allows for proper decision making in an organization. Furthermore, recent human Resource information system simulations have also been used to even predict future performance of employees (Muriithi, Gachunga & Mburugu, 2014).

As talent becomes harder to find, recruiters look within their own house for the next applicant for that important job. Recruiters want the ability to understand internal applicants in greater detail

than the external candidates, including a performance history and learning details to assess their fit for open positions. The integration of performance into the HRIS, where recruiting data often is housed, would open a new door for continued focus on internal mobility. Also, through competency management - understanding the skills and abilities of the workforce continues to baffle most executives. What has been missing in all links from compensation to performance is measurement of year-over-year increases in performance and the impact that compensation has on performance.

Organizational Performance

Most of the firms operating in the sector are spread across the county and are found in all the regions in Nigeria. Although the manufacturing sector has been as one of the most popular and profitable sectors of the economy the sector has been dissected with more unfavourable scenes in the recent times (Okechukwu 2012). Despite huge positive returns commonly associated with the sector over the years there have myriads of challenges affecting the sector that have worked to slow down its operation. The issues of low efficiency, effectiveness, poor performance and reputation have been the major bottlenecks in the realization of the sectors core objectives mission and visions (Karim, 2011; Ogola 2012, 2012; & Kihara; 2013). From the above discourse, it is evident that the nature of organizational performance and its measurement has been a topic for both scholars and practitioners since organizations were first formed. How to determine if the efforts of the organization are being put to their best use and are achieving the desired outcomes is at the heart of several disciplines. Accountants devote their attention to fairly presenting the historical financial performance of organizations, while the management disciplines focus on how to improve current and future organizational performance. More specifically, for the purposes of management research, and in particular entrepreneurship and strategic management research, post hoc performance must be measured to determine the effectiveness of the managerial decisions. The "Balanced Scorecard" approach developed by Kaplan (1984) combines both historical accounting perspectives as well as operational measures that capture information about expected future organizational performance. According to James and Hall (2009); the determination of performance within an organization contents can assume three fundamental approaches. The first and very widely used approach to the determination measurement of performance is the application of behavioural, non-quantifiable, subjective and non-practical indicators. (Robbins, 2007; Coulter, 2009; & Anderson, 2011). The dimension commonly applied in this approach comprise of such product offering aspects as product quality, line and output, (Armstrong, 2005; Holt 2012; Hitt, 2013) The second and very minimally and moderately applied approach is concerned with the utilization of the resources. (Schwalble, 2009; Meyer, 2010; Kimani, 2013). Other indicators commonly used among organizations comprise of the profitability, cost of operation, waste and scrap levels, sales volume, revenue levels and the time taken to complete a specified work format, levels of production and quality dimensions. (Weetman, 2005; Tobiang, 2009; Sabalala, 2011). The third and least applied approach although the most popular with majority of firms in the Western world is the application of behavioural non quantifiable and subjective systems that cannot be seen and the non-behavioural practical objective and quantifiable systems. Nicholas, 2011; Upenda, 2012; & Kenneth, 2002). Birien (2014); observe that whereas effectiveness should be considered in both objective and non-objective indicators the most sensible approach is to develop a dual system to the determination of performance in an organization. This ensures complete comprehensiveness and wide but thoroughness an in the application of productivity. Glinow (2011); state that the performance levels may be high low and moderate depending on an organization system of measurements. The level of performance can also be negative or positive. Whereas positive productivity is associated with increased sales, revenue, profitability, low costs of operation, low scrap and material wastages for the objective assessments, it may comprise of the high commitments, innovation, creativity, quality, loyalty trusts and reduced cases of stress and accidents as well as deaths (Beddian, 2007; Owinon, 2010). Organizational performance is a philosophy used in the measurements of the possible

outcomes or outputs from the possible inputs from organizational or employee's point of view. (Anderson, 2011; Koontz, 2012; & Tobiko, 2013).

In the consideration of effectiveness as an organizational performance dimension, the employee inputs in regards to efforts, skills, experiences, trainings, knowledge capabilities and ability are compared to the outcome from employee actions in respect of behaviours, characters, identification, reaction, attitudes and perceptive tendencies as well as the personal attributes. (De Wit, 2005; Dahir 2008; & Ehrhard, 2013). High levels of skills abilities, positive efforts and adequate experiences contributes to positive behaviour, sound characters, reactions and perception and attitude towards the organization. However low inputs levels in terms of efforts and experience and training contributes to negative and unsound behavioural attributes, negative reaction and poor perception, attitude and personality that hinge on organizational performance, growth, profitability and quality dimension (Ireland James Hall 2009, Nicholas, 2011; & Odunga, 2012).

Operational systems and organizational performance

Loudon (2010) observed that one of the key features of any organization, and that which defines the extent of its success in its cost minimization, waste control and efficient resource utilization. This is as the daily planning and functionality of the organization relies heavily on its capacity to utilize and apply its resources in a most efficient and productive way. This position is shared by various scholars (Owino, 2010; Desler, 2011) and details the usefulness of control and the streamlining of behaviour and actions in a way that necessitates organizational performance. While it may appear that most studies agree to the identified position of operational systems as a prerequisite for improved organizational functionality, there is however poor evidence to support this assertion, especially within the Nigerian manufacturing sector. On this note, this study hypothesizes as follows:

HO₁: There is no significant relationship between operational systems and product offering of manufacturing firms in Rivers State

HO₂: There is no significant relationship between operational systems and resource utilization of manufacturing firms in Rivers State

Research Design

The researcher in this study, adopted the quantitative methodology in the assessment of the relationship between the study variables.

Research Population

The population for this study was drawn from all manufacturing firms within Rivers State. This captured all sectors including food and beverages, electronics, roofing and housing accessories etc. Given the level of analysis – organizational; the population for this study therefore comprises of a total of 88 managers from 22 manufacturing firms in Rivers State. In this case, 4 managers were identified within key positions relevant to this study (general manager, production/operations manager, human resources/administrative manager, and the budget/finance manager). These were identified as pervading in all 22 manufacturing firms and as such served in defining the population for the study.

Instrumentation

The primary data for the study will be generated using the structured questionnaire, while the secondary data will be sourced from reports, published materials and existing verifiable content from the target organizations, or from online publications on the organizations.

Data Analysis Techniques

The test for hypotheses in the study will be carried out using inferential techniques such as the Spearman's rank order correlation coefficient for the test on bivariate relationships (bivariate analysis) The formula for the Spearman's rank order correlation is presented as follows:

$$r_s = 1 - \frac{6 \sum_{i=1}^n D_i^2}{n(n^2 - 1)}$$

Where r = rho value

n = sample size

D = difference between the two ranking

RESULTS

HO₁: There is no significant relationship between operational systems and product offering of manufacturing firms in Rivers State

The test on this hypothesis revealed both variables to have a significant relationship where operational systems at a rho = 0.608 and a P = 0.000 is observed to significantly contribute towards outcomes of product offering within the manufacturing firms in Rivers State. As such the hypothesis is rejected on the basis of the evidence presented.

HO₂: There is no significant relationship between operational systems and resource utilization of manufacturing firms in Rivers State

The test on this hypothesis revealed both variables to have a significant relationship where operational systems at a rho = 0.401 and a P = 0.000 is observed to significantly contribute towards outcomes of resource utilization within the manufacturing firms in Rivers State. As such the hypotheses is rejected on the basis of the evidence presented.

The result from the analysis reveals that operational systems contribute as a significant predictor of organizational performance. This is based on the results which show that operational systems have a positive and substantial impact on outcomes of product offering and resource utilization. The evidence suggests that activities related to the functionality and operational processes or systems of the organization, impacts more evidently on products offering than resource utilization. In view of the evidence presented the findings on this set of tests are stated as follows:

- i. Operational systems significantly enhance the products offering of manufacturing firms in Rivers State
- ii. Operational systems significantly influence the resource utilization of manufacturing firms in Rivers State

Discussion of the Findings

Operational systems significantly influence the organizational performance of manufacturing firms in Rivers State

Operational systems are revealed in this study to impact significantly on organizational performance – thus demonstrating that without the established systems of addressing workforce planning, skills assessment and payroll control, it would be extremely difficult for organizations to make their decisions. This is because they would be forced to making baseless information due to the lack of confirmed information. Moreover, operational systems normally lay a firm foundation for the establishment of concrete decisions through its systematic tools, timely information and adequate managerial policies and regulations. Furthermore, operational systems regarding businesses act as guidelines to business owners when making critical decisions about their businesses and their workforce. As a result, managers and key decision makers are bridled from overstepping their boundaries or exceeding their business mandate. This is very crucial as it helps in keeping businesses checked and balanced thus ensuring that only proven decisions are considered while the untried ones are thwarted.

More importantly, the capacity to guide decision-making facilitates progress and improvement of the operations in a company (Hegel, 2012). In addition, most operational programs are endowed with the capacity to give real-time updates of the occurrences in company or system. By real-time, scholars (Kamau, 2013) simply refer to immediate updates of occurrences in a system. These immediate updates help mangers to take necessary actions as soon as is deemed appropriate—especially during the discovery and human resource management gaps. This augment push for improvement in company

operations through timely decision-making. This is important for companies in the modern-day generation where any slight lapse in decision making can lead to very huge losses (Rietsema, 2015). Still, operational systems are very elemental and imperative in improving company securities (Avebrok 2012). For example, in many instances, most operational systems can be easily programmed by the owner to conduct certain actions at certain times. In effect, managers can program the system to perform certain routine checks on skills assessment which can help in improving efficiency of a company through easy discovery of lapses or mismatches. Furthermore, the programmability of most operational systems save a lot of priceless time and resources for owners. In other words, through programmability, business managers can program the systems to automatically discover certain deficiencies and even solve them.

CONCLUSION

This study through its empirical activities has established human resource information systems as a significant predictor of organizational performance of manufacturing firms in Rivers State. The application of operational systems in the coordination and harnessing of human resources functions within the organization, drives the development of organizational features and operations which are imperative for enhancing the product offerings and resource utilization of manufacturing firms in Rivers State

RECOMMENDATIONS

The following recommendations are premised on the observed link between human resource information technology and organizational performance. As well as the moderating contributions of organizational structure and size to the relationship between the variables. On this basis, it is recommended that:

- i. The application of operational systems can be improved upon through the adoption of designs that focus on the integration of human resource responsibilities, roles and functions within the organization in a manner that positively impacts on the product offerings and resource utilization of the manufacturing companies in Rivers State.
- ii. The size of the organization should be channelled to offer the necessary support and base for the development of more robust and growth embracive human resource information system that is required for the actualization of organizational performance of the manufacturing firms in Rivers State.

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