
HUMAN RESOURCE INFORMATION SYSTEMS AND PRODUCT OFFERING OF MANUFACTURING FIRMS IN RIVERS STATE, NIGERIA

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ABSTRACT

This study examined the relationship between human resource information systems and product offering of manufacturing firms in Rivers State. The objectives of the study were to assess the relationship between human resource information systems and product offering. Data was obtained from 82 respondents from a population of 22 manufacturing firms in Rivers State using questionnaire as the research instrument. The Spearman's rank order correlation tool was utilized to test for the relationship between the human resource information systems and product offering. The study found that there is a significant relationship between human resource information systems and products offering. The study concludes that the adoption and application of human resource information systems in the human resource management activities enhances product offering of manufacturing firms in Rivers State; and that manufacturing firms in Rivers State that desire improved competitiveness through product offering should adopt HRIS that delivers efficient and effective human resource planning and management.

Keywords: Strategic systems, organizational performance, product offering

INTRODUCTION

The manufacturing sector is an ever-changing beast and every year, the industry is faced with fresh challenges (Glen, 2014), as virtually all media houses constantly report the closure of industrial units, labour disputes or reductions in labour force due to recession and other economic dynamics. Also, the image of manufacturing industries has been marred by low wages, high labour turnover, inadequate working conditions, poor performance and productivity (Githinji, 2014). The strategic role that learning functions play within organizations today demands that performance management, learning management and other strategic components of human capital management (HCM) become integrated and work together as a seamless process, instead of the silo approach that human resource management (HRM) has taken for the past 60 years. Many organizations feel that they have an integrated process today, but what they actually have is an interface; a point at which independent systems interact. Averbroom (2012) reports that more than 95% of company leaders believe, that their workforce performance processes are either somewhat or very limited; and that most see the need to bring the two important processes of performance and learning together.

A considerable number of studies premised on performance of manufacturing firms in Nigeria appear to share the same views (Zeb-Obipi, 2015; Upadhaya et al., 2014). This is as undesirable

outcomes such as low productivity and poor resource utilization can be traced to inefficiency of work systems and inconsistencies in existing human resource management models applied by firms. This is as Egbunike et al. (2015) affirmed that most organizations, even within the current technological age, still rely on out-dated human resource management practices, lacking in flexibility and the capacity of effectively and optimally applying, coordinating and harnessing the efforts, skills and knowledge of workers in the organization. Egbunike et al. (2015) further noted that this situation presents organizations with a disadvantage which over the years has drained both capital investments and financial resources.

Thus, this study investigates the relationship between human resource information system and product offering of manufacturing firms in Rivers State, Nigeria. The study by this purpose is geared towards identifying and addressing the specific human resource information challenges of manufacturing firms in Nigeria. The null hypothesis below is formulated to guide the study:

Ho₁: There is no significant relationship between human resource information systems and product offering of manufacturing firms in Rivers State.



Fig. 1: Conceptual framework of strategic systems and product offering

LITERATURE REVIEW

Human Resource Information Systems

The first dimension of human resource information systems examined is that which addresses functions or systems considered to be strategic in nature, such as personnel tracking, performance appraisal and sales forecasting. Personnel tracking focuses on identify the most qualified candidates, reduce paperwork, automate and manage workflows to efficiently build the firm's talent pool (Obara & Dumo, 2020). It is also meant to monitor reports, like times to fill a position and cost per hire with reporting capabilities that are tailored to organizational recruiting process. Besides it enable candidates to search and apply for jobs online. Personnel-tracking systems may include many features and capabilities, such as skill scanning and grading of capabilities, profiling of workers, cost-analysis, reports, personnel demographic and equal employment opportunity information.

Generally, human resource information systems make provision for recording of details of recruitment activities such as cost, application tracking and evaluation, resume management, method of recruitment, interviewing and selection and time to fill positions (Obara & Dumo,2020). In some African countries, a handful of evaluation studies carried out reveal that the need for e-recruitment is vital to organizations' efficiency and competitiveness in the growing global economy (Kananu, 2013). Kananu (2013) in a comparative assessment survey on the utilization of human resource information systems in Kenyan Universities premised their observations on similar grounds and acknowledges that human resource information systems are to be commonly used for payroll and record management.

HRIS also finds usefulness in recruitment, promotions and skills inventory (Kananu, 2013). Human resource managers play proactive roles in supporting HRIS implementation in organizations. However, to become more effective, HRIS must be integrated, and should be able to exchange data in order to increase availability and readiness of information to support top management on decision making.

A survey by Blair *et al.*, (2009) on addressing problems of HRIS revealed that due to poor payroll management, newly recruited staff were often not paid for three to four months and in a few extreme cases staff were not paid for an entire year; and some retired staff died without receiving pension. Blair (2009) also reports that the process for identifying ghost workers often took an average of six months, with some cases taking nearly two years. HRIS can be integrated to the ERP solutions, which enable companies enjoy the ultimate benefit of an all-in-one system that decreases errors, lower cycle times, reduces turnaround time, and support management decisions. Performance management is an integral part of this capability and allows managers and employees to monitor, schedule and complete the review process on line. Again, advances in technology over the past decade make it possible to deploy performance management tools on workers with little to no infrastructure or training.

Technologies such as on-demand, XML integration and hosted solutions allow HRIS professionals the opportunity to roll out new productivity measurements faster, better and cheaper than ever. Also, reporting technology, including data marts, data warehouses and executive dashboards, brings the results of these tools directly to those who make decisions about how the workforce impacts the business like never before. The performance evaluation subset of HRIS includes information regarding performance ratings, dates these ratings are received, type of appraisals that were used, comments therein and performance objectives and goals. Recent HRIS simulations have also been used to predict future performances of employees (Harris *et al.*, 2011).

Product Offering

Product Offering relates to the production features of organizations, relating to output, quality and nature of product (Zeb-Obipi, 2016). Productivity referred to the quantity of work attained in a unit of time by means of factors of production, including technology, capital, entrepreneurship, land and labour. Productivity is also occurs when equal amount of output is generated using fewer inputs (ILO, 2005). In the perspective of Bhatti and Qureshi (2007), productivity is a measure of performance that encompasses both efficiency and effectiveness; or the ratio of output or production capacity of workers in an organization.

The performance of a business that determines its continued existence and development is largely dependent on the features of its product offering (Obara & Zeb-Obipi, 2020). Yesufu (2000) states that the prosperity of a nation and the socio-economic welfare of its citizens is determined by the level of effectiveness and efficiency of its various sub components. Product offering is a measure of organizational performance that indicates how well essential resources are utilised with respect to the product line, output level and product quality (Zeb-Obipi, 2015). Consequently, it is suitable when measuring actual output compared to input resources, taking time into consideration. Hence, product offering ratios such as quality, output and quantity indicate the extent to which company resources are effectively and efficiently used to produce desired outputs.

Baseline Theory: General Systems Theory

This study is grounded in the general systems theory (Bertalanffy, 1969). A system is defined as a regularly interacting or interdependent group of items forming a unified whole, and as a group of devices or artificial objects or an organization forming a network especially for distributing something or serving a common purpose. Meadows (2009) defined system as a set of things, people, cells, molecules, or whatever, interconnected in such a way that they produce their own pattern of behaviour over time. These definitions are consistent with other existing definitions of a system, as they share four common elements: (1) having a group of objects, molecules, or forces; (2) the relationships and interactions between the groups within their environment; (3) how these groups make up a larger whole; and (4) the function or purpose of the elements within the group, that affects the function or purpose of the group as a whole.

Organisations are regularly described in systems terminology. Such descriptions have become an important aspect of explaining the nature of organisations and how they function. These descriptions also provide a common language for discussing issues relating to how to manage them more effectively. Robbins and Barnwell (1998) point out that describing organisations as systems provides insights into their make-up. For example, Harvey and Brown (1992) use systems terminology to describe a dynamic model of organisational change. Systems theory enables a better understanding of the nature of interactions and processes that occur within organizations and how these impact organization as a whole (Bechtold, 1997). Consequently, contemporary organization theory and practice tend to incorporate a systems approach to organization analysis.

Organizations need to be internally developed. The ability of firms to organize enables them to attain sustainability and improved performance through differentiation that endows competitive advantage. HRIS ensure that human resource functions and activities are well organized in each area. Lepak and Snell (2002) are of the opinion that internal elaboration is ensured in human resources by the application of information systems that ensures efficient functioning. Von Glinow *et al.*, (1983) suggest that career-based human resource systems are organized with equal flow of information at all levels. This facilitates human resources actions that promote internal reliability, coherence, and accomplishment of superior outcomes. The primary logic of human resources systems is to ensure synergistic effect where human resources practices and human resources policies complement each other (Delery & Doty, 1996), not in isolation. So, human resources systems are needed for fostering high performance, commitment, and involvement within organizations. The relevance of HRIS to performance usually exists at all levels of organization (Gerhart, 2005) and this is also one of the logics behind HRIS. Thus, it can be discerned that the roots of human resources information systems concept are taken from general systems theory of management thinking.

RESEARCH METHODOLOGY

This study adopts the cross-sectional survey design to investigate the relationship between HRIS and product offerings of manufacturing firms. The population for the study includes manufacturing firms in Rivers State, which is given as 22. The study took a census; and sampled and 4 managers (general manager, production/operations manager, human resources manager, and finance manager) in each of the firms. The study adopted a questionnaire as instrument for primary data collection. The questionnaire was divided into 2 parts. The first gathered data on demographics of respondents, while the second part, which was designed a 5-point Likert scale gathered data on the constructs under examination.

RESULTS AND INTERPRETATIONS

Table 1: Correlation Human Resource Information Systems and Product offering

		HRIS	Product Offering	
Spearman's rho	HRIS	Correlation Coefficient	1.000	
		Sig. (2-tailed)	.438**	
		N	.000	
	Product Offering	Correlation Coefficient	.438**	1.000
		Sig. (2-tailed)	.000	.
		N	82	82
		Correlation Coefficient	.916**	.332**

Source: Output of data analysis (2022)

The test of hypothesis revealed a significant relationship between HRIS and product offerings with a $\rho = 0.438$ and a $P_v = 0.000$. These values mean that a positive moderate and statistically significant exists between HRIS and product offerings of manufacturing firms in Rivers State. So, the study takes the position that improvements in HRIS will lead to increase in product offerings of manufacturing firms in Rivers State. Thus, the hypothesis is rejected.

DISCUSSION OF THE FINDINGS

The purpose of this study was to examine the relationship between HRIS and product offerings of manufacturing firms in Rivers State. The results obtained through the statistical analyses showed that HRIS relates positively to product offerings of manufacturing firms. This result indicates that manufacturing in the current information technology age need to adopt information technology solution that provides effective HRIS that enables efficient management of a firm's personnel. The results of the study provides substantial ground to posit that manufacturing firms in Rivers State can become more competitive through the adoption of HRIS that delivers efficient and effective human resource planning and management. Therefore, top managers should understand that HRIS contributes to enduring business advantage (Troshani *et al.*, 2011; Harris *et al.*, 2011; Armstrong, 2005).

The findings and position of this study supports the view of Kamau (2013) that organizations need to adopt HRIS to boost their productivity and competitive advantage. Essentially, HRIS enable firms to determine their human capital and the advantages accruing from them build business' strengths and reduce the effects of weaknesses, and enable the realization of business goals and objectives. HRIS may also enhance competition through established strategic systems that address sales forecasting and personnel tracking; to foster achievement of improved performance outcomes (Kamau, 2013). The argument that the utilization of HRIS positively influences organizational performance in terms of product offerings and resource utilization (Ball, 2011) is also supported by the outcome of the present study.

CONCLUSION AND RECOMMENDATIONS

This study through its empirical activities has established HRIS as a significant driver of product offering of manufacturing firms in Rivers State. The premise for this is assertion is the evidence generated from the study which identifies HRIS as enhancing aspects of product offerings of

manufacturing firms. Thus, the study concludes that the adoption and application of HRIS in the operations and processing of human resource activities enhances or magnifies product offerings of manufacturing firms in Rivers State. The study therefore recommended that:

- i. The development of HRIS should be such that draws on the long-term goals and trends of the environment of the organization, in a manner that aligns human resource practices and management functions with changes and development in the environment.
- ii. The size of the organization should be channeled to offer necessary support and base for the development of robust and growth embracive HRIS that is required for the actualization of organizational performance of manufacturing firms in Rivers State.

REFERENCES

- Armstrong, M. (2005). *Human resources management (5th edition)*. Prentice Hall Publishers.
- Averbrook, J. (2015). The deployment of human resource information systems in the Arabian gulf region.
- Ball, K. S. (2001). The use of human resource information systems: A survey. *Personnel Review*, 30(5/6), 677-693.
- Bechtold, B. (1997). Chaos theory as a model for strategy development. *Empowerment in Organisations*, 5(4), 193-201.
- Bertalanffy, L. (1968). General system theory: foundations, development. George Braziller.
- Bhatti, K. K., & Qureshi, T. M. (2007). impact of employee participation on job satisfaction, employee commitment and employee productivity. *International Review of Business Research Papers*, 3(2), 54-68.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, 39(4), 802-835.
- Egbunike, A. P., Ijeoma, N. B. & Ebubeogu, C. G. (2015). The use of activity-based costing and balance score card for strategic performance measurement: Perception of chartered accountants in Anambra State, Nigeria. *American Journal of Economics, Finance and Management*, 1(3), 211-222.
- Gerhart, B. (2005). Human resources and business performance: Findings, unanswered questions, and an alternative approach. *Management Review*, 174-185.
- Githinji A., (2014). Effects of training on employee performance: A case study of United Nations Support Office for the African. Union Mission in Somalia. United States International University-Africa.
- Glen, W. (2014). 6 Challenges facing the global manufacturing sector in 2015. Global Manufacturing. Retrieved from <http://www.manufacturingglobal.com/leadership/226/6-challenges-facing-the-global-manufacturing-sector-in-2015>
- Harris, E. C., & David, A. L. (2011). Talent and analytics: New approaches, higher ROI. *Journal of Business Strategy*, 32(6).
- Kamau, M. K. (2013). An assessment of HRS in Kenyan Universities: A comparative study of Public & Private Universities. *Journal of Business Management*, 16(1).

- Lepak, D. P., & Snell, S. A. (2002). Examining the human resource architecture: The relationships among human capital, employment, and human resource configurations. *Journal of management*, 28(4), 517-543.
- Meadows, D. H. (2009). *Thinking in systems: A primer*. Earthscan
- Obara, C. E., & Dumo N. O. (2020). Strategic systems as a predictor to organizational performance of manufacturing firms in Rivers State. *African Journal of Accounting and Management Research*, 7(2), 6705 – 4221.
- Obara, C. E., & Zeb-Obipi, I. (2020). Tactical systems and organizational performance of manufacturing firms in Rivers State. *International Journal of Innovative Research and Advanced Studies*, 8(1), 2248-4376.
- Robbins, S., & Barnwell, N. (1998). *Organisation theory: Concepts and cases*, Prentice-Hall.
- Troshani, I., Jerram, & Hill, R. S. (2011). Exploring the public sector adoption of HRIS, *Industrial Management & Data Systems*, 3(3), 470-488.
- Upadhaya, B., Munir, R., & Blount, Y. (2014). Association between performance measurement systems and organisational effectiveness. *International Journal of Operations & Production Management*, 34(7), 853-875.
- Von Glinow, M. A., Driver, M. J., Brousseau, K., & Prince, J. B. (1983). The design of a career oriented human resource system. *Academy of Management Review*, 8(1), 23-32.
- Yesufu, T.M., 2000. The human factor in national development Nigeria. Spectrum Books Ltd.
- Zeb-Obipi, I. (2015). Corporate productivity performance: A harmonist framework. *International Journal of Business and General Management*, 4(1), 19-22.
- Zeb-Obipi, I. (2016). Enhancing corporate productivity performance through worker competence development. *International Journal of Human resource management and Research*, 5(3), 1-10.