Job Rotation and Employee Performance in Manufacturing Companies in Rivers State

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Abstract

This study investigates how job rotation impacts employee performance in manufacturing firms in Rivers State, Nigeria, amidst globalization and technological advancements. Job rotation is increasingly adopted as a strategic HR practice to boost productivity and innovation. Drawing from behavioral and sociological management perspectives, the research examines its influence on employee involvement, skills development, and organizational outcomes. A cross-sectional survey involved 134 employees from diverse manufacturing enterprises in Rivers State. Using structured questionnaires, the study collected data on employee perceptions of job rotation's effects on productivity, skills development, and innovativeness. Statistical analyses, including Pearson correlation coefficients and regression models, explored these relationships. Findings highlight significant positive correlations: Employee Involvement and Productivity: A strong relationship (.830**) indicates that active participation in job rotation enhances employee productivity. Skills Development and Innovativeness: There is a significant positive relationship (p = .000), suggesting job rotation fosters innovativeness through diversified skill development. The study underscores the importance of tailored training and transparent communication to optimize job rotation's benefits. Challenges such as initial resistance and role effectiveness concerns emphasize the need for strategic implementation and ongoing evaluation. Recommendations include developing comprehensive training programs, fostering open communication, and monitoring performance metrics to maximize job rotation's effectiveness. By cultivating a versatile and motivated workforce, manufacturing companies in Rivers State can enhance their competitive edge and sustain growth in a dynamic business landscape. This research contributes empirical evidence to HRM literature on the benefits of job rotation in enhancing employee performance and organizational outcomes within manufacturing contexts

Keywords: Job rotation, Employee performance, Employee involvement, Skills development, Productivity, Innovativeness

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Introduction

Job rotation, a systematic movement of employees between different jobs and tasks within an organization, has been recognized as a strategic approach to enhance employee performance and organizational effectiveness. In manufacturing companies, where operations often require a high degree of specialization and repetitive tasks, job rotation can serve as a powerful tool to mitigate job monotony, reduce employee burnout, and foster a versatile and adaptable workforce (Pattanayak, 2020). This study focuses on the manufacturing sector in Rivers State, a region known for its industrial activities and significant contribution to Nigeria's economy (Salaam, 2017). Employee performance, a critical determinant of organizational success, encompasses various aspects such as productivity, innovativeness, and skills proficiency. By rotating employees through different roles, organizations can provide diverse experiences that enhance their skills, stimulate their creativity, and ultimately improve their performance (Campion, Cheraskin, & Stevens, 1994). Moreover, job rotation can lead to better employee involvement, as it encourages a deeper understanding of different facets of the organization, thereby fostering a sense of ownership and commitment among employees (McClelland, 1998). This study aims to explore the relationship between job rotation and employee performance in manufacturing companies in Rivers State. Specifically, it seeks to determine how employee involvement through job rotation impacts productivity and how skills development influences innovativeness within these companies.

Statement of the Problem

In the dynamic and competitive environment of manufacturing companies in Rivers State, maintaining high levels of employee performance is crucial for organizational success and sustainability. Despite significant investments in human resource management practices, many manufacturing companies continue to face challenges related to employee productivity and innovativeness. High employee turnover, job dissatisfaction, and skill deficiencies are prevalent issues that hinder the achievement of optimal performance (Ramlall, 2004). Job rotation, as a strategic human resource practice, has the potential to address these challenges by enhancing employee involvement and skills development (Ortega, 2001). However, the relationship between job rotation and employee performance in the context of manufacturing companies in Rivers State remains underexplored. While some organizations have adopted job rotation programs, there is limited empirical evidence on the effectiveness of these programs in improving employee productivity and fostering innovativeness (Eriksson & Ortega, 2006). This gap in the literature necessitates a comprehensive investigation into how job rotation influences employee performance in manufacturing companies in Rivers State. Specifically, there is a need to determine whether rotating employees through various roles within the organization leads to higher productivity and greater innovation. Understanding these dynamics is critical for developing effective human resource strategies that can enhance organizational performance and competitiveness in the manufacturing sector (Wright & McMahan, 1992).. Therefore, this study seeks to address the following problems: The lack of empirical evidence on the impact of employee involvement through job rotation on productivity in manufacturing companies in Rivers State. The need to

explore the relationship between skills development through job rotation and innovativeness in the same context.

Objectives of the Study

This study examined the relationship between job rotation and employee performance in manufacturing companies in Rivers State. The specific objectives were;

1. To determine the relationship between employee involvement and productivity in manufacturing companies in Rivers State.

2. To examine the relationship between skills development and innovativeness in manufacturing companies in Rivers State.

Research Questions

The study was guided by the following research questions;

1. What is the relationship between employee involvement and productivity in manufacturing companies in Rivers State?

2. What is the relationship between skills development and innovativeness in manufacturing companies in Rivers State?

Research Hypotheses

The following research hypotheses were formulated to guide the study;

 H_{01} : There is no significant relationship between employee involvement and productivity in manufacturing companies in Rivers State

H₀₂: There is no significant relationship between skills development and innovativeness in manufacturing companies in Rivers State.

LITERATURE REVIEW

Employee Involvement

Adjei (2012) emphasized the importance of involving employees who are active in the process and pushing them to gather experiences. For employees to understand and adhere to company policies, they must participate in job rotation. One of the key components of effective human resource management is ensuring that workers understand how their roles fit into the agency's larger objective. Establishing an atmosphere where workers can influence decisions and actions that affect their jobs is known as employee participation. According to Zeff (2018), employees should take responsibility for the rotation policy and actively participate in the procedure.

Skills Development

Adjei (2012) also highlighted that a small business's long-term innovativeness largely depends on the quality of its workforce and how they are developed through education and training. Investing in skill development for highly skilled employees is wise policy, as it boosts their output. However, Adjei noted that employees did not receive sufficient training regarding their new departmental responsibilities before being rotated. Therefore, the researcher advises supervisors to take the lead in helping employees advance their skills in various areas to maximize their job performance and improve overall organizational performance.

Productivity

Productivity, as defined by Mathis, Jackson and Valentine (2017), is a measurement of the amount and quality of work completed, accounting for resource costs. An organization's competitive edge increases with productivity due to the effective use of resources. A significant portion of an HR system's operations aims to impact individual and organizational productivity. HR practices such as pay, appraisal methods, training, hiring, job design, and compensation are all closely related to productivity. Additionally, Russel and Bernardin (1993) argues that achieving a competitive edge in human resource management (HRM) requires reducing labor costs and boosting productivity by creating more distinct links between performance and compensation. Furthermore, growing concerns about productivity and meeting requirements have led to increased interest in strategies to encourage staff to be more focused on meeting (or surpassing) customer expectations and enhancing performance.

Innovativeness

Innovation refers to the introduction of new concepts, items, or ideas. The ability of an organization to implement new ideas, procedures, and methods is essential for both company productivity and employee well-being. Innovation fosters novelty and progress hinges on the emergence of fresh ideas. In a competitive market, a firm cannot remain relevant without development. Innovation might manifest as greater quality, distinctiveness in products, brand image, or cutting-edge goods and services tailored to evolving market needs. Dessler and Varrkey (2005) assert that organizational innovation and performance are positively correlated. Huselid (1995) found that organizational performance, as determined by return on assets (ROA), was positively impacted by innovation. Furthermore, superior quality is a prerequisite for new goods and services to succeed in the market, suggesting that quality positively mediates the relationship between innovation and market success.

Theoretical Review

The foundation of this study is based on the Knowledge-Based Theory and Human Capital Theory. These theories provide a framework for understanding how job rotation can enhance employee performance through improved knowledge transfer and skills development.

Human Capital Theory

Becker's (1993) Human Capital Theory emphasizes the importance of investing in employee training and development to enhance productivity and efficiency. According to this theory, training improves workers' cognitive abilities, leading to more effective and productive work performance. In the context of job rotation, this theory suggests that rotating employees through various roles allows them to gain diverse skills and experiences, which in turn enhances their overall performance (Becker, 1993).

Job rotation aligns with the principles of Human Capital Theory by treating employees as valuable assets whose skills and capabilities need continuous development. By exposing employees to different functions and responsibilities, organizations can cultivate a more versatile and skilled workforce. This is particularly relevant in manufacturing companies in Rivers State, where the dynamic nature of the industry requires employees to be adaptable and proficient in multiple areas.

Knowledge-Based Theory

Winters' (1987) Knowledge-Based Theory posits that knowledge, especially tacit knowledge, is a critical resource for organizational survival and competitive advantage. This theory highlights the importance of face-to-face interactions, such as those facilitated by job rotation, in the effective transfer of knowledge. In manufacturing settings, where operational expertise and hands-on skills are crucial, job rotation can serve as a mechanism for disseminating tacit knowledge across the workforce (Winter, 1987). By rotating employees through different roles, organizations can ensure that knowledge is not siloed but shared across various departments. This practice enhances the collective expertise of the organization, leading to improved problem-solving capabilities and innovation. The theory underscores that knowledge-based resources, being complex and socially embedded, are difficult to imitate, thereby providing a sustained competitive advantage (Nonaka & Toyama, 2015). Both theories support the notion that job rotation can significantly enhance employee performance. Human Capital Theory provides the rationale for the continuous development of employee skills, while Knowledge-Based Theory emphasizes the strategic value of knowledge transfer within the organization. Job rotation, therefore, serves as a strategic HR practice that fosters both skill diversification and knowledge sharing. In manufacturing companies in Rivers State, these theoretical perspectives suggest that job rotation can lead to improved employee involvement, higher productivity, and greater innovativeness. By developing comprehensive training programs and promoting a culture of continuous learning and knowledge sharing, organizations can maximize the benefits of job rotation. This theoretical alignment underscores the potential of job rotation to contribute to sustainable growth and competitive advantage in the manufacturing sector.

EMPIRICAL REVIEW

Azzopardi (2019) conducted a study on internal job rotation within Maltese audit companies, revealing that job rotation significantly increases employees' job satisfaction and motivation. The

study employed a combination of qualitative and quantitative research methods, collecting primary data through questionnaires and secondary data via document analysis from four large Maltese audit companies. Using regression and correlation models for inferential statistics, the findings indicated that employees prefer performing a diverse range of tasks rather than specializing in a single task. Job rotation was shown to positively impact job satisfaction by encouraging higher performance, continuous job growth, sustained knowledge and skill development, and improved employee-customer quality (Azzopardi, 2019). This study highlighted that job rotation can address the issue of low employee motivation by helping workers develop a broader range of skills, sharpen their vision, and reduce job fatigue. Although the research used a mixed-method design, the focus on job rotation resulted in data collection primarily through questionnaires.

Akbari and Maniei (2017) examined the impact of job rotations on employee performance at Dana Insurance Company in Tehran. This study aimed to demonstrate how job rotation facilitates knowledge development within an organization. The researchers used a descriptive research approach, distributing an eight-question questionnaire to a sample of senior managers. Data analysis was performed using SPSS, employing regression and correlation models. The results indicated that job rotation enabled employees to acquire new experiences and skills, thereby enhancing their performance (Akbari & Maniei, 2017). In comparison to the current study, which adopts a correlational research design, Akbari and Maniei's study used a descriptive approach. However, both studies underscore the positive influence of job rotation on employee skill development and performance improvement. Both studies provide empirical evidence supporting the notion that job rotation can significantly enhance employee performance through skill diversification and motivation improvement. Azzopardi's (2019) study in the audit sector and Akbari and Maniei's (2017) research in the insurance industry both found that job rotation fosters job satisfaction and the acquisition of new skills, which are critical for maintaining high performance levels. The methodologies differ slightly, with Azzopardi employing a mixed-method approach and Akbari and Maniei using a descriptive approach, yet both studies reach similar conclusions regarding the benefits of job rotation. These empirical findings align with the theoretical perspectives of Human Capital Theory and Knowledge-Based Theory, which suggest that continuous development and effective knowledge transfer are crucial for enhancing employee performance. In manufacturing companies in Rivers State, these insights indicate that implementing job rotation can lead to improved employee involvement, productivity, and innovativeness, thus supporting sustainable growth and competitive advantage in the sector.

Methodology

This study employs a cross-sectional survey research approach, allowing for the collection of data through questionnaires over a brief period (Sekaran & Bougie, 2016). The target population consists of 202 employees from selected manufacturing enterprises in Rivers State. Using Krejcie and Morgan's (1970) sample size determination table, a sample size of 134 was obtained. Data was collected using a structured questionnaire distributed to the respondents, comprising three sections: Section A (Participant profiles), Section B (Employee job rotation research questions), and Section C (Employee performance research questions). Each section utilized eight items to measure job

rotation and employee performance, respectively, with responses recorded on a five-point Likert scale ranging from strong agreement (5) to neither agreement nor disagreement (1). The instrument's validity was assessed using face validity, and reliability was ensured through the application of the Cronbach α test. The reliability coefficients were as follows: Employee involvement ($\alpha = 0.74$), Skills development ($\alpha = 0.78$), Innovativeness ($\alpha = 0.82$), and Productivity ($\alpha = 0.86$). The Pearson Product Moment Correlation Coefficient (PPMC) was used to test the research hypotheses, with statistical analysis facilitated by IBM SPSS 22.0 software. Of the 134 distributed questionnaires, 123 were correctly completed and deemed suitable for analysis, representing a response rate of approximately 91.8%.

RESULTS AND DISCUSSION

Table1: Respondents Profiles

Demographic	Frequency	Percentage(%)
Gender		
MaleF	84	69.1
emale	39	30.9
AgeBracket		
46 years &	51	40.7
above36- 45years	47	39.0
18-35years	24	20.3
Educational		
BackgroundSecondary	11	8.1
Ph.DdegreeMas terdegree	4	2.4
Diploma	17	14.6
certificateBachel ordegree ["]	35	27.6

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47.2

Source: Field Survey (2023)

The gender distribution results indicated that out of the respondents, 84 individuals, making up 69.1%, identified as males, while 39 individuals, representing 30.9%, identified as females. This suggests a higher presence of males within the manufacturing sector at the time of the study. Regarding age brackets, 51 respondents, accounting for 40.7%, fell into the 46 years and above category; 47 respondents, comprising 39.0%, fell into the 36-45 years category; and 24 respondents, constituting 20.3%, fell into the 18-35 years category. In terms of educational background, 11 participants (8.1%) possessed secondary education, 4 participants (2.4%) held Ph.D. degrees, 17 participants (14.6%) held Master's degrees, 35 participants (27.6%) held diploma certificates, and 57 participants (47.2%) held Bachelor's degrees.

Table 2: Hypothesis one result

	Corr	elations	
	Deemen Completion	Employee involvement	Productivity
Employee	Pearson Correlation	1	.830**
involvement	Sig. (2-tailed)		.000
	N	123	123
Productivity	Pearson Correlation	.830**	1
	Sig. (2-tailed)	.000	
	N	123	123
** Correlat	tion is significant at the 0.01 level (2-t	(belie	

**. Correlation is significant at the 0.01 level (2-tailed).

Hypotheses Testing

Employee Involvement and Productivity:

From Table 2, employee involvement has a significant positive relationship with productivity (p = .000 < 0.01). The result also shows a high correlation ($r = .830^{**}$), implying a strong agreement between employee involvement and productivity. Since the probability value of .000 is less than the benchmark of 0.01, the null hypothesis is rejected, and the alternate hypothesis is accepted.

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Table 3:	Hypothesis two result	

	C	orrelations	
		Skills development	Innovativeness
01.11	Pearson Correlation	- 1	.870**
Skills Sig. (2-tailed) development N		.000	
	N	123	123
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Innovativeness	Pearson Correlation	.870**	1
	Sig. (2-tailed)	.000	
	N	123	123
**. Correlation is a	significant at the 0.01 level (2-tailed).		

Skills Development and Innovativeness:

Discussion

The results of the analyzed hypotheses revealed that job rotation has a significant positive association with employee performance in manufacturing companies in Rivers State. Specifically, it was discovered that:

There is a significant and positive relationship between employee involvement and productivity. This finding is consistent with earlier research by Adjei (2012), who noted that management needs to include actively engaged employees in the process, allowing them to gain experience and understand company policies through job rotation. There is a significant positive relationship between skills development and innovativeness. This aligns with the research conducted by Akbari and Maniei (2017), which concluded that job rotation enables employees to acquire fresh experiences and skills, thereby enhancing their performance. The outcomes are also in line with Azzopardi's (2019) investigation on internal job rotation and job satisfaction. These findings underscore the importance of job rotation as a strategic human resource practice that fosters employee engagement, skill development, and innovation, ultimately leading to enhanced organizational performance.

Summary of Findings

The study investigated the impact of job rotation on employee performance within manufacturing companies in Rivers State. It focused on exploring relationships between job rotation, employee involvement, skills development, and organizational outcomes. Through a cross-sectional survey involving 134 employees from various manufacturing enterprises, the study found significant positive relationships between job rotation and several key performance indicators. Specifically:

- i. **Employee Involvement and Productivity:** There was a strong positive correlation (.830**) between employee involvement in job rotation and productivity. This suggests that actively involving employees in varied roles enhances their productivity within the organization.
- ii. Skills Development and Innovativeness: The study revealed a significant positive relationship (p = .000) between skills development through job rotation and innovativeness. Employees who engaged in job rotation reported higher levels of innovation, indicating that exposure to diverse tasks fosters creative thinking and problem-solving skills.

These findings underscore the importance of job rotation as a strategic HR practice that not only improves individual skills but also contributes to organizational performance and innovation in manufacturing settings.

Discussion of Findings

The findings align with existing literature emphasizing the benefits of job rotation in enhancing employee engagement, skill diversification, and organizational adaptability (Achieng et al., 2014; Lu & Yang, 2015). By rotating employees across different roles, companies in Rivers State can mitigate the risks associated with job monotony and skill stagnation, thereby promoting a dynamic and resilient workforce. Moreover, the positive correlations observed between employee involvement, skills development, and organizational outcomes validate the theoretical underpinnings of human capital theory and knowledge-based views of the firm (Becker, 1993; Nonaka & Toyama, 2015). These theories suggest that investing in employee development through mechanisms like job rotation enhances organizational capabilities and competitive advantage. However, challenges such as initial resistance from employees, concerns about role effectiveness, and the need for comprehensive training programs were identified as potential barriers to maximizing the benefits of job rotation. Addressing these challenges through clear communication, tailored training initiatives, and ongoing performance monitoring can further optimize the effectiveness of job rotation strategies in manufacturing firms.

Conclusion

In conclusion, the study affirms that job rotation significantly enhances employee performance, productivity, and innovativeness in manufacturing companies in Rivers State. By exposing employees to diverse job roles, organizations can cultivate a versatile workforce capable of adapting to changing business demands and driving sustainable growth.

Recommendations

Based on the findings, the study recommends the following actions for manufacturing companies in Rivers State:

- i. **Develop and implement robust training programs**: Companies should establish comprehensive training initiatives to adequately prepare employees for new roles during job rotation cycles, ensuring they have the necessary skills and knowledge to succeed in their new positions.
- ii. **Foster a culture of transparent communication**: Management should address employee concerns and promote understanding of the benefits of job rotation through clear, open communication, thereby reducing resistance and fostering a more accepting attitude towards job rotation practices.
- iii. Establish mechanisms for continuous performance monitoring and evaluation: To assess the impact of job rotation on employee productivity and skills development, companies should

implement regular performance reviews and feedback systems. This will help identify areas of improvement and measure the effectiveness of job rotation programs.

- iv. **Support ongoing skills development and learning opportunities**: Providing continuous learning and professional development opportunities will ensure employees can maximize the benefits of job rotation experiences, enhancing their skills and contributing to their overall career growth.
- v. **Tailor job rotation plans to align with individual career aspirations and organizational goals**: Customizing job rotation schedules to match employees' career goals and the company's strategic objectives will increase employee engagement and satisfaction, leading to higher productivity and morale within the organization.

Implications of the Study

The study's findings have significant implications for practice and policy in HR management within manufacturing sectors. By leveraging job rotation as a strategic tool, companies can foster a culture of innovation, improve employee satisfaction, and achieve sustainable competitive advantage. Moreover, the study contributes to the body of knowledge on effective HR strategies that enhance organizational performance in dynamic and competitive business environments.

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