

EFFECT OF JOB ROTATION TRAINING TECHNIQUE ON EMPLOYEE
PRODUCTIVITY AT EAST AFRICAN PORTLAND CEMENT COMPANY, KENYA

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DOI: <https://doi.org/10.56293/IJMSSSR.2025.5535>

IJMSSSR 2025

VOLUME 7

ISSUE 2 MARCH – APRIL

ISSN: 2582 – 0265

Abstract: With the unpredictable business environment and intense business competition, organizations are required to reach certain standards by improving their performance to align with such great demands and an abundance of resources such as infrastructures or physical facilities are made meaningless without the support of qualified human resources that directly disrupt the continuity of the business operations. The objective of the study was to assess the effect of job rotation training technique on employee productivity at East Africa Portland Cement PLC at Athi River Kenya. Herzberg two-factor theory anchored the study. The target population of study comprised employees at East Africa Portland Cement PLC at Athi River Kenya and targeted 457 employees who had taken part in a form of training and development. Purposive and random sampling were used in selection of the 137 respondents who formed the sample size. Primary data was collected using questionnaires. The data collected was analyzed using Statistical Package for Social Sciences software. Descriptive statistics results showed that the respondents agreed that job rotation training technique had an effect on employee productivity in EAPCC. The regression results showed a positive and significant effect of job rotation training technique ($\beta = 0.256$, Sig. = 0.026) on employee productivity. The study concludes that job rotation is a powerful training technique that offers numerous benefits for both employees and organizations since it enhances skills, knowledge, and adaptability while promoting employee engagement and retention. The study recommends adoption of adaptability-focused job rotation in EAPCC since is a strategic initiative that contributes significantly to an organization's agility, innovation, and overall success.

Keywords: Job rotation, Training techniques, Employee productivity, East Africa Portland Cement

INTRODUCTION

Training in organizations is a systematic process of acquiring knowledge, developing skills, and enhancing competencies among staff to enhance their performance, productivity, and overall contribution to the organization's success (Singh & Jain, 2017). Training plays a crucial role in nurturing and enhancing talent and plays a vital role in achieving business goals and maintaining a competitive edge (Tan & Khatijah, 2017). Organizations that promote a culture of continuous learning encourage employees to seek opportunities for ongoing skill development and career growth. It aligns the skills and knowledge of the workforce with the evolving needs of the business, ensuring a competitive edge in the marketplace (Shafiq & Hamza, 2017).

Employees have a central and vital function in organizations, and their importance is not to be overstated. They are the lifeblood of an organization, and their contributions directly impact its success, productivity, and overall effectiveness (Abomeh & Peace, 2015). Employees are the heart and soul of an organization. Their contributions extend far beyond their job descriptions, and their dedication, skills, and commitment are integral to achieving the organization's mission, vision, and long-term success (Nedae, Alavi & Zahra, 2012). Recognizing the significance of employees and investing in their well-being and development is essential for building a thriving and sustainable organization.

Training techniques are the specific methods and strategies used to impart knowledge, skills, and competencies to individuals or groups of learners (Conner, 2011). These techniques are employed in various educational and professional settings to facilitate learning and skill development. Training techniques encompass a wide range of approaches and tools designed to engage learners, enhance their understanding, and ensure that they can apply what they have learned effectively. Effective training methods are chosen according to the particular learning goals, the audience's characteristics, and the content being taught. These methods are typically tailored to address various learning preferences and preferences, ensuring that learners can acquire knowledge and skills efficiently and effectively (Macharia & Nyakwende, 2010).

On-the-job training is a technique of staff training occurring in the workplace while a staff is performing their regular job duties (Dostie, 2014). It is a hands-on approach to training allowing staff to learn and acquire new skills, knowhow, and competencies directly in the context of their job tasks and responsibilities. It may not be suitable for every type of skill or organization. It may be less effective for complex theoretical concepts or when standardized training across multiple locations is needed (Macharia & Nyakwende, 2010).

Job rotation as a training technique involves systematically moving employees through various positions or roles within an organization to provide them with a broader range of experiences and skills (McCourt & Eldridge 2003). As a training technique, it is particularly effective for organizations seeking to cross-train employees, develop leadership talent, reduce employee turnover, and foster a culture of continuous learning and development. However, it should be implemented thoughtfully to ensure that it aligns with both individual and organizational needs and goals (Nedae, Alavi & Zahra, 2012).

East Africa Portland Cement PLC is a Kenyan cement manufacturing company that operates in the cement industry. It is a publicly traded company listed on the Nairobi Securities Exchange (NSE) under the ticker symbol "PORT." It is one of the leading cement manufacturers in Kenya. The company produces various types of cement products, including Portland cement, which is widely used in the construction industry for making concrete and mortar. IT serves both domestic and regional markets. It supplies cement to construction projects in Kenya and exports to neighboring countries in East Africa. EAPC has been increasingly focused on sustainability and environmental responsibility including efforts towards reducing the environmental effect of cement production and promote responsible business practices (Kenny & Nnamdi, 2019).

The business environment is dynamic and can present various challenges to organizations of all sizes and industries and these challenges can have a significant influence on an organization's operations, profitability, and entire success (Asamoah & Avenorgbo, 2021). Economic challenges such as downturns, recessions, inflation, and currency fluctuations can impact consumer spending, alter demand for goods and services, and influence business costs. Companies must adjust their strategies to navigate these economic cycles effectively. Training is very important in employee productivity, although training techniques are not sufficiently supported by many organizations (Kenny & Nnamdi, 2019). Further, despite the benefits accrued from adopting some training methods for employees, EAPCC is still limited on HR development issues in promoting employee productivity. **Additionally**, for some years now it appears that although training in East African Portland Cement PLC has been happening and a number of the staff have the qualification in regard to some form of training, several training techniques have been applied yet the effect of the job rotation training technique has not been established.

THEORETICAL REVIEW

Herzberg's two-factor theory is a psychological theory of motivation and job satisfaction (Herzberg et al., 1959). Herzberg identified hygiene factors, also known as maintenance factors or dissatisfiers, as elements of the work environment that, if missing or insufficient, can lead to workers dissatisfaction. These factors include working conditions, salary, company policies, and job security. On the other hand, motivators, also referred to as satisfiers, are factors that contribute to job satisfaction and intrinsic motivation (Peretomode & Pkoya, 2019). These factors are linked to the kind of the work itself, such as responsibility, advancement, and personal growth. Herzberg's theory proposes a two-dimensional model, where job satisfaction and job dissatisfaction are not on a single continuum but are affected by varying sets of factors. Motivators, on the other hand, are essential for enhancing job satisfaction and intrinsic motivation (Lake, 2000).

The implication of this theory is that it focuses on intrinsic motivation and thus to boost job satisfaction and motivation, organizations should prioritize offering employees opportunities for achievement, recognition, and personal development. Companies need to also focus on hygiene factors to avoid dissatisfaction, such as addressing concerns about salary, working conditions, and job security (Peretomode & Pkoya, 2019). Furthermore, job enrichment—re-designing roles to include more challenging and meaningful tasks—is essential, aligns with Herzberg's theory as it can enhance motivation by incorporating motivators into the work itself (Fried & Langer, 2020).

Some critics argue that Herzberg's theory has limited empirical support, as the methodology used in his original research has been criticized for its subjective nature and reliance on self-report data (Lake, 2000). Further, Herzberg's two-factor model is seen by some as overly simplistic, as it does not consider the complex interplay of various factors that influence job satisfaction and motivation. It does not account for individual differences in what constitutes a hygiene factor or a motivator. What one person finds motivating another may not.

EMPIRICAL LITERATURE REVIEW

A study assessing the correlation between job rotation and employee productivity was carried out by Cherotich, Rop and Bett (2021). Correlational and survey research designs were used. 663 medical personnel from 13 hospitals were targeted. 249 respondents were sampled. Questionnaires were used. Descriptive statistics and correlation coefficient were used in analysis. Job rotation moderately correlated with employee productivity. The study examining the effect of job rotation on staffs’ productivity in Nigeria was carried out by Oluwatuase, Enitilo and Ogunjobi (2019). 3,011 staff of Skye bank Nigeria Plc., were targeted. Multi-stage sampling technique and Logit regression analysis was done. Job rotation significantly affected productivity.

Kampkotter, Harbring and Sliwk (2018) did a study on job rotation in the banking sector in Germany. Panel data was evaluated. Findings showed that high and low performers had that ability to rotate efficiently but there was frequent lateral rotation among low performers. There was improved productivity among staff who had rotated in comparison to those who had not between different job functions. Akbari and Maniei (2017) studied the effect of job rotation on employee productivity in Tehran. Descriptive research design was used. Senior managers were targeted. Questionnaires were used. Regression and correlation models were used. Job rotation led to acquisition of new skills and experiences affecting productivity positively.

RESEARCH METHODOLOGY

This study adopted a descriptive design since it offers qualitative descriptions of trends, approaches and insights of the population where a study of a sample of that population is done. The study population consisted of 457 employees while the sample size was 137 respondents. Questionnaires were used in collecting data and administering of the questionnaires was via drop and pick later approach to reduce the risk of collecting data that is inaccurate, incomplete, or biased and improving the data quality. Data was analyzed using descriptive and inferential statistics using Statistical Package of Social Sciences. The regression model was

$$Y = \beta_0 + \beta_1 X_1 + \epsilon$$

Where

- Y = Employee productivity
- β_1 = Coefficients of workload
- X_1 = Job rotation
- ϵ_0 = Error term assumed to be a constant

FINDINGS AND DISCUSSION

Descriptive statistics

Job rotation training technique and employee productivity at East African Portland Cement PLC at Athi River Kenya was established. Job rotation training technique was conceptualized to constitute cross functional, within

functional and adaptability. Mean summaries in Table 1 showed that there are some specific skills or competencies that employees can develop through participating in an adaptability-focused job rotation program had mean of 4.24 and SD of 0.63. The company has a way of evaluating the success of a cross-functional job rotation program in terms of employee development had a mean of 4.11 and SD of 0.46. Our company has a structure a within-functional job rotation program to maximize its effectiveness in developing employees' skills and knowledge had a mean of 4.08 and SD of 0.59. The company has had the benefits of implementing a cross-functional job rotation program as a training technique had a mean of 4.06 and SD of 0.76. Our company emphasizes adaptability to help prepare employees for a rapidly changing work environment had a mean of 3.85 and SD of 0.88 while there are some challenges that our company has been facing when implementing a within-functional job rotation program had a mean of 3.75 and SD of 0.75.

Table 1: Job rotation and Employee Productivity

| Description | Frequency and Percentages | | | | | Mean | SD | | | |
|--|---------------------------|-------|----|-------|----|-------|----|-------|-------------|------|
| | SD | D | N | A | SA | | | | | |
| The company has had the benefits of implementing a cross-functional job rotation program as a training technique | 3 | 2.9% | 17 | 16.7% | 53 | 52.0% | 29 | 28.4% | 4.06 | 0.76 |
| The company has a way of evaluating the success of a cross-functional job rotation program in terms of employee development | 1 | 1.0% | 3 | 2.9% | 82 | 80.4% | 16 | 15.7% | 4.11 | 0.46 |
| Our company has a structure a within-functional job rotation program to maximize its effectiveness in developing employees' skills and knowledge | 4 | 3.9% | 2 | 2.0% | 78 | 76.5% | 18 | 17.6% | 4.08 | 0.59 |
| There are some challenges that our company has been facing when implementing a within-functional job rotation program | 10 | 9.8% | 14 | 13.7% | 69 | 67.6% | 9 | 8.8% | 3.75 | 0.75 |
| Our company emphasizes adaptability to help prepare employees for a rapidly changing work environment | 12 | 11.8% | 12 | 11.8% | 57 | 55.9% | 21 | 20.6% | 3.85 | 0.88 |
| There are some specific skills or competencies that employees can develop through participating in an adaptability-focused job rotation program | | | 11 | 10.8% | 56 | 54.9% | 35 | 34.3% | 4.24 | 0.63 |
| Composite Mean | | | | | | | | | 4.02 | |

Source; Survey data (2023)

The findings of this study are supported by Khan (2010) who connoted that adaptability-focused job rotation exposes employees to a variety of roles and functions within the organization. As a result, employees develop a broader skill set, encompassing different job-specific skills and competencies. This diversification makes employees more adaptable and capable of handling a wide range of tasks and challenges. Further, Muhammad (2012) indicated that the primary goal of adaptability-focused job rotation is to increase employees' adaptability and by experiencing different roles and challenges, employees become more comfortable with change and more resilient in the face of uncertainty, which is essential in today's rapidly evolving business environment. Organizations that prioritize adaptability-focused job rotation are better equipped to adapt to changing market conditions and industry disruptions and this adaptability can provide a competitive advantage in a fast-paced business environment (Sajuyigbe & Amusat, 2012).

Employee Productivity

The study sought to establish on employee productivity at East African Portland Cement PLC at Athi River Kenya which was conceptualized to constitute efficiency, effectiveness and provision of quality services. Results shown in Table 2 are mean summaries which showed that effectiveness has been enhanced through training and development had the highest mean of 4.03. There was low variation (standard deviation (SD) of 0.67). Provision of quality services has obtained through training and development had a mean of 3.94. There was a low variation (SD) of 0.76 while training and development has led to improved efficiency in the company had a mean of 3.75 and an SD of 0.97 thus a low variation. Results showed that the respondents agreed that there was employee productivity in EAPCC since the indicators had an aggregate mean of 3.91.

Table 2: Employee productivity at East African Portland Cement

| Employee productivity statements | Frequency and Percentages | | | | | Mean | SD |
|---|---------------------------|-----------|-------------|-------------|-------------|-------------|------|
| | SD | D | N | A | SA | | |
| Training and development has led to improved efficiency in the company | 4 3.9% | | 40 39.2% | 32 31.4% | 26 25.5% | 3.75 | 0.97 |
| Effectiveness has been enhanced through training and development | | 1 1.0% | 18 17.6% | 60 58.8% | 23 22.5% | 4.03 | 0.67 |
| Provision of quality services has obtained through training and development | | 6 5.9% | 14 13.7% | 62 60.8% | 20 19.6% | 3.94 | 0.76 |
| Composite Mean | | | | | | 3.91 | |

Source: Survey data (2023)

The findings are supported by those of Kataria, Garg and Rastogi (2013) who indicated that effectiveness goes hand in hand with resource optimization and that when employees are efficient and effective, they make better use of resources such as time, materials, and technology. This reduces waste and maximizes the utilization of available resources, leading to cost savings and improved resource management. Effectiveness in the workplace often translates into better time management skills. Employees who can manage their time effectively are more likely to have a healthy work-life balance. This balance contributes to reduced burnout, increased job satisfaction, and a more sustainable workforce. According to Gruman and Saks (2011) effective employees are more likely to perform at their best, which results in higher productivity levels. When employees are efficient in their tasks and use their time and resources wisely, they can accomplish more in less time. This not only benefits the organization by increasing its output but also reduces operational costs and enhances profitability (Cameron et al., 2011). When employees feel that their efforts contribute to the organization's success and that they are effective in their roles, it often leads to higher job satisfaction and engagement. Engaged employees are more committed to their work, less likely to leave the company, and more likely to go the extra mile to achieve desired outcomes (Kataria et al., 2013).

Regression analysis

Regression model was used to establish the effect of job rotation training technique on employee productivity at the EAPCC as shown as in Table 3.

Table 3: Regression coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | | |
|------------|-----------------------------|------------|---------------------------|-------|-------|
| | B | Std. Error | Beta | t | Sig. |
| (Constant) | 3.246 | 1.098 | | 2.957 | 0.004 |

| | | | | | |
|--------------|-------|-------|-------|-------|-------|
| Job rotation | 0.256 | 0.210 | 0.138 | 1.217 | 0.026 |
|--------------|-------|-------|-------|-------|-------|

As per the results generated, the equation translated to;

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

$$\text{Employee Productivity} = 3.246 + 0.256 (0.210)$$

Where; Employee Productivity = Constant + Job rotation

The findings in Table 3 indicate that job rotation affected employee productivity in EAPCC positively as shown by the beta coefficient of 0.256. The effect is significant as shown by a significance level of 0.026 which is less than 0.05 at 5% level of significance. The study findings indicate that enhancing job rotation training technique leads to 0.256 increase in employee productivity in EAPCC.

CONCLUSION AND RECOMMENDATION

The study concludes that job rotation is a powerful training technique that offers numerous benefits for both employees and organizations since it enhances skills, knowledge, and adaptability while promoting employee engagement and retention. Moreover, it contributes to leadership development and succession planning, ultimately strengthening an organization's competitive position in the marketplace. The study recommends adoption of adaptability-focused job rotation in EAPCC since is a strategic initiative that contributes significantly to an organization's agility, innovation, and overall success. By providing employees with diverse experiences and skill development opportunities, organizations can build a workforce that is better prepared to navigate the challenges of today's dynamic business landscape.

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