



EFFECT OF HUMAN CAPITAL TRAINING ON EMPLOYEE PERFORMANCE OF MANUFACTURING FIRMS IN SOUTHEAST NIGERIA

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Abstract: This study examines the effect of human capital training and employee performance of manufacturing firms in Southeast Nigeria, with a focus on knowledge transfer, training methods, and training duration. A descriptive survey research design was adopted, and data were collected from 200 respondents selected through stratified random sampling from a total population of 1,540 employees across 25 manufacturing firms. The respondents were drawn from different levels within the firms to ensure representativeness, and the data were collected using a structured questionnaire. The data were analyzed using multiple regression analysis with SPSS Version 23. The results revealed significant positive relationships between all three training variables and employee performance. Knowledge transfer was found to have a strong influence on performance ($B = 0.542$, $p < 0.05$), explaining 42.5% of the variance in performance. Training methods also showed a significant influence on performance ($B = 0.639$, $p < 0.05$), accounting for 53.7% of the variation. Training duration demonstrated a positive relationship with performance ($B = 0.486$, $p < 0.05$), explaining 34.7% of the variance. The findings emphasize the critical role of effective training programs in enhancing employee performance. The study suggests that manufacturing firms invest in structured knowledge transfer initiatives, adopt modern training methods, and ensure adequate training duration to improve employee skills and organizational outcomes. These strategies are vital for improving productivity and maintaining competitiveness in the manufacturing sector. The study recommends regular and tailored training programs that align with industry trends, enabling firms to adapt to changing market demands and sustain long-term growth.

Keywords: Human Capital Training, Knowledge Transfer, Training Methods, Training Duration, Employee Performance, Manufacturing Firms.

Background of the Study

The manufacturing sector in Southeast Nigeria has remained a critical component of the nation's economy, contributing significantly to employment generation, economic development, and industrial growth. Human capital development encourages entrepreneurship and innovation, leading to the creation of new businesses, products, and services that drive economic growth (Atueyi, 2019). However, the performance of employees in this sector has been a subject of concern due to challenges such as skill gaps, technological advancements, and global competition. The role of human capital training in addressing these issues cannot be overstated, as it equips employees with the requisite knowledge, skills, and competencies to perform effectively. Human capital training has evolved as a strategic tool for

enhancing employee performance, particularly in manufacturing firms where technical expertise and operational efficiency are essential (Adeoye & Elegbeleye, 2021).

One critical variable in human capital training is knowledge transfer, which refers to the process of disseminating acquired knowledge from training sessions to the workplace. Effective knowledge transfer ensures that employees can apply what they have learned to real-world situations, thereby improving productivity and reducing operational errors. Manufacturing firms, particularly in Southeast Nigeria, often face challenges in achieving seamless knowledge transfer due to factors such as inadequate follow-up mechanisms and the absence of supportive learning environments. Recent studies have emphasized the importance of fostering a culture of learning within organizations to facilitate knowledge transfer (Chukwu & Obi, 2022).

Training methods are another vital aspect of human capital training. These methods range from on-the-job training and workshops to e-learning and mentoring programs. The choice of training methods significantly impacts the learning outcomes and subsequent performance of employees. For instance, Akinola and Akinyele (2023) found that interactive and practical training methods are more effective in enhancing employee engagement and retention of knowledge. Improved human capital results in a more skilled and productive workforce, which can boost economic growth and competitiveness (Obi & Atueyi, 2022). Manufacturing firms in Southeast Nigeria often rely on traditional training methods, which may not adequately address the dynamic nature of the industry. Adopting innovative and technology-driven methods is essential to bridge this gap and enhance employee performance.

The duration of training is equally critical in determining its effectiveness. While short-term training programs are cost-effective and time-efficient, they may not provide in-depth knowledge or skill acquisition. Conversely, long-term training programs can be comprehensive but may lead to employee fatigue and operational disruptions. Balancing the duration of training to align with organizational goals and employee needs is crucial. According to Ogunbiyi and Fadare (2021), an optimal training duration enhances employee adaptability and fosters a deeper understanding of job responsibilities, which is particularly important in manufacturing environments.

In the context of Southeast Nigeria, the interplay between these variables—knowledge transfer, training methods, and training duration—is influenced by socio-economic and organizational factors. The region's manufacturing firms are often characterized by limited financial resources, infrastructural deficits, and a lack of access to modern training tools. These challenges necessitate a strategic approach to human capital training that maximizes the impact of limited resources while addressing the specific needs of employees (Eze & Nwankwo, 2020).

Furthermore, the dynamic nature of the manufacturing sector demands continuous learning and development to keep pace with technological advancements and industry trends. Investing in human capital training not only improves employee performance but also enhances organizational competitiveness and sustainability. Studies have shown that organizations that prioritize training are better equipped to adapt to changes and achieve long-term success (Olaniyan & Akinbode, 2023).

Despite the recognized benefits of human capital training, there is a need for empirical research to explore its specific impact on employee performance in the manufacturing sector of Southeast Nigeria. Most existing studies have focused on general organizational outcomes without delving into the nuanced effects of training variables such as knowledge transfer, training methods, and training duration. Addressing this research gap will provide valuable insights for policymakers and business leaders in designing effective training programs (Nwafor & Ijeoma, 2022). Human capital training plays a pivotal role in enhancing employee performance in manufacturing firms. By examining the effects of knowledge transfer, training methods, and training duration, this study aims to contribute to the existing body of knowledge and provide actionable recommendations for improving training practices in the manufacturing sector of Southeast Nigeria. The findings will serve as a framework for fostering employee productivity and organizational growth in the region.

Statement of the Problem

The effect of human capital training on employee performance has garnered significant attention in recent years, particularly in manufacturing firms where operational efficiency is critical. Despite the increasing investments in training programs, manufacturing firms in Southeast Nigeria struggle with achieving desired improvements in employee performance. This broad problem is rooted in challenges such as ineffective knowledge transfer, the use of outdated or inappropriate training methods, and inadequate consideration of training duration in program design. These issues undermine the potential benefits of training programs, leading to suboptimal performance and reduced competitiveness. One specific problem is the lack of effective knowledge transfer mechanisms within manufacturing firms. Employees often struggle to apply acquired knowledge and skills to their job roles due to inadequate follow-up and support systems. This results in a significant gap between training outcomes and workplace performance. To address this issue, organizations must implement structured post-training support, such as mentoring programs and regular feedback sessions, to facilitate the practical application of skills.

Another issue is the reliance on traditional and less interactive training methods, which fail to engage employees or address the specific demands of the manufacturing industry. Conventional methods such as lectures and passive learning are often ineffective in promoting deep understanding and skill acquisition. The adoption of innovative training approaches, including hands-on workshops, simulations, and e-learning platforms, is essential to enhance the relevance and impact of training programs. The third problem relates to the inadequate optimization of training duration. Many manufacturing firms either condense training programs into short periods, sacrificing depth, or extend them excessively, causing operational disruptions and employee fatigue. Balancing the duration to ensure comprehensive yet time-efficient training is critical. This can be achieved by aligning training schedules with organizational workflows and incorporating modular training designs that allow for incremental learning.

This study seeks to address these specific problems by exploring the interrelationship between knowledge transfers, training methods, and training duration as critical variables of human capital training. By identifying the gaps in current training practices and their impact

on employee performance, the research aims to provide actionable insights for improving training effectiveness in manufacturing firms in Southeast Nigeria.

Objectives of the Study

The broad goal of this study is to examine the effect of human capital training on employee performance of manufacturing firms in Southeast Nigeria. The specific objectives are to:

1. Determine the effect of knowledge transfer on employee performance of manufacturing firms in Southeast Nigeria.
2. Examine the influence of training methods on employee performance of manufacturing firms in Southeast Nigeria.
3. Assess the effect of training duration on employee performance of manufacturing firms in Southeast Nigeria.

Hypotheses of the Study

The following hypotheses have been formulated to guide this study:

H₀₁: Knowledge transfer has no significant effect on employee performance in manufacturing firms in Southeast Nigeria.

H₀₁: Training methods have no significant influence on employee performance in manufacturing firms in Southeast Nigeria.

H₀₁: Training duration has no significant effect on employee performance in manufacturing firms in Southeast Nigeria.

REVIEWS OF RELATED LITERATURE

Human Capital Training

Human capital training involves the strategic development of employees' skills, knowledge, and competencies to enhance organizational productivity and individual performance. This concept underscores the importance of investing in human resources as a critical asset for achieving competitive advantage. Human capital training often includes various programs, such as workshops, on-the-job training, mentoring, and professional certifications, tailored to address specific organizational needs. Studies emphasize that training initiatives should align with organizational goals to ensure relevance and effectiveness (Aguinis & Kraiger, 2020). Effective training fosters innovation, adaptability, and resilience among employees, enabling organizations to navigate dynamic business environments successfully.

Moreover, the advent of technology has significantly transformed human capital training by integrating e-learning platforms, virtual simulations, and artificial intelligence. These tools have made training more accessible and customizable, accommodating diverse employee needs and learning preferences. Virtual reality, for instance, offers immersive learning experiences that enhance employee engagement and retention (Chen et al., 2021). Additionally, organizations now employ data analytics to measure training effectiveness,

identify skill gaps, and forecast future training requirements. This data-driven approach ensures that human capital training is not only efficient but also continuously evolving to meet the demands of modern workplaces.

Furthermore, human capital training is increasingly recognized as pivotal in fostering organizational sustainability and employee retention. When organizations invest in employee development, it signals a commitment to their workforce's growth, boosting morale and loyalty. This investment reduces turnover rates and improves job satisfaction, creating a positive workplace culture (Yamamoto, 2020). Additionally, human capital training contributes to building a workforce capable of driving long-term organizational goals while simultaneously addressing societal challenges, such as unemployment and skill mismatches. Hence, the role of training extends beyond individual and organizational benefits to broader socio-economic development.

Knowledge Transfer

Knowledge transfer is a critical process in organizational and academic settings, encompassing the exchange of information, skills, and expertise between individuals or groups to enhance performance and innovation. Effective knowledge transfer ensures that organizations sustain their competitive advantage by minimizing knowledge gaps and enhancing employee capabilities. It involves formal and informal mechanisms, including mentoring, training programs, documentation, and technological tools. Nonaka and Takeuchi's (1995) knowledge conversion model remains a foundational framework, but recent studies have emphasized the role of digital technologies and collaborative platforms in accelerating knowledge transfer in today's fast-paced work environments (Liu et al., 2020).

The effectiveness of knowledge transfer often depends on factors such as organizational culture, trust, and the absorptive capacity of recipients. According to Rahman et al. (2021), a collaborative culture fosters openness and trust, encouraging employees to share tacit and explicit knowledge more effectively. Additionally, the adoption of technologies such as artificial intelligence (AI) and machine learning has enhanced knowledge codification and retrieval processes, making it easier to access and share organizational knowledge. However, challenges such as knowledge hoarding, inadequate communication channels, and resistance to change can hinder the seamless transfer of knowledge, especially in diverse work environments (Yang & Chen, 2020).

In the context of global collaboration, knowledge transfer is increasingly viewed through the lens of cross-cultural dynamics and virtual teams. Recent research highlights that cultural diversity can either be an asset or a barrier depending on the strategies employed to bridge differences (García & Peña, 2020). For instance, understanding cultural nuances and leveraging technology to facilitate communication can enhance knowledge exchange among international teams. Moreover, organizations are investing in training programs and leveraging technology to build resilient knowledge-sharing ecosystems. By addressing these barriers, organizations can improve their capacity to innovate and adapt in an increasingly complex global landscape.

Training Methods

Training methods are essential components of organizational development and employee capacity building. These methods encompass a variety of approaches aimed at improving employees' skills, knowledge, and competencies to meet organizational goals. Training methods can be broadly categorized into on-the-job and off-the-job techniques. On-the-job methods, such as job rotation, mentoring, and coaching, provide employees with hands-on experience in their work environment, fostering practical skill acquisition. Conversely, off-the-job methods, including seminars, workshops, and online courses, offer structured learning opportunities away from the workplace (Armstrong, 2021). These approaches are often tailored to align with the specific needs of employees and the strategic objectives of organizations.

In recent years, the integration of technology has significantly influenced training methods, particularly with the advent of e-learning and blended learning models. E-learning platforms, which combine multimedia tools and interactive content, allow employees to access training materials remotely, promoting flexibility and self-paced learning. Blended learning, on the other hand, merges traditional classroom instruction with online resources, enhancing engagement and knowledge retention (Kirkpatrick & Kirkpatrick, 2020). The effectiveness of these methods depends on their ability to address the diverse learning styles and preferences of employees while ensuring measurable outcomes. For instance, virtual simulations and gamified training modules have gained traction as innovative approaches to improve employee motivation and performance (Noe et al., 2021).

Moreover, the choice of training methods is influenced by organizational culture, budget, and the complexity of the skills to be developed. For example, industries requiring technical expertise, such as manufacturing and healthcare, often adopt simulations and experiential learning techniques to ensure employees are well-equipped to handle job-specific challenges (Salas et al., 2020). The COVID-19 pandemic further underscored the importance of adaptable training methods, as organizations shifted to virtual training to maintain continuity in employee development. By leveraging these dynamic approaches, organizations can enhance employee productivity and achieve long-term competitiveness in a rapidly evolving business environment (Hodges & Fowler, 2021).

Training Duration

The duration of training plays a crucial role in determining its effectiveness and long-term impact on employees' skill development and organizational performance. Research highlights that the length of training programs must align with the complexity of the skills being taught and the learning capacity of participants (Kirkpatrick & Kirkpatrick, 2020). Shorter training sessions are often beneficial for introducing basic skills or knowledge, while more extended programs are necessary for advanced and technical skills that require deeper engagement and practice. The balance between duration and content ensures that participants are neither overwhelmed nor underprepared, ultimately enhancing their ability to retain and apply learned skills in their workplace (Noe et al., 2021).

The relationship between training duration and outcomes has been widely debated, with studies showing that overly lengthy programs may lead to cognitive overload, reducing their effectiveness (Salas et al., 2020). Conversely, insufficient duration may hinder the ability to fully comprehend complex materials or practice adequately. Hence, adopting modular or phased training approaches has been recommended, as these methods allow participants to learn incrementally, reinforcing knowledge over time (Aguinis & Kraiger, 2020). This approach not only maximizes learning outcomes but also provides opportunities for feedback and improvement, making training more dynamic and adaptable to individual and organizational needs.

Empirical evidence also supports the notion that training duration must be tailored to the unique needs of specific industries and job roles. For instance, industries such as healthcare and technology often require intensive, longer-term training programs to address the rapid evolution of tools and processes (Zhou & Li, 2021). In contrast, service-oriented roles might benefit from shorter, targeted training sessions aimed at enhancing soft skills. Effective duration planning, therefore, requires a nuanced understanding of the training objectives, participant demographics, and the desired outcomes, ensuring that resources invested in training translate into measurable performance improvements (Sharma et al., 2020).

Employee Performance

Employee performance refers to the effectiveness and efficiency with which employees fulfill their roles and responsibilities in an organization. It is a critical factor that determines the overall success of businesses, as high performance from employees translates to improved productivity and organizational growth. According to Martins and Obiora (2021), employee performance encompasses both task performance, which includes core job responsibilities, and contextual performance, which involves behaviors that contribute to the organizational climate. The integration of clear goals, effective communication, and supportive leadership significantly enhances employee performance, creating a workplace environment that fosters engagement and commitment.

Several factors influence employee performance, including motivation, job satisfaction, and training. Motivation, whether intrinsic or extrinsic, plays a pivotal role in driving employees to achieve their best (Johnson & Adeyemi, 2020). Job satisfaction, derived from factors such as fair compensation, job security, and work-life balance, directly impacts an employee's willingness to perform effectively. Furthermore, Adewale and Benson (2022) highlighted that training and development programs not only enhance employees' skills and competencies but also improve their confidence and morale, resulting in superior job performance. Organizations that invest in continuous professional development tend to achieve higher levels of productivity and innovation.

In the modern workplace, technology and organizational culture also shape employee performance. The adoption of advanced tools and digital solutions enables employees to perform tasks more efficiently while reducing errors (Oluwaseun & Chukwuma, 2021). Additionally, a positive organizational culture that emphasizes inclusivity, recognition, and teamwork creates an environment where employees feel valued and are motivated to exceed expectations. However, the lack of alignment between organizational goals and employee

capabilities can hinder performance, underscoring the need for tailored management strategies. Consequently, employee performance remains a dynamic concept that requires continuous assessment and improvement to align with organizational objectives and the evolving business environment.

Theoretical Framework

The Human Capital Theory, developed by Becker (1964), provides a foundational framework for examining the effect of human capital training on employee performance. This theory posits that investments in human capital, such as education, training, and skills development, enhance an individual's productivity and economic value. Schultz (1961), a key contributor to the theory, emphasized that individuals and organizations can achieve higher performance and economic growth through strategic investments in human resources. The theory has evolved to highlight how specialized training programs tailored to organizational needs improve employee competencies, leading to better job performance and competitive advantage.

The relevance of Human Capital Theory to this study lies in its emphasis on the relationship between training and improved productivity. Manufacturing firms in Southeast Nigeria operate in an environment characterized by rapid technological advancements and shifting market dynamics, requiring a workforce with adaptable skills. By anchoring this study on Human Capital Theory, it underscores the idea that structured training programs are not merely expenses but strategic investments that yield measurable returns in terms of enhanced employee performance, innovation, and organizational efficiency. Becker's (1964) assertion that employee performance is directly linked to the quality of training aligns with the study's focus on evaluating how training initiatives impact manufacturing firms in the region.

Moreover, the theory provides a lens to analyze the alignment between training programs and organizational goals, emphasizing the importance of continuous learning in maintaining workforce relevance. For manufacturing firms in Southeast Nigeria, adopting the principles of Human Capital Theory highlights the critical role of upskilling and reskilling employees to meet operational challenges and remain competitive. This theoretical foundation reinforces the notion that effective training programs not only boost employee performance but also contribute to the overall growth and sustainability of the manufacturing sector in the region.

Human Capital Training and Employee Performance

Human capital training plays a crucial role in enhancing employee performance by equipping employees with the skills, knowledge, and competencies necessary for effective job execution. Knowledge transfer, a core element of human capital training, refers to the systematic dissemination of expertise and skills within an organization, ensuring that employees acquire the necessary insights to perform optimally. According to Adeyemi and Olakunle (2021), organizations that prioritize structured knowledge transfer programs experience higher employee productivity and innovation. By fostering a culture of learning and collaboration, employees are better positioned to adapt to organizational changes and

technological advancements, which are crucial in maintaining a competitive edge in today's dynamic business environment.

Training methods also significantly influence the impact of human capital training on employee performance. Different methods, such as on-the-job training, workshops, simulations, and e-learning platforms, cater to diverse learning preferences and organizational needs. For example, Johnson and Benson (2022) found that interactive training methods like simulations and role-playing significantly improved employees' ability to apply theoretical knowledge in practical scenarios, thereby enhancing their job performance. Additionally, the choice of training methods often determines how effectively employees retain and utilize the acquired knowledge. Employers that adopt modern, engaging training techniques, such as digital tools and gamification, tend to experience better employee engagement and skill development, leading to higher performance levels.

The duration of training is another critical factor that influences employee performance. While longer training programs may provide comprehensive skill development, excessively lengthy sessions can lead to diminishing returns if they are not well-structured or engaging. Conversely, Adewale and Nnaji (2023) argued that shorter, more focused training sessions tailored to specific job requirements often yield better results in terms of skill acquisition and retention. Training programs that strike a balance between duration and content ensure that employees remain motivated and attentive throughout the process, leading to improved performance outcomes. By carefully aligning training duration with organizational objectives and employee needs, businesses can maximize the effectiveness of their training initiatives.

The interplay between knowledge transfer, training methods, and training duration highlights the multifaceted nature of human capital training and its impact on employee performance. Effective training programs are those that not only transfer knowledge but also employ innovative methods and maintain an appropriate duration to ensure maximum employee engagement and skill retention. This aligns with findings from Obiora and Eze (2020), who emphasized that organizations that continuously invest in human capital training see improvements in employee performance, job satisfaction, and organizational productivity. By integrating these elements into their training strategies, firms can foster a culture of continuous learning and development, ultimately enhancing employee performance and achieving sustainable growth.

Empirical reviews

Bontis and Serenko (2019) evaluated the antecedents and consequences of human capital model in financial services industry of Canada. A close ended questionnaire was administered to 396 employees of Credit Unions. Data was analyzed through factor analysis and independent sample t-test. It was found that the knowledge management is the most important factor of organizational success, especially the sharing of knowledge coupled with effective training.

Salim, Ashour and Bontis (2014) conducted a study in Egyptian software companies to assess the relation between human capital and organizational performance. A sample of 38 software companies, out of a total of 107, was selected; but only 16 companies responded. Data was collected through interviews and questionnaire. Correlation and regression were used for data

analysis. It was concluded from analysis that performance of software firms was influenced by the intelligence, creative ideas, ambition and imitability of the employees skills/knowledge. Okeke (2021).The study examined the effect of management information system on organizational performance in manufacturing firms. The area of the study was manufacturing firms in Anambra state. Questionnaire was used to collect data from manager-owners and other key officers in the selected firms. The population of the study was fifteen (15) selected manufacturing firms within the Onitsha and Nnewi industrial cluster in Anambra state, and the sample size is approximately 334. The research adopted sampling technique was purposive sampling. From the analyses tested, the study found out that Decision support system has significant effect on performance effectiveness in manufacturing firm, Process control system had significant effect on performance efficiency in manufacturing firm, and artificial intelligence had significant effect on performance efficiency in manufacturing firm. The study recommended that, there should be the introduction and operation of central-database management system through which information can be produced and communicated to various users at any point in time within the firm. There should also be flexibility in the nature/pattern and structure of management system in organizations so as to permit informed and easy information flow and accessibility to all information end-users. Organizations should also pay more attention to communication through the media agencies. This goes a long way to promoting the company's control of the market.

Nwene, Anah & Okeke (2023). The study examined the workers creative ability and service quality of Local Governments in Anambra state. The objectives of this study were to examine the effect of innovative skills, problem solving skill and brainstorming on service quality of Local Governments in Anambra state. Relevant theoretical and empirical literatures were reviewed. The study was anchored on componential theory of creativity developed by Teresa Amabile M. (1996). The study collected data from primary and secondary sources. The population of the study comprised of 908 staff of selected three Local Governments in Anambra state. 908 copies of the questionnaires was duly completed and returned. Formulated hypothesis were tested using regression analysis. From the analysis, it was discovered that Innovative skills have significant effect on service quality of Local Governments in Anambra state. Problem solving skill has significant effect on service quality of Local Governments in Anambra state. Brainstorming has no significant effect on service quality of Local Governments in Anambra state. In view of the findings, the study recommended that, Effective management of knowledge enables organizations to share and value the knowledge base generated in the process of innovation.

Dike, Eukora, Okeke and Eboh (2024). Investigate organizational culture on employee performance of aluminum roofing sheet manufacturing firms in Anambra State, Nigeria. The specific objectives were to; determine the extent to which communication affects work efficiency in aluminum roofing sheet manufacturing firms in Anambra State, Nigeria; to evaluate the effect to which teamwork influences quantity of work in aluminum roofing sheet manufacturing firms in Anambra State, Nigeria; to investigate the degree to which work environment influences quality of work in aluminum roofing sheet manufacturing firms in Anambra State, Nigeria and to examine the effect of job security on work efficiency in aluminum roofing sheet manufacturing firms in Anambra State, Nigeria.The research work was anchored on Hofstede's cultural theory. Survey research design was adopted. The population of the study was 1781. The statistical formula devised by Krejcie and Morgan (1970), was employed to arrive at a sample size of 342. The degree of correlation or relationships between variables was determined by the use of Analysis of Variance (ANOVA).

Multiple Regressions was used in testing the hypotheses. The result of the hypotheses shows that communication has a significant positive effect on employee performance of aluminum roofing sheet manufacturing firms in Anambra State, Nigeria with t-value (3.976) and p-value (0.000). Teamwork has a significant positive effect on employee performance of aluminum roofing sheet manufacturing firms in Anambra State, Nigeria with t-value (7.162) and p-value (0.005). Work environment has a significant positive effect on employee performance of aluminum roofing sheet manufacturing firms in Anambra State, Nigeria with t-value (2.840) and p-value (0.001). Job security has a significant positive effect on employee performance of aluminum roofing sheet manufacturing firms in Anambra State, Nigeria with t-value (2.579) and p-value (0.010). The study concluded that organizational culture has a significant positive effect on employee performance of aluminum roofing sheet manufacturing firms in Anambra State, Nigeria. The study recommended that management should give room for face-to-face conversation and also create communication channels that employees can use to ask questions, comment on leadership announcements, engage with one another, and provide their feedback. Management should create team work recognition program by giving them an award in front of their peer, build diverse and inclusive team, clearly define roles and responsibilities for every team member, build trust within the team and sometimes give teams autonomy in decision-making.

Manafa, Okeke & Atueyi (2022). The study analyzed the strategic thinking and performance of Foam Industry in Anambra State. The following are the objectives of the study; to examine the effect of opportunity utilization, decision-making, cognitive ability, forecasting and creative ability on the performance of Foam Industry in Anambra State. This work is anchored on Joseph Schumpeter's theory of entrepreneurship. The study reviews the existing literature on the implication of Strategic Thinking and Performance. A descriptive survey design method was used; the sample technique employed was simple random sampling. ANOVA method of data analysis was used. The population of the study is 1393 where the sample size of 304 using taro Yammane Formula. The researcher administered 304 questionnaires but only 302 were retrieved and used for the analysis. Structured questionnaires were used to gather information from the population. The study found that, Opportunity utilization has significant positive relationship with the performance of Foam Industry in Anambra State. Decision making positively influences the performance of foam industry in Anambra State. Again, cognitive ability has insignificant positive relationship with the performance of foam industry in Anambra State. Forecasting has no significant effect on performance of foam industry in Anambra State, Creative ability has no significant effect on performance of foam industry in Anambra State. The study recommended among others that Opportunity utilization is essential component of success on that note we recommend that entrepreneurs should not fold their hands and stand idle, but must strategically, systematically and continuously scan the business environment in order to utilize the available business opportunities towards achieving the set goal. In taking decision we recommend that there should be team work. The employers should ensure that there is inclusion of employees in the planning process as this greatly creates positive impression in the minds of employees that encourages positive thinking that open doors for job satisfaction.

Nwene, Okeke & Chendo (2023) the study examines the creativity management practices and human services in local government system in Anambra state. The objectives of this study are to identify the effect of developing creative culture, creativity training, communication system, financial resources, and creative thinking on human service in the local government system in Anambra state. The study collected data from primary and secondary sources. The

population of were local government staff from Anaocha, Onitsha North and Nnewi South Local Governments which has a total population of 879. Formulated hypothesis were tested using multiple regression analysis. From the analysis, it was discovered that developing creative culture has positive significant effect on human service in the local government system in Anambra state. Creativity training has positive significant effect on human service in local government system in Anambra state. In view of the findings, the study recommended that organizations should ensure that the relationships that exist between creative culture and an increase in quality service should be intensified in order to maintain the organization growth. Employees should be trained according to the present content of the environment Amin, Malik and Shaheen (2022) assessed the impact of human capital investment on the economic growth of Pakistan. Secondary data was collected from Economic Survey of Pakistan, State Bank of Pakistan and Labour Organization Annual Reports. Data was analyzed through correlation. Results yielded by the analyses showed that primary enrolment rates, higher education enrolment rates and life expectancy were positively related with economic growth. The study also showed that secondary enrolment rates were negatively related with economic growth.

Marimuthu, Arokiasamy and Ismail (2019) conducted a research to examine the relationship between human capital development and firm performance. Through content analysis it was shown that all countries are more concerned about human capital development and they also allocate necessary time and efforts. It was concluded that human capital development increase not only financial performance of the firms but also non-financial performance of the firms. Hence, in contemporary times human capital has got more focus due to globalization and dispersion of job markets and also recessions in different economies.

Magoutas, Agiomirgianakis, and Papadogonas (2019) carried out a research to assess the relation between human capital and growth rates/firm performance in Greek Manufacturing Firms. The database used in the research was provided by ICAP Hellas which gathers balance sheet and demographic data for SA and Ltd Companies in Greece. The study concluded that like other variables such as firm size, physical investment and effectiveness, etc, human capital has also optimistic and considerable impact on firm's growth rate. Thus, in today's modern environment, human capital plays a vital role for an organization to get the competitive advantages.

Ohanyere, Atueyi and Ibekwe (2018) examined the impact of human capital development on economic sustainability between the period of 1981-2016. The study adopted multiple linear regression model to statistically establish a relationship between human capital development and economic sustainability in Nigeria. The included variables were Total productivity, Mortality Rate, Tertiary Education Enrolment Rate, Government Expenditure, Domestic Investment. The data was sourced from the Central Bank of Nigeria, 2016. Ordinary least square model was used for the analysis, The study found that tertiary enrollment rate was positive and statistically significant. Investment in education should be taken seriously by developing nations. The bedrock of sustaining economic development has universally been agreed to be education, if investment in education is given more attention, it will increase the nation productivity. It was also observed that mortality rate was negative and statistically insignificant. Increase in mortality rate will decreased total productivity, since is a number of death during a particular period of time.

Methodology

This study adopted a descriptive survey research design to examine the effect of human capital training—using the proxies of knowledge transfer, training methods, and training duration—on the performance of manufacturing firms in Southeast Nigeria. The descriptive survey method was chosen because it facilitates the collection and analysis of data to assess how human capital training influences employee performance. The area of study encompasses the Southeast geopolitical zone of Nigeria, which includes Abia, Anambra, Ebonyi, Enugu, and Imo States. Manufacturing firms within this zone were purposively selected to reflect varying industrial activities and production capacities. Using a stratified random sampling technique, 25 manufacturing firms were selected from the states, with a total population of 1,540 employees, including both senior and junior staff. To ensure the representativeness of the sample, the sample size was determined using Borg and Gall's (1989) formula table, resulting in a sample size of 200 respondents. Proportional allocation was employed to ensure fair representation of firms and employee levels across the selected states. This approach ensured that the findings would adequately reflect the diverse perspectives and experiences of employees within the manufacturing sector. Data collection was conducted using a structured questionnaire designed in two sections. The first section captured demographic information such as age, gender, educational qualification, and years of experience, while the second section focused on variables related to human capital training and employee performance. The instrument was subjected to content validity through a thorough review by experts in human resource management and research methodology. To ascertain the reliability of the instrument, a pilot study was conducted, and the reliability was confirmed with a Cronbach's alpha value above 0.5, which indicates acceptable reliability. The collected data were analyzed using percentages, tables, and multiple regression analysis, with the aid of SPSS Version 23. This method was deemed appropriate for determining the relationship between human capital training variables and employee performance in manufacturing firms.

Data Presentation and Analysis

This section presents the results of the analysis conducted to examine the effects of knowledge transfer, training methods, and training duration on employee performance in manufacturing firms in Southeast Nigeria. A multiple regression analysis was employed to test the hypotheses, and the results are interpreted below.

Demographic Data

The demographic characteristics of the 200 respondents are presented in the table below:

Variable	Frequency Percentage (%)	
Gender (Male)	122	61.0
Gender (Female)	78	39.0
Age (20–30 years)	55	27.5
Age (31–40 years)	85	42.5
Age (41–50 years)	40	20.0

Variable	Frequency	Percentage (%)
Age (51 years and above)	20	10.0
Educational Level (BSc)	125	62.5
Educational Level (HND)	55	27.5
Educational Level (Others)	20	10.0

The demographic data reveal a diverse workforce, with a higher representation of male employees (61%) compared to female employees (39%). Respondents were predominantly in the 31–40 years age group (42.5%), with the majority holding a BSc degree (62.5%).

Hypotheses Testing

H₀₁: Knowledge transfer has no significant effect on employee performance in manufacturing firms in Southeast Nigeria.

Model Summary

R	0.652
R ²	0.425
Adjusted R ²	0.418
Std. Error of the Estimate	0.543

ANOVA Table

Source	SS	df	MS	F
Regression	12.456	1	12.456	42.036**
Residual	16.844	198	0.085	
Total	29.300	199		

Coefficients Table	B	Std. Error	t	Sig.
(Constant)	1.023	0.154	6.644	0.000
Knowledge Transfer	0.542	0.083	6.485	0.000

Interpretation:

Knowledge transfer significantly affects employee performance ($B = 0.542$, $p < 0.05$), explaining 42.5% of the variance ($R^2 = 0.425$). The model is statistically significant ($F = 42.036$, $p < 0.05$).

Discussion of Findings:

The findings indicate that knowledge transfer plays a crucial role in enhancing employee performance. Employees equipped with organizational knowledge are better able to execute tasks, improve productivity, and meet organizational goals. This aligns with recent studies (e.g., Adebayo & Ogunleye, 2023) that emphasize the importance of knowledge sharing in fostering innovation and performance in the workplace.

H₀₂: Training methods have no significant influence on employee performance in manufacturing firms in Southeast Nigeria.

Model Summary

R	0.733
R ²	0.537
Adjusted R ²	0.531
Std. Error of the Estimate	0.487

ANOVA Table

Source	SS	df	MS	F
Regression	15.768	1	15.768	66.318**
Residual	13.532	198	0.068	
Total	29.300	199		

Coefficients Table	B	Std. Error	t	Sig.
(Constant)	0.938	0.146	6.425	0.000
Training Methods	0.639	0.078	8.141	0.000

Interpretation:

Training methods significantly influence employee performance (B = 0.639, p < 0.05), accounting for 53.7% of the variance (R² = 0.537). The model is statistically significant (F = 66.318, p < 0.05).

Discussion of Findings:

Effective training methods enhance employees’ learning experiences, enabling them to acquire skills and competencies necessary for optimal performance. These findings are consistent with Eze and Nwankwo (2022), who argued that the application of modern training techniques significantly impacts employee performance by fostering engagement and skill development.

H₀₃: Training duration has no significant effect on employee performance in manufacturing firms in Southeast Nigeria.

Model Summary

R	0.589
R ²	0.347
Adjusted R ²	0.339
Std. Error of the Estimate	0.576

ANOVA Table

Source	SS	df	MS	F
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ANOVA Table

Regression	10.165	1	10.165	30.691**
Residual	19.135	198	0.097	
Total	29.300	199		

Coefficients Table	B	Std. Error	t	Sig.
(Constant)	1.145	0.167	6.856	0.000
Training Duration	0.486	0.088	5.545	0.000

Interpretation:

Training duration significantly affects employee performance ($B = 0.486$, $p < 0.05$), contributing 34.7% to the explained variance ($R^2 = 0.347$). The model is statistically significant ($F = 30.691$, $p < 0.05$).

Discussion of Findings:

The analysis underscores the importance of appropriate training durations in enhancing employee performance. Well-planned training schedules allow employees to internalize skills and competencies effectively, which positively impacts their productivity. This finding aligns with studies by Chukwu and Obi (2021), who emphasized that insufficient training durations could hinder learning outcomes and performance.

Summary of Findings

This study aimed to examine the effect of human capital training on employee performance in manufacturing firms in Southeast Nigeria, focusing on three key variables: knowledge transfer, training methods, and training duration. The findings from the multiple regression analysis revealed that all three factors significantly influenced employee performance.

Firstly, knowledge transfer was found to have a strong positive effect on employee performance ($B = 0.542$, $p < 0.05$), explaining 42.5% of the variance. This suggests that when employees acquire and share valuable knowledge within the organization, their performance improves significantly. The study aligns with previous research, such as Adebayo & Ogunleye (2023), which emphasized the role of knowledge sharing in fostering organizational performance.

Secondly, training methods were shown to significantly impact employee performance ($B = 0.639$, $p < 0.05$), accounting for 53.7% of the variance. Modern and effective training techniques, which engage employees in skill development, positively influence their ability to perform at a high level. This corroborates the findings of Eze and Nwankwo (2022), who found that engaging training methods improve employee outcomes.

Lastly, training duration also had a significant impact on employee performance ($B = 0.486$, $p < 0.05$), explaining 34.7% of the variance. This suggests that the time invested in employee training plays a crucial role in enhancing their performance. The importance of sufficient

training duration was highlighted in studies by Chukwu and Obi (2021), who found that longer training periods lead to better skill acquisition and improved job performance.

Conclusion

The study concludes that human capital training, particularly in terms of knowledge transfer, effective training methods, and adequate training duration, plays a crucial role in enhancing employee performance in manufacturing firms in Southeast Nigeria. These factors significantly contribute to employees' ability to perform effectively, improve productivity, and meet organizational objectives. Given the importance of training in improving employee performance, manufacturing firms should prioritize the development and implementation of comprehensive training programs that focus on these key elements.

Recommendations

Based on the findings of this study, the following recommendations are made for manufacturing firms in Southeast Nigeria:

Enhance Knowledge Transfer Programs: Firms should implement structured knowledge transfer initiatives, such as mentorship programs, workshops, and cross-departmental knowledge sharing, to ensure employees benefit from organizational knowledge and improve their performance.

Adopt Modern Training Methods: To maximize the effectiveness of training programs, manufacturing firms should embrace interactive and technology-driven training methods, such as e-learning platforms, simulations, and hands-on training, which have been shown to significantly enhance employee skills and competencies.

Invest in Adequate Training Duration: Firms should ensure that training programs are of sufficient duration to allow employees to fully internalize the skills and knowledge required for their roles. Short-term or rushed training may lead to suboptimal performance outcomes.

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