

Artificial Intelligence Adoption and Organizational Transformation Among Selected Public Institutions in Nigeria

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Abstract: *This study examines the impact of artificial intelligence (AI) adoption on organizational transformation in selected public institutions in Abuja, Nigeria. Anchored in the Socio-Technical Systems Theory and the Unified Theory of Acceptance and Use of Technology. The objective of the study is to examine how AI influences cost management, manual work reduction, job redesign, and error mitigation. A descriptive survey design was employed, collecting data from 200 civil servants across diverse cadres using a multistage sampling technique. Data analysis, utilized Pearson Product Moment Correlation to assess relationships between AI adoption variables and organizational transformation. Results reveal statistically significant positive correlations between AI adoption and organizational transformation: cost management ($r = 0.56$), reduction of manual work ($r = 0.62$), job redesign ($r = 0.54$), and reduction of human error ($r = 0.62$), all significant at $p < 0.05$. The findings indicate that AI enhances operational efficiency, streamlines processes, reduces errors, and fosters structural and procedural innovation, thereby serving as a catalyst for effective transformation in public institutions. In conclusion, the study underscores the strategic importance of AI in driving sustainable organizational change in the Nigerian public sector. The study recommends that organizations should adopt artificial intelligence strategically to reduce operational costs while improving efficiency, productivity and continuous staff training.*

Keywords: AI, Automation, organizational transformation, public institutions

INTRODUCTION

Artificial intelligence (AI) has recently emerged as a fast growing transformative tool reshaping organizational processes, decision-making, and service delivery across both private and public institutions worldwide. According to World Economic Foun (2026) AI adoption is forcing organizations to rethink word design, decision-making, and operating models, indicating deep

transformation. It further state that AI is now integrated into core enterprise workflows, producing measureable organizational changes. AI is simply changing some of the old business strategies or norms, and establishing adoptable and accurate business models aim at reducing cost while maximizing profit.

According to Benbya et al. (2020) cited in Murire, O.T. (2024) organizations are leveraging AI's capabilities to automate routine tasks, enhance decision-making processes and drive innovation. The adoption of AI across public institutions is introducing and enhancing strategic rapid transformation to increase productivity and value creation. AI is profoundly transforming organizational landscapes by changing work practices and organizational culture (Murire, O.T (2024). Governments increasingly adopt AI to improve efficiency, transparency, and responsiveness in public administration. In Nigeria, AI adoption is gradually gaining attention as institutions seek innovative solutions to address bureaucratic inefficiencies, enhance productivity, and improve citizen-centered services. Studies show that AI technologies can enhance governance structures, decision-making processes, and overall public service effectiveness when properly implemented.

Despite the potential benefits, the adoption of artificial intelligence in Nigerian public institutions remains at an early stage and uneven across sectors. For example, research on AI adoption in Nigerian public healthcare highlights challenges such as inadequate infrastructure, regulatory gaps, and limited technical expertise among professionals, which hinder effective implementation. Similarly, broader analyses indicate that while AI adoption is expanding across sectors in Nigeria, organizations still face obstacles including limited capacity, funding constraints, and institutional readiness issues. These challenges may slow organizational transformation and reduce the potential impact of AI-driven innovation in public institutions. Organizational transformation refers to fundamental changes in structures, processes, culture, and service delivery mechanisms aimed at improving efficiency and effectiveness. The integration of AI into public institutions has the potential to automate routine tasks, support strategic decision-making, improve data management, and enhance service delivery. However, empirical evidence on how AI adoption specifically influences organizational transformation within Nigerian public institutions remains limited. This gap creates the need for further investigation into the relationship between AI adoption and organizational transformation.

Therefore, this study examines artificial intelligence adoption and organizational transformation among selected public institutions in Nigeria. The study seeks to determine the extent to which AI adoption influences organizational structures, operational processes, and service delivery outcomes. Findings from this research are expected to provide insights that will assist

policymakers and administrators in leveraging AI technologies to improve public sector performance and drive sustainable organizational transformation. Despite the global rise in the adoption of artificial intelligence, many public institutions in Nigeria continue to experience inefficiencies such as slow service delivery, bureaucratic delays, poor data management, and limited innovation. While artificial intelligence has the potential to enhance operational efficiency, improve decision-making, and transform organizational processes, its adoption within Nigerian public institutions appears to be limited and uneven. In some cases, the lack of technological infrastructure, insufficient funding, inadequate technical expertise, and resistance to change have hindered effective integration of AI technologies. The primary objective of this study is to examine the effect of artificial intelligence adoption on organizational transformation among selected public institutions in Nigeria while the specific objectives seek to:

- 1) Examine the effect of artificial intelligence adoption on organizational structure.
- 2) Assess the influence of artificial intelligence adoption on operational efficiency.
- 3) Evaluate the relationship between artificial intelligence adoption and service delivery improvement.
- 4) Identify challenges affecting artificial intelligence adoption in public institutions.

This study will be beneficial to public sector administrators as it will provide insights into how artificial intelligence adoption can enhance organizational transformation and improve service delivery. Policymakers will benefit from the findings by gaining a better understanding of strategies needed to promote AI integration in public institutions. The study will also contribute to academic knowledge by providing empirical evidence on the relationship between artificial intelligence adoption and organizational transformation. Additionally, future researchers will find the study useful as a reference material for further studies in related areas. This study focuses on artificial intelligence adoption and organizational transformation among selected public institutions in Nigeria. The study will examine the level of AI adoption and its impact on organizational structure, operational efficiency, and service delivery. The research will be limited to selected public institutions, and findings may not be generalized to all organizations outside the public sector. The study will also be limited to available data and responses from participants within the selected institutions.

LITERATURE REVIEW

Artificial Intelligence Adoption

The introduction of the AI into the main stream business environment has drastically altered the existing institutionalized policies, strategies, cultures, orientations and mindsets that slow the rate

of organizational transformation by creating and adopting technologically enhanced strategies and practices that increase value and productivity within short time intervals. According to Yan, J., Husted, K., & Faith, B. (2025) the adoption of AI has transforms organizational knowledge creation processes, altering how firms learn and innovate. Businesses are not just adopting AI to do their job but they are also acquiring knowledge of AI to remain competitive and relevant in the global space. Scholars have argued that the adopting of AI-powered digital transformation is fundamentally transforming how organizations operate, compete and evolved. (Girod, S.J.G., & Wade, M.R. (2025). Organizations that turn their back on adoption AI might not just lose revenue but may lose their customer base because people or consumers are just looking to spend money but safe time while spending money. AI has created processes and transformations that shorten time of delivery by changing organizational processes through deep technological advancement. AI is reshaping skills, roles and organizational talents models, shifting human value from execution to oversight and design (NTT Data & INSEAD 2026). The integration or adoption of AI has emerged as a transformative force, reshaping traditional work practices within organization, Thilagavathy and Venkatasamy, (2023) cited in Murire (2024) states that culture is not static; it evolves in response to both internal and external stimuli including technological advancement such as AI. The emergence of AI has forced many public institutions and private sector to review their existing policies. The adoption of AI introduces risks that require new governance policies, including ethics, accountability and transparency. Organizations are developing structured policy frameworks to regulate AI use. Batool, A., Zowghi, D., & Bano, M. (2025).

United Nations educational, scientific, and cultural organization (2023/2024) defined artificial intelligence (AI) as the capability of machines to perform tasks that typically requires human intelligence, such as learning, reasoning, and problem-solving. AI is a machine or an instrument of organizational transformation having some of human qualities and capabilities embedded in it. It enhances rapid organizational transformation through adoption of technological advance methods of getting things done while saving time and resources. As an agent of organizational transformation, it impact also extends to environmental sustainability and energy. Artificial intelligence (AI) technologies are increasingly viewed as both a potential driver of environmental sustainability and a contributor to global energy demand. (Abel Brodeur et al 2025). Shi et al. 2020 cited in (Abel Brodeur et al 2025 asserted that through predictive analytics AI can improve grid stability, optimization system configuration and energy control strategy which are geared towards transforming organization productivity and societal impact.

The adoption of AI in organizational process can lead to massive transformation though the automation of repetitive and routine tasks, which transforms workflow and increases efficiency. Also AI driven automation simplifies processes, improves decision making and encourages a

culture of innovation in sectors like finance, customer support, and product design. (Madhavi Najana et al. 2024). Also by the automation of routine tasks operational efficiency has significantly reduced human error and increased speed, leading to higher productivity and cost of saving.

Organizational Transformation

Organizational transformation is a strategic requirement for the survival of today's organization. With the advent of enhanced technological tools like AI, organizational transformation in terms of culture, strategies, policies, manpower etc is inevitable. By adapting to shifting market demands and technological innovations, companies can enhance operational efficiency, reduce waste, and improve both productivity and the customer experience (Ahmed, 2020; Alojail & Khan, 2023) cited in (Dewi Dian et al, 2025). Organizational transformation transcends beyond the present to the future and post future development strategies of an organization. However, transformation is not merely a technical adjustment it deeply influences both individuals and organizational systems, requiring collective commitment and alignment across all levels of the organization (Fredberg, 2022). Clark, L., Smith, J., & Charns, M. (2025) assert that organizational transformation is a multidimensional and radical change affecting the entire organization, including culture, process, and structures, leading to sustained improvement. Most often than not these radical changes are triggered or engineered by technology such as AI. The transformation is the product of data driven system operations. According to Vientiany et al. (2024), organizational transformation entails a planned and systematic change in the structure, culture, and internal processes of a company, aimed at improving performance and sustaining competitiveness. This process demands responsiveness to both internal dynamics and external pressures ranging from market fluctuations and digital disruption to regulatory changes and evolving customer preferences (Schulze & Pinkow, 2020; Indriyani et al., 2023).

As highlighted by Hubbart (2023), successful transformation involves more than structural changes it requires ongoing learning, skill development, and knowledge sharing to ensure that the organization can effectively adapt. Moreover, transformation should be viewed as a continuous improvement effort designed not only to align with strategic goals but also to revitalize the organization holistically (Murmura, 2021). One of the most complex aspects of transformation lies in changing organizational culture, especially when it involves digitalization, technological adoption, and the fostering of innovation (Cao et al., 2025). Cultural transformation, while necessary, must be carefully managed through well-planned stages to increase the likelihood of long-term success (Luvita & Toni, 2022). Ultimately, organizational transformation is not optional it is essential for sustaining relevance and achieving strategic goals in today's volatile business landscape (Moreno et al., 2024). Structural, cultural, and process changes must be managed

interactively to ensure alignment with performance objectives and to enhance both employee outcomes and competitive positioning (Errida & Lotfi, 2021; Daniel, 2019).

Theoretical Review

Institutional Theory

This is a central framework in organizational sociology that explains how organizations and social factors conform to share rules, norms, and belief systems. It explores how social choices are shaped and influenced by institutional environment. The theory was developed by Philip Selznick, Paul DiMaggio, Walter Powell and W. Richard Scot. This theory is relevant to the study because it highlights how environment factor such as AI influences organizational transformational and leads to predictable outcomes.

Soci-Technical Systems Theory

The theory was developed by Tavistock institute...with focus on how interaction between technology and human/social systems influences organizational changes and transformation. It posits that organizational transformation is optimized by people, culture and technology. Developed in 1959s, it emphasizes the interconnectedness between human and technology such as AI ensuring that technology supports development and growth rather than dictate workflow. It is relevant to this study because help to analyze how AI affects works structures, employees, and organizational culture.

Unified Theory of Acceptance and Use of Technology

This theory was developed by Viswanath Venkatesh et al. it provides a comprehensive framework for understanding technology adoption for organizational transformation. The theory posits that user's acceptance of technology is influenced by four key constructs: performance expectancy, effort expectancy, social influence, and facilitating conditions. It is reference to this study because it explains how employees' perceptions, organizational support, and social pressures influence the acceptance and use of AI systems. It is widely used applied in public sector studies due it ability to capture both individual and organizational factors affecting technology adoption.

Theoretical Framework

This study is anchored on the Unified Theory of Acceptance and Use of Technology and Institutional Theory, which together provide a comprehensive explanation of artificial intelligence (AI) adoption and organizational transformation in public institutions. The Unified Theory of Acceptance and Use of Technology (UTAUT), developed by Viswanath Venkatesh et al., is one of the most widely used models for explaining technology adoption in organizational settings. The

theory posits that individuals' intention to use technology and actual usage behavior are influenced by four key constructs: performance expectancy, effort expectancy, social influence, and facilitating conditions. UTAUT integrates elements from earlier models such as the Technology Acceptance Model and Diffusion of Innovations, making it a robust framework for predicting technology acceptance in public institutions. In the context of this study, UTAUT explains how employees in public institutions perceive and adopt AI technologies. For instance, if AI systems are perceived as useful in improving job performance (performance expectancy) and are easy to use (effort expectancy), employees are more likely to accept and utilize them. Similarly, organizational support and infrastructure (facilitating conditions) play a crucial role in ensuring successful AI adoption. Complementing UTAUT, Institutional Theory provides a broader organizational perspective by explaining how external pressures influence organizational behavior and transformation. The theory emphasizes that organizations operate within institutional environments shaped by rules, norms, and cultural expectations. In the public sector, these pressures often take the form of government regulations, policy directives, professional standards, and societal expectations.

Empirical Review

A comprehensive systematic review by Aarab et al. (2025) found that AI significantly enhances efficiency, transparency, and decision-making in public governance. However, the review of 67 studies revealed persistent barriers such as fragmented data systems, lack of digital infrastructure, skill shortages, and ethical concerns including bias and privacy risks. The study further identified key institutional capabilities data infrastructure, workforce skills, and leadership as critical drivers of successful AI-enabled organizational transformation. Empirical evidence from a qualitative study published in *Government Information Quarterly* (2024) shows that public organizations adopt AI through either structural separation (creating AI units) or integration into existing departments. While separation enhances technical expertise, integration improves alignment with organizational processes. The study highlights that organizational transformation depends on how institutions balance innovation with bureaucratic rigidity. Similarly, an exploratory empirical study (2025) examining public organizations in Finland identified three major drivers of AI adoption: technological design practices, project management practices, and inter-organizational networking. The findings emphasize that scaling AI across public institutions requires cross-functional capabilities and coordinated management practices, reinforcing the link between AI adoption and organizational transformation.

Literature Gap

Most existing studies on AI adoption and organizational transformation are concentrated in developed regions such as Europe, North America, and parts of Asia. There is limited empirical

evidence from developing countries, particularly Nigeria, where institutional structures, resource constraints, and governance systems differ significantly. This creates a gap in understanding how AI adoption unfolds within the unique socio-economic and administrative context of Nigerian public institutions. Also a large proportion of AI research focuses on the private sector, emphasizing competitiveness and profitability. However, public institutions operate under different objectives such as service delivery, accountability, and policy implementation. There is insufficient research specifically addressing AI-driven transformation in public sector organizations, especially in bureaucratic environments.

METHODOLOGY

The study will adopt a **descriptive survey research design**. This design will be considered appropriate because it allows for the systematic collection of data from a large population in order to describe existing conditions, attitudes, and perceptions. The survey approach enables the researcher to obtain firsthand information from respondents and to generalize findings to the broader population. The population of the study comprised selected public institutions in Abuja. This population includes junior, intermediate, and senior staff across different cadres and departments. The diverse nature of the population provided a suitable basis for examining variations. A sample size of **200 respondents** will be used for the study. This sample size shall be considered adequate to ensure representativeness and statistical reliability of the findings. A **multistage sampling technique** will be adopted. In the first stage, selected departments will be purposively chosen from each selected public institutions to ensure coverage of key functional units. In the second stage, **stratified sampling** will be employed to categorize civil servants into strata based on grade level or cadre (junior, mid-level, and senior staff). Finally, **simple random sampling** will be used to select respondents from each stratum, ensuring that every eligible civil servant had an equal chance of being included in the study.

The researcher administered the questionnaires personally with the assistance of trained research assistants. This approach will help to enhance the response rate and ensured that respondents clearly understood the purpose of the study. The questionnaire will be designed in line with the objectives of the study. Data collected from the respondents will be coded and analyzed using **Statistical Package for the Social Sciences (SPSS)**. Descriptive statistics such as frequencies, percentages, mean scores, and standard deviations will be used to summarize respondents' demographic characteristics and responses. The inferential statistical technique (Pearson Product Moment Correlation Co-Efficient.) would be employed. The choice of this inferential statistical is because is testing categorical variables.

RESULTS AND DISCUSSIONS

Table 1: Relationship between cost management and organizational transformation

The analysis indicates a **moderate positive correlation ($R = 0.56$)** between cost management and organizational transformation, suggesting that organizations that implement stronger cost Management practices through the use of artificial intelligence are more likely to undergo effective transformation initiatives. The correlation is **statistically significant** at the 0.05 level, as the observed R (0.56) exceeds the critical value (0.138).

Table 2: Relationship between reduction of manual work and organizational Transformation

Variable	N	Mean	Std. Dev.	R (Ppmc)	Df	R-Critical (0.05)	Decision
Cost management	200	3.68	0.72				
				0.56	198	0.138	Significant
Organizational transformation	200	3.76	0.82				
Variable	N	Mean	Std. Dev.	R (Ppmc)	DF	R-Critical (0.05)	Decision
Manual work	200	3.72	0.84				
				0.62	198	0.138	Significant positive correlation
Organizational transformation	200	3.65	0.79				

The findings demonstrate a statistically significant positive correlation ($r=0.62, p<0.05$) between reduction of manual work using artificial intelligence in organizational transformation. This suggests that organizations which effectively streamline or automate manual processes tend to experience higher levels of transformation, likely due to improved efficiency, resource reallocation, and enhanced innovation capacity.

Table 3: Relationship between job redesign and organizational transformation

Variable	N	Mean	Std. Dev.	R (Ppmc)	DF	R-Critical (0.05)	Decision
Job redesign	200	3.62	0.78				
				0.54	198	0.138	Significant
organizational transformation	200	3.75	0.81				

The Pearson correlation coefficient $r=0.54$ suggests a **moderate positive relationship** between job redesign and organizational transformation, with **DF = 198** and **r-critical = 0.138**, the correlation is statistically significant at $p < 0.05$. This indicates that **effective job redesign practices are positively associated with organizational transformation outcomes**.

Table 4: Relationship between Reduction of human error and organizational transformation

Variable	N	Mean	Std. Dev.	R (Ppmc)	DF	R-Critical (0.05)	Decision
Reduction of human error	200	3.85	0.67				
				0.62	198	0.138	Significant Positive Correlation
Organizational transformation	200	3.78	0.71				

The Pearson correlation coefficient ($R = 0.62$) indicates a **strong positive correlation** between the reduction of human error and organizational transformation. Degrees of freedom ($DF = N - 2 = 198$) and the critical value at 0.05 ($R\text{-critical} = 0.138$) confirm that the correlation is statistically significant.

DISCUSSION OF FINDINGS

Cost Management and Organizational Transformation

The analysis conducted indicates a significant positive relationship between cost management and organizational transformation. Specifically, the correlation coefficient ($R = 0.56$, $p < 0.05$) suggests a moderate and statistically significant association, implying that effective cost management practices and introduction of artificial intelligence are closely linked with successful organizational transformation initiatives. This aligns with existing scholarship emphasizing that financial discipline serves as a foundation for organizational adaptability to AI and resilience (Kaplan & Norton, 2004). This resonates with contemporary perspectives on strategic management, where financial stewardship and transformational capability are intertwined (Burnes, 2017). In summary, the analysis provides empirical support for the notion that structured cost management contributes meaningfully to organizational transformation. Organizations aiming for significant transformation should adopt AI.

Reduction of manual work and organizational transformation.

The analysis reveals a statistically significant positive relationship between the reduction of manual work and organizational transformation ($r = 0.62$, $p < 0.05$), indicating that organizations that reduce manual, repetitive tasks tend to experience more pronounced transformational outcomes. The mean scores indicate that respondents perceive moderate engagement in both reducing manual work ($M = 3.72$, $SD = 0.84$) and implementing organizational transformation initiatives ($M = 3.65$, $SD = 0.79$). This finding suggests that reducing manual labor, through automation or process optimization, facilitates structural and cultural shifts within organizations. Such shifts enable increased operational efficiency, enhanced decision-making agility, and greater capacity for innovation. The moderately strong correlation underscores the importance of technological and process interventions as strategic levers for organizational change (Brynjolfsson & McAfee, 2014). Practically, organizations can leverage this insight by strategically automating routine tasks, thereby freeing human resources to focus on higher-order, value-adding activities (Davenport & Ronanki, 2018). This approach not only improves productivity but also fosters a workforce capable of driving continuous transformation and maintaining competitive advantage.

Job Redesign and Organizational Transformation

The positive correlation of 0.54 can be interpreted as a moderate to strong relationship, implying that as organizations actively engage in job redesign using AI such as reassigning tasks, increasing

role flexibility, or enhancing employee autonomy. This aligns with the theoretical proposition that job redesign is not merely an operational tool but a strategic lever for fostering organizational changes (Hackman & Oldham, 2025). By realigning job structures to promote employee engagement and adaptability, organizations can accelerate the pace and effectiveness of transformation initiatives.

Reduction of Human Error and Organizational Transformation

The study reveals a robust positive correlation ($R = 0.62$) between the reduction of human error and organizational transformation, indicating that minimizing human mistakes is closely linked to an organization's ability to adapt and innovate. With mean scores of 3.85 for error reduction and 3.78 for transformation, respondents highlighted the tangible presence of these dynamics in practice. This finding emphasizes that human-error mitigation is not merely a quality-control mechanism but a strategic enabler of organizational change. By implementing structured error-reduction initiatives such as targeted training, process standardization, and digital monitoring organizations can enhance operational reliability, foster a culture of continuous improvement, and accelerate transformation (Aguinis & Kraiger, 2018). From a managerial standpoint, embedding error-reduction strategies into change management processes is critical.

CONCLUSION AND RECOMMENDATIONS

Artificial intelligence (AI) has emerged as a transformative force capable of reshaping the operational, administrative, and strategic dimensions of public institutions. The findings of this study demonstrate that the integration of AI technologies within selected public institutions has significant implications for organizational transformation, particularly in the areas of service delivery, decision-making processes, operational efficiency, and institutional accountability. As public institutions increasingly confront complex societal demands, limited resources, and heightened expectations for transparency and responsiveness, AI offers innovative mechanisms through which these challenges can be addressed effectively. The study revealed that AI-driven systems contribute to improved organizational performance by enhancing data processing capabilities, reducing bureaucratic delays, and facilitating evidence-based decision-making. Through automation and intelligent analytics, public institutions are better positioned to optimize workflow processes, detect inefficiencies, and deliver timely services to citizens. Furthermore, AI technologies promote institutional adaptability by enabling organizations to respond more rapidly to changing socio-economic and administrative conditions. This transformation is not merely technological but structural and cultural, as institutions are compelled to redesign traditional procedures, redefine employee roles, and adopt more innovation-oriented management practices.

However, the study also established that the adoption of AI within public institutions is accompanied by several critical challenges. Issues relating to inadequate technological infrastructure, insufficient digital competencies among public sector employees, resistance to organizational change, ethical concerns, and data privacy risks continue to hinder the effective implementation of AI initiatives. In many cases, institutional transformation is constrained by limited funding, weak policy frameworks, and the absence of comprehensive regulatory guidelines governing the responsible use of AI technologies. Consequently, while AI presents substantial opportunities for modernization and institutional reform, its successful integration requires deliberate planning, sustained investment, and strategic leadership.

Based on the findings, the following recommendations were reached

1. **Cost Management Due to the Use of Artificial Intelligence and Organizational Transformation:** Organizations should adopt artificial intelligence strategically to reduce operational costs while improving efficiency and productivity. Management should begin with automating repetitive and resource-intensive tasks to minimize unnecessary expenditure on manual processes. Investment in scalable AI systems and cloud-based technologies can further reduce infrastructure and maintenance costs. Organizations should also conduct regular cost-benefit analyses to ensure that AI investments deliver measurable financial value. Also, employees should be trained to effectively use AI tools so that organizations can maximize returns on technology adoption and avoid waste caused by underutilization.
2. **Reduction of Manual Work Due to the Use of Artificial Intelligence and Organizational Transformation:** Organizations should integrate AI technologies into routine administrative and operational activities to reduce excessive manual work. Tasks such as data entry, scheduling, customer support, and report generation can be automated to increase speed and efficiency. Management should redesign workflows to combine human expertise with AI capabilities, allowing employees to focus on more strategic and creative responsibilities. Continuous staff training and digital literacy programs should also be implemented to help employees adapt to automated systems and improve collaboration between humans and intelligent technologies.
3. **Job Redesign Due to the Use of Artificial Intelligence and Organizational Transformation:** Organizations should redesign jobs in a manner that complements AI systems rather than replacing employees entirely. Roles should be restructured to emphasize critical thinking, decision-making, creativity, problem-solving, and interpersonal skills that AI cannot easily replicate. Employers should establish reskilling and upskilling programs to prepare workers for emerging digital roles and responsibilities. Furthermore, organizations should encourage flexibility and collaboration

between departments to support smooth organizational transformation and reduce employee resistance to technological change.

4. Reduction of Human Error Due to the Use of Artificial Intelligence and Organizational Transformation: Organizations should utilize AI systems to improve accuracy, consistency, and decision-making processes in operations. AI-powered tools can help minimize errors in data processing, financial transactions, inventory management, and customer service by performing tasks with greater precision than manual methods. However, organizations should maintain human oversight and monitoring mechanisms to ensure ethical use and prevent system failures. Regular system updates, cyber security measures, and employee training should also be prioritized to ensure that AI solutions continue to operate effectively and reliably.

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- Journal of Social Work and Science Education Volume 6 (1) 2025, 119-147 E-ISSN 2723-6919, P-ISSN 2746-0827 119 Reviewing the Transformation of Enterprise Systems in Indonesia through Integrated Design and Operations Management Dewi Dian Emor1, Cryzelda Minerva Lumbantoruan1, Briana Limpele1, Benny Lule1, Nuphanudin2 1Universitas Klabat, North Sulawesi, Indonesia, 2Universitas Negeri Surabaya, East Java, Indonesia Corresponding author e-mail: nuphanudinnuphanudin@unesa.ac.id Article History:
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