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Artificial Intelligence and Leadership Styles as Determinants of Employees' Perceived Job Displacement in the Banking Sector in Owerri

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ABSTRACT

The study set out to determine whether the adoption of artificial intelligence and the leadership styles practised by managers account for how bank employees perceive the threat of job displacement. A total of 239 employees were selected from five major commercial banks in Owerri, Imo State: Zenith Bank, Access Bank, Guaranty Trust Bank (GTB), First Bank and United Bank of Africa. A stratified random sampling technique was used to ensure fair representation across the banks, after which simple random sampling was applied to select respondents proportionately. The participants comprised 115 males (48.1%) and 124 females (51.9%), with ages ranging from 22 to 55 years (M = 40.69, SD = 6.36). Data were collected using structured questionnaires measuring AI adoption, leadership style and perceived job displacement. The instruments returned reliability coefficients ranging from .60 to .88. Data analysis was conducted using descriptive statistics, Pearson product-moment correlation and multiple regression analysis. The findings revealed that there was a small negative correlation between artificial intelligence and perceived job displacement, $r(237) = -.10$, $p = .121$, which was not statistically significant at the .05 level of significance. The relationship between leadership style and perceived job displacement was likewise not statistically significant, $r(237) = -.04$, $p = .548$. Bank management should ensure that their employees enjoy job security, as this will make them feel that their efforts are appreciated.

KEYWORDS artificial intelligence • leadership style • job displacement • bank employees

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1. INTRODUCTION

The banking sector in Owerri, Imo State, has not been isolated from the rapid wave of technological transformation affecting financial institutions across Nigeria and the world (Umealo, 2021). Commercial banks operating in Owerri increasingly utilise artificial intelligence enabled technologies such as automated customer service platforms, cashless banking systems, digital verification tools, and algorithm-driven operational systems. These innovations have changed traditional work structures, reduced dependence on manual operations, and introduced new skill requirements for employees. Consequently, workers in the banking sector may experience concerns regarding role relevance, employability, and long-term job security, particularly among employees whose tasks are highly repetitive or technology-sensitive. In addition, leadership practices within banks in Owerri may significantly influence how employees perceive these technological changes. Managers and organisational leaders who encourage employee participation, provide regular communication, and invest in staff training may help reduce employees' fears of displacement. On the other hand, leadership approaches characterised by poor communication, limited employee involvement, and inadequate support may increase perceptions of insecurity and uncertainty among workers. Therefore, understanding how artificial intelligence and leadership styles jointly determine employees' perceived job displacement is important for improving organisational effectiveness, employee well-being, and workforce sustainability within the banking sector.

The relevance of this topic is further reinforced by contemporary global concerns surrounding the future of work in the age of artificial intelligence. Experts predict that AI-driven automation will continue reshaping labour markets by replacing routine tasks while simultaneously creating demand for new digital and analytical skills (Bernhardt, 2024). Although some scholars argue that artificial intelligence will augment human capabilities rather than completely replace workers (Kassa & Worku, 2025), employees' perceptions of displacement remain significant because such perceptions influence job satisfaction, organisational commitment, morale, productivity, and psychological well-being (Dan & Yun-ling, 2023). The concept of perceived job displacement refers to employees' fears, anxieties, or beliefs that technological innovations may reduce the relevance of their roles or eventually eliminate their jobs entirely. In the banking industry, this perception has intensified as organisations continue to adopt AI-enabled systems that can perform tasks with greater speed and accuracy than human employees. Recent reports indicate that many financial institutions worldwide are restructuring their workforce as AI technologies become more sophisticated. Major global banks have acknowledged that AI may eliminate certain categories of jobs while simultaneously creating new technology-oriented roles that require advanced digital competencies (Rudri, 2023).

The emergence of Artificial Intelligence (AI) has transformed the global business environment and redefined the nature of work across industries. In contemporary organisations, Artificial Intelligence refers to computer systems and digital technologies capable of performing tasks that traditionally required human intelligence, such as learning, problem-solving, decision-making, language processing, and predictive analysis. Artificial Intelligence technologies, including machine learning, robotic process automation, chatbots, biometric systems, and intelligent analytics, are increasingly being integrated into organisational operations to improve efficiency, reduce operational costs, and enhance service delivery (Abbasi et al., 2024). The banking sector, in particular, has become one of the leading adopters of Artificial Intelligence-driven innovations due to the growing demand for digital banking services, enhanced cybersecurity, fraud detection, customer relationship management, and operational automation (Marocco et al., 2024). Globally, banks are deploying Artificial Intelligence systems to automate repetitive tasks, manage customer inquiries through virtual assistants, analyse customer behaviour, assess credit risks, and streamline internal administrative processes. These technological advancements have significantly improved productivity and service quality within financial institutions. However, alongside these benefits, the adoption of Artificial Intelligence has generated growing concerns among employees about job security, role redundancy, and potential displacement. Studies have shown that employees in banking institutions increasingly perceive Artificial Intelligence as both an opportunity and a threat, particularly because automation tends to replace routine and clerical functions previously performed by humans (Marocco et al., 2024).

In addition to technological transformation, leadership styles within organisations play a critical role in shaping employees' perceptions, attitudes, and responses toward organisational change (Meher et al., 2025). Leadership style refers to the manner and approach through which leaders direct, motivate, communicate with, and influence employees in achieving organisational goals. Different leadership styles, such as transformational leadership, transactional leadership, democratic leadership, autocratic leadership, and servant leadership, influence employee morale, organisational commitment, trust, and adaptability differently. In periods of technological change and uncertainty, leadership becomes particularly important because

employees often rely on organisational leaders for guidance, reassurance, communication, and emotional support (Yolanda et al., 2024).

Transformational leadership, for example, encourages innovation, employee empowerment, and adaptability by motivating employees to embrace organisational changes positively. Leaders who adopt transformational approaches often communicate a compelling vision, provide emotional support, and encourage continuous learning and development. Such leadership behaviours may reduce employees' fears regarding Artificial Intelligence adoption by emphasising reskilling, career growth opportunities, and technological collaboration rather than replacement. Conversely, transactional or authoritarian leadership styles may intensify employees' anxieties if organisational changes are implemented without adequate communication, participation, or support mechanisms. Employees who feel excluded from decision-making processes may develop stronger perceptions of insecurity and displacement (Richter et al., 2018).

The relationship between Artificial Intelligence adoption and leadership styles has therefore become an important area of organisational and management research. While Artificial Intelligence technologies influence operational structures and workforce composition, leadership styles determine how employees psychologically interpret and react to these changes. Effective leadership can help employees perceive Artificial Intelligence as a supportive tool that enhances productivity and creates opportunities for professional development. Poor leadership practices, however, may heighten uncertainty, resistance, and fear among workers, especially when employees perceive inadequate organisational support during technological transitions. Studies have emphasised that transparent communication, employee participation, ethical leadership, and reskilling initiatives are essential in reducing negative employee perceptions associated with Artificial Intelligence integration (Yolanda et al., 2024).

2. STATEMENT OF THE PROBLEM

In Owerri's banking sector, employees are increasingly exposed to technological changes that alter traditional work structures and reduce reliance on manual operations. This shift has created anxiety and apprehension among workers who perceive Artificial Intelligence as a threat to their employment stability. Employees' perceived job displacement refers to the subjective fear or expectation that one's job may be replaced, reduced, or rendered obsolete due to technological advancement. Such perceptions may negatively affect employees' psychological well-being, motivation, organisational commitment, job satisfaction, and productivity. When management adopts authoritarian or unsupportive leadership styles, this may intensify employees' fears of displacement, stress, and resistance to technological change.

Despite the growing adoption of Artificial Intelligence in Nigerian banks, there is limited empirical research examining the combined influence of Artificial Intelligence adoption and leadership styles on employees' perceived job displacement, particularly in the banking sector in Owerri. Most existing studies focus primarily on technological efficiency, organisational performance, or automation outcomes, with insufficient attention to the psychological experiences of employees undergoing technological transitions. Therefore, the problem this study seeks to address is the growing concern that the integration of Artificial Intelligence in the banking sector may contribute to employees' perceived job displacement, and that leadership styles may either mitigate or exacerbate these perceptions.

It is against this backdrop that the study aims to investigate how artificial intelligence and leadership styles separately and jointly determine employees' perceived job displacement among bank workers in Owerri.

3. PURPOSE OF THE STUDY

The purpose of this study is to examine the influence of artificial intelligence and leadership styles on employees' perceived job displacement in the banking sector in Owerri. Specifically, the study seeks to:

1. Investigate how the increasing adoption of artificial intelligence technologies affects employees' perceived job displacement in the banking sector in Owerri.
2. Investigate how the different leadership approaches practised by managers affect employees' perceived job displacement in the banking sector in Owerri.

4. OBJECTIVES OF THE STUDY

The general objective of this study is to investigate artificial intelligence and leadership styles as determinants of employees' perceived job displacement in the banking sector in Owerri.

Specific objectives include

1. To examine the relationship between artificial intelligence adoption and employees' perceived job displacement in the banking sector in Owerri.
2. To determine the influence of leadership styles on employees' perceived job displacement in the banking sector in Owerri.

5. EMPIRICAL REVIEW

Artificial Intelligence and Perceived Job Displacement

Cheng, Noorasiah and Zhenglong (2025) employed a systematic literature review method and PRISMA approach to collate and synthesise a substantial body of relevant studies of the last 40 years, intending to sort out the impact of Artificial intelligence on the job market and further analyse the opportunities and challenges associated with the effects of artificial intelligence on job substitution, to fill the gaps in the existing studies. It has been demonstrated that artificial intelligence has a discernible displacement effect in specific repetitive and predictable work environments, leading to the obsolescence of some conventional roles. Conversely, it also engenders new employment opportunities and a demand for highly proficient and adaptable professionals. This paper presents a comprehensive analysis of the current state of job substitution in the context of artificial intelligence across different industries and regions. It also offers insights into the corresponding policy countermeasures and other aspects to provide a reference point for further understanding and coping with this growing problem. This study systematically reviews the existing literature and suggests future research directions, including combining emerging technologies such as the Internet of Things and blockchain with artificial intelligence.

Furthermore, Rudri (2023) worked on the Impact of AI and Machine Learning on Job Displacement and Employment Opportunities. It explores the potential effects of the increasing use of artificial intelligence (AI) and machine learning on the job market. The paper examines how these technologies may lead to job displacement in certain industries, as well as the potential for new employment opportunities in other areas. The study also examines how governments and organisations can mitigate the negative effects of job displacement and promote the creation of new job opportunities in AI and machine learning. Overall, the paper concludes that while there may be some negative effects on job displacement, the potential for new employment opportunities in the field of Artificial intelligence and machine learning outweighs the potential negative impacts.

Meher, Jannatul, Uttam, Mohammad and Mohammad (2025) investigated Artificial intelligence and Technological unemployment: Understanding trends, Technology's adverse roles and Current Mitigation guidelines. This study employs a Systematic Literature Review (SLR) guided by the PRISMA framework to examine peer-reviewed literature from the Scopus database (2015 to July 2025). It identifies three core themes: (1) trends in AI-induced labour displacement, including task automation, skill polarisation, and industry-specific disruptions in sectors such as healthcare, education, and creative industries; (2) the adverse roles of Artificial intelligence technologies, particularly in affecting white-collar professionals, gig workers, and freelancers by increasing precarity and skill mismatches; and (3) existing mitigation strategies, including responsible Artificial intelligence guidelines proposed by governments, institutions, and firms aimed at balancing technological advancement with employment protection. While a growing body of policy responses encourages human-Artificial intelligence complementarity, current measures remain fragmented and insufficient to address the structural risks of workforce displacement. This study presents a comprehensive synthesis of the evolving relationship between Artificial intelligence and employment, highlighting key areas for further inquiry and policy development.

Evidence drawn from Nigerian banking itself is scarcer, but it is not absent. Nwambe (2026) surveyed accountants and accounting staff in four Nigerian deposit money banks, namely Access Bank, Zenith Bank, First Bank and Guaranty Trust Holding Company, and analysed the returns using regression at the .05 level. Artificial intelligence powered accounting systems were found to affect accountants' job security significantly, and accounting automation likewise influenced employment stability. The author nevertheless concluded that these systems do not replace accountants outright; they redistribute the work, moving it away from routine posting towards analytical and advisory duties. That reading matters for the present study because the banks sampled by Nwambe overlap almost entirely with those sampled here, which allows the Owerri findings to be set against a Nigerian benchmark rather than only against studies conducted elsewhere.

Leadership Styles and Job Displacement

Yolanda, Purnama, Harliant, and Maharani (2024) worked on leadership styles and Job Displacement in Indonesian start-ups: The role of challenges and Engagement. This study explores whether higher job engagement impacts job insecurity, providing practical insights for leaders. The study was structured using a quantitative approach known as structural equation modeling-partial least squares (SEM-PLS), which analysed 198 responses from Indonesian start-up employees. This study found that leadership styles significantly affect job insecurity ($\beta = 1.337$, $p < 0.05$); however, leadership styles do not substantially affect job engagement ($\beta = 0.435$, $p > 0.05$). Another finding states that job challenges do not significantly affect job engagement ($\beta = 0.491$, $p > 0.05$) and job insecurity ($\beta = -0.037$, $p > 0.05$). Job engagement significantly influences job insecurity ($\beta = -0.428$, $p < 0.05$). This study specifically targets employees in Indonesian start-ups to uncover mechanisms and offer practical recommendations for enhancing job security and motivation. The findings point to a substantial effect of leadership style on job insecurity, emphasising the importance of engaging and motivating employees through personalised leadership style approaches to enhance job stability and overall workforce effectiveness in Indonesian start-ups.

Richter, Tafvelin, and Sverke (2018) researched on the mediated relationship of leadership on Job insecurity. The purpose of this study is to enhance the understanding of the effect of organisational management, more specifically of production- and employee-oriented leadership, on job insecurity. Moreover, two potential mediators of leadership, goal clarity and trust, are investigated. Cross-sectional questionnaire data (n = 1329) from an acute care hospital in Sweden was used. Both leadership styles were negatively associated with job insecurity. In addition, production-oriented and employee-oriented leadership had indirect effects on job insecurity. More specifically, goal clarity was found to be the prominent mediator of the relation between production-oriented leadership and job insecurity. Organisational actions such as leadership are important for working preventively with job insecurity. It is the mechanisms of leadership that may reduce job insecurity.

More so, Putri, Supriaddin and Sabilalo (2024) investigated the influence of leadership styles and job insecurity on turnover intention. This research approach is a survey with an explanatory research design. Data collection was carried out using a survey method using an instrument in the form of a questionnaire. The population of this research is all employees of PT. Hoffmen Energi Perkasa, totalling 219 people. The sample was determined using the Slovin formula with a precision of 10%, resulting in a total sample of 69 people. The analysis equipment used is Partial Least Squares (PLS) Analysis. The research results show that (1) Leadership Style has a significant effect on Turnover Intention, and (2) Job Insecurity has a positive and significant effect on Turnover Intention. Thus, it can be concluded that changes in increasing Leadership Style and Job Insecurity have a positive and significant contribution to increasing Turnover Intention.

Within Nigeria, Oruh, Mordi, Dibia and Ajonbadi (2021) interviewed 30 workers drawn from banking, manufacturing and frontline healthcare across three Nigerian cities and analysed the accounts thematically. Fear of job insecurity emerged as one of the leading stressors reported by the banking respondents, and a compassionate managerial leadership style appeared to soften that fear where it was practised. Because the design was qualitative and the sample small, the study cannot speak to effect sizes. It does, however, suggest that in Nigerian banks the leadership variable may operate through felt supportiveness rather than through the formal transformational or transactional categories that the Multifactor Leadership Questionnaire captures, and that possibility is taken up again in the discussion below.

6. THEORETICAL FRAMEWORK

This study is anchored on the Theory of Job Insecurity developed by Greenhalgh and Rosenblatt in 1984. The theory explains how employees perceive threats to the continuity and stability of their jobs, especially in periods of organisational change, technological advancement, restructuring, and uncertainty. Greenhalgh and Rosenblatt (1984) defined job insecurity as the perceived powerlessness to maintain desired continuity in a threatened job situation. The theory posits that job insecurity is a subjective psychological state in which employees feel uncertain about the future existence of their jobs or the preservation of important job features such as salary, career progression, authority, work roles, and status. According to the theory, employees may experience insecurity not only when there is an actual threat of unemployment, but also when they perceive possible threats arising from organisational transformation, technological innovation, automation, or managerial decisions.

The theory is highly relevant to this study because the adoption of artificial intelligence in banks may generate both quantitative and qualitative job insecurity among employees. Quantitative insecurity may arise

when employees fear that Artificial intelligence systems could completely replace their positions. Qualitative insecurity may occur when employees believe that Artificial intelligence could reduce their responsibilities, career advancement opportunities, or workplace relevance. Applying the theory to the banking sector in Owerri, employees in commercial banks may perceive AI technologies as a threat to job continuity due to the increasing automation of banking operations. Employees may fear downsizing, restructuring, reduced human involvement, or redundancy. However, leadership style may either moderate or amplify these perceptions depending on how management handles technological innovation and employee relations.

7. HYPOTHESES

1. There will be a statistically significant influence of artificial intelligence on perceived job displacement in the banking sector in Owerri.

2. There will be a statistically significant influence of leadership styles on perceived job displacement in the banking sector in Owerri.

8. METHOD

Participants

The researchers selected 239 bank employees from five (5) banks: Zenith, Access, Guaranty Trust, United Bank for Africa and First Bank. They were selected through a stratified random sampling technique to ensure fair representation across banks, after which simple random sampling was applied within each bank to select respondents proportionately. The participants comprised 115 males and 124 females, of whom 122 were married, while 117 were single. The ages of the participants ranged from 22 to 55 years (M = 40.69, SD = 6.36). Two hundred and fifty questionnaires were administered in all, at a quota of 50 per bank. Eleven returns were discarded because they were incompletely filled, which left 239 usable questionnaires and a return rate of 95.6%.

Instruments

Three instruments were used for data collection:

A. Technology Acceptance Model.

B. Multifactor Leadership Questionnaire (MLQ).

C. Job Insecurity Scale.

Technology Acceptance Model

This scale was developed by Davis in 1989; it was used to measure Artificial intelligence. Technology Acceptance Model is made up of 12 positive items with a 7-point response format ranging from 1, Extremely Disagree, to 7, Extremely Agree. The model itself derives from the theory of reasoned action (Fishbein & Ajzen, 1975) and continues to be applied to new technologies in both international and Nigerian settings (Guo et al., 2025; Ojeka-John et al., 2025). Davis validated his scales using both predictive and convergent validity by comparing survey scores with actual system interactions and self-reported future usage. Predictive validity for perceived usefulness was significant against self-reported current usage (r = 0.63) and self-predicted future usage (r = 0.85). Predictive validity for perceived ease of use was significant against current usage (r = 0.45) and future usage (r = 0.59). For construct validity, the scales exhibited high convergent, discriminant, and factorial validity, establishing the questionnaire as a reliable, robust instrument for research. The scale was revalidated in Nigeria by Olaolu (2022). Questionnaires were administered electronically, and the set quota of 50 respondents per bank, totalling 250, was met. Cronbach's alpha test indicated that the instrument had a value greater than 0.70, implying that it was reliable. The norm for the scale is 39.12. Scores higher than the norm indicate high technology acceptance, while scores lower than the norm indicate low technology acceptance.

Multifactor Leadership Questionnaire

The Multifactor Leadership Questionnaire (MLQ) is a widely used survey instrument developed by Bass and Avolio (1995). It evaluates the Full Range Leadership Model, measuring 9 distinct leadership styles across three main categories (transformational, transactional and laissez-faire). The scale contains 21 items scored on a five-point Likert format ranging from 0, Not at all, to 4, Frequently, if not always, giving a possible score range of 0 to 84. Bass and Avolio provided the psychometric properties for American samples. For internal

consistency and reliability, subscale reliabilities assessed via Cronbach's alpha consistently range between 0.74 and 0.94, indicating high internal consistency. This demonstrates that the grouped questions reliably measure the intended leadership traits. Test-retest reliability evaluated over 1-year intervals shows strong temporal stability. For construct and factor validity, the standard MLQ (Form 5X) was originally validated as a 9-factor structure evaluating specific dimensions of leadership, for example Idealized Influence and Inspirational Motivation. However, depending on context and demographic samples, Confirmatory Factor Analysis (CFA) often supports varying, more parsimonious variations, such as 3-factor or 4-factor models. For convergent and discriminant validity, the MLQ correlates highly with positive organisational outcomes like employee satisfaction, extra effort, and leadership effectiveness. Conversely, it shows distinct differences separating highly active, positive leadership styles from passive or avoidant and laissez-faire behaviours. The MLQ was revalidated for Nigerian use by Ugwu (2016), whose confirmatory factor analysis of Form 5X among 350 bank and production-company workers in Enugu State yielded acceptable model fit indices and subscale reliability coefficients generally above .70. Uzonwanne (2017) similarly reported a Cronbach's alpha of .86 for the MLQ among ministry leaders in Lagos State, lending further support to the instrument's reliability within the Nigerian context.

Job Insecurity Scale

Job Insecurity Scale was used to measure job displacement. The instrument was developed by De Witte (2000) and was adopted and administered in the study. It is a four-item scale designed to elicit and to measure employees' perceived threat of continuity in their jobs. The four-item scale is in a five-point Likert response format ranging from Strongly agree (5) to Strongly disagree (1). All the negative items 1, 3, and 4 are scored directly, while the positive item 2 is scored inversely. The higher the score, the higher the perceived job insecurity and vice versa. The author reported an alpha coefficient of .85, while Ugwu and Asogwa (2017) obtained a Cronbach's alpha of .80 when they revalidated and adopted the instrument for use in Nigeria. In addition, while establishing the reliability coefficient of the perceived job insecurity scale, the researcher in a pilot study with 70 participants drawn from two branches of First Bank, one branch of Guaranty Trust Bank, and one branch of Access Bank in Kaduna State obtained a Cronbach's alpha coefficient of .60 in this study. That value falls below the .70 threshold conventionally regarded as acceptable, and it is treated as a limitation of the study rather than passed over.

9. RESULTS

Table 1. *Descriptive Statistics for Study Variables*

Variable	n	M	SD	Min	Max
Artificial Intelligence (AI)	239	39.78	12.25	16	72
Leadership Styles (LS)	239	48.20	11.43	28	73
Perceived Job Displacement (PJD)	239	11.06	3.41	5	18

Note. AI = Artificial Intelligence (Technology Acceptance Model; 12 items; 7-point scale). LS = Leadership Styles (Multifactor Leadership Questionnaire; 21 items; 5-point scale, 0 to 4). PJD = Perceived Job Displacement (Job Insecurity Scale; 4 items; 5-point scale).

Prior to hypothesis testing, descriptive statistics were computed for all study variables, and frequency analyses were conducted for demographic characteristics. The sample comprised N = 239 bank employees drawn from banking institutions in Owerri, Imo State, Nigeria. Participants ranged in age from 22 to 55 years (M = 40.69, SD = 6.36). With respect to gender, 124 participants identified as female (51.9%) and 115 as male (48.1%). Regarding marital status, 122 participants were married (51.0%), and 117 were single (49.0%).

Descriptive statistics for the main study variables are presented in Table 1. Artificial intelligence (AI), as assessed by the Technology Acceptance Model, yielded a mean score of 39.78 (SD = 12.25) out of a possible range of 12–84, indicating moderate perceptions of AI adoption among the sample. Leadership styles, measured by the Multifactor Leadership Questionnaire, produced a mean of 48.20 (SD = 11.43) out of a possible range of 0–84. Perceived job displacement, assessed with the Job Insecurity Scale, had a mean of 11.06 (SD = 3.41) on a scale with a possible range of 4–20, indicating moderate levels of perceived job displacement in the sample.

Table 2. *Pearson Correlations Among Study Variables*

Variable	1	2	3
1. Artificial Intelligence	—		
2. Leadership Styles	-.186**	—	
3. Perceived Job Displacement	-.101	-.039	—

*Note. n = 239. Values shown are Pearson correlation coefficients. **p < .01. *p < .05 (two-tailed).*

Bivariate correlations among all study variables are presented in Table 2.

Hypothesis 1 stated that artificial intelligence would significantly determine employees' perceived job displacement in the banking sector in Owerri. A Pearson product-moment correlation was computed to examine this relationship. Results revealed a small negative correlation between artificial intelligence and perceived job displacement, r(237) = -.10, p = .121, which was not statistically significant at the .05 level of significance. Consequently, Hypothesis 1 was not supported by the data.

Hypothesis 2 posited that leadership styles would significantly influence employees' perceived job displacement in the banking sector. The Pearson product-moment correlation between leadership styles and perceived job displacement was likewise not statistically significant, r(237) = -.04, p = .548. Accordingly, Hypothesis 2 was also not supported by the data. The intercorrelation between artificial intelligence and leadership styles was, however, statistically significant, r(237) = -.19, p = .004.

Table 3. *Multiple Regression Analysis Predicting Perceived Job Displacement from Artificial Intelligence and Leadership Styles*

Predictor	B	SE B	β	t	p	R^2	Adj. R^2	F
Constant	13.16	1.31	—	10.01	< .001	.014	.005	1.622
Artificial Intelligence	-0.031	0.018	-.112	-1.697	.091			
Leadership Styles	-0.018	0.020	-.060	-0.909	.364			

Note. n = 239. B = unstandardised regression coefficient. SE B = standard error of B. β = standardised regression coefficient. F(2, 236) = 1.622, p = .200. R^2 = .014 (Adjusted R^2 = .005). 95% confidence intervals: AI [-0.067, 0.005]; LS [-0.056, 0.021].

To further evaluate the joint predictive capacity of artificial intelligence and leadership styles on perceived job displacement, a simultaneous multiple regression analysis was conducted with perceived job displacement as the criterion variable and artificial intelligence and leadership styles as predictors. As presented in Table 3, the overall regression model was not statistically significant, F(2, 236) = 1.622, p = .200, R^2 = .014, adjusted R^2 = .005, indicating that artificial intelligence and leadership styles together accounted for only 1.4% of the variance in perceived job displacement, which was not significantly different from zero.

Examination of the individual predictors within the model revealed that artificial intelligence did not significantly predict perceived job displacement (B = -0.031, SE = 0.018, β = -.112, t = -1.697, p = .091). Similarly, leadership styles did not significantly predict perceived job displacement (B = -0.018, SE = 0.020, β = -.060, t = -0.909, p = .364). Taken together, the results indicate that neither artificial intelligence nor leadership styles were significant determinants of employees' perceived job displacement in the banking sector in Owerri, and both study hypotheses were therefore not supported.

10. SUMMARY OF FINDINGS

The findings of the study are summarised as follows:

1. Artificial intelligence did not significantly determine employees' perceived job displacement in the banking sector in Owerri (r = -.10, p = .121; β = -.112, p = .091). Hypothesis 1 was therefore rejected.

2. Leadership styles did not significantly influence employees' perceived job displacement (r = -.04, p = .548; β = -.060, p = .364). Hypothesis 2 was therefore rejected.

3. The joint regression model was not statistically significant, F(2, 236) = 1.622, p = .200, with the two predictors together explaining less than 2% of the variance in perceived job displacement.

4. Artificial intelligence and leadership styles were themselves related, showing a small but statistically significant negative correlation (r = -.19, p < .01), even though neither predicted the criterion variable.

11. DISCUSSION

This study set out to determine whether artificial intelligence and leadership styles account for employees' perceived job displacement among bank workers in Owerri. A cross-sectional survey of 239 employees drawn from five commercial banks produced no support for either hypothesis, and the joint model explained less than 2% of the variance in the criterion. Findings of this kind are easy to pass over quickly, yet they carry information, and the sections that follow consider each hypothesis against the theoretical framework adopted in this study and against the empirical work reviewed earlier.

The first hypothesis predicted that artificial intelligence would significantly determine perceived job displacement. It did not. The correlation was negative, small and non-significant, $r(237) = -.10$, $p = .121$, and the regression coefficient told the same story. The direction of the association is itself worth pausing on. Employees who scored higher on technology acceptance tended, if anything, to report slightly lower perceived displacement rather than higher. If the relationship holds in a larger sample, it would suggest that acceptance and threat perception are not two ends of one continuum among these workers. An employee may find the new systems useful and easy to operate, and still hold no strong view about whether those systems endanger the post. The Technology Acceptance Model was designed to predict adoption behaviour rather than threat appraisal (Davis, 1989), and using it as a proxy for exposure to artificial intelligence may therefore have measured something adjacent to, rather than the same as, what the hypothesis assumed.

Set against the Theory of Job Insecurity, the result is less surprising than it may first appear. Greenhalgh and Rosenblatt (1984) locate insecurity in perceived powerlessness to maintain a threatened job, not in the presence of the threatening agent as such. On that account, automation only translates into insecurity once employees judge that they cannot do anything about it. Nigerian bank staff work under several pressures at once, including redeployment, target-driven appraisal and a difficult external labour market, and technology may simply not be the most salient of these. Where an employee's sense of powerlessness is already anchored elsewhere, variation in artificial intelligence exposure would add little to what the outcome measure detects.

The finding sits awkwardly beside the reviewed literature, and that tension deserves to be named rather than smoothed over. Cheng et al. (2025) and Rudri (2023) both report displacement effects, while Meher et al. (2025) documents adverse consequences for white-collar workers in particular. Two differences may account for the divergence. First, all three are systematic reviews synthesising labour market outcomes at sector or national level; the present study measured a psychological perception in individual employees, and an aggregate displacement trend need not register as personal fear. Second, the Nigerian evidence is not uniform either. Nwambe (2026), working in four of the same commercial banks sampled here, did obtain a significant effect of artificial intelligence powered systems on job security, but the respondents were accountants, whose routine posting duties are the most directly automatable in a bank. The present sample was drawn across banking roles without restriction to any function. It is plausible that displacement perceptions concentrate in particular occupational niches and dilute when a workforce is sampled as a whole, which would reconcile the two Nigerian results without treating either as an error.

The second hypothesis fared no better. Leadership styles did not significantly influence perceived job displacement, $r(237) = -.04$, $p = .548$, and the standardised coefficient was similarly negligible. This departs sharply from Yolanda et al. (2024), who found a substantial effect of leadership style on job insecurity among Indonesian start-up employees, and from Richter et al. (2018), who reported negative associations for both production-oriented and employee-oriented leadership in a Swedish hospital. Neither setting resembles a Nigerian commercial bank closely. Start-ups are small, flat and founder-led, so the leader is visible daily and the firm's survival is openly tied to the leader's decisions; job insecurity there is almost a leadership variable by construction. Nigerian banks, by contrast, are large, hierarchical and centrally administered, and decisions about staffing, restructuring and technology are typically taken well above branch level. A branch manager in Owerri may be supportive or distant without that making any difference to whether head office automates a process, and employees are likely to know this.

Measurement may also be implicated. The Multifactor Leadership Questionnaire classifies leader behaviour into transformational, transactional and laissez-faire categories developed on American samples. Oruh et al. (2021) found that what mattered to Nigerian bank workers facing fear of job insecurity was whether managers responded compassionately to their circumstances, which is a quality that cuts across the three MLQ categories rather than mapping onto any one of them. If the supportive dimension that matters locally is distributed across the instrument's subscales, a total score would tend to obscure it. Richter et al. (2018) reached a related conclusion from a different direction, reporting that leadership acted on insecurity indirectly

through goal clarity and trust rather than directly. The present study modelled direct effects only, so a mediated pathway of that kind would not have been detected.

One result did reach significance and should not be lost among the null findings. Artificial intelligence and leadership styles correlated negatively, $r(237) = -.19$, $p = .004$. Employees who reported higher technology acceptance tended to rate their leaders lower on the MLQ. The association is modest and its direction cannot be established from cross-sectional data, but it is consistent with a workplace in which technological change is driven from above and experienced as displacing the leader's role rather than as something leaders themselves enable. Putri et al. (2024) found leadership style and job insecurity each contributing to turnover intention, which raises the possibility that in this sample the two predictors act on outcomes other than the one measured here.

Taken together, the results are best interpreted with caution rather than read as evidence that artificial intelligence and leadership are irrelevant to how Nigerian bank employees experience their jobs. The outcome measure returned a pilot reliability of .60 in this study, below the conventional threshold, and an unreliable criterion attenuates any correlation computed with it. Some part of the weak associations obtained is therefore likely to be measurement error rather than an absence of relationship. What the study does establish is narrower but still useful: within one urban Nigerian banking sample, neither technology acceptance nor leadership style as measured by these instruments distinguished employees who feared displacement from those who did not. That is a reasonable starting point for better-instrumented work rather than a closing of the question.

12. LIMITATIONS OF THE STUDY

1. The Job Insecurity Scale returned a Cronbach's alpha of .60 in the pilot conducted for this study, which is below the .70 threshold generally regarded as acceptable. A criterion measured with limited reliability attenuates observed correlations, so the weak associations reported here may understate the true relationships.

2. The design was cross-sectional and correlational, which means that no causal inference can be drawn from any of the associations reported, including the significant correlation between artificial intelligence and leadership styles.

3. The sample was drawn from five commercial banks in a single city. Findings may not extend to banks in other Nigerian states, to microfinance and merchant banks, or to financial institutions elsewhere in West Africa.

4. All three instruments were self-report measures, which leaves the data open to social desirability, particularly on items concerning leaders.

5. The Technology Acceptance Model measures acceptance of technology rather than exposure to it or appraisal of it as a threat, and it may therefore be an imperfect operationalisation of artificial intelligence for the purpose of this study.

13. CONCLUSION

This study examined artificial intelligence and leadership styles as determinants of employees' perceived job displacement in the banking sector in Owerri. Neither predictor reached statistical significance, whether examined separately or jointly, and together they accounted for less than 2% of the variance in perceived job displacement. Based on the evidence, the two variables did not determine how these bank employees perceived the threat of displacement.

This does not settle the question. The outcome measure performed below the accepted reliability threshold in the pilot, the design was cross-sectional, and the sample was confined to one city, so the null results are better treated as inconclusive than as evidence of no relationship. The one significant association obtained, a small negative correlation between artificial intelligence and leadership styles, suggests that the two constructs are connected to each other even where neither is connected to the criterion, and that connection may repay further study.

What the study contributes is a first quantitative estimate for a Nigerian banking population on a question that has so far been examined mainly through systematic reviews and through evidence gathered elsewhere. It also indicates where the next study should begin, namely with an outcome measure validated on Nigerian workers and a design capable of detecting the indirect pathways through which leadership appears to operate in comparable settings.

14. RECOMMENDATIONS

Based on the findings of this study, which revealed that Artificial Intelligence and leadership styles did not significantly determine employees' perceived job displacement in the banking sector in Owerri, the following psychological and organisational recommendations were proposed:

1. Although Artificial Intelligence was not found to significantly influence perceived job displacement, organisations should continue to create psychologically safe work environments where employees feel secure, valued, and confident about their future roles. Management should regularly communicate organisational goals, technological changes, and job expectations clearly to reduce uncertainty, anxiety, and fear associated with automation.

2. Organisations should encourage employees to develop adaptive psychological traits such as resilience, flexibility, creativity, and openness to change. Regular training and retraining programmes should be organised to improve employees' confidence in using technological systems and adapting to organisational innovations. This will enhance self-efficacy and reduce irrational fears concerning Artificial Intelligence implementation.

3. Even though leadership styles did not significantly determine perceived job displacement, leaders and managers should continue to practise supportive and participative leadership behaviours. Psychological research has shown that employees perform better and experience lower workplace anxiety when leaders demonstrate empathy, fairness, emotional intelligence, and interpersonal support.

4. Banks should organise sensitisation programmes, seminars, and workshops aimed at helping employees perceive Artificial Intelligence as a supportive tool rather than a threat to employment. Positive psychological orientation toward technology can improve acceptance, reduce resistance to change, and enhance organisational commitment.

5. Future researchers working on a similar study in Nigeria should endeavour to validate the outcome measure on a Nigerian working population before use, and should consider longitudinal or mediated designs capable of detecting the indirect pathways through which leadership may act on job insecurity.

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