
Perceived Usefulness of Artificial Intelligence and Employee Job Satisfaction in Nigeria's Financial Services Sector: The Moderating Role of Training Effectiveness

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Abstract: *The study investigates the influence of perceived usefulness of Artificial Intelligence on job satisfaction of employees in financial services sector in Nigeria whilst testing the moderating effect of the training effectiveness. The study meets the increasing demand for a deeper understanding of AI as a technology innovation and as it impacts on employees' workplaces. The quantitative cross-sectional survey was undertaken with bank, fintech, insurance company, microfinance and investment company employees. A total of 600 questionnaires were distributed 478 valid questionnaires were analyzed with Pearson correlation and hierarchical regression. The results indicate that the perceived usefulness of AI significantly and positively influences employee job satisfaction. Effectiveness of training has a significant positive effect as well, and further enhances the correlation between perceived usefulness and job satisfaction. The study ends with a conclusion that AI is more fulfilling to the workers, when its usefulness is facilitated with good training that develops competency, confidence and ability to use it practically. The article adds to the literature of AI adoption by demonstrating that training effectiveness serves as a 'capability condition' that helps to connect perceived usefulness of AI to positive employee outcomes in a developing economy financial services context.*

Keywords: Artificial intelligence, perceived usefulness, employee job satisfaction, training effectiveness, financial services, Nigeria

INTRODUCTION

Today, artificial intelligence (AI) has become mainstream to the financial world. In banking, insurance, and microfinanciers, investment services and fintech businesses, AI has already been

Publication of the European Centre for Research Training and Development-UK adopted to evaluate creditworthiness, stop frauds, manage customer service, track compliance, analyze investments, and direct internal decisions. Uses are frequently described as efficient, accurate, and comparable, but then need more research and study concerning AI work from the worker's perspective. This means that a technology can do more than make an organization more efficient; it can also reduce employee happiness and satisfaction while increasing uncertainty, dependence, anxiety or a sense of displacement.

The study explores the link between the usefulness of AI and satisfaction of employees in Nigeria's financial services industry. It also explores how the effectiveness of training will affect its moderating influence. The emphasis is deliberately drawn onto a narrow focus. To avoid the simplistic application of adopting AI as a mere overarching phenomenon, the article focuses on the perceived usefulness as an independent variable, as employees are measuring the suitability for their work in terms of usefulness. An AI system, when it helps to increase accuracy, speed or decision quality, in environments where staff are given performance metrics, pressure from customers and regulatory requirements will likely be felt as a tool to help achieve those goals. This inquiry takes place within the context of the financial services sector, which is an important sector in Nigeria. Both the sector is technologically dynamic and institutionally uneven. Some organisations are further down the digital pathway or in the process of developing the human capacity needed to operate AI. Training cannot, therefore, be regarded as a 'side-issue'. It is a state of being that decides if staff members can take advantage of the usefulness of AI and turn it into a more fulfilling career experience. The article suggests that perceived usefulness could boost job satisfaction, but that impacts are more pronounced when training is effective and relevant to employees' jobs with AI.

Conceptual review

Perceived usefulness of artificial intelligence

Perceived usefulness is defined as the degree to which employees think the use of the technology will enhance job performance. Usefulness can manifest in various forms in AI-driven work – speed to provide service, improved information processing, better decision support, more precise analysis, fewer repetitive tasks, and increased ability to meet customer expectations. The idea is not just a purely technical one. It is experiential because workers' sense of usefulness is derived from practical examples of AI that they encounter in their work.

Additionally, perceived usefulness is very important in financial services because when mistakes are made, delays or customers are mishandled, they create a significant organisational risk. By streamlining these tasks, AI can decrease work strain and create a sense of task completion, which can benefit employees. But if the employees don't know how to use the technology to its fullest advantage, then utility isn't enough.

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Employee job satisfaction

Employee job satisfaction indicates an evaluation by employees of their feelings of positive affect and cognition towards their job, work setting and experiences, respectively. Satisfaction could be affected by how well AI helps to clarify tasks, whether it takes away unnecessary work, helps with competency, or improves the quality of the work results, in the context of work using AI. If employees can feel that AI is a tool they can control and not one that controls them, they are more likely to be satisfied with their jobs.

Training effectiveness

Training effectiveness is the extent to which training is effective in enabling employees to acquire transferable knowledge, skills, confidence and competence. When it comes to AI, training needs to go beyond awareness. It should be designed to make employees aware of the nature of AI systems, how to employ them, how to read the results and how to navigate the limits of human decision-making and AI suggestions. Hence, effective training acts as a capability gap between the usefulness of the AI and the job satisfaction of the employee.

Theoretical review

The article is based on the framework of the Technology Acceptance Model and Social Cognitive Theory. The Technology Acceptance Model elucidates the significance of perceived usefulness in the reactions of employees to technology. Davis (1989) states that people will be more willing to embrace and use a system when they feel it makes them more efficient. The logic is extended in this article from technology acceptance to job satisfaction – when employees think AI is useful, they're more likely to look at their work situation and experience positive outcomes. The moderating effect of the training effectiveness is based on SCT. Bandura (1986) argues that behaviour and outcomes are influenced by personal cognition and by beliefs of environmental support and capabilities. Competence and self-efficacy are improved through training. It empowers employees to go beyond simply acknowledging AI's value to using it with confidence and effectively. Both theories thus advance the thesis that the usefulness of AI enhances job satisfaction and the impact is more pronounced when the training is efficient.

Empirical review

Existing studies increasingly show that AI and digital technologies influence employee outcomes through usefulness, trust, confidence, readiness and organisational support. Studies of technology adoption consistently identify perceived usefulness as a major predictor of adoption behaviour and technology-related attitudes. AI-specific evidence also suggests that usefulness is often more influential than novelty because employees and users evaluate intelligent systems through their practical contribution to work and performance.

Evidence from Nigerian and other developing-economy contexts is especially relevant. Bolodeoku, Igbino, Salau, Chukwudi and Idia (2022) found that perceived usefulness of

Publication of the European Centre for Research Training and Development-UK technology was associated with multiple employee outcomes in Nigeria’s oil and gas sector. Ibrahim, Munscher, Daseking and Telle (2025) also highlight the importance of perceived usefulness in AI acceptance. In workplace learning literature, Noe, Clarke and Klein (2014) and Salas, Tannenbaum, Kraiger and Smith-Jentsch (2012) show that training effectiveness is central to translating workplace change into employee competence and performance. The results are in line with the rationale that training can enhance the usefulness-satisfaction relationship.

Gap in literature

While there is growing research into the use of AI, there are three gaps. Firstly, the literature tends to be centred on the adoption intention rather than on employee job satisfaction and usage behaviour or organisational performance. Secondly, Nigerian financial services are not well represented in the context of AI and work; in fact they are fast being digitised and are pertinent to economic development. Third, training effectiveness is not seriously considered to be a boundary condition, which could moderate the relationship between perceived AI usefulness and employee job satisfaction. The purpose of the article is to address these challenges by examining the moderation of the perceived usefulness-employee job satisfaction relationship with training effectiveness in a focused model.

6. Conceptual framework and hypotheses

Conceptual framework

Model element	Operational meaning in this article
Independent variable	Perceived usefulness of AI: the extent to which employees believe that AI improves job performance, productivity, accuracy and decision-making.
Dependent variable	Employee job satisfaction: employees’ positive evaluation of work experience in AI-enabled financial services workplaces.
Moderator	Training effectiveness: the extent to which AI-related training builds knowledge, skills, confidence and practical application capability.
Expected relationship	Perceived usefulness is expected to improve job satisfaction, and the relationship is expected to be stronger when training effectiveness is high.

H1: Perceived usefulness of AI has a positive and significant effect on employee job satisfaction.

H2: Training effectiveness positively moderates the relationship between perceived usefulness of AI and employee job satisfaction.

METHODOLOGY

The study adopted a quantitative cross-sectional survey design. Data were collected from employees in Nigeria's financial services sector, including commercial banks, fintech firms, insurance companies, microfinance banks and investment or asset management firms. A total of 600 questionnaires were administered, of which 478 valid responses were retained for analysis. This represented a response rate of 79.7 percent.

The focal independent variable was the perceived usefulness of AI. Employee job satisfaction was the dependent variable, while training effectiveness was the moderator. The instrument used a five-point Likert scale. The data were analysed using descriptive statistics, Pearson correlation and hierarchical regression analysis. The interaction term between perceived usefulness and training effectiveness was used to test the moderation hypothesis.

DISCUSSION OF FINDINGS

The results demonstrate the positive link between the perception of the usefulness of AI and job satisfaction among employees. This finding is in line with the Technology Acceptance Model, which states that acceptance of technology is driven more favorably by users when they feel they will benefit from the technology. In the financial services industry, the outcome indicates that staff members will feel more satisfied with AI's ability to minimise repetitive work, increase accuracy, complete tasks more quickly, and make better decisions for their businesses.

This is especially important for the moderation results. The college's perceived usefulness positively correlates with training effectiveness, which suggests that usefulness is not independent of training effectiveness. While the value that employees may be aware of is more profound when well educated and trained enough for them to use AI with confidence. This result is in line with the training research that shows that by training that is meaningful and applied, the capability of the employees is improved and transfer of learning is better. In addition, it allows a socio-technical understanding of the adoption of AI: the greater the capability development that is aligned with the implementation of AI, the larger the human impact.

The evidence could have practical implications for financial institutions. Implementing AI should be more than just software purchases or automation. There should be training for the institution which is role specific, continuous and application to the actual tasks. When employees are provided with basic or superficial training, AI benefits could have a limited impact. When train works, it is useable and employee satisfaction would be more likely to be increased.

The results are reported in two parts. First up, the correlation analysis is used to determine the direction and magnitude of the relationships between the variables of interest. Secondly, regression

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Table 1: Correlation Analysis of Focal Variables

Variable	1	2	3
1. Perceived usefulness	1.000		
2. Training effectiveness	0.474	1.000	
3. Employee job satisfaction	0.537	0.467	1.000

Note: $N = 478$. Correlations are Pearson coefficients. All reported correlations are significant at $p < 0.01$. Source: Author's calculation through SPSS output, 2026.

Table 2: Regression and Moderation Results

Model path	B	Beta	t-value	Sig.	Decision
Perceived usefulness -> Job satisfaction	0.295	0.363	10.769	0.000	Supported
Training effectiveness -> Job satisfaction	0.131	0.162	4.390	0.000	Supported
Perceived usefulness x Training effectiveness -> Job satisfaction	0.204	0.186	5.058	0.000	Supported

Note: Dependent variable = Employee job satisfaction. Source: Author's computation from SPSS output, 2026.

CONCLUSION AND RECOMMENDATIONS

This article has reviewed the perceived usefulness of AI and the employee satisfaction with the AI in Nigeria's financial services industry and how training effectiveness acts as a moderator. The findings indicate that employee job satisfaction is significantly influenced by perceived usefulness, and that the influence is enhanced by training effectiveness.

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The study suggests that financial institutions implement practical, role-specific, and ongoing AI training programs. Managers must show how AI tools have helped improve outcomes for work, offer guided practice, and after implementation, support staff. Longitudinal designs could be used in future research to investigate if the positive impact of the usefulness of AI lasts over time, as does its effectiveness for training.

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