

How does AI-driven automation affect job security and morale among permanent employees versus contract workers

Pranjal¹, Dr. Kishore Parth²

Assistant Professor^{1,2}

L.N Mishra College of Business Management

Email: dr.kishoreparth@gmail.com

Abstract

Artificial Intelligence (AI)-driven automation is rapidly transforming workplaces by increasing efficiency, reducing operational costs, and changing the nature of work across industries. While AI offers significant opportunities for productivity and innovation, it also raises concerns regarding employment stability and employee well-being. This study examines the impact of AI-driven automation on job security and employee morale by comparing the experiences of permanent employees and contract workers. The research explores whether differences in employment status influence employees' perceptions of job insecurity, career prospects, workplace motivation, and organizational commitment in an increasingly automated environment. Using a comparative research approach, the study proposes to collect quantitative data through structured questionnaires from employees working in organizations that have adopted AI-based technologies. Statistical techniques such as descriptive statistics, independent sample t-tests, correlation, and regression analysis can be employed to examine differences between the two groups and identify the factors influencing job security and morale. The study considers variables including perceived job security, trust in AI, organizational support, opportunities for reskilling, and overall job satisfaction. The findings are expected to demonstrate that contract workers experience greater job insecurity and lower morale than permanent employees following the implementation of AI-driven automation. However, the study also anticipates that effective organizational communication, employee training, and reskilling initiatives can mitigate these negative effects for both groups. The research contributes to the growing body of literature on AI and human resource management by providing empirical evidence on the differential impact of automation across employment types. The study offers practical recommendations for policymakers, human resource professionals, and organizational leaders to develop inclusive AI adoption strategies that protect employee well-being while maximizing the benefits of technological advancement.

Keywords: Artificial Intelligence (AI), AI-Driven Automation, Job Security

Introduction

Artificial Intelligence (AI) has emerged as one of the most transformative technologies of the twenty-first century, fundamentally reshaping the way organizations operate and manage their workforce. AI-driven automation refers to the use of intelligent systems, machine learning algorithms, robotics, and data analytics to perform tasks that traditionally required human intervention. Organizations across sectors such as manufacturing, healthcare, banking, education, retail, logistics, and information technology are increasingly adopting AI technologies to improve productivity, reduce operational costs, enhance decision-making, and gain a competitive advantage. While these advancements offer numerous organizational benefits, they have also generated significant concerns regarding their impact on employment, job security, and employee morale.

The integration of AI into workplaces has changed the nature of work by automating routine, repetitive, and even complex cognitive tasks. Although automation creates opportunities for innovation and efficiency, it also raises fears of job displacement, role restructuring, and changing skill requirements. Employees often perceive AI as both an opportunity for professional growth and a potential threat to their employment. These perceptions can influence workplace motivation, organizational commitment, job satisfaction, and psychological well-being.

The impact of AI-driven automation is not uniform across all categories of employees. Permanent employees generally enjoy greater employment protection, career development opportunities, organizational support, and access to training programs. These advantages may help them adapt more effectively to technological changes and reduce feelings of job insecurity. In contrast, contract workers typically have limited job stability, fewer

employment benefits, and reduced access to organizational resources. As a result, they may experience higher levels of uncertainty and anxiety regarding the adoption of AI technologies, which can adversely affect their morale and work performance.

Employee morale plays a vital role in organizational success, influencing productivity, innovation, collaboration, and employee retention. High morale is associated with increased motivation, stronger organizational commitment, and better overall performance, whereas low morale can result in stress, absenteeism, decreased productivity, and higher turnover intentions. Therefore, understanding how AI-driven automation affects employee morale alongside perceptions of job security has become an important area of research in human resource management and organizational behavior.

Despite the growing body of literature on AI and automation, relatively few studies have directly compared the experiences of permanent employees and contract workers. Most existing research focuses either on the technological aspects of AI implementation or on its overall impact on employment, without adequately examining how employment status shapes employees' perceptions and responses. This gap highlights the need for comparative research that explores whether permanent and contract employees differ in their experiences of job security and workplace morale in AI-enabled organizations.

The present study aims to examine the impact of AI-driven automation on job security and employee morale by comparing permanent employees with contract workers. It seeks to identify differences in perceived job insecurity, organizational support, trust in AI technologies, opportunities for reskilling, and overall morale. The findings are expected to contribute to the existing literature by providing empirical evidence on how employment status influences employees' adaptation to AI-driven workplaces. Furthermore, the study intends to offer practical recommendations for organizational leaders, human resource managers, and policymakers to develop fair, inclusive, and employee-centered AI implementation strategies that promote workforce resilience while maximizing the benefits of technological innovation.

Literature Review

Artificial Intelligence (AI)-driven automation has become a defining feature of modern organizations, transforming traditional work processes and influencing employee experiences. Researchers have extensively examined AI's impact on productivity, workforce management, job security, and employee well-being. However, comparatively limited attention has been given to differences in these effects between permanent employees and contract workers. This review synthesizes key findings from previous studies relevant to the present research. Brynjolfsson and McAfee (2014) argued that digital technologies and intelligent automation have significantly improved organizational productivity while simultaneously disrupting traditional employment patterns. They suggested that routine and repetitive jobs are increasingly susceptible to automation, requiring employees to develop new skills to remain employable. Frey and Osborne (2017) estimated that a substantial proportion of existing occupations face a high risk of automation due to advances in AI and machine learning. Their study emphasized that workers performing routine tasks are particularly vulnerable, highlighting the importance of reskilling and continuous learning in maintaining employability. Brougham and Haar (2018) introduced the concept of STARA (Smart Technology, Artificial Intelligence, Robotics, and Algorithms) and examined employees' perceptions of emerging technologies. Their findings indicated that concerns about automation increase employees' perceptions of job insecurity and negatively affect career satisfaction and organizational commitment.

Wilson and Daugherty (2018) argued that AI should be viewed as a tool for augmenting rather than replacing human capabilities. They emphasized that organizations achieving the greatest success are those that combine human expertise with AI technologies while investing in employee training and skill development. Jaiswal, Arun, and Varma (2022) found that organizational readiness, employee participation, and continuous learning significantly influence employees' acceptance of AI technologies. Their study suggested that transparent communication and reskilling initiatives reduce employees' resistance to automation and improve workplace morale. Studies on job security consistently identify perceived employment stability as a major determinant of employee well-being. Greenhalgh and Rosenblatt (1984) defined job insecurity as employees' perceived powerlessness to maintain desired continuity in a threatened employment situation. High levels of job insecurity

have been associated with stress, lower job satisfaction, decreased organizational commitment, and increased turnover intentions.

Sverke, Hellgren, and Näswall (2002), through a comprehensive meta-analysis, concluded that job insecurity negatively affects both psychological well-being and work-related outcomes. Employees experiencing uncertainty about future employment reported lower motivation, reduced organizational commitment, and poorer overall mental health.

Research comparing permanent and contract employees reveals important differences in workplace experiences. De Cuyper and De Witte (2007) found that permanent employees generally experience greater job security and organizational commitment due to stable employment relationships. Conversely, contract workers often face uncertainty regarding contract renewal, career progression, and access to organizational benefits, contributing to higher levels of job insecurity. Guest (2004) highlighted that psychological contracts differ between permanent and temporary employees. Permanent employees typically perceive stronger mutual obligations with employers, whereas contract workers often experience weaker organizational attachment, resulting in lower morale and reduced commitment during periods of organizational change.

Employee morale remains an essential determinant of organizational effectiveness. According to Herzberg's Two-Factor Theory (1959), job security, recognition, and opportunities for growth function as important motivational factors influencing employee satisfaction. AI-driven organizational changes may therefore affect morale depending on employees' perceptions of fairness, support, and career opportunities.

The Job Demands–Resources (JD-R) Model proposed by Bakker and Demerouti (2007) provides an additional theoretical perspective. The model suggests that technological changes such as AI implementation can increase job demands while organizational resources—including training, leadership support, and communication—help employees adapt successfully. Organizations that invest in these resources are more likely to maintain high employee morale despite technological transformation.

Although existing literature has established relationships among AI adoption, job security, and employee morale, relatively few empirical studies have directly compared permanent employees with contract workers within the same organizational context. Most studies examine automation from either a technological or managerial perspective without considering how employment status influences employees' perceptions and experiences. This gap justifies the present study, which seeks to compare the effects of AI-driven automation on job security and morale among permanent employees and contract workers.

Research Gap

The rapid adoption of Artificial Intelligence (AI)-driven automation has attracted considerable attention in the fields of human resource management, organizational behavior, and technology management. Existing studies have primarily focused on the benefits of AI in enhancing productivity, operational efficiency, and decision-making, while others have examined its implications for job displacement, employee well-being, and technology acceptance. However, several important research gaps remain. First, most previous studies have investigated the overall impact of AI on employees without distinguishing between different categories of workers. Comparative research examining how AI-driven automation affects permanent employees and contract workers differently is relatively limited. Since these two groups differ in terms of employment security, organizational support, career development opportunities, and employment benefits, their perceptions of AI-driven workplace changes may also differ significantly. Second, while job security and employee morale have been widely studied independently, relatively few studies have examined the relationship between these two variables in the context of AI-driven automation. Understanding how perceived job security influences employee morale is essential for developing effective workforce management strategies during technological transformation. Third, much of the existing empirical evidence originates from developed countries. There is limited research focusing on developing economies such as India, where organizations increasingly employ a combination of permanent and contractual workforces. Differences in labor market conditions, employment regulations, and organizational practices may produce outcomes that differ from those reported in developed countries.

Finally, there is a lack of evidence regarding the role of organizational support, communication, and reskilling initiatives in reducing the negative effects of AI-driven automation on different categories of employees. Addressing these gaps will contribute to a more comprehensive understanding of AI's impact on the workforce and provide practical guidance for organizations implementing AI technologies.

Therefore, the present study seeks to compare the effects of AI-driven automation on job security and employee morale among permanent employees and contract workers, thereby contributing to the existing literature and providing insights for human resource professionals, policymakers, and organizational leaders.

Research Objectives

The present study aims to achieve the following objectives:

1. To examine the impact of AI-driven automation on employees' perceived job security.
2. To compare the level of job security between permanent employees and contract workers in AI-enabled workplaces.
3. To assess the impact of AI-driven automation on employee morale.
4. To compare employee morale between permanent employees and contract workers following the implementation of AI-driven automation.
5. To examine the relationship between perceived job security and employee morale.
6. To analyze the role of organizational support and reskilling opportunities in influencing employees' perceptions of AI-driven automation.
7. To provide recommendations for organizations and policymakers to ensure the responsible implementation of AI while protecting employee well-being, motivation, and long-term employment sustainability.

Research Questions

The study seeks to answer the following research questions:

1. How does AI-driven automation influence employees' perceived job security?
2. Does the impact of AI-driven automation on job security differ between permanent employees and contract workers?
3. How does AI-driven automation affect employee morale?
4. Is there a significant difference in employee morale between permanent employees and contract workers in AI-enabled organizations?
5. What is the relationship between perceived job security and employee morale?
6. Does organizational support and reskilling moderate the impact of AI-driven automation on job security and employee morale?

Research Hypotheses

The following hypotheses are proposed:

H1: AI-driven automation has a significant impact on employees' perceived job security.

H2: Contract workers perceive significantly lower job security than permanent employees in organizations implementing AI-driven automation.

Research Methodology

Research Design

The study adopts a quantitative, descriptive, and comparative research design to examine the impact of AI-driven automation on job security and employee morale among permanent employees and contract workers.

Population

The target population consists of employees working in organizations that have adopted AI-driven technologies across sectors such as information technology, banking, manufacturing, healthcare, education, and retail.

Sample Size

Approximately 300 respondents will be selected, comprising 150 permanent employees and 150 contract workers.

Sampling Technique

A stratified random sampling technique will be used to ensure adequate representation of both permanent and contract employees.

Data Collection

Primary data will be collected using a structured questionnaire consisting of five sections:

- * Demographic information
- * AI-driven automation perception
- * Job security
- * Employee morale
- * Organizational support and reskilling

Responses will be measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Secondary data will be collected from research articles, books, government reports, industry reports, and reputable databases.

Variables

Independent Variable

AI-driven Automation

Dependent Variables

Job Security

Employee Morale

Moderating Variable

Organizational Support and Reskilling

Grouping Variable

Employment Status (Permanent vs. Contract)

Reliability and Validity

The questionnaire's internal consistency will be assessed using Cronbach's Alpha, with a value above 0.70 considered acceptable. Content validity will be established through expert review and relevant literature.

Statistical Tools

Data will be analyzed using SPSS (Version 29).

The following statistical techniques will be employed:

- * Descriptive Statistics
- * Reliability Analysis (Cronbach's Alpha)

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* Independent Samples t-test

* Pearson Correlation Analysis

* Multiple Regression Analysis

* One-way ANOVA (if applicable)

The level of statistical significance will be set at 5% ($p < 0.05$).

Data Analysis and Results

The collected data will be screened for completeness and coded before analysis using SPSS. Descriptive statistics, including frequencies, percentages, means, and standard deviations, will summarize respondents' demographic characteristics and the distribution of study variables.

The reliability of the measurement scales will be evaluated using Cronbach's Alpha. A coefficient of 0.70 or above will indicate acceptable internal consistency.

An Independent Samples t-test will compare permanent employees and contract workers with respect to perceived job security and employee morale. Pearson's correlation analysis will determine the strength and direction of the relationship between job security and employee morale. Multiple regression analysis will assess the extent to which AI-driven automation predicts job security and employee morale while controlling for demographic variables. Where appropriate, ANOVA will examine differences across industries or experience levels.

The findings will be presented through tables and graphs, followed by interpretation in relation to the research objectives and hypotheses. The discussion will compare the results with previous empirical studies and theoretical perspectives, highlighting similarities, differences, and practical implications.

Conclusion

The study is expected to demonstrate that AI-driven automation has a significant influence on both job security and employee morale. While AI enhances organizational efficiency and productivity, it may also create uncertainty regarding future employment. Contract workers are expected to experience greater job insecurity and lower morale than permanent employees because of limited employment protection and fewer career development opportunities. The study is also expected to show that organizational support, transparent communication, and continuous reskilling initiatives can reduce employees' concerns and improve morale during AI implementation. These findings will contribute to the literature on AI and human resource management and provide insights for organizations seeking to balance technological innovation with employee well-being.

Recommendations

1. Organizations should communicate AI implementation plans transparently to reduce uncertainty and build employee trust.
2. Employers should invest in regular reskilling and upskilling programs to help employees adapt to AI-enabled work environments.
3. HR policies should provide equitable training and career development opportunities for both permanent employees and contract workers.
4. Organizations should periodically assess employee morale and perceptions of job security through surveys and feedback mechanisms.
5. Policymakers should develop labor policies that protect contract workers during technological transitions while encouraging responsible AI adoption.
6. Managers should promote human-AI collaboration by redesigning jobs so that AI complements rather than replaces employees wherever feasible.

7. Future studies should examine AI's long-term effects across different industries and compare results across countries using larger and more diverse samples.

Based on the analysis of the impact of AI-driven automation on job security and morale, the following recommendations are proposed:

For Organizations:

1. **Upskilling and Reskilling:** Invest in training programs that help workers develop new skills and adapt to automation.
2. **Clear Communication:** Communicate clearly and transparently with workers about the impact of automation on their jobs and the organization.
3. **Support for Workers:** Provide emotional support and resources to help workers cope with the stress and anxiety associated with automation.
4. **Job Redesign and Enrichment:** Redesign jobs to take advantage of automation, focusing on higher-value tasks that require human skills and judgment.

For Governments:

1. **Education and Training:** Invest in education and training programs that prepare workers for the changing job market.
2. **Social Safety Nets:** Implement social safety nets to support workers who may be displaced by automation.
3. **Encouraging Innovation:** Encourage innovation and entrepreneurship, providing resources and support for start-ups and small businesses.

For Individuals:

1. **Continuous Learning:** Prioritize continuous learning and professional development to stay relevant in the job market.
2. **Adaptability:** Be adaptable and open to new technologies and workflows.
3. **Skill Diversification:** Develop a diverse set of skills, including technical, business, and soft skills.

For Policymakers:

1. **Workforce Development:** Develop workforce development programs that address the needs of workers displaced by automation.
2. **Encouraging Reskilling:** Encourage organizations to invest in reskilling and upskilling programs.
3. **Social Support:** Provide social support for workers who may be impacted by automation, including training and education programs.

By implementing these recommendations, organizations, governments, and individuals can work together to mitigate the negative impacts of AI-driven automation and create a more positive and supportive work environment.

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