Scholar Journal of Commerce and Management
Vol. 02, Issue. 01, pp. 66 - 72, Jan - Mar 2026

SIP Scholar India Publishers

A STUDY OF JOB DISPLACEMENT DUE TO THE ADVANCEMENT OF AI IN BUSINESS ORGANIZATIONS

Komal Kumari Sharma D*[1], Kavya S L[2], Pavithra M C[2]

1. Faculty, Ethiraj College for Women, Chennai, Tamil Nadu, India
2. Student, Ethiraj College for Women, Chennai, Tamil Nadu, India

Abstract

Artificial Intelligence (AI) has become a major change driver in today's business organizations. The technological progress has also led to job displacement, particularly in roles involving routine, repetitive, and administrative tasks. The purpose of the research is to find the relationship between AI and the various factors like skill gap, technological Advancement, economic and organizational factors, government and policy factors, social and psychological factors in job displacement due to AI in business organization. In this study 364 respondents are collected through quantitative sampling method. Reliability test based on overall weighted mean, T- test, Anova and was performed to test the factors influencing job displacement. The study also examines whether there exists any relationship between demographics and job displacement through One Way ANOVA and t-test. The study also signifies that there is a significant difference in the job displacement of different age group, occupation and income of individuals. The adoption of AI may influence the relationships and teamwork in the workplace. This may lead to reduced creativity in some aspects. Hence, there is a possibility for AI to displace more jobs in the business organization in the future.

Keywords

Artificial Intelligence, AI In Job Displacement, Business Organization, AI Adoption, Workforce Automation, Technological Advancement

1. Introduction

As artificial intelligence evolves quickly it is changing business organizations around the world. Artificial intelligence is making many things easier by streamlining processes improving decision-making and making things more efficient. This is happening in areas, such as using predictive analytics in finance, chatbots in customer service and robotic process automation in manufacturing. By 2025 artificial intelligence is expected to make businesses 40% more productive according to the McKinsey Global Institute in 2017. However artificial intelligence also affects people in ways. Many employees are feeling unhappy because their skills are becoming outdated their roles are no longer. They are worried about losing their jobs.

Artificial intelligence systems, like GPT models and machine learning algorithms are taking over tasks that're repetitive and even tasks that are complex. A survey by Gallup in 2024 found that 35% of workers who use intelligence in their jobs are unhappy with automation. This unhappiness can lead to people feeling burned out having morale and being more likely to leave their jobs with a 25% increase in people wanting to leave. Nowadays it is common for humans and artificial intelligence to work in many workplaces and this is a threat to the

*Corresponding author: komalsharmad8921@gmail.com

culture of organizations and can affect how well they perform in the long run.

In this study we are looking at the problems that artificial intelligence is causing for jobs, such as what happens when people lose their skills, issues and the need, for retraining. We are talking to workers in settings to find patterns and solutions that business leaders can use to make things better. Our goal is to make it easier for humans and artificial intelligence to work together so that everyone can be happy and healthy.

2. Review of Literature

Nirupama Shankar Babu T et al. (2024) conducted a study on "The Impact of Artificial Intelligence in the Workplace and its Effect on the Digital Wellbeing of Employees." This study was intended to explore how "The impact of AI in work environments has significantly affected digital wellbeing, productivity, and mental health at work among employees. It addressed the duality involved in AI technology, with emphasis on both positive and negative implications at work. AI technology, with its implications at work, has been at the center with its positive impact on work. There is documentation on methodology in terms of study design, data gathering procedures, sampling, and data analysis methods. Secondly, data is gathered through structural survey methods.

Yossi Sheffi's (2024) conducted a study on "Technology Is Not Enough: Potential job displacement in an AI-driven future". In this research, Yossi investigates the impact of increasingly available AI technologies on future job markets and their changes. The methodology relies on concepts and secondary sources. Yossi repeatedly underscored that changes and preparations through education and adequate institutions are mandatory to avoid mass job dislocation. According to him, to overcome this challenge, preparation through education and proper institutions is required to effectively address changes and shifts to an AI-driven work environment: "If we don't change, we'll see job displacement."

Raj Prasad et al. (2024) conducted a study titled "AI Tools Impact and Jobs Displacement" This study analysed the impact of AI automation and augmentation on job roles in different sectors. This descriptive and analytical research study utilizes secondary data and uses various AI tools like Gamma, Merlin, Bard, and Formula Dog to understand the automation of tasks or the use of AI in assisting humans in making decisions. The study also compared AI developments with technological advancements to understand the challenges and solutions.AI makes work more efficient and productive. It also raises concerns about job loss and worker readiness. The study emphasized the need for workers to learn skills, good policies and organizational efforts to deal with changes in AI-driven work environments.

Abhishek Pandey and Sachin Kumar (2024) conducted a study on "AI's Effect on Employment Displacement and the Future of Work" aiming to analyse how AI-driven automation is reshaping workforce patterns in major industries. They agreed with Frey and Osbornes 2017 finding that routine and predictable jobs are more likely to be automated. The authors also noted that as found by OECD in 2019 and World Economic Forum in 2020 industries like manufacturing, finance, healthcare, retail and logistics are quickly adopting AI. This fast adoption leads to job displacement in low-skill roles. Creates more high-skill and AI-related jobs. However, the authors stressed that workers lacking skills face higher employment risks. The study suggested policy measures like reskilling, income support and ethical AI regulations to make transitions smoother. Overall, the study said that planning is crucial in balancing progress, with long-term employment stability. transitions smoother. Overall, this study suggested that planning is instrumental in balancing technological progress with long-term employment stability.

Dimitar Kolev and Ivan Petkov (2024) conducted a study on "The Impact of AI and Automation on Job Displacement" This research aimed to examine the impact of increased automation on employment patterns in the global economy. According to their research, though AI may enable increased

productivity, challenges to job displacement in many industries also arise. The research uses theoretical principles aided by statistics to investigate task automation, skill displacement, labour market dynamics, job polarization, and disparities in incomes. This study helps to demonstrate an understanding of the ever-changing labour market patterns and the need to address challenges through deliberate approaches to mitigate the effects of advancement on jobs. The research tries to explain the challenge of increased automation on job displacement through several contextual reasons. According to the research, increased automation has led to workforce realignment in many industries.

Ayesha Ansari and Asna Ansari (2024) conducted a study titled "Consequences of AI-Induced Job Displacement" with the objective of understanding how the adoption of AI technologies affects employment, specifically within the pharmaceutical industry. The Study explains that although AI brings positive advancements, it also raises concerns about job security due to its potential to replace human roles. The researchers targeted employees from pharma industries, using a calculated sample size of 245 respondents to examine workforce perceptions and the consequences of AI-driven job displacement. The study concludes that organizations planning to incorporate AI must prioritize workforce training and skill development to prevent excessive dependence on AI systems, as lack of preparedness may lead to operational challenges and reduced human contribution. The study highlights the need for proactive skill-building to balance AI integration with sustainable employment practices.

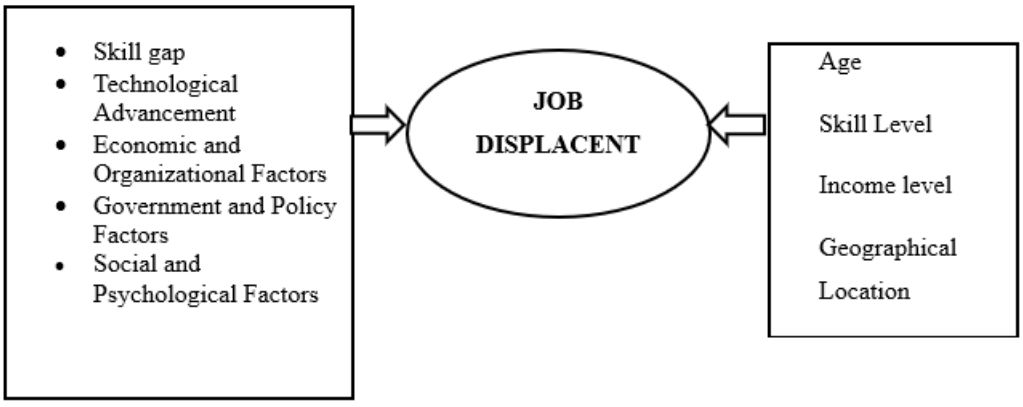
3. Objectives

- To understand the concept of job displacement due to AI in business
- To analyze the challenges faced by employees displaced by AI
- To examine the impact of AI on employment opportunities

4. Need For The Study

- To identify factors causing job dissatisfaction due to AI in business organizations
- The research will give methods through which human-AI hybrid models create new roles that are meaningful
- To understand human impact beyond job losses for sustainable AI adoption

Figure 1. Factors Affecting Economic Growth



5. Research Methodology

The framework (fig.1) shows the relationship between independent variables and dependent variable of the study. Job Displacement is the dependent variable and the following factors are taken as independent variables - Skill gap, technological advancement, economic and organizational factors, government and policy factors, and social and

psychological factors. In addition to these factors, the study also examines the demographic characteristics of the respondents such as age, skill level, income level, and geographical location, to understand how these variables relate to perceptions of job displacement. The study was proposed to find the impact of AI on employment opportunities. All the factors were measured using a 5-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree".

The primary data in this study were collected using questionnaires. Using Google Forms structured questionnaire was designed and shared on a social media application. Three hundred and sixty-four people have completed the survey. In order to find secondary data, information was collected from research publications from websites such as Google Scholar, Research Gate, and others. The sampling method that was used in this study was convenience sampling. The collected data were analysed by using a software program called the Statistical Package for Social Science (SPSS)

6. Limitations

Results only reflect the respondents across Tamil Nadu; hence the results could differ across industries, regions, job roles, and company sizes. The project was designed on a belief that the information provided by the respondents are fair. For our study, we have limited to five factors only, but there are many factors that lead to job dissatisfaction due to the advancement of AI in business.

7. Data Analysis and Interpretation

A survey was conducted amongst the consumers whose responses were collected and analysed. The respondents were classified on the basis of age, gender, education, occupation, and Monthly Family Income. The following table shows the classification of the respondents based on age, gender, education, occupation, and Monthly Family Income.

Table 1. Demographic Profile of the Respondents

S.No	*Demographic Variables*	*Category*	*Frequency (N=364)*	*Percentage 100%*
1.	Age	Below 20	312	86.4
		21- 25	33	9.1
		26 - 30	5	1.4
		Above 30	11	3
2.	Gender	Female	336	92.8
		Male	26	7.2
3.	Education	Undergraduate	337	93.1
		Postgraduate	16	4.4
		Diploma	3	0.8
		Professional Degree	4	1.1
		Others	2	0.6
4.	Occupation	Student	331	91.4
		Private employee	19	5.2
		Government employee	3	0.8
		Professional	5	1.4
		Others	4	1.1

5.	Monthly Family Income	Below Rs.30000	103	29.3
		Rs.30000 - Rs.50000	58	16.5
		Rs.50000 - Rs.80000	46	13.1
		Rs.80000 - Rs.120000	67	19.1
		Above Rs.120000	77	21.9

Source: Primary Data

- The demographic profile of the respondents shows that the majority of participants were below 20 years of age (86.4%).
- In terms of gender, female respondents constituted the highest proportion (92.8%) compared to males.
- Regarding educational qualification, most respondents were undergraduates (93.1%).
- With respect to occupation, the majority of the participants were students (91.4%).
- From the Monthly Family Income data, the highest percentage is 29.3% (Below Rs. 30,000)

Table 2. Specific Demographics of the Respondents

No	*Demographic Variables*	*Category*	*Frequency (N=364)*	*Percentage 100%*
1.	Do you think AI will create new job opportunities in the future?	Yes, definitely	107	29.7
		Probably yes	95	26.4
		Not sure	123	34.2
		Probably not	22	6.1
		Definitely not	13	3.6

Source: Primary Data

From the above table, it can be inferred that 34.2% of the respondents are not sure whether AI will create new job opportunities in the future. This is followed by 29.7% of respondents who definitely believe that AI will create new job opportunities, and 26.4% who probably believe so. Meanwhile, 6.1% of respondents probably do not think AI will create new jobs, and only 3.6% of respondents definitely do not believe that AI will create new job opportunities. This indicates that the majority of respondents have a positive or uncertain perception regarding AI creating future employment opportunities.

Table 3. Reliability Test Based On Cronbach's Alpha

Factors	*No. of Items*	*Cronbach's Alpha Score*
Overall Reliability Score	18	0.843

Source: Primary Data

The Cronbach's score for the factors is more than 0.6 and the overall Cronbach Alpha score is 0.843 and it indicates that the questionnaire is reliable.

Table 4. Summary of the Factors of the Study

S.No	*Factors*	*Weighted Mean*	*Standard Deviation*
1	Skill Gap	2.07	0.59
2	Technological Advancement	1.96	0.63

3	Economic And Organisational	2.07	0.60
4	Government And Policy	2.09	0.60
5	Social And Psychological	2.00	0.59

Source: Primary Data

From the above table, it can be inferred that government policy has the highest weighted mean of 2.09 followed by skill gap and economical & organizational factors of 2.07. And it is also inferred that technological advancement has the highest standard deviation of 0.63, followed by economic & organization and government & policy factors of 0.60.

Table 5. Factors of The Study Based on Gender: T-Test

S.No	*Factors*	*T*	*Sig (2 Tailed)*
1	Skill Gap	-0.574	0.566(Ns)
2	Technological Advancement	-0.776	0.438(Ns)
3	Economic And Organisational	-2.558	0.011(S)
4	Government And Policy	-0.64	0.949(Ns)
5	Social And Psychological	-1.196	0.232(Ns)

Source: Primary Data

The independent sample t test was conducted to evaluate null hypothesis. The P value is greater than 0.05 (P> 0.05) which means that we accept null hypothesis. There is no significant difference between the gender and the factors influence job displacement.

Table 6. Factors of Study Based On Age (ANOVA)

Factors		*Sum of Squares*	*Df*	*Mean Square*	*F*	*Sig.*
Skill Gap	Between Groups	1.173	4	.293	.731	.571*(NS)
	Within Groups	144.110	359	.401		
	Total	145.283	363			
Technological Advancement	Between Groups	.939	4	.235	.514	.725*(NS)
	Within Groups	163.962	359	.457		
	Total	164.901	363			
Economic And Organizational Factors	Between Groups	.460	4	.115	.259	.904*(NS)
	Within Groups	159.650	359	.445		
	Total	160.110	363			
Government And Policy Factors	Between Groups	1.104	4	.276	.586	.673*(NS)
	Within Groups	169.255	359	.471		
	Total	170.360	363			
Social And Psychological Factors	Between Groups	1.187	4	.297	.712	.584*(NS)
	Within Groups	149.635	359	.417		
	Total	150.821	363			

Source: Primary Data

Note: *Denotes significance at 5%

One way analysis of variance was conducted to evaluate null hypothesis. From the above table it is

inferred that F value is not significant @ 5% level of significant. The P value is greater than (P> 0.05) which means that we accept null hypothesis. There is no significant difference between the age and the factors influence job displacement in Tamil Nadu.

8. Findings and Conclusion

The study concludes that Artificial Intelligence is really changing the way businesses work. Artificial Intelligence has the potential to do tasks that we do over and again which makes things more efficient but it can also mean that some people will lose their jobs. Governments, schools and businesses should work together to get people ready, for the technology that is coming. In general, the future of work in business organisations will probably involve people and AI working together instead of one replacing the other. AI can help workers by taking care of tasks that are repetitive and require a lot of data, which lets them focus more on strategic thinking, creativity, innovation, and making important decisions. Organisations can be more productive and efficient when people and machines work together. AI can make business operations more efficient and accurate. AI systems can quickly look at a lot of data, which helps businesses make decisions more quickly and with more information. This can boost productivity and help businesses stay competitive in a tech world that changes quickly. The adoption of AI may influence the relationships and teamwork in the workplace. This may lead to reduced creativity in some aspects. Hence, there is a possibility for AI to displace more jobs in the business organization in the future.

Reference

[1] Tiwari, R., Babu, N. S., Marda, K., Mishra, A., Bhattar, S., & Ahluwalia, A. (2024). The impact of artificial intelligence in the workplace and its effect on the digital wellbeing of employees. International Journal Of Progressive Research In Engineering Management And Science (IJPREMS), 4(6), 2422-2427.

[2] Sheffi, Y. (2024). Technology is not enough: Potential job displacement in an AI-driven future. Journal of Supply Chain Management, Logistics and Procurement, 6(4), 338-351.

[3] Prasad, R., Yadav, L., & Deharkar, A. AI Tools Impact and Jobs Displacement.

[4] Pandey, A., & Kumar, S. (2024). AI's Effect on Employment Displacement and the Future of Work. Knowledgeable Research A Multidisciplinary Journal, 3(03), 43-55.

[5] Kolev, D., & Petkov, I. The Impact of AI and Automation on Job Displacement.

[6] Ansari, A., & Ansari, A. (2024). Consequences of AI Induced Job Displacement. International Journal of Business, Analytics, and Technology, 2(1), 4-19.