A Study About AI Reshaping Employment And Its Impact On The IT Industries

*Dissertation submitted to **MAHATMA GANDHI UNIVERSITY, KOTTAYAM***

In partial fulfilment of the requirement for the degree of

BACHELOR OF COMMERCE

Submitted by,

Aida Shynu(210021069214)

Helna Benadict(210021069226)

Krishnapriya K M(210021069268)

Under the supervision of

Dr. Ponny Joseph

Head Of The Department

School Of Commerce And Management Studies

BHARATA MATA COLLEGE,THRIKKAKARA,KOCHI

2021-2024

BHARATA MATA COLLEGE

School of Commerce and Management studies

<u>**BONAFIDE**</u> <u>**CERTIFICATE**</u>

This is to certify that the dissertation entitled, "**A STUDY ABOUT AI RESHAPING EMPLOYMENT AND ITS IMPACT ON THE IT INDUSTRIES**", is a bonafide research work carried out by AIDA SHYNU, HELNA BENADICT and KRISHNAPRIYA K M, in partial fulfilment of the requirement for the three years Bachelor of degree in Commerce during the academic year 2021 – 2024.

Signature of the HOD   Signature of the Supervising Teacher

Dr. Ponny Joseph   **Dr. Ponny Joseph**

Assistant Professor   Assistant Professor (HOD)

School of commerce and management studies

Place : Thrikkakara

Date:

Name & Signature of the External Examiner

DECLARATION

We, AIDA SHYNU, HELNA BENADICT and KRISHNAPRIYA K M B.com final year students, school commerce and management studies , Bharata Mata College, Thrikkakara, hereby declare that the dissertation submitted for the award of bachelor's degree is our original work. We further declare that the said work has not previously been submitted to any other university or academic body.

Aida Shynu (210021069214)

Helna Benadict (210021069226)

Krishnapriya K M (210021069268)

Place : Thrikkakara

Date :

ACKNOWLEDGEMENT

In preparation of this dissertation **"A Study About AI Reshaping Employment And Its Impact On The IT Industries"** We received valuable guidance and encouragement from many quarters. We take this opportunity to thank them all. Firstly, we thank the god almighty for showering his bountiful blessings without which we would not have completed this dissertation successfully.

We extend our heartfelt gratitude to our supervising teacher **Dr. Ponny Joseph**, Head of the Department of Commerce, and Assistant Professor at the School of Commerce and Management Studies, for her invaluable guidance and unwavering support throughout the preparation of our dissertation report. Additionally, we express our appreciation to the esteemed faculty members of Bharata Mata College, Thrikkakara, for their assistance and encouragement during this dissertation.

We are extremely indebted to our parents and friends for their encouragement given to our task of preparing the dissertation report. We again extend our whole sincerity to all those who have directly and indirectly helped us during the course of our work.

Aida Shynu

Helna Benadict

Krishnapriya K M

List of contents

List of tables

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

"The rise of powerful AI will either be the best or the worst thing ever to happen to humanity"

-Stephen Hawking

Artificial Intelligence has emerged as a disruptive force reshaping the landscape of employment across various industries. This groundbreaking technology's integration into workplaces is not only revolutionising how tasks are performed but also fundamentally altering the nature of jobs and the workforce. The emergence of AI has resulted in a range of changes, from the automation of mundane and repetitive tasks to the enhancement of human capacities in areas such as decision-making, problem-solving, creative and artistic jobs.

On one hand, there are concerns about job displacement and the potential erosion of traditional roles due to AI's ability to automate certain tasks. Jobs in manufacturing, customer service, data entry, and more could be replaced by AI-powered systems and algorithms.

On the other hand, the emergence of AI has also created new possibilities for the workforce. It requires a shift in skills, emphasising the importance of uniquely human capabilities that AI cannot replicate, such as creativity, emotional intelligence, critical thinking, and complex problem-solving. This shift highlights the need for businesses to offer training programs to help employees to learn how to work well with AI tools, upskilling and reskilling their ability to collaborate effectively. In consideration of the continuous progress in AI, it is crucial to study the effects it has on employment .

 This study aims to understand how AI affects jobs in the IT industry. It covers challenges, opportunities, and ethics in the IT industry. By analysing this, the goal is to understand the transformative landscape of employment in the era of AI technology in the IT industry.

1.2 STATEMENT OF THE PROBLEM

Artificial intelligence is rapidly evolving and transforming industries, with the IT sector at the forefront. While AI promises increased efficiency, automation, and productivity, it also raises concerns about its impact on employment. The problem at hand revolves around the potential displacement of traditional IT roles, identifying new skill requirements, and assessing the consequences faced by employees due to AI implementation. This research aims to explore the complex relationship between AI and employment within the IT industry.

1.3 OBJECTIVES OF THE STUDY

The major objectives of this study are:

- To examine the impact of AI adoption in the IT industry
- To investigate instances of job displacement caused by AI technologies.
- To Assess the adaptability of the current workforce to AI driven changes.

1.4 SCOPE OF THE STUDY

The study is limited to checking the performance of IT professionals after the emergence of AI who works in Ernakulam district . This data will help us understand the varied perception of IT professionals to implement AI technology, the challenges faced by them etc. which will be more beneficial in the future research.

1.5 RESEARCH METHODOLOGY

TOOLS FOR DATA COLLECTION

- PRIMARY DATA
  The primary data is collected through questionnaire methods. Questionnaires were distributed to the IT professionals in Ernakulam district .

- SECONDARY DATA
  The secondary data is collected through the internet , books, journals etc.

1.6 SAMPLE DESIGN

- SAMPLE SIZE
  The sample size taken for the study is 50 and it represents the number of respondents.

- SAMPLING TECHNIQUE
  Sample for the study is selected through convenience sampling.

- STATISTICAL TOOL
  Statistical tools like percentage method , pie chart, bar diagram etc. are used for analysing and interpreting the data.

1.7 LIMITATIONS OF THE STUDY

- The data was collected from only one type of respondents that is the IT professionals. So, the results of the study cannot be generalised.

- The study is done on the IT professionals of Ernakulam district only ; thus, if the data is collected from various states or countries, it can give better comparative results to understand everybody's perspective.

1.8 CHAPTERISATION

- Chapter 1

  It deals with introduction to the topic ,statement of the problem, objectives, scope, methodology, limitations etc.

- Chapter 2

  The second chapter deals with the review of literature done by other researchers and theoretical framework on AI and its impact on the IT industry.

- Chapter 3

  The fourth chapter deals with the analysis and interpretation of data collected from IT professionals.

- Chapter 4

  The fifth chapter deals with the findings and suggestions we made after the analysis and interpretation of the data.

CHAPTER 2
REVIEW OF LITERATURE

A literature review is a report that evaluates data from the literature in your area of interest. This literature should be described, summed up, assessed, and explained in the review. This needs to give the study's theoretical foundation and assist in defining its scope.

Previous Studies

1. **Grace Su (2004)** article "Unemployment in the AI Age" contemplates the profound impact of artificial intelligence on employment. Referencing Voltaire's assertion on the significance of work, Su highlights the looming challenge of AI potentially displacing human jobs, leading to social unrest. The article anticipates unemployment to emerge as a primary societal concern before ethical dilemmas surrounding AI are adequately addressed.

2. **Wei-wen Vera Chang (2020)** article, "Labour Displacement in Artificial Intelligence Era: A Systematic Literature Review," examines the impact of AI on labour displacement. It highlights the growing concern regarding AI's potential to surpass human capabilities, leading to job displacement across various industries. The review encompasses diverse scholarly perspectives—optimistic, pessimistic, and neutral—on AI's impact on labour, concluding that AI's evolution relies on human guidance for beneficial societal outcomes.

3. **Suparna Karmakar and Anita Hammer's(2019)** chapter, "Work and Employment in the Times of Automation and Artificial Intelligence: The Indian Case," discusses the impact of technology-driven productivity on work structures, specifically focusing on automation and AI in populous developing nations like India and China. The chapter highlights the transformative nature of AI and advanced robotics in the labour market, prompting the need for tailored public policies to ensure a positive societal impact amidst concerns of potential job disruptions.

4. **Arunava Narayan Mukherjee's (2022)** paper, "Application of Artificial Intelligence: Benefits and Limitations for Human Potential and Labor-Intensive Economy – An Empirical Investigation into Pandemic-Ridden Indian Industry," investigates the usage and implications of AI in modern organisations, focusing on the evolving nature of future jobs and its impact on the Indian economy, particularly the job market. The qualitative study involves interviews with senior professionals across various sectors, aiming to understand how AI is utilised and its coexistence with human intelligence in the labour-intensive Indian context

5. **Judith Clifton, Amy Glasmeier, and Mia Gray's (2020)** article, "When Machines Think for Us: The Consequences for Work and Place," delves into the intricate relationship between technology and work, particularly focusing on the evolving impact of Artificial Intelligence (AI). The article examines the widespread discussions and debates regarding AI's potential effects on labour displacement, work structure, and operational frameworks. It stresses the complexity of AI's influence on work, emphasising that while concerns about labour displacement persist, the actual impact of AI adoption remains uncertain and might be overestimated presently. The article highlights the uneven consequences of AI on work, contingent upon diverse factors such as location, economic activities, education levels, and gender, concluding by exploring AI's potential impacts on various social, geographic, and governmental outcomes.

6. **Yulin Liu, Xiangtao Meng, and Anqi Li** examine AI's ethical implications on job displacement. It discusses AI's impact on employment, explores challenges and solutions, and addresses cognitive biases in public responses. The paper advocates for a cautious approach, emphasising protection for vulnerable groups and government-led training initiatives.

7. **Chetan Sachdeva**'s paper, "AI Can Lead to Job Displacement," delves into the impact of artificial intelligence (AI) on work displacement and its societal implications. Exploring theoretical perspectives alongside

7

empirical evidence and case studies from various industries, the paper scrutinises the real-world effects of AI on employment. It also discusses broader societal implications like income inequality and social stability, emphasising the need for proactive strategies such as retraining programs and ethical considerations to navigate the evolving job market shaped by AI. The paper concludes by stressing the importance of ongoing research and adaptation to ensure a smooth transition in the workforce affected by AI.

8. **Rudra Tiwari**'s research paper, "The Impact of AI and Machine Learning on Job Displacement and Employment Opportunities," explores the implications of AI and machine learning on the job market. It delves into potential job displacement due to these technologies while highlighting the prospects of new employment opportunities in AI-related fields. The study suggests strategies for governments and organisations to mitigate negative impacts and foster growth in AI-related job opportunities. Overall, the paper underscores the potential for new employment opportunities outweighing the potential negative impacts of job displacement caused by AI and machine learning.

9. **Anjum Razzaque** (2021) reviews the intersection of AI and IT governance, noting the limited research in this area. The study evaluates existing literature, emphasising the importance of understanding the reciprocal influence of AI and IT governance. It highlights the scarcity of research in this domain and proposes future research agendas to explore its significance in shaping financial performance.

10. **George Lazaroiu and Elżbieta Rogalska(2023)** in Oeconomia Copernicana examine how generative AI affects job displacement and productivity. They discuss AI's ability to automate creative tasks, redefine job roles with synthetic media, and leverage real-time data for decision-making. The article emphasises machine autonomy via deep learning and augmented reality, boosting productivity in factories.

11. **Donna Ogle**'s paper presented at the **2018** IEEE Technology and Engineering Management Conference discusses the concerns regarding technological job loss due to the rise of computer technology and artificial intelligence (AI). Highlighting the emergence of machine learning and its potential impact on job displacement, the paper aims to address the management challenges associated with this potential transition in employment.

12. **Hunt, Sarkar, and Warhurst (2020)** study the impact of AI on jobs using a unique UK business leader survey. Unlike prior research, they provide descriptive insights into AI adoption's effects on job dynamics within organisations. They propose future research directions based on this approach.

13. **Shaji George, Hovan George, and Gabrio Martin**'s survey **(2023)** AI's impact on jobs across sectors, including ChatGPT. They highlight benefits like productivity and innovation, alongside concerns such as job displacement and ethical issues. The survey also explores future work implications, stressing the importance of reskilling, upskilling, and policy interventions.

14. In their survey paper, **Philippe Aghion, Céline Antonin, and Simon Bunel (2019)** examine AI's impact on growth and employment, stressing the role of policies. They find that AI can boost growth but may hinder it without proper competition policy. Their analysis suggests that robotization negatively affects employment, especially for non-educated workers, underlining the need for appropriate labour market and education policies.

References

1. Grace Su (2004) article "Unemployment in the AI Age"
2. Wei-wen Vera Chang (2020) article, "Labour Displacement in Artificial Intelligence Era: A Systematic Literature Review,"
3. Suparna Karmakar and Anita Hammer's(2019) chapter, "Work and Employment in the Times of Automation and Artificial Intelligence: The Indian Case,"
4. Arunava Narayan Mukherjee's (20"Application of Artificial Intelligence: Benefits and Limitations for Human Potential and Labor-Intensive Economy– An Empirical Investigation into Pandemic-Ridden Indian Industry,"
5. Judith Clifton, Amy Glasmeier, and Mia Gray's (2020) article, "When Machines Think for Us: The Consequences for Work and Place,"
6. Yulin Liu, Xiangtao Meng, and Anqi Li's paper, "AI's Ethical Implications: Job Displacement,"
7. Chetan Sachdeva's paper, "AI Can Lead to Job Displacement,"
8. Rudra Tiwari's research paper, "The Impact of AI and Machine Learning on Job Displacement and Employment Opportunities,"
9. Anjum Razzaque's review titled 'Artificial Intelligence and IT Governance"
10. George Lazaroiu and Elżbieta Rogalska's article (2023) in Oeconomia Copernicana, "How Generative Artificial Intelligence Technologies Shape Partial Job Displacement and Labor Productivity Growth,"
11. Donna Ogle 2018 technological job loss due to the rise of computer technology and artificial intelligence (AI)
12. Wil Hunt, Sudipa Sarkar, and Chris Warhurst, (2020) AI on jobs at the organisational level
13. Shaji George, Hovan George, and Gabrio Martin's survey (2023) AI's impact, on jobs and employment across diverse sectors
14. Philippe Aghion, Céline Antonin, and Simon Bunel (2019) Artificial intelligence ,Growth and Employment

THEORETICAL FRAMEWORK

In examining the impact of AI on employment within the IT industry, this research explores the fundamental shifts in workforce dynamics driven by the adoption of artificial intelligence technologies. It delves into the transformation of job roles and employment structures, considering how AI-driven automation leads to the displacement of routine tasks while creating new opportunities for specialised skills. Furthermore, it investigates the evolving relationship between human workers and AI systems within organisational contexts, analysing the implications for job design, skill requirements, and workplace dynamics.

 The study explores the socio-economic consequences of AI adoption on employment patterns, including issues of job displacement, income inequality, and labour market participation. Moreover, it considers the role of government policies, industry initiatives, and organisational strategies in mitigating potential negative impacts and facilitating a smooth transition to the AI-powered workforce of the future. Finally, the research addresses ethical considerations surrounding AI deployment in the IT industry, including concerns related to privacy, fairness, and the ethical use of AI in decision-making processes, aiming to ensure a responsible and sustainable integration of AI technologies into the workplace.

1. Features

1. AI technologies can mimic human thought processes, including reasoning, problem-solving, and decision-making, expanding the capabilities of IT systems in complex scenarios.
2. AI enables the automation of repetitive tasks and processes, reducing manual intervention and increasing efficiency.
3. AI systems can learn from data and improve over time without explicit programming, enabling tasks such as image recognition, anomaly detection, and recommendation systems.
4. AI-powered algorithms can analyse data to predict trends, outcomes, and potential issues, aiding in decision-making and planning

2. Advantages

1. AI technologies can automate repetitive tasks, optimise workflows, and streamline processes, leading to greater efficiency in software development, system maintenance, and other IT operations.
2. By automating routine tasks AI implementation can reduce workloads and allow IT employees to achieve a better work-life balance, leading to increased job satisfaction and well-being.
3. The implementation of AI often necessitates upskilling and reskilling efforts, providing IT employees with opportunities to learn new technologies and expand their skill sets, enhancing their career prospects.
4. AI adoption drives IT innovation, empowering employees to contribute to cutting-edge projects, develop new technologies, and advance in dynamic career paths.

3. Disadvantages

1. AI adoption may automate human tasks, leading to job displacement and potential unemployment as roles become redundant.
2. AI in IT raises ethical issues like privacy, bias, and accountability, causing societal mistrust and regulatory challenges.
3. AI implementation demands specialised skills, creating skill gaps among IT professionals and requiring ongoing training to adapt to evolving technology.
4. Over-reliance on AI systems in IT operations can lead to vulnerabilities, system failures, and disruptions, posing risks to business continuity and data security.
5. AI infrastructure implementation is costly and resource-intensive, demanding significant investments in hardware, software, and skilled personnel, with uncertain immediate returns.

CHAPTER - 3

DATA ANALYSIS AND INTERPRETATION

# DATA ANALYSIS AND INTERPRETATION

Any research project must include data analysis and interpretation. The analysis and interpretation of data collected from IT employees are the topics covered in this chapter. Tables and diagrams were used to present the data once they had been analysed. Inferences were later made based on the interpretations of the acquired data in order to provide answers to the questions of the study.

The analysis and interpretation of data collected regarding "**A Study About AI Reshaping Employment And Its Impact On The IT Industries**"

3.1 Age of the Respondents

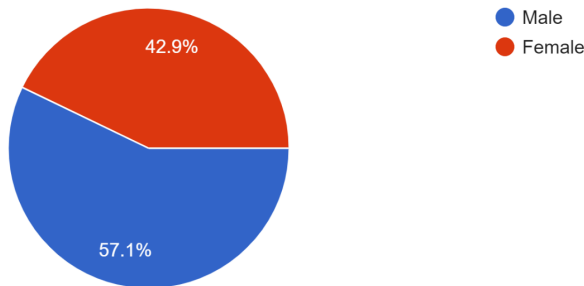| Age	No of Respondents
20-25	31
25-30	10
30-35	6
Above 35	4

1. Age

50 responses
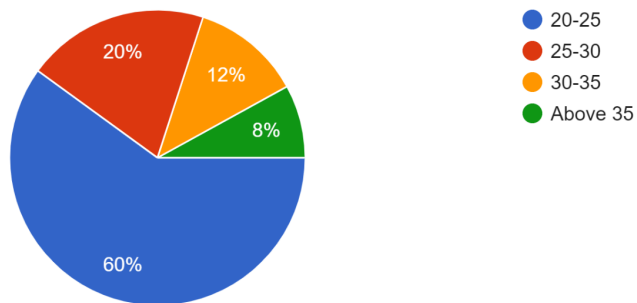
INTERPRETATIONS:

Out of 50 respondents, 60% are in the age group 20-25, 20% under 25-30, 12% under 30-35 and 8% respondents above 35 category.

3.2 Gender of Respondents

Gender	Number of respondents
Male	28
Female	21
Anonymous	1
Total	50

2. Gender

49 responses

● Male
● Female

42.9%

57.1%

INTERPRETATIONS:

 From the above graph we can see that the majority of the respondents were males. They contributed up to 57.1% of total respondents.While females were only 42.9% of total respondents.

3.3 Years of Experience

Years of experience	No of respondents
0-3	19
4-6	22
7-10	7
Above 10	3

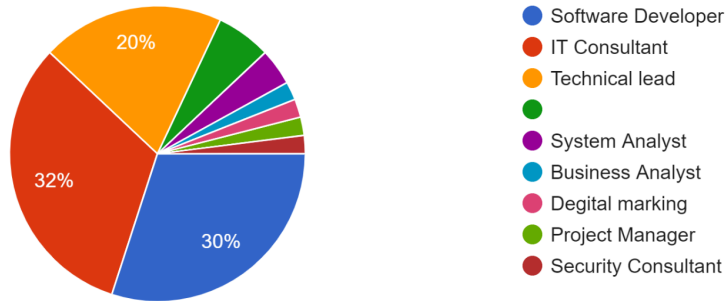3. How many years of work experience do you have in the IT field

50 responses
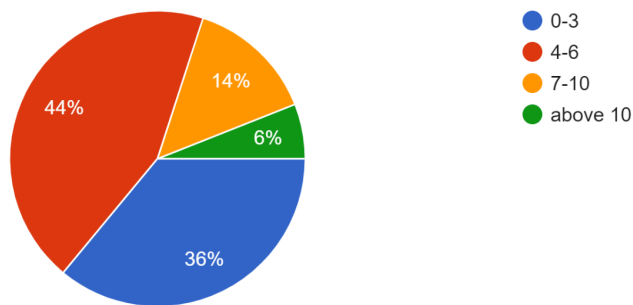
INTERPRETATIONS :

Out of 50 respondents, 44% of the respondents have a work experience of 4-6 years. 36% of the respondents have work experience of 0-3 years. Rest of the respondents have work experience above 7 years.

3.4 Designations of the Respondents

4. What is your designation in the company
50 responses

Legend:
- Software Developer
- IT Consultant
- Technical lead
- System Analyst
- Business Analyst
- Degital marking
- Project Manager
- Security Consultant

3.5 Adaptability of Workforce to AI Softwares and Tools

6. Are you comfortable adapting to new software or tools introduced in workplace, especially those related to AI
50 responses

Legend:
- Strongly agree
- Agree
- Netural
- Disagree
- Strongly disagree
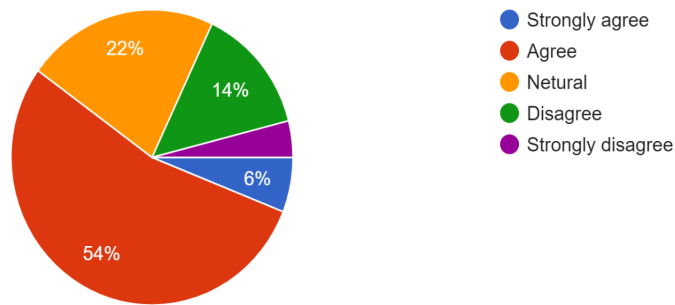
INTERPRETATIONS :

54% of the respondents are comfortable in adapting to AI softwares and tools. 14% of the respondents are not willing to adapt to AI technologies. 22% of the respondents have a neutral opinion.

3.6 AI's Impact on Job Displacement

7. How has artificial intelligence impacted the IT industry regarding job displacement?

50 responses
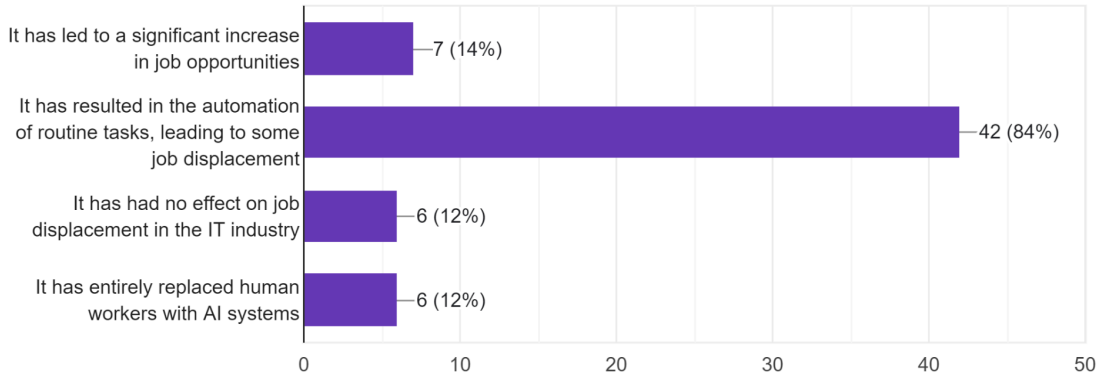
INTERPRETATIONS :

Majority of the respondents say that AI has resulted in the automation of routine tasks , leading to some job displacements. 14% of the respondents say that AI has led to significant increase in job opportunities. A few respondents say that AI has entirely replaced human workers.

3.7 Job Threat due to AI

10. Have you ever felt your job is in threat due to AI
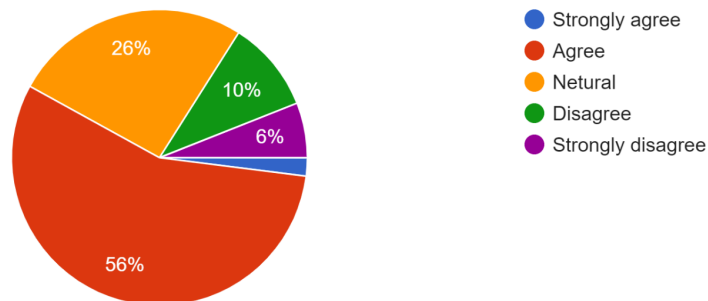
50 responses
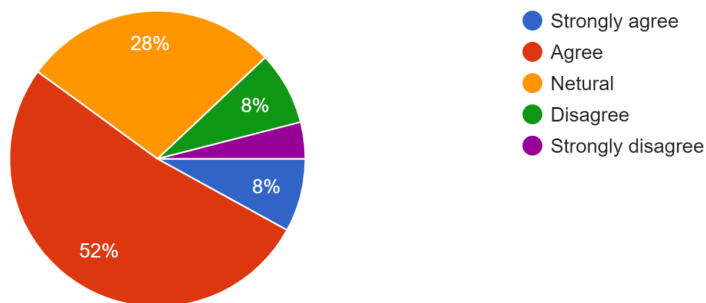
INTERPRETATIONS :

Half of the respondents agree that their job is in threat due implementation of AI. 8% of the respondents say that their job is not under threat while 28% of the respondents are uncertain.

3.8 Stress and Workload Caused by AI

12.In your experience, have there been any cases where AI implementation resulted in increased workload or stress for IT professionals?
50 responses
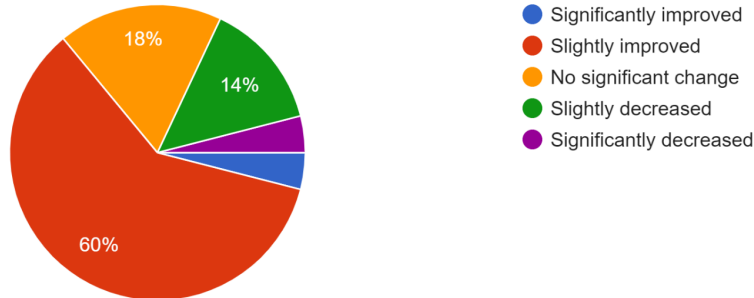

INTERPRETATIONS :

Out of 50 respondents , 56% of the respondents say that AI has resulted in increased workload and stress. 10% of the respondents disagree with the fact and 26% of respondents are neutral in opinion.

3.9 Work-Life Balance and Job Satisfaction

13.How has AI affected the overall work-life balance and job satisfaction among IT professionals in your organization?

50 responses

- ● Significantly improved
- ● Slightly improved
- ● No significant change
- ● Slightly decreased
- ● Significantly decreased

INTERPRETATIONS :

Majority of the respondents' work life balance and job satisfaction has improved as a result of AI.18% of the respondents say that there is no change whereas 14% of the respondents say that AI has slightly decreased the job satisfaction level.

3.10 Career Advancement Opportunities in Connection with AI

14.Do you think AI will enhance or hinder career advancement opportunities in the IT sector?

50 responses

- ● Enhance opportunities
- ● Hinder opportunities
- ● No significant impact
- ● Uncertain / Too early to tell
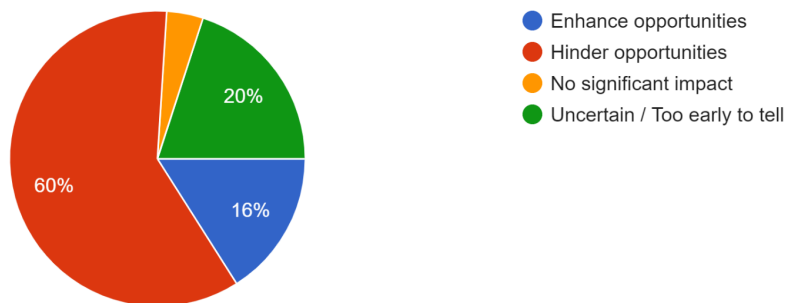
INTERPRETATIONS:

60% of the respondents say that AI will hinder career opportunities whereas 16% of the respondents states that AI improved career opportunities. Rest of the 20% are uncertain about the fact .

3.11 IT Roles susceptible to Job displacement

15.Which of the following IT roles is most susceptible to job displacement due to artificial intelligence?

50 responses
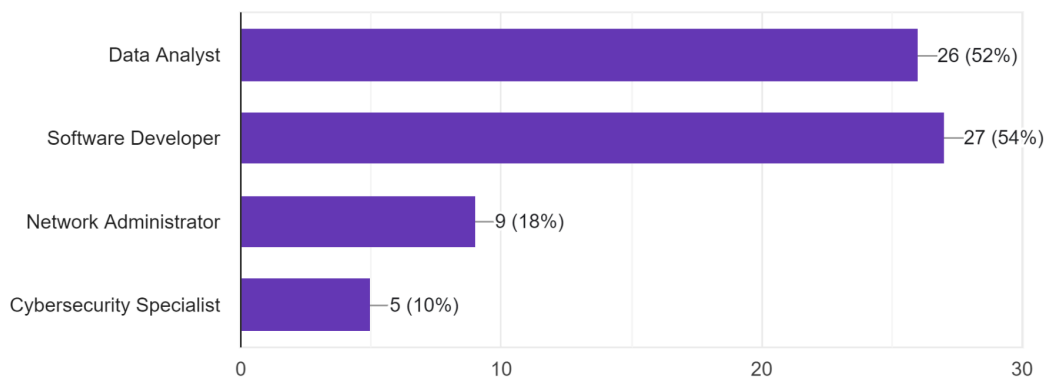
INTERPRETATIONS :

Data analyst and Software Developer are the most susceptible job roles when compared to Network Administrator and Cybersecurity Specialist.

3.12 Adaptability to the changing landscape of AI

16.How can IT professionals adapt to the changing landscape of AI in the industry?
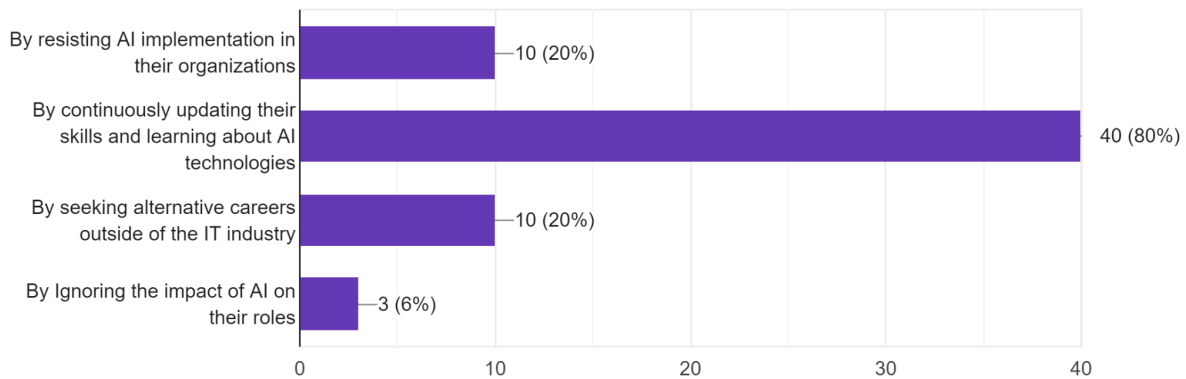50 responses

By resisting AI implementation in their organizations — 10 (20%)
By continuously updating their skills and learning about AI technologies — 40 (80%)
By seeking alternative careers outside of the IT industry — 10 (20%)
By Ignoring the impact of AI on their roles — 3 (6%)

INTERPRETATIONS :

80% of the respondents say that they have to continuously update their skills and learn about AI technologies in order to adapt to the changing landscape of AI. 20% of the respondents suggest seeking alternative careers outside of the IT industry.

3.13 Benefit of AI in the IT industry despite Job Displacement

17.What is one potential benefit of AI in the IT industry despite job displacement concerns?
50 responses

Higher demand for manual labor jobs — 13 (26%)
Increased efficiency and productivity in IT operations — 38 (76%)
Decreased need for skilled IT professionals — 8 (16%)
Slower innovation and technological advancement — 4 (8%)

23
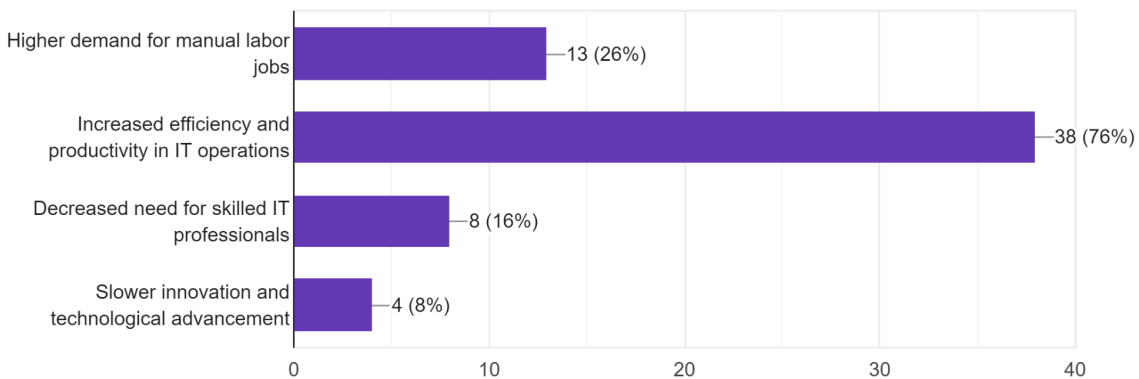
INTERPRETATIONS :

76% of the respondents agreed that AI increased the efficiency and productivity in IT operations. 26% of the respondents stated that demand for manual labour jobs have increased.

3.14 Response Towards Various Statements:

Response	AI is reshaping the future of IT Industries	Skills and qualification requirements are shifting because of AI	New Job roles have emerged as a result of AI implementation in the IT industry	IT companies should invest more in AI technology for workforce development
Strongly Agree	7	3	2	3
Agree	26	34	20	32
Neutral	12	9	20	11
Disagree	4	4	4	1
Strongly Disagree	1	0	4	3
Total	**50**	**50**	**50**	**50**

INTERPRETATIONS:

- From the above table , we can see that about 52%of the respondents agree that AI is reshaping the future of IT industries. 10% 0f the respondents disagree with the statement and the rest of them have a neutral opinion.

- 74% of the respondents agree that skills and qualification requirements are shifting because of AI. 8% of the respondents disagree with the statement.
- 44% of the respondents agree that new job roles have emerged as a result of AI implementation. 40% of respondents have a neutral opinion about the statement. 16% of the respondents have a negative opinion about the statement.
- For the statement "IT companies should invest more in AI technology for workforce development" 70% of the respondents agree, 8% of the respondents disagrees and 22% of the respondents have neutral opinion.

CHAPTER-4

FINDINGS, SUGGESTIONS AND CONCLUSIONS

FINDINGS

- Most of the respondents are male.
- Most of the respondents are in their 20s.
- All of the respondents belong to Ernakulam district.
- Most of the respondents have an average work experience between 4-6 years.
- Most of the respondents were IT consultants and software developers. Rest of them were technical leads , system analysts and business analysts.
- 54% of the respondents are comfortable in adapting to new softwares and tools relating to AI. 14% of the respondents say that they are not comfortable in adapting to AI tools and softwares.
- Majority of the respondents say that AI has resulted in the automation of routine tasks , leading to some job displacements.
- 14% of the respondents say that AI has led to significant increase in job opportunities. A few respondents say that AI has entirely replaced human workers.
- Half of the respondents agree that their job is in threat due implementation of AI. 8% of the respondents say that their job is not under threat.
- Out of 50 respondents , 56% of the respondents say that AI has resulted in increased workload and stress.
- Majority of the respondents' work life balance and job satisfaction has improved as a result of AI.14% of the respondents say that AI has slightly decreased the job satisfaction level.
- 60% of the respondents say that AI will hinder career opportunities whereas 16% of the respondents states that AI improved career opportunities.
- According to the responses of IT professionals , Data analyst and Software Developer are the most susceptible job roles when compared to Network Administrator and Cybersecurity Specialist.

- 80% of the respondents say that they have to continuously update their skills and learn about AI technologies in order to adapt to the changing landscape of AI.
- 20% of the respondents suggest seeking alternative careers outside of the IT industry.
- 76% of the respondents agreed that AI increased the efficiency and productivity in IT operations.
- 52%of the respondents agree with the statement that AI is reshaping the future of IT industries. 10% 0f the respondents disagree with the statement.
- More than half of the respondents agree that skills and qualification requirements are shifting because of AI.
- Approximately half of the respondents agree that new job roles have emerged as a result of AI implementation.
- For the statement "IT companies should invest more in AI technology for workforce development" 70% of the respondents agree, 8% of the respondents disagrees and 22% of the respondents have neutral opinion.

SUGGESTIONS

➢ Advocate for expanding AI-related education and training programs to promote proactive upskilling and reskilling for job market competitiveness

➢ Promote collaboration among education, industry, and government to align training programs with industry needs, ensuring individuals gain relevant AI skills for job roles.

➢ Encourage continuous skill development and lifelong learning among IT workers, emphasising the importance of staying updated on emerging technologies to adapt to evolving job requirements.

➢ Implement support programs for workers affected by AI-driven automation, offering career counselling, job placement, and financial assistance for retraining to ease their transition to new employment.

➢ Encourage entrepreneurship and innovation in the IT industry by providing resources and support for aspiring entrepreneurs to leverage AI technologies for freelance opportunities or start their own businesses.

➢ Promote diversification of skills among workers, highlighting the value of soft skills like creativity and problem-solving alongside technical expertise, as they are less prone to automation.

➢ Advocate for AI development that augments human capabilities rather than replacing them entirely, highlighting its potential to enhance productivity, decision-making, and create new job opportunities in areas like AI ethics and bias mitigation.

➢ Promote transparent communication about AI's impact on employment, encouraging open dialogue between employers and employees on implementation strategies and providing opportunities for feedback.

➢ Advocate for government policies supporting AI-driven automation challenges, including income support programs, tax incentives for training, and regulations ensuring fair and ethical AI deployment.

➢ Strengthen social safety nets to support workers affected by AI-driven job displacement, including measures like unemployment insurance, healthcare coverage, and retraining assistance during transition periods.

CONCLUSIONS

Research on the reshaping of employment by AI within the IT industry yields profound insights into its multifaceted impact. One prominent feature is the automation of routine tasks, a trend increasingly evident as AI technologies advance. This automation leads to shifts in job roles and responsibilities, necessitating a continuous process of skill upgrading among IT professionals.

Automation in the IT industry may displace some jobs but also creates opportunities in emerging fields like AI ethics and bias mitigation. This leads to a complex mix of job losses and creations. Integrating AI fosters collaboration between humans and machines, enhancing productivity and innovation. However, realising these benefits requires a fundamental shift in organisational culture and practices.

The study findings indicate that a significant proportion of respondents assert a positive impact of AI on the IT industry. They highlight how AI has led to the automation of routine tasks, thereby enhancing the overall efficiency of the sector. This positive perception aligns with the prevailing discourse on AI's potential to streamline processes and boost productivity within IT organisations. However, it's worth noting that the research also unveils some negative impacts attributed to AI adoption in the IT industry.

Respondents express concerns about potential job displacement due to automation and the need for continuous skill upgrades to stay competitive. Many feel apprehensive about AI's impact on their career prospects within IT, believing it will impede advancement opportunities and prompting them to seek alternative employment. This sentiment arises from fears of job displacement and uncertainty about the IT industry's future trajectory amidst advancing AI technologies, driving many to explore opportunities in other sectors.

BIBLIOGRAPHY

ARTICLES

1. Grace Su (2004) article "Unemployment in the AI Age"

2. Wei-wen Vera Chang (2020) article, "Labour Displacement in Artificial Intelligence Era: A Systematic Literature Review,"

3. Suparna Karmakar and Anita Hammer's(2019) chapter, "Work and Employment in the Times of Automation and Artificial Intelligence: The Indian Case,"

4. Arunava Narayan Mukherjee's (2022) paper, "Application of Artificial Intelligence: Benefits and Limitations for Human Potential and Labor-Intensive Economy– An Empirical Investigation into Pandemic-Ridden Indian Industry,"

5. Judith Clifton, Amy Glasmeier, and Mia Gray's (2020) article, "When Machines Think for Us: The Consequences for Work and Place,"

6. Yulin Liu, XiangtaoMeng, and Anqi Li's paper, "AI's Ethical Implications: Job Displacement,"

7. Chetan Sachdeva's paper, "AI Can Lead to Job Displacement,"

8. Rudra Tiwari's research paper, "The Impact of AI and Machine Learning on Job Displacement and Employment Opportunities,"

9. Anjum Razzaque's review titled 'Artificial Intelligence and IT Governance"

10. George Lazaroiu and ElżbietaRogalska's article (2023) in OeconomiaCopernicana, "How Generative Artificial Intelligence Technologies Shape Partial Job Displacement and Labor Productivity Growth,"

11.   Donna Ogle 2018 technological job loss due to the rise of computer technology and artificial intelligence (AI)

12.   Wil Hunt, Sudipa Sarkar, and Chris Warhurst, (2020) AI on jobs at the organisational level

13.   Shaji George, Hovan George, and Gabrio Martin's survey (2023) AI's impact, on jobs and employment across diverse sectors

14.   Philippe Aghion, Céline Antonin, and Simon Bunel (2019) Artificial intelligence ,Growth and Employment

WEBSITE

https://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.ojs-doi-10_24136_oc_2023_020/c/articles-19900462.pdf.pdf

http://www.hillpublisher.com/UpFile/202307/20230721183149.pdf

https://academic.oup.com/cjres/article-abstract/13/1/3/5781959

https://dl.acm.org/doi/abs/10.1145/3175502.3175511

https://www.emerald.com/insight/content/doi/10.1108/MANM-02-2022-0034/full/html

APPENDIX

QUESTIONNAIRE

A Study About AI Reshaping Employment And Its Impact On The IT Industries

1.Gender

- Male
- Female
- Anonymous

2.Age

- 20-25
- 25-30
- 30-35
- Above 35

3. How many years of work experience do you have in the IT field

- 0-3
- 4-6
- 7-10
- Above 10

4.What is your designation in the company

- Software developer
- IT consultant
- Technical lead
- Other

5. Do you think AI is reshaping the future of IT Industries

- Strongly agree
- Agree
- Neutral

- Disagree
- Strongly disagree

6.Are you comfortable adapting to new software or tools introduced in workplace, especially those related to AI

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

7.How has artificial intelligence impacted the IT industry regarding job displacement?

- It has led to a significant increase in job opportunities
- It has resulted in the automation of routine tasks, leading to some job displacement
- It has had no effect on job displacement in the IT industry
- It has entirely replaced human workers with AI systems

8.Do you think skills and qualification requirements are shifting because of AI

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

9.Do you think new Job roles have emerged as a result of AI implementation in the IT industry

- Strongly agree
- Agree
- Neutral
- Disagree

- Strongly disagree

10.Have you ever felt your job is in threat due to AI

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

11.Do you think IT companies should invest more in AI technology for workforce development

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

12.In your experience, have there been any cases where AI implementation resulted in increased workload or stress for IT professionals?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

13.How has AI affected the overall work-life balance and job satisfaction among IT professionals in your organisation?

- Significantly improved
- Slightly improved
- No significant change
- Slightly decreased
- Significantly decreased

14. Do you think AI will enhance or hinder career advancement opportunities in the IT sector?

- Enhance opportunities
- Hinder opportunities
- No significant impact
- Uncertain / Too early to tell

15. Which of the following IT roles is most susceptible to job displacement due to artificial intelligence?

- Data Analyst
- Software Developer
- Network Administrator
- Cybersecurity Specialist

16. How can IT professionals adapt to the changing landscape of AI in the industry?

- By resisting AI implementation in their organisations
- By continuously updating their skills and learning about AI technologies
- By seeking alternative careers outside of the IT industry
- By Ignoring the impact of AI on their roles

17. What is one potential benefit of AI in the IT industry despite job displacement concerns?

- Higher demand for manual labour jobs
- Increased efficiency and productivity in IT operations
- Decreased need for skilled IT professionals
- Slower innovation and technological advancement