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The Impact Of Artificial Intelligence on the job role of Gen Z and Millennials in Bangalore

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ABSTRACT:

This study explores the transformative impact of Artificial Intelligence (AI) on the job roles of Gen Z and Millennials in Bangalore, a rapidly growing technological hub in India. As AI continues to evolve, its integration into various industries is reshaping the employment landscape, particularly for younger generations who are entering or navigating their careers. This paper examines how AI is influencing job creation, skill requirements, and workplace dynamics for Gen Z and Millennials, who are characterized by their adaptability and technological fluency. Through a comprehensive analysis of industry trends, workforce data, and interviews with professionals, the study identifies both the opportunities and challenges posed by AI. The research highlights the importance of continuous learning and upskilling for Gen Z and Millennials to thrive in an AI-driven economy.

Keywords *- Artificial Intelligence (AI), Job Roles, Gen Z, Millennials, Employment Impact, Skill Development, Job Displacement, Workplace Dynamics*

INTRODUCTION

Artificial intelligence (AI) is a branch of science focused on creating computers and machines capable of reasoning, learning, and behaving in ways that typically require human intelligence, especially when dealing with large-scale data that exceeds human analytical capabilities. AI encompasses a wide range of disciplines, including computer science, data analytics, statistics, software and hardware engineering, linguistics, neuroscience, and even philosophy and psychology. In the context of business operations, AI consists mainly of technologies rooted in machine learning and deep learning, which are utilized for data analysis, predictions, forecasting, object classification, natural language processing, recommendations, and intelligent data retrieval, among other applications.

How does AI work?

Though the specifics differ among various AI techniques, the fundamental principle centers on data. AI systems enhance their capabilities by analyzing large volumes of data, uncovering patterns and relationships that might elude human observation. This learning process typically employs algorithms—sets of rules or instructions that direct the AI's analysis and decision-making. In machine learning, a well-known subset of AI, algorithms are trained using either labeled or unlabeled data to predict outcomes or classify information. Deep learning, a further specialization, utilizes multi-layered artificial neural networks to process information in a

manner that emulates the organization and function of the human brain. As these systems engage in continuous learning and adaptation, they become increasingly proficient at performing various tasks, ranging from image recognition to language translation and more.

Benefits of artificial intelligence for employees

1. Increased Efficiency and Productivity

- Automation of Routine Tasks: AI can handle repetitive and mundane tasks (like data entry, scheduling, and basic customer queries), freeing up employees to focus on more complex and value-added activities.
- Enhanced Decision-Making: AI tools can provide data-driven insights and recommendations, helping employees make more informed decisions faster.

2. Improved Work-Life Balance

- Flexible Work Arrangements: AI-powered tools can facilitate remote work and flexible scheduling by automating administrative tasks and ensuring smooth communication and collaboration.
- Task Management: AI can help employees prioritize tasks and manage their time more effectively, reducing stress and burnout.

3. Enhanced Skills and Training

- Personalized Learning: AI-driven learning platforms can offer tailored training and development programs based on individual skills and career goals, enhancing professional growth.
- Continuous Feedback: AI systems can provide real-time feedback on performance, helping employees improve their skills and address weaknesses more effectively.

5. Enhanced Creativity and Innovation

- Idea Generation: AI can assist in brainstorming sessions by analyzing trends and providing data-driven insights that inspire new ideas and innovations.
- Creative Tools: AI-powered tools can enhance creative processes, such as design and content creation, by providing suggestions, automating repetitive tasks, and improving efficiency.

6. Improved Job Satisfaction

- Reduced Manual Work: By automating mundane tasks, AI allows employees to focus on more engaging and meaningful work, which can lead to higher job satisfaction.
- Customized Work Environment: AI can help create a more personalized work environment by adjusting settings like lighting, temperature, and ergonomics based on individual preferences.

7. Health and Well-Being

- Stress Reduction: AI tools can manage administrative tasks and reduce workload, decreasing stress and preventing burnout.
- Health Monitoring: AI-driven health and wellness programs can offer personalized recommendations for fitness, nutrition, and mental health.

Impact on Job Roles

1. Automation of Routine Tasks:

AI automates repetitive tasks, boosting efficiency but causing job displacement. Millennials and Gen Z must upskill to adapt to evolving job requirements.

2. Creation of New Job Opportunities:

AI creates new roles in fields like machine learning and data science. This opens career paths but requires a shift towards tech-focused education.

3. Shift in Skill Requirements:

AI integration emphasizes skills like data analysis and problem-solving. Soft skills like creativity and critical thinking are also increasingly valuable.

4. Workplace Dynamics and Collaboration:

AI enhances collaboration through advanced tools, improving productivity. However, it can also blur work-life balance and affect job autonomy.

CHALLENGES

1. Job Displacement Risks:

Repetitive roles are vulnerable to AI-driven job losses. Millennials and Gen Z, often in such roles, face career uncertainties.

2. Skill Gaps and Education:

The growing demand for AI skills creates a gap in current education systems. Educational institutions must align with industry needs to prepare future workers.

OBJECTIVE OF THE STUDY

- To examine the impact of AI on the Future job role of Genz and Millenials

LITERATURE REVIEW

The Implications of Artificial Intelligence on the Employment Sector - Rohan Jadhav (13 Jun 2024)

This paper delves into the multifaceted impacts of artificial intelligence (AI) on the employment sector. It explores how AI technologies are reshaping job markets by automating tasks, creating new job roles, and transforming existing ones. The authors analyze industry-specific case studies to illustrate the varying effects of AI across different sectors, and they offer strategic recommendations for policymakers, businesses, and workers to navigate these changes effectively.

Are the Robots Going to Take Our Jobs? This Is How American and Hungarian Economists of Generations Y and Z Conceive the Impact of Artificial Intelligence KITTI DIÓSSY (01 Apr 2021)

This paper examines the perceptions of American and Hungarian economists from Generations Y and Z regarding the impact of artificial intelligence (AI) on employment. It explores their views on AI's potential to automate jobs and reshape labor markets, highlighting generational differences in concern and optimism. The study provides insights into how these younger economists foresee AI's role in job creation, displacement, and future economic dynamics.

Artificial Intelligence and the Economy - The Impact of Artificial Intelligence on the Job Market Yingying Shen, (20 Jun 2024)

The impact of artificial intelligence on Gen Z's job roles includes creating new opportunities but also replacing traditional roles, increasing employment thresholds, and shifting income patterns in the job market. Yingying Shen explores the transformative effects of AI across various industries and its implications for workforce dynamics. The study emphasizes the need for adaptive strategies to address the challenges and opportunities presented by AI in the labor market.

From the Perspective of the Labor Market,The Opportunities and Challenges Brought by the New Generation of Artificial Intelligence Technologies such as ChatGPT are Analyzed - Jun Liu, (23 May 2023)

This paper analyzes the opportunities and challenges presented by new-generation AI technologies, such as ChatGPT, from a labor market perspective. It explores how these advancements can create new job roles and opportunities while also posing risks of job displacement and skill mismatches. The study underscores the need for strategic workforce planning and reskilling initiatives to navigate the evolving labor landscape shaped by these technologies.

Artificial Intelligence Revolution: Shaping the Future of Millennials - Muhammad Waleed

The paper focuses on millennials, not Gen Z. However, AI offers job opportunities aligned with Gen Z's values, emphasizing sustainability and social impact, resonating with their intentions and aspirations. The study highlights the need for Millennials to adapt and acquire new skills to thrive in an AI-driven economy.

Artificial intelligence: Its impact on employability Gomes Rickardo

This paper by Gomes Rickardo and Santos Meiriele investigates the impact of artificial intelligence (AI) on employability, focusing on how AI advancements influence job opportunities and skills required in the labor market. It assesses both the potential for job displacement and the creation of new employment opportunities.

The study highlights the necessity for workers to adapt and gain relevant skills to remain competitive in an AI-enhanced job market.

The impact of artificial intelligence on employment Manisha Tripathi- 23 Mar 2024

This paper explores the effects of artificial intelligence (AI) on employment, emphasizing how AI technologies are transforming job markets by automating tasks and creating new roles. The study examines the balance between job displacement and new opportunities, as well as the need for workforce adaptation and skill development. It underscores the importance of strategic planning to address the challenges and leverage the benefits of AI in employment.

Impact of Artificial Intelligence, Robotics, and Automation on Employment - Ravi Kumar 28 Jul 2022

This paper analyzes the impact of artificial intelligence, robotics, and automation on employment, highlighting how these technologies are reshaping job markets. The study focuses on both the potential for job displacement and the emergence of new employment opportunities. It emphasizes the need for strategies to manage workforce transitions and skill development in response to technological advancements.

RESEARCH DESIGN

RESEARCH METHODOLOGY

The study evaluates the impact of Artificial Intelligence on the job role of GenZ and millennials in Bangalore using Descriptive approach and statistical approach. The sampling method was adopted to collect the data 83 respondents through Google Form.

SOURCES OF DATA

Primary data collection is necessary when a researcher cannot find the data needed in secondary sources. Three basic means of obtaining primary data are observation, surveys, and experiments. The choice will be influenced by the nature of the problem and by the availability of time. For this research study Questionnaire was the Primary Data source which is applied.

TOOLS FOR DATA COLLECTION

Survey method is employed to collect the data from the respondents and the data are collected with the help of questionnaires. Questionnaire is administered for the respondents. Questionnaire is a standardized form for collecting information to elicit data from the respondents. A questionnaire consists of a set of questions presented to a responded for his or her answers. The questionnaire prepared in this study was mainly aimed at personal interview, multi-choice questions, and also checklists.

DATA ANALYSIS

REGRESSION

Table 1

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.628[a]	.395	.383	.60184	2.075
a. Predictors: (Constant), Positive Role of AI, Negative Role of AI					
b. Dependent Variable: Employment					

Source – Complied by the researcher

- This indicates that 39.5% of the variance in employment can be explained by the two predictors: the positive and negative roles of AI.

Adjusted R-Square: 0.383

- Adjusted R-square adjusts for the number of predictors in the model and indicates a similar proportion (38.3%) of the variance explained.

Standard Error of the Estimate: 0.60184

- This is the average distance that the observed values fall from the regression line.

Durbin-Watson Statistic: 2.075

- This is a measure of autocorrelation in the residuals. A value close to 2 indicates no autocorrelation, which is ideal in regression analysis.

Table 2

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.116	2	12.058	33.290	.000[b]
	Residual	36.946	102	.362		
	Total	61.062	104			
a. Dependent Variable: Employment						
b. Predictors: (Constant), Positive Role of AI, Negative Role of AI						

Source – Complied by the researcher

F-statistic: 33.290

- The F-test indicates that the overall regression model is statistically significant.

p-value (Sig.): 0.000

- Since the p-value is less than 0.05, we reject the null hypothesis, which means that at least one of the independent variables significantly predicts employment.

Table 3

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.023	.348		2.940	.004
	Negative Role of AI	.149	.127	.140	1.168	.245
	Positive Role of AI	.585	.137	.514	4.282	.000
a. Dependent Variable: Employment						

Source – Complied by the researcher

The coefficients table provides insights into the effect of each predictor on the dependent variable (employment).

- **Constant (Intercept):**
  - **B = 1.023**, **p-value = 0.004**
    - This is the value of employment when both predictors (Positive and Negative Role of AI) are zero. It is statistically significant.
- **Negative Role of AI:**
  - **B = 0.178**, **Standardized Beta = 0.140**, **p-value = 0.245**
    - This indicates that for every one unit increase in the negative perception of AI, employment increases by 0.178 units (B coefficient). However, since the p-value is 0.245 (greater than 0.05), the effect of the negative role of AI on employment is **not statistically significant**.
- **Positive Role of AI:**
  - **B = 0.585**, **Standardized Beta = 0.514**, **p-value = 0.000**
- The positive perception of AI has a significant and positive effect on employment. For every one unit increase in the positive role of AI, employment increases by 0.585 units. The p-value is very small (0.000), indicating a statistically significant relationship

Table 4

Residuals Statistics[a]					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.7562	4.6898	3.8063	.48155	105
Residual	-2.07228	2.76091	.00000	.59603	105
Std. Predicted Value	-4.257	1.835	.000	1.000	105
Std. Residual	-3.443	4.587	.000	.990	105
a. Dependent Variable: Employment					

Source – Complied by the researcher

- Predicted Value: Range between 1.7562 and 4.6898, with a mean of 3.8063
- Residuals: Residuals are well-centered around zero with a mean of zero.
- Standardized Predicted Value: The range of predicted values is well within expected bounds (-4.257 to 1.835).
- Standardized Residual: Residuals range from -3.443 to 4.587, indicating that no extreme outliers are present in the data.

FINDINGS AND SUGGESTIONS

FINDINGS

- The positive perception of AI has a **statistically significant and positive impact** on employment, indicating that when individuals see AI in a positive light, employment outcomes improve.
- The negative perception of AI does not have a statistically significant effect, suggesting that negative concerns about AI's role may not strongly influence employment in this dataset.
- The model explains a substantial portion of the variance in employment (39.5%), and the overall regression model is statistically significant.

SUGGESTIONS

• Skill Development: Provide specific training on how to use AI tools relevant to their roles. For example, if AI is used for data analysis, employees should be trained in interpreting and acting on AI-generated insights.

• Seamless Integration: Ensure that AI tools are integrated smoothly into existing workflows. Avoid creating additional steps or complications for employees.

• New Role Development: Identify and create new job roles and opportunities that AI technologies can generate. For instance, roles in AI maintenance, data analysis, and ethical oversight.

• Continuous Learning Culture: Foster a culture of continuous learning and adaptability within organizations. Encourage employees to regularly update their skills and knowledge.

• Job Transformation: AI is automating routine tasks, leading to new and evolved job roles for Gen Z and Millennials.

• Skill Shift: There is a growing need for technical skills related to AI, alongside creative and problem-solving abilities.

• Increased Productivity: AI boosts productivity, enabling younger workers to focus on more complex, creative tasks.

• Job Displacement: AI may displace jobs reliant on routine tasks, requiring adaptation and continuous learning.

• Enhanced Work-Life Balance: AI can improve work-life balance through automation and flexible work options.

CONCLUSION

The impact of artificial intelligence (AI) on the job roles of Gen Z and Millennials is transforming the workforce in significant ways. AI is automating many routine tasks, such as data entry and customer service, which allows younger workers to focus more on creative and strategic work. This shift aligns with the values of these generations, who often seek meaningful, purpose-driven jobs. However, it also means they need to acquire new skills in areas like data analysis and AI management to remain competitive in an evolving job market.

AI is also reshaping the job landscape by creating new tech-driven roles, such as AI specialists and data analysts, while making some traditional jobs obsolete. This has opened up exciting opportunities for younger

workers in emerging fields, but it has also led to job displacement in sectors like retail and manufacturing, where many entry-level positions are being automated. As a result, some Millennials and Gen Z workers face challenges in finding stable employment in these areas.

Overall, AI presents both opportunities and challenges for Gen Z and Millennials. To thrive in this changing environment, they need to embrace continuous learning and adaptability. While AI will continue to influence job roles, those who develop strong skills in areas like creativity, communication, and problem-solving will be better positioned to succeed. The key is to view AI as a tool that can enhance human potential, rather than a threat to job security.

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