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Artificial Intelligence and Management: Can AI Be Able to Replace the Managers from the Industry

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Abstract: The aim of this research is to find out that Artificial Intelligence would be able to replace the managers from the industry also how powerful Artificial Intelligence is present and how powerful it becomes in future. The systematic literature review includes 24 text papers that were categorized into 3 groups - Artificial Intelligence in management, Artificial Intelligence as a replacement for human manpower / workforce & Future of AI. The research methodology which was used in this research paper is primary data. We collect data by circulating Google form and on the basis of the response in the form we write this research paper.

Keywords: Algorithm management, Artificial intelligence.

1. Introduction:

This research is all about AI power, how artificial intelligence is replacing the human workforce. My co-researchers and I are conducting a survey on AI capabilities and whether it will be able to replace managers in industry. On the basis of responses collected from the survey, we are going to conclude how capable AI is of replacing human manpower/workforce with present facts. The methodology we are using in this research is primary data collection from the general public, and based on the responses, we will conclude whether AI will be able to replace managers in industry. In this research, my co-researcher Gupta S. is conducting a survey and trying to collect data from the general public. On the other hand, Pathak S., Singh K.P., and Chaurasia N. are gathering data from the internet.

2. Objective

The objective of this research is to analyze whether AI is able or unable to replace managers in industries and how aware the local public is of AI. We aim to determine how many people think that AI can replace managers in industries, what the public opinion is of AI power, and whether they really think that AI can take over all jobs in the future.

3. Literature Review

AI should augment human intelligence not to replace it. David De Cremer & Garry Kasparov (March 18, 2021)

In this research paper, the researchers first try to understand how Mr. Garry Kasparov was defeated by a machine in a very intelligent game [chess]. On page 2, the researchers state that in the 21st century, "AI is evolving to be superior to humans in many tasks, which makes it seem that we are ready to outsource our intelligence to technology," meaning that no job is safe from being offloaded to machines. But they believe that AI is unable to match full human intelligence.

Artificial Intelligence & Managers Rakel Einarsdottir (September 2019):

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In this research paper, the researcher writes that "AI as a replacement of the human workforce" could affect HR managers from the industry in the future. Because the future of AI is totally based on humans and what direction we choose for AI. AI will follow that path only. On page 15, the researcher writes that, "AI as a replacement of the human workforce, we found that in future HR managers are most likely to be affected by the technology of AI," and also wrote that "AI was considered both as a tool and replacement for the human workforce."

An explanation of the problem of replacing accounting professions by AI in the future. Yiting Peng and Justin S. Chang (2019)

In this research, the researchers try to find out if AI will be able to replace manual accounting by humans. On page 4, the researchers found that yes, 70% of the questionnaire survey responses say that AI can replace manual accounting in the future. Further, they wrote that, "AI precision is something humans cannot compare to and can work 24/7 and only need maintenance. AI has lots of advantages that humans cannot compare with."

4. Methodology and Tools Used In Research

The research method used in this study is quantitative, descriptive method. The main focus is on providing a rich and detailed account of an experiment or event without delving into deep interpretation or theoretical framework. This type of data used in research is primary as well as secondary data.

Data sources are obtained through a Google form and some past research papers collected from trusted internet websites like Google Scholar and Research Gate. Some of the secondary data is also collected from past researchers. The data collection techniques used in the research were surveying through Google form and analyzing past research and then drawing a conclusion.

5. Result and Interaction of the Research

| | Cases | | | | | |
| | Valid | | Missing | | Total | |
	N	Percent	N	Percent	N	Percent
what is your age * are you employed or unemployed	37	100.0%	0	0.0%	37	100.0%

what is your age * are you employed or unemployed Crosstabulation

Count

| | | are you employed or unemployed | | Total |
		yes	no	
what is your age	18 to 20	0	20	20
	20 to 30	1	10	11
	30 to 40	3	1	4
	40 to 50	1	0	1
	50 above	1	0	1
Total		6	31	37

Figure-1 Case Processing Summary

What is your age, are you employed or unemployed: Age and employment cross-tabulation analysis case processing summary.

This analysis is based on 37 valid responses, with no missing data for the variables "What is your age?" and "Are you employed or unemployed?" This ensures that all 37 participants provided complete answers to both questions.

The cross-tabulation table summarizes the frequency of respondents across different age groups based on their employment status, classified as "employed" (yes) or "unemployed" (no).

Summary In total, across all age groups:

- Employed respondents: 6
- Unemployed respondents: 31
- Grand total: 37 respondents

This provides a clear and organized overview of how employment status varies among different age groups in the survey.
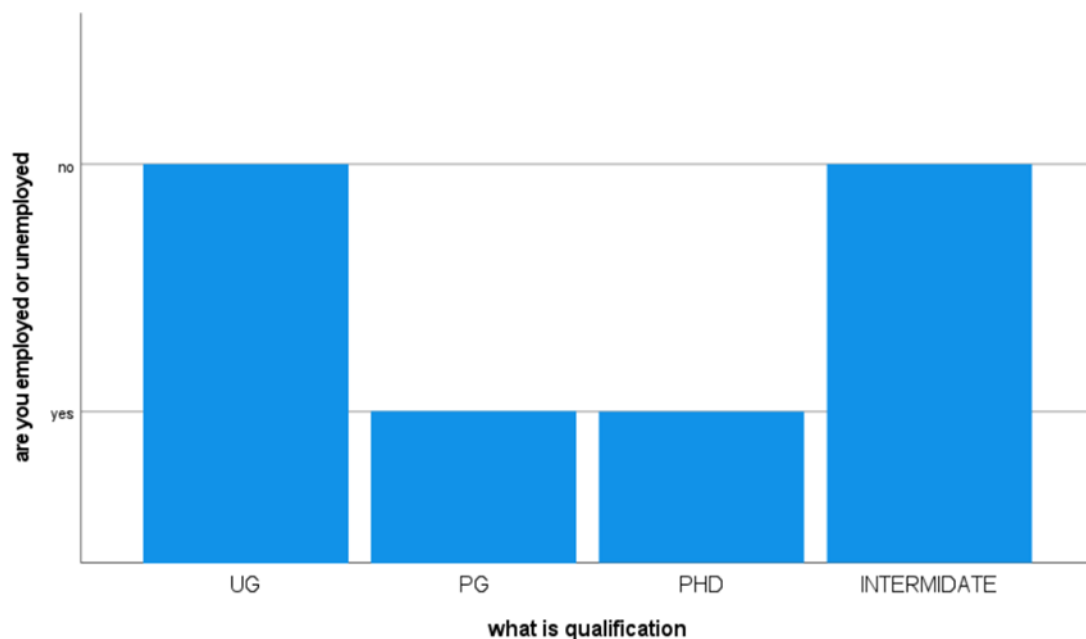

Figure-2 Simple Bar of are you employed or unemployed by what is qualification

The image presents a simple bar chart illustrating the relationship between individuals' employment status ("employed" or "unemployed") and their educational qualifications ("UG"- undergraduate, "PG"- postgraduate, "PHD" - Doctorate, "Intermediate").

Key observations

Undergraduate (UG) and intermediate individuals show a higher proportion of unemployment ("no" on the y-axis) compared to employment ("yes").

Individuals with postgraduate (PG) and PhD qualifications exhibit lower levels of unemployment and comparatively higher employment rates.

The chart visually emphasizes that higher qualifications (PG and PhD) are associated with better employment outcomes, whereas individuals with only intermediate or UG education are more likely to be unemployed.
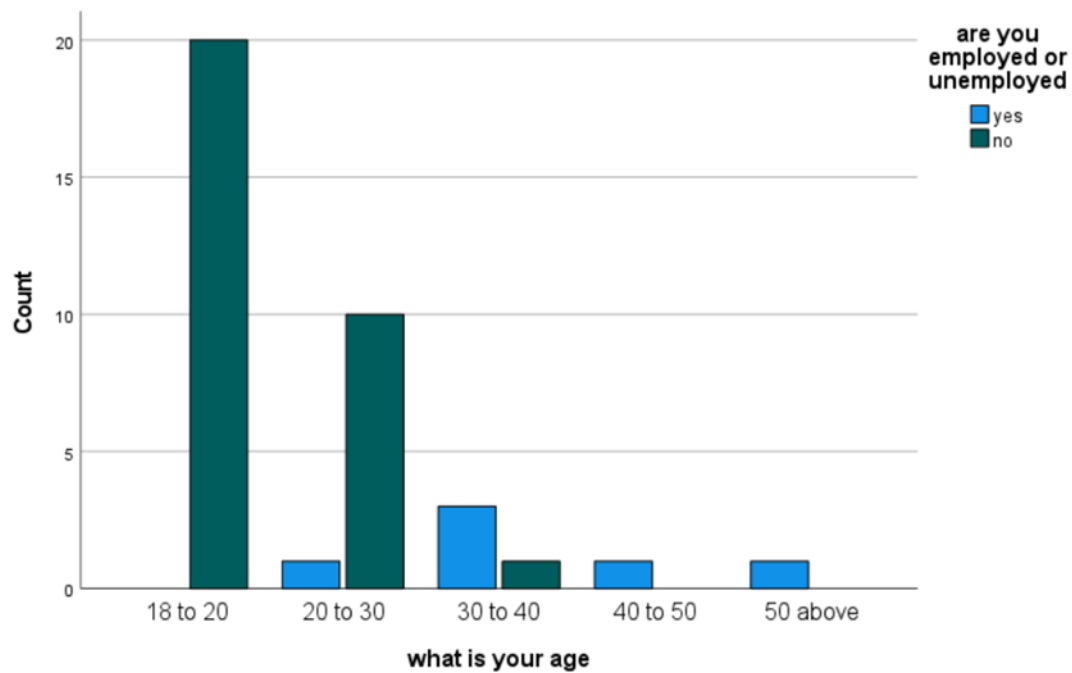
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Figure-3 Bar Chart on Court and What is your age

This is a **bar chart** representing the relationship between **age groups** and their **employment status** (employed or unemployed).

Key elements

- The x-axis displays **age categories**: "18 to 20", "20 to 30", "30 to 40", "40 to 50", and "50 above".
- The y-axis shows the *count of individuals* in each age group.
- The bars are color-coded: **Dark green** represents individuals who are **unemployed** ("no").
- **Light blue** represents individuals who are **employed** ("yes").

Overall interpretation:

- Younger individuals (especially those aged 18 to 30) face higher rates of unemployment.
- Employment rates increase after the age of 30, suggesting that work opportunities or employability tend to improve with age and possibly with experience.
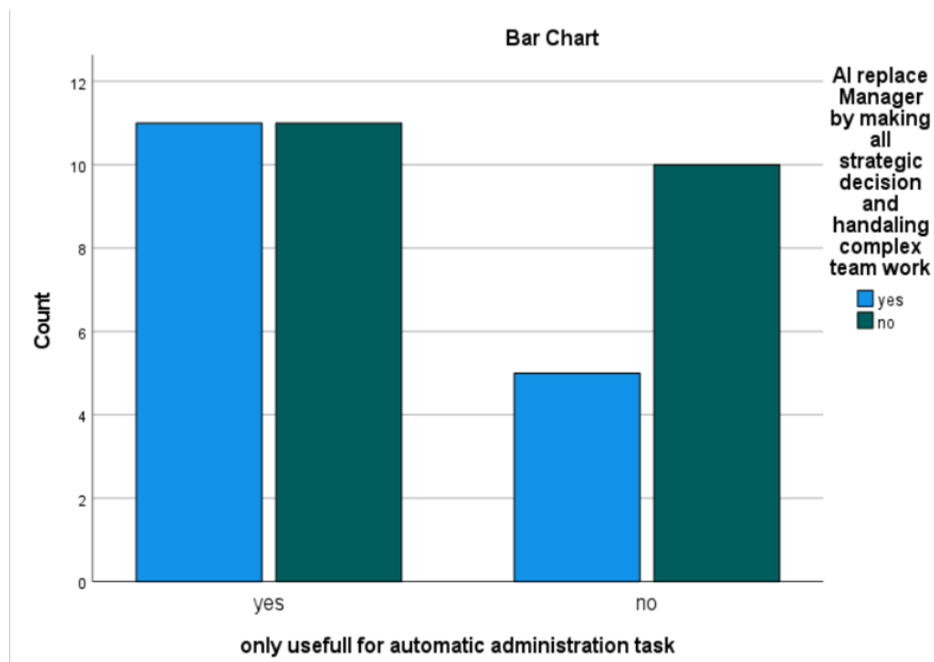- Older age groups (40 and above) show low participation but are exclusively employed in this dataset.

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Figure-4 Bar Chart on court and only useful for Automatic administration task

Bar chart analysis: Perception of AI in managerial roles

This bar chart explores respondents' perception of the potential for AI to replace managerial roles, particularly in terms of:

1. Being useful for only automatic administrative tasks.
2. Replacing managers by making all strategic decisions and handling complex teamwork.

Insights

Only useful for automatic administrative tasks:

- YES: 11 respondents
- NO: 11 respondents

Interpretation: The responses are evenly split, indicating a balanced view. While some believe AI is suitable only for basic administrative functions, others think it may extend beyond that.

AI replacing managers with strategic decisions and complex teamwork

- YES: 5 respondents
- NO: 10 respondents

Interpretation: A majority of respondents (10 out of 15) do not believe AI can fully replace human managers when it comes to strategic decision-making and managing team dynamics, highlighting skepticism about AI capability in handling nuanced, human-centered leadership roles.
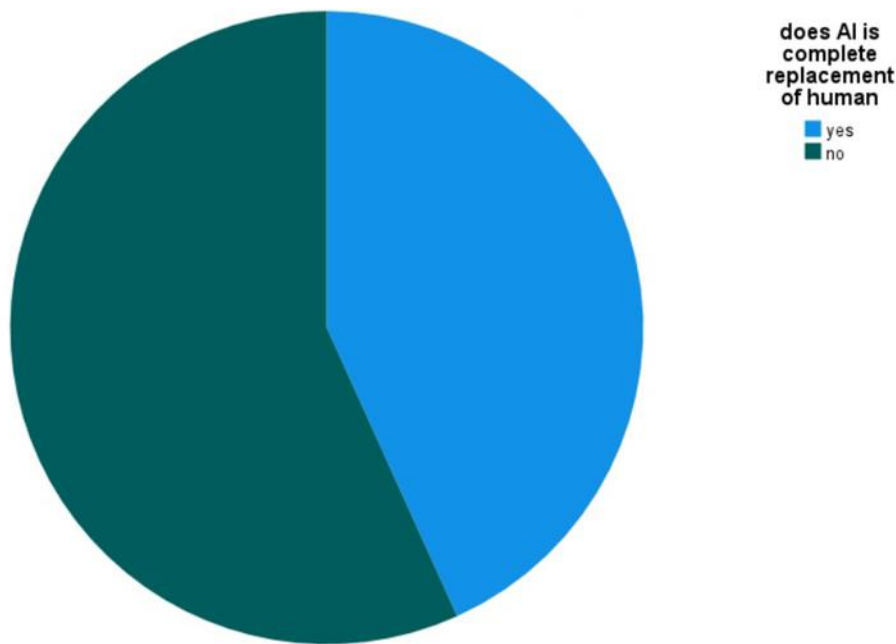
Figure-5 Pie Chart Count of does Al is complete replacement of human

Pie chart analysis: Can AI be complete replacements for humans?

The pie chart visualizes responses to the question: "Is AI a complete replacement for humans?"

Dark Green (NO): respondents who do not believe AI can completely replace humans.

Insights:

- The majority (dark green) of respondents answered "no," indicating skepticism toward the idea that AI can completely take over human roles.
- A smaller segment (blue) answered "yes," showing a minority believes AI could fully replace human capabilities.

6. Recommendation

The research collected data from the general public by publishing a Google form or questionnaire, and we found that more than 50% of the public respondents think that AI will not be able to completely replace managers.

- Do not completely depend upon AI.
- Do your daily tasks on your own without using AI.
- Do not use AI in education.
- Try to use less AI.

7. Conclusion

This research surveys whether artificial intelligence (AI) has the capability to replace human managers, using both primary survey data and insights from previous literature. The findings indicate that while AI can efficiently automate routine and administrative tasks, it lacks emotional intelligence, creativity, and strategic decision-making skills that are essential for effective leadership and managerial roles.

Survey data disclosed that the majority of respondents do not believe AI can fully replace human managers, especially in roles that require handling complex team dynamics and human-centered decision-making. Additionally, skepticism remains high regarding AI's ability to completely replace the human workforce, with most participants agreeing that AI is better suited to assist, rather than replace, human professionals.

From the literature review, it is evident that although AI is becoming more advanced and is already replacing certain repetitive jobs (e.g., accounting functions), experts emphasize that AI should be seen as a tool to augment human capabilities, not as a complete substitute.

Therefore, we conclude that AI is a powerful aid but not a full replacement for managerial roles. The future of AI in the workplace should focus on collaboration between humans and machines, where AI supports managers in data-driven tasks, while humans continue to lead in areas requiring emotional intelligence, ethical judgment, and interpersonal communication.

8. References

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[3] Einarsdottir, R. (2019, September). Artificial intelligence & managers: AI as a replacement of the human workforce.