

IMPACT OF ARTIFICIAL INTELLIGENCE ON MANAGEMENT

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Abstract: *This paper investigates how artificial intelligence (AI) can enhance leadership skills and managerial decision-making processes through a systematic literature review of relevant and objective articles. The research problem is framed as 'the adaptation of leadership skills and managerial decision-making processes due to AI implementation in the workplace,' identified as a research gap in the literature. The study concludes that leadership styles will shift, with AI taking over more technical aspects of leadership. Managers will need to develop uniquely human skills such as motivating employees and fostering creativity. The study also finds that while the exact changes in decision-making processes due to AI are unclear, AI will improve decision speed and accuracy with quality training data.*

Keywords - Artificial Intelligence, Decision-Making, Deep Learning, Leadership, Machine Learning

1. INTRODUCTION

The introduction provides an overview of the paper topic, starting with background information and outlining the problem formulation and purpose, including research questions. It also covers the delimitations and sustainability aspects, and ends with an outline of the paper and relevant definitions. AI is seen as a transformative technology, replacing technical leadership tasks, and necessitating a focus on human-centric skills for managers. Although the specific changes in decision-making processes due to AI remain uncertain, AI is expected to significantly enhance decision speed and accuracy, provided it has high-quality training data. The dynamic nature of AI technology means that what is considered AI can change over time as technologies become mainstream and are no longer perceived as future innovations.

2. LITERATURE REVIEW

AI is defined by the Oxford English Dictionary as “the theory and development of computer systems able to perform tasks normally requiring human intelligence” and by Merriam-Webster as “the capability of a machine to imitate intelligent human behavior.” These definitions highlight AI’s ability to mimic human thinking and actions, enabling machines to perform human tasks and adapt to their environment. AI’s goals include learning, reasoning, and perception, which give it significant problem-solving potential. AI operates much faster than human brains, with modern microprocessors working at speeds millions of times faster than human neurons. An example of AI’s capabilities is its performance in the ancient Chinese board game Go, where AI has demonstrated superior problem-solving abilities.

3. OBJECTIVE OF THE STUDY

1. To study the importance of artificial intelligence in education management.

2. To highlight the function of artificial intelligence applications in education management.
3. To identify major issues of artificial intelligence in education management.
4. To evaluate how artificial intelligence technologies streamline study processes to enhance efficiency.
5. To determine how artificial intelligence can optimize resource allocation in study planning and execution.
6. To investigate how AI-driven algorithms can enhance the quality of study outcomes.
7. To identify how AI tools can help mitigate potential risks in study management.

4. LIMITATION OF THE STUDY

The study acknowledges potential biases in data collection and analysis, which can affect results. The rapid evolution of AI technologies might render findings outdated, and generalizability may be an issue if the study focuses on specific industries or organizations. Ethical considerations, such as privacy concerns and algorithmic transparency, may not be fully addressed, impacting the study's comprehensiveness.

5. RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it we study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them. Research methodology is crucial in ensuring the validity, reliability, and credibility of research findings.

6. RESEARCH DESIGN

Research design serves as a blueprint for the study, outlining methodologies, tools, and techniques used. It helps identify and address potential problems during research and analysis.

6.1 SOURCES OF DATA COLLECTION

Data Source

The research was carried out with the help of primary as well as secondary data.

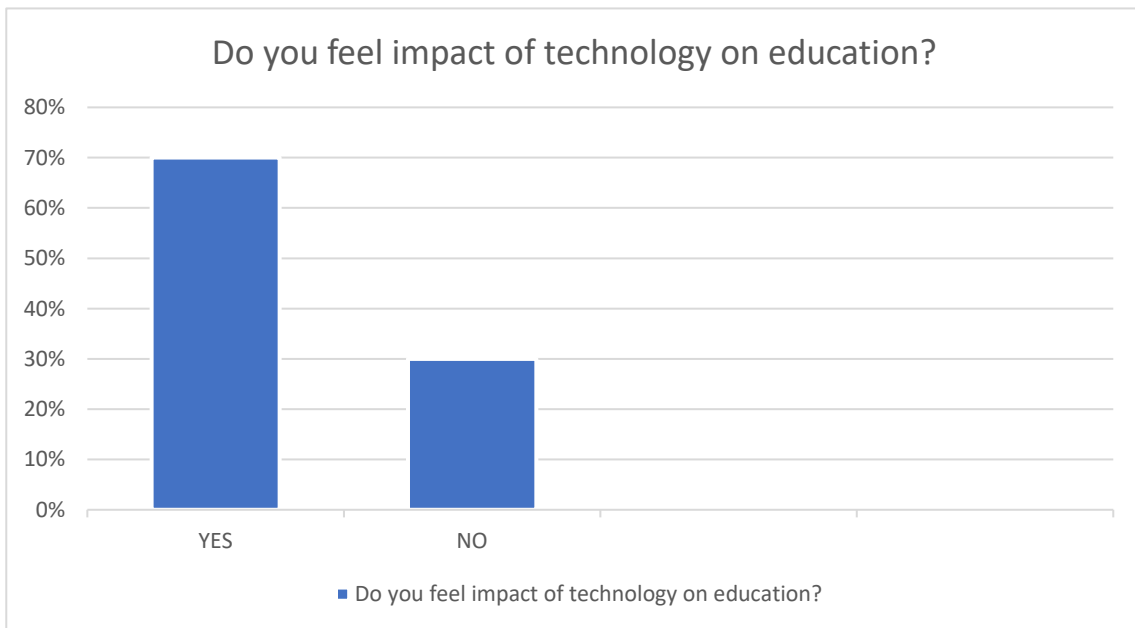
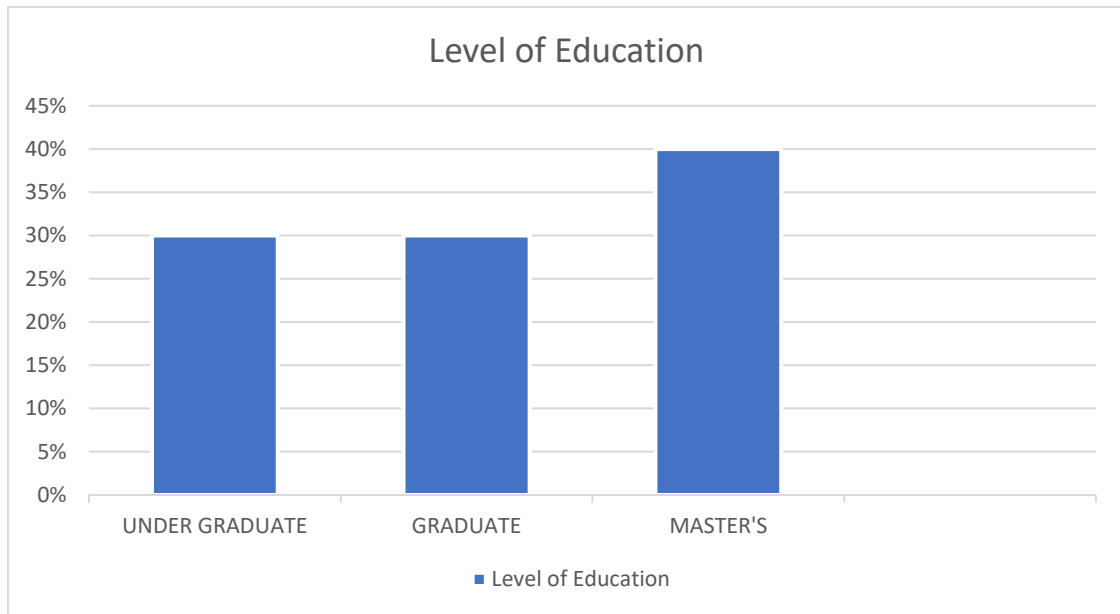
6.1.1 PRIMARY DATA

Collected directly from sources through interviews, surveys, and experiments, primary data is considered the best kind of data in research.

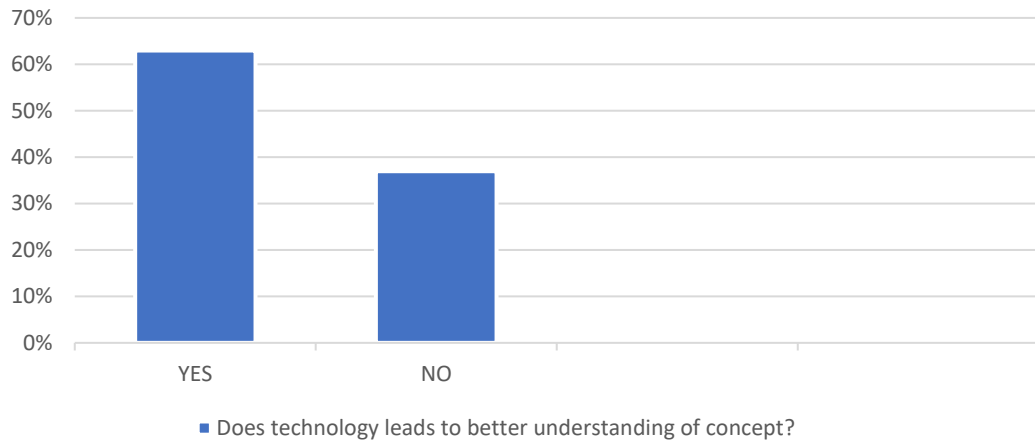
6.1.2 SECONDARY DATA

Secondary data includes information previously gathered by others through surveys, observations, experiments, questionnaires, and personal interviews.

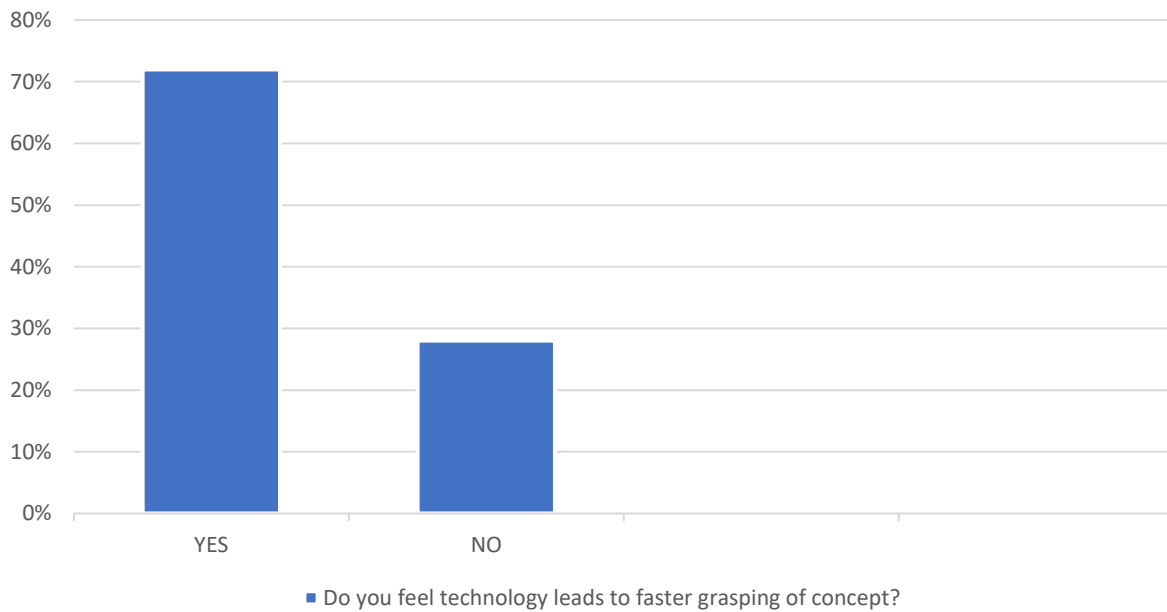
7. DATA ANALYSIS AND INTERPRETATION



Does technology leads to better understanding of concept?



Do you feel technology leads to faster grasping of concept?



8. FINDINGS

1. Out of 64 respondents, 60% are male and 40% are females.
2. Out of 64 respondents, 14% are under 18, 43% are of between 18-25, 38% are of age 25-35 and 5% are of age 35 above.
3. Out of 64 respondents, 30% are undergraduate, 30% are graduate and 40% are post graduate.
4. Out of 64 respondents, 70% feels impact of technology.
5. Out of 64 respondents, 72% feel technology leads to faster grasping of concept.
6. Out of 64 respondents, 63% thinks technology leads to better understanding of concept.
7. Out of 64 respondents, 75% feel technology should be used in every traditional classroom.
8. Out of 64 respondents, 70% thinks technology leads to better understand of concept.
9. Out of 64 respondents, 55% you think government should subsidize education through modern technology.
10. Out of 64 respondents, 67% thinks cost of education is increasing due to extensive use of technology.

9. CONCLUSIONS

The study explores how AI can improve project management performance, particularly in the context of digital transformation toward Industry 5.0. AI techniques such as machine learning, natural language processing, and neural networks show promise in enhancing various project dimensions, including stakeholder management, team communication, planning, resource allocation, and risk assessment. The research highlights the need for comprehensive frameworks for AI-based project management, considering project life cycles, sustainability, security, and adoption by project managers. Future research should focus on these areas to maximize AI's potential in project management.

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