

Course Title:

RESEARCH_METHODODOLOGY_IN_COMPUTER_SCIENCE

ASSIGNMENT2

Course Code:

AI800

Weighting:

20%

Lecturer:

Dr. Mohammed Anbar

Hand-in Method:

Online Submission via E-Learning.

Research Title	
"The Impact of Artificial Intelligence on Business Decision Making	
<u>241001865</u>	متعب زين الحربي

Summary:

Explores the influence of AI on decision-making in various business sectors using case studies.

Analysis:

Strong methodology, utilizing both quantitative and qualitative data, but limited generalizability.

Connections/Conflicts:

Correlates AI adoption with improved decision speed, conflicting with Paper 4's findings.

Summary:

Investigates the ethical implications of AI-driven decision-making in corporate environments.

Analysis:

Robust ethical framework analysis, yet lacks a longitudinal perspective on evolving ethical norms.

Connections/Conflicts:

Aligns with Paper 5 on ethical concerns, contrasting with Paper 3's focus on efficiency gains.

Summary:

Examines the efficiency gains achieved through AI integration in business decision processes.

Analysis:

Strong focus on quantitative metrics but overlooks potential biases in the data.

Connections/Conflicts:

Supports Paper 2's efficiency gains, conflicts with Paper 6 on potential biases.

Summary:

Investigates the challenges faced by businesses during the AI adoption process.

Analysis:

Thorough exploration of barriers, but lacks in proposing practical solutions.

Connections/Conflicts:

Contrasts with Paper 1's optimistic view on AI's impact on decision speed.

Summary:

Explores the ethical considerations surrounding AI in decision-making, focusing on transparency and accountability.

Analysis:

Comprehensive analysis of ethical frameworks, but limited discussion on practical implementation.

Connections/Conflicts:

Aligns with Paper 2 on ethical concerns, conflicts with Paper 3's emphasis on efficiency gains.

Summary:

Investigates potential biases in AI-driven decision-making and their implications.

Analysis:

Rigorous examination of biases, but lacks a comparative analysis of different AI models.

Connections/Conflicts:

Contrasts with Paper 3's emphasis on efficiency gains, aligns with Paper 5 on ethical considerations.

Review for Summary Table:

Publication years	Author's	Methodology Employed	Key findings	Weakness/ Limitations
2019	Author 1	Quantitative & Qualitative	AI adoption improves decision speed but lacks generalizability	Limited generalizability
2020	Author 2	Ethical Framework Analysis	Ethical implications of AI-driven decisions	Lacks a longitudinal perspective on evolving ethical norms
2021	Author 3	Quantitative Metrics	AI integration leads to efficiency gains	Overlooks potential biases in the data
2022	Author 4	Case Studies	Challenges in AI adoption	Lacks practical solutions
2023	Author 5	Ethical Framework Analysis	Ethical considerations in AI decisionmaking	Limited discussion on practical implementation
2024	Author 11 & 12	Comparative Analysis	Investigates biases in AI-driven decisions	Lacks comparative analysis of different AI

Summary and Analysis

Ensure to synthesize these findings, emphasizing trends, gaps, and areas for future research. The impact of artificial intelligence (AI) on business decisionmaking processes is profound. AI enables data-driven insights, automates repetitive tasks, and enhances predictive analytics, leading to more informed and efficient decision-making. It improves operational efficiency, identifies patterns in large datasets, and facilitates personalized customer experiences.

However, challenges like ethical concerns, data privacy, and the need for human oversight accompany these advancements, shaping the ongoing dialogue around responsible AI integration in business strategies.

The impact of artificial intelligence (AI) on business decision-making processes is multifaceted. AI introduces data-driven decision-making, leveraging advanced algorithms to analyze vast datasets swiftly. This enhances the accuracy and speed of decision-making, improving overall operational efficiency. Predictive analytics powered by AI aids in forecasting trends and identifying opportunities or potential risks.

Furthermore, AI automates routine tasks, allowing human resources to focus on strategic and creative aspects of decision-making. However, the integration of AI presents challenges, including ethical considerations, potential biases in algorithms, and the need for transparent decision processes. Businesses must navigate these complexities to ensure responsible AI implementation.