

AI in Business Decision Making

Assignment Guidelines:

This assignment is all about how Artificial Intelligence is changing the way organisations make strategic and operational decisions. It is all about machine learning, predictive analytics and decision-support systems in improving the quality, speed and outcomes of decisions across business functions. The project will have students explore the tangible benefits and the organisational challenges of integrating AI into real-world decision processes, keeping in mind strategic fit, risk and sustainability in the long term.

Submission Format:

- Type: Detailed project report
- Font: Times New Roman, Size 12, Double Spaced
- Word count: 3000 – 4000 words
- Submission Deadline: To be announced by the respective professors

Assessment Criteria:

- Understanding and application of AI concepts relevant to decision-making – 20%
- Critical analysis of AI applications in business decision contexts – 25%
- Use of academic literature, evidence and industry case studies – 20%
- Strategic insight, evaluation of impact and quality of recommendations – 25%
- Structure, academic writing, presentation and APA referencing – 10%

Mandatory Sections:

- Title Page
- Table of Contents
- Abstract
- Introduction
- Literature Review
- Methodology
- Findings
- Discussion
- Conclusion
- References
- Appendices

Assignment Task – Choose ONE of the following written assignments:

Option 1: Designing AI-Driven Decision Support Systems for Strategic Advantage

Analyse how organisations can design and implement AI-powered decision support systems that improve strategic and operational choices. Your paper should:

- Describe the classes of AI techniques used to support decision-making (machine learning, predictive analytics, optimisation and recommendation systems) and the types of business problems they are best equipped to solve.

- Explain the workflow and key considerations to transform raw data into trustworthy decision models, such as data quality, feature engineering, model choice and validation.
- Analyse real-world examples of organisations that have integrated AI into their strategic or operational decision-making processes, discussing the advantages and challenges.
- Develop a practical framework that business leaders can use to determine if an AI decision-support initiative will generate measurable improvements in decision quality and business outcomes.

Option 2: AI in Functional Decision-Making – Marketing, Finance, Operations and Supply Chain

Investigate how AI is transforming decision-making within specific business functions and what this means for managers. Your paper should:

- Examine how predictive models, automation and recommendation engines are transforming everyday and strategic decisions through the application of AI in at least two large functional areas (such as marketing, finance, operations, or supply chain). >
- Assess the consequences of those AI applications on critical performance results, such as efficiency, customer satisfaction, risk mitigation, and competitive position.
- Discuss the organisational and human-related factors that affect successful adoption, e.g. skills, trust in AI recommendations, and changes to decision rights. source breakdown
- Draw on case studies from leading companies to show how mid-sized organisations can best prioritise AI decision-use cases that offer the greatest value with the least risk.

Option 3: Evaluating the Business Impact and Risks of AI-Supported Decisions

Assess how organisations can measure the value of AI-driven decisions while managing the associated risks. Your paper should:

- Develop suitable measurements and approaches to assess the impact of AI on the quality and speed of decision making and on financial and strategic results.
- Consider the key risks associated with AI-influenced and AI-automated decisions including model bias, excessive reliance on black box systems, data drift and accountability lapses.
- Evaluate examples of good and bad deployments of AI decisions and what this can teach us about governance, monitoring and human oversight.
- Deliver a well-rounded set of recommendations that allow organisations to reap the benefits of AI-enabled decision making, without losing transparency, control or ethical responsibility.