



SUKKUR IBA UNIVERSITY

Department of Business Administration AI for Business

Class: BBA-VIII A&B	Semester: Spring 2025
Credit Hours: Class Work 3	Instructor: Dr. Altaf H Samo

Grading

1	Class Participation/presentations	10%
3	Final Project & presentation	20%
4	Midterm Exams	30%
5	Final Exam	40%

Course Objectives:

1. Provide a comprehensive understanding of AI applications across key business domains like marketing, HR, and finance.
2. Equip participants with practical knowledge of AI tools and techniques to enhance decision-making and efficiency.
3. Foster skills to design and implement AI-driven business strategies while addressing ethical and compliance challenges.

Learning Outcomes:

By the end of the course, participants will:

1. Understand how AI transforms business processes in marketing, HR, and finance.
2. Design AI-enabled strategies to solve real-world challenges and improve business performance.

3. Measure and assess the impact of AI-driven initiatives in achieving organizational goals.
4. Evaluate the ethical, legal, and compliance aspects of AI in business.

Expectations: I expect a friendly and professional class environment based on mutual respect as we are in this learning journey together. I expect the class environment to be more critical and rational. Examples from the real world are always encouraged so I expect you to do first hand research before coming to the class.

Readings: Talking from experience, if you read in advance this is going to help you to earn more CP points and help you pay attention in class. This really helps to have interest in class and grasp the discussion and connect the bigger picture.

Attendance: Your attendance in class is critical to fulfillment of course objectives. You will not be eligible to appear in the exam if you cross six absences. Late coming, even for one minute, would strictly be marked as absent.

Note: For any help and assistance you all are welcome to come during my assigned counseling hours, you can also discuss your issues (if any) through my following contacts; to express your quarries

Email: **altaf@iba-suk.edu.pk**

Module Details

Module-1 AI Fundamentals for Non-Data Scientists

Introduction to Machine Learning

- Understanding machine learning concepts
- Differentiating between AI, machine learning, and deep learning

Machine Learning Methods

- Supervised and unsupervised learning
- Deep learning fundamentals

Generative Models

- Introduction to GANs (Generative Adversarial Networks) and VAEs (Variational Autoencoders)

Module2 AI for Marketing

Introduction to AI in Marketing

- Overview of AI and its evolution in marketing
- Key applications (e.g., chatbots, predictive analytics, and personalization)

AI-Driven Marketing Strategies

- Designing AI-powered campaigns
- Customer journey mapping using AI

AI in Digital Advertising

- AI-based tools for ad placement, targeting, and performance tracking
- Case study: How AI optimizes advertising campaigns

Ethical and Legal Implications in AI Marketing

- Data privacy, algorithm bias, and transparency
- Regulations and compliance

Module3: AI in Human (HR Resources)

Introduction to AI in HR

- Role of AI in modern HR practices
- Automation of repetitive tasks (e.g., payroll, scheduling)

AI in Recruitment and Talent Management

- AI tools for resume screening and candidate matching
- Enhancing diversity and inclusion through AI

AI in Employee Engagement and Development

- Personalized training programs using AI
- Performance monitoring and feedback

Module4: AI in Finance

Introduction to AI in Finance

- Role of AI in transforming financial services
- Overview of AI applications in banking, investment, and insurance

AI in Financial Analytics and Forecasting

- Predictive analytics for investment and portfolio management

- Tools and techniques for market analysis

AI in Fraud Detection and Prevention

- Identifying anomalies and suspicious transactions
- Case study: Real-world applications in fraud detection

Compliance, Risks, and Ethics in AI for Finance

- Regulatory requirements for AI in the financial sector
- Addressing ethical dilemmas in algorithm-driven finance

1. Marketing Case Studies:

- *Netflix and its Recommendation Engine: Explore how Netflix uses machine learning algorithms to personalize content and improve user engagement.*
- *Starbucks Personalization through AI: Analyze Starbucks' use of predictive analytics and AI for customer segmentation and targeted promotions.*
- *Amazon's Dynamic Pricing and Customer Insights: Study how Amazon leverages AI to offer personalized recommendations and adjust pricing dynamically.*

2. Finance Case Studies:

- *JPMorgan Chase and AI for Fraud Detection: how AI models like "COiN" streamline document review and detect fraudulent transactions.*
- *Zest AI and Credit Scoring: Investigate Zest AI's approach to building fairer, more transparent credit-scoring models.*
- *Robinhood and AI-Driven Investment Strategies: Look at how Robinhood applies AI to simplify stock trading and provide investment recommendations.*

3. AI in HR: S Case Studies

- *Case Study: IBM Watson Recruitment*
Explore how IBM uses AI to predict job performance and match candidates to roles based on skills, experience, and potential cultural fit.
- *Case Study: LinkedIn Talent Solutions*
Examine how LinkedIn uses AI to recommend candidates for job postings, automate sourcing, and provide workforce insights.
- *Case Study: Unilever and AI-Driven Talent Management*
Look at how Unilever applies AI for candidate assessments, employee well-being initiatives, and improving productivity.

Suggested Readings and Articles

1. Books and Chapters:

- *Prediction Machines: The Simple Economics of Artificial Intelligence* by Ajay Agrawal, Joshua Gans, and Avi Goldfarb.
- *Data Science for Business: What You Need to Know about Data Mining and Data-Analytic Thinking* by Foster Provost and Tom Fawcett (focus on applications in finance and marketing).

2. Research Papers:

- "AI and Machine Learning in Marketing: Evolution and Current Landscape" (*Journal of Marketing*).
- "The Role of Artificial Intelligence in Personalization in Marketing" (*International Journal of Research in Marketing*).
- "The Economics of AI in Financial Markets" (*Journal of Financial Economics*).

3. Industry Reports:

- McKinsey & Company: *AI-Powered Personalization in Marketing*.
- Deloitte: *AI in Financial Services – From Risk Management to Revenue Generation*.

Videos and Tutorials

• AI in Marketing:

- TED Talk: *How AI is Changing Marketing* by Andrew Ng.
- YouTube Tutorial: *AI Personalization in Action: Real-Life Examples*.

• AI in Finance:

- Masterclass: *AI for Fraud Detection in Financial Services* (Coursera).
- Video Case Study: *How Goldman Sachs Leverages AI for Financial Modeling*.

• AI in HR

- TED Talk: *The Future of AI in Recruitment and Hiring* by Fei-Fei Li.
- YouTube Video: *Predictive Analytics in HR: Real-Life Applications*

Final Project

Marketing Project

1. *Personalization through AI*
 - *Objective: Explore how AI drives personalized marketing campaigns.*
 - *Task: Analyze Starbucks' use of predictive analytics and suggest how similar strategies can be applied by local chains (e.g., Espresso or Chaye Khana).*
 - *Deliverable: A marketing plan showcasing an AI-driven personalization strategy for a Pakistani brand.*
2. *Recommendation Engines*
 - *Objective: Learn how AI enhances user experience through recommendations.*
 - *Task: Research Netflix's recommendation engine. Propose a similar AI model for a Pakistani streaming service like Tapmad.*
 - *Deliverable: A prototype or flowchart of a recommendation engine tailored for the Pakistani audience.*

HR Project

AI in Recruitment and Selection

- *Objective: Analyze the effectiveness of AI in improving recruitment outcomes.*
- *Task: Research and present a comparative analysis of traditional vs. AI-driven recruitment processes. Use tools like LinkedIn Talent Solutions or HireVue as case studies.*
- *Deliverable: A group presentation with recommendations for Pakistani companies on implementing AI in recruitment.*

Workplace Analytics

- *Objective: Understand how predictive analytics can improve employee retention.*
- *Task: Study a company (e.g., Unilever or Telenor Pakistan) using HR analytics to track employee engagement. Suggest strategies to reduce turnover.*
- *Deliverable: A report on how data-driven decisions can optimize workforce planning in Pakistan.*

Finance Project

1. *AI in Fraud Detection*
 - *Objective: Explore the role of AI in combating financial fraud.*

- *Task: Research how local banks in Pakistan (e.g., HBL, UBL) use AI for fraud detection. Compare with international models like JPMorgan's COiN.*
 - *Deliverable: A case analysis report with recommendations for improving fraud detection in Pakistan's financial sector.*
2. Investment Strategies with AI
- Objective: Examine the use of AI in simplifying investment decisions.
 - Task: Study Robinhood's AI-driven investment recommendations. Propose how AI-based investment apps could cater to young investors in Pakistan.
 - Deliverable: A mock pitch for a Pakistani investment app featuring AI functionalities.

Video References and cases studies

AI In Marketing

- <https://www.cliffsnotes.com/study-notes/22998398>
- <https://hbr.org/2021/07/how-to-design-an-ai-marketing-strategy>
- <https://www.ibm.com/think/topics/ai-in-marketing>
- <https://www.coursera.org/programs/hec-pak-learning-program-j8ady/learn/uva-darden-artificial-intelligence-marketing?source=search#modules>
- <https://www.coursera.org/programs/hec-pak-learning-program-j8ady/learn/whatcanaidoformarketing?specialization=aiformarketing>

AI for HR

- <https://www.coursera.org/programs/hec-pak-learning-program-j8ady/learn/generative-ai-advance-your-human-resources?specialization=generative-ai-for-human-resources>

<https://www.youtube.com/watch?v=ed7-OmDwDZM>

AI in Finance

- <https://www.ibm.com/topics/artificial-intelligence-finance>
- <https://kpmg.com/xx/en/our-insights/ai-and-technology/kpmg-global-ai-in-finance-report.html>
- https://www.youtube.com/watch?v=5Qqn4OSuK_M
- <https://www.youtube.com/watch?v=qvbQQmjU0Zq>