Course: MIS, Management Information System

Lecturer: Ali Rajabzadeh

Introduction:

Information Technology (IT) is a critical driver of innovation and competitiveness in modern organizations. Effective IT management is essential for aligning technology resources with business objectives, ensuring efficiency, and driving digital transformation. This module, based on the book "Information Technology for Management" by Turban, offers a comprehensive understanding of IT management principles and practices to prepare students for leadership roles in the IT field.

Objectives:

- ✓ Understand IT Management Fundamentals: Introduce students to core concepts and principles of IT management, emphasizing the strategic role of IT in organizations.

- ✓ IT Strategy and Planning: Equip students with skills to develop IT strategies that align with business goals and support competitive advantage.

- ✓ Resource Management: Explore the effective allocation and management of IT resources, including hardware, software, and human resources.

- ✓ Cybersecurity and Risk Management: Address the importance of cybersecurity and risk management in protecting IT assets and ensuring data privacy.

Contents:

- ✓ Week 1-2: Introduction to IT Management, Introduction to MIS
  Definition and Scope of MIS, Role of MIS in Organizations

Definition and Scope of IT Management

The Role of IT in Modern Organizations

Historical Evolution of IT Management

- ✓ Week 3-4: IT Strategy and Planning- Information and Data Management, Data vs. Information, Database Management Systems (DBMS) ,Aligning IT with Business Strategy

IT Governance and Frameworks (e.g., ITIL, COBIT)

Strategic IT Planning and Road mapping

- • Week 5-6: Resource Management

IT Infrastructure Management

IT Project Management

IT Human Resource Management

- • Week 7-8: Cybersecurity and Risk Management

Information Security Fundamentals

Cyber Threats and Vulnerabilities

Risk Assessment and Mitigation

- • Week 9-10: IT Innovation and Digital Transformation
- • Leveraging Emerging Technologies (e.g., AI, IoT)

Digital Transformation Strategies

Change Management in IT Initiatives

- • Week 11-12: Vendor and Supplier Management - System Implementation and Integration, System Development Life Cycle

Vendor Selection and Evaluation

IT Procurement and Contract Management

Outsourcing Strategies

Week 13-14: IT Performance Measurement and Governance- Emerging Trends in MIS, Cloud Computing and MIS, Internet of Things (IoT), Artificial Intelligence

Key Performance Indicators (KPIs) in IT

IT Service Management

Compliance and Audit

- • Week 15 -16 -17 : case analysis, action projects

Apply IT management concepts from the book to a real-world case study

Develop a project demonstrating IT management principles

- Teaching methods:
  lectures, case-based learning, group discussions, hands-on workshops, online platforms, role-playing, simulations, action projects and assessments
- Assessment:

  - ✓ Weekly individual assignment
  - ✓ Paper review
  - ✓ Action projects
  - ✓ Quizzes and final exam

- References:

Turban, E., Pollard, C., & Wood, G. (2017). Information Technology for Management: Advancing Sustainable, Profitable Business Growth. Wiley. Link

Weill, P., & Ross, J. W. (2019). IT Governance: How Top Performers Manage IT Decision Rights for Superior Results. Harvard Business Review Press. Link

Schwalbe, K. (2020). Information Technology Project Management. Cengage Learning. Link

Van Grembergen, W., & De Haes, S. (2015). Enterprise Governance of Information Technology: Achieving Alignment and Value, Featuring COBIT 5. Springer. Link

Dhillon, G. (2018). Principles of Information Systems Security: Texts and Cases. Wiley. Link

- Papers for journal club:

- Paper Title: "The Impact of Business Intelligence on Organizational Decision-Making"

Authors: Chen, H., Chiang, R. H., & Storey, V. C.

Published In: Journal of Decision Support Systems, 2012

Summary: This paper explores how Business Intelligence (BI) systems influence decision-making processes within organizations, emphasizing the strategic importance of data-driven decisions.

- Paper Title: "Digital Transformation: A Literature Review and Research Agenda"

Authors: El Sawy, O. A., Pereira, F., & Riedl, R.

Published In: International Journal of Information Management, 2020

Summary: This paper provides a comprehensive review of the digital transformation literature and outlines key research areas and challenges in the context of MIS.

- Paper Title: "Information Technology and Organizational Performance: An Integrative Model of IT Business Value"

Authors: Melville, N., Kraemer, K., & Gurbaxani, V.

Published In: MIS Quarterly, 2004

Summary: This seminal paper presents an integrative model linking IT investments to organizational performance and business value, a fundamental concept in MIS.

- Paper Title: "The Role of IT Capabilities in Enabling the Digital Business Transformation"

Authors: Luftman, J., & Ben-Zvi, T.

Published In: Journal of IT Management, 2020

Summary: This paper discusses the critical role of IT capabilities in facilitating digital business transformation and competitiveness.

- Paper Title: "Big Data: The Next Frontier for Innovation, Competition, and Productivity"

Authors: Manyika, J., et al.

Published In: McKinsey Global Institute, 2011

Summary: This report explores the potential of Big Data in driving innovation and enhancing competitiveness, offering valuable insights into the importance of data in MIS.

- Paper Title: "The Dark Side of Information Technology: An Analysis of the Relationship Between Digital Addiction, Depression, and Suicidal Ideation"

Authors: Elhai, J. D., Dvorak, R. D., & Levine, J. C.

Published In: Cyberpsychology, Behavior, and Social Networking, 2017

Summary: This paper sheds light on the potential negative consequences of excessive technology use, addressing issues related to digital addiction and mental health, which are essential considerations for IT management.

- Paper Title: "A Review of the IT Outsourcing Literature: Insights for Practice"

Authors: Lacity, M. C., & Willcocks, L. P.

Published In: The Journal of Strategic Information Systems, 2018

Summary: This paper provides a comprehensive review of IT outsourcing literature, offering insights for organizations considering outsourcing IT functions.

- Paper Title: "Digital Business Strategy: Toward a Next Generation of Insights"

Authors: Teece, D. J.

Published In: MIS Quarterly, 2018

Summary: This paper discusses digital business strategy and highlights the importance of dynamic capabilities and strategic agility in the digital age.

- Paper Title: "The Use and Impact of Social Media in SMEs: A Literature Review"

Authors: Koirala, B., et al.

Published In: Information Systems Management, 2019

Summary: This paper explores the use and impact of social media in Small and Medium-sized Enterprises (SMEs), offering insights into the role of social media in MIS.

- Paper Title: "Artificial Intelligence: The Revolution Hasn't Happened Yet"

Authors: Marcus, G.

Published In: The New York Times, 2018

Summary: This opinion piece critically examines the current state of artificial intelligence and challenges some common misconceptions, providing a balanced view of AI's potential and limitations.