COURSE SYLLABUS

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YEAR COURSE OFFERED: 2025

SEMESTER COURSE OFFERED: SPRING

DEPARTMENT: MIS

COURSE NUMBER: 4397 and 7397

NAME OF COURSE: Digital Transformation

NAME OF INSTRUCTOR: Pankaj Jagtap

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The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

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Learning Objectives

This class helps students understand how the leading digital technologies such as AI, Big Data, Cloud, and Internet of Things (IoT) are deployed to create unique customer value in disrupting the traditional businesses via digital transformation. This course highlights the critical role of digital transformation in the growth and survival of contemporary organizations. This course equips students with the digital and leadership capabilities needed to lead successful digital transformation initiatives

Students will explore advanced topics such as agile deployment of digital technology, defining and delivering business value using business case and KPIs, and designing digital products using concepts of design thinking and customer experience design. This class will also focus on building leadership capabilities, such as how to craft a digital vision, develop digital roadmap, end-user adoption, implementing effective governance, and build technology leadership. The class ends with a review of developing actionable digital transformation playbooks and sustaining digital transformation.

By integrating theoretical knowledge, practical case studies, and hands-on projects, students will grasp the digital and leadership capabilities needed to succeed in digital initiatives. The course is further enriched with expert guest lectures and real-world scenarios, offering a comprehensive learning experience.

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Major Assignments/Exams

The assessment for this course is designed to provide a comprehensive evaluation of your understanding and application of digital transformation concepts. It includes a mix of theoretical knowledge, practical application, and collaborative learning experiences.

Tests will focus on assessing your grasp of core concepts and theoretical frameworks covered in the course, ensuring a strong foundation in digital transformation principles.

Case studies, sourced from Harvard Business Review (HBR), will challenge you to apply theoretical knowledge to real-world business scenarios. These case studies will involve analysis and reflection, with opportunities for presenting findings and discussing strategic insights in class.

Group projects will simulate real-world digital transformation projects, requiring teams to collaborate on complex problems and engage with real-world clients or stakeholders. These projects will emphasize teamwork, problem-solving, and effective communication as students design and propose digital solutions.

Class participation is highly valued as it enhances the learning environment. Active engagement in discussions, thoughtful contributions, and critical analysis of case studies will be encouraged to foster a dynamic and interactive classroom experience.

Required Reading

Although there is no single textbook assigned to this class, following are two recommended books that will enhance student's knowledge of digital transformation.

"Rewired: The McKinsey Guide to Outcompeting in the age of Digital and AI," Wiley, 2023. "Leading Digital: Turning Technology into Business Transformation," published by Harvard Business Review Press, 2014.

List of discussion/lecture topics

Week 1: Introduction to Digital Transformation
Understand the impact of advancements in digital technology and the Fourth Industrial Revolution on business. Explore the key drivers behind digital initiatives and analyze what factors contribute to the success or failure of digital transformations.

Week 2: Digital Mastery
Examine the two key dimensions of digital mastery—digital capabilities and leadership capabilities—essential for successful transformations. Explore various categories of digital transformation initiatives and the impact of technologies like AI, Big Data, cloud computing, IoT.

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Week 3: Leading Digital Technology
Learn how advanced digital technologies, including AI (Generative AI and Machine Learning), Big Data, Cloud, and the Internet of Things (IoT), can be leveraged to create unique customer value.

Week 4: Agile Digital Solution Delivery
Explore digital solution delivery approaches based on Agile methodology, including Scrum and Scaled Agile Framework (SAFe), and learn best practices for deploying agile methodologies in digital projects.

Week 5: Building Leadership Capabilities
Develop leadership skills for digital transformation by creating a compelling digital vision, engaging stakeholders at scale, providing governance for transformation initiatives, and fostering technology leadership.

Week 6: Digital Roadmap Development
Learn the process of selecting digital initiatives that align with organizational goals and develop a comprehensive digital transformation roadmap.

Week 7: Delivering Business Value
Master the art of developing business cases for digital transformation initiatives, defining value through key performance indicators (KPIs), and ensuring the delivery of tangible benefits.

Week 8: Designing Digital Solutions
Explore tools and methods for designing digital solutions, including the business model canvas, design thinking, and customer experience design, to create user-centric digital products.

Week 9: Leading Digital Teams
Learn how to lead high-performing digital teams in an agile, cross-functional environment, covering talent planning, recruitment, onboarding, coaching, and development.

Week 10: Stakeholder Management
Gain expertise in engaging with stakeholders by understanding their needs and expectations, and learn how to leverage this knowledge for successful digital transformations.

Week 11: Leading Change
Develop change leadership skills, including assessing organizational readiness, overcoming resistance, implementing change, and measuring progress throughout the transformation process.

Week 12: Managing Vendor Relationships
Learn strategies for selecting the right vendors and partners, negotiating contracts, building trust, and managing these relationships effectively throughout the digital transformation journey.

Week 13: Succeeding in the Digital Journey

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Focus on monitoring, controlling, and adapting digital initiatives to ensure they remain aligned with organizational goals and evolving business needs, using tools such as Jira for project tracking.

Week 14: Digital Transformation Playbook
Create an actionable digital transformation playbook by framing challenges, prioritizing investments, mobilizing the organization, and fostering a culture of continuous innovation to sustain long-term success.