

Syllabus  
**GMT5281 Innovation Management and Digital Business Models**  
Prof. Dr. Mario Boßlau  
Summer Semester 2024

<b>Level</b>	Master	
<b>Credits</b>	5 Credits	
<b>Student Contact Hours</b>	4 (45 minutes)	
<b>Workload</b>	150 hours, thereof Contact time 60 hours (4 hours per week x 15) self-study 90 hours (for preparation of course and presentations)	
<b>Prerequisites</b>	Foundation management courses from the MBA program	
<b>Time</b>	11:30-13:00, 13:45-15:15	
<b>Room</b>	W4.1.06	
<b>Start Date</b>	19.03.2024	
<b>Lecturer(s)</b>	<b>Name</b>	Prof. Dr. Mario Boßlau
	<b>Office</b>	W2.2.23
	<b>Virtual Office</b>	TBD
	<b>Office Hours</b>	TBD
	<b>Phone</b>	TBD
	<b>Email</b>	TBD

## Summary

The "Innovation Management and Digital Business Models" course offers an in-depth analysis and comprehensive knowledge base for understanding and applying innovation and digital business models within the contemporary business landscape. It emphasizes the critical role of innovation and digital business models in securing competitive advantages across different cultures and markets, exploring global strategies for digital transformation.

The course starts with the fundamental concepts of innovation, exploring the distinctions between innovation and invention, and delves into the origins, types, and management strategies of innovations. The course covers standard and modern approaches to managing innovation processes, including the roles of project management, design thinking, and the significance of multidisciplinary teams.

A significant focus is placed on digital business models, examining their foundations, evolution, and key success factors. Students will learn about the essential elements of business models, including customer segments, value propositions, and revenue models, and how these elements are transformed in the digital age. Through a thorough examination of digital trends and enabling technologies like Artificial Intelligence (AI), Internet of Things (IoT), and cloud computing, the course provides insights into the drivers of digital transformation. Key frameworks and tools, such as the Business Model Canvas, are explored to aid in the design and management of digital business models. Special attention is given to digital business model patterns, platform models, and the strategic considerations necessary for their successful implementation. The course culminates in practical applications, showcasing how digital innovations drive business models in both business-to-consumer (B2C) and business-to-business (B2B) contexts.

Through case studies, students will analyze the challenges and opportunities of managing innovation and digital business models across diverse economic landscapes. This approach not only broadens the understanding of digital business management but also equips students with the skills to navigate the complexities of international markets. The course also aims to foster a global perspective on innovation, encouraging students to apply theoretical concepts to real-world scenarios across various industries and regions. By the end of this course, participants will be adept at designing and implementing innovative digital business models.

# Outline of the Course

## **1. Fundamentals of Innovation Management**

- 1.1. Basic Concepts: Innovation vs. Invention
- 1.2. Origins of Innovations
- 1.3. Types and Typologies of Innovations
- 1.4. Core Tasks and Goals of Innovation Management
- 1.5. Case Studies on Innovation

## **2. Standard Models for Managing Innovation Processes**

- 2.1. Role of Project Management in Innovation Processes
- 2.2. Standard Processes for Product Innovations
- 2.3. Innovation Processes for Services
- 2.4. Innovation Processes for Integrated Solutions and Business Models

## **3. Modern Approaches in Innovation Management**

- 3.1. Open Innovation
- 3.2. Design Thinking
- 3.3. Customer Journey and Customer Experience
- 3.4. Prototyping
- 3.5. Multidisciplinary Teams
- 3.6. Business Model Innovation

## **4. Business Models in the Digital Era: Fundamentals and Concepts**

- 4.1. Origin and Evolution of Business Model Concepts
- 4.2. Trends in Business Model Research
- 4.3. Types and Definitions of Business Models
- 4.4. Success Factors for Digital Business Models
- 4.5. Levels and Goals of Digital Business Models

## **5. Essential Elements of Business Models**

- 5.1. Customer Segments
- 5.2. Value Propositions
- 5.3. Value Architecture: Offer, Distribution and Communication Channels, Customer Relationship, Value Chain, Core Capabilities, Key Activities, Key Partnerships
- 5.4. Revenue Model: Revenue Sources, Cost Structure

## **6. Trends and Technologies as Enablers for Digital Business Models**

- 6.1. Platform Economy
- 6.2. Internet of Things (IoT)
- 6.3. Cloud Computing

6.4. Big Data and Data Science

6.5. Artificial Intelligence (AI)

## **7. Tools and Frameworks for Digital Business Model Design**

7.1. Business Model Canvas by Osterwalder and Pigneur

7.2. St. Gallen Business Model Navigator by Gassmann et al.

7.3. Business Model Grid by Schallmo

7.4. Digital Value Creation Framework by Hoffmeister

7.5. 4C-Net Business Model and 4S-Net Business Model by Wirtz

## **8. Application of the Business Model Canvas for Business Model Design**

8.1. The Business Model Canvas's Nine Components

8.2. Similarities in Business Models

8.3. Designing Business Models

8.4. Strategic Areas of Business Models

8.5. The Business Model Design Process

## **9. Digital Business Model Patterns**

9.1. Importance of Digital Business Model Patterns

9.2. Long Tail

9.3. Freemium

9.4. Multi-sided Markets

9.5. Subscription and Flat-rate

## **10. Digital Platform Business Models**

10.1. From Pipeline to Digital Platform

10.2. Basic Platform Functionalities and Systematization Approaches

10.3. Direct and Indirect Network Effects

10.4. Frameworks for Modelling

10.5. Challenges and Success Factors in Development and Implementation

## **11. Design and Management of Digital Business Models**

11.1. Digital Business Models as Drivers of Innovation

11.2. Importance of the Business Plan in the Context of Digital Business Models

11.3. Company Positioning in Digital Business Models

11.4. Methods for Design and Management of Digital Business Models

11.5. Application and Case Studies in B2C and B2B Markets

## Course Intended Learning Outcomes and their Contribution to Program Intended Learning Outcomes / Program Goals

Program Intended Learning Outcomes		Course Intended Learning Outcomes	Assessment Methods	
After completion of the program, the students will be able...		After completion of the course, the students will be able...	Essay	Presentation
			60%	40%
			Individual	Collective
1	Responsible Leadership in Organizational Contexts			
1.1	... to know and explain important leadership principles.	... to understand the role of innovation and digital transformation in leading organizations effectively.	x	
1.2	... to apply leadership concepts to an organizational context or a specific case.	... to apply digital business models and innovation strategies in leadership roles.	x	x
1.3	... to critically reflect on leadership concepts in a certain organizational context or in a specific case.	... to critically assess the impact of technology on organizational leadership.		x
1.4	... to act responsibly from a scientific self-understanding and to act professionally.	... to develop responsible leadership strategies that incorporate digital innovation.	x	
2	Creative Problem-Solving Skills in a Complex Business Environment			
2.1	... to identify & classify problems.	... to identify digital trends and their implications for business innovation.	x	
2.2	... to analyze problems.	... to analyze complex business scenarios using digital business model concepts.	x	x
2.3	... to creatively solve problems.	... to devise innovative solutions and their corresponding digital business models leveraging digital technologies.		x
2.4	... to explain problems and their solutions in a comprehensive manner.	... to present complex digital business model solutions effectively.	x	x
3	Applied research skills			
3.1	... to know the research and analysis methods important in his/her field of study.	... to conduct research on digital business trends and innovation management.	x	
3.2	... to appropriately apply the research and analysis methods.	... to apply qualitative and quantitative methods to analyze digital business models.	x	x
3.3	... to obtain innovative results using relevant research methods.	... to produce actionable insights through research on digital business and innovation.		x
4	Innovation management and management of digital transformation			
4.1	... to have fundamental knowledge of operational innovation processes and of processes of digital transformation.	... to understand the lifecycle of digital business models and innovation management.	x	
4.2	... to assess a company's innovation potential and its needs/opportunities with respect to digital transformation.	... to evaluate the digital maturity and innovation capacity of a business.	x	x
4.3	... to develop complex technological strategies and strategies for managing digital transformation.	... to manage and lead digital transformation initiatives effectively.		x
5	Management of the challenges of global sustainability and awareness for social and corporate responsibilities			
5.1	... to have a sound basic knowledge of sustainability issues.	... to integrate sustainability into digital business strategies.	x	
5.2	... to identify and analyze sustainability issues and their causes.	... to assess the social and environmental impact of digital business models.	x	x
5.3	... to develop sustainability strategies.	... to develop digital business models that promote corporate responsibility.		x

## Teaching and Learning Approach

The course employs a blended learning approach, combining theoretical knowledge with practical application. On-site Lectures and readings provide the foundational concepts of innovation management and digital business models, while case studies and hands-on projects allow students to apply these concepts in real-world scenarios. Interactive discussions and collaborative work are encouraged to foster critical thinking and peer learning. The learning environment is designed to be student-centered, with emphasis on self-guided research and proactive engagement.

## Literature and Course Materials

Core literature for the course will consist of contemporary textbooks on innovation management and digital business models, as well as a collection of recent journal articles and case studies.

Recommended readings:

- Aagaard, A. (2019). *Digital Business Models: Driving Transformation and Innovation*. Palgrave Macmillan US.
- Bessant, J. R., & Tidd, J. (2018). *Innovation and entrepreneurship* (3rd ed., reprinted.). JOHN WILEY & Sons.
- Cantamessa, M., & Montagna, F. (2016). *Management of innovation and product development: Integrating business and technological perspectives*. Springer.
- Gassmann, O., Frankenberger, K., & Choudury, M. (2020). *The business model navigator: The strategies behind the most successful companies* (Second edition). FT Financial Times publishing. Pearson Education Limited.
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*. Wiley.
- Oswald, G., & Kleinemeier, M. (2017). *Shaping the Digital Enterprise*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-40967-2>
- Wirtz, B. W. (2019). *Digital Business Models: Concepts, Models, and the Alphabet Case Study* (1st edition 2019). *Progress in IS*. Springer International Publishing.
- Wirtz, B. W. (2020). *Business model management: Design - process - instruments* (Second edition). *Springer texts in business and economics*. Springer. <https://doi.org/10.1007/978-3-030-48017-2>

Additional materials, including lecture slides, supplemental readings, and case study resources, will be provided via the course's online learning platform.

## Assessment

Assessment will be based on individual essays (60%) and group presentations (40%). Essays will focus on the critical analysis and reflection of innovation concepts and digital business models. Group presentations will involve the application of course materials to analyze, design, and propose innovative business model solutions, fostering teamwork and collaborative skills.

## Schedule

The course schedule will detail weekly topics, required readings, assignment deadlines, and other important dates. This information will be provided on the first day of class and will be available on the online course platform for reference throughout the semester.

## Academic Integrity and Student Responsibility

Students are expected to uphold the highest standards of academic integrity. This includes abstaining from plagiarism, cheating, and any other forms of academic dishonesty. Assignments and assessments should reflect individual and group efforts appropriately. Violations will be taken seriously and may result in disciplinary action.

## Code of Conduct for online Teaching

[Link to the Code of Conduct for online Teaching](#)

## **Teaching Philosophy**

The teaching philosophy is grounded in the conviction that the most impactful learning occurs through direct, in-person engagement. The course is structured around on-site sessions that facilitate interactive discussions, collaborative problem-solving, and real-time feedback, which are essential for developing a nuanced understanding of the course topics. To augment this experience and accommodate various learning preferences, we integrate supplementary online elements such as video lectures. These resources are specifically designed to support asynchronous learning, allowing students to review complex concepts at their own pace and prepare more effectively for assessments such as presentations and essays. The goal is to create a dynamic and flexible educational environment that respects the traditional virtues of classroom teaching while embracing the advantages that digital enhancements provide.

## **Additional Information**

Students are encouraged to regularly check the online learning platform for updates and additional resources. Office hours will be available for students seeking further discussion or clarification on course content. Feedback is highly valued, and students are welcome to provide suggestions for improving the course throughout the semester.