



COURSE UNIT DESCRIPTION

Course Unit Title	DIGITAL BUSINESS TOOLS AND DIGITAL BUSINESS DEVELOPMENT	
Course Unit Code	GD320	
Type of Unit	Core	
Level of Course Unit	First cycle	
Year of Study	First/second year	
Semester	On demand	
Number of ECTS Credits	6 ECTS	
Course Unit Objectives	<p>The business world is rapidly digitalizing, breaking down industry barriers and creating new opportunities while destroying long-successful business models. Organisations need to create new business options for the more-connected future of digital ecosystems. Recent research shows that companies that had 50% or more of their revenues from digital ecosystems and understood their end customers better than their average competitor saw 32% higher revenue growth and 27% higher profit margins than their industry averages (Weill & Woerner, 2015).</p> <p>The digital economy is transforming the way people work and the skills they need at work. This represents a major challenge for employers, workers and public authorities.</p> <p>Digital business development refers to an organization’s leverage of digital capabilities and aligned strategic, marketing, and sales activities to approach the market and customers, and enable value-creating growth.</p> <p>The main objectives of this course are to foster data-driven culture and equip students with in-depth knowledge of digital business tools. Students will also learn how to develop business models that support a company's strategic objectives, be able to integrate appropriate information and other technologies, both existing and emerging, in developing business processes and business models. Learning in this course will be reinforced by practical application opportunities via case studies.</p>	
Learning Outcomes	On completion of the course the students are expected to be able to:	
	CILO1	Use business process mapping tools, develop new or improved innovative business processes in support of a company's strategic objectives in a socially responsible manner
	CILO2	Examine the internal capabilities necessary to recognize the potential commercial value of digital technology emerging in the external environment and assess which digital tools should be used for each function of business
	CILO3	Employ digital business tools, foster data-driven culture, and continuously learn and adopt new technological tools
	CILO4	Demonstrate in-depth knowledge of new business models and delineate what strategies can companies employ to move from traditional business models to creating a digital ecosystem and invest in knowing their end customers
Name of Lecturer(s)	Dr Andreas Assiotis	
Mode of delivery	Face to Face	
Prerequisites or corequisites	None	
Content	Introduction to business process mapping tools.	CILO 1

	How to develop new or improved innovative business processes from gap analysis through process design in support of a company's strategic objectives in a socially responsible manner.	
	Assessment of the business competitive environment and the internal capabilities necessary to recognize the potential commercial value of digital technology emerging in the external environment. Assessing which digital tools should be used for each function of business.	CILO 2
	<p>Categories of digital business tools:</p> <ul style="list-style-type: none"> - Business web presence, such as online directory listings, websites, and mobile apps - Social media for customer engagement, sales, marketing, or other business purposes - Data analytics to gain customer insights or inform business decisions - E-commerce and online scheduling capabilities via their own websites or third-party platforms - Online advertising, including ad banners on websites, social media advertising, and search engine marketing and optimization - Internal productivity tools that improve internal business processes, such as cloud-based software, video conferencing, and corporate social networks. 	CILO 3
	<p>Learning specific digital skills such as for example:</p> <ul style="list-style-type: none"> - Collaborative tools (messaging, emailing, common shared drives, common shared spreadsheets) - either Google Sheets or Office 365 (Online) - Payments electronically and associated tools - DocuSign for signing Documents - Visualisation tools - Big data: Apache Spark and hadoop. This is for large scale and distributed computations and analytics. - Code hosting platform: GitHub - Website development, Mobile app development: Java, Javascript, CSS - Artificial intelligence (AI)/Machine learning/neural networks: Scikit, PyTorch, TensorFlow, Keras. Speech recognition for dictation. Natural language computing, e.g. automatic translation between languages. - Edge computing, IoT <p>This list may be adjusted to include other digital tools so as to stay up-to-date with technology development.</p>	CILO 3
	Fostering tech-driven and data-driven culture. Continuous professional learning, selecting and adopting new technological tools.	CILO 3
	Four business models for the digital era (based on the <i>MIT</i> article).	CILO 4

	Case study analysis and group work.
Recommended or required reading	<p>Lectures, articles, case studies, reports, and other course materials are available via CIIM Moodle.</p> <p>Recommended reading:</p> <p>EU Report (2021, March 9). ICT for Work: Digital Skills in the Workplace. https://digital-strategy.ec.europa.eu/en/library/ict-work-digital-skills-workplace</p> <p><i>The Wall Street Journal</i> (2017, June 21). Digital Tools a Boon to Small Business. https://deloitte.wsj.com/cio/2017/06/21/digital-tools-a-boon-to-small-businesses/</p> <p>Weill, P. & Woerner, S. (2015, July 1). Thriving in an Increasingly Digital Ecosystem. <i>MIT Sloan Management Review</i>, V. 56 (4). https://hbsp.harvard.edu/product/SMR531-PDF-ENG?Ntt=digital%20business%20models</p> <p>Rogers, D. (2016). <i>The Digital Transformation Playbook: Rethink Your Business for the Digital Age</i>. Columbia Business School Publishing.</p> <p>John Hopkins Carey Business School - Science of Digital Business Development Initiative. https://carey.jhu.edu/partnerships/science-digital-business-development-initiative</p> <p><i>The Modern Entrepreneur</i> (n.d.) Digital Business Tools. https://www.themodernentrepreneur.com/business-tools/</p> <p>Digital tools for business: Find digital tools and software to help you connect with customers and employees (by the Australian Gov't). https://business.gov.au/online/digital-tools-for-business</p> <p>10 Essential Tools to Support Your Digital Transformation https://www.lumapps.com/solutions/digital-transformation/digital-transformation-tools/</p>
Planned learning activities and teaching methods	Lectures; in-class discussion and debates; in-class exercises; problem sets; team work; case studies, team presentations, interactive online learning via Moodle (quizzes, assignments, forums)
Assessment methods and criteria	<p>Class Participation: 10%</p> <p>Group Work in class: 20% (case studies)</p> <p>Final Assignment: 70%</p>
Language of Instruction	English
Work Placement(s)	Not applicable