

DITRAMA - D3.1 – ANNEX Joint Curriculum Digital Transformation Manage

Title	Title Chapter within L.U.	Number of developed Pill	Name of Pills	# Pills totals		Who?	managers of furniture companies	workers of furniture companies	HE in woodworking and furniture	VET students in woodworkin g and furniture
				# Pills / chapter	#					
<b>1 Digital technology - Exploration of contemporary emerging and potential</b>		7								
	<b>Internet of Things (IoT)</b>	43	Internet of Things - Emergence of Connected Economics	1	1	Aarhus	X	X	X	X
	<b>Industrial Internet of Things (IIoT), framework for product development</b>	71	What is IoT/IIoT? General approach and platforms	4	1	UTBv	X	X	X	X
		72	IoT framework - Case study Tapio (HOMAG)		2	UTBv	X	X	X	X
		83	Digital product configuration, selling, buying from a single platform (pCon)		3	UTBv	X		X	
	<b>Cloud computing, enabler of Industry 4.0</b>	100	Case study of One Two Time and Job registration by barcode scanning		4	HoGent	X	X	X	X
		48	Cloud Computing – Enabling Industries of the Future	2	1	Aarhus	X	X	X	X
		73	Cloud computing explained in the context of Industry 4.0		2	UTBv	X	X	X	X
				7	7					
<b>2 Digital technology - engineering and manufacturing</b>		36								
	<b>Horizontal and vertical system integration</b>	46	Technical General Competences	13	1	Aarhus	X	X	X	X
		47	Horizontal and Vertical System Integration		2	Aarhus	X	X	X	X
	<b>Industry 4.0: concept and terminology (ERP, ORP...)</b>	86	A brief history on the first, second and third industrial revolution		3	HoGent	X	X	X	X
		87	Industry 4.0		4	HoGent	X	X	X	X
		88	ERP Introduction		5	HoGent	X	X	X	X
		89	Case study of Proteus® ERP		6	HoGent	X			
		90	Operational Resource Planning Case study - ARDIS®		7	HoGent	X	X	X	X
	<b>Parametric design softwares for furniture industry 4.0</b>	74	Review of parametric design software for Industry 4.0		8	UTBv	X	X	X	X
		75	Case study: Imos as customized design software		9	UTBv	X	X	X	X
		76	Case study: Inventor software (applied in Nord Arin S.A Co.)		10	UTBv	X			
	<b>From product design to production</b>	91	CADCAM Case study -TopSolid		11	HoGent	X		X	
		77	CAD-CAM system Industry 4.0 Case study - Cabinet Vision		12	UTBv	X	X	X	X
		78	CAD-CAM Case study - bCabinet (Biesse)		13	UTBv	X			
	<b>Additive manufacturing</b>	92	Additive Manufacturing Introduction	3	1	HoGent	X	X	X	X
		93	Additive Manufacturing Overview		2	HoGent	X		X	
		94	Additive Manufacturing Examples from the furniture sector		3	HoGent	X		X	
	<b>Autonomous robots</b>	55	Autonomous Robots - An Introduction	2	1	Aarhus	X		X	
		85	Autonomous robots - Case study: Lesta robots for furniture finishing		2	UTBv	X	X	X	X
				25	18					
<b>3 Digital technology – simulation and AR/VR</b>		10								
	<b>Simulation, digital twins, machining and virtual prototyping</b>	51	Establishing Digital Twins for Cyber-Physical Systems	3	1	Aarhus	X	X	X	X
		79	Case study - bSolid (Biesse)		2	UTBv	X	X	X	X
		80	CAD-CAM-CAE - Sophia platform		3	UTBv	X		X	
	<b>Virtual/Augmented reality: in design and in relation to AI</b>	69	Visualization of the design	6	1	Aarhus	X	X	X	X
		70	Augmented Reality & Artificial Intelligence		2	Aarhus	X		X	
		81	Augmented Reality - General concepts and applications		3	UTBv	X	X	X	X
		82	Case study - design pCon digital platform		4	UTBv	X	X	X	X
		95	Using AR/VR in sales		5	HoGent	X			
		96	Remote technician and operator training by AR/VR		6	HoGent	X	X	X	X
				34	9					

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<b>4 Digital technology – data &amp; security</b>		24								
Data management and data-driven analytics		44	New ways of collecting and moving data - digital platforms	6	1	Aarhus	X	X	X	X
		28	Tools for Understanding and Monetizing Data		2	Aarhus	X		X	
		52	Big Data analytics & advanced analytics		3	Aarhus	X		X	
		53	LEAN and Digital Manufacturing “Total Production Maintenance” TPM		4	Aarhus	X		X	
		56	LEAN and Digital Manufacturing SMED		5	Aarhus	X		X	
Information Security Management & Cybersecurity (including BI)		84	Big data analytics and evaluation of customer experience		6	UTBv	X		X	
		45	Cybersecurity Introduction – backing up your data might not be enough	6	1	Aarhus	X	X	X	X
		59	A strategy for cybersecurity: how to protect your digital assets		2	Aarhus	X		X	
		30	Cybersecurity (internally in the firm)		3	Aarhus	X	X	X	X
		29	GDPR and Safety - General Data Protection Regulation		4	Aarhus	X	X	X	X
		57	Blockchain - a changing trend for industries and what does it mean for your business		5	Aarhus	X		X	
		60	Machine Learning in the furniture industry		6	Aarhus	X		X	
				46	12					
<b>5 Innovation and digital transformation</b>		22								
Disruption and (digital) business models and frameworks		14	Understanding the Digital Ecosystem	2	1	Aarhus	X	X	X	X
		20	Managing innovation processes and tools to drive digitalization		2	Aarhus	X	X	X	X
Innovation, creativity and ideas generation		19	Ability to sense the opportunities within digitalization	3	1	Aarhus	X	X	X	X
		27	New (Digital) Business Models		2	Aarhus	X	X	X	X
		38	Value generation		3	Aarhus	X		X	
Business and IT strategy & alignment		11	Introduction to Digital Transformation	6	1	Aarhus	X	X	X	X
		12	What is Digital Maturity ?		2	Aarhus	X	X	X	X
		13	Designing the Digital Strategy		3	Aarhus	X		X	
		15	Moving from Supply Chain to Ecosystems		4	Aarhus	X		X	
		17	Moving from Products to Services: New Value Propositions		5	Aarhus	X		X	
	21	Understanding the Market / Technical Trend and the Competition to Fit in the Digital		6	Aarhus	X		X		
				57	11					
<b>6 Leadership in digital transformation</b>		26								
Organizational structures and leadership		22	Investing for Digital Transformation: The Business Case	3	1	Aarhus	X	X	X	X
	Digital maturity models in the furniture industry	49	Related to business concepts (i.e. investments)		2	Aarhus	X		X	
		1	Leveraging Maturity Models to promote Digital Transformation in the Furniture Industry		3	CENFIM	X		X	
Change management - strategy and culture		65	Digital Adoption: What, why and how	6	1	Aarhus	X	X	X	X
	Digital accelerators for digital adoption	2	Strategy, Organizational Culture and People		2	CENFIM	X		X	
		3	Underpinning execution: ICT, standards and processes		3	CENFIM	X	X	X	X
		4	Reorienting the company around the Customer Experience to generate business value		4	CENFIM	X		X	
		5	Embracing constant change and rapid adaptation to generate business value		5	CENFIM	X	X	X	X
		6	Examples of Digital Transformation Enablers and Tools		6	CENFIM	X	X	X	X
Process management, governance and management of digital assets		7	Self-assessment exploratory questions	4	1	CENFIM	X	X	X	X
	Self-assessment, evaluation maturity tools and case studies	8	Evaluation Tools - How digitally mature is your company?		2	CENFIM	X		X	
		9	Furniture Manufacturing Industry: Current Status		3	CENFIM	X			
		10	Advancement of the Digital Maturity of Furniture Manufacturing Companies		4	CENFIM	X	X	X	X
				70	13					

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<b>7 Communication in digital transformation</b>		20								
	Engagement, transparency and accelerators adoption	18	Digitalization: Opportunity or Threat	2	1	Aarhus	X	X	X	X
		32	Communicating the Digital Change in the Company		2	Aarhus	X	X	X	X
	Partnerships	16	How to create partnerships in a digital ecosystem	2	1	Aarhus	X		X	
		50	LEAN and Digital enabled Supply Chain/Logistic		2	Aarhus	X		X	
	Digital marketing	35	The Financial Perspective for Digital Commerce	6	1	Aarhus	X		X	
		68	Delivering Digital versions of the furniture/products (e-commerce) - Intro		2	Aarhus	X	X	X	X
		37	New customer touch points		3	Aarhus	X		X	
		39	E-marketing and (mobile) branding		4	Aarhus	X		X	
		40	How to understand “your” market		5	Aarhus	X		X	
		98	Brands & Patents - Intellectual Property Rights		6	HoGent	X		X	
				80	10					
<b>8 The people within the digital transformation</b>		6								
	Working in team: HR-practices in a digital environment	41	Digital HR Practices	2	1	Aarhus	X		X	
		23	Getting the right Employees: Hiring & training		2	Aarhus	X		X	
	Culture and mindset in a digital company	24	Assessing the need for organizational change	4	1	Aarhus	X		X	
		25	Managing the organizational change		2	Aarhus	X		X	
		26	Change of Culture and Mindset in the Company		3	Aarhus	X		X	
		97	Change of culture and mindset in the company. Case study - Van Hoecke		4	HoGent	X	X	X	X
				86	6					
<b>9 Quality, risk and safety in digital transformation</b>		8								
	Quality: automation and standardization	64	Automating tasks performed by human vision - Case study: TrackTech	1	1	Aarhus	X	X	X	X
	Implementing a digital strategy with regards to Risk and Safety	31	Digitalization of Organizational Processes	7	1	Aarhus	X	X	X	X
	From an analog safety management system to a digital system	42	From an Analog Safety Management System to a Digital System?		2	Aarhus	X		X	
		58	Ecosystems and transactions: security implications		3	Aarhus	X		X	
	Risk management in the digital area	61	Intro to Risk management in the Digital area		4	Aarhus	X		X	
		62	A vision for the Digital risk: the seven building blocks		5	Aarhus	X		X	
		63	Implementing a Digital Strategy with Respect to Safety		6	Aarhus	X	X	X	X
		99	Prevention Policy, Risk Assessment		7	HoGent	X		X	
				94	8					
<b>10 Social and environmental impact of digitization</b>		6								
	The Good, the Bad and the Ugly in a digital transformation process	66	Digital Transformation - The Good, Bad & Ugly	1	1	Aarhus	X	X	X	X
	Digital tools in times of emergency (i.e. healthcare, COVID-19)	54	Digital tools in times of emergency - Covid 19	2	1	Aarhus	X	X	X	X
		67	Digital tools in times of emergency - Covid 19 (part 2)		2	Aarhus	X		X	
	Connecting sustainability with digitalization	33	Connecting Sustainability with Digitalization	3	1	Aarhus	X	X	X	X
		34	How ‘servitization’ facilitates for longer lifetime of products		2	Aarhus	X		X	
		36	Full cycle reusability of the Products		3	Aarhus	X	X	X	X
				100	6					