Digl-VET

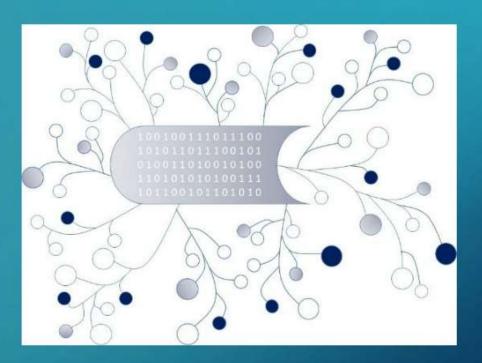
Project Number: 2018-1-DE02-KA202-005145

Digl-VET

FOSTERING DIGITISATION AND INDUSTRY 4.0 IN VOCATIONAL EDUCATION AND TRAINING

Training Modules for the Learner Module C: Current Status and future developments University of Paderborn, Jennifer Schneider

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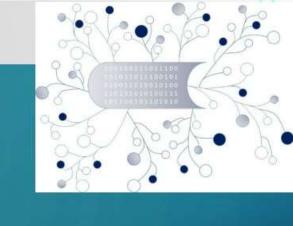
Agenda of Module C: Current Status and future developments

Current Status: Meaning of Internet of Things (IoT)
 1.1 Task - Advertising Video of BOSCH - Demonstrate IoT in daily life
 1.2 Task - H5P Task: Memory Game
 1.3 Task - H5P Task: Find the words from the grid
 Future developments of IOT
 Future developments of IOT
 2.2 Task - Mind Map

ARGES

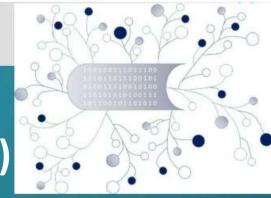
Emphasys

USKnowledge



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of the European Union



1. Current Status: Meaning of Internet of Things (IOT)

Common definition: Internet of Things (IoT) as a network of physical objects.

"[...] IoT is a global infrastructure for the information society, enabling advanced services by interconnecting (physical and virtual) things based on existing and evolving interoperable information and communication technologies." Patel, K.; Patel, S. (2016)







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01. Current Status: Meaning of Internet of Things (IOT)

Ъ	Anything	• Any devices (smartphones, tablets, laptops, etc.)	
	Anyone	Everyone (every person can be part of IoT)	
	Any Services	regardless of company size, industry and business Properties and unique selling points of the	
99	Any Path	Any network is possible	~
	Any Place & Anytime	Flexibility in time and place due to the benefits of digitalisation and the connection to the internet	J



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Task

Please watch the following Advertising Video of BOSCH - Demonstrate IoT in daily life. Please take some notes!



TASK





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1.1 Task



https://www.youtube.com/watch?v=v2kV6pgJxu0













Please answer the next H5P.org tasks!



TASK

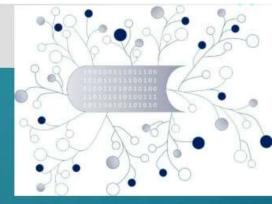




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1.2 Task



VET_Learner_MC_Current-Status_Task1_DE Memory Game

[h5p id="3"]

Please play the following memory game with facts of IoT.







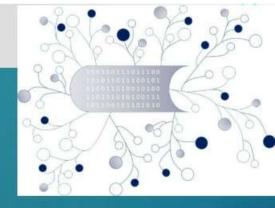
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1.3 Task

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Find the words from the grid

ngenious Knowledge

Department Wirtschaftspädagogik Business and Human Resource Education Chair Wirtschaftspädagogik II

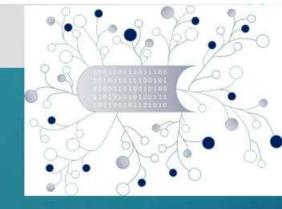
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P	J	s	R	R	N	Ρ	1	С	۷	E	0	R	Y	Y	z
N	1	N	E	E	1	Y	D	۵	U	Α	w	R	E	Ρ	U
	ind the	words													
Interneto/Things		terneto/Things AnyPath		Path	Anyone Anytime			Anything network			son	connectivity IoT devices			

Please find the words from the grid!









2. Future developments of IoT

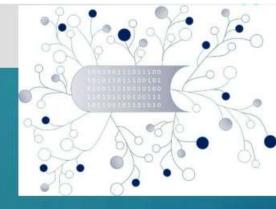


"IoT is when everyday products such as refrigerators, watches, speakers and more connect to the internet and to one another. The Internet of Things is already transforming our homes and workplaces."*

> * https://www.forbes.com/sites/bernardmarr/2018/09/12/19-astonishing-quotesabout-the-internet-of-things-everyone-should-read/#4b82d98ce1db







2. Future developments of IoT



- Human
- \$170 -1590 billion
- Major applications:
- · Monitoring and managing illness
- · Improving wellness, etc.



• \$ 200 -350 billion

Home

- Major applications:
- · Energy management
- Safety and security, etc.

Office

- \$70- 150 billion
- Major applications:
- Organizational redesign and worker monitoring, AR, Building security, etc.



Factories

- \$1210-3700 billion Major applications
- Operations optimization
- · Health and safety, etc.



- \$210- 740 Major applications:
- · Condition- based maintenance, etc.



Cities

- \$930- 1660 billion
- Major applications:
- Public safety and health
- Traffic control, etc.

Fig.: Own figure, followed IOT Economic Impact (2025).















Task

Please watch the following Video about IoT in daily life. Please take some notes!



TASK





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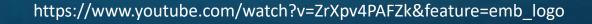




TASK

2.1 Task









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(maximu)

- Tatsu Technologies









2.2 Task

Please think of IoT in a <u>critical perspective</u>! 1. What could be negative impacts of IoT in daily life? 2. What means data security and protection of personal rights in this context?

3. Please take some notes and create a mind map!



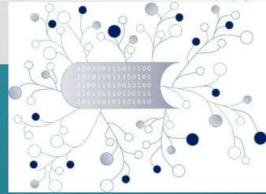
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TASK







Agenda of Module A: Digitisation Terms and history

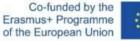
- Manyika, J. et al. (2015): "The Internet of Things: Mapping the Value Beyond the Hype," McKinsey Global Institute.
- Marr, B. (2018): 19 Astonishing Quotes About The Internet Of Things Everyone Should ReadRetrieved from the Internet: https://www.forbes.com/sites/bernardmarr/2018/09/12/19-astonishing-quotes-about-the-internet-ofthings-everyone-should-read/#4b82d98ce1db, Access date: 14.05.2021.
- Patel, K.; Patel, S. (2016): International Journal of Engineering Science and Computing, May 2016. Internet of Things-IOT: Definition, Characteristics, Architecture, Enabling Technologies, Application & Future Challenge. Link: <u>file:///C:/Users/jsc/Documents/Lehrstuhl/Digl-VET/Intellectual%20Outputs/IO4/Recherche_Modules/2016_IoT.pdf</u>
- Online Resourcen:
- Link: https://www.ida.gov.sg/~/media/Files/Infocomm%20Lan dscape/Technology/TechnologyRoadmap/InternetOfThin gs.pdf
- Link: http://tblocks.com/internet-of-things

YouTube:

nowledg

- https://www.youtube.com/watch?v=crDyC6Xeqs
- https://www.youtube.com/watch?v=ZrXpv4PAFZk&feature=emb_logo
- https://www.youtube.com/watch?v=v2kV6pgJxuo





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