

DigiFInd

Enhance Adult Learners Digital Skills for Furniture Industry

Project: 2018-1-BG01-KA204-047923

KA2 - Cooperation for Innovation and the Exchange of Good Practices

KA204 - Strategic Partnerships for adult education

O1-A3: Design of the Training Programme for Trainers

Deliverable within Intellectual Output 1:

Training programme for trainers, aimed at providing training in Digital skills and Industry 4.0 for low-skilled adult learners in Furniture industry

Lead Partner	UNWE
Contributing Partners	PAIZ, INTERKRES, EFFEBI, FHM, CESPIM, BIA, FMT

April 2021

2019

Document Version Control

v1	Draft	First draft version developed by PAIZ +Partners
v2	Draft	Second version feedback by PAIZ
v3	Draft	Third version developed by Partners
v4	Final	Final version developed by PAIZ + Partners
V5	Final	Updated final version developed by PAIZ, UNWE, INTERKRES, EFFEBI

Training curriculum

Name of the training	Training programme for trainers, aimed at providing training in Digital skills and Industry 4.0 for low-skilled Adult learners in Furniture industry
Training Goal	This training will help trainers working in the furniture industry to work with low skilled learners in Industry 4.0 , in line with actual needs and challenges.

Module I	Furniture industry - essential information for trainers
Module content	<p>1. Challenges and trends in the furniture industry regarding digital and Industry 4.0 transformation</p> <ul style="list-style-type: none"> a. Introduction: What is important of Industry 4.0 policies; Key characteristics of digital and Industry 4.0 transformation; Key challenges in the Furniture industry b. Trends in the Furniture industry. Need to improve the digital skills: different for low-skilled and other adult learners (such as basic and specific digital skills; CAD-type software...). c. General framework of the furniture sector in each specific country. d. Needs of companies to achieve the new production standards required by industry 4.0. e. Networked production oriented towards customers with personalized preferences (design, customized products), the growing complexity of production and the online marketing push. f. Lack of interest in acquiring new skills among employees and lack of basic digital skills needed to be able to understand more advanced in specific training. <p>2. Most relevant digital skills and competences for low-skilled adults in Furniture industry</p> <ul style="list-style-type: none"> a. Relevant digital skills in Furniture Industry b. Basic, intermediate, and advanced digital skills in Furniture industry c. Practical examples from Furniture industry d. Training curriculum for trainers, aimed at providing training in Digital skills and Industry 4.0 for low-skilled adult learners in Furniture industry

<p>Objectives</p> <p>(knowledge and skills)</p>	<p><u>On completion of this module trainers will:</u></p> <ol style="list-style-type: none"> 1. understand the importance of Industry 4.0 for the industry. 2. understand the need to improve the digital skills, in accordance with trends in the Furniture industry. 3. recognize level of implementation of digitalization in furniture sector compared to other sectors. 4. know the specific features of furniture sector (especially for SME's sector) in their own country. 5. understand the characteristics of the market demand (customers preferences in the furniture sector about design, technology, etc.) 6. recognize the most relevant digital skills and competences for low-skilled adults in Furniture Industry. 7. distinguish the difference between basic, intermediate, and more advanced digital skills. 8. learn practical examples of technological solutions for concrete business activities in Furniture industry. 9. customize the training curriculum provided. 10. design a lesson for the specific needs of the low-skilled adults.
<p>Delivery methods</p>	<ol style="list-style-type: none"> 1. <u>Presentation with animation and narration:</u> Challenges and trends in the Furniture industry regarding digital and Industry 4.0 transformation 2. Activity: <u>Do it for yourself.</u> Build your own checklist for preparation of training: steps for delivering educational content, such as: create course materials, create animations, create narrations, prepare materials for publishing, publish content. 3. Activity: <u>Activity Read/watch and share your opinion.</u> <ul style="list-style-type: none"> - European Report: On the identified most relevant digital skills and competences for low-skilled adults in Furniture industry. - https://ec.europa.eu/digital-single-market/en/fourth-industrial-revolution 4. <u>Knowledge quiz.</u> Test knowledge with feedback: questions and answers (what the wrong answers are and why). 5. Presentation with narration: Relevant digital skills in Furniture Industry 6. Activity <u>Read/watch and share your opinion:</u> Watch the video “How to thrive in Industry 4.0” https://www.youtube.com/watch?v=jXarjmelLrw and share your

	<p>opinion in the Learner’s forum: what employees need in terms of skills and competences, to be prepared to tackle the challenge coming with the digitalization?</p> <p>Watch the video “What if furniture had superpowers?” https://www.youtube.com/watch?v=SQwpuQhWizA&list=PLXuyTLrB1pkNt8OAU4Gh5I92_UvAoxloV&index=1 and share your opinion: Do technologies like robotics and IoT applied to Furniture Industry, offer an appropriate solution to cope with smaller living/working place? What kind of barriers you could face?</p> <p>7. Activity <u>Read/watch and share your opinion</u>: read a text on the digital skills in furniture industry and their differentiation among levels “European Report: On the identified most relevant digital skills and competences for low-skilled adults in Furniture industry” and provide your opinion on a learner forum on the 4 main areas identified and their adequacy in relation to the gradual subdivision of the skills training (Basic; Intermediate – for Customer relations; Advanced – Production Processes and Specific Computer science skills)</p> <p>8. Activity <u>Read/watch and share your opinion</u>: Practical examples from Furniture industry.</p> <p>9. Activity <u>Read/watch and share your opinion</u>: read the training curriculum provided and comment in the Learners’ forum: do the contents of the units cover the Learning outcomes defined?</p> <p>10. Activity Do it and share your opinion/comment on a learner forum: based on the template provided, adapt the contents of the training according to the previously identified needs.</p> <p>11. Activity <u>Upload and invite others to evaluate</u> create a training session including at least one of each digital skills level (basic, intermediate, and advanced)</p>
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Module II	New methods and tools for trainers to be used in teaching digital skills and Industry 4.0
<p>Module content</p>	<p>1. Innovative teaching methods (ex. bite-size learning, mobile learning, gamification ...)</p> <ul style="list-style-type: none"> a. Requirements for specialized didactic tools b. Methods and tools concerning online-learning c. Frameworks to train storage of high data volumes d. Frameworks to train big data management/ analysis - MATLAB e. Frameworks to train Internet of Things (IoT)- Applications f. Frameworks to train big data analysis <p>2. Assessment tools available online for trainers</p>
<p>Objectives (knowledge and skills)</p>	<p><u>On completion of this module trainers will:</u></p> <ol style="list-style-type: none"> 1. Understand special requirements for didactic tools when teaching digital skills 2. Know about latest methods and tools concerning online-learning 3. Be able to adopt above methods, in particular use three important experimental tools for experimenting after understanding the content of the module <ul style="list-style-type: none"> ● Setup, install a free MATLAB test account and conduct experiments ● Setup a free ThingSpeak account and conduct experiments ● Use free Hadoop Cloudera HUE for own experiments (if available) 4. In particular: <ul style="list-style-type: none"> ● Will know about experimental equipment that is used to teach the storage of large data volumes in the Industry 4.0- environment ● Know about major features and options of MATLAB concerning its adoption for teaching big data management ● Will be capable to develop and test Internet of Things (IoT)/ Cloud Computing- ThingSpeak applications and integrate ThingSpeak into didactic approaches ● To provide big data analysis examples by adopting Hadoop Cloudera HUE 5. In addition, trainers will be able to <ul style="list-style-type: none"> ● recognize the importance of different tools represented in the classroom for training design and delivery. ● develop a curriculum based on the availability of the tools. ● run a ThingSpeak and Matlab demonstration program.

	<ol style="list-style-type: none"> 6. Revise the traditional assessment methods and tools and particularize the proper ones for developing digital skills in the furniture industry. 7. Update their knowledge and practice to the latest assessment methods and tools, especially the ICT-based ones, for developing digital skills in the furniture industry. 8. Design and put into practice the specific tools for diagnostic, formative, and summative assessment of learners' development of digital skills in the furniture industry whereas comparing and contrasting their efficiency.
<p>Delivery methods</p>	<ol style="list-style-type: none"> 1. Presentation with narration: Teaching digital skills – Tools and software to support didactic. 2. Presentation with narration: MATLAB for teaching big data management and IoT-Technologies. 3. Presentation with narration: Frameworks for trainers (1) – ThingSpeak. 4. Presentation with narration: Frameworks for trainers (2) - Demo of Hadoop Part 1 5. Presentation with narration: Frameworks for trainers (3) - Demo of Hadoop Part 2 6. Presentation with narration: Tools for trainers in detail - Big data analysis for industry 4.0 7. Presentation with narration: Frameworks for trainers (5) - Demonstration/exercise HUE 8. Knowledge quiz 9. Presentation with narration: Assessment tools available online for trainers 10. Activity: Read/watch and share your opinion: Off-the-job versus on-the-job training for developing digital skills in furniture industry 11. Activity: Do it and share your opinion/comment on a learner forum: What assessment methods are the most effective in low skilled adult training in the furniture industry? 12. Activity: Do it for yourself: Create an online diagnosis assessment test adapted for low-skilled adults in the furniture industry. Present its aim and objectives. Use at least 3 different tools to create the assessment items.

Module III	Principles and models used in adult learning
Module content	<ol style="list-style-type: none"> 1. Principles of adult learning 2. Learning styles 3. Learning objectives 4. How to prepare for trainings
Objectives (knowledge and skills)	<p><u>On completion of this module trainers will be able to:</u></p> <ol style="list-style-type: none"> 1. recognize the importance of different learning styles represented in the classroom for training design and delivery 2. develop the curriculum taking into consideration the needs of each learning style 3. design the training minding the Kolb cycle and principles of adult learning 4. write learning objectives describing the expected student's performance 5. appreciate the importance of learning objectives for training and learning evaluation 6. use learning objectives to design the training flow 7. prepare their own "trainer's preparation checklist" 8. use the checklist to prepare for every training
Delivery methods	<ol style="list-style-type: none"> 1. Presentation with narration: Principles of adult learning 2. Activity Asses yourself: How good are you as a trainer? 3. Activity Read/watch and share your opinion: Bring on the learning revolution! https://youtu.be/kFMZrEABdw4 (Q: Recall the quote from A. Lincoln's speech and share your opinion on the ideas or theories that are still alive in teaching although they are no longer adequate to the changed reality.) 4. Presentation with narration: Learning Styles 5. Activity Do it and share your opinion/comment on a learner forum: What do you do during your trainings to make learning easier for each learning style? 6. Activity Read/watch and share your opinion : Learning styles & the importance of critical self-reflection https://youtu.be/855Now8h5Rs; Q: Share what stuck with you after having watched the presentation. 7. Presentation with narration: Learning objectives 8. Activity Do it for yourself: Prepare learning objectives for one of your training session or case study.

	<p>9. Activity Upload and invite others to evaluate: Upload your learning objectives and let others evaluate</p> <p>10. Presentation with narration: How to prepare for trainings</p> <p>11. Activity Read/watch and share your opinion: Share your techniques for stress management that you found effective</p> <p>12. Activity Do it for yourself: Build your own checklist for preparation for trainings</p> <p>13. Activity Upload and invite others to evaluate: Upload your checklist and let others evaluate</p> <p>14. Knowledge quiz</p>
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Module IV	Improving training process - guidelines for trainers
	Part 1 Guidelines for Trainers
Module content	<ol style="list-style-type: none"> 1. Instructional Design 2. Online trainer tools for workshop planning and facilitation 3. Crucial trainers skills 4. Techniques to capture learners attention
Objectives (knowledge and skills)	<p><u>Upon completion of this module trainers will be able to:</u></p> <ol style="list-style-type: none"> 1. design a training following the questions from the Training Wheel model 2. use selected online trainer tools to design trainings 3. be able to choose the right sharing tools to exchange files with trainees 4. understand the benefits and the potential risks of exchanging digital materials with trainees 5. distinguish between training and facilitation skills understanding the conditions for effective use of each of the two 6. design a facilitated session 7. choose attention grabbers adequate for the audience 8. pay attention and eliminate their own distracting trainer behaviors that may hinder learning
Delivery methods	<ol style="list-style-type: none"> 1. <u>Presentation with narration</u>: Instructional Design 2. Read the text: Online trainer tools for workshop planning and facilitation

	<ol style="list-style-type: none"> 3. Activity: <u>Read/watch and share your opinion</u>: Which trainer tools have you tried out and consider most valuable for you as a trainer? 4. Activity: <u>Do it for yourself</u>: Design one training session using "4 Step Training Wheel" and selected online trainer tool. 5. Activity: <u>Upload and invite others to evaluate</u> Upload your work (designed session using "4 Step Training Wheel") and let others evaluate 6. <u>Presentation with narration: Crucial trainers' skills</u> 7. Activity: Share your ideas on where during the training and with what learning objectives in mind you would recommend using a facilitated session 8. <u>Presentation with narration: Techniques to capture learner attention</u> 9. Activity: <u>Read/watch and share your opinion</u>: Julian Treasure - How to speak so that people want to listen (Q: What habits that trainers have may hinder knowledge apprehension by adult learners?) (https://www.ted.com/talks/julian_treasure_how_to_speak_so_that_people_want_to_listen) 10. Activity: <u>Upload and invite others to evaluate</u>: Describe one technique you use to grab and keep your learners' attention; when you are done let others evaluate 11. <u>Knowledge quiz</u>
Module IV	Improving training process - guidelines for trainers
	Part 2 Guidelines for Trainers in Online Environment
Module content	<ol style="list-style-type: none"> 1. Tools for running virtual training sessions 2. Tools for engaging participants 3. Tools for exchanging digital materials with trainees 4. Knowledge testing to capture learner's attention
Objectives (knowledge and skills)	<p><u>Upon completion of this module trainers will be able to:</u></p> <ol style="list-style-type: none"> 1. consider and select an appropriate tool for running virtual training sessions 2. use some of the tools for running virtual training sessions, presented in the module 3. choose an appropriate online tool to engage their trainees 4. use some of the tools presented in this module to engage the participants of their trainings 5. be aware of the characteristics of the difference tools for exchanging digital materials with trainees

	<ol style="list-style-type: none"> 6. be able to use the basic function of the exchanging tools introduced 7. to consider and select an appropriate tool for knowledge testing 8. to be able to use some of the tools for knowledge testing, presented in the module
<p>Delivery methods</p>	<ol style="list-style-type: none"> 1. Presentation with narration: Tools for running virtual training sessions 2. Activity: <u>Perceive and comment</u> Read the article, titled Zoom vs. Microsoft Teams vs. Google Meet: Which Top Video Conferencing App Is Best? and find out the pros and cons of each tool. Share your opinion in Learners' forum, https://www.pcmag.com/news/zoom-vs-microsoft-teams-vs-google-meet-a-videoconferencing-face-off 3. Activity: <u>Perceive and comment</u> Read the article Zoom vs Google Meet vs Skype vs Webex Which One Is The Best For You? and watch the video at https://bestcollegeaid.com/zoom-vs-google-meet-vs-skype-vs-webex-which-one-is-the-best-for-you/ Share your opinion in Learners' forum. 4. Presentation with narration: Tools for engaging participants 5. Activity: <u>Perceive and comment</u> Write on the Learners' forum, which of the tools from the presentation you use in your work with trainees. What do you like about them? 6. Activity: <u>Perceive and comment</u> Watch the video "How To Use Trello For Beginners 2020 The Basics" available under the link: https://www.youtube.com/watch?v=sgiXur4fpMc. Write on the Learners' forum how Trello can be used to engage participants of a remote training. 7. Activity: <u>Perceive and comment</u> Watch the videos from the playlist "Learning the basics of MURAL" available here: https://www.youtube.com/playlist?list=PLDZa1OFNww6MPz6QwASaF8fFEQGeiJadL Write on the Learners' forum how MURAL can be used to engage participants of a remote training. 8. Activity: <u>Perceive and comment</u> Watch the video "How to Use Google Jamboard for Remote Teaching" available under the link: https://www.youtube.com/watch?v=S9m4HCjOkcA Write on the Learners' forum how Jamboard can be used to engage participants of a remote training. 9. <u>Presentation with narration</u>: Tools for exchanging digital materials with trainees 10. Activity: <u>Read/watch and share your opinion</u>: Read the article "What are the Pros and Cons of the File Sharing?" and share your opinion in the learners' forum: "please indicate the tool that you most use and provide your own pros and cons list" https://www.poweradmin.com/blog/what-are-the-pros-and-cons-of-file-sharing/ 11. Presentation with narration: Knowledge testing tools

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| | <p>12. Activity: <u>Perceive and comment</u> Watch the video “The Basics of Creating a Quiz in Google Forms” and share your experience in Forum with creating quiz with Google forms for testing knowledge: https://www.youtube.com/watch?v=Pdt8Vv7-3Xk</p> <p>13. Activity: <u>Perceive and comment</u> Watch the video “Create a quiz with MS forms” and share your experience in Forum with creating quiz with MS forms for testing knowledge: https://www.microsoft.com/en-us/videoplayer/embed/RE1YIVu?pid=ocpVideo0-innerdiv-oneplayer&postJsllMsg=true&maskLevel=20&market=en-us</p> |
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