Project Title: THE FOF-DESIGNER: DIGITAL DESIGN SKILLS FOR FACTORIES OF THE FUTURE

Project Acronym: DigiFoF



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Subject: D7.1. Evaluating Industry Cases and Providing inputs for improvements in WP3¹

Dissemination Level: Public

Lead Organization: UNIBG Project Coordinator: ULBS Contributors: BOC, CONTI, CLEX, ULBS, UNIBG,EMSE, UNIBIAL

Reviewers: CIMES

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1 Executive Summary

From a general perspective, WP7 aims to guarantee the good fit among the topical and competence need identified and the solutions provided by complementing the activities carried out in WP6 through peer and external evaluations. Improvement suggestions feed then back into WP3, WP4 and WP5.

In this regard, *D7.1 – Evaluating Industry Cases and providing inputs for improvements in WP3* is aimed to provide a peer and external evaluations of the industrial cases provided by partners in WP3.

The objective of D7.1 is to describe the developed scientific methodology applied for evaluation, the evaluation process as well as the results and recommendations collected.

2 Methodology

D7.1 formalizes the approach that will be followed by the DigiFoF consortium to ensure the best possible quality and provide suggestions in order to improve the Industrial Case studies collected by the Consortium members.

All the partners dealing with T3.4 have been involved and coordinated by AFIL – Associazione Fabbrica Intelligente Lombardia in performing this activity in line with their specific expertise and responsibilities.

From a general perspective, 21 Industrial Cases have been collected and equally distributed among the involved partners for peer and external review. Each industrial case has been reviewed by 1 expert internal to the Consortium and by 1 Expert External to the consortium.

2.1 Evaluation Form

The evaluation form - **Table 1** - **Evaluation Form** (either for internal as well for external evaluation) has been created and shared with the DigiFoF consortium by AFIL and UNIBG.

Case Nr and Title:				
Partner:				
Internal Peer Reviewer (Pers				
Date of Sending out the completed peer review				
Section 1 – Deliverable	Evaluation	Comme	ents	Recommendations
content and objective				
Does the Case Studies	Yes			
comply with the major	No			

objective of the DigiFoF project?	Partially		
Does the case studies correspond with the activity description as specified in the application form?	YesNoPartially		
Major strength of the Case Studies	Free Text		
Major weakness of the Case Studies	Free Text		
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	YesNoPartially		
Is the Case Study presented according to the template?	YesNoPartially		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	YesNoPartially		
Level of written English	ExcellentAdequatePoor	2	1

 Table 1 - Evaluation Form

As indicated in Table 1 - *Evaluation Form* the main section of the evaluation were aimed to evaluate the coherence among the content of the industrial case and the overall objectives of the DigiFoF project.

Feedback have been collected by AFIL and UNIBG and reported in D7.1 - Evaluating Industry Cases and providing inputs for improvements.

2.2 Case Studies Distribution

As previously mentioned, all the partners dealing with T3.4 have been involved and coordinated by AFIL – Associazione Fabbrica Intelligente Lombardia in performing this activity in line with their specific expertise and responsibilities. The 21 Industrial Cases have been collected and equally distributed among the involved partners for peer and external review according to **Table 2:** *Case studies distribution for review*.

Case Study	Title	Author	Reviewer
#			
1	Complete revamping of materials and product handling systems along the assembly line	AFIL	EMSE
2	Systems for complete traceability of assembled components and a guided pipeline in assembly operations	AFIL	EMSE
3	Distributed design, planning, monitoring, control and diagnostic system through the cross- application of the Industry 4.0 technology	AFIL	EMSE
4	Outsourcing of production processes.	BOC	AFIL
5	Automation of production processes for individual (retail) orders and specification.	BOC	AFIL
6	Sensor based maintenance of HVAC equipment in large office facilities.	BOC	AFIL
7	The final customer satisfaction of information transmission.	EMSE	UNIBG
8	Integrated design of a product service system and the associated economic model.	EMSE	UNIBG
9	AGV for modern Logistics in industrial companies.	CONTINENTAL	ULBS
10	Rapid implementation of Cobots in industrial environment.	CONTINENTAL	ULBS
11	Optimization of the orders flow process through solutions of the digital workflow of details and interactive warehouses in an additive manufacturing environment.	IDPC	CONTI
12	Industry 4.0, change of paradigm within the Company for a greener and sustainable economy using advanced technologies, automation and robotics.	PRELMET	CONTI
13	TIPCO – Intelligent traceability for complex products.	CIMES	UNIBIAL

14	USITRONIC – Self-adapting production island	CIMES	UNIBIAL
15	From e-spindle and e-machining projects to servitization.	CIMES	UNIBIAL
16	HALL 32 – New approach of the vocational trainings.	CIMES	UNIBIAL
17	A performing service system for the wood industry.	CIRIDD	CLEXTRAL
18	Improving performance thanks to the economy of functionality	CIRIDD	CLEXTRAL
19	Shaping light to gain new markets	CIRIDD	CLEXTRAL
20	Implementing a "Remote Assistance" service package	CLEXTRAL	BOC
21	Implementing a CRM – upside, resistance, and opportunities	CLEXTRAL	BOC

 Table 2: Case studies distribution for review

3 Feedback Form Evaluation

3.1 AFIL

AFIL – Associazione Fabbrica Intelligente Lombardia – has provided 3 industrial cases that have been evaluated by EMSE.

3.1.1 Internal Review:

Case Nr and Title:		revamping of materials and product ms along the assembly line	
Partner:		AFIL	
Internal Peer Reviewer (Person, Institutions)		Elaheh MALEKI, EMSE	
Date of Sending out the completed peer review		10/06/2020	

Section 1 – Deliverable	Evaluation	Comments	Recommendations
content and objective			
Does the Case Studies	🗵 Yes		
comply with the major	🗆 No		
objective of the DigiFoF	Partially		
project?			
Does the case studies	🗵 Yes		
correspond with the	🗆 No		
activity description as	Partially		
specified in the application			
form?			

Major strength of the Case Studies	The solution is well explained and easy to understand.			
Major weakness of the Case Studies	It would be more understandable if there is at least one schema visualising either the case or the solution.			
Section 2 – Case Study	Evaluation Comments Recommendations			
structure and Layout				
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	 □ Yes □ No ⊠ Partially 		It could be more understandable if the problem/ challenge/ transformation motivations are clearly explained. The transformation section is too short.	
Is the Case Study presented according to the template? Are the complementary information (external	 ☑ Yes □ No □ Partially □ Yes ☑ No 	This could be because of	To avoid this problem, adding some open	
sources, bibliography, methodology, list of contacts) adequate?	Partially	confidentiality issues.	references could be helpful.	
Level of written English	ExcellentAdequatePoor			

Case Nr and Title:	2- Systems for the complete traceability of assembled components and a guided pipeline in assembly operations				
Partner:		AFIL			
Internal Peer Reviewer (Person, Institutions)		Elaheh MALEKI, EMSE			
Date of Sending out the completed peer review		10/06/2020			

Section 1 – Deliverable	Evaluation	Comments	Recommendations
content and objective			
Does the Case Studies	🗵 Yes		
comply with the major	🗆 No		
objective of the DigiFoF	Partially		
project?			
Does the case studies	🗵 Yes		
correspond with the	🗆 No		
activity description as	Partially		
specified in the application			
form?			
Major strength of the Case	The solution is well explained and easy to understand.		
Studies			
Major weakness of the	It would be more understandable if there is at least one schema		
Case Studies	visualising either	the case or the solut	tion.
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			

Is the length of the Case	□ Yes		It could be more
Studies justified? If no,	🗆 No		understandable if the
please specify by e.g.	🗵 Partially		problem/ challenge/
indicating parts that are			transformation
superfluous, irrelevant,			motivations are clearly
redundant, unspecific or			explained. The
would need more			transformation section
explanation?			is too short.
Is the Case Study	🗵 Yes		
presented according to the	🗆 No		
template?	Partially		
Are the complementary	□ Yes	This could be	To avoid this problem,
information (external	🗵 No	because of	adding some open
sources, bibliography,	Partially	confidentiality	references could be
methodology, list of		issues.	helpful.
contacts) adequate?			
Level of written English	🗵 Excellent		
	Adequate		
	D Poor		

Case Nr and Title: 3	3- Implementation of a real time monitoring system of machine performance.
Partner:	AFIL
Internal Peer Reviewer (Person, Institutions)	N Dubruc. EMSE
Date of Sending out the completed peer review	

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Studies comply with the major objective of the DigiFoF project? Does the case studies correspond with the activity description as specified in the application	X Yes No Partially X Yes No Partially		
form? Major strength of the Case Studies	It is a real digital t	transformation chall	enge.
Major weakness of the Case Studies	Details are missing. For example, we can't see how workers reacted.		
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are	X Yes No Partially 		

superfluous, irrelevant, redundant, unspecific or would need more explanation?	
Is the Case Study presented according to the template?	X Yes No Partially
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	YesMissingX NoPartially
Level of written English	X Excellent Adequate Poor

3.1.2 External Review:

Case Nr and Title:	1- Complete revamping of materials and product handling systems along the assembly line.
Partner:	AFIL
External Peer Reviewer (Person, Institutions)	J. De Benedettis, EMSE
Date of Sending out the completed peer review	

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal with the topic of design the	Yes		
Factory of the Future?	 Partially 		
Major strength of the Case Studies	future. It present	• •	ic of the industry of the as implemented advanced ity.
Major weakness of the Case Studies	superficial. No temporality, the a new skills acquire acquired, the org	data is proposed actors involved in the ed by the employees anizational changes,	letails and remains very concerning: the project project, the nature of the and how they have been the allocated budget, the organization encountered.
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant,	YesNoPartially	A lot of information are missing (see above)	

redundant, unspecific or would need more explanation?		
Is the Case Study presented according to the template?	YesNoPartially	
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	YesNoPartially	I would suggest adding external information about the company to provide the readers with more details.
Level of written English	ExcellentAdequatePoor	I

Case Nr and Title:	2 - Systems for the complete traceability of assembled components and a guided pipeling in assembly operations	
Partner:	AFIL	
Internal Peer Reviewer (Person, Institutions)	P. Gianessi, EMSE	
Date of Sending out the completed peer review	June 10 th , 2020	

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal with the topic of design the Factory of the Future? Major strength of the Case Studies	 Yes No Partially Transformation of traceability 	of offer, through th	e added value of digital
Major weakness of the Case Studies	Not very innovati there is a transfo the company, or j	rmation in the proc	
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	 Yes No Partially 		Section 2.1. We understand the general context. But what was innovative for the company? What were the difficulties? Was it a change for the company? Section 5 : Apart of the new system, were there other impacts on the

		capabilities of the company, or on it future business ?
Is the Case Study presented according to the template?	 Yes No Partially 	
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	 Yes No Partially 	
Level of written English	 Excellent <u>Adequate</u> Poor 	

Case Nr and Title:	2 - Implementation of a real time monitoring system of machine performance
Partner:	AFIL
Internal Peer Reviewer (Person, Institutions)	P. Gianessi, EMSE
Date of Sending out the completed peer review	June 10 th , 2020

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal with the topic of design the Factory of the Future? Major strength of the Case Studies	Yes No Partially	of real time monitori	ng solution
Major weakness of the Case Studies		•	ck of views on difficulties, or future business or
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	 Yes No Partially 		Could be more in depth developed. Section 2.1 does not emphasize sufficiently what is the innovation for the company, and how it is linked to industry of the future. Section 2.2 : apart from the solution itself, were there technical impacts

		for the customers and on the technical skills/collaborations of the Company C ? Section 5: the results and impacts, for one or several actors could be perhaps more developed? Section 6: do you have feedback on the satisfaction of the client, and on
		further impact on business development for company C?
Is the Case Study presented according to the template?	 Yes No Partially 	
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	 Yes No Partially 	
Level of written English	 Excellent <u>Adequate</u> Poor 	·

3.2 BOC

BOC has provided 3 industrial cases that have been evaluated by AFIL.

3.2.1 Internal Review:

Case Nr and Title:	4 - Sensor Based Maintenance of HVAC equipment
Partner:	BOC
External Peer Reviewer (Person, Institutions)	Andrea Mazzoleni – AFIL
Date of Sending out the completed peer review	June 2020

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal with the topic of design the Factory of the Future?	X YesNoPartially		

Major strength of the Case	Major strength is the explanation of an industrial case related		
Studies	to the concept of servitization.		
Major weakness of the	Maybe, the majo	Maybe, the major weakness is the lack of numerical details, but	
Case Studies	it could be relate	ed to confidentiali	ity issues.
		I	
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	X Yes		
Studies justified? If no,	🗆 No		
please specify by e.g.	Partially		
indicating parts that are			
superfluous, irrelevant,			
redundant, unspecific or			
would need more			
explanation?			
Are the complementary	X Yes		Maybe same more oper
information (external	🗆 No		reference can be added
sources, bibliography,	Partially		e.g., regarding the
methodology, list of			concept of product
contacts) adequate?			service.
Level of written English	Excellent	<u> </u>	I
	🗆 X Adequa	ate	
	□ Poor		

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal with the topic of design the Factory of the Future? Major strength of the Case		•	rovides an example of the
Studies Major weakness of the Case Studies	concept of mass cus Lack of numerical d issues.		it is due to confidentiality
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant,	YesNoX Partially		Maybe some theoretical concept can be added to explain more in the details the several

redundant, unspecific or would need more explanation? Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	 Yes No X Partially 	aspects related to mass- customization. Maybe some open references related to mass customization or design thinking can be added.
Level of written English	ExcellentX AdequatePoor	

Case Nr and Title:	5 - Automation of production processes for individual (retail) orders and specifications	
Partner:	BOC	
External Peer Reviewer (Person, Institutions)	Andrea Mazzoleni - AFIL	
Date of Sending out the completed peer review	June 2020	

Section 1 – Case study	Evaluation	Comments	Recommendations
content and objective			
Does the Case Studies deal	X Yes		
with the topic of design the	□ No		
Factory of the Future?	Partially		
Major strength of the Case Studies	The major strength concept of mass cus		rovides an example of the
Major weakness of the Case Studies	Lack of numerical d issues.	etail, but maybe	it is due to confidentiality
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	YesNoX Partially		Maybe some theoretical concept can be added to explain more in the details the several aspects related to mass- customization.
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	YesNoX Partially		Maybe some open references related to mass customization or design thinking can be added.

Level of written English	Excellent
	X Adequate
	Poor

Case Nr and Title:	6 - Conceptual case: batteries as a service
Partner:	BOC
External Peer Reviewer (Person, Institutions)	Andrea Mazzoleni – AFIL
Date of Sending out the completed peer review	

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal with the topic of design the Factory of the Future?	X YesNoPartially		
Major strength of the Case Studies Major weakness of the Case Studies	concept of product industrial case show in improve its perfo same time custome	-service linked t vs how a digitaliza ormance related r – oriented.	case is that it explains the o Circular Economy. The ation can help a company to sustainability being at it is due to confidentiality
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	YesNoX Partially		The introduction of some theoretical concepts can be helpful to improve the readability of the document and to provide a context to the industrial case.
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	 Yes X No Partially 		In this case, complementary information are missing. I would suggest to add some open reference e.g., dealing the recent EU policy concerning Circular Economy and batteries.

Level of written English	Excellent
Level of whitten Linghsh	
	X Adequate
	Poor

3.2.2 External Review:

Case Nr and Title:	4 - Sensor Based Maintenance of HVAC equipment
Partner:	BOC
External Peer Reviewer (Person, Institutions)	Valerio Pesenti – Consorzio Intellimech
Date of Sending out the completed peer review	June 2020

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal with the topic of design the Factory of the Future?	X YesNoPartially		
Major strength of the Case Studies			he strength of digital oncept of product-service
Major weakness of the Case Studies	Lack of data, but	it could be related to	o confidentiality issues.
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	X YesNoPartially		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	X YesNoPartially		
Level of written English	ExcellentX AdequaPoor		

Case Nr and Title:	5 - Automation of production processes for individual (retail) orders and specifications
Partner:	BOC
External Peer Reviewer (Person, Institutions)	Valerio Pesenti – Consorzio Intellimech
Date of Sending out the completed peer review	June 2020

Section 1 – Case study	Evaluation	Comments	Recommendations
content and objective			
Does the Case Studies deal	X Yes		
with the topic of design the	□ No		
Factory of the Future?	Partially		
Major strength of the Case	The case illustrates	the concept of m	ass customization, one of
Studies	the manufacturing t	rends in the near	future.
Major weakness of the	Lack of detail, but m	haybe it is due to o	confidentiality issues.
Case Studies			
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	X Yes		
Studies justified? If no,	□ No		
please specify by e.g.	Partially		
indicating parts that are			
superfluous, irrelevant,			
redundant, unspecific or			
would need more			
explanation?			
Are the complementary	Yes	Lack of detail,	Maybe some open
information (external	□ No	but maybe it is	references related to
sources, bibliography,	X Partially	due to	mass customization or
methodology, list of		confidentiality	design thinking can be
contacts) adequate?		issues.	added.
Level of written English	Excellent	1	1
	□ X Adequate		
	 Poor 		

Case Nr and Title:	6- Conceptual case: batteries as a service
Partner:	BOC
External Peer Reviewer (Person, Institutions)	Valerio Pesenti – Consorzio Intellimech
Date of Sending out the completed peer review	June 2020

Section 1 – Case study	Evaluation	Comments	Recommendations
content and objective Does the Case Studies deal with the topic of design the Factory of the Future? Major strength of the Case Studies		y of batteries is line with the recent	relevant aspects to be EU directives.
Major weakness of the Case Studies			confidentiality issues.
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	X YesNoPartially		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	YesX NoPartially		Maybe some open reference can be added e.g., related to Batteries directives.
Level of written English	ExcellentX AdequaPoor	te	

3.3 EMSE

EMSE has provided 2 industrial cases that have been evaluated by UNIBG.

3.3.1 Internal Review:

Case Nr and Title:	7 - The final customer satisfaction of information transmission.
Partner:	EMSE
Internal Peer Reviewer (Person, Institutions)	Fabiana Pirola – UNIBG
Date of Sending out the completed peer review	11/06/2020

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Studies	X Yes		
comply with the major	🗆 No		
objective of the DigiFoF	Partially		
project?	,		
Does the case studies	X Yes		
correspond with the	🗆 No		
activity description as	Partially		
specified in the application			
form?			
Major strength of the Case		• •	ling real time services to
Studies		y related to spare pa	
Major weakness of the			available to dealers and
Case Studies	manufacturer in r	eal time	
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	□ Yes		Add some more details
Studies justified? If no,	□ No		on the solution
please specify by e.g.			
indicating parts that are	X Partially		
superfluous, irrelevant,			
redundant, unspecific or			
would need more			
explanation?			
Is the Case Study	X Yes		
presented according to the	□ No		
template?	Partially		
Are the complementary	X Yes		
information (external	□ No		

methodology, list of contacts) adequate?	
Level of written English	X Excellent Adequate Poor

Case Nr and Title:	8- Integrated design of a product service system and the associated economic model.
Partner:	Fabiana Pirola – UNIBG
Internal Peer Reviewer (Person, Institutions)	11/06/2020
Date of Sending out the completed peer review	Fabiana Pirola – UNIBG

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Studies comply with the major objective of the DigiFoF project?	X Yes No Partially		
Does the case studies correspond with the activity description as specified in the application form?	X Yes No Partially		
Major strength of the Case Studies			ample of technological ge towards servitization in
Major weakness of the Case Studies	business model		g of the company (and the the network scenarios elected.
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	YesNoX Partially		Solution section would need more details on scenarios analysed and selected
Is the Case Study presented according to the template?	X Yes No Partially		

Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	X Yes No Partially
Level of written English	X Excellent Adequate Poor

3.3.2 External Review:

Case Nr and Title:	7 - The final customer satisfaction of information transmission.
Partner:	EMSE
External Peer Reviewer (Person, Institutions)	Manuel Salvi – Vittur
Date of Sending out the completed peer review	June 2020

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Major strength of the Case Studies	Interesting the new business model enabled by data integrated		
Major weakness of the Case Studies	Some more deta appreciated	ail on the solution	implemented would be
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	X Yes No Partially		
Is the Case Study presented according to the template?	X Yes No Partially		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	X Yes No Partially		

Level of written English	X Excellent
	Adequate
	□ Poor

Case Nr and Title:	8- Integrated design of a product service system and the associated economic model.	
Partner:	Fabiana Pirola – UNIBG	
External Peer Reviewer (Person, Institutions)	Manuel Salvi – Vittur	
Date of Sending out the completed peer review	June 2020	

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Major strength of the Case Studies	Interesting the new business model of the company based on servitization		
Major weakness of the Case Studies	Some more details on the alternative value chains studied to deliver the solution on the market would be appreciated.		
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation? Is the Case Study presented according to the template?	X Yes No Partially X Yes No Partially		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	X Yes No Partially		
Level of written English	ExcellentX AdequatePoor		

3.4 CONTINENTAL

Continental has provided 2 industrial cases that have been evaluated by ULBS.

3.4.1 Internal Review:

Case Nr and Title:	9 - AGV for modern Logistics in industrial companies	
Partner:	Continental	
Internal Peer Reviewer (Person, Institutions)	Daniel Morariu/ ULBS	
Date of Sending out the completed peer review	29.05.2020	

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Studies comply with the major objective of the DigiFoF project?	X Yes No Partially	Presented an actual problem related to using the robots (AGV) in repetitive part of the technological process.	
Does the case studies correspond with the activity description as specified in the application form?	X Yes No Partially	Was also translated in all languages of project partners.	
Major strength of the Case Studies	manufacturing pr	ocess and the bene eded for manage su	l Guided Vehicles (AGV) in fit of those. Presented all ich devices and for which
Major weakness of the Case Studies			
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	YesNoX Partially		Some additional knowledge that employees must obtained in order to manipulate AGV can be obtained by attending several courses organized by DigiFoF
Is the Case Study presented according to the template?	X Yes No Partially	It presented a lot of knowledge and skills that can be achieved following this training.	
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	YesNoX Partially	The bibliographic list is quite short	Can offer more bibliographic references.

Level of written English	 Excellent X Adequate Poor

Case Nr and Title:	10 - Rapid implementation of Cobots in industrial environment.	
Partner:	Continental	
Internal Peer Reviewer (Person, Institutions)	Daniel Morariu/ ULBS	
Date of Sending out the completed peer review	w 29.05.2020	

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Studies comply with the major objective of the DigiFoF project?	X Yes No Partially	Presented a very actual problem related to Industry 4.0. Using the collaborative robots in technological process.	
Does the case studies correspond with the activity description as specified in the application form?	X Yes No Partially	Was also translated in all languages of project partners.	Recommend specifying a title for this case study.
Major strength of the Case Studies	Presented the benefits of using cobots in technological process. Presented the knowledge that can be obtained by participant of this training. Presented separately the most important transformations that can be obtain by implementing collaborative robots. The case study has some expert aspects.		
Major weakness of the Case Studies	Sometime lack of clarity in presenting the benefit of main knowledge and skills that can be obtained.		
Section 2 – Case Study	Evaluation Comments Recommendations		
structure and Layout			
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or	X Yes No Partially		

would need more explanation?			
Is the Case Study presented according to the template?	X Yes No Partially	Document respects the template.	
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	X Yes No Partially	Contains a lot of bibliography references and web references.	
Level of written English	ExcellentX AdequatePoor		

3.4.2 External Review:

Case Nr and Title:	9 - AGV for modern Logistics in industrial companies	
Partner:	ULBS	
External Peer Reviewer (Person, Institutions)	Ing. Alin David SC Marquardt Schaltsysteme SCS Sibiu	
Date of Sending out the completed peer review	04.06.2020	

Section 1 – Case study	Evaluation	Comments	Recommendations
content and objective			
Does the Case Study deal	X Yes	AGVs are part of	Missing some ideas
with the topic of design the	No	the Factory of	about error scenarios
Factory of the Future?	Partially	the Future and	(power down, remote
		are according to	maintenance, etc.)
		Industry 4.0	
		concept. The	
		study is perfectly	
		suitable for any	
		factory that aims	
		for digitalization	
		and automation	
		of processes.	
Major strength of the Case	The aim of the case study very well sustained by the existing		
Study	and implemented solution.		
Major weakness of the	Not very clear what the role of the trainee. AGVs are meant to		
Case Study	replace human workforce and the AGVs are self-operated and		
	maintained remotely by experienced users.		
Section 2 – Case Study	Evaluation Comments Recommendations		
structure and Layout			

Public

Is the length of the Case Study justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	X Yes Perfect length Image: No and interesting to interesting to Image: Partially read.
Is the Case Study presented according to the template?	X Yes No Partially
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	 Yes No references, small X Partially bibliography.
Level of written English	X ExcellentAdequatePoor

Case Nr and Title:	10 - Rapid implementation of Cobots in industrial environment.
Partner:	ULBS
External Peer Reviewer (Person, Institutions)	Ing. Alin David SC Marquardt Schaltsysteme SCS Sibiu
Date of Sending out the completed peer review	04.06.2020

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Study deal with the topic of design the Factory of the Future?	X Yes No Partially	Starting from Industry 4.0 Concept up to COBOTS usage in a Factory of the Future the ideas and concepts are very well exposed for a good understanding of the study case.	J. J
Major strength of the Case Study	Very well documented and all ideas exposed are perfectly justified.		
Major weakness of the Case Study	PLM not mentioned regarding process, product and industrial tools.		

Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case Study justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	X Yes No Partially	Good explanation of ideas and specific concept well described. Author perfectly grasps the essence of usability and benefits of the COBOTS	
Is the Case Study presented according to the template?	X Yes No Partially		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	X Yes No Partially		
Level of written English	X Excellent Adequate		<u>.</u>

3.5 IDPC

IDPC has provided 1 industrial case that has been reviewed by Continental.

3.5.1 Internal Review:

Case Nr and Title:	11- Optimization of the orders flow process through solutions of the digital workflow of details and interactive warehouses in an additive manufacturing environment.	
Partner:	IDPC	
Internal Peer Reviewer (Person, Institutions)	Cristian Mihutoiu/Conti	
Date of Sending out the completed peer review	22.06.2020	

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Studies comply with the major objective of the DigiFoF project?	X Yes No Partially	Presented a very actual problem related to Industry 4.0., business and	More detailed technical transformation needed.

		conceptual transformations clearly defined	
Does the case studies correspond with the activity description as specified in the application form?	X Yes No Partially	It was, also, translated in all languages of project partners.	
Major strength of the Case Studies	manufacturer an knowledge that c Presented separa can be obtain by	penefits of using integ d client in ordering pro an be obtained by partic tely the most important implementing this flow c	ocess. Presented the ipant of this training. transformations that
Major weakness of the Case Studies	Not identified		
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	X Yes No Partially		
Is the Case Study presented according to the template?	X Yes No Partially	The document respect standard template.	
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	X Yes No Partially		References need to be added, for the sources of the training materials to be developed.
Level of written English	x Excellent Adequate Poor 	2	1

3.5.2 External Review:

	11- Optimization of the orders flow
	process through solutions of the
Case Nr and Title:	digital workflow of details and
	interactive warehouses in an additive
	manufacturing environment.

Partner:	IDPC
Internal Peer Reviewer (Person, Institutions)	Valerio Pesenti – Intellimech Consortium
Date of Sending out the completed peer review	June

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Study deal with the topic of design the Factory of the Future? Major strength of the Case	X Yes No Partially It provides the be	It is related to digitalization and sw integration, so completely aligned with industry 4.0 topics enefits of digitalization	
Studies Major weakness of the Case Studies		ls on the solution should	l be provided
Section 2 – Case Study structure and Layout Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	Evaluation X Yes No Partially	Comments	Recommendations
Is the Case Study presented according to the template?	X Yes No Partially		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	☐ YesX No☐ Partially		Add references
Level of written English	X Excellent Adequate Poor 		1

3.6 PRELMET

IDPC has provided 1 industrial case that has been reviewed by Continental.

3.6.1 Internal Review:

Case Nr and Title:	12 - Industry 4.0, change of paradigm within the Company for a greener and sustainable economy using advanced technologies, automation and robotics	
Partner:	PRELMET	
Internal Peer Reviewer (Person, Institutions)	Cristian Mihutoiu/Conti	
Date of Sending out the completed peer review	22.06.2020	

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Studies comply with the major objective of the DigiFoF project?	X Yes No Partially	Presented a very actual problem related to Industry 4.0. Business, conceptual and technical transformations clearly defined.	More details about technical transformation needed.
Does the case studies correspond with the activity description as specified in the application form?	X Yes No Partially	It was, also, translated in all languages of project partners.	
Major strength of the Case Studies	Results expected well defined. It is presented the knowledge that can be obtained by participant of this training. It is presented separately the most important transformations that can be obtain by implementing Industry 4.0 concepts.		
Major weakness of the Case Studies	Not identified		
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	X Yes No Partially		
Is the Case Study presented according to the template?	X Yes No Partially	The document respect standard template.	
Are the complementary information (external	X Yes	All references are coming from Compa meetings with partners and from	External references need to be added

sources, bibliography, methodology, list of contacts) adequate?	□ Partially	assessing of actual situation regarding Industry 4.0 implementation.	for training material sources.
Level of written English	ExcellentAdequatePoor		

3.6.2 External Review:

Case Nr and Title:	12 - Industry 4.0, change of paradigm within the Company for a greener and sustainable economy using advanced technologies, automation and robotics	
Partner:	PRELMET	
Internal Peer Reviewer (Person, Institutions)	Valerio Pesenti – Intellimech Consortium	
Date of Sending out the completed peer review	June	

Section 1 -	Evaluation	Comments	Recommendations
Deliverable content			
and objective			
Does the Case Study	X Yes		
deal with the topic of	□ No		
design the Factory of	Partially		
the Future?	,		
Major strength of the	It shows the bei	nefits and the new skills n	eeded to implement
Case Studies	advanced manufa	acturing solutions	
Major weakness of the	Some more detail	ls on the solution would prov	ide more value to the
Case Studies	case		
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the	X Yes		
Case Studies justified?	□ No		
If no, please specify by	Partially		
e.g. indicating parts	,		
that are superfluous,			
irrelevant, redundant,			
unspecific or would			
need more			
explanation?			
Is the Case Study	X Yes		
presented according	□ No		
to the template?			

	Partially	
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	□ Yes □ No X Partially	References are related to company steps in the project, not external sources
Level of written English	X Excellent Adequate Poor	

3.7 CIMES

CIMES has provided 4 industrial case that have been reviewed by UNIBIAL

3.7.1 Internal Review:

Case Nr and Title:	13 - TIPCO – Intelligent traceability for complex products.	
Partner:	CIMES	
External Peer Reviewer (Person, Institutions)	Arkadiusz Jurczuk, UNIBIAL	
Date of Sending out the completed peer review	15.06.2020	

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal	🗵 Yes	The case deals	
with the topic of design	🗆 No	with the	
the Factory of the Future?	Partially	process	
	,	designing and	
		automatization	
		issues.	
Major strength of the Case	The context of th	e case study (p. 2	.1-2.3) allows to analyse the
Studies	presented solut	ions and techn	ology and organisational
	problems.		
Major weakness of the	Solution is descr	ibed only in a ge	neral manner. It should be
Case Studies	related to key-problem - tracing metallic high-temperatured		
	products evolving in a complex environment. Description in the		
	P. 4 is not fully relevant with the its topic (keys kills and		
	competences).		
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	🗵 Yes		More detailed information
Studies justified? If no,	□ No		about a solution related to
please specify by e.g.	Partially		key-problem is needed.
indicating parts that are			But, it may be fulfilled by
superfluous, irrelevant,			given links to external
redundant, unspecific or			sources.

would need more explanation?	
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	 Yes No ▷ Partially The submitted It is recommended to bibliography complete the description of provides access sources according to the to the referencing additional style/bibliographic information standard (e.g. Harvard required by a Style -BSI). user.
Level of written English	 Excellent Adequate Poor

Case Nr and Title:	14. USITRONIC – Self-adapting production island.	
Partner:	CIMES	
External Peer Reviewer (Person, Institutions)	Arkadiusz Jurczuk, UNIBIAL	
Date of Sending out the completed peer review	15.06.2020	

Section 1 – Case study	Evaluation	Comments	Recommendations
content and objective			
Does the Case Studies deal	🗵 Yes	The case deals	
with the topic of design the	🗆 No	with the process	
Factory of the Future?	Partially	engineering,	
		monitoring and	
		quality	
		management	
		issues as well.	
		Those aspects	
		are crucial	
		towards business	
		readiness for	
		implementation	
		of concept of	
		Industry 4.0.	
Major strength of the Case			transformation (p. 2.1).
Studies		NIC concept descript	
Major weakness of the	Solution and resu	Its sections should b	e described with more
Case Studies	details. It worth n	nentioning about pro	oject influence (p. 5) on
	process maturity (in relevance to Factory of the Future).		
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	🗵 Yes		
Studies justified? If no,	□ No		
please specify by e.g.	Partially		
indicating parts that are			
superfluous, irrelevant,			

redundant, unspecific or would need more explanation?		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	 Yes No ⊠ Partially 	It is recommended to complete the description of sources according to the referencing style/bibliographic standard (e.g. Harvard Style -BSI).
Level of written English	ExcellentAdequatePoor	

Case Nr and Title:	15. E-SPINDLE – From e-spindle and e-machining projects to servitization		
Partner:	CIMES		
External Peer Reviewer (Person, Institutions) Arkadiusz Jurczuk, UNIBIAL			
Date of Sending out the completed peer review	15.06.2020		

Section 1 – Case study	Evaluation	Comments	Recommendations
content and objective			
Does the Case Studies deal	🗵 Yes	The case deals	
with the topic of design the	No	with a new	
Factory of the Future?	Partially	business model –	
		Industry Internet	
		of Things as a	
		part of FoF	
		concept.	
Major strength of the Case	The eSpindle cas	se study refers to	the transformation of a
Studies			e Future by implementing
	intelligent active processes. This case is a good example of the		
	development of servitization using IIOT.		
Major weakness of the			bed and emphasized in the
Case Studies	section 2.3 (Technology transformations). Some phrases need		
	additional comments (e.g. e-spindle is a tool).		
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	🗵 Yes		
Studies justified? If no,	□ No		
please specify by e.g.	Partially		
indicating parts that are			
superfluous, irrelevant,			
redundant, unspecific or			
would need more			
explanation?			

Public

Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	☐ Yes☐ No☑ Partially	The source materials are not completely described.	It is recommended to complete the description of sources according to the referencing style/bibliographic standard (e.g. Harvard Style -BSI).
Level of written English	ExcellentAdequatPoor	-	

Case Nr and Title:	16. HALL 32 – New approach of the vocational trainings aiming at creating a program of excellence to train people for the industrial jobs
Partner:	CIMES
External Peer Reviewer (Person, Institutions)	Arkadiusz Jurczuk, UNIBIAL
Date of Sending out the completed peer review	15.06.2020

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal	🗵 Yes	Case deals with	
with the topic of design the	□ No	competency	
Factory of the Future?		development of	
Factory of the Future!	Partially	Factory of the	
		Fuctory of the Future	
Main strong the of the Const		employees.	and the second
Major strength of the Case	Demonstration of a role of digital competence development as		
Studies	crucial part of FoF implementation.		
Major weakness of the	Key skills and competences should be revised (p. 4). FoF		
Case Studies		•	f existing gaps could be
	pointed out in thi	· ·	
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	🗵 Yes	Some minor letter	To review a case
Studies justified? If no,	No	mistakes in the	description.
please specify by e.g.	Partially	case description.	
indicating parts that are	,		
superfluous, irrelevant,			
redundant, unspecific or			
would need more			
explanation?			
Are the complementary	🗆 Yes	The source	It is recommended to
information (external	🗆 No	materials are not	complete the description
sources, bibliography,	⊠ Partially	completely	of sources according to
	,	described.	the referencing

methodology, list of contacts) adequate?		style/bibliographic standard (e.g. Harvard Style -BSI).
Level of written English	ExcellentAdequatePoor	

3.7.2 External Review:

Case Nr and Title:	13 - TIPCO – Intelligent traceability for complex products.	
Partner:	CIMES	
External Peer Reviewer (Person, Institutions)	Marcin Dębowski, Valeant Med Sp. z o.o.	
Date of Sending out the completed peer review	26.06.2020	

Section 1 – Case study	Evaluation	Comments	Recommendations
content and objective			
Does the Case Studies deal	\boxtimes Yes	Yes, in terms of	
with the topic of design the	□ No	design and	
Factory of the Future?	Partially	process	
		automation.	
Major strength of the Case	The presented content indicates the essence of the solution and		
Studies	allows to analyse it from a technological and organizational		
	perspective.		
Major weakness of the	The adopted level of description is slightly too general. It would		
Case Studies	also be worth indicating on which processes implemented in		
		in what way the sol	•
		•	uld also be worthwhile to
	indicate more spe	cific skills related to	the presented solution.
Castien 2 Case Chude	Freely attack	Commente	Deserves and attempt
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			The description is quite
Is the length of the Case	\boxtimes Yes		The description is quite
Studies justified? If no, please specify by e.g.			short, but is supplemented by
indicating parts that are	Partially		references to useful
superfluous, irrelevant,			literature.
redundant, unspecific or			
would need more			
explanation?			
Are the complementary	\times Yes		
information (external	\square No		
sources, bibliography,	Partially		
· ·	Partially		
sources, bibliography,	Partially		
🗵 Adequate			

□ Poor			

Case Nr and Title:	14. USITRONIC – Self-adapting production island.	
Partner:	CIMES	
External Peer Reviewer (Person, Institutions)	Marcin Dębowski,	
	Valeant Med Sp. z o.o.	
Date of Sending out the completed peer review	26.06.2020	

Section 1 – Case study	Evaluation	Comments	Recommendations
content and objective			
Does the Case Studies deal	\bowtie Yes	Yes, in the	
with the topic of design the	□ No	context of	
Factory of the Future?	Partially	process	
		engineering and	
		quality	
		management.	
Major strength of the Case	•		sition (especially business
Studies	and technical) pre	epared clearly and in	detail.
Major weakness of the		while to specify in m	
Case Studies	-		oints 3 and 5), especially
	,	pact on the compan	
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	\bowtie Yes		
Studies justified? If no,	□ No		
please specify by e.g.	Partially		
indicating parts that are			
superfluous, irrelevant,			
redundant, unspecific or			
would need more			
explanation?			
Are the complementary	X Yes	The literature	
information (external	□ No	presented is	
sources, bibliography,	Partially	useful and	
methodology, list of		broadens the	
contacts) adequate?		description of the	
		solution.	
Level of written English	Excellent		
	🗵 Adequa	nte	
	Poor		

Case Nr and Title:	15. E-SPINDLE – From e-spindle and e- machining projects to servitization	
Partner:	CIMES	
External Peer Reviewer (Person, Institutions)	Daniel Tochwin, British American Tobacco	
Date of Sending out the completed peer review	29.06.2020	

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal with the topic of design the Factory of the Future?	∑ Yes □ No □ Partially	e-SPINDLE aims to develop a smart spindle for intelligent machining. The device is the IIoT bridge between the process and the machine.	
Major strength of the Case Studies Major weakness of the Case Studies	The proposed solution allows to reach some important objectives: to modify operating parameters in real time and to improve productivity and optimise tool life and workpiece quality. e-SPINDLE utilises the smart value-added machining. This case is a good example of utilizing Industrial Internet of Things. e-SPINDLE as an innovative solutions should be more detailed described (section 2.3).		
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	⊠ Yes □ No □ Partially		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	 □ Yes □ No ⊠ Partially 	The source materials are to briefly described.	The source materials could be extended.
Level of written English	□ Excellent ⊠ Adequa □ Poor		

Case Nr and Title:	16. HALL 32 – New approach of the vocational trainings aiming at creating a program of excellence to train people for the industrial jobs
Partner:	CIMES
External Peer Reviewer (Person, Institutions)	Daniel Tochwin, British American Tobacco
Date of Sending out the completed peer review	29.06.2020

Section 1 – Case study	Evaluation	Comments	Recommendations
content and objective			
Does the Case Studies deal	\bowtie Yes	This Case deals with	
with the topic of design the	□ No	the topic of design	
Factory of the Future?	Partially	the FoF as skilled	
		employees are very	
		important assets of	
		the Factory of the	
		Future.	
Major strength of the Case		train people with innov	
Studies		ting-edge technologies	. It is also adapted to
		eeds and expectations.	
Major weakness of the	•	npetences are only men	tioned and should be
Case Studies	more detailed des		
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	\bowtie Yes	This case has been	Please correct some
Studies justified? If no,	□ No	described	minor letter mistakes
please specify by e.g.	Partially	comprehensively.	in the case
indicating parts that are			description.
superfluous, irrelevant,			
redundant, unspecific or			
would need more			
explanation?			
Are the complementary	□ Yes	The source materials	
information (external	□ No	are not completely	
sources, bibliography, methodology, list of	🗵 Partially	described.	
07/			
contacts) adequate?			
Level of written English	Excellent		
	⊠ Adequate		
	D Poor		

3.8 CIRIDD

CIRIDD has provided 2 industrial case that have been reviewed by CLEXTRAL with the support of EMSE.

3.8.1 Internal Review:

Case Nr and Title:	17. A performing service system for the wood industry
Partner:	CIRIDD
Internal Peer Reviewer (Person, Institutions)	N Dubruc EMSE
Date of Sending out the completed peer review	

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Studies comply with the major objective of the DigiFoF project? Does the case studies	 Yes No Partially Yes 	No more digital oriented	
correspond with the activity description as specified in the application form?	NoPartially		
Major strength of the Case Studies Major weakness of the Case Studies		ypical business mod s about organizatio	el change onal impact and digital
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation? Is the Case Study presented according to the	 Yes No Partially Yes No 		
template?	NoPartially		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	YesNoPartially	Only one reference	
Level of written English	ExcellentAdequatePoor		•

	•	
Case Nr and Title:	18 - Improving performance thanks to the economy of functionality	
Partner:	CIRIDD	
Internal Peer Reviewer (Person, Institutions)	X.Boucher, Mines Saint Etienne	
Date of Sending out the completed peer review	2020, June 10th	

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Studies comply with the major objective of the DigiFoF project?	 Yes No Partially 		The link with industry of the future could be better emphasized (see below)
Does the case studies correspond with the activity description as specified in the application form? Major strength of the Case Studies Major weakness of the Case Studies	impacts at all leve	els of the company in depth described to	els transformation, with o highlight many interests
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	 Yes No Partially 		Could be increased, nearly on each of the sections. Section 2.1 could underline that functional economy is part of Factory of the Future, as a new business model requiring also technical transformation. Section 2.1 could try to explain why it is a challenge and a transformation for the company. Section 2.2 could develop a bit, what is different with this new way of functioning, with regards to the older one. You could also underline that, starting with a new way of selling, the

	FJ
	company has finally developed a new offer including reduction of energy consumption, by heat recovery.4. New skills: new customer relationship management and commercial skills?Enlarged offer (not only compressed air but also heat recovery and perhaps energy diagnosis) thus enlargement of the fields of competencies of the company?5. Recommendation: several was to develop this section, for instance : risk of the transition? financial difficulties? Change management? Do you need pilot project?
Is the Case Study Yes presented according to the Image: No Image: No template? Image: Partially	
Are the complementaryYesinformation(externalNosources,bibliography,Partiallymethodology,listofcontacts)adequate?	
Level of written English Excellent Adequate Poor	I
Case Nr and Title:	19 - Shaping light to gain new markets
De urba e ur	CIRIDD
Partner:	CINIDD
Partner: Internal Peer Reviewer (Person, Institutions)	X.Boucher, Mines Saint Etienne

	-		
Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Studies comply with the major objective of the DigiFoF project?	YesNoPartially	But the link with Industry of the Future should be better highlighted	Section 2.1 should emphasize how this change of BM is part of industry of the future
Does the case studies correspond with the activity description as specified in the application form? Major strength of the Case Studies Major weakness of the Case Studies	impacts at all leve	f Business Models to ls of the company n depth described to	ransformation, with o highlight many interests
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	 Yes No Partially 		The description of the case could be re- inforced. Section 2.1: to be able to re-use the case, the issues for the company should be more precisely described. The need of a 'new strategy' remains a problem too general. You could be more specific, and underline that the company addressed her problems through the design of a new BM based on servitization. Section 2.2 :could be a bit

		structured and managed to implement the conceptual transformation. Section 3: Could you give some insights to emphasize if the company effectively followed the progressive transformation of its offer and business after the relieF program, and if the transition had positive impacts ? 6. Eventually, re-inforce a bit this section, for instance by highlighting the added value of help by external expertise (RelieF) and the need of transition or change management for SMEs. Some conclusions on the fact that the change of BM is adapted or not to SMES would be interesting.
Is the Case Study presented according to the template?	 <u>Yes</u> No Partially 	
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	 Yes No Partially 	
Level of written English	 Excellent <u>Adequate</u> Poor 	1

3.8.2 External Review:

Case Nr and Title:	17- A performing service system for the wood industry
Partner:	CIRRID
External Peer Reviewer (Person, Institutions)	J. De Benedettis, EMSE
Date of Sending out the completed peer review	

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal with the topic of design the Factory of the Future?	YesNoPartially	I do not think that CRM can be considered as tools of the industry of the future.	
Major strength of the Case Studies	Easy to read		
Major weakness of the Case Studies			mation is missing for the the project (duration,
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	YesNoPartially	Each part of the case would need more explanations.	More details would be required as mentioned above.
Is the Case Study presented according to the template?	YesNoPartially		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	YesNoPartially	I do not see the point of the proposed link: I expected a link to resources related to the company, not a regional program that has no real interest to understand the company's project.	
Level of written English	ExcellentAdequatePoor		

Case Nr and Title:	18 - Improving performance thanks to the economy of functionality
Partner:	CIRIDD
Externa Peer Reviewer (Person, Institutions)	G.Neubert, EmLyon
Date of Sending out the completed peer review	2020, June 19th

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal with the topic of design the Factory of the Future?	 Yes No <u>Partially</u> 		It can be linked, but it should be better explained
Major strength of the Case Studies	Free Text Compa	ny Transformation,	with a variety of impacts
Major weakness of the Case Studies		ailed information o	
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation? Is the Case Study presented according to the template?	 Yes No Partially Yes No No 		Provide more information in the various sections
template?	Partially		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	 <u>Yes</u> No Partially 		
Level of written English	 <u>Excellent</u> Adequate Poor 		

Case Nr and Title:	19 - Shaping light to gain new markets
Partner:	CIRIDD
Externa Peer Reviewer (Person, Institutions)	G.Neubert, EmLyon
Date of Sending out the completed peer review	2020, June 19th

Section 1 – Case study content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal with the topic of design the Factory of the Future?	 Yes No <u>Partially</u> 		It can be linked, but it should be better explained
Major strength of the Case Studies	Impacts at all leve	els of the company	y
Major weakness of the Case Studies		of the different p	of the change program, and rocesses or dimensions of ct.
Section 2 – Case Study structure and Layout	Evaluation	Comments	Recommendations
Is the length of the Case Studies justified? If no, please specify by e.g. indicating parts that are superfluous, irrelevant, redundant, unspecific or would need more explanation?	 Yes No Partially 		Follow my recommendation above, by developing in a more structure way the content.
Is the Case Study presented according to the template?	 Yes No Partially 		
Are the complementary information (external sources, bibliography, methodology, list of contacts) adequate?	 Yes <u>No</u> Partially 		Too general, no direct link with the case study. Seems to be publicity ?
Level of written English	 <u>Excellent</u> <u>Adequate</u> Poor 		

3.9 CLEXTRAL

CLEXTRAL has provided 2 industrial case that has been reviewed by BOC.

3.9.1 Internal Review:

Case Nr and Title:	20 - Implementing a "Remote Assistance" service package
Partner:	Clextral

Internal Peer Reviewer (Person, Institutions)	Zbigniew Misiak (BOC)
Date of Sending out the completed peer review	15/06/2020

Section 1 – Deliverable	Evaluation	Comments	Recommendations
content and objective Does the Case Studies	⊠ Yes		
comply with the major	□ No		
objective of the DigiFoF	□ Partially		
project?			
Does the case studies	🗵 Yes		
correspond with the			
activity description as	□ Partially		
specified in the application			
form?			
Major strength of the Case	Easy to understar	nd and interesting de	escription. Although
Studies		at the very end does	
	structure, it is a v	ery interesting addit	ion showing benefits
	from different pe	rspective.	-
Major weakness of the	Some minor Engli	sh language issues.	
Case Studies			
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	🗵 Yes		
Studies justified? If no,	🗆 No		
please specify by e.g.	Partially		
indicating parts that are			
superfluous, irrelevant,			
redundant, unspecific or			
would need more			
explanation?			
Is the Case Study	🗵 Yes		
presented according to the	🗆 No		
template?	Partially		
Are the complementary	🗆 Yes	References are	If possible, references
information (external	🗵 No	missing	should be added
sources, bibliography,	Partially		
methodology, list of			
contacts) adequate?			
Level of written English	Excellent		
	🗵 Adequate		
	Poor		

Case Nr and Title:	21 - Implementing a CRM – upside, resistance an opportunities		
Partner:		Clextral	
Internal Peer Reviewer (Person, Institutions)		Zbigniew Misiak (BOC)	

Date of Sending out the completed peer review 15/06/2020

Section 1 – Deliverable	Evaluation	Comments	Recommendations
content and objective			
Does the Case Studies	🗵 Yes		
comply with the major	🗆 No		
objective of the DigiFoF	Partially		
project?			
Does the case studies	🗵 Yes		
correspond with the	🗆 No		
activity description as	Partially		
specified in the application			
form?			
Major strength of the Case		for any company off	-
Studies		needs to implemen	
Major weakness of the		describes the imple	
Case Studies		•	ent some aspects of this
			mon in such descriptions,
	-	-BE architecture or p	
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	⊠ Yes		
Studies justified? If no,	□ No		
please specify by e.g.	Partially		
indicating parts that are			
superfluous, irrelevant,			
redundant, unspecific or			
would need more			
explanation?			
Is the Case Study	⊠ Yes		
presented according to the	□ No		
template?	Partially		
Are the complementary	□ Yes	References are	If possible, references
information (external	⊠ No	missing	should be added
sources, bibliography,	Partially		
methodology, list of			
contacts) adequate?			
Level of written English	Excellent		
	⊠ Adequate		
	Poor		

3.9.2 External Review:

Case Nr and Title:	20 - Implementing a "Remote Assistance" service package		
Partner:		Clextral	
Internal Peer Reviewer (Person, Institutions)		Krzysztof Dziekonski (UWE Bristol)	
Date of Sending out the completed peer review		June 2020	

Section 1 – Deliverable content and objective	Evaluation	Comments	Recommendations
Does the Case Studies deal	🗵 Yes		
with the topic of design the	🗆 No		
Factory of the Future?	□ Partially		
Major strength of the Case	Good reference t	o COVID restrictions	
Studies			
Major weakness of the	Some major lange	uage errors. Proofre	ading is advised.
Case Studies	Abbreviations sha	all be explained (suc	h as PLC).
	A reference to fig	ure/workflow shoul	d have been made. It is
	not clear what is	shown on a diagram	
	Some technical ja	irgon not properly ir	ntroduced in the case
			on'" relates to company
		•	ing industry. A more
		on to case study is r	
	What are "connected glasses"? Are these some kind of VR		
	goggles?	1	
Section 2 – Case Study	Evaluation	Comments	Recommendations
structure and Layout			
Is the length of the Case	🛛 Yes		
Studies justified? If no,	□ No		
please specify by e.g.	\Box Partially		
indicating parts that are			
superfluous, irrelevant,			
redundant, unspecific or			
would need more			
explanation?	<u> </u>		
Is the Case Study	⊠ Yes		
presented according to the	□ No		
template?	□ Partially		
Are the complementary	\Box Yes	References are	If possible, references
information (external	⊠ No	missing	should be added
sources, bibliography,	□ Partially		
methodology, list of			
contacts) adequate?			
Level of written English	Excellent		
	⊠ Adequate		
	D Poor		

Case Nr and Title:	Nr and Title: 21 - Implementing a CRM – upside, resistance a opportunities		
Partner:		Clextral	
Internal Peer Reviewer (Person, Institutions)		Krzysztof Dziekonski (UWE Bristol)	
Date of Sending out the completed peer review		June 2020	

Section 1 – Deliverable	Evaluation	Comments	Recommendations
content and objective			

Does the Case Studies deal with the topic of design the	⊠ Yes □ No		
Factory of the Future?	Partially		
Major strength of the Case	Good overview of a project manager role.		
Studies			
Major weakness of the	A proofreading is required. CMR is used in section 6 instead of		
Case Studies	CRM. All abbreviations should be explained in the text.		
Section 2 – Case Study	Evaluation Comments Recommendations		
structure and Layout			
Is the length of the Case	🗵 Yes		
Studies justified? If no,	🗆 No		
please specify by e.g.	Partially		
indicating parts that are			
superfluous, irrelevant,			
redundant, unspecific or			
would need more			
explanation?			
Is the Case Study	🗵 Yes		
presented according to the	🗆 No		
template?	Partially		
Are the complementary	□ Yes	References are	If possible, references
information (external	🗵 No	missing	should be added
sources, bibliography,	Partially		
methodology, list of			
contacts) adequate?			
Level of written English	Excellent		
	Adequate		
	🗵 Poor		

4 Conclusion

D7.1 – Evaluating Industry Cases and providing inputs for improvements in WP3 has been coordinated by AFIL with the support of UNIBG. The objective of D7.1 is to carry out peer and external evaluations to industrial case studies in order to provide feedback for improvement into WP3. A methodology applied for evaluation has been defined and the evaluation process performed.

All the suggestions will be into account - considering confindentiality issues related to each case - in order to improve the quality of the collected industrial case studies.