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#### Role-play based Assessment of IPS<sup>2</sup>-specific Intellectual Capital by

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• Industrial





• Industrial







• Industrial



• Products





Industrial



• Products







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Industrial



Products







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Industrial



Products









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Industrial



Products









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Industrial



Products



• Services





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Industrial







- Services







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Industrial

Products



• Services









Good Business Model





Good Business Model





- Good Business Model 🗸
- Good Products





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- Good Products



- Good Business Model
- Good Products
- Good Services



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Is that all?



- Good Business Model 🗹
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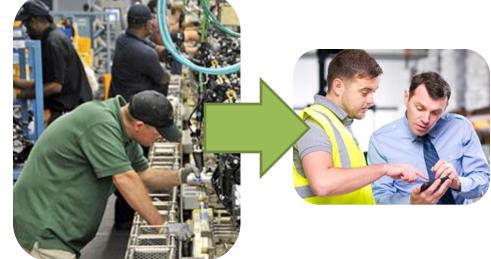
### Is an exemplary manufacturing company prepared for an IPS<sup>2</sup>?



- Good Business Model
- Good Products
- Good Services

Is an exemplary

Is that all?



#### manufacturing company prepared for an IPS<sup>2</sup>?









Service oriented thinking





Service oriented thinking

Joint organizational structure



IP



Service oriented thinking

Joint organizational structure

Joint standards and rules of conduct
 Rules



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**Standards** 



Service oriented thinking

Joint organizational structure

 Joint standards and rules of conduct Rules

All examples are intangibles:

It is the "Intellectual Capital" of companies

IP

**Standards** 









• Competences, skills, experience of the staff





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- All kind of relationships, especially to external people, groups, or organisations

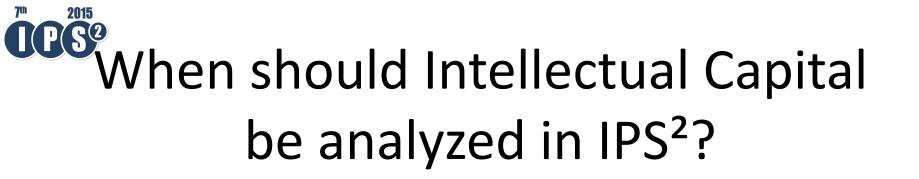






- Competences, skills, experience of the staff
- All kind of relationships, especially to external people, groups, or organisations
- All kind of structures that are used by the staff to work efficiently and be innovative







# When should Intellectual Capital be analyzed in IPS<sup>2</sup>?

• IPS<sup>2</sup> is based on a joint planning



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2015

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2015

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   → Joint structures for creation of value
   → Service oriented thinking



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- IPS<sup>2</sup> is based on a joint planning
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- IPS<sup>2</sup> is based on a collaboration
   → Joint structures for creation of value
  - $\rightarrow$  Service oriented thinking
  - $\rightarrow$  As early as possible







#### How to measure Intellectual Capital for IPS<sup>2</sup>?





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 By an involvement of staff members of all participating companies







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 By an involvement of staff members of all participating companies



 Consideration of the goals and challenges of all participating companies











• Easy to apply method that also is adaptable





• Easy to apply method that also is adaptable

• Easy to understand method





• Easy to apply method that also is adaptable

• Easy to understand method

• Clear structured method





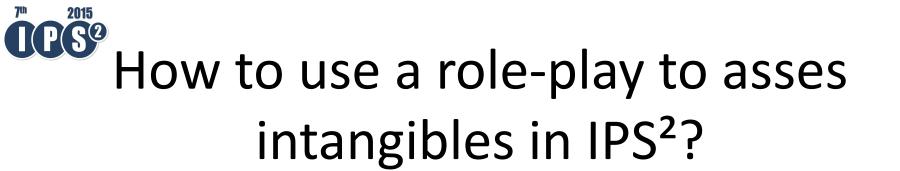
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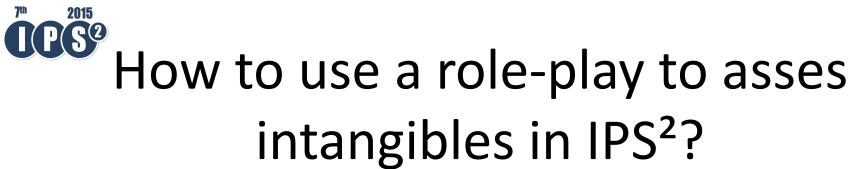
• Easy to understand method

Clear structured method









• Design:



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Designing of future events with risks



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• Simulation:



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Doing the role-play with participants that are involved in the IPS<sup>2</sup> (provider and customer)



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• Results:



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- Simulation:

Doing the role-play with participants that are involved in the IPS<sup>2</sup> (provider and customer)

• Results:

Participants assess intangibles that are helpful to manage risks that are simulated in the role-play









• Creation of daily routine







- Creation of daily routine
  - $\rightarrow$  What risks do we expect?







- Creation of daily routine
  - $\rightarrow$  What risks do we expect?
  - $\rightarrow$  What actions are associated with this risks?







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  - $\rightarrow$  Which persons are involved in that actions?
- Creation of challenges
  - $\rightarrow$  How will people react?
  - → What structures will be required?





# What impressions have we made?







• People like role-plays

 $\rightarrow$  participants are open minded





#### What impressions have we made?

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   A participants are open
  - $\rightarrow$  participants are open minded
- Creating fictive future events helps to realise required intangibles





#### What impressions have we made?

- People like role-plays
   → participants are open minded
- Creating fictive future events helps to realise required intangibles
- Results show connections to simulated risks











 Individually adjustable case studies for each IPS<sup>2</sup>







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 No software nor high-tech equipment required







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 No software nor high-tech equipment required

 Results are compatible for use in further methods



