EADTC

European Advances in Digital Transformation Conference

AN ADVANCED FURTHER EDUCATION FRAMEWORK FOR INDUSTRY 4.0

DEVELOPING A CERTIFICATION PROGRAM FOR DIGITAL TRANSFORMATION

Goals

- Comprehensive overview of required competencies for Industry 4.0
  - ideally workplace- / job-specific
- Certification program for imparting these competencies
  - Approach for implementing digitalization projects
  - Comprehensive toolbox for each step of the approach
  - Trainings and certificates for different workplaces and hierarchy levels

Research Questions

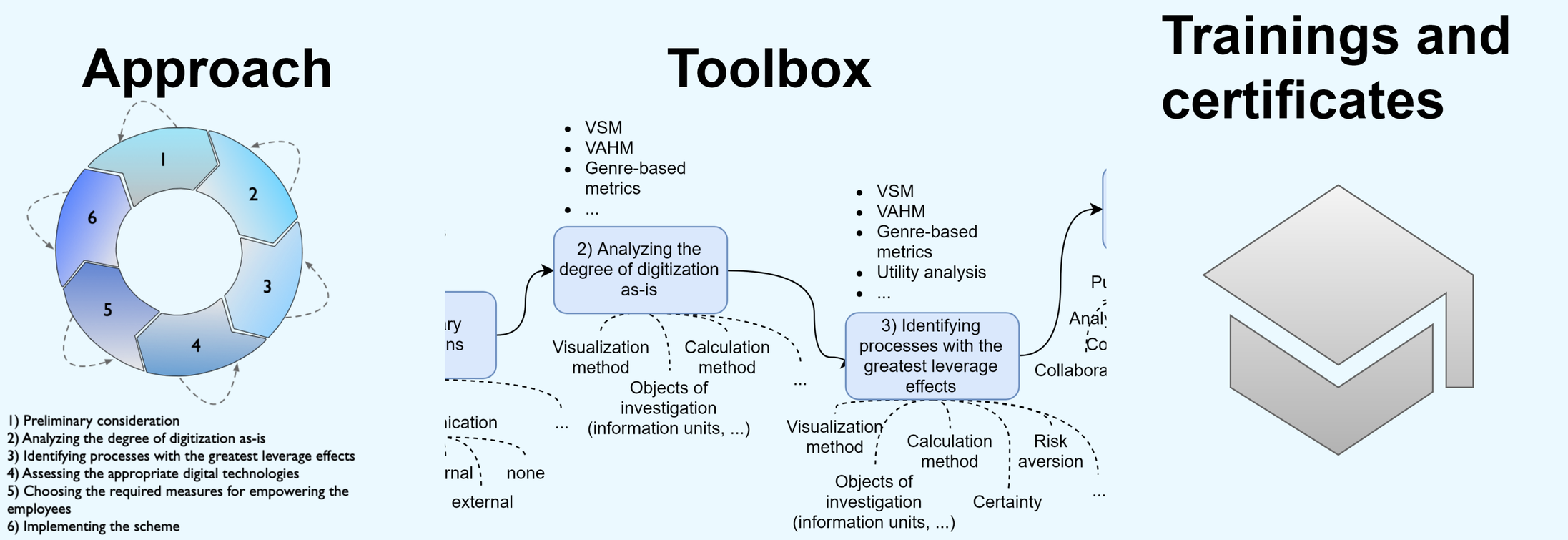
- What are "competencies" and how are they distinct to "skills" or "qualifications", e.g.?
- What are "digital" competencies?
- What should a further education program be like to impart these competencies to employees at different workplaces in the high-tech industry?

Preliminary Literature Review – Competencies for Industry 4.0

	Benešová and Tupa (2017)	Butschan et al. (2017)	Hecklau et al. (2016)	Vuorikari et al. (2016)
Technical competencies	5 out of 7 competencies	2/7	6/7	3/7
Methodological competencies	5/11	4/11	8/11	3/11
Social and communication competencies	6/10	5/10	8/10	2/10
Personal competencies	3/11	6/11	6/11	1/11

- Benešová, A. and Tupa, J. (2017) 'Requirements for Education and Qualification of People in Industry 4.0', *Procedia Manufacturing*, vol. 11, pp. 2195–2202.
- Butschan, J., Nestle, V., Munck, J. C. and Gleich, R. (2017) 'Kompetenzaufbau zur Umsetzung von Industrie 4.0 in der Produktion', in Seiter, M., Grünert, L. and Berlin, S. (eds) *Betriebswirtschaftliche Aspekte von Industrie 4.0*, Wiesbaden, Springer Fachmedien Wiesbaden, pp. 75–110.
- Hecklau, F., Galeitzke, M., Flachs, S. and Kohl, H. (2016) 'Holistic Approach for Human Resource Management in Industry 4.0', *Procedia CIRP*, vol. 54, pp. 1–6.
- Vuorikari, R., Punie, Y., Carretero, S., van den Brande and Lieve (2016) *DigComp 2.0: The Digital Competence Framework for Citizens* (Update Phase 1: The Conceptual Reference Model. EUR 27948 EN), Luxembourg, Publication Office of the European Union.

Concept of a Certification Program for Digital Transformation



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