

Manufacturing TEFs

1) Would you be ready for a network of TEF applications?

0 2 3

Yes. Please elaborate what best practices you suggest to build a strong and impactful proposal.



No. Please explain how to mitigate the risks.



2) Would SMEs use the TEF, even if there is no funding to use facilities, but services provided for free?

0 2 7

Yes



No



It depends (please specify).



3) What would attract SMEs to use TEFs? They will receive the services for free but have to invest their own resources spent at the facility.

0 1 7

(1/2)

- Clarity on additional (potential) costs
- Availability of datasets
- Experts with access to technology address SMEs challenges (which they will not be able solve on their own)
- High-tech analytics and equipment.
- Practical solutions How to use AI in operative work
- The best competence combined with understanding of doing business
- The TEFs must add value to their product, at least some kind of certification, something that distinguishes them from others that do not use TEFs
- they need to trust the TEF organisation. Access needs to be simple and not waste their time
- access to SOTA technologies, expertises, support for innovation, clear IP rules...
- Protected IP, clear simple rules for participation,

3) What would attract SMEs to use TEFs? They will receive the services for free but have to invest their own resources spent at the facility. (2/2)

- fast implementation, very low administrative tasks,
 - SMEs like any other organisation works well with the projects that have a starting and ending time and budget. Otherwise the planning of activities hangs loosely.
 - Access to real world data; potential cooperations
 - Support provided by TEF personnel and advanced equipment
 - The possibility to test
- without interfere with production
 - easy access real return
 - Support in applying AI Technologie and Algorithms
 - Clear business cases for the SMEs to be developed jointly before entering TEF-use contract.

4) What would be attractive for larger companies to use the TEFs? Larger than SMEs companies would have to pay for the service as laid out in the price list of the TEFs.

(1/2)

- To insure an access for SMEs with which they work
- The companies would need a clear project with ambitious targets. They also need to justify the projects internally. The set and clear rules help to orchestrate the activities.
- Verifiability and trust through the advertisement of the adherence to TEFs
- Large companies are most attracted by the cutting edge new solutions developed by the RTOs
- Collaboration with AI researchers to test AI potential in their work
- Easier access to competence and equipment
- Availability of the newest technology for experimentation. additional information related to certification trajects for instance.
- Board technology platform, high degree of expertise, rapid prototyping possible

4) What would be attractive for larger companies to use the TEFs? Larger than SMEs companies would have to pay for the service as laid out in the price list of the TEFs.

(2/2)

- The ability to adjust the TEF to their needs.
- More future oriented research and collaboration with other leading companies, and international network
- visibility and access to facilities they do not have
- Benefitting from specialised expertise at TEF that can be called upon only when needed.
- pre-competitive cooperation, access to AI communities
- cheaper than maintaining their own test facilities. More up-to-date equipment
- expertise! maybe also networking
- using gpu data center
- Get access to SME innovative solutions

5) The draft DEP Work Programme indicates key areas for a Manufacturing TEF. Please vote on the most promising one for a network of TEFs (you can click several):

0 2 8

Factory-level optimization



Collaborative robotics



Circular economy



6) In which stages of the manufacturing industrial value chain do you foresee the TEFs to create most value?

0 2 4

(1/2)

- Design, reuse, recycling



- Logistics



- Maintenance



- Product engineering



- Shop floor



6) In which stages of the manufacturing industrial value chain do you foresee the TEFs to create most value?

(2/2)

0 2 4

- Supply chain planning

 8 %

7) Which are the types of product, service and process innovations that could stem from the creation of a manufacturing TEF?

(1/2)

- New eco innovation processes
- Products designed for use and manufacturing
- using AI in process optimization
- maintenance, intralogistics
- we can not imagine... SME innovation potential is amazing
- test before invest in AI solution. pre-production, business model innovation to be tested before real integration
- Control systems for manufacturing equipment
- Automation of manufacturing processes still performed manually
- smart sensors, in-situ data processing, robotics in general
- Collaborative robots in factory.
- The new applications relating to circular economy are foreseen (robotics and AI assisted disassembly, recycling, repairing etc)
- Trough process optimisation
- New production process, new technologies and new raw materials

7) Which are the types of product, service and process innovations that could stem from the creation of a manufacturing TEF?

(2/2)

0 1 6

- Resource optimization tools
- True lot-size-1 production.
- Scalable and secure AI Solutions

8) What KPIs should measure the success for manufacturing TEFs?

0 1 7

(1/2)

- # of users, # of integrated AI solutions in the manufacturing ecosystems, turnover growth, increase of Digital Maturity assesement
- rapid prototypes, lean manufacturing
- Ability to support industrial cases
- Value for the company that receives support-services Commitement from consortire partners
- Number of companies intereseted in using TEF
- How many new innovation processes are tested?
- # of customers and cooperations with DIHs; and long-term impact!
- Agility, Productivity, sustainability
- number of companies using the TEF, number of cases brought and services used, amount of revenue generated
- Number and variety of the projects done in collaboration (company+company, or company+academia). Dissemination events organised based on these results. Number of new projects.

8) What KPIs should measure the success for manufacturing TEFs?

(2/2)

0 1 7

- number of users number of tests that are finally implemented
- No of applications received
- Numer of real industrial use cases
- Number and quality of business opportunities
- Systems deployed in industry, number of SMEs that have made an investment
- Number of new tests or projects
- number of returning customers

9) How will manufacturers apply AI in the years ahead? What kind of improvements and innovations can we expect to see?

0 1 7

(1/2)

- control process and optimize production green their production and reuse current waste include AI in their product to make it smart
- Within 10 y AI is involved in majority of manufacturing operations. AI support/make in decision making in complex environment
- Improved (autonomous) response to unexpected situations. Reduced failures.
- With the help of tech providers and other entities Interesting improvements.
- With digital twin larger applications
- smart automated systems
- Moving from automated processes to truly autonomous processes
- data analysis
- New business models, providing functions as a service
- predictive maintenance, massive customization, increase cybersecurity

9) How will manufacturers apply AI in the years ahead? What kind of improvements and innovations can we expect to see?

0 1 7

(2/2)

- AI solutions in digital production lines (smart production) (at least to systems integrators).
- large variety of "smart systems" where the end-user don't have to worry about AI as a technology
- Autonomous robots in manufacturing
- lots of cross-disciplinary work and applications
- quality improvement
- digital twins for factory floor optimisation and design
- Through toolboxes that are available