



SMACC

DIGITAL BOOST FOR FINNISH INDUSTRY

Technological Services for digital SME's: A local case
Smart Machines and Manufacturing Competence Centre
(SMACC)

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SMACC answers to the objectives of the Finnish industrial policy

Objectives


- Growth of the Finnish export
- Profiles, specialization and cooperation of universities and research institutes
- International competitive competence centres
- Increase of cooperation between research institutes and companies in innovation actions
- Building IOT University Network connecting the essential research and development environments
- Ecosystems development



SMACC

- Provides digital boost for the Finnish industry – special focus in SME's
- Focuses on the research of smart machines and smart manufacturing technologies
- Offers the highest scientific competence in smart machines and manufacturing area
- Fast piloting and agile operation model enables the dissemination of enthusiasm and courage for new innovations
- SMACC is ecosystem where the key research actor is the research alliance of TUT and VTT together with TAMK

Tampere Region – the Centre of Finnish industry

 Examples of Finnish global market leaders

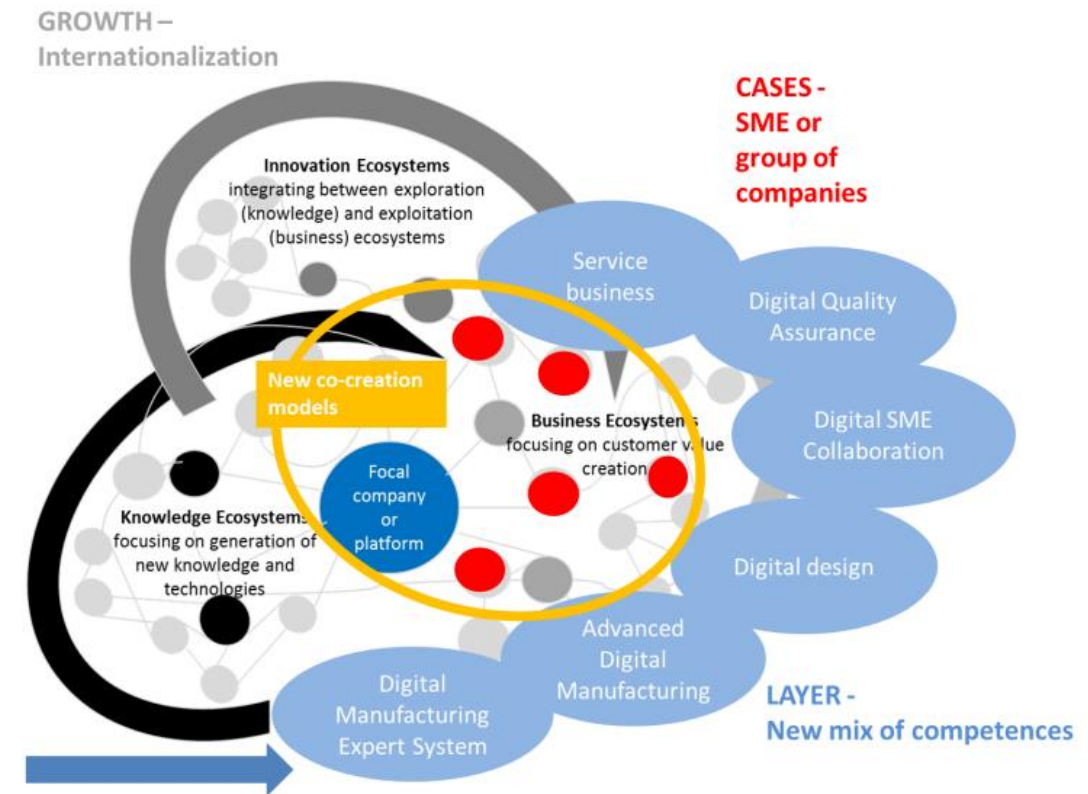


SMACC themes

SMACC development themes are living and the efforts are redirected according to changes in needs in industry. The theme areas have varying research volumes.

- Advanced digital manufacturing
- Digital design and modelling
- New digital service innovations
- Digital quality control (Industrial internet)
- Digital asset management
- Additive manufacturing (3D-printing)

Themes are consisting of industrial and scientific projects which are contributing on whole ecosystem

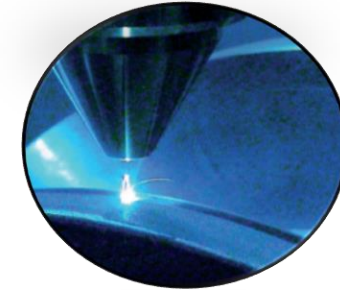


SMACC-Labs

- Networked technological infrastructure for SMEs
 - Core infrastructure formed by diverse facilities of VTT, TUT & TAMK
 - Robotics labs, material R&D labs, digital engineering labs, AM labs,...
- Open view to available facilities & equipment, know-how, services and related contacts
 - Case examples: problem → solution → impact → created value
 - SMEs can reach the right contacts for further discussion
- Platform for SME's to offer their own infrastructure
 - For pilots, demonstrations, momentary capacity increase,...
- Extended infrastructure for Hackathons (e.g. SMACC-Hacks)



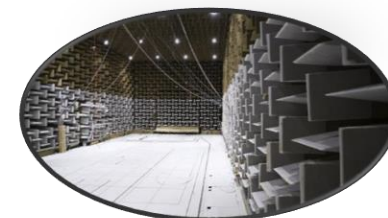
Human-Robot
Collaboration
Labs



Additive
Manufacturing
Technology
Labs



Powder
Piloting
Services



Noise Control
& Sound
Quality Lab

What SMACC-Labs offers to manufacturing SMEs?

- One-stop-shop for latest technology and infrastructure combined with cutting-edge research expertise
 - Decision to utilize new technologies can be backed up with agile pilots and demonstrations → smaller investment, experience prior bigger investments
 - Decrease the risk of future investments in novel technology
- Knowledge regarding pilots, demonstrations and created value transformed to all the parties in the ecosystem
 - Facilitates knowledge transfer from pioneers to adapters and vice versa
 - Supports altering strategic choices of SMEs
- Networked infrastructure enables new business opportunities & models
 - Fast and agile pilots across the border
 - Regional, national, global markets
 - Renting of own infrastructure
 - Higher utilization rate, revenues
 - Shared ownership of infrastructure
 - Smaller investment, shared risk
 - New joint business opportunities and networks between companies

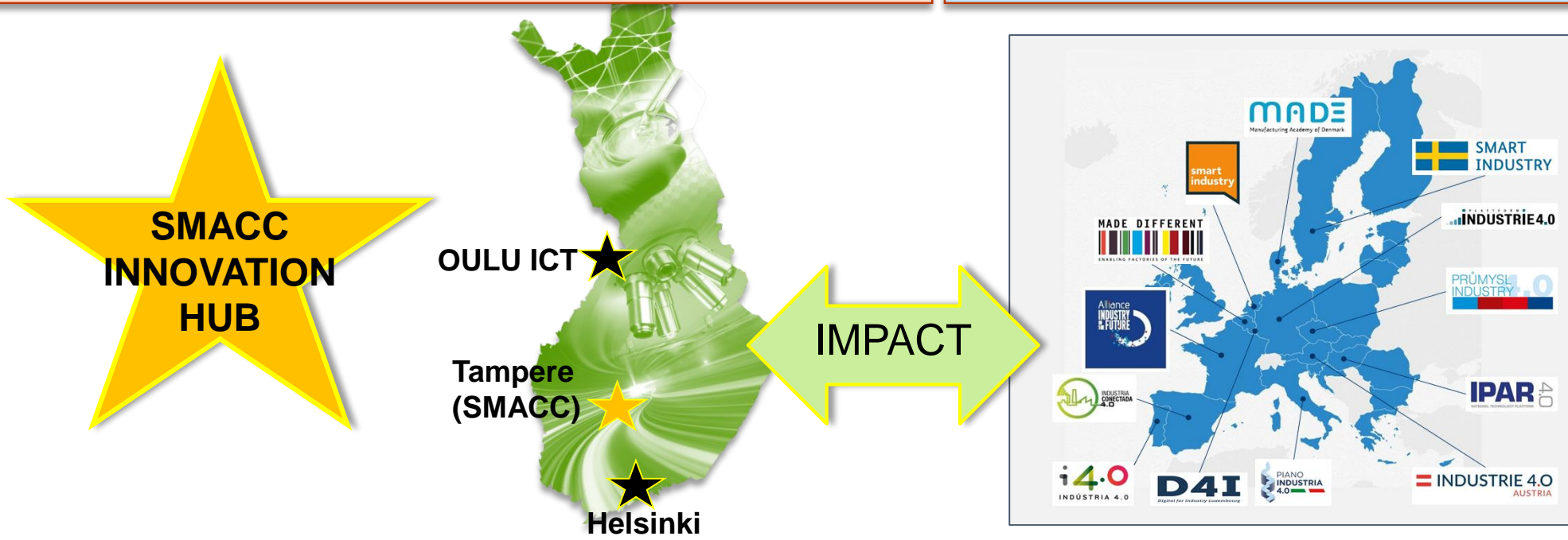


From European initiatives to national benefits – and vice versa

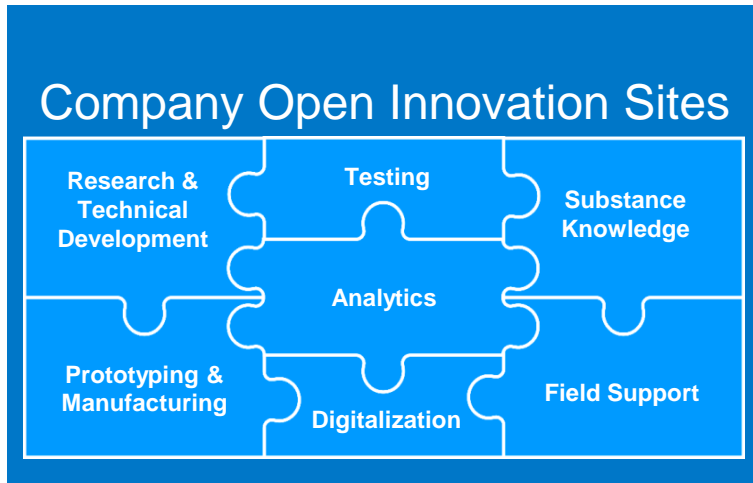
- Business benefits
- Societal influence
- Boosting strengths
- Visionary concepts
- Cross-sectoral
- Shared vision and strategy
- Inspiring collaboration
- New business partners
- Co-investment, shared risk
- Networks of hubs
- Enabling long term development

European dimension – opportunities for SMACC

- **Vanguard Smart Specialisation strategy**
- **Innovation hubs and platforms e.g. I4MS (ICT Innovations for manufacturing SME's)**
- KET (Key Enabling Technology) on advanced manufacturing – SME impact
- EIT Added value manufacturing.KIC



Open Innovation Ecosystem Infra end Expertise



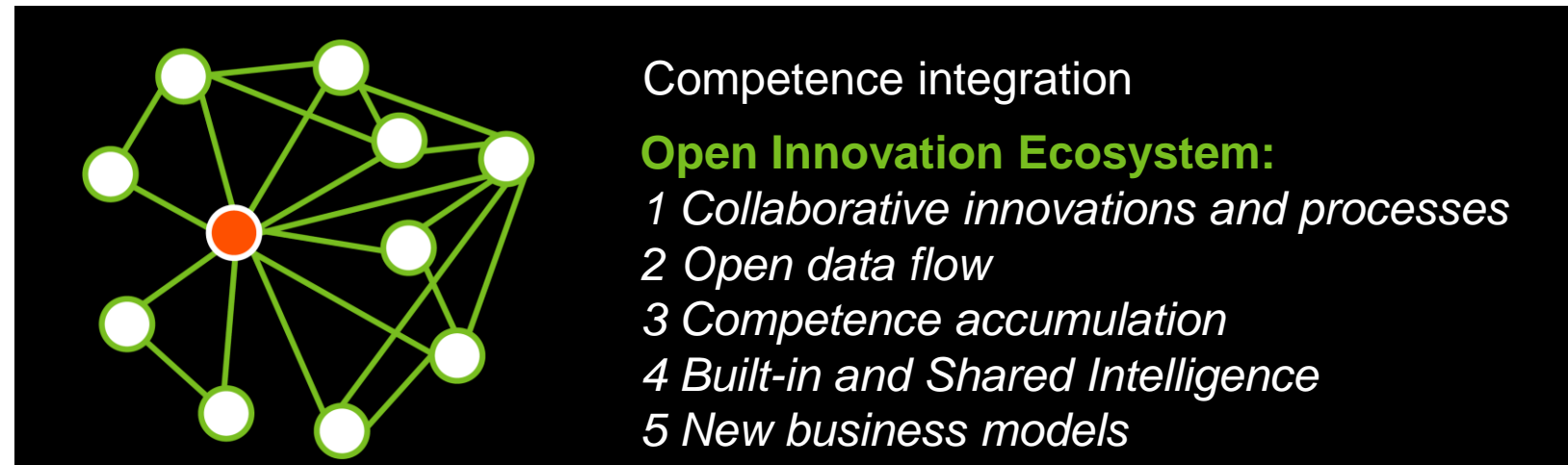
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