



Support and Stimulation of dynamic and organic growth of pan European ICT for Manufacturing SME Innovation Ecosystems

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I4MS Growth - Mission

Support and Stimulation of dynamic and organic growth of pan European ICT for Manufacturing SME Innovation Ecosystems



I4MS – The Initiative



Funding: FU€110 million + €34 million in 2017.

Goal: Enable + foster collaboration across value chains

How: SMEs run experiments to test digital innovations (DIHs).

What: Focused experiments of short duration. Brokerage and transfer of know-how and technology are provided by the DIH improving their products and services, processes, business models and digital skills.



I4MS – Benefits



- **SMEs:** financial means and network to adopt leading edge technology -> new products + services.
- **Innovative suppliers:** mature their technologies and broaden the field of their application (new markets, services)
- **DIHs:** extend research oriented activities with industrial projects -> new sustainable business model.
- I4MS helps manufacturing companies/suppliers to change from product-oriented into service-oriented business models, (needed in digital economy).



Phase 1: Creating the ecosystem



- 2013-2017 with 7 IAs +1CSA
- Creation of ecosystems around regional DIHs. Areas:
 - HPC cloud-based simulation services
 - Advanced laser-based equipment assessment
 - Industrial robotics systems
 - Intelligent fixtures
- 195 experiments + 39 DIHS + 210 SMEs and mid-caps
- Enormous economic and societal impact.
- Regional DIHs + targeted initiative (manufacturing SMEs) delivers intended results.



The UK's leading HPC Centre

- 27 years old
- 100+ staff
- Host and support many of UK's National HPC and Research Data services
- Always worked with industry and commerce – SMEs and multinationals
- Self funding – commercial mindset
- Digital Innovation Hub in partnership with Scottish Enterprise
- Fortissimo grew from Supercomputing Scotland model

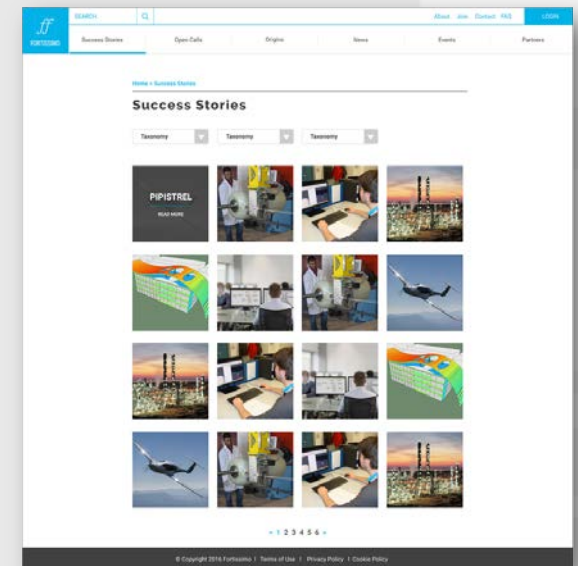


Fortissimo Project



High Performance Computing and Data Analytics for Manufacturing SMEs

- Too few European manufacturing SMEs use modelling and simulation to improve their products and services
- Fortissimo helps them take their first steps through a small 18-month “experiment” – typically 3-4 partners
- Statistics
 - 218 partners
 - 129 SMEs
 - 92 experiments
 - €34m costs / €26m funding



**New company established
Fortissimo Marketplace Ltd**



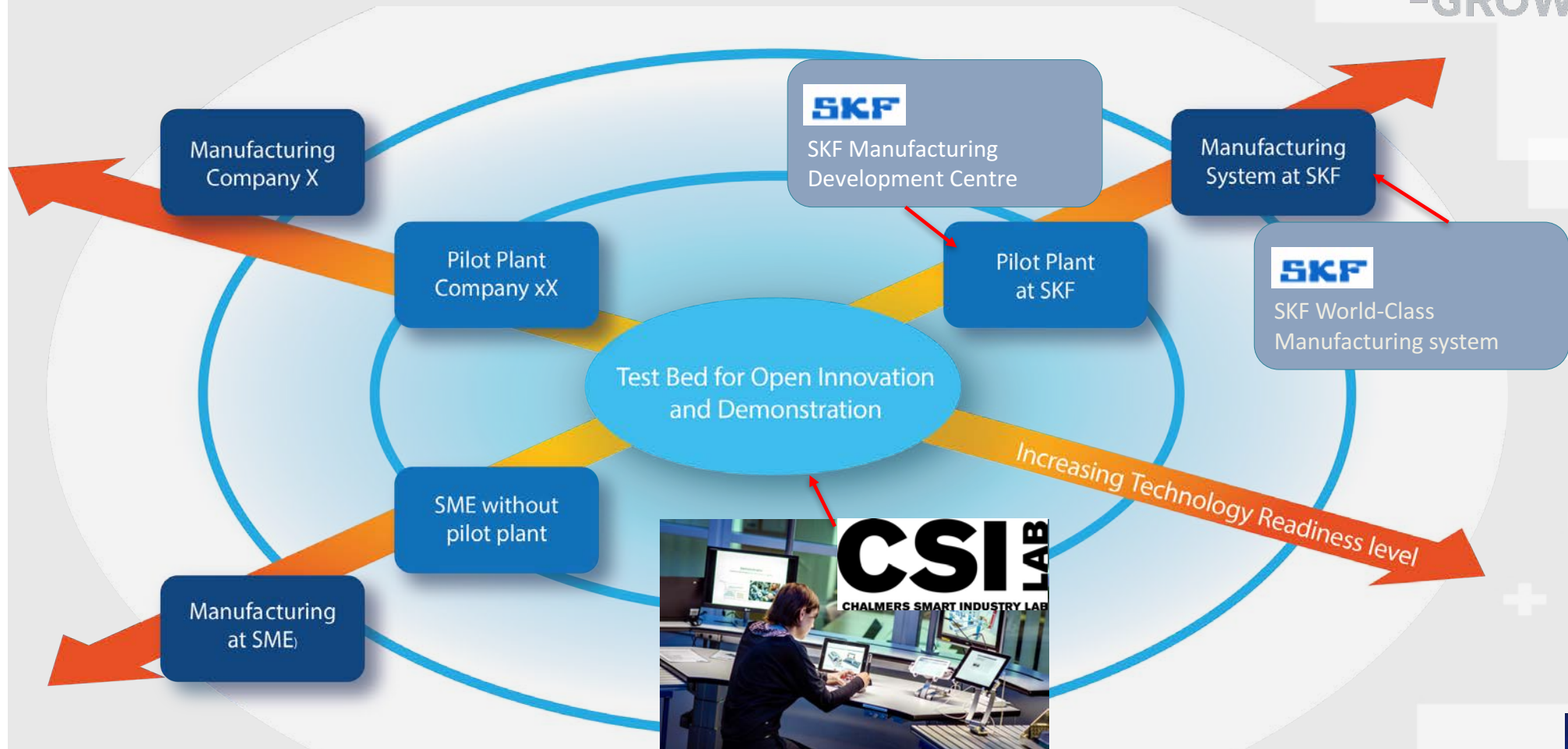
Phase 2: Growing the ecosystem



- Started in 2015: 4 new IAs + 2 CSAs.
- Objectives:
 - organically grow existing ecosystems
 - extend their European dimension
 - motivate the creation of new (mentoring programme).
- “Financial Support to Third Parties” scheme of H2020



Chalmers Industry Innovation Hub



Phase 2: Growing the ecosystem



- 60 experiments launched + 12 (near future)
- 25 new DIHs and 120 SMEs.
- Cross-border dimension to foster collaboration on European level.
- Technologies:
 - Cyber Physical Systems (CPS) and Internet of Things in manufacturing processes.
 - HPC cloud-based simulation services + data analytics.
 - Robotic systems affordable and useful for SMEs.



Open calls



- More than €26 million funding:15 calls (phases 1-2).
Including 2 for regional DIHs.
- 2 calls end of 2017 (€1.6million).
- Light, SME friendly application scheme:
 - 10 page proposal
 - Calls tailored to market challenges
 - Very short time to experiment start
- Interest of SMEs has strongly increased.



Highly attractive to industry



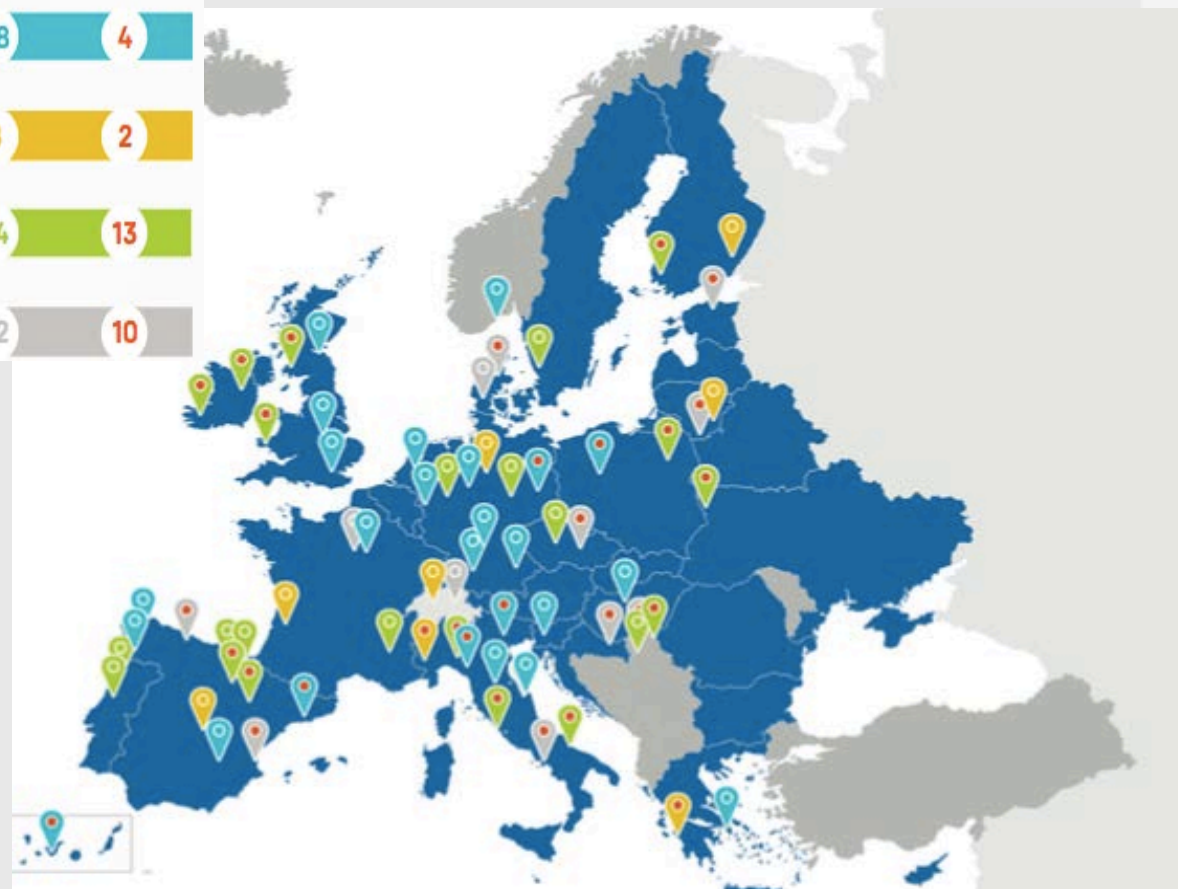
- Out of 560 current contractors 406 are from industry.
- 84% of the industrial partners are SMEs (65% newcomers)
- 50% of the industrial participants are end-users
- I4MS provides SMEs with :
 - competences and skills
 - pan-European competence and business networks
 - financial support



Highly attractive to industry



	I4MS phase 1 and 2	Coached DIHs
HPC Cloud-Based Simulation	48	4
Laser and Additive Manufacturing	8	2
Sensors, Cyber Physical Systems, Internet of Things	24	13
Robotics	32	10



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