

Industry 4.0 "Demo factory" project EDIOP-1.1.3-16 (ERDF)

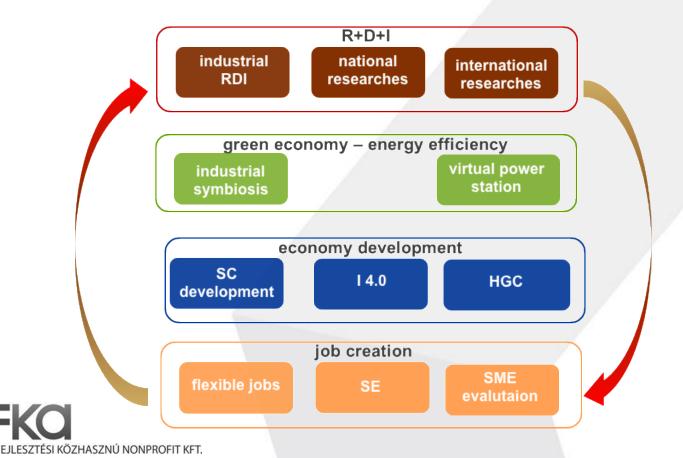
BÁRDOS, Krisztina PhD managing director, IFKA 20 September 2017



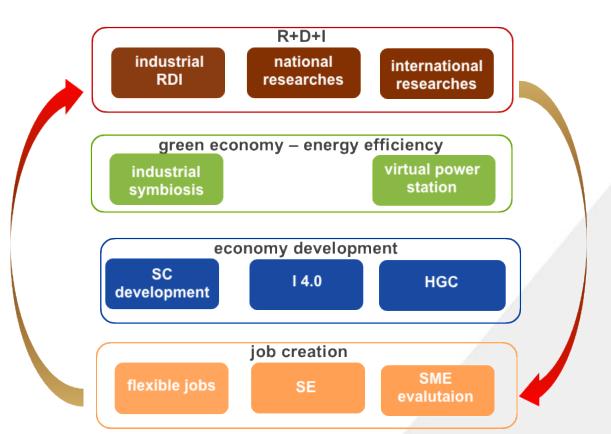


IFKA Public Benefit Nonprofit Ltd. for the Development of the Industry

- IFKA is the professional background organization to the Ministry for National Economy
- > Over 25 years IFKA acts as an **intermediary organization** between policymakers and businesses,
- with own, business—based budget (no state support)
- ➤ IFKA is strategic partner to several EU and Hungarian organisation
- acting as proactive key player in running domestic flagship intitiatives for economic development







14.0





The project aims at introducing the industry 4.0 approach in Hungary

Policy requirements

- GDP share of industry to increase from 23,5% to 30% by 2020
- Focusing on selected industries (Irinyi Plan)

Policy instrument

- EDIOP-1.1.3-16 project
- Main objectives and activities:
 - Demonstrating industry 4.0 good practices (demo factories)
 - Terminating information barriers between supply and demand in industry 4.0 related markets
 - Promoting development of industry 4.0 to potent SMEs
 - Building up policy background (indices, concept, monitoring system)

Expected project results

- 2017 July: 1000 surveyed and qualified industry 4.0 potent SMEs
- 2017 Sept: Pre-qualification of SMEs for i4 schems (EDIOP128)
- 2017 Nov: "Night of modern factories" countrywide awareness event
- 2018-2019: Industry 4.0 demo factories, mobile demo truck
- By end-2019: 4000 visitors at demo factories and 350 SMEs participating in development planning support

Project	GINOP-1.1.3-16
Owner	IFKA (lead) and IVSZ (partner)
Budget	EUR 7,58 million
Duration	May 2016 – May 2019
Purpose	Industry 4.0 development
Target group	Manufacturing SMEs





Political and technological need is behind the project to support Irinyi-plan (economic development program)

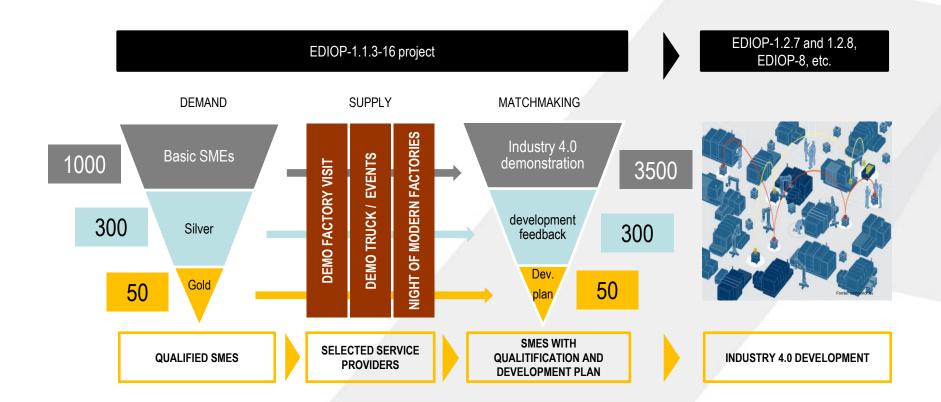
- specific, economic-industrial mainstream initiative, flagship even in the EU
- distintctive characteristics multiplicative, industry development effect by "one" investment unit
- expectations: technology-intensive growth, new business modells, shift to modern production structure and considerable higher added value

INDUSTRIAL PARADIGMA CHANGE IS NEEDED!





The project aims at identifing demand and supply and speeding up and catalysing their alignment

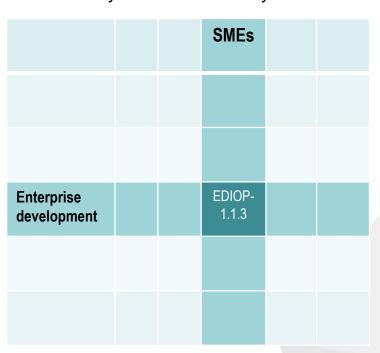




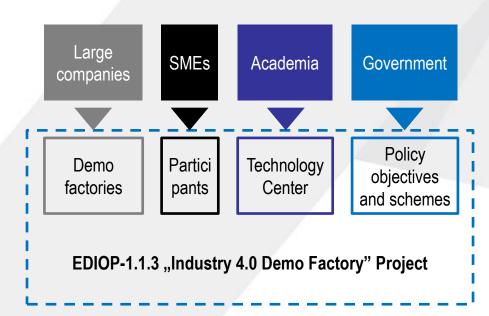


Industry 4.0 policy context is complex, with the intention of stakeholder involvement and coordination

Policy scene for Industry 4.0



Stakeholder involvement map for EDIOP-1.1.3







Project implementation is broken down into 8 work packages

Policy background

- A. Preparation
- B. Survey
- C. Conceptualisation
- D. Monitoring

Market services

- E. Demonstration
- F. Development



- G. Communication
- H. Project management





Demonstration is a core element of the project

E. Demonstration

1. Demo sites (demo factories)

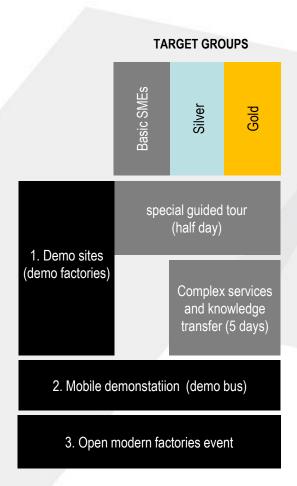
- 6 industry 4.0 demo sites, one Technological Center with BTU
- Weekly demonstration events (i.e. 100 eevnt / 2 years / site9
- 4000 visitors planned
- guided tour, training and consultation on site

2. Mobile demonstration (demo bus)

- Mounted with mobile devices
- Full country coverage (industrial parks, cities, industry zones)

3. Open modern factories night

- · countrywide event for raising awareness
- at demo sites and other factories







The project provides development planning support for top potent SMEs

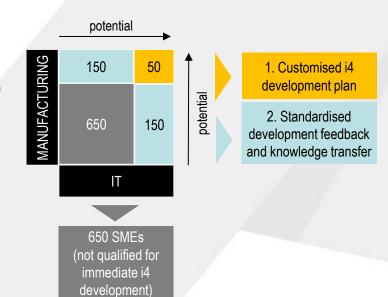
Development

1. Customised industry 4.0 development plan

- for the top qualified 50 gold SMEs
- assessment (as-is) and realistic goal setting (to-be)
- development recommendations and prioritizing (ROI-based)
- financing and support (co-financing) opportunities
- business planning based on selected scenario

2. Standardised development feedback

- for the qualified 300 silver SMEs
- standard feedback and off-the-shelf recommendations on areas for development, means and tools
- information on market-based and support opprtunities
- G. Communication
- H. Project management







Q and A

1. What are the solutions that can benefit SMEs, for instance in terms of smart logistics

- 1. Our project provides SMEs with a variety of high value added services:
 - 1. knowledge sharing events,
 - 2. demonstration factory visits,
 - 3. education and knowledge transfer and
 - 4. development support.
- 2. All services accessible free of charge and administrative burden.

2. What are the best "Smart Factory" practices you know and why are they deemed successful

1. We plan to select 6 industry 4.0 demo factories which will inevitably possess "smart" features and technologies. Our approach is twofold: provide SMEs with smart factory solution practices, to make them understood in a way so that these practices are still accessible, affordable and understandable to SMEs. There is no use in showing cases which are beyond SME capabilities.

3. What is the relation between Industry 4.0 and the greening of production chains?

Industry 4.0 requires clear production management with optimized processes, otherwise digitalization will have less than
expected results. Processes should be optimized in terms of time, resources and energy, producing and containing as little
waste as possible. If waste and energy waste is minimized in a process, then it is consequently greener. Also, we have to bear in
mind the circular economy perspective meaning that firm along the value chain may utilize "waste" as input to their
production.





Q and A

- 4. What are the main needs expressed by SMEs in terms of guidance and training regarding Smart Factory solutions?
- **a.** SMEs need to optimize their management and manufacturing processes before starting their journey towards becoming smart factory. Lean, Kaizen, 5S, etc. are merely examples. They also need to have hands-on experience with technologies and corresponding IT solutions. They also need a reliable and impartial partner to guide their way.
- 5. Partner searches and network development are key but why collaborating across regions and sectors?
- Technology enables and enhances horizontal integration across the value chain, and companies might take
 advantage of the newly evolving cooperation models built on comparative advantages.
- 6. How to better strengthen cross-regional collaboration to match EU capabilities?
- a. Good practices (such as our smart factory SME project) need to have broad publicity and the models, experience and knowledge should be shared, transferred and used all over Europe, tailored to the different contexts.
 Therefore we made measures and also look forward to participating in multinational cooperation projects across the EU.



