

# Industry 4.0 in Ukraine



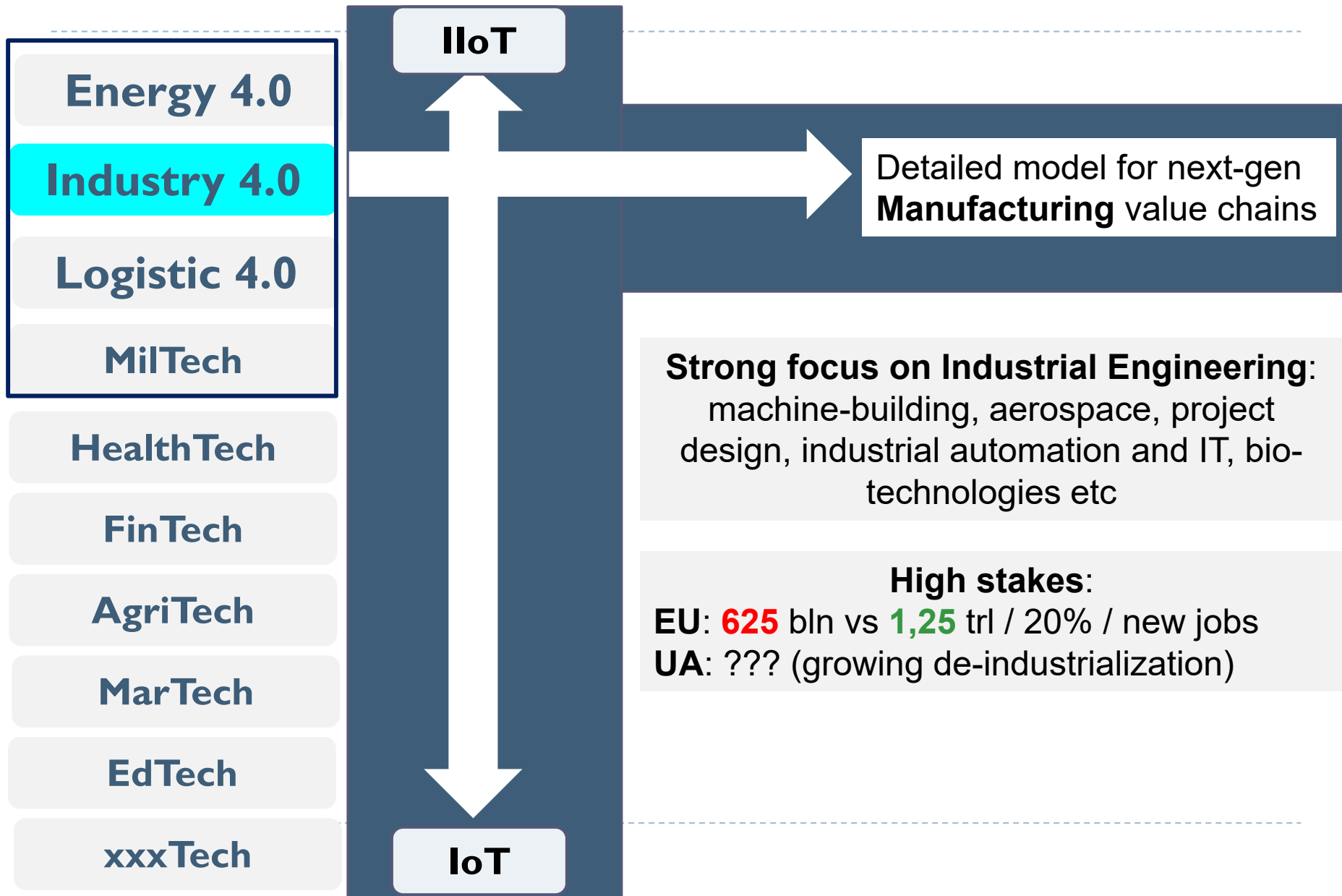
'it's all about twinning'

16 of October, Belgrad



# Industry 4.0

## It is about smart manufacturing



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**Starting twinning & integration in  
EU:  
first lessons from 2017-18**

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Building IoT cluster collaboration  
program Poland-Ukraine

EaP / H2020



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**New strategy**  
**INDUSTRY 4.0**

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# Industry 4.0: projects 2019-2021



7. Industry4Ukraine platform

# 5 basic factors

1. Basic growth
2. Focus on Industrial Engineering
3. Inclusiveness & coordination



4. Fast digitization of basic industries
5. Development of innovative ecosystems



Аналітичний огляд

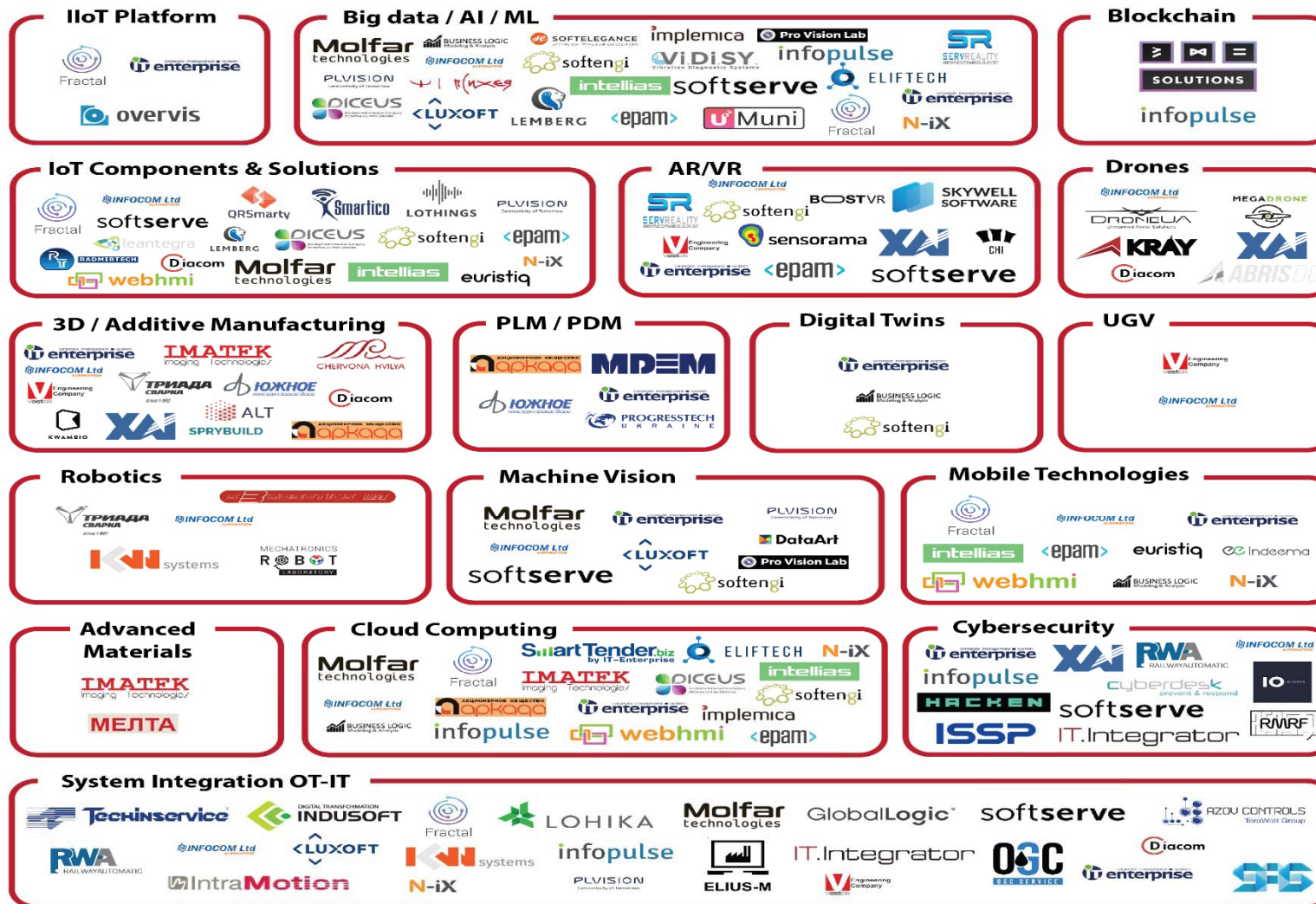
# LANDSCAPE INDUSTRY 4.0 IN UKRAINE



# UKRAINIAN LANDSCAPE INDUSTRY 4.0 TECHNOLOGIES

ВЕРСІЯ 2.0

76



# ISRAELI INNOVATION: INDUSTRY 4.0

THERE ARE OVER **150** INNOVATIVE INDUSTRY 4.0 START-UP COMPANIES IN ISRAEL

OPERATION OPTIMIZATION	3D PRINTING	SAFETY & HEALTH	ROBOTICS	INSPECTION & TESTING	SUPPLY CHAIN



Grove Ventures is an early-stage fund, focused on investing in cutting edge data technology startups. We support Israeli startups throughout their lifecycle and growth by providing our clients entrepreneurs with the capital, expertise and network needed to shape and build successful global businesses.

SENSING & IMAGING	MAINTENANCE	PLATFORMS & CONNECTIVITY	CYBER SECURITY



Start-Up Nation Central is an Israel-based non-profit that serves as a gateway to Israeli innovates. The organization leverages its in-depth knowledge of Israel's innovation sector to introduce business leaders, government, and NGOs from across the globe to the most relevant people and technologies that address their critical needs.

# Digitization of Basic industries

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# AUSTRALIA'S MINING AND METS SECTOR



**400**  
operating  
mines

**\$133.2 billion**  
in direct Gross Value Added  
(GVA) in 2015–16

With an estimate of between  
**\$10 to \$40 billion**  
GVA for the METS sector\*

Source: Deloitte Access Economics (2017),<sup>10</sup> METS Ignited (2016),<sup>11</sup> Austmine (2017).<sup>12</sup>

\* METS sector GVA based on a combination of published and existing estimates.

## Australia's METS Sector



Employed **386,000**  
highly skilled workers in FY12



**\$90 billion**  
revenue in FY12



METS organisations  
accounted for the  
**majority (~76%)**  
of patents filed  
in the Australian  
mining sector between  
1994 and 2011



**3,000–4,000**  
METS businesses in 2013



**\$15 billion**  
of exports



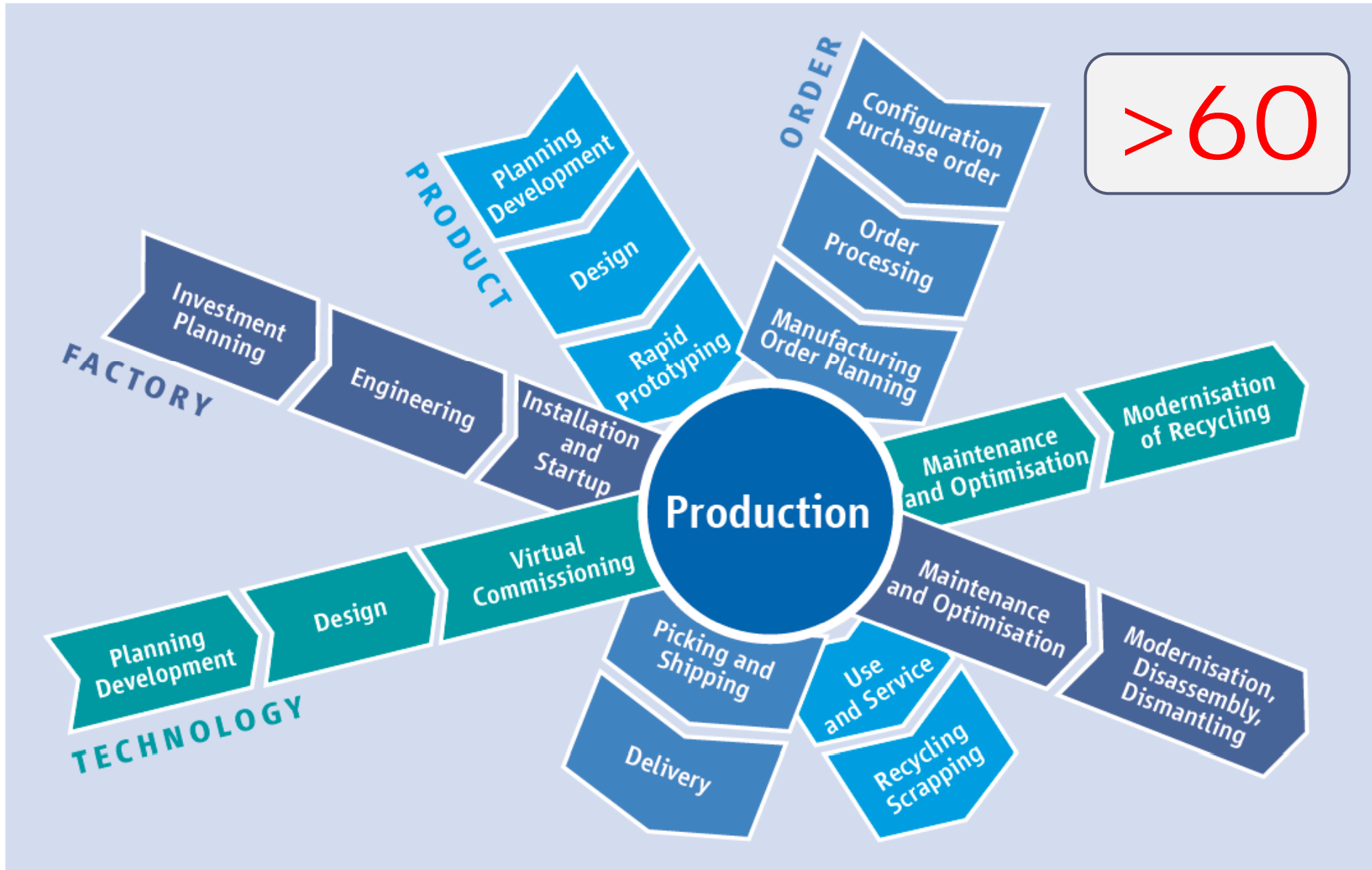
**80%** of METS businesses  
are Australian owned



**\$1.18 billion**  
expenditure on research  
and development in FY14


Source: METS Ignited (2016),<sup>11</sup> Department of Industry, Innovation and Science (2016),<sup>13</sup> Austmine (2013, 2015, 2017),<sup>14 15 16</sup> IP Australia (2015).<sup>17</sup>

# Technical standards in Industry 4.0



# Awareness CAMPaign for better Use of Standards

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**Ріст обізнаності та використання в Україні сучасних стандартів промислової автоматизації та ІТ**

Огляд проекту

**aCampus**  
Awareness Campaign  
for Better Use of Standards

  
співпраця з  
німеччиною  
DEUTSCHE ZUSAMMENARBEIT

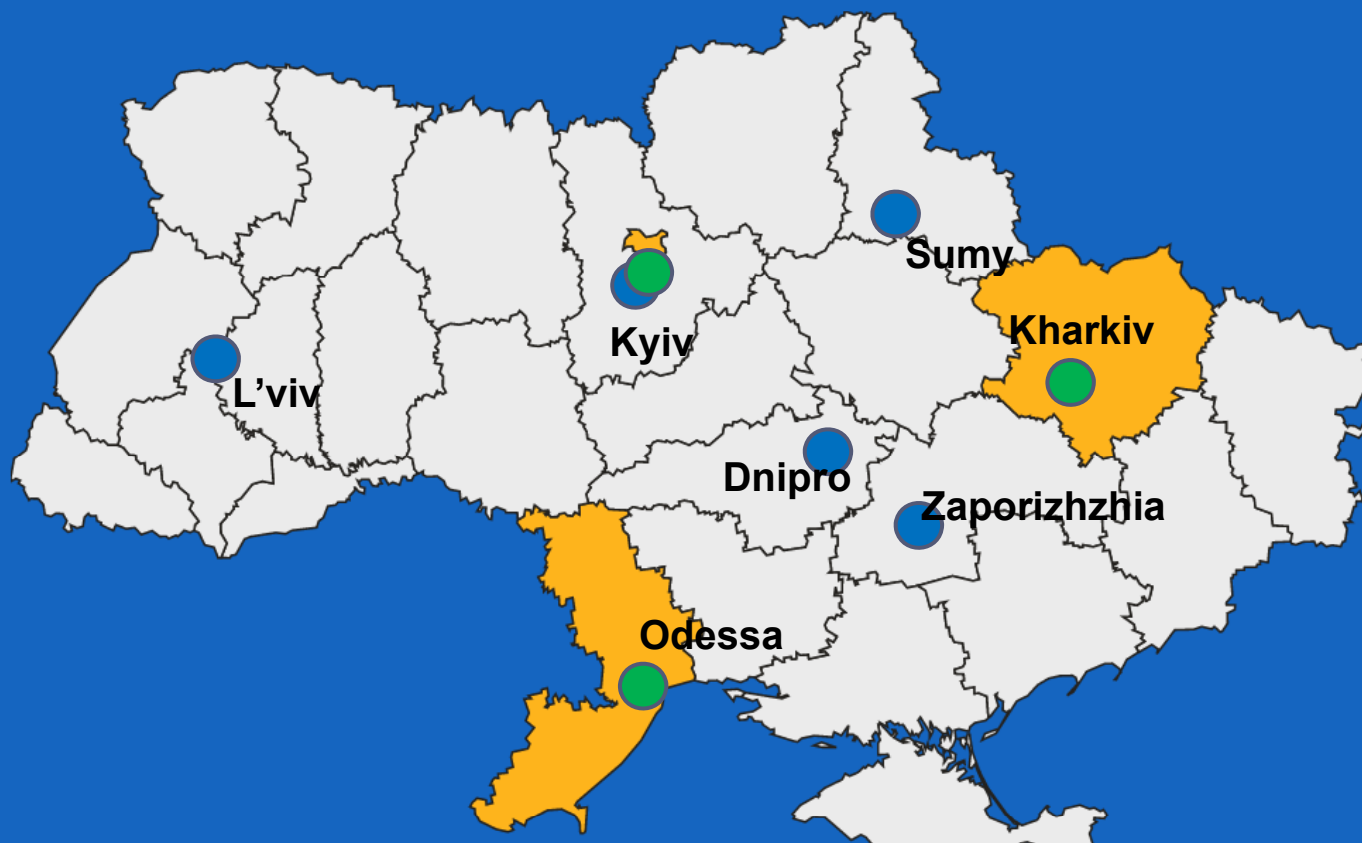
Виконавець:  
**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

 Завдання проекту aCampus

 Команда проекту aCampus

 Графік активностей проекту

# The network of Center 4.0 through Ukraine



## Про регіональні центри

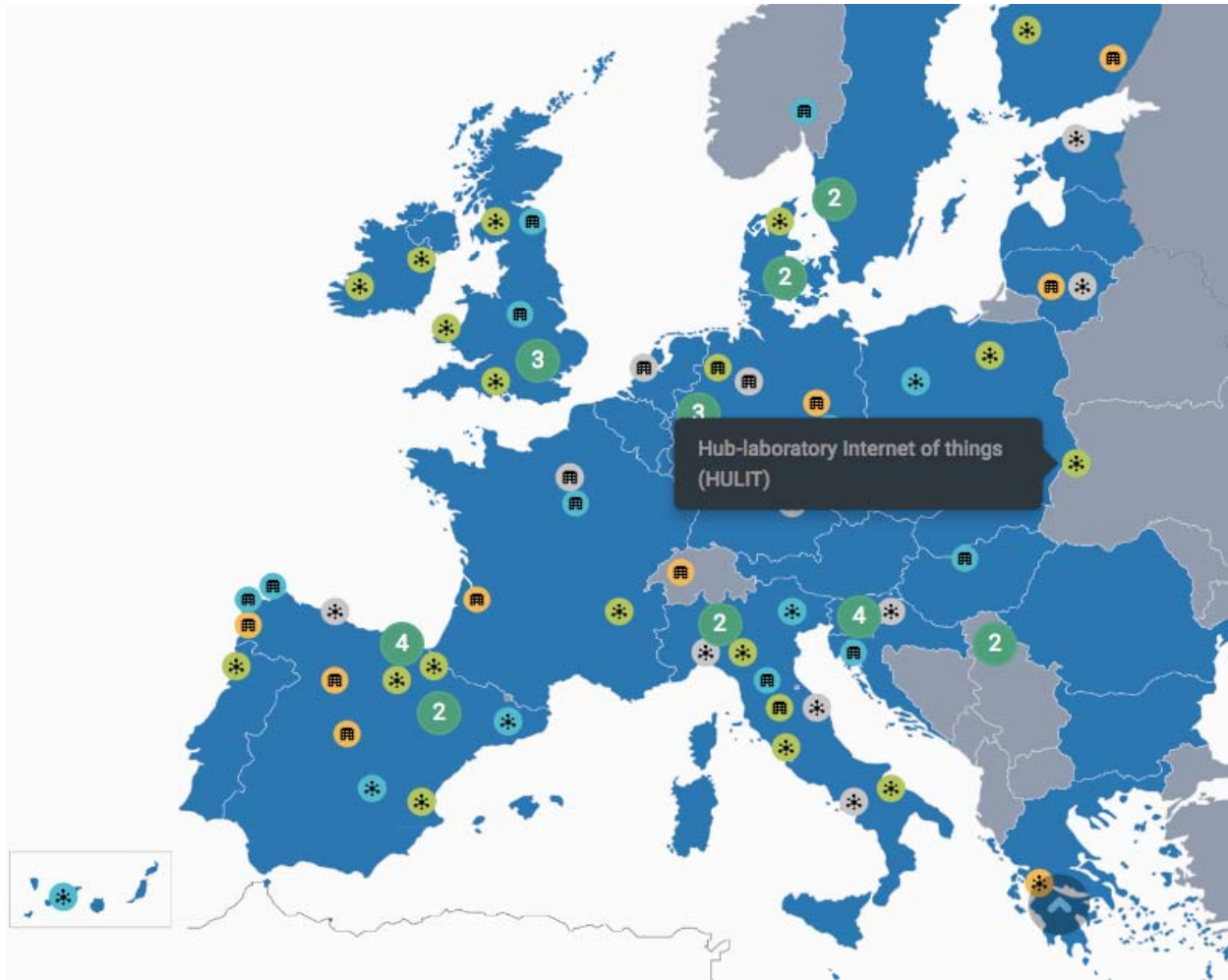
Створення регіональних осередків руху 4.0 на базі вибраних ВНЗ має на меті подолати низьку культуру та знання ринку про технології 4.0, низьку довіру ринку до ВНЗ як осередків знань, підготовки кадрів та надання сервісів з навчання та R&D. В перспективі ці осередки можуть ставати основою для створення відповідних кластерних структур чи технологічних парків.

[ДЕТАЛЬНІШЕ](#)





# I4MS: Digital Innovation Hubs



## Roles and functions

- Digital expertise
- Testbeds and Labs
- Access to best expertise and solutions base
- Support in commercialization
- Development of innovative ecosystem
- Technologies brokerage
- Access to funds
- Accumulation of market expertise
- Training and education
- Incubation & mentoring

# EAM clusters

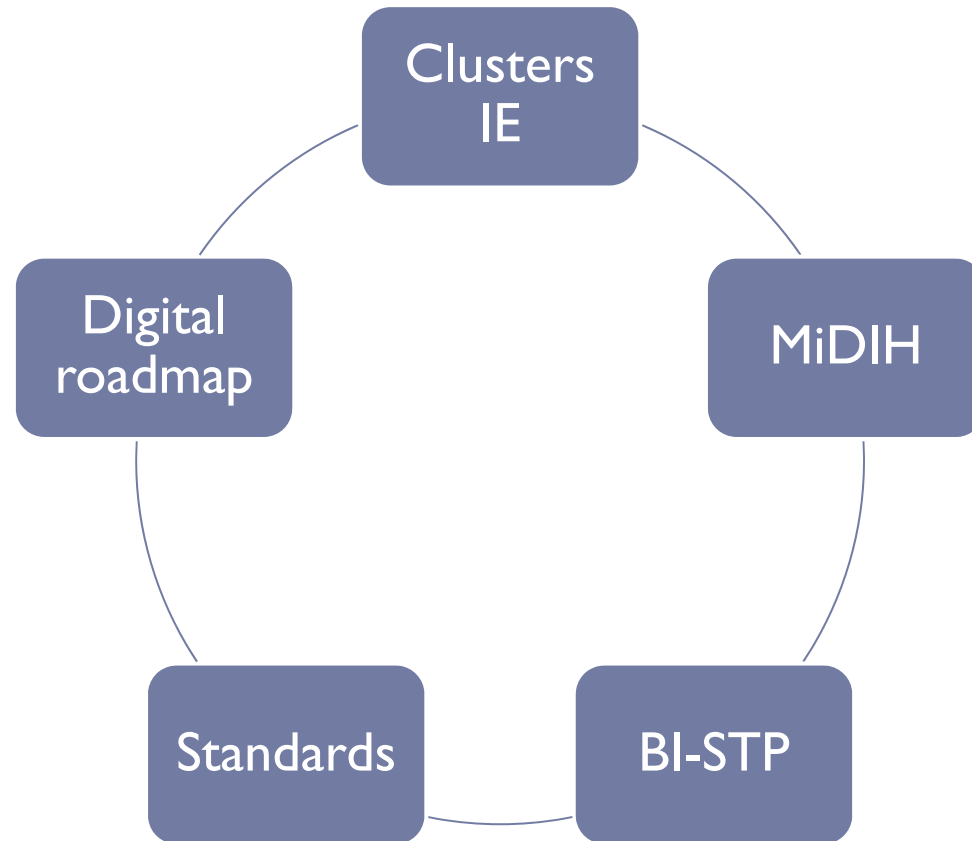
## Engineering, Automation, Machinery

Smart Product	Smart Organization	Smart Export
<ul style="list-style-type: none"><li>• Technologies 4.0</li><li>• Service models</li><li>• High level of integration (inside &amp; outside)</li></ul>	<ul style="list-style-type: none"><li>• Collective vs individual possibilities</li><li>• Focus on capabilities development</li><li>• Common 'fight for talents'</li></ul>	<ul style="list-style-type: none"><li>• Global values chain</li><li>• EU integration</li><li>• Better use of local service providers (as EPO, APPAU etc)</li></ul>
<b>Weak competitiveness</b>	<b>Broken value chains</b>	<b>Difficulties of international trade</b>



# All directions for twinning

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For each mentioned initiative we need  
EU partner and we're ready to cooperate

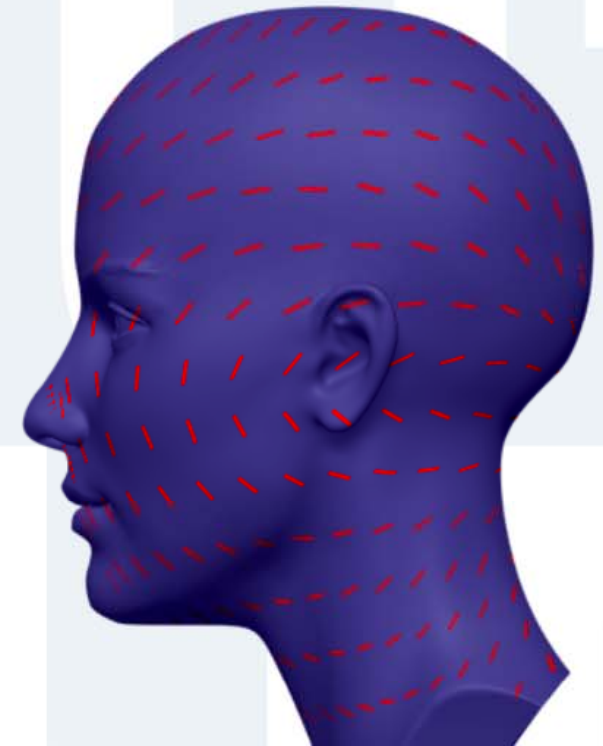
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## TRANS4MATION

Trans4mation is a forum for business owners, CEOs and department managers.

Our goal is to show how Industry 4.0 technologies have a positive effect on businesses. We will show you real cases of digital transformation in Ukraine and in the world.



**22 of November, Kyiv, Ukraine**

