



**LINPRA**

# THE **DIGITALISATION** CHALLENGES IN LITHUANIAN ENGINEERING INDUSTRY

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November 30, 2018

Latvia



# WHAT IS LINPRA?



## **THE ENGINEERING INDUSTRIES ASSOCIATION OF LITHUANIA (LINPRA)**

is an independent self-regulatory organization.



## **LINPRA REPRESENTS THE INTERESTS OF LITHUANIAN ENGINEERING INDUSTRIES ON NATIONAL AND INTERNATIONAL LEVELS**

It aims to increase Lithuania's international competitiveness and step up economic and social development.

# LITHUANIAN EXPORT IS DOMINATED BY MANUFACTURING SECTOR

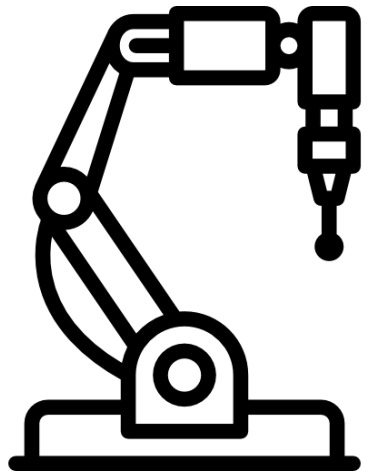
Structure of Lithuanian export, 2017, %



Export of goods: percentage of GDP, 2017, %



# LITHUANIAN BUSINESS ENVIRONMENT



# #2

world's most  
attractive destination  
for manufacturers in  
2018

“Lithuania is rated No.1 in Europe and No.2 in the world (after China) on the attractiveness for global manufacturing according to Manufacturing Risk Index (2018)“

	2012	2018
Doing Business Ranking	26 14	↗
Global Competitiveness Index	45 41	↗
Report Economic Freedom Index	21 16	↗

# LITHUANIAN ENGINEERING SECTOR

3,8 bln. €\*  


+18 % vs 2016

> 46 000\*\*  


## ENGINEERING INDUSTRY IN NUMBERS

> 1 500\*\*  


> 75 % / 2,9 mlrd. €\*  


+24 % vs 2016

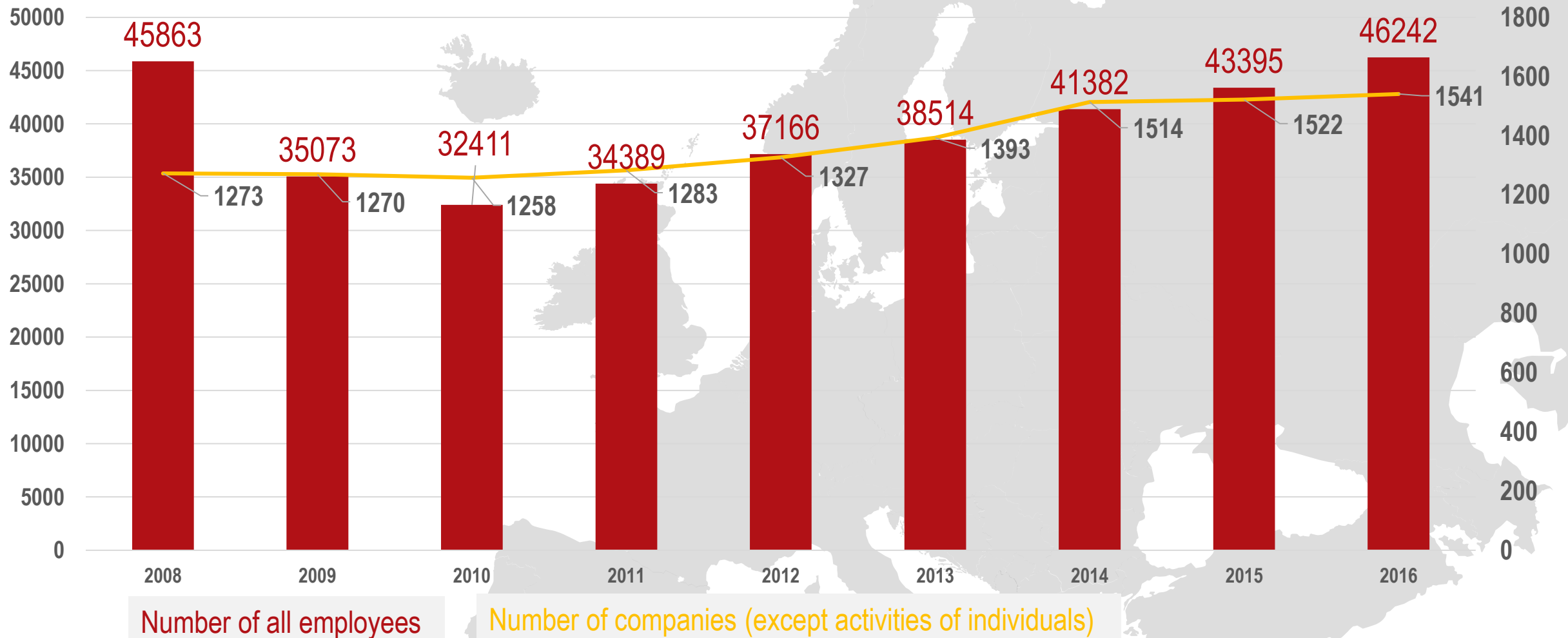
Source:

\*Statistics department, 2017

\*\*Statistics department, 2016



# LITHUANIAN ENGINEERING INDUSTRY – **PRODUCE 43% MORE** PRODUCTS THAN BEFORE ECONOMIC CRISIS WITH ALMOST THE SAME AMOUNT OF EMPLOYEES



\* Average number of employees in a company

Source: Statistics department, 2017

# CHALLENGES IN EUROPE

Adapt fast to the changes or risks losing its competitiveness in the global market

- European Commission report show that only around 6% of companies in basic metals & fabricated metal products excluding machines & equipment are highly digitised.
- Only 16% of SMEs in EU are highly digitized
- Lack of highly qualified engineers, technicians and machine operators, who are most demanded by industry







# AVERAGE LABOR PRODUCTIVITY IN LITHUANIA – ENGINEERING INDUSTRY

~35 000 EUR / FOR  
EACH WORKER

Source: Statistics department, 2017

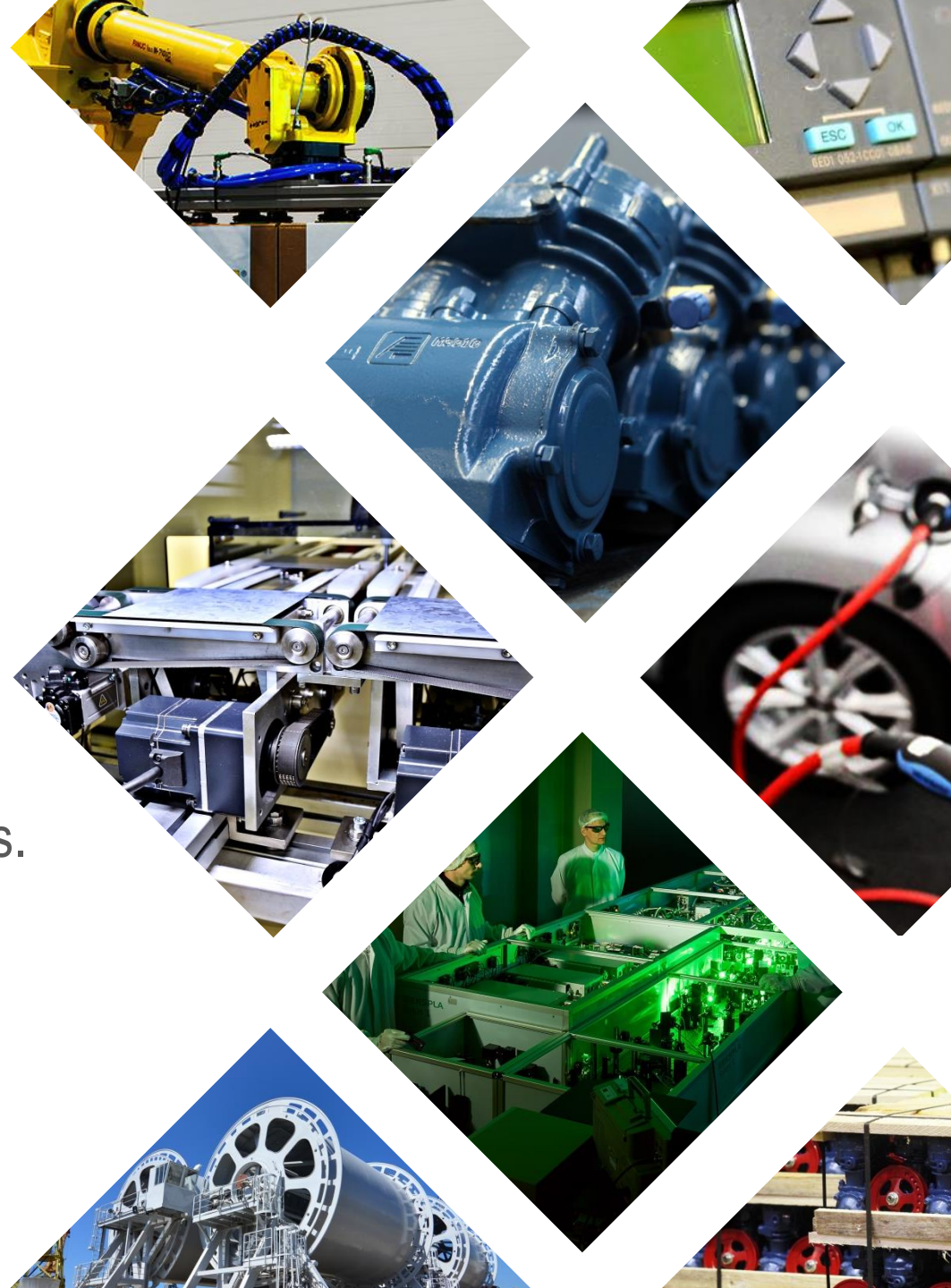




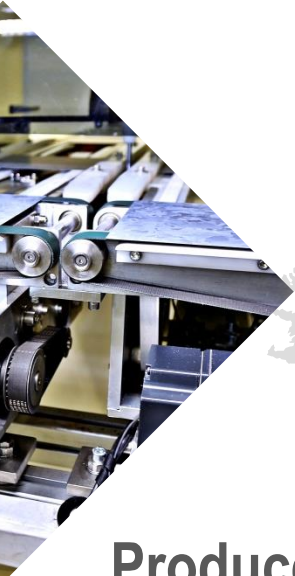
# CHALLENGES IN LITHUANIA

Major challenge for Lithuania is to lower dependence on contract manufacturing of low value-added products

- Turning current and future public R&D investments into applied research and to start create and develop more new end used products.
- Local industry is dominated by SMEs with low-level technology readiness.
- Small number of high value added end product producers.
- Lack of highly qualified engineers, technicians and machine operators, who are most demanded by industry
- Insufficiently balanced labour markets: current education does not meet industry needs.



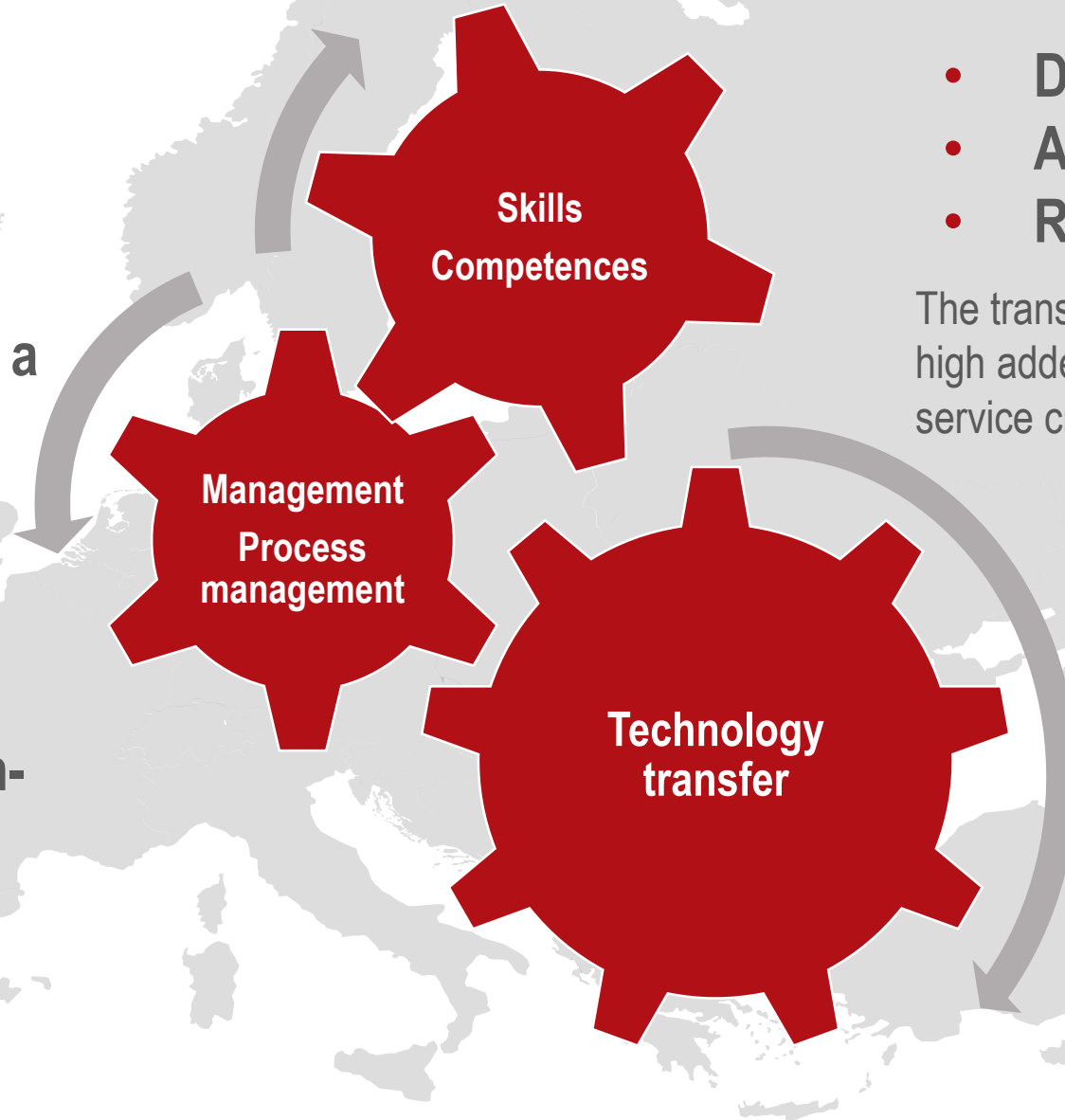
# HOW TO INCREASE PRODUCTIVITY / EFFICIENCY?



**Produce more products in a time unit**

**Provide more complex decisions**

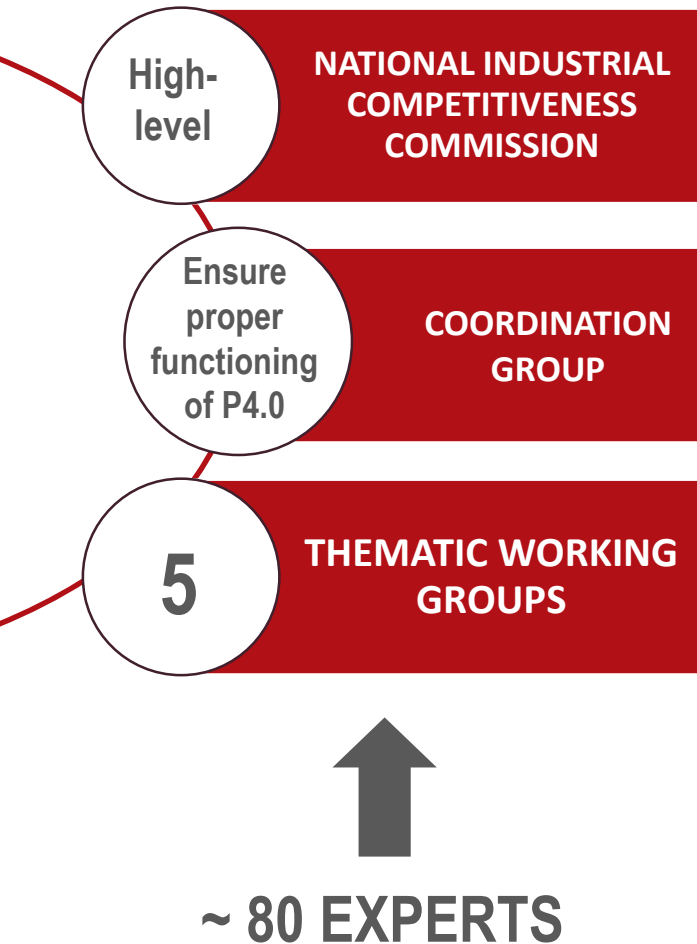
**Innovate and produce high-value added products**



- **DIGITALIZATION**
- **AUTOMATION**
- **ROBOTIZATION**

The transition from services providers to high added value product producers and service creators, creation of R&D centers

# INDUSTRY 4.0: NATIONAL INDUSTRY DIGITISATION PLATFORM 'PRAMONÉ 4.0'



National Platform 'Pramoné 4.0' is based on **bottom-up** approach

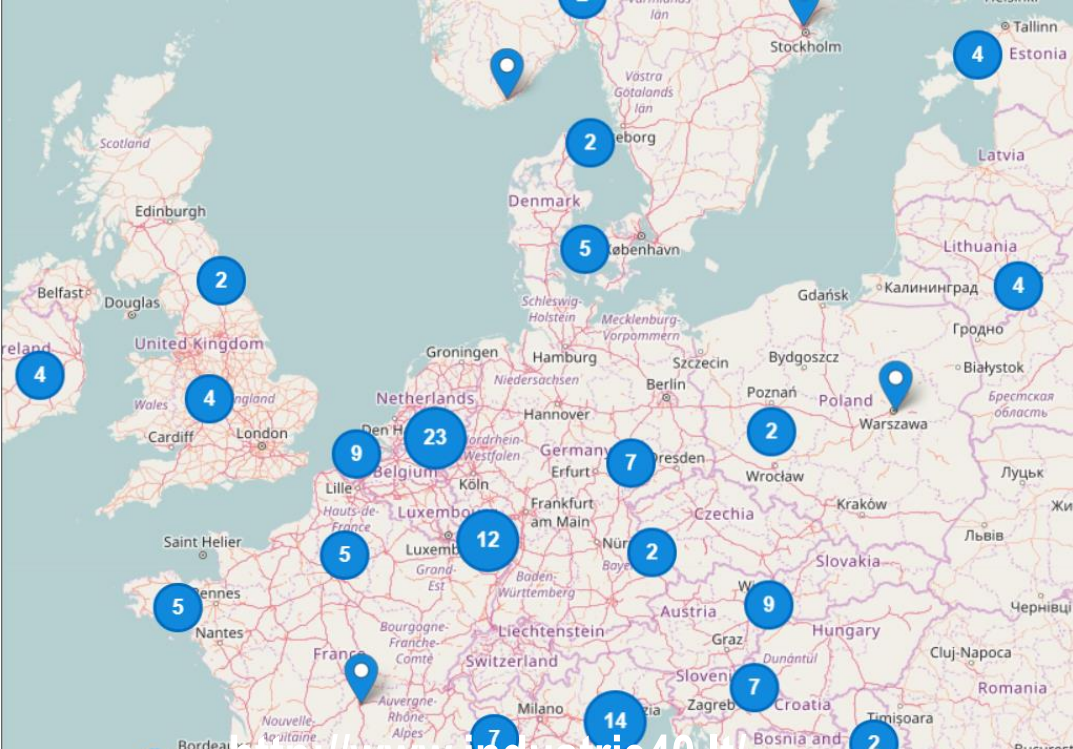


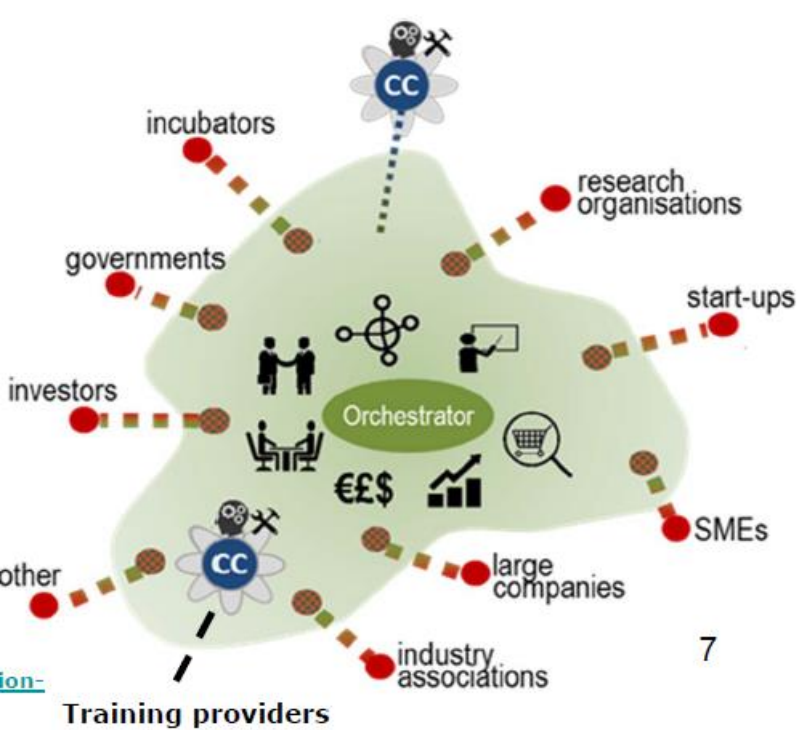
# INITIATIVES OF **DIGITAL INNOVATION HUBS** IN LITHUANIA AND EUROPE

## **ADVANCED MANUFACTURING DIGITAL INNOVATION HUB**

*Coordinated by LINPRA established competence centre „Intechcentras“*

- The activities of the hub are well aligned with the Lithuanian national initiative for digitising industry, Pramonė 4.0.
- This HUB is a participant in the international project Smart Factories in the New EU Member States, and also a member of the Lithuanian Industry 4.0 National Platform (<http://www.industrie40.lt/platform/>).
- We are also partners in several EU fund applications together with such partners as Fraunhofer institute and Civitta.





# ADVANCED MANUFACTURING DIGITAL INNOVATION HUB

The one-stop-shop center provides business enterprises with up-to-date information, expert assistance and access to technology for testing digital innovations. It also helps to carry out and conduct experiments with products, processes or business models.

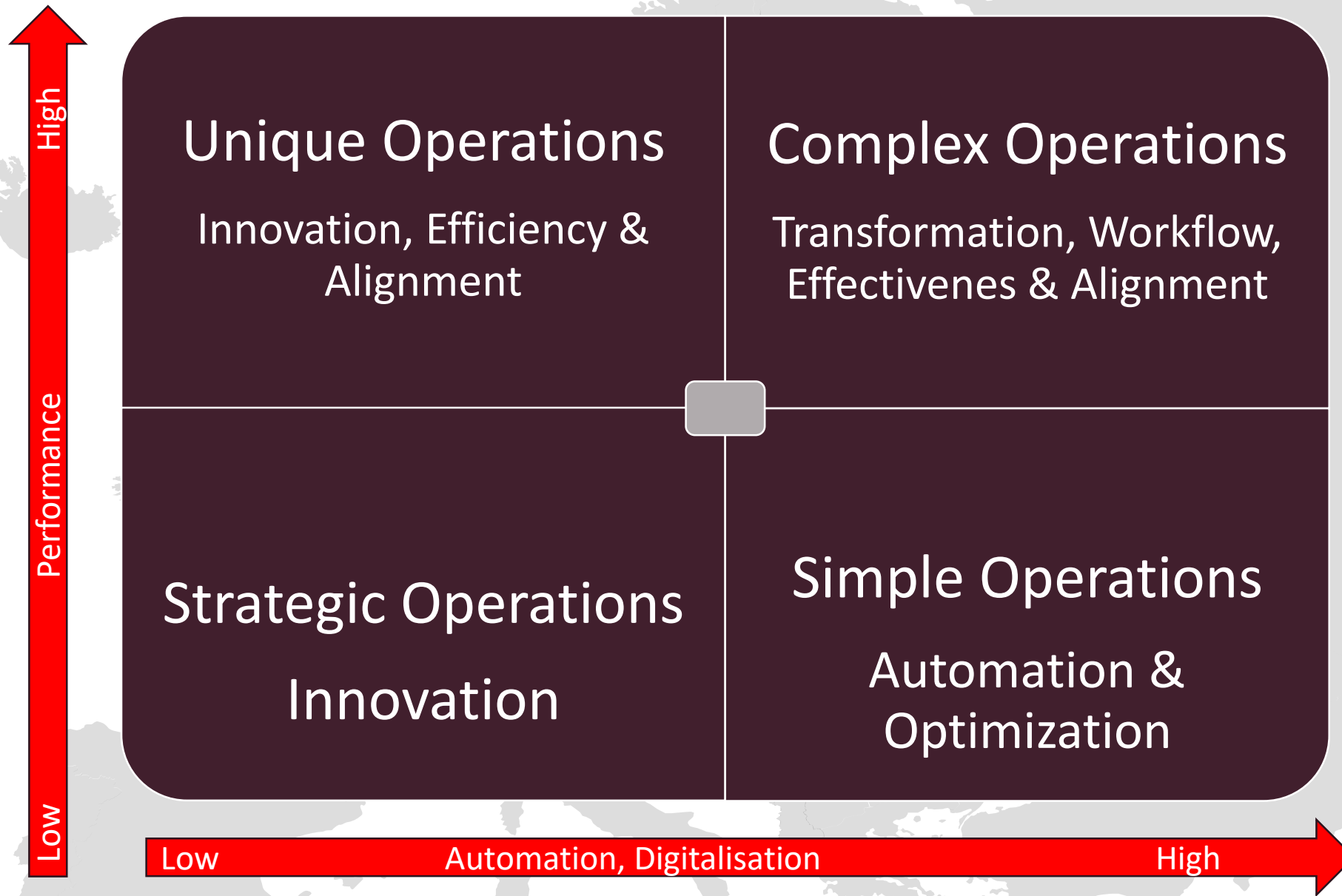
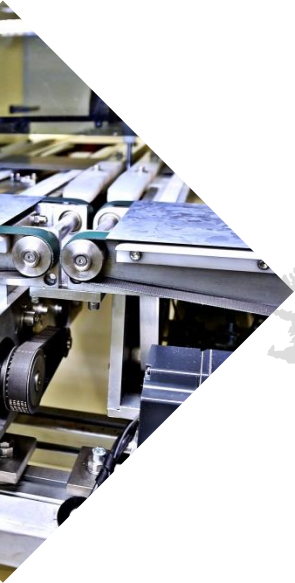
The Hub seeks significant changes in the field of digitizing industry in Lithuanian companies, thus increasing their competitiveness and added value.

**MISSION:** By integration of Lithuanian ecosystem participants, in usage of digital technologies, to increase the competitiveness of Lithuanian enterprises.



## SERVICES:

- Access to the centers of competences
- The heart of the innovation ecosystem
- Mediation services
- Aid for funding
- Education, training and consulting services
- **Audits and assesment** of digitalization level



European Commission report show us that only around 6% of companies in basic metals & fabricated metal products excluding machines & equipment are highly digitised. Only 16% of SMEs in EU are highly digitised





## Making Industry 4.0 real

The 4th international Industry 4.0 conference  
Kaunas, LITHUANIA | 20th March 2019



# THANK YOU !



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