



CITY INFORMATION

Tartu is the 2nd city on size in Estonia and the main economic hub in southern Estonia, representing a 15,4% of the Estonian GDP. It has 95.000 inhabitants and around 20.000 students, some studying in Tartu University – the oldest and most important, funded 1632 and a world reference in the field of semiotics and literary studies, some in the university of applied sciences and others in the vocational centre.

The city is strong in wood, food and metal industries and has competencies in ICT (ICT enterprises and high-tech companies such as Playtech, Pipedrive, Reach-U, Bercman, Powerup, Skeleton) and digitalization. There is a shift towards servitization.

Local Industry 4.0 ecosystems' challenges

In terms of digitalisation, only 20% of Estonia's companies are highly digitized. Digitalisation will help companies become more competitive and leaner.

- Shortage of graduates with practical skills and skilled staff
- Lack of people with skills in lean, industrial engineering, mechanics, operating machines, and ICT systems development, analysis, management, etc.
- Image problem of the manufacturing sector, there is a low number of young STEM students
- Close gap between manufacturing firms and local KIBS; and between startup ecosystem and industrial firms
- Match education with labor market
- Improve the vocational industry → keeping up with the speed of industry
- University prefers to work with big companies



Industry 4.0 policy focus and actions

- University students go back to vocational schools to learn practical training.
- education and training together but it is difficult, they need to work closely
- Lean manufacturing workshops → Tartu Business advisory center (gives out financial support and services for companies, with a focus on smart industry.)
- (skilled staff) Introduction to new automation and AI technologies
- County Development Centres is organizing **digitalisation support** for firms outside the two biggest cities in Estonia Tallinn and Tartu. → it developed a **tool** to see **level of digitalization** called **Diginno**
- From Tartu, SMEs can apply for a digitalization voucher scheme for local manufacturing companies → it can be hard to access to national subsidies
- University of Tartu's Institute of Computer Science → <u>Industrial master's program</u> <u>in IT</u> has activities <u>education leading</u> to the manufacturing industry.



- Events like **startup Day Festival** supporting the startup ecosystem, industry hackatons and supporting incubators.
- **SPARK DEMO** → business support structure for entrepreneurship, bring together manufacturing companies, employers,, exporters...
- Tartu takes part in the **Interreg BSR** <u>InnoCAPE</u> project addressing challenges of Industry 4.0
- Established <u>AIRE</u> (artificial intelligence and robotics innovation hub) → advises Estonian manufacturing to be more competitive, helps business get into AI and robotics