

DATA DRIVEN INNOVATION ECOSYSTEMS

CURI - WB RD&I Component

7/18/2024



1.WHY DATA ?

2. WHAT DATA ?

**3. EFFECTIVE PROFILING OF
DATA**

WHY DATA ???

- **EVIDENCE BASED PROFILING & PROMOTION** of Regional Innovation Assets
- **ENABLING BETTER DECISION MAKING** by investors, Regions, Innovation actors
- **DATA DRIVEN INNOVATION** – Opening datasets leads to new products and services
- **EFFICIENCY** – Ready made data for different users
- **WRITING BETTER REGIONAL PROJECTS**
- **MULTIPURPOSE** for multiple audiences: investors, media, companies, regional admin, startups, public



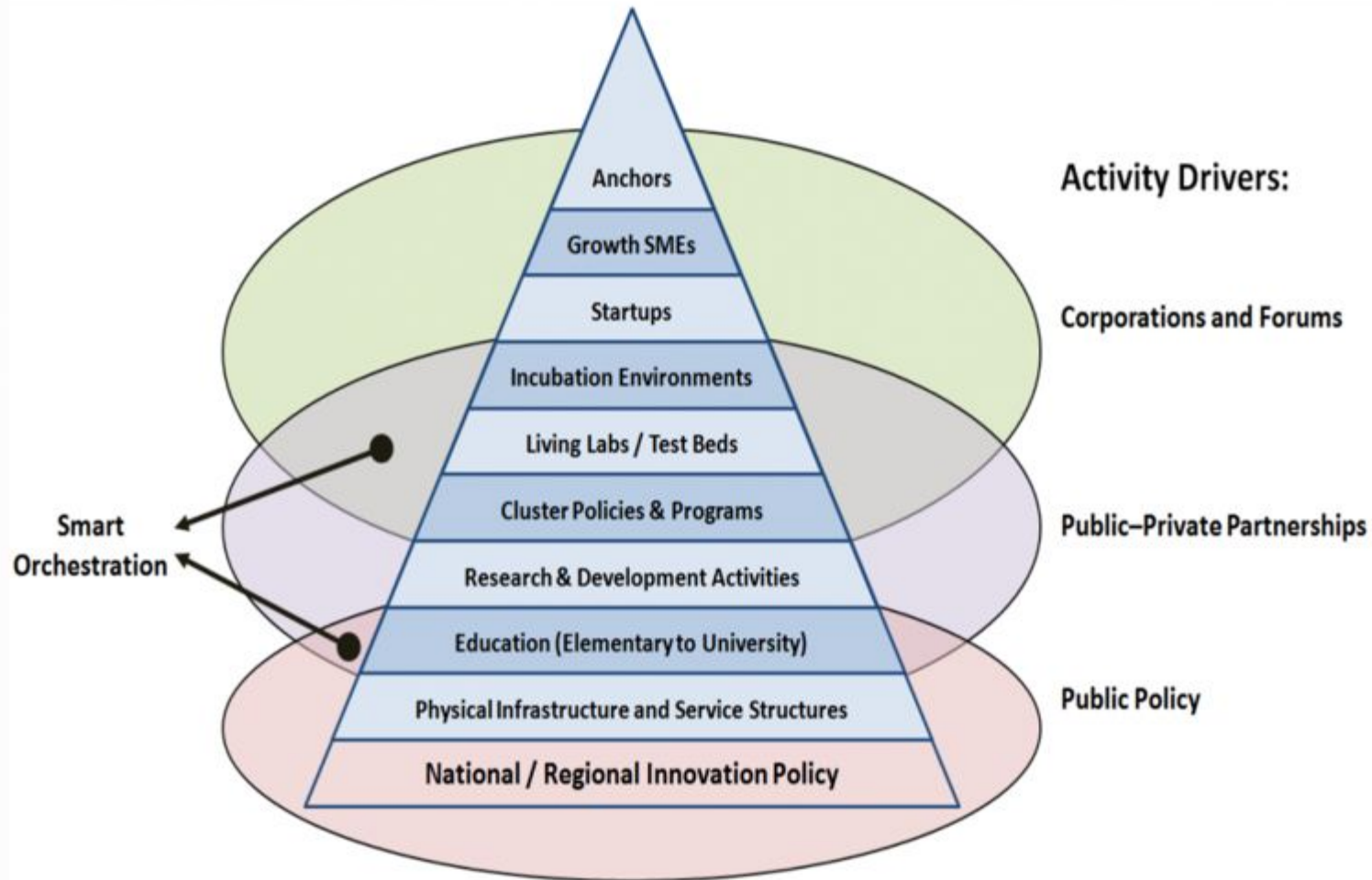


Figure 1. The innovation hub framework and its key regional innovation ecosystem elements

**BUILDING DATA
ECOSYSTEMS:
WHAT DATA?**

WHAT TO PROFILE ?

TRIPLE HELIX ACTORS & REGIONAL SPECIALISATION – UNIQUENESS FACTOR

- R&D Sector – Universities: STEM Research
- Industry – Key Companies with RD
- Regional government`s support for RD&I – concrete measures

SECTORAL DEEP DIVES – focused data on region`s top RDI driven economic sectors

MAPPING of RD&I FLAGSHIP PROJECTS

STARTUP PORTFOLIO

IMPACT: RDI SPENDING, INNOVATION PRODUCTS, COMPANIES or OUTPUTS HALL OF FAME

PLUG-IN DATA INTO INNOVATION VALUE CHAIN



EXAMPLES

HOW OTHERS DO IT:

**CANADA: HALTECH REGIONAL
INNOVATION CENTER**

Haltech by the Numbers

M.E.V.I.C.

TechPlace

866

Total Advisor Hours

97

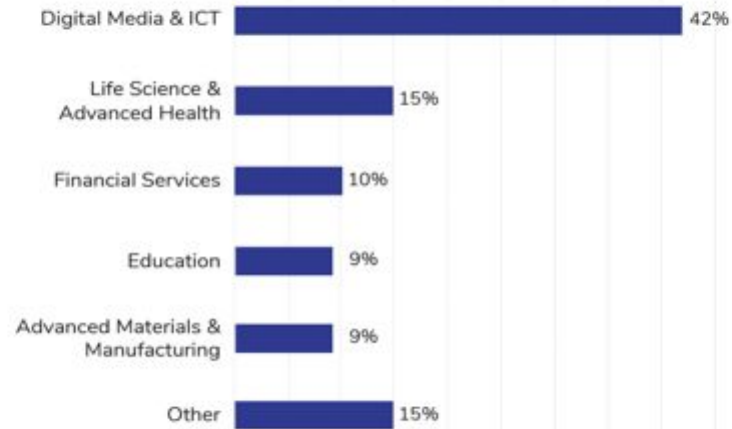
Total Events Hosted

1,511

Total Event Attendees



By Sector



By Location

| | |
|--------------|-----|
| Oakville | 26% |
| Burlington | 19% |
| Toronto | 12% |
| Milton | 9% |
| Hamilton | 7% |
| Missisaga | 7% |
| Halton Hills | 1% |
| Other | 13% |

By Stage



43%
Women Founders



22%
Youth Founders

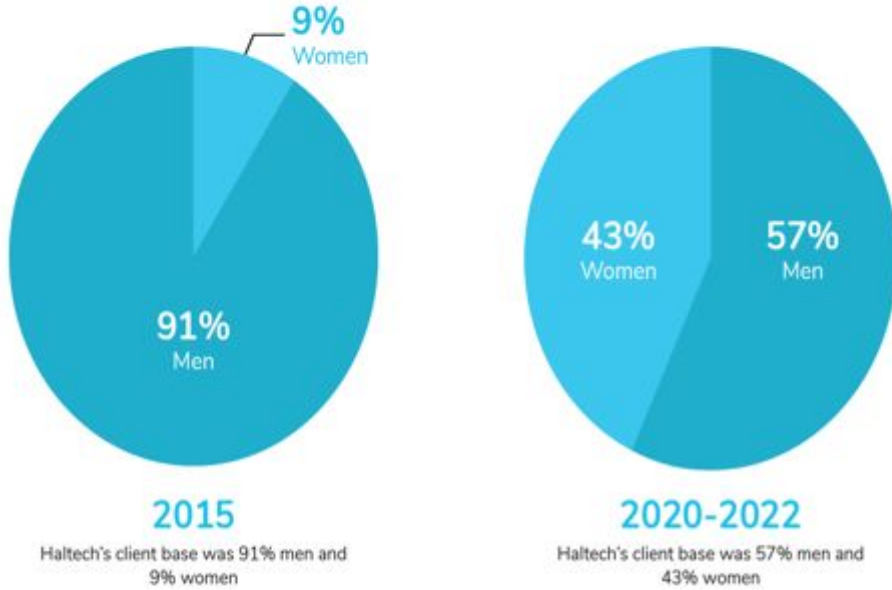


10%
Social Innovation

"I would like to thank you for supporting AI Materia throughout the year. I am very grateful for all the opportunities you provided us to connect, learn and grow, to access mentorship from experienced mentors, and for inviting us to professional events, Advanced Design and Manufacturing Expo, Equation angels, and the Hi5 Pitch competition. At AI Materia, we very much appreciate your support and look forward to our continued collaborations with Haltech."

- MARYAM EMAMI, FOUNDER AND CEO OF AI MATERIA

Women Entrepreneurs at Haltech



The Impact of Beyond Boundaries

Beyond Boundaries Metrics



**CANADA:
HALTECH
REGIONAL
INNOVATION
CENTER**

Our Programs for Women Founders



Beyond Boundaries

Haltech's accelerator program for woman identifying entrepreneurs to help them grow, scale-up and reach global markets.



Roadmap To MVP

A combination of content sessions and mentoring that help women starting tech companies deepen their technology skills and launch their Minimum Viable Product.

Women Founders Impact 2019-2022

2019



2022



Client Profile

Lee St James | Social Robots

Tell us a bit about you

To start off the interview we wanted Lee to tell us a bit about herself and the mission behind Social Robots. The Founder and President of Social Robots shared: "The company was founded in the fall of 2019. We offer robot helpers to engage and entertain older adults and staff in retirement homes and long-term care facilities. The mission of Social Robots is to help reduce social isolation, loneliness and boredom for older adults."

What services and mentorship have helped you most?

To bounce off the last question we continued by asking her about the services she's taken advantage of: "I have participated in so many activities at Haltech. Both formal educational activities, and networking activities, and especially at the start of COVID, it was incredibly valuable how quickly they switched to doing virtual networking and activities. She continued by saying: "that was a huge benefit to me because I was literally just at a point of gaining momentum and starting a pilot study. If I hadn't been part of Haltech at that point, I'm sure I would have dropped the whole thing."



So it was so valuable to be part of this community and to really feel connected to that group. And now I get the weekly emails and I sort of see what might be relevant to me and I sign up for webinars."

What would you tell other entrepreneurs who are thinking of joining Haltech?

Lee shared that entrepreneurs thinking of joining should "go with an open mind and really be engaged and part of the community. Listening is so important and really understanding. I remember I got a piece of advice early on that this was going to take at least three years and I had to be patient and careful and I was like 'Three years! I can't afford that.' And I'm so glad I have it because it's been really important."



Lee St James
Founder | Social Robots

Quick Facts

| | |
|----------------|--------------|
| Founder | Lee St James |
| Founded | 2019 |
| Joined Haltech | 2020 |

Services Used

- Advisory Services
- Hi5 Pitch Competition
- Education Services
- Networking Opportunities
- Beyond Boundaries

New & Notable Clients



Nova is a professional workspace for collaboration. We help teams who work on complex multi-stakeholder projects collaborate effectively. Our online workspace is a productivity platform that helps teams collaborate without the chaos. We break down complex projects into digestible milestones and steps - to improve clarity, hit project deadlines, and boost collaboration in one place.

Validation



Digital Media & ICT Sector



Take the guesswork out of plants - EarthOne Plant Monitors guarantee an improvement in yield, foliage and flowering. EarthOne provides science based plant care to enthusiasts that want to take their plant game to the next level.

Validation



Green Tech



BACKEDBYBEES

Mead | Honey | Aparies | Farm Markets

Natural craft mead, raw unpasteurized honey and whole local foods are our specialty. We brew sustainable alcohol by fermenting honey, we keep bees, we grow and curate real food for your table from your community of local makers. Come explore new tastes and find where you belong around Nature's table.

Scale



Agriculture



CLEAR FILTERS

Status

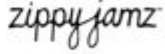
- Acquired
- Fundraising
- In Market
- Intellectual Property


Company Sectors


- Advanced Manufacturing
- Agriculture
- Clean Technologies
- Digital Media & ICT
- Education
- Financial Services
- Food & Beverage
- Life Sciences
- Tourism & Culture
- Transportation & Mobility


Company Tags


- Autonomous Vehicles/Smart City
- Cleantech



 ZippyJamz



 FluidAI Medical



 Oligomaster


 DOUBL

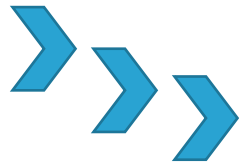

 MesoMat Inc.


 Korechi Innovations Inc.


 StrongBó


 KA Imaging

[← Back to portfolio](#)



About us

The next generation of sustainable plastic and coating solutions aren't just inspired by nature. They actively incorporate different systems and processes, unlocking possibilities that were unthinkable just a few years ago. Oligomaster is the intersection between advanced disruptive lab technology and industry experience that we use as our operating system to streamline, grow, and develop innovations within the plastics and coatings industries.

Our story began in 2019 incorporating a company with an idea to change the polymer industry in the way it develops new products and technologies. After graduating The Forge in 2020, the forward momentum of our dedication to disrupting the market was in full-scale. Today, Oligomaster has pivotal technologies in the company's four main pillars: Agri-food Nexus: Bioplastics and Advanced Materials, Sustainable Plastic Recycling, Next Generation Antimicrobials, and A.I. guided solutions for renewable plastic products.

Program engagement



Oligomaster

www.oligomaster.com [in](#)

Leadership

[Kushal Panchal](#)
President and Co-Founder

Status

- \$ Fundraising
- M In Market

Sector

Advanced Manufacturing

Subsector

Cleantech, Drug/Therapeutic, Manufacturing

**CANADA:
INNOVATION
FACTORY -
ONTARIO**

**NICE EXAMPLE
OF FILTERING
FUNCTION OF
USE CASES,
CLIENTS**

The 5 strengths of Pays de la Loire

Locating to Pays de la Loire offers unique advantages for business growth in the marine renewables sector. Take a look at these five key strengths which underpin this competitive industry.



FRANCE:
REGIONAL
INNOVATION
CENTER OF

REGION DE LA
LOIRE

A region at the forefront

Pays de la Loire enjoys a leadership position in France's marine renewables sector. Behind this success are the workforce, the expertise, the political will and the concentration of industrial infrastructure.

Many businesses across the region already possess the skills and experience for the growth of offshore wind projects.

Three growth stages of a nascent sector

- By 2014, regional manufacturers developed, built and installed turbines and substations for the international market.
- In 2018, France's first floating wind turbine was constructed at the port of Saint-Nazaire. For 4 years, the demonstrator has been generating electricity at the Centrale Nantes offshore test site.
- Since 2019, regional businesses have been working to build and install France's first offshore wind farm, located off Saint-Nazaire. Its 80 turbines and the substation were made locally by General Electric and Atlantique Offshore Energy.

Pays de la Loire, where France's offshore wind began, is home to 1/3 of all the country's marine renewable jobs.

SEARCH BY TECHNOLOGIE(S)

- Fixed wind energy
- Floating wind energy
- Tidal energy
- Wave energy
- Other

SEARCH BY CATEGORY

Get results

SEARCH WHOLE DIRECTORY

Keywords, company name, etc.

Reset filters

116 RESULTS



AAA

44550 MONTOIR DE BRETAGNE

See the company profile



ABMI GRAND OUEST-AGENCE DE NANTES

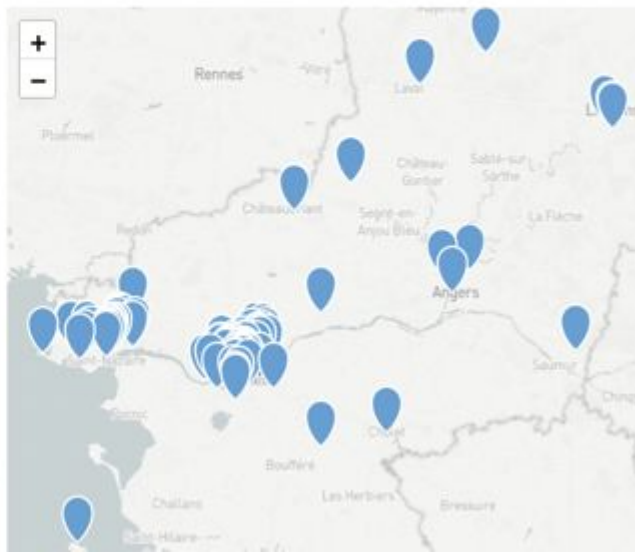
44800 SAINT-HERBLAIN

Design

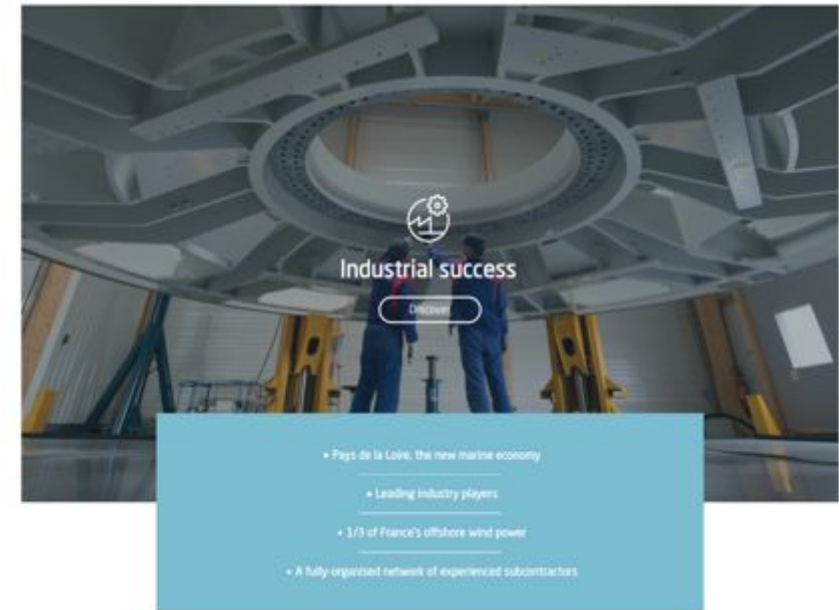
See the company profile



ADF COTE OUEST



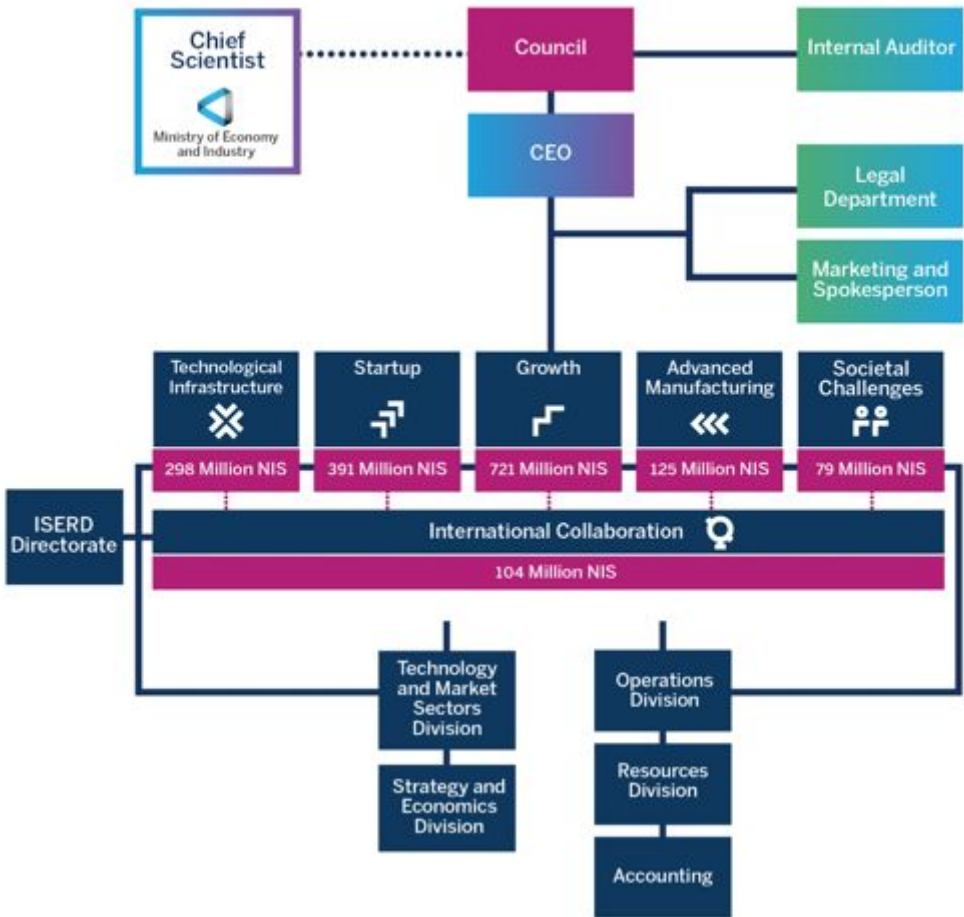
INFO BY REGIONAL INDUSTRY SPECIALISATION



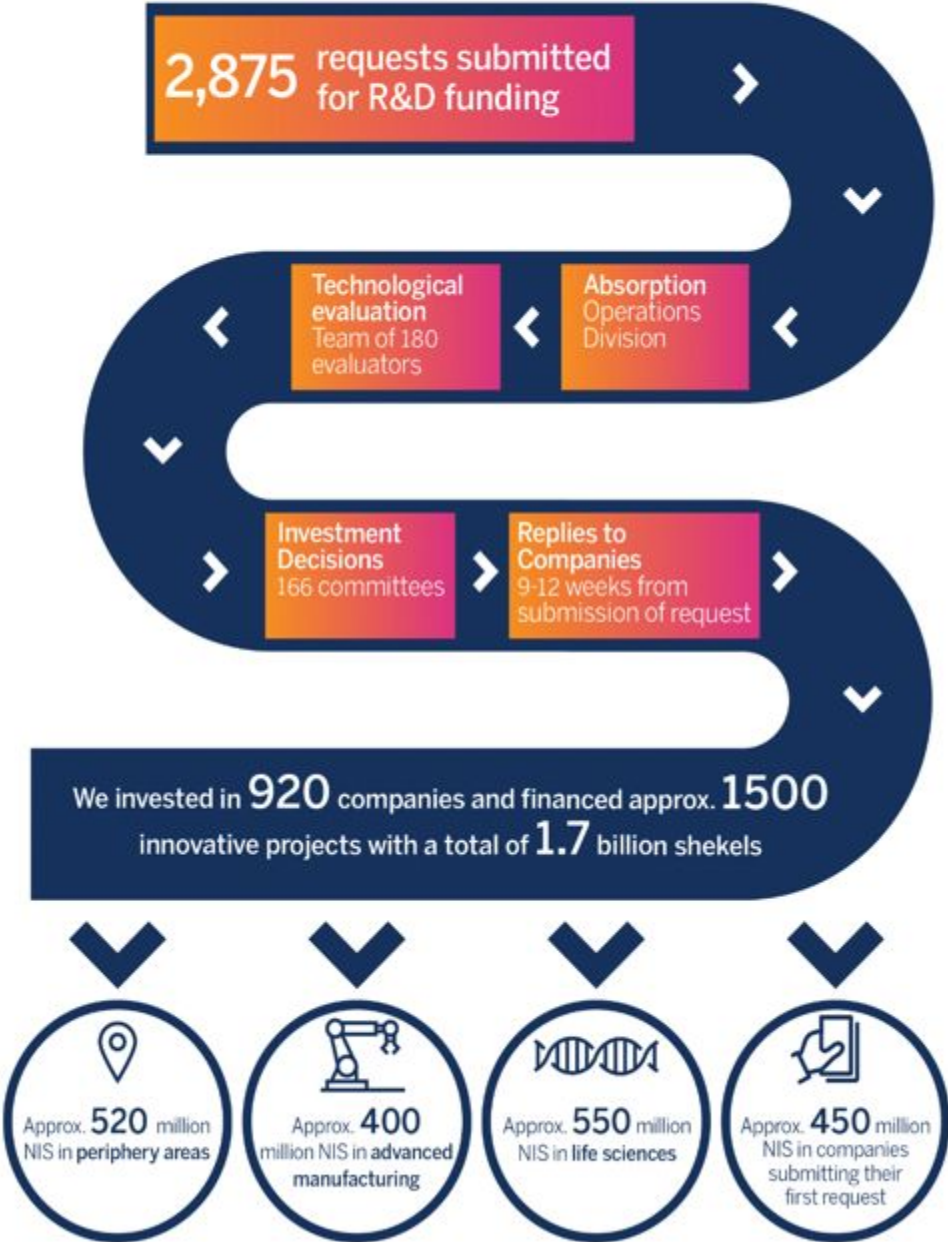
<https://www.mre-paysdelaloire.com/strengths/>

ISRAEL: USER JOURNEY BASED

Structure of Innovation Authority and Innovation Divisions Budgets in 2018



INTERNATIONAL PARTNERSHIPS FOCUSED (VIDEO)

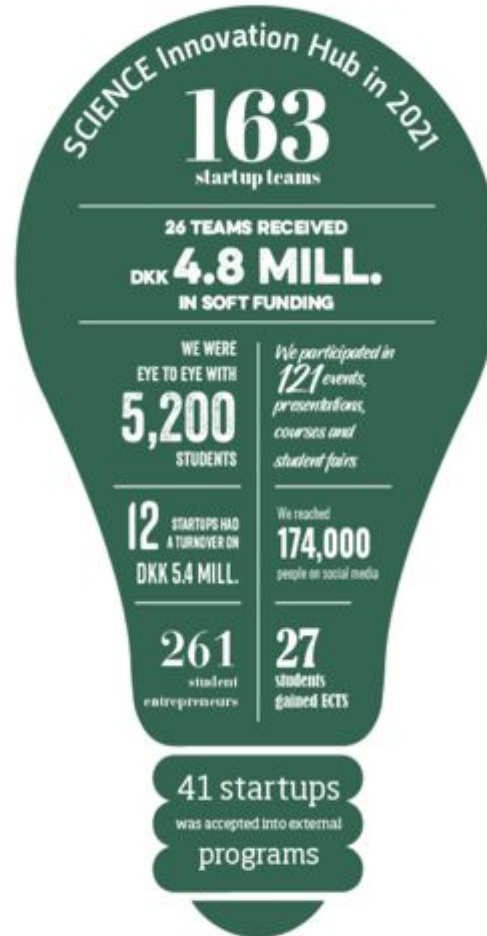




SCIENCE Innovation Hub

SCIENCE Innovation Hub in numbers

See SCIENCE Innovation Hub's great results and progress in the period 2017-2022 illustrated through our signature light bulbs.



DENMARK: ...IMPACT OVER TIME








UNI OF COPENHAGEN SCIENCE INNO HUB

... REPORTING ON ANNUAL RESULTS


IRELAND: INNOVATION SPACE IN A SMALLER REGION

<https://www.merits.ie/> Promo teaser – RIC Walkthrough


Discover your technology track

| | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  Food and AgTech Future-proofing our Food and Agriculture system to make it healthier, sustainable and transparent |  Sustainable Tech Building a foundation to make industrial processes efficient and sustainable while promoting the use of new materials and resources to gear towards a circular system |  Digital Tech Accelerating Ireland's digital transformation to create next-gen digital innovations and ventures |  Equine Tech Promoting solutions to address the issues in the Equine Industry and to support Animal Welfare, Equine Health and transparency in the industry |
|  FinTech Improving and automating the delivery and use of financial services |  Gaming Tech Designing tools and technologies to enable an immersive virtual experience for gamers |  Health and Wellness Tech Bringing forward innovative healthcare solutions to strengthen our systems and address real-world problems |  Property Tech Enabling the application of IT and economics to real-estate markets |









MERITS has been created to support you on your StandUp, StartUp or ScaleUp Journey.



Come in have a look and see what we do (press play on the video above)



Membership Benefits

| | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
|  Access to our curated database, workshops and agile processes |  Schedule one-on-one mentor meetings |  Explore, collaborate and create beyond organisational boundaries |  Direct introduction to potential clients, partners and investors |
|  Opportunity to participate in our tailored Incubation and Acceleration Programmes |  Connect with our National and Global partners |  Attend our events and hackathons |  Avail of discounts and credits from key partners |

[FIND OUT MORE](#)

LOWER AUSTRIA REGION

House of Digitalization – High Linkage to Reg. Economic Growth & Business prospects

economic data Lower Austria



RD&I INDICATORS

Regional Innovation Scoreboard 2021

Východné Slovensko (SK04)

| | Data | Normalised score | Relative to | |
|---------------------------------------------|------|------------------|-------------|------|
| | | | SK | EU |
| Tertiary education | 37.1 | 0.519 | 91 | 90 |
| Lifelong learning | 3.1 | 0.115 | 86 | 29 |
| International scientific co-publications | 820 | 0.464 | 100 | 83 |
| Most-cited scientific publications | 5.3 | 0.259 | 124 | 48 |
| Above average digital skills | 27.3 | 0.444 | 102 | 84 |
| R&D expenditures public sector | 0.24 | 0.152 | 61 | 31 |
| R&D expenditures business sector | 0.23 | 0.083 | 51 | 16 |
| Non-R&D innovation expenditures | ± | 0.445 | ± | ± |
| Innovation expenditures per person employed | ± | 0.341 | ± | ± |
| Employed ICT specialists | 3.4 | 0.429 | 91 | 86 |
| Product innovators | ± | 0.223 | ± | ± |
| Business process innovators | ± | 0.211 | ± | ± |
| Innovative SMEs collaborating | ± | 0.282 | ± | ± |
| Public-private co-publications | 70.0 | 0.297 | 91 | 60 |
| PCT patent applications | 0.55 | 0.249 | 99 | 40 |
| Trademark applications | 2.71 | 0.198 | 76 | 43 |
| Design applications | 0.70 | 0.240 | 72 | 42 |
| Employment knowledge-intensive activities | 13.7 | 0.505 | 68 | 85 |
| Employment innovative enterprises | ± | 0.298 | ± | ± |
| Sales of innovative products | ± | 0.617 | ± | ± |
| Air emissions by fine particulates | 19.1 | 0.231 | 84 | 47 |
| Average score | -- | 0.314 | -- | -- |
| Country EIS-RIS correction factor | -- | 0.933 | -- | -- |
| Regional Innovation Index 2021 | -- | 0.293 | -- | -- |
| RII 2021 (same year) | -- | -- | 89.3 | 54.6 |
| RII 2021 (cf. to EU 2014) | -- | -- | -- | 62.7 |
| Regional Innovation Index 2014 | -- | 0.273 | -- | -- |
| RII 2014 (same year) | -- | -- | 90.6 | 58.4 |
| RII - change between 2014 and 2021 | -- | 4.3 | -- | -- |

± Relative-to-EU scores are not shown as these would allow recalculating confidential regional CIS data.

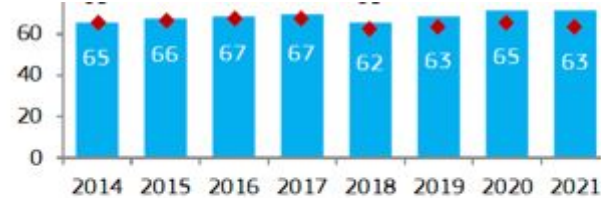
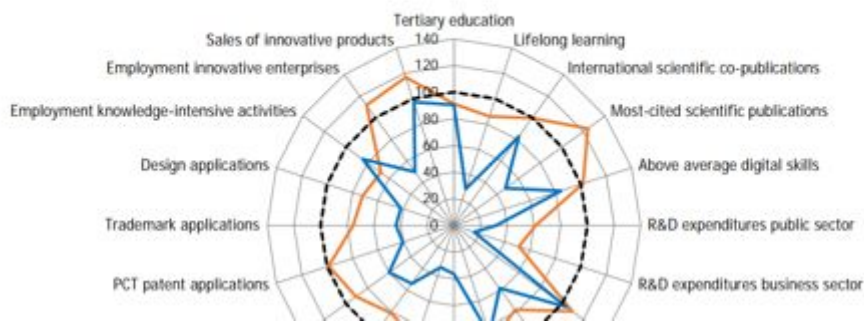
Východné Slovensko (SK04) is an Emerging Innovator +. Innovation performance has increased over time (4.3%).

The table on the left shows the normalised scores per indicator and relative results compared to Slovakia and the EU. The table also shows the Regional Innovation Index (RII) in 2021 compared to that of Slovakia and the EU in 2021, the RII in 2021 compared to that of the EU in 2014, and performance change over time between 2014 and 2021.

The radar graph shows relative strengths compared to Slovakia (orange line) and the EU (blue line), showing relative strengths (e.g. Non-R&D innovation expenditures) and weaknesses (e.g. R&D expenditures business sector).

The table below shows data highlighting possible structural differences, e.g. Employment in Utilities & Construction (above average) and GDP per capita (below average).

| | SK04 | SK | EU |
|---------------------------------------------------|--------|--------|---------|
| Share of employment in: | | | |
| Agriculture & Mining (A-B) | 2.7 | 2.9 | 4.6 |
| Manufacturing (C) | 21.5 | 24.7 | 16.4 |
| Utilities & Construction (D-F) | 12.9 | 11.3 | 8.2 |
| Services (G-N) | 53.1 | 52.3 | 62.9 |
| Public administration (O-U) | 9.8 | 8.7 | 7.1 |
| Average number of employed persons per enterprise | 2.9 | 3.4 | 5.2 |
| GDP per capita (PPS) | 15,400 | 21,900 | 31,200 |
| GDP per capita growth (PPS) | 0.49 | 0.46 | 3.21 |
| Population density | 104 | 112 | 109 |
| Urbanisation | 58.3 | 62.3 | 75.3 |
| Population size (000s) | 1,630 | 5,460 | 446,450 |



■ Relative to EU in base year • Relative to EU in same year

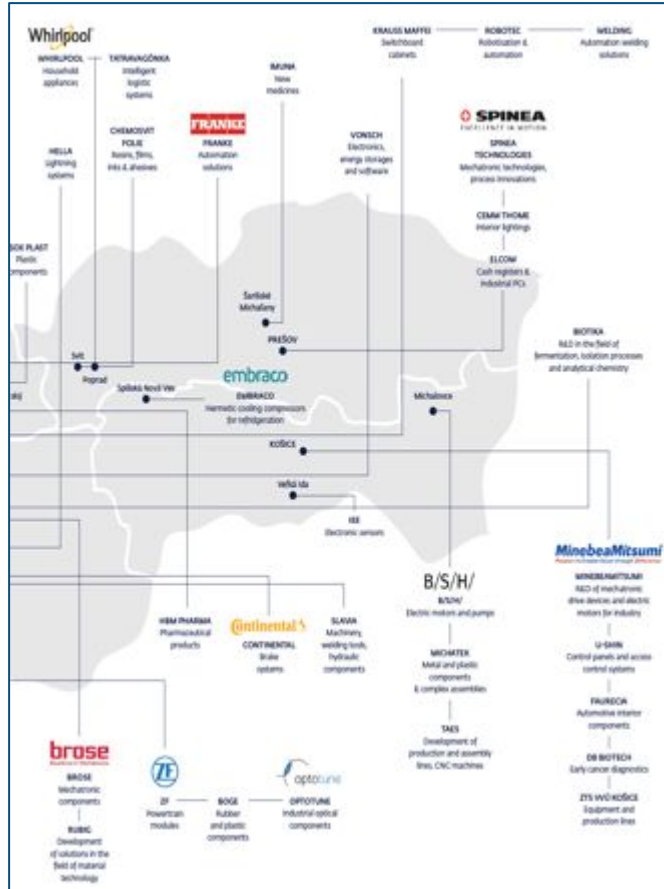
Structural differences with the EU are shown in the table below including, compared to the EIS 2020, new information on different types of (innovating) enterprises (Innovation profiles) and environmental indicators.

| | SK | EU |
|-----------------------------------------------------------|--------|--------|
| Performance and structure of the economy | | |
| GDP per capita (PPS) | 21,700 | 30,800 |
| Average annual GDP growth (%) | -1.3 | -2.5 |
| Employment share Manufacturing (NACE C) (%) | 24.7 | 16.5 |
| of which High and Medium high-tech (%) | 45.1 | 37.9 |
| Employment share Services (NACE G-N) (%) | 34.3 | 41.2 |
| of which Knowledge-intensive services (%) | 30.8 | 35.1 |
| Turnover share SMEs (%) | 34.9 | 36.5 |
| Turnover share large enterprises (%) | 42.5 | 45.7 |
| Foreign-controlled enterprises – share of value added (%) | 21.2 | 11.8 |
| Business and entrepreneurship | | |
| Enterprise births (10+ employees) (%) | 1.5 | 1.0 |
| Total Entrepreneurial Activity (TEA) (%) | 12.4 | 6.7 |
| FDI net inflows (% GDP) | n/a | 2.0 |
| Top R&D spending enterprises per 10 million population | 0.0 | 16.2 |
| Buyer sophistication (1 to 7 best) | 3.0 | 3.7 |
| Innovation profiles | | |
| In-house product innovators with market novelties | 5.3 | 10.7 |
| In-house product innovators without market novelties | 3.6 | 12.3 |
| In-house business process innovators | 5.5 | 11.0 |
| Innovators that do not develop innovations themselves | 4.5 | 11.6 |
| Innovation active non-innovators | 2.7 | 3.3 |
| Non-innovators with potential to innovate | 29.5 | 19.9 |
| Non-innovators without disposition to innovate | 49.0 | 31.3 |
| Governance and policy framework | | |
| Ease of starting a business (0 to 100 best) | 75.4 | 76.5 |
| Basic school entrepreneurial education and training | 1.8 | 2.0 |
| Govt. procurement of advanced tech. products | 3.1 | 3.5 |
| Rule of law (-2.5 to 2.5 best) | 0.6 | 1.1 |
| Climate change indicators | | |
| Circular material use rate | 5.4 | 11.7 |
| Greenhouse gas emissions intensity of energy consumption | 83.9 | 86.6 |
| Eco-Innovation Index | 62.0 | 100.0 |
| Demography | | |
| Population size | 5.5 | 446.7 |
| Average annual population growth (%) | 0.1 | 0.1 |
| Population density | 111.8 | 108.8 |

| Slovakia | Relative to EU 2021 in | Relative to EU 2014 in | |
|------------------------------------------------|------------------------|------------------------|-------|
| | 2021 | 2014 | 2021 |
| SUMMARY INNOVATION INDEX | | | |
| | 63.1 | 65.1 | 71.0 |
| Human resources | | | |
| | 74.9 | 70.9 | 79.4 |
| Doctorate graduates | 87.0 | 111.5 | 77.0 |
| Population with tertiary education | 98.7 | 49.6 | 127.3 |
| Lifelong learning | 27.3 | 25.6 | 30.0 |
| Attractive research systems | | | |
| | 56.5 | 36.8 | 63.5 |
| International scientific co-publications | 77.1 | 62.4 | 101.1 |
| Most cited publications | 42.6 | 15.7 | 41.8 |
| Foreign doctorate students | 51.6 | 48.3 | 61.3 |
| Digitalisation | | | |
| | 81.2 | 94.7 | 112.3 |
| Broadband penetration | 80.8 | 94.9 | 122.5 |
| People with above basic overall digital skills | 81.8 | 94.4 | 100.0 |
| Finance and support | | | |
| | 25.5 | 31.1 | 30.4 |
| R&D expenditures in the public sector | 36.4 | 50.9 | 35.1 |
| Venture capital expenditures | 14.9 | 11.3 | 25.0 |
| Government support for business R&D | 24.1 | 17.9 | 27.8 |
| Firm investments | | | |
| | 48.2 | 55.6 | 58.2 |
| R&D expenditure in the business sector | 28.4 | 22.0 | 31.5 |
| Non-R&D Innovation expenditures | 93.0 | 103.5 | 105.7 |
| Innovation expenditures per employee | 42.1 | 50.6 | 55.6 |
| Use of information technologies | | | |
| | 83.8 | 73.8 | 96.8 |
| Enterprises providing ICT training | 73.3 | 80.0 | 73.3 |
| Employed ICT specialists | 92.9 | 66.7 | 123.8 |
| Innovators | | | |
| | 27.2 | 49.1 | 37.2 |
| Product innovators (SMEs) | 29.9 | 36.1 | 42.2 |
| Business process innovators (SMEs) | 24.6 | 60.6 | 32.8 |
| Linkages | | | |
| | 49.1 | 54.6 | 66.2 |
| Innovative SMEs collaborating with others | 63.1 | 72.9 | 92.4 |
| Public-private co-publications | 75.6 | 65.6 | 84.8 |
| Job-to-job mobility of HRST | 23.2 | 33.3 | 33.3 |
| Intellectual assets | | | |
| | 48.3 | 36.0 | 41.8 |
| PCT patent applications | 18.0 | 13.8 | 15.6 |
| Trademark applications | 75.9 | 59.2 | 79.7 |
| Design applications | 40.4 | 32.9 | 27.7 |
| Employment impacts | | | |
| | 46.2 | 44.7 | 47.1 |
| Employment in knowledge-intensive activities | 64.6 | 58.7 | 70.7 |
| Employment in innovative enterprises | 31.4 | 34.9 | 30.4 |
| Sales impacts | | | |
| | 90.5 | 104.9 | 92.2 |
| Medium and high tech goods exports | 129.7 | 127.4 | 142.2 |
| Knowledge-intensive services exports | 41.7 | 37.5 | 44.1 |
| Sales of innovative products | 96.2 | 155.4 | 83.6 |
| Environmental sustainability | | | |
| | 110.4 | 107.5 | 114.9 |
| Resource productivity | 73.5 | 77.5 | 108.9 |
| Air emissions by fine particulate matter | 103.3 | 92.9 | 109.9 |
| Environment-related technologies | 166.3 | 144.0 | 125.0 |

The colours show normalised performance in 2021 relative to that of the EU in 2021: dark green: above 125%; light green: between 100% and 125%; yellow: between 70% and 100%; orange: below 70%. Normalised performance uses the data after a possible imputation of missing data and transformation of the data.

SARIO'S RD&I PROFILE SKSOME REGIONAL



R&D Specialisation at the Largest Slovak Universities

STU
Slovak University of Technology in Bratislava

Faculty of Electrical Engineering and IT

- National Centre of Robotics
- National Centre for Space Engineering
- Partners & International Cooperation
- Siemens, Matador, Volkswagen

Faculty of Mechanical Engineering

- manufacturing technologies
- recycling of materials for the purpose of composite production
- Partners & International Cooperation
- Volkswagen, Schaeffler, Brose

Faculty of Informatics & Information Technologies

- data analysis and information processing
- artificial intelligence
- cybersecurity
- Partners & International Cooperation
- ESET (a specialised IT research centre in cooperation with the Faculty of Mathematics, Physics & Informatics of Comenius University)

Faculty of Material Sciences and Technology in Trnava

- SlovakION, one of the CEE's leading research centres for ion beam & plasma technologies in materials engineering & nanotechnology
- Partners & International Cooperation
- Johnson Controls, Bosch

Faculty of Chemical and Food Technology

- biotechnology
- chemical and biological protection of environment
- Partners & International Cooperation
- Volkswagen, Mond, Matador

University Science Park STU, Bratislava

- ICT, electrical, chemical & civil engineering
- industrial biotechnology

COMENIUS UNIVERSITY IN BRATISLAVA

Faculty of Mathematics, Physics & Informatics

- applied mathematics & physics
- computer sciences
- Partners & International Cooperation
- PwC, Accenture

Faculty of Natural Sciences

TECHNICAL UNIVERSITY OF KOŠICE

TECHNICAL UNIVERSITY IN KOŠICE

Faculty of Electrical Engineering and Informatics

- cybernetics and artificial intelligence
- electronics & electrical engineering
- Partners & International Cooperation
- Volkswagen, Siemens, U.S. Steel, Slovak Telecom

Faculty of Mechanical Engineering

- manufacturing technologies
- green & alternative fuel mobility
- Partners & International Cooperation
- Honeywell, Embraco, Faurecia, Getrag

Faculty of Aeronautics

- air traffic management
- aerospace & space engineering
- aviation security and management
- Partners & International Cooperation
- European Aviation Safety Agency, International Civil Aviation Organisation, International Astronautical Federation

University Science Park TECHNICA, Košice

- ICT, electrical, mechanical, civil & environmental engineering

UNIVERSITY OF ŽILINA

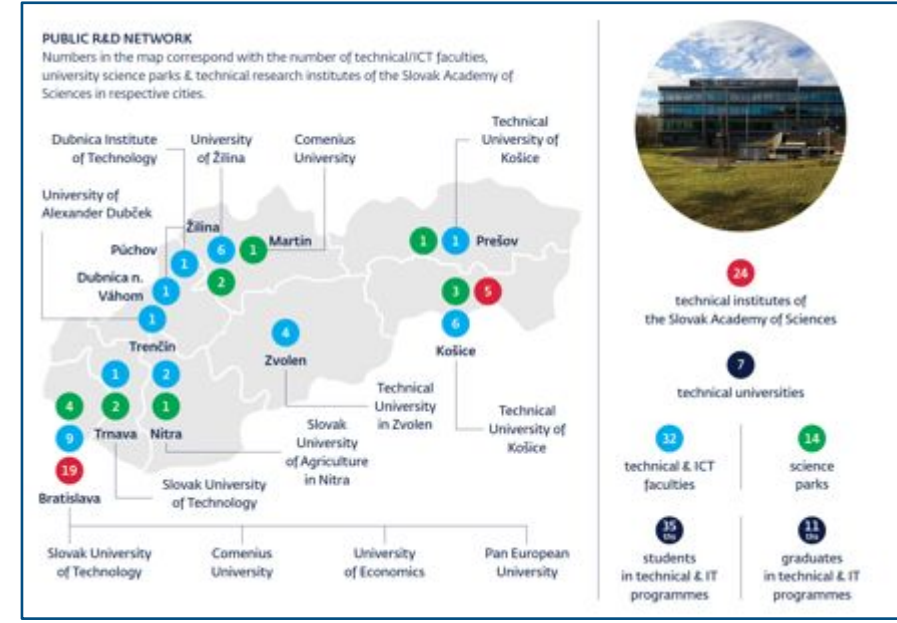
Faculty of Electrical Engineering and Information Technology

- ICT applied in transport and industry
- electronic systems & networks
- Partners & International Cooperation
- Siemens, Panasonic, Brose

Faculty of Mechanical Engineering

- mechanical engineering
- materials engineering
- machines and equipment design
- automation of production systems
- Partners & International Cooperation
- Volkswagen, KIA Motors, Schaeffler, Whirlpool

CETRA – Centre for Transport Research at University of Žilina



Industry – Key Co. but many missing

Uni Profiling

KSK RDI DATA

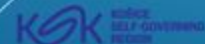
MAIN MONITORED AREAS

- ▶ Demography – population and health
- ▶ Labor market and social statistics
- ▶ Macroeconomic statistics
- ▶ Research and Development, Innovation
- ▶ Transport services
- ▶ Social infrastructure
- ▶ School infrastructure
- ▶ Health facilities
- ▶ Tourism
- ▶ Culture
- ▶ Energy
- ▶ Agriculture
- ▶ Environment

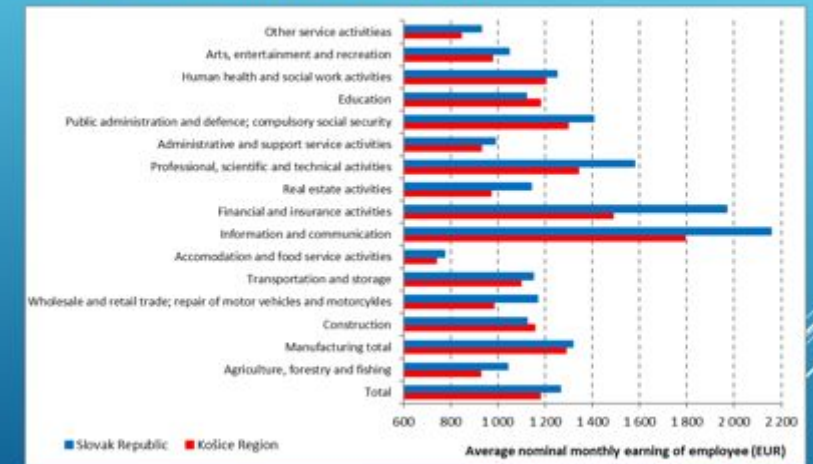


BASIC ECONOMIC DATA – YEAR 2020

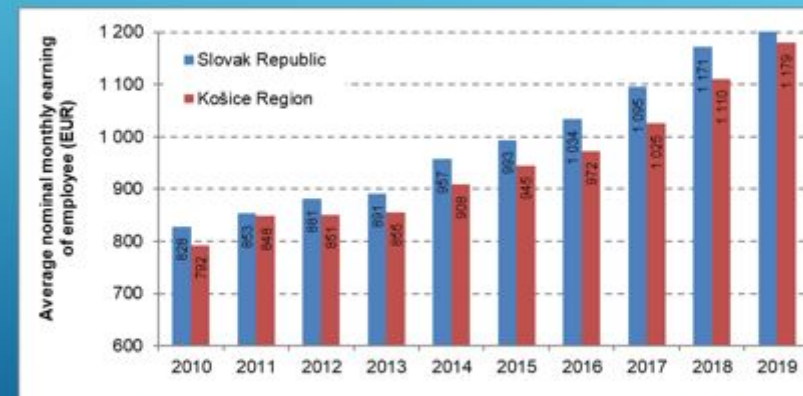
| Indicator | Košice Region | Slovak Republic |
|----------------------------------------------------------|---------------|-----------------|
| Employment rate 20-64 years (%) | 67.6 | 72.5 |
| Economically active population (%) | 47.09 | 50.15 |
| Registered unemployment rate (%) | 10.55 | 7.57 |
| Average nominal monthly earning of employee (EUR) (2019) | 1 179 | 1 266 |
| Regional gross domestic product per capita (PPS) (2019) | 17 459.7 | 21 861.8 |
| Gross value added in current price (Mills. EUR) (2019) | 9 848.5 | 83 985.5 |
| Foreign direct investment (thousands EUR) (2018) | 2 463 611 | 52 279 396 |
| Proportion of agricultural land (%) | 49.3 | 48.4 |
| Proportion of forest area (%) | 39.9 | 41.3 |



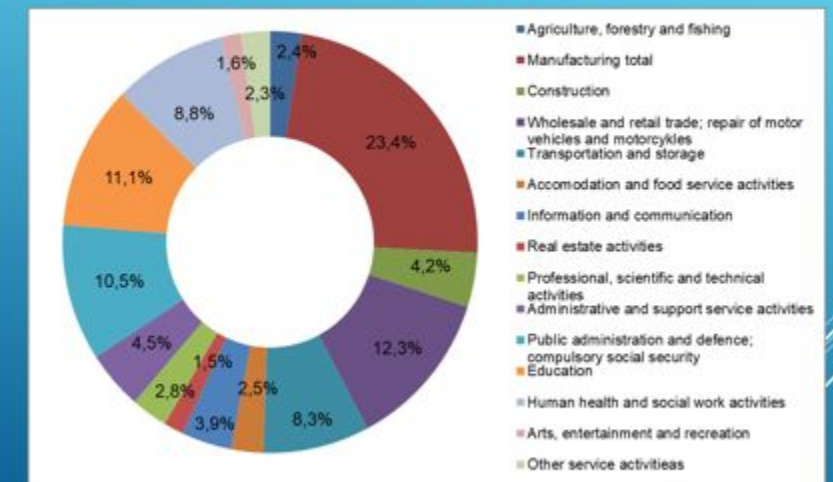
WAGE BY ECONOMIC ACTIVITY IN THE KOŠICE REGION AND SLOVAK REPUBLIC IN YEAR 2019 (EUR)



AVERAGE NOMINAL MONTHLY EARNING OF EMPLOYEE IN THE KOŠICE REGION AND SLOVAK REPUBLIC IN YEARS 2010-2020 (EUR)



AVERAGE REGISTERED NUMBER OF EMPLOYEES BY ECONOMIC ACTIVITY IN THE KOŠICE REGION IN YEAR 2019 (%)



WHAT IS MISSING

According to KSK`s Dept of Reg. Dev – Stats unit:

... RD&I provided on demand, not readily available & promoted

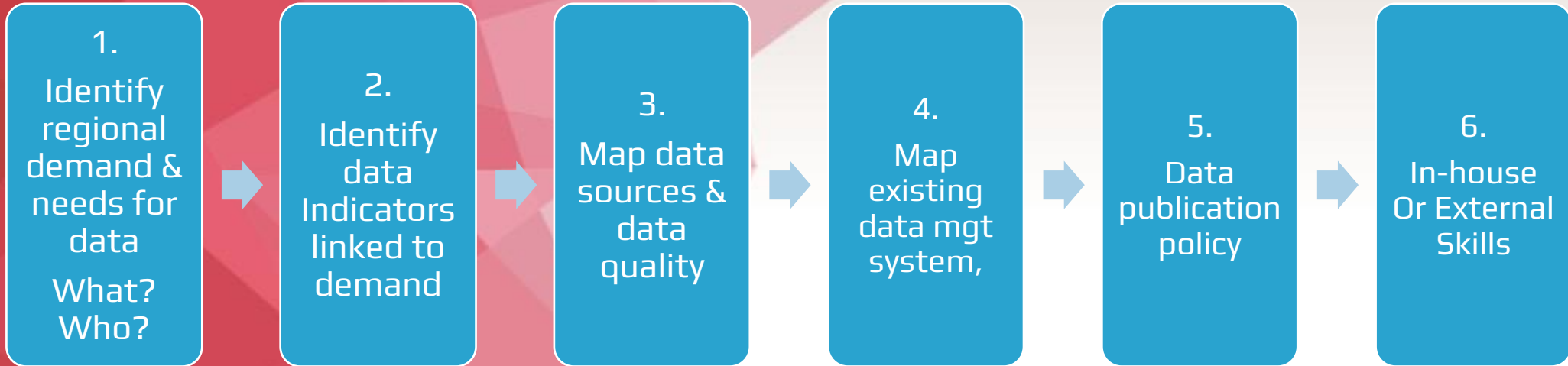
... time lags as existing modality takes time

... public access & visibility on KSK RD&I

... consolidated & updated dataset on relevant RD&I indicators

... effective, multipurpose internal/ external visualisation of data

PHASE 1 Short-term



PHASE 2 Long-term



... TIPS FOR KSK & BBSK RICs

1. **No single recipe – regional creativity & targeted focus**
2. **Identify what you want to profile, how often & in what format**
3. **Identify your audience(s), data users**
4. **Build on data that already exists** e.g. regional stats, SARIO regional investment profiles.
5. **Adopt a phased, modular approach** – start modest & add data modules over time
6. **Focus expertise on data collection, processing but also visualisation**
7. **Partner up with University & data user communities**
8. **Convene events for regional data science communities**

INVESTOR PROFILES

CURI - WB RD&I Component

TYPICAL FEATURES

Demographic Profile (past five years)

Geographic Profile & Advantages

Economic Profile & Advantages

Innovation Specific

- Sectoral dive-ins
- Institutional drivers
- RD&I spending
- Outputs (Patent, trademark, design apps)
- Companies

INVESTOR PROFILES

CURI - WB RD&I Component

TYPICAL FEATURES (continued)

Success Stories

- Company profiles
- Successful Investors

Typical FAQs by investors

Offer of Services

Key Contacts