



# INNOVATION CAPACITY OF SERBIA

REGIONAL PERSPECTIVE

June 2022

# Context: Smart Specialisation Strategy in RS



The Government of the Republic of Serbia adopted the national **Smart Specialisation Strategy of the Republic of Serbia 2020 – 2027 (S4)** in 2020

Priority areas identified in S4: 1) **Food for the future**, 2) **ICT**, 3) **Future machines and manufacturing processes** and 4) **Creative industries**.

The areas were selected on the basis of quantitative and qualitative analysis and entrepreneurial discovery process (EDP) i.e., process based on public-private sector dialogue, applying the European Commission methodology for development of Smart Specialisation Strategy.

The S4 development included mapping of regional economic, scientific and innovation potentials including the analysis of innovation and creative potential at national level.

Although regional development potential were initially identified through S4, the **S4 Action Plan for Implementation does not provide for the regional aspect**.

# Context: Role of the Innovation Fund



One of the key roles in achieving the objectives of the S4 Action Plan for Implementation is that of the **Innovation Fund**.

The Fund is a state agency established in line with the **Law on Innovation Activity**, and specialised in supporting innovation and managing financial resources to encourage innovation.

**Proceeds of the Fund** – through the EU Pre Accession Instrument, the IPA fund, largely through Loan Agreements between the Republic of Serbia and the International Bank for Reconstruction and Development (World Bank), and also from the budget of the Republic of Serbia.

**Support mechanisms of Fund (Programmes)** aim to stimulate the development of innovative products, processes and services and to establish a robust link between science and economy, to establish and empower companies with innovation potential.

# Objective of research



The main objective of the research is to **examine the efficiency of the existing national approach to supporting innovation and S4 implementation and develop recommendations as to the ways to achieve a more balanced development of regional innovation potentials in Serbia.**

The research looks into representation of regions in innovation capacities in Serbia and measures the level of innovation activities at regional level.



# Methodology: Sample



The quantitative (descriptive) analysis includes mapping of regional innovation activity based on the number of projects ongoing or implemented in the observed period.

Four regions are in line with NUTS 2 classification: 1) **Belgrade**, 2) **Vojvodina**, 3) **Šumadija and Western Serbia** and 4) **Southern and Eastern Serbia**.

The research was implemented on the sample of 1,344 approved projects, in the period 2016 - 2022

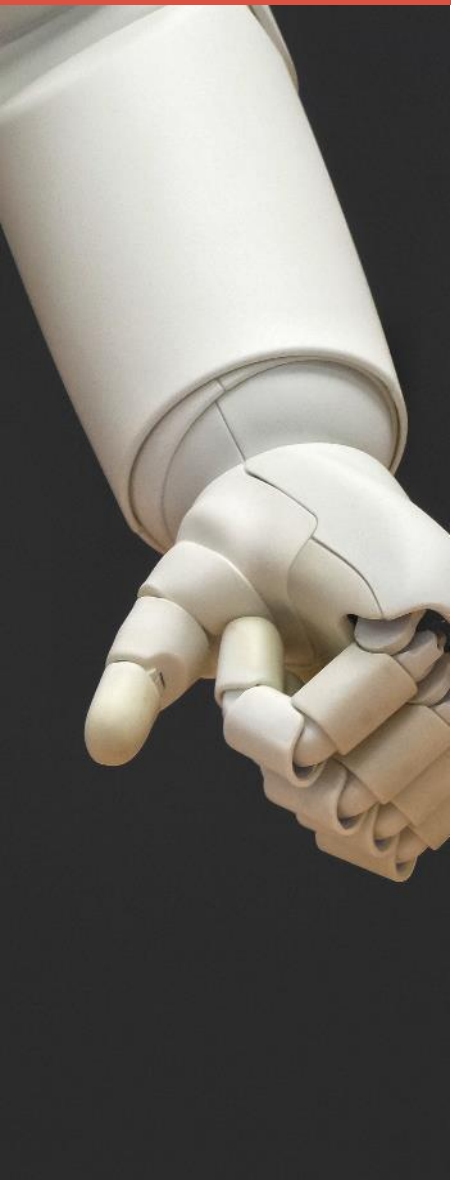
The data on the projects within eight programs: 1) **Proof of Concept**, 2) **Innovation Vouchers**, 3) **Catapult Program**, 4) **Smart Start**, 5) **Mini Grants Programme**, 6) **Collaborative Grant Scheme Program**, 7) **Innovations Co-funding Programme** and 8) **Technology Transfer Program**.

## **Limitations:**

The data used on the approved projects – submitted but not approved applications were not taken into account.

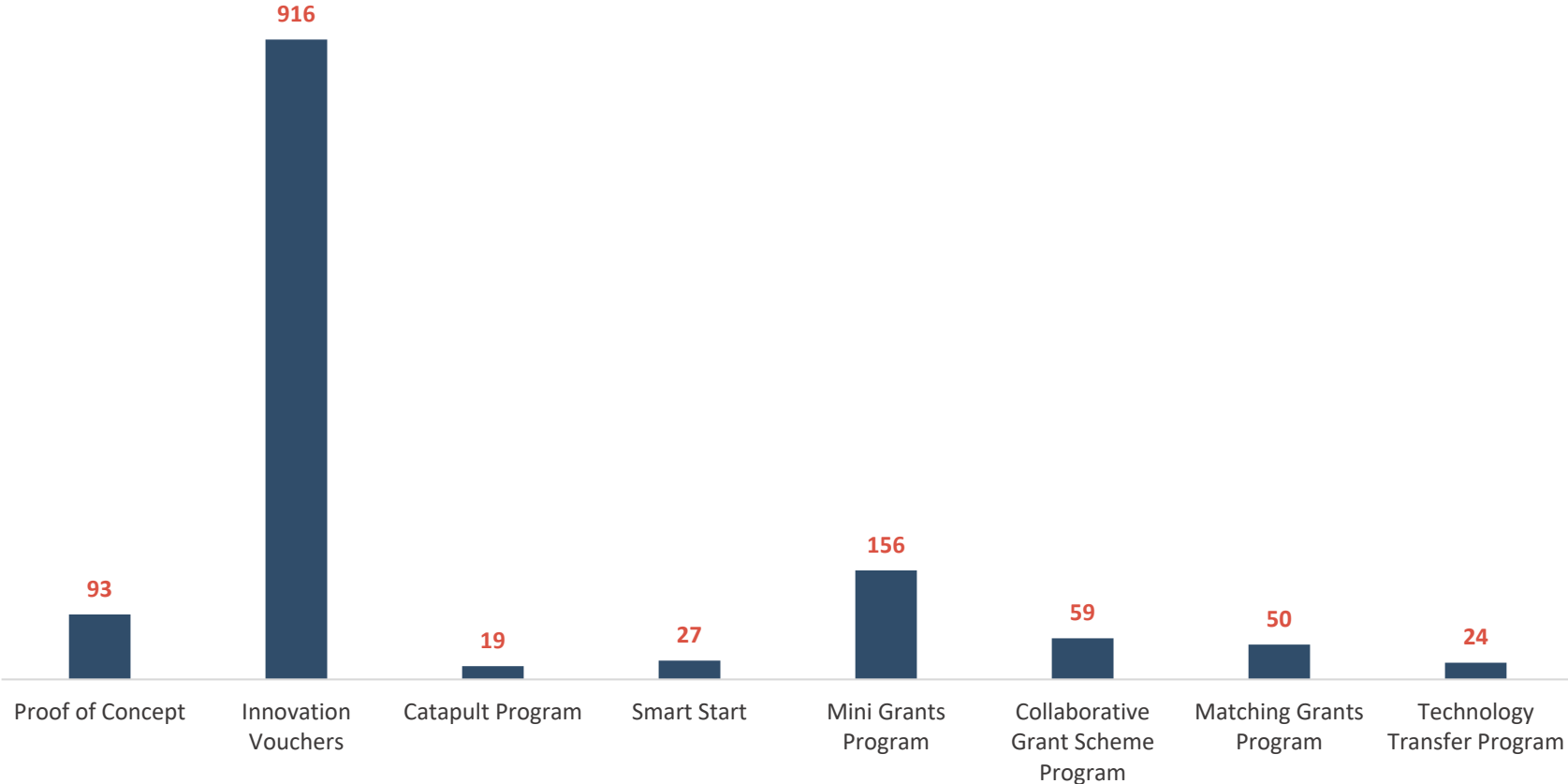
The current classification of industries is too wide – certain areas (ICT) cover a large number of businesses.

# Methodology: Programmes of the Fund



Programme	Objective of programme	Target group
Proof of Concept	Support to researchers in testing their concepts in order to prove potential for new product development	Science and research organisations
Innovation Vouchers	Support to small and medium-sized enterprises (SMEs) to raise the level of innovation of their products/services/processes using the services of science and research organisations	SMEs and science and research organisations
Catapult Program	Raising the level of innovative entrepreneurship and ensuring better access to external sources of funding for businesses growth and for increasing the number of new/improved innovative products and services on the market	Teams (start-ups)
Smart Start	Support to the most promising teams seeking to validate their business ideas and demonstrate the utility of their products/services/technologies by developing the 1 <sup>st</sup> prototype or the minimum viable product (MVP).	Micro companies and teams
Mini Grants Program	Support to businesses to survive during the critical stage of research and development and increase efficient business capacities to be used to market their innovations	Micro companies and small companies up to 5 years since establishment, and teams
Collaborative Grants Scheme Program	Support to private businesses and science and research organisations associated in consortiums to create new commercially viable products and services	SMEs and science and research organisations (as consortiums)
Matching Grants Program	Support to marketing research and development	Micro companies, SMEs
Technology Transfer Program	Support to science and research organisations to raise the capacities and efficiency in marketing innovations	Science and research organisations

# Methodology: Programmes of the Fund



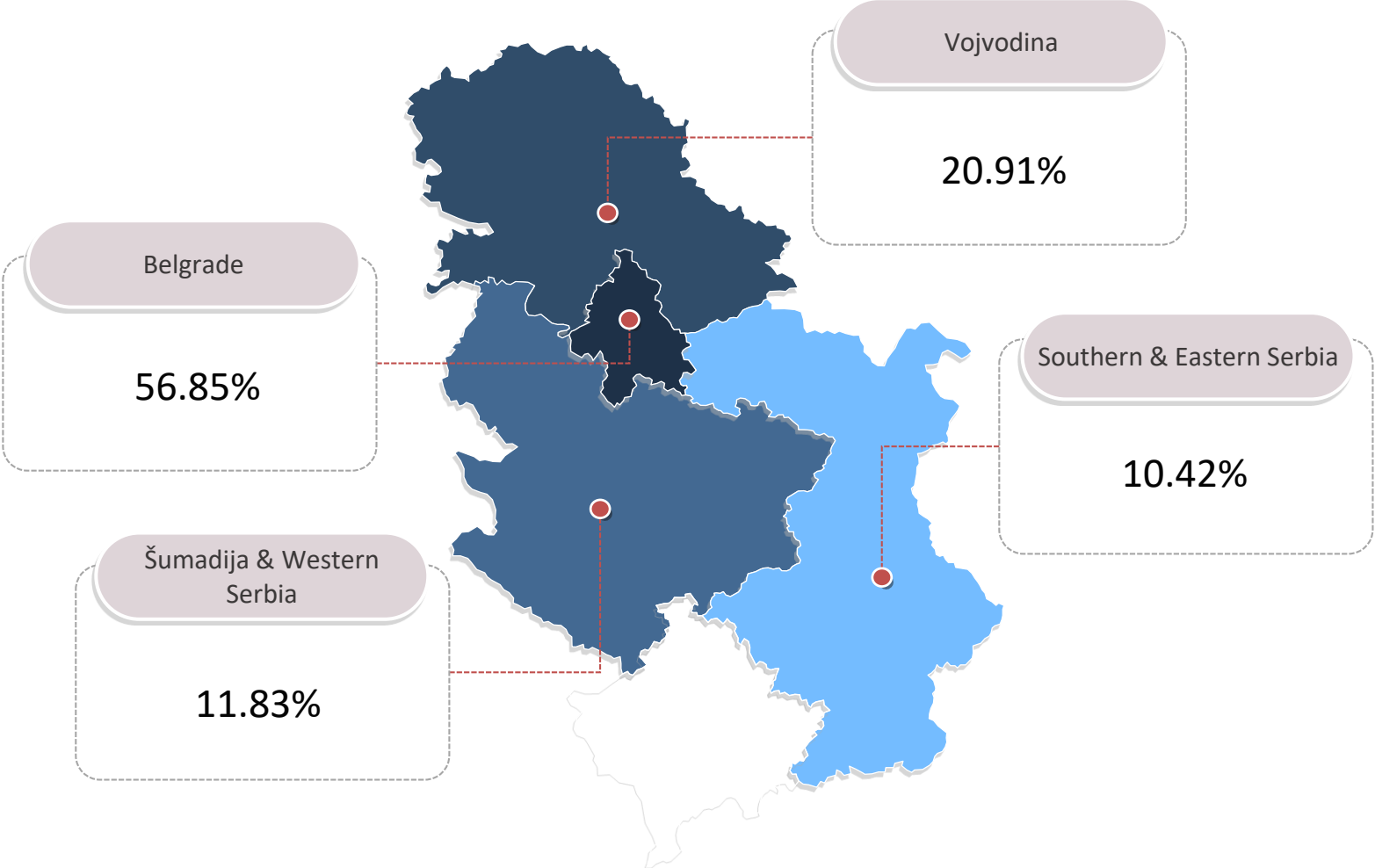


On the basis of the used sample, **six key dimensions** of regional innovation potential in Serbia were analysed :

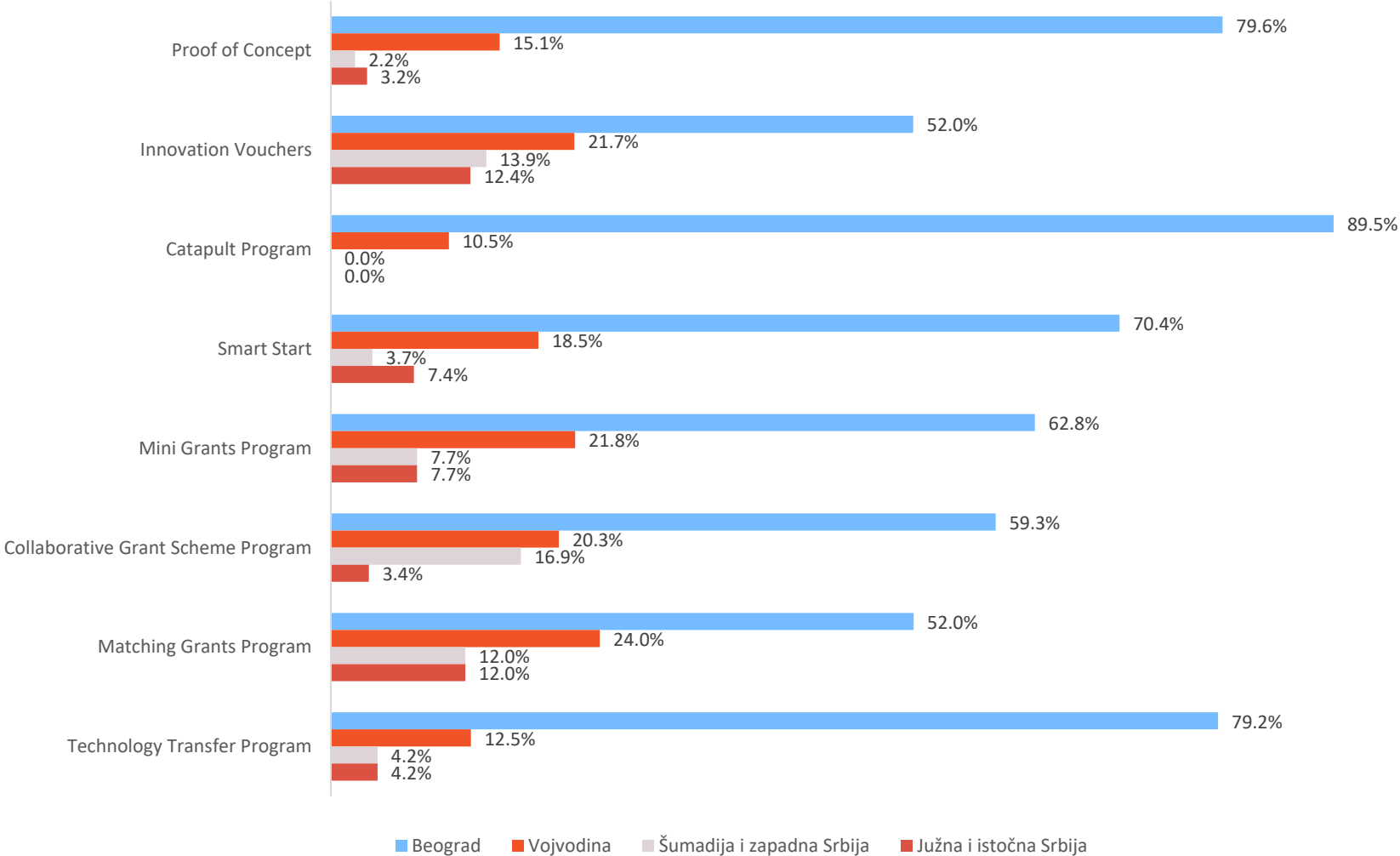
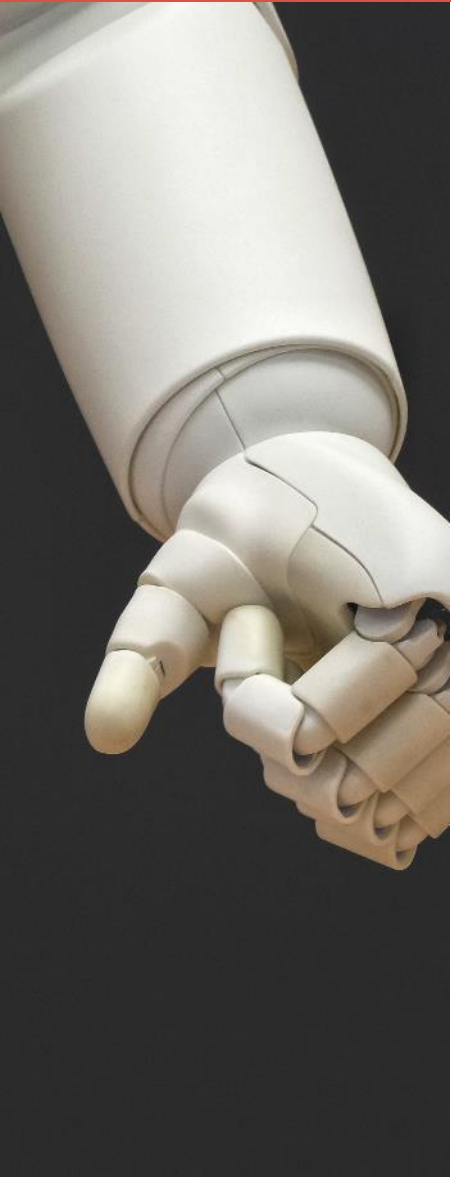
1. Regional distribution of projects, total and by programme
2. Representation of programmes by region
3. NUTS 3 level of innovation analysis (regions of Vojvodina, Šumadija and Western Serbia and Southern and Eastern Serbia)
4. Regional distribution of the approved projects by value of the funds approved
5. Regional distribution of development of industries
6. Interregional collaboration through the Fund programmes



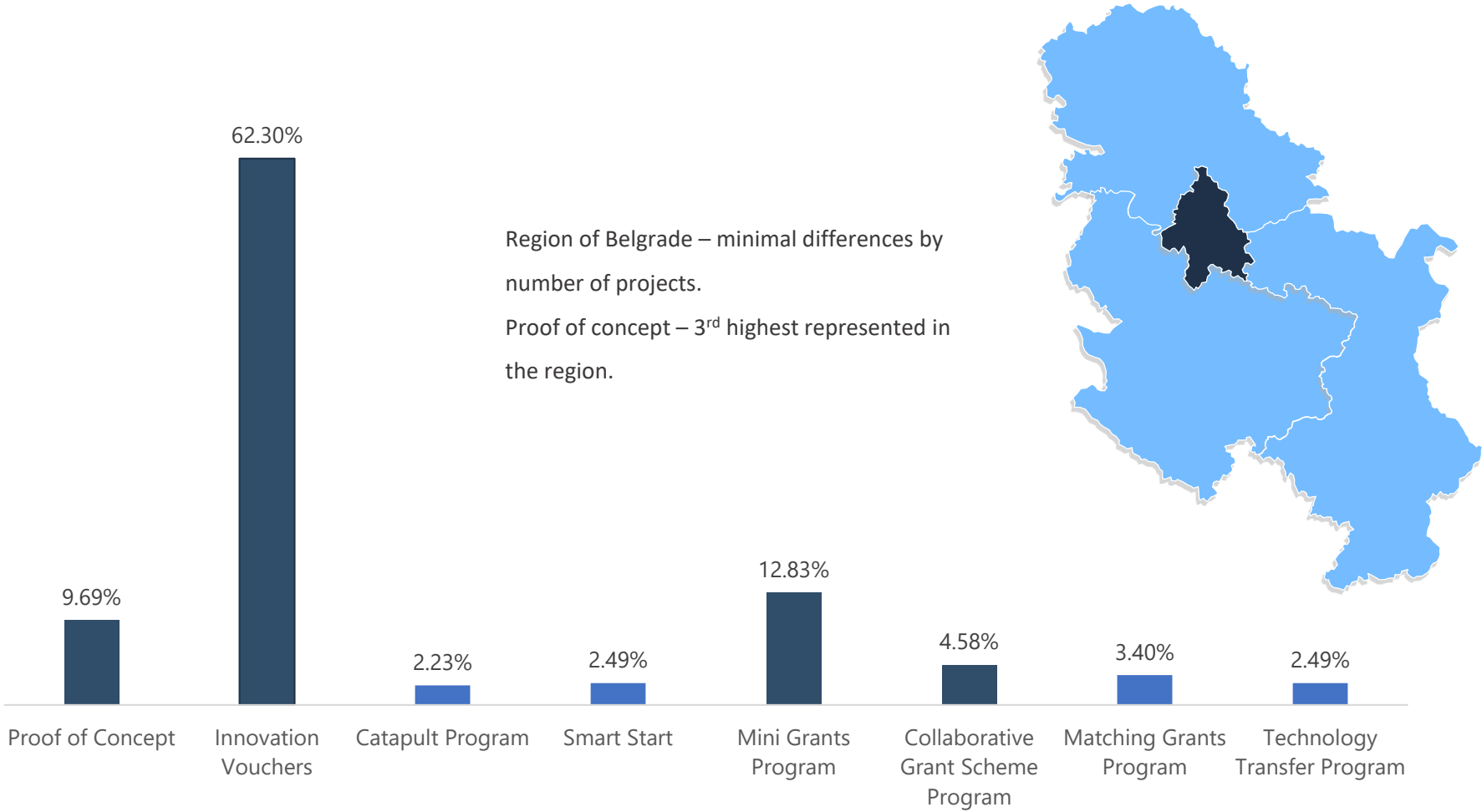
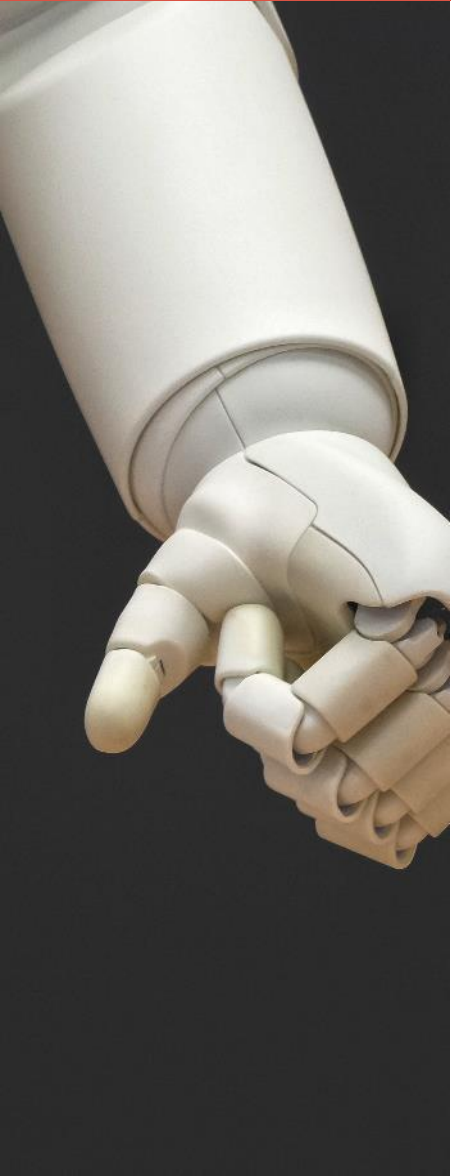
# Finding 1: Regional distribution of projects



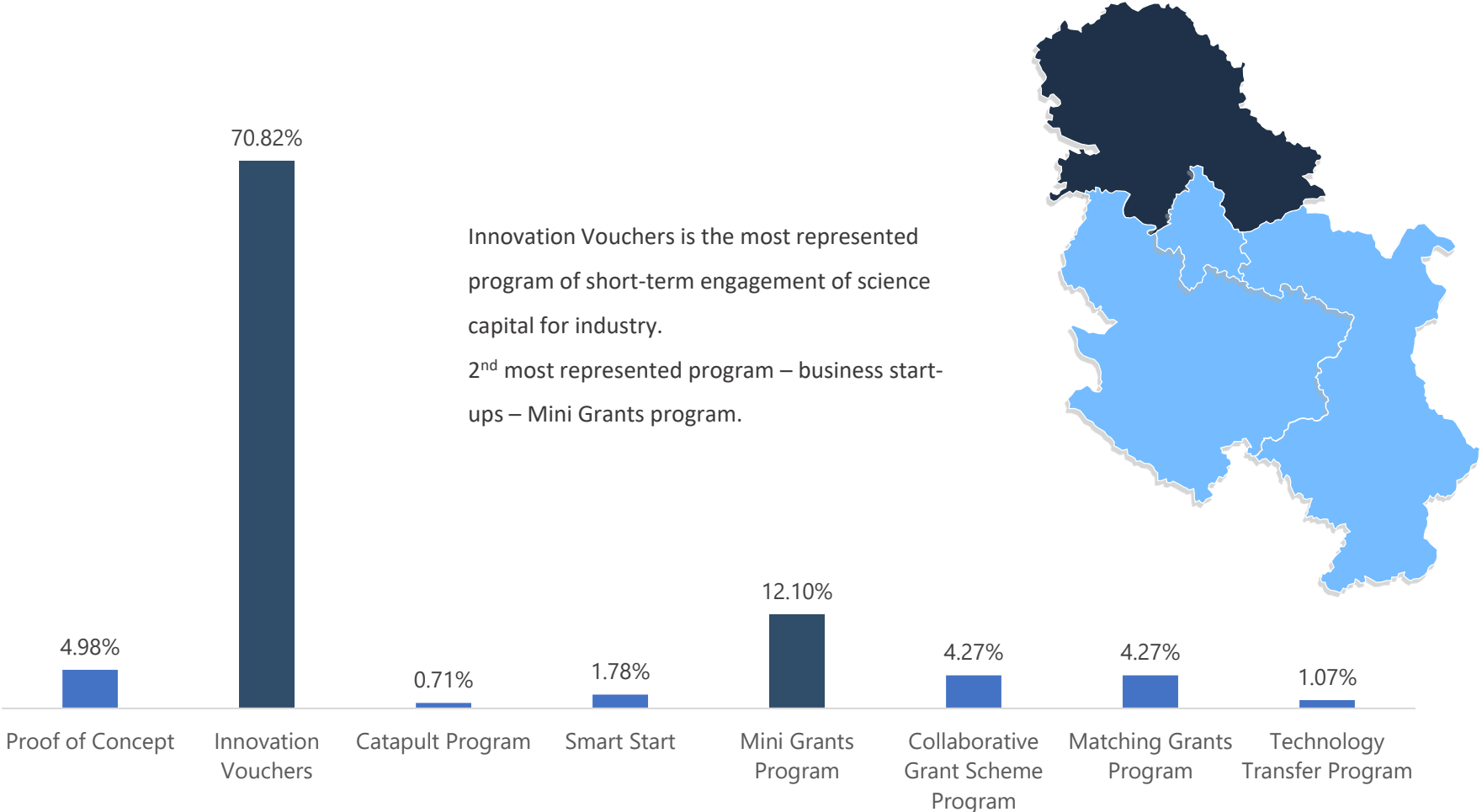
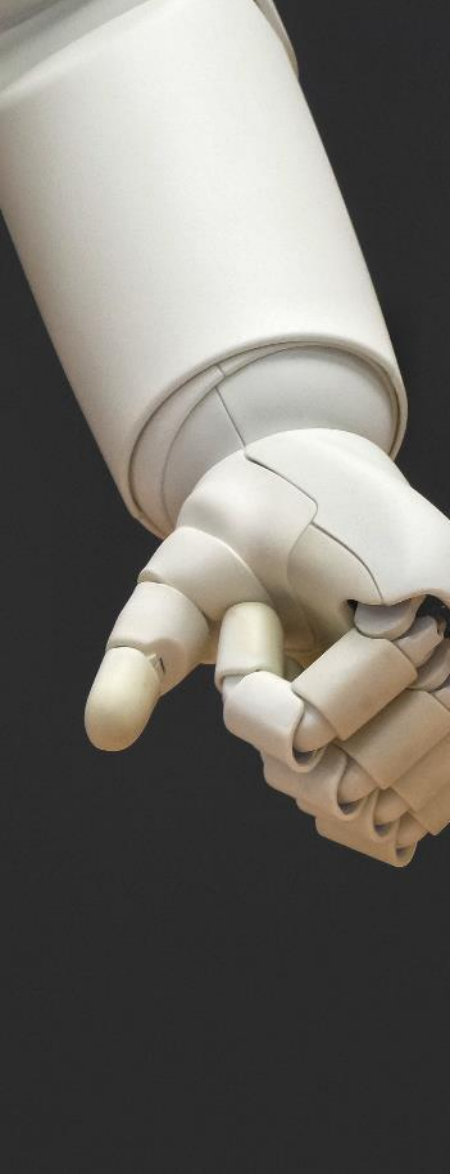
# Finding 1: Regional distribution of projects, by programme



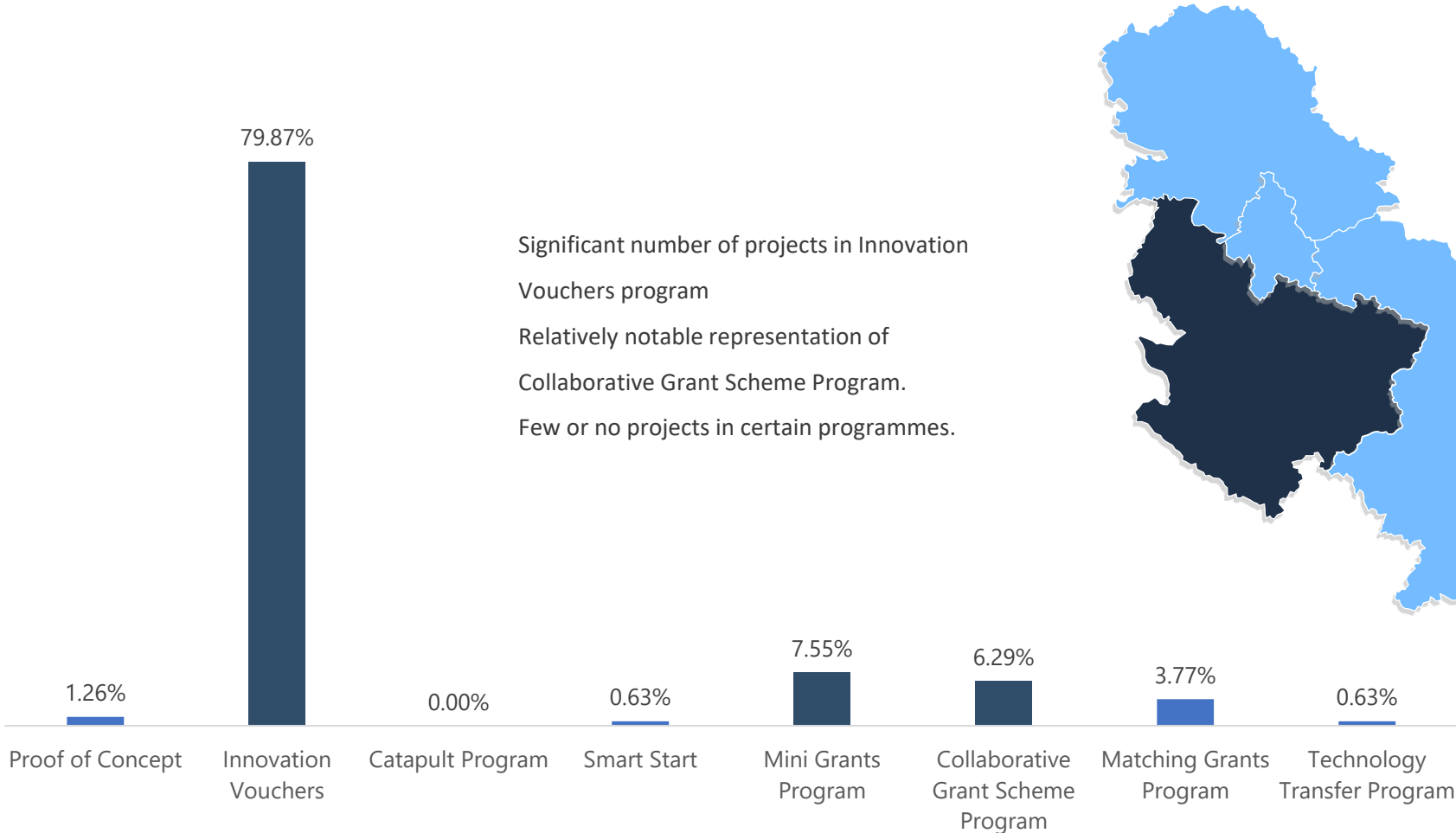
# Finding 2: Representation of programmes, region of Belgrade



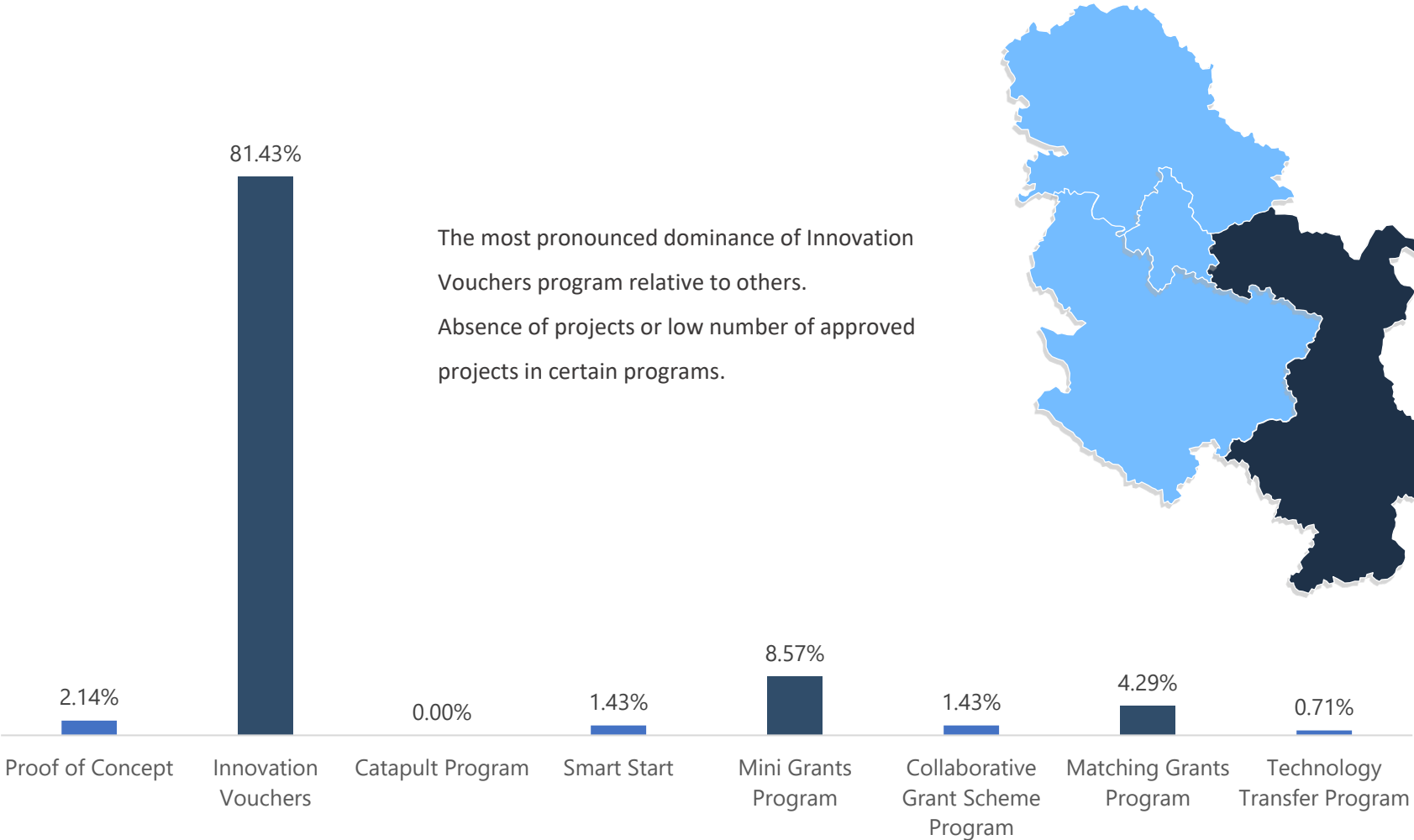
# Finding 2: Representation of programmes, region of Vojvodina



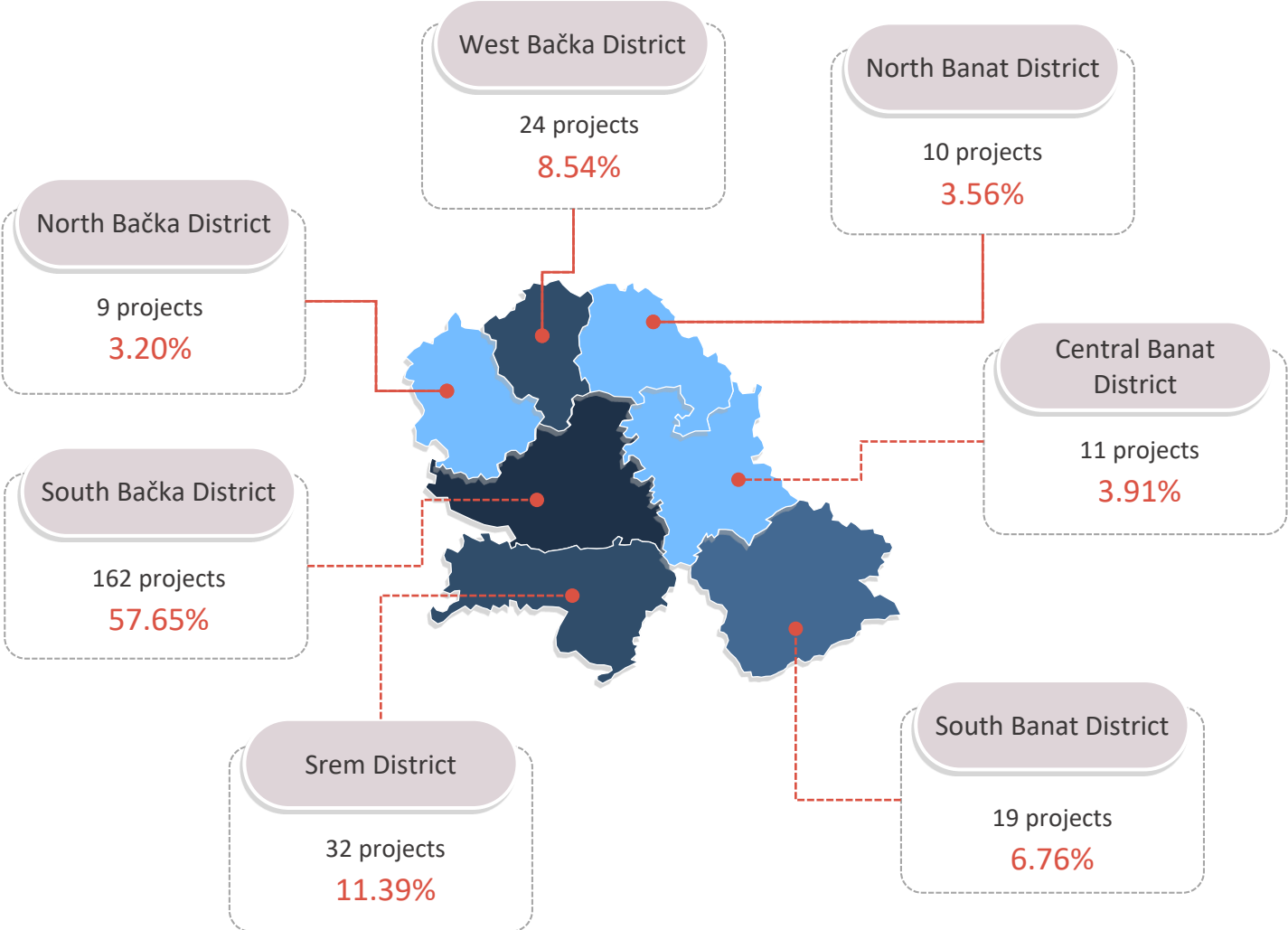
# Finding 2: Representation of programmes, region of Šumadija & Western Serbia



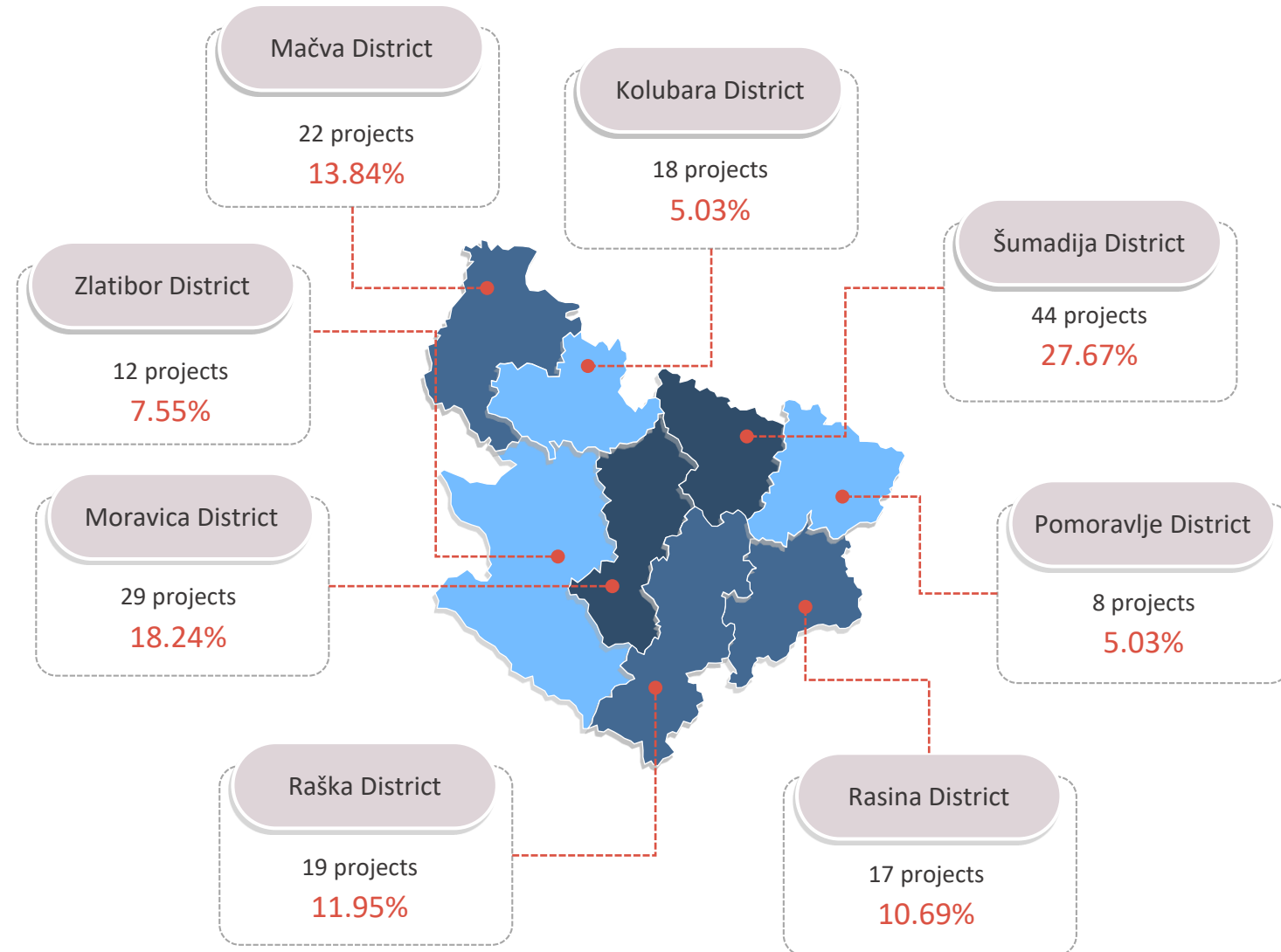
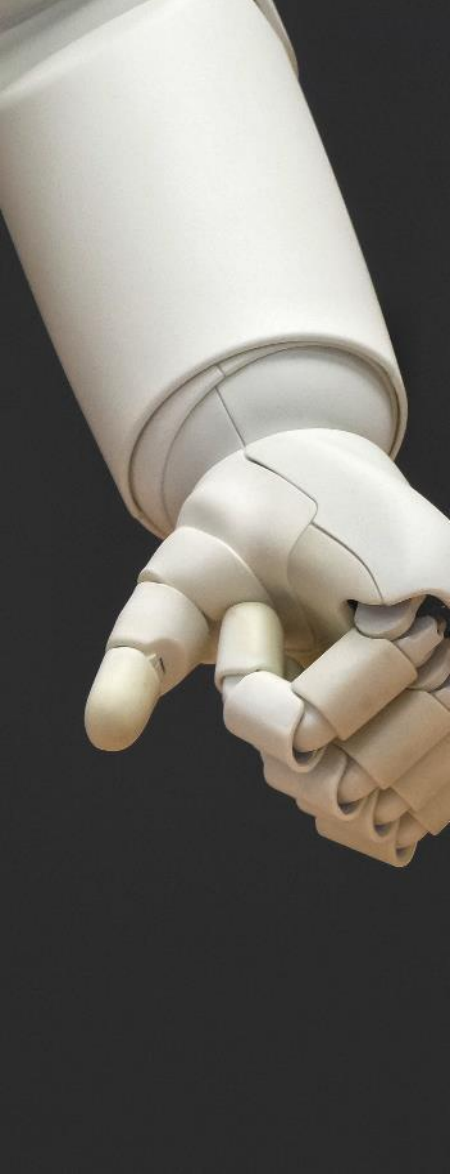
# Finding 2: Representation of programmes, region of Southern & Eastern Serbia



# Finding 3: NUTS 3 level of analysis, region of Vojvodina

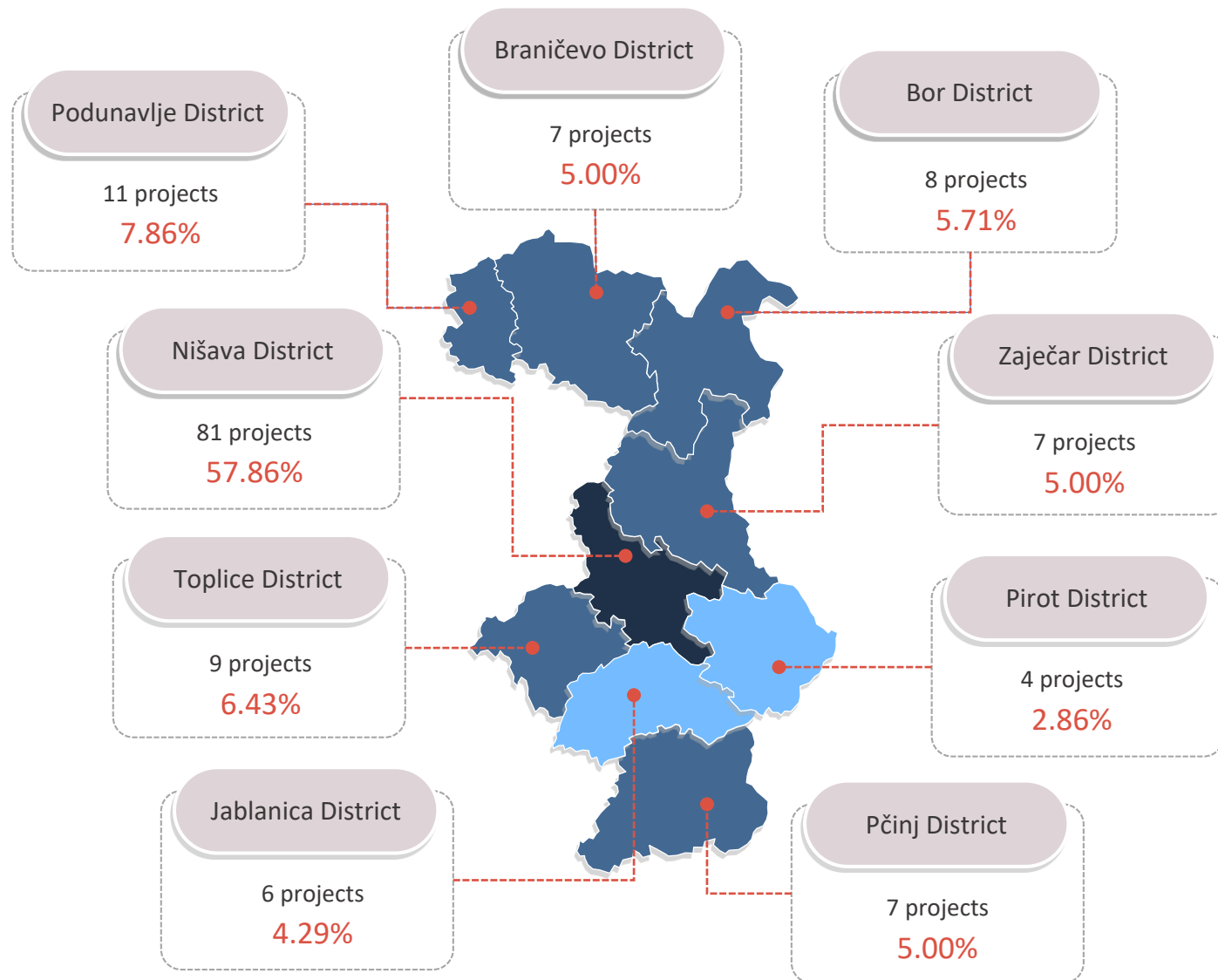


# Finding 3: NUTS 3 level of analysis, region of Šumadija & Western Serbia

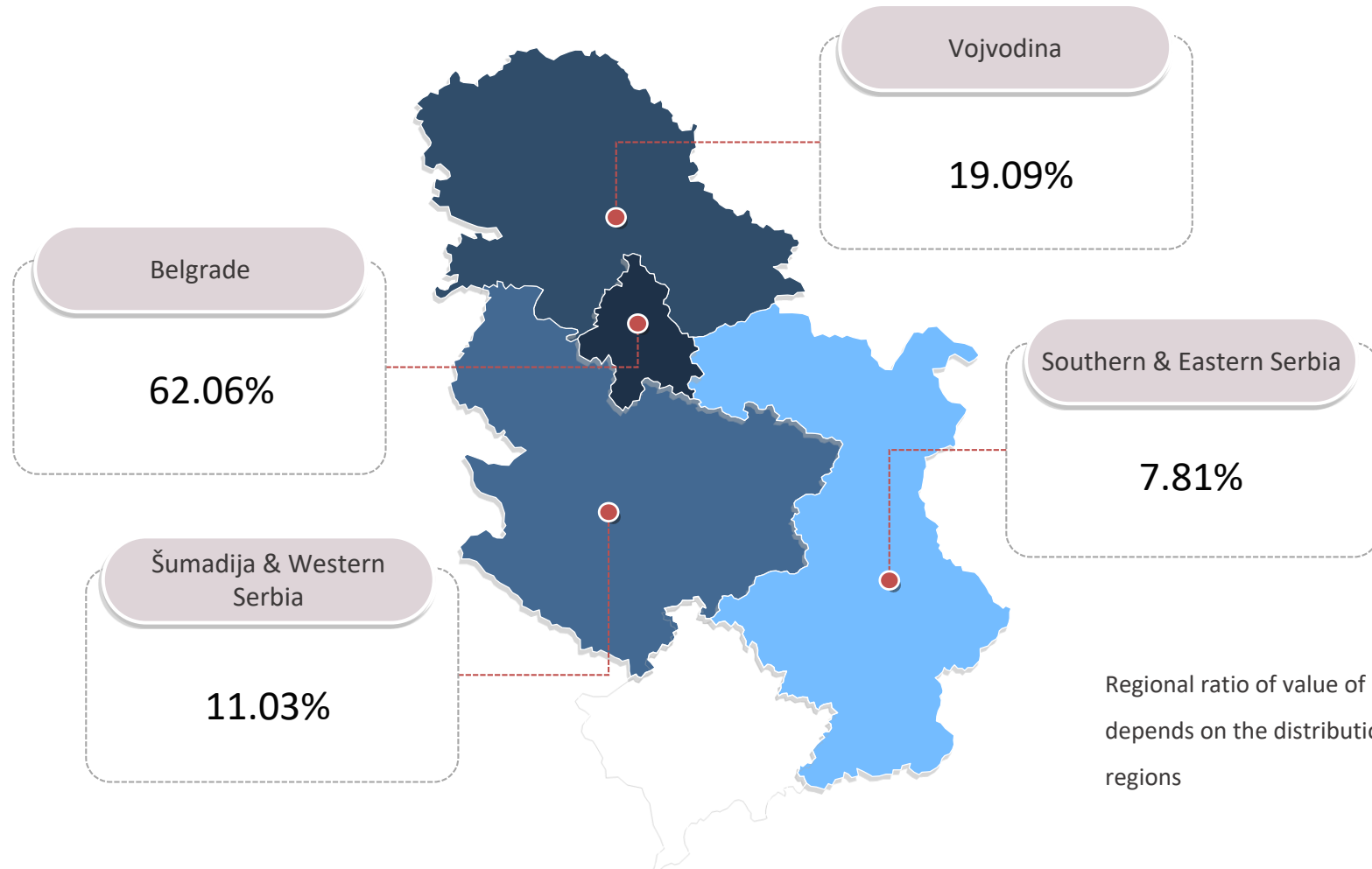
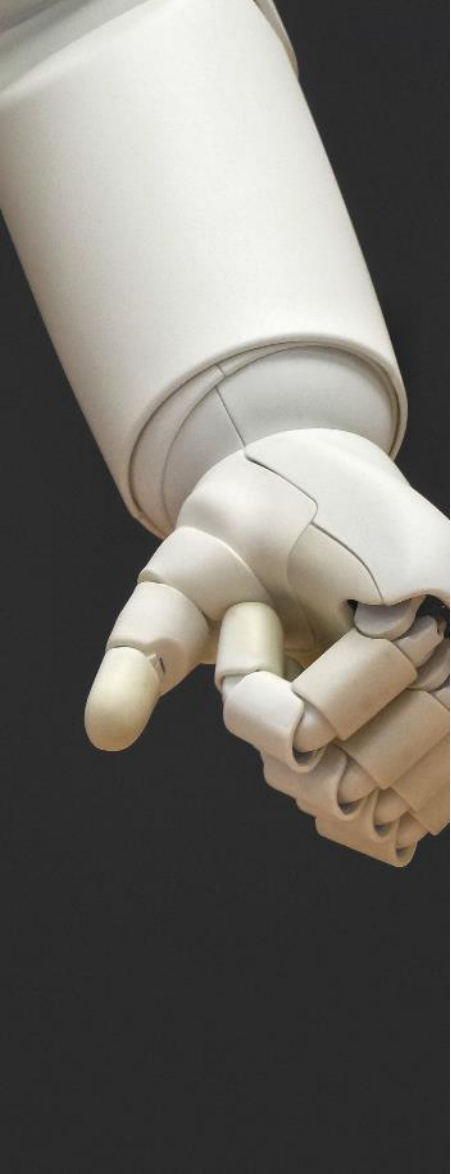




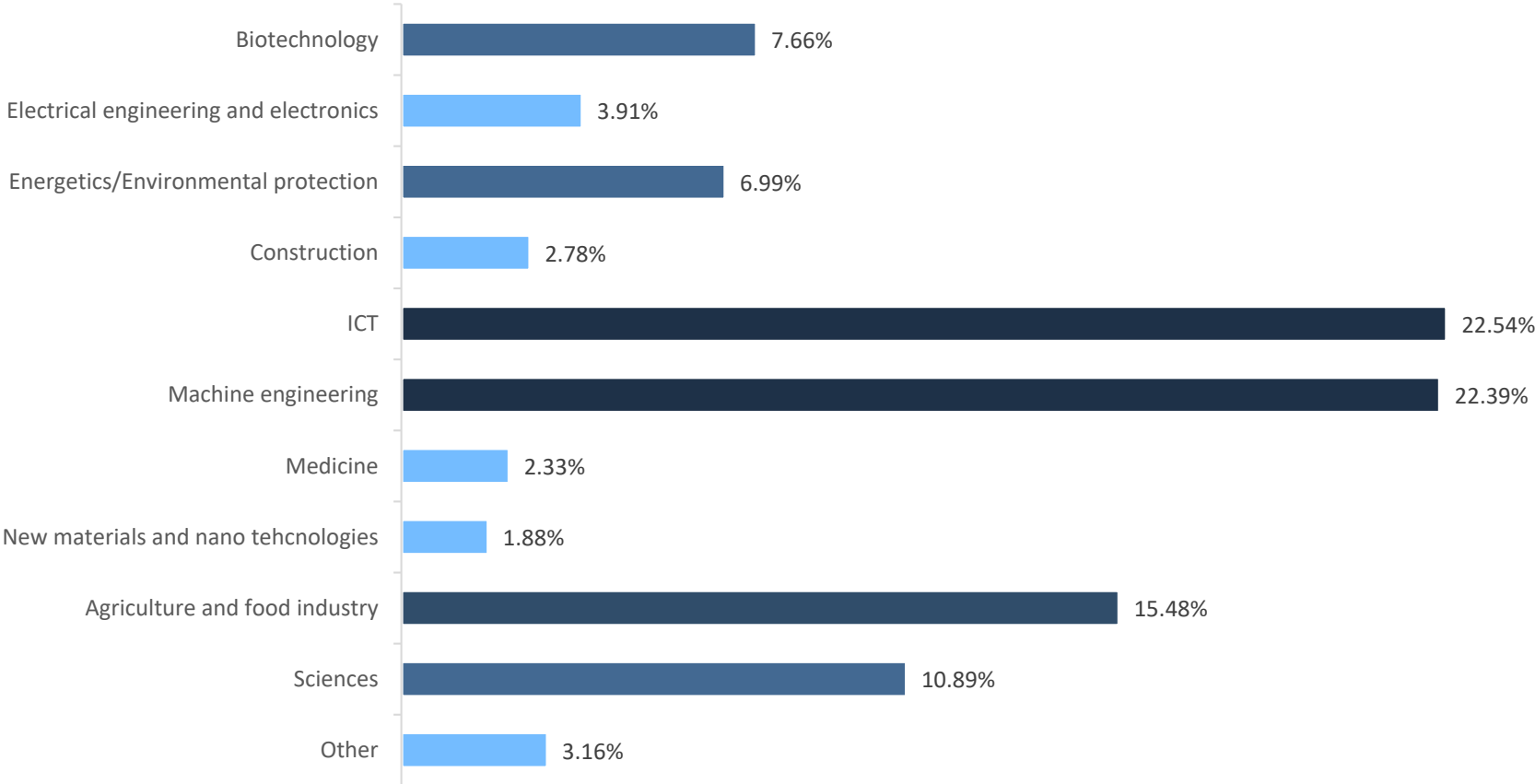
# Finding 3: NUTS3 level of analysis, region of Southern & Eastern Serbia



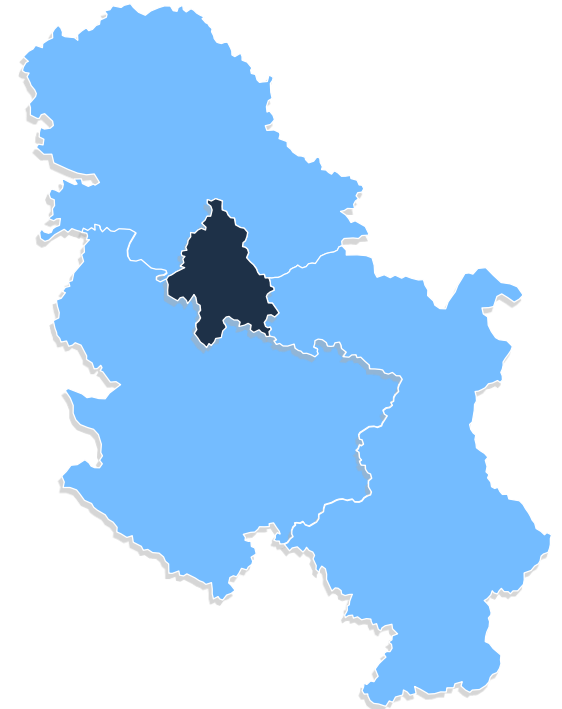
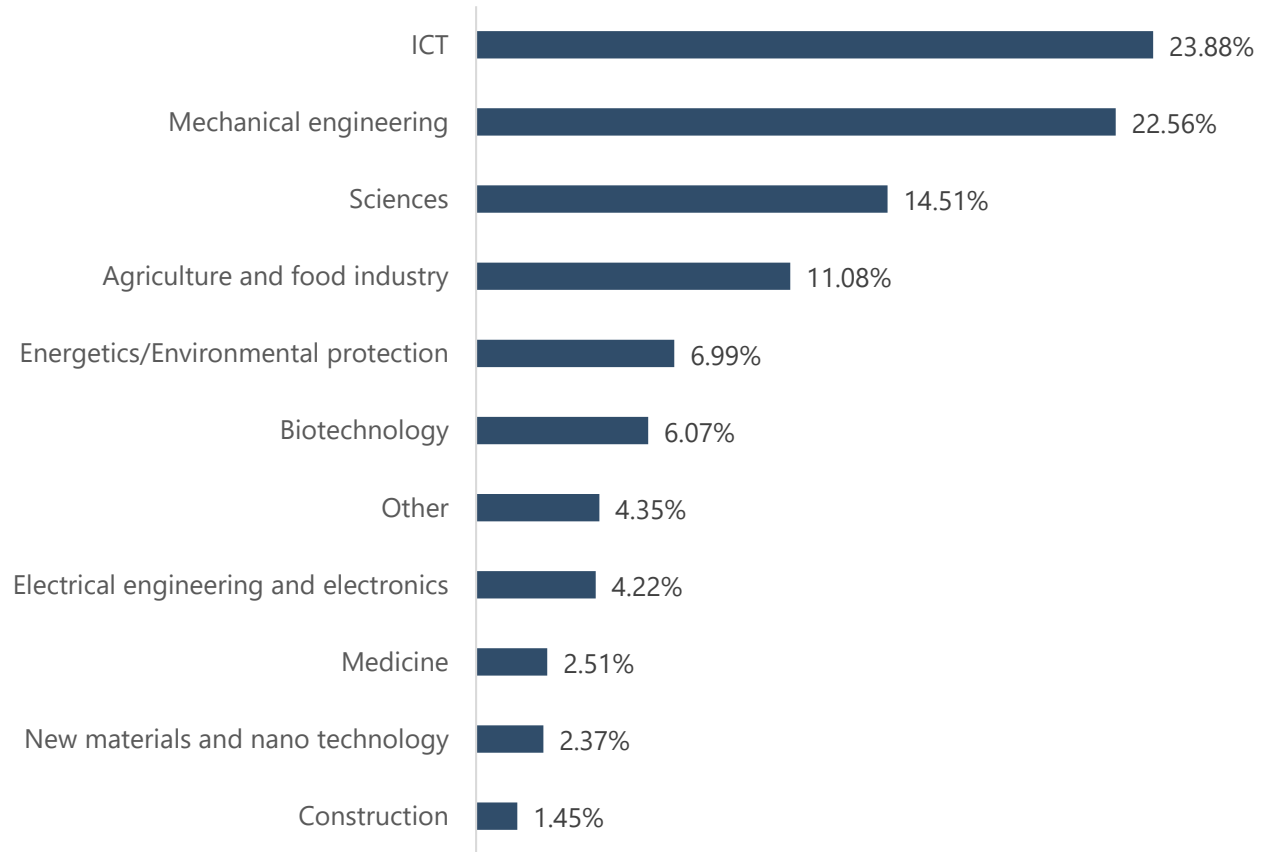
# Finding 4: Regional distribution of investments of the Fund



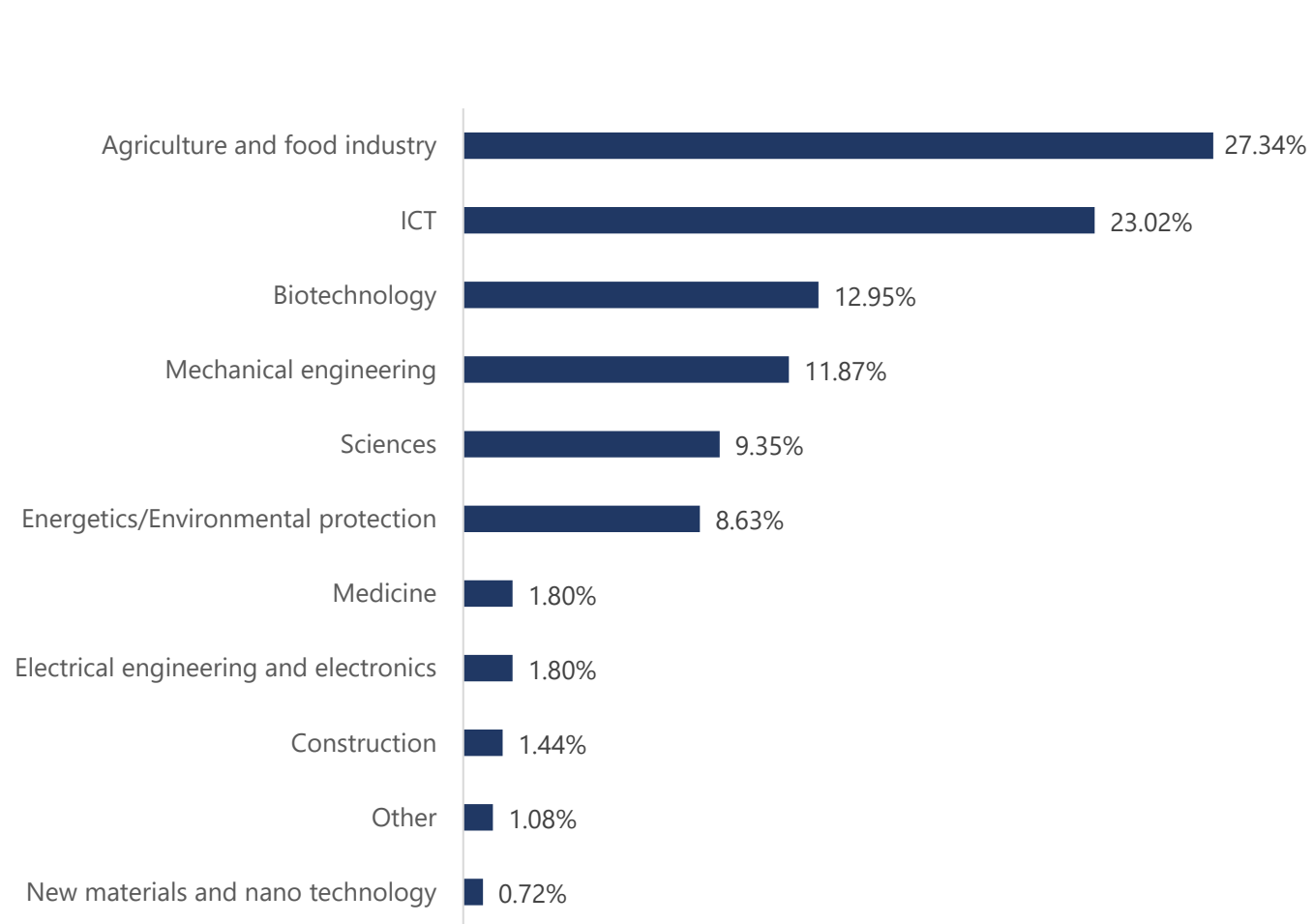
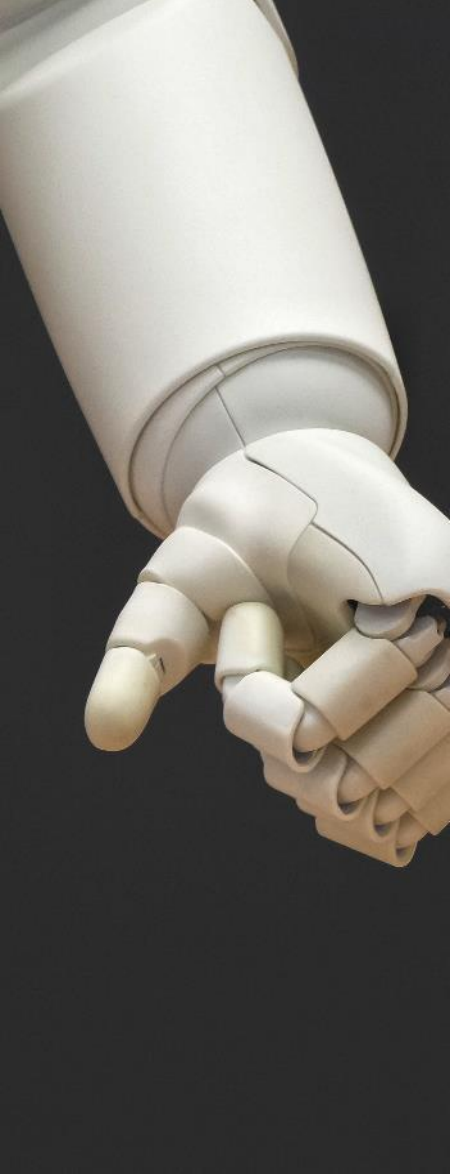
# Finding 5: Industries, all regions



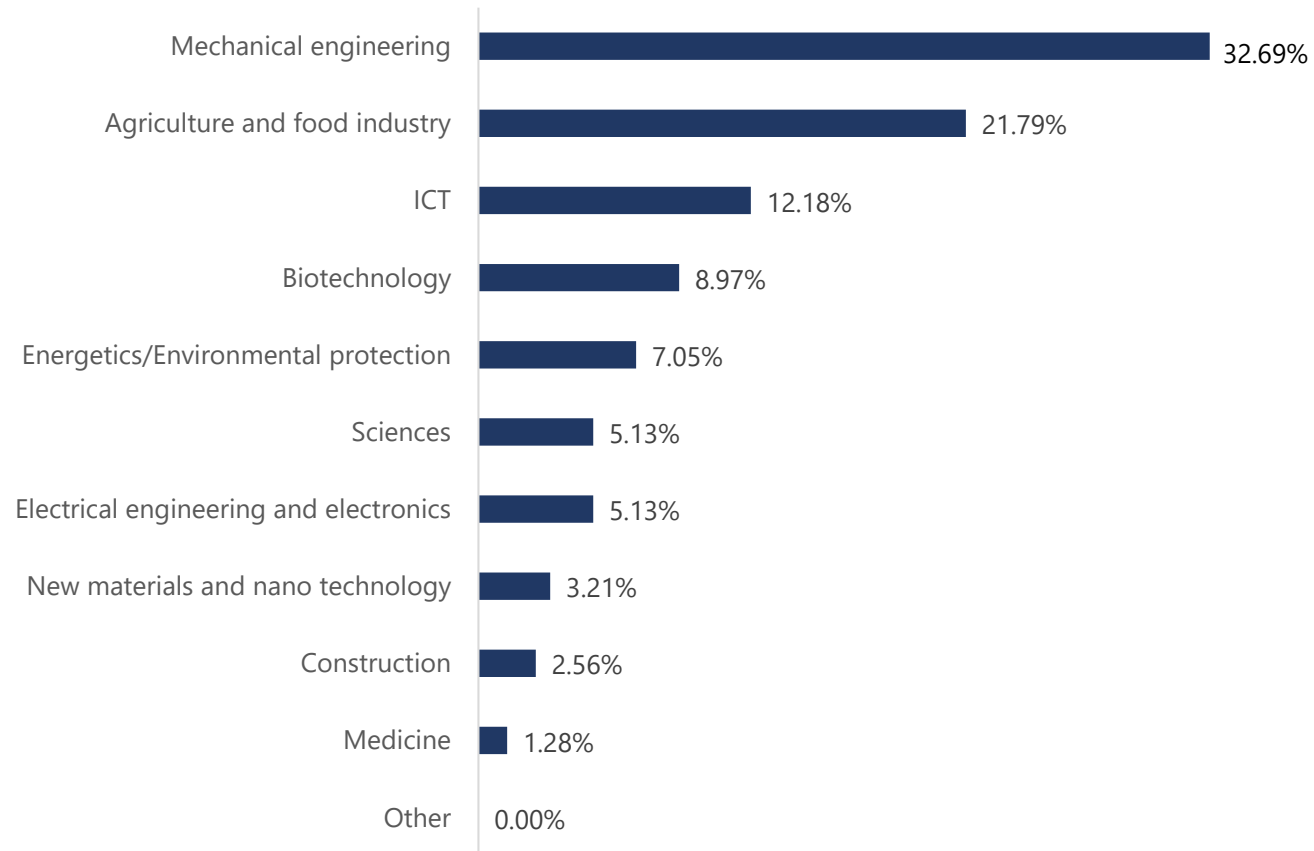
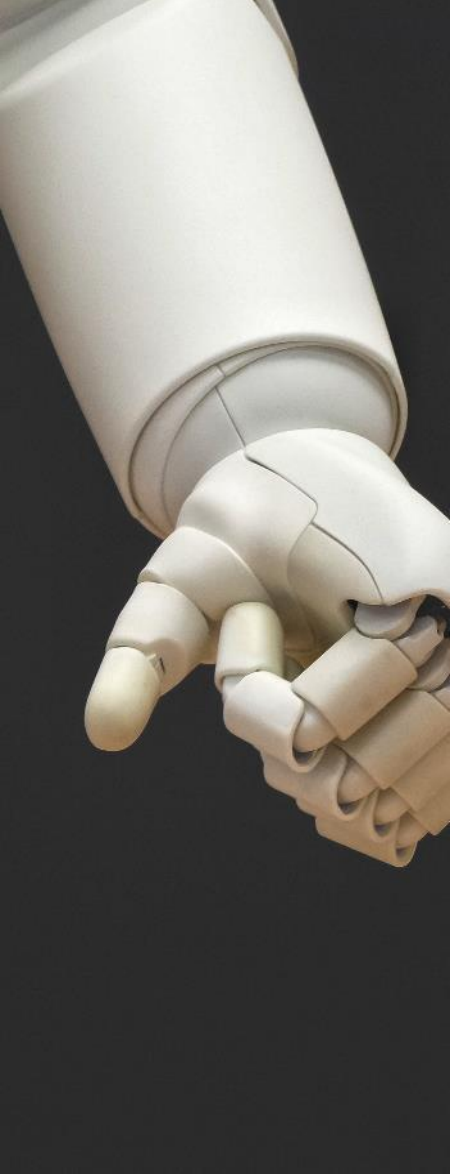
# Finding 5: Industries, region of Belgrade



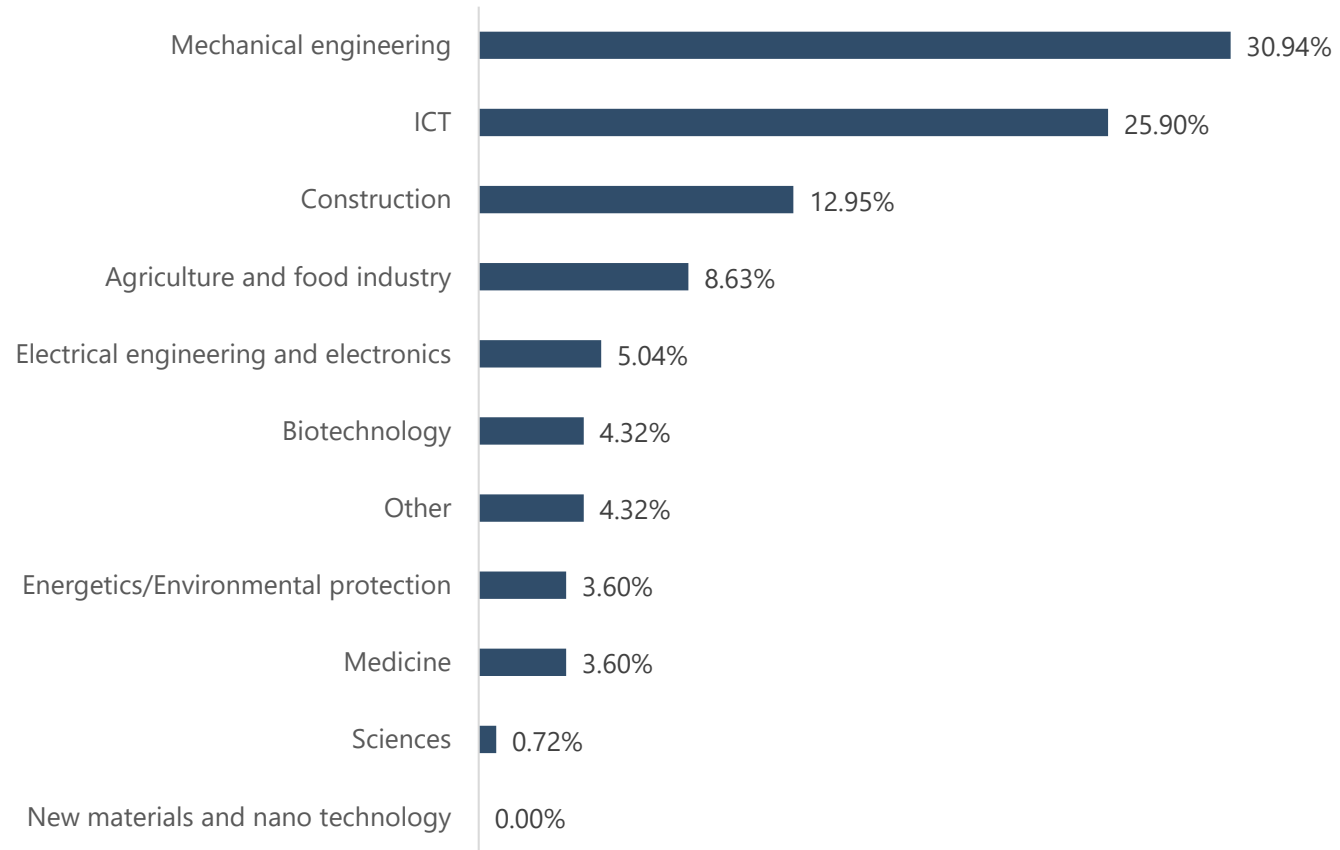
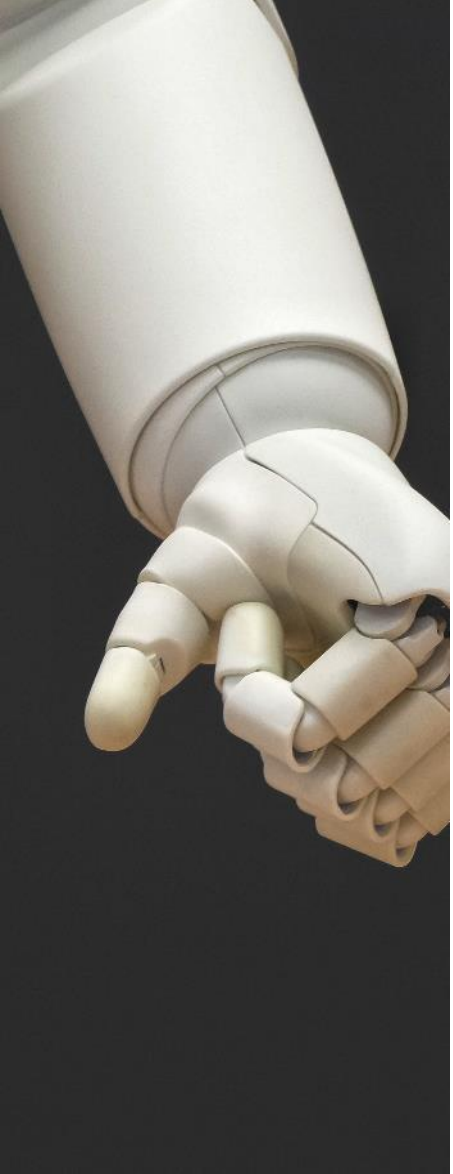
# Finding 5: Industries, region of Vojvodina



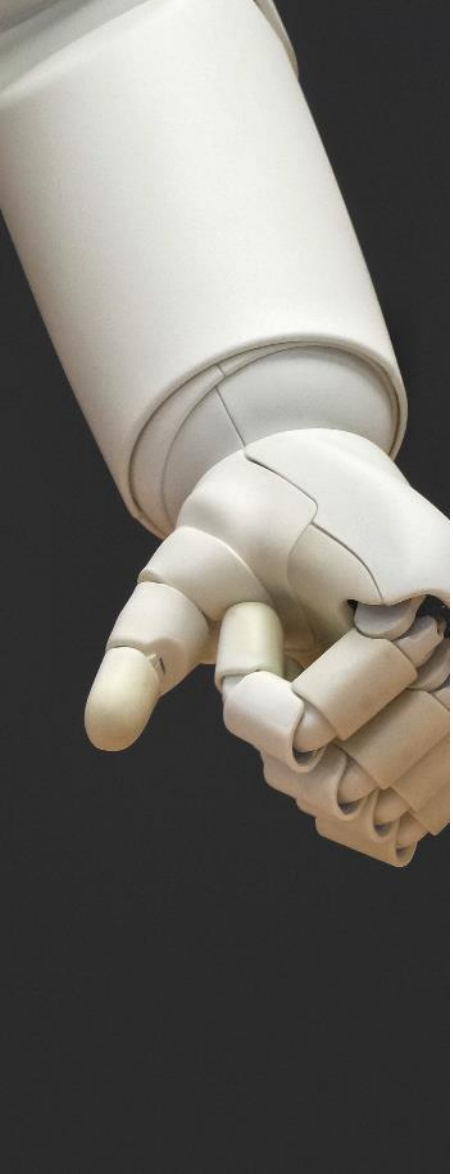
# Finding 5: Industries, region of Šumadija & Western Serbia



# Finding 5: Industries, region of Southern & Eastern Serbia



# Finding 6: Interregional cooperation through the Fund programmes

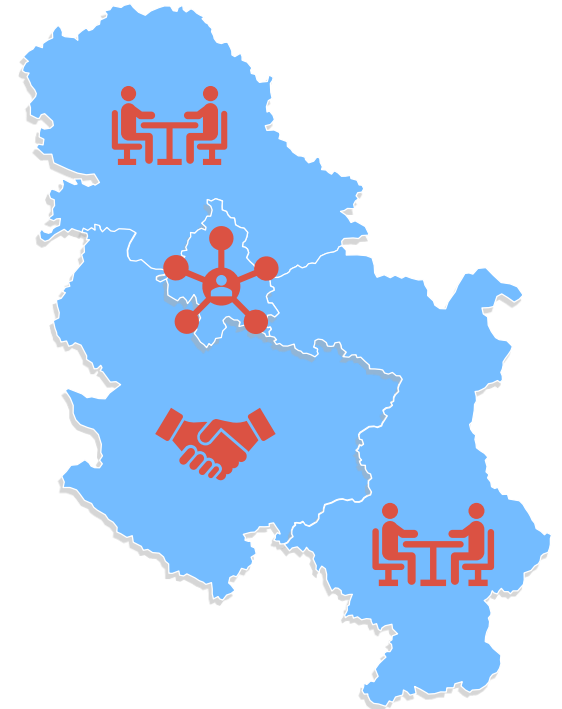


The business sector of the Belgrade region relies largely on the internal science capacities.

Science resources from the region of Belgrade are the key “external” partner for the private sector in other regions.

Vojvodina and Southern & Eastern Serbia are relatively closed to networking. Companies rarely opt for collaboration with science resources from other regions. When they do, they mostly collaborate with science organisations from Belgrade.

The business sector in Šumadija and Western Serbia is open to interregional collaboration. The private sector of this regions networks with the Belgrade academic sector in more than 60% projects.







**The region of Belgrade is dominant** in implementation of innovative activities and development. Relative to other regions, it has a significantly higher concentration of economic and science potentials.

**The lower level of innovation activities in other regions** reflects their relatively lower capacities for innovation. This asserts the rule of resource and agglomeration concentration.

**Science capacities from Belgrade** represent a the backbone for innovation actors in other regions. This highlights the role of the Belgrade academic sector also at the level of the national innovation ecosystem.

**Vojvodina and Southern & Eastern Serbia are relatively closed regional systems** – the economic and science capacities network within their own regions most often. **Šumadija and Western Serbia is an exception** – the business sector relies more on external science capacities than on its own.



- Regardless of whether the Smart Specialisation national principle would be kept or the regional principle adopted, align Smart Specialisation and balanced regional development policies: this is in line with the EU idea on the role of Smart Specialisation and a prerequisite for utilisation of the European funds.
- Regardless of which – national or regional – approach is embraced, develop a robust measurement instrument to monitor the impact of smart specialisation on the absorption of innovations at regional level so as to pre-empt the possibility of regional divergence, lagging and deepening of the gap.
- Within the process of RIS development, map the organisations and institutions in charge of regional development so as to include them in the promotion and stimulation of implementation of smart specialisation at regional/local level.



**THANK YOU  
FOR YOUR  
ATTENTION!**

