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INNOVATION SUPPORT IN SERBIA: MAPPING THE INSTITUTIONAL AND FINANCIAL INFRASTRUCTURE OF THE STARTUP ECOSYSTEM

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ABSTRACT:

The development of a vibrant startup ecosystem is a key driver of innovation, economic growth and competitiveness in knowledge-based economies. This paper provides an analytical overview of the institutional and financial infrastructure supporting startups in Serbia and maps the main components of the Serbian startup innovation ecosystem. The primary focus is placed on innovation support institutions such as science and technology parks, business incubators, accelerators, and academic innovation incubators, as well as public and private funding mechanisms. The research highlights recent developments in the expansion of support structures and the availability of early-stage funding, while also identifying ongoing challenges such as the low commercialization of academic research and an overreliance on grants as a safety net for early-stage startups. The paper offers insights for policymakers, ecosystem builders and researchers seeking to strengthen the foundations of a dynamic and sustainable startup ecosystem in Serbia moving forward.

Keywords: startup ecosystem, innovation infrastructure, financial support, startup entrepreneurship

1. INTRODUCTION

Innovation-driven entrepreneurship is increasingly recognized as a key engine of productivity growth and international competitiveness, especially in small, open economies. An innovation ecosystem is defined by the complex relationships formed between actors, whose objective is to enable technology development and innovation by growing the economy and creating jobs [1]. During last decade, Serbia has invested in a broad set of institutions and policy instruments that shape the country's startup landscape - from science and technology parks and innovation incubators to public grants, private investments and targeted tax incentives. Despite the rapid expansion of support infrastructure, some problems remain, including the limited commercialization of academic research, uneven regional development and a financing gap between grant-funded and venture-backed scaling. This paper maps the institutional and financial infrastructure of Serbia's startup ecosystem and organizes it into four interdependent pillars. The main contribution of this paper is to provide a systematized overview of the innovation ecosystem components and their interactions, by offering a foundation for identifying strengths, weaknesses, and opportunities to further develop Serbia's startup innovation ecosystem.

2. SERBIAN INNOVATION ECOSYSTEM FRAMEWORK

Serbian Innovation Ecosystem Framework provides a structured representation of the key institutional, financial, policy, and legal components that together support the development of an innovation environment in Serbia. The framework is divided into four interconnected pillars: (1) Innovation support institutions and science & research organizations, (2) Financial support and funding opportunities, (3) Policy bodies, agencies, and government funds, and (4) Legal framework and government strategies. Each pillar includes different but complementary elements that address different stages of the innovation lifecycle, from idea generation and early-stage development to commercialization and scaling.

SERBIAN INNOVATION ECOSYSTEM FRAMEWORK			
INNOVATION SUPPORT INSTITUTION AND S&R ORGANIZATIONS	FINANCIAL SUPPORT & FUNDING OPPORTUNITIES	POLICY BODIES, AGENCIES & GOVERMENT FUNDS	LEGAL FRAMEWORK & GOVERMENT STRATEGIES
SCIENCE AND TECHNOLOGY PARKS REGIONAL INNOVATION STARTUP CENTERS	GOVERMENT FINANCIAL SUPPORT PROGRAMS PRIVATE INITIATIVES FOR STARTUP FINANCING AND BUSINESS DEVELOPMENT	MINISTRY OF SCIENCE, TECHNOLOGICAL DEVELOPMENT AND INNOVATION INNOVATION FUND OF SERBIA	LAW ON INNOVATION ACTIVITY LAW ON ALTERNATIVE INVESTMENT FUNDS LAW ON DIGITAL ASSETS
ACADEMIC INNOVATION INCUBATORS BUSINESS & TECH INCUBATORS LINIVERSITIES & SCIENCE	SUPPORT VENTURE CAPITAL FUNDS PRIVATE INVESTORS & BUSINESS ANGELS ORGANIZATIONS	SCIENCE FUND OF SERBIA CHAMBER OF COMMERCE AND INDUSTRY OF SERBIA DEVELOPMENT AGENCY OF	THE PATENT LAW SMART SPECIALISATION STRATEGY STRATEGY FOR THE DEVELOPMENT OF STARTUP
INSTITUTES INNOVATIVE CENTERS & TECHNOLOGY TRASFER OFFICES	TAX INCENTIVES BANK LOANS	SERBIA SERBIAN INTELECTUAL PROPERTIES OFFICE	ECOSYSTEM STRATEGY ON SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT
INNOVATION COMUNITY SUPPORT ORGANIZATIONS	EU PROGRAMS AND INTERNATIONAL GRANTS	OFFICE FOR INFORMATIONAL TECHNOLOGY AND E-GOVERMENT	LOW ON SCIENCE AND RESEARCH ACTIVITIES
STARTUPS AND SCALEUPS, ACADEMIC SPIN-OFFS, INNOVATION-DRIVEN COMPANIES, PATENTS, LICENCES AND TECHNOLOGY TRANSFER OUTPUTS			

Fig. 1 Serbian Innovation Ecosystem Framework; Source: Authors

Fig. 1 shows the visual model of Serbian innovation ecosystem framework that highlights the Serbian innovation ecosystem, demonstrating how various actors and mechanisms interact to provide startups with physical infrastructure, mentorship, research and development capabilities, access to funding, regulatory guidance, and strategic direction. By mapping both institutional and financial infrastructures, the framework identifies the critical bridges between science, industry, and government, while also emphasizing the role of policy and legal instruments in fostering an enabling environment. The diagram further underscores the interdependence of these pillars, indicating that the absence or weakness of any component can significantly hinder ecosystem performance. This holistic approach aligns with contemporary innovation policy thinking, which recognizes ecosystems as complex adaptive systems requiring coordinated action from multiple stakeholders. In the context of Serbia, the framework also serves as a strategic tool for assessing strengths, gaps, and opportunities in aligning national innovation capacity with global competitiveness benchmarks.

2.1. Pillar I - Innovation support institutions and Science and research organizations

Innovation support institutions and science & research organizations form the foundational infrastructure of the Serbian innovation ecosystem, enabling the transformation of innovative ideas into market-ready products and services. Their role is

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not only to support early-stage startups but also to strengthen links between academia, industry, and government, by facilitating knowledge transfer and commercialization. In the Serbian context, these organizations had significant expansion, driven by targeted public investments in physical infrastructure, public and EU-funded programs, and increasing private sector engagement.

Science and technology parks (STPs) represent a vital component of Serbia's innovation ecosystem, acting as organized platforms that connect academia, research organizations, businesses, and the market. The Innovation Law of Republic of Serbia defined science and technology park as business entity whose purpose is to stimulate economic development through the promotion and advancement of innovation activities by facilitating and managing the flow of knowledge and technologies between universities, research organizations, businesses, and the market, as well as by providing support for the creation and growth of innovative enterprises [2]. In Serbia operates four major STPs—Belgrade, Niš, Čačak, and Novi Sad-hosting over 200 resident companies engaged in high-tech and knowledge-intensive sectors. The Belgrade STP, established in 2015, has supported over 240 early-stage tech companies, two-thirds of which are startups [3]. Science and technology park Niš focuses on the ICT sector, with a strong emphasis on electronics, telecommunications, and software engineering. Science and technology park Čačak serves as a hub for micro and small enterprises in mechatronics, agricultural technology, and IT solutions, maintaining strong ties with the local academic community. It is the only Science and technology park in Serbia equipped with a production hall, enabling a strong focus on hardware development. Science and technology park Novi Sad, focus on startups and high-tech companies particularly in AI, agritech, and biotechnology. All Science and technology parks in Serbia are strategically distributed across the country to ensure balanced regional innovation development. They maintain direct collaboration with the four largest universities in Serbia — the University of Belgrade, the University of Niš, the University of Kragujevac, and the University of Novi Sad.

Regional Innovation Startup Centers (RISCs) are specialized support hubs established to stimulate innovation and entrepreneurship at the local and regional levels. These centers are particularly important in cities that do not have faculties and are not part of the broader academic community. By establishing RISCs in such locations, Serbia ensures that entrepreneurial opportunities, training programs, and innovation support services are accessible to a wider range of people, including those in less-developed areas. This approach helps bridge the gap between urban and rural innovation capacity, enabling local talent to access resources that they need. Currently, there are more than 20 Regional innovation startup centers in Serbia, each having a different level of impact on innovation activity within their respective regions. Regional innovation startup centers are strategically located in cities such as Gornji Milanovac, Subotica, Leskovac, Vrnjačka Banja, Zlatibor and others, with goal to ensure balanced territorial coverage and inclusion of regions outside the main innovation hubs. These centers typically offer co-working spaces, training programs, networking events, and services such as business model development and intellectual property protection. Over the past two years, science and technology parks in each region have taken on a significant role in coordinating the activities of regional innovation startup centers, with the aim of enhancing overall innovation activity within their respective regions.

In Serbia, academic **Innovation incubators** operate as integral parts of the broader innovation infrastructure, bridging the gap between academia and industry. Academic Innovation incubators are specialized organizational units within universities and research institutions designed to foster entrepreneurship, support commercialization of research results, and accelerate the transformation of innovative ideas into viable business ventures. Their primary mission is to provide students, researchers, and faculty members access to mentoring, business development trainings, intellectual property advisory services, and early-stage networking opportunities. Establishment of Innovation incubators is also intended to inspire an entrepreneurial mindset among young people and to increase the likelihood of success in the early stages of business development [4]. Academic innovation incubators were established through a project initiated by the Ministry of science, technological development and innovation of of Serbia and during 2024 - their first year they have provided structured mentoring and support to 133 academic startup teams [5]. In addition to the 12 innovation incubators that have continued operations after their first year, plans are underway to establish 17 more, bringing the total to 29. These incubators are expected to serve as a link between research results and commercialization, as well as between student startup ideas and their entry into the market.

Most **Business and technology incubators** have their origins in the early 2000s, when the first such initiatives were established with the aim of fostering entrepreneurship and stimulating economic growth across different regions. Initially, their primary focus was on supporting traditional small and medium-sized enterprises, often by providing shared workspace, basic business advisory services, and access to local markets. In Serbia today, they serve as platforms for nurturing early-stage companies through a combination of workspace provision, business advisory support, and technology development services. Many of these incubators have shifted their focus toward startup and innovation-driven entrepreneurship, aligning their activities with modern trends in the knowledge economy.

Universities and Institutes are the backbone of Serbia's research and innovation capacity, providing both human capital and knowledge resources for the startup ecosystem. The largest universities such as universities at Belgrade, Novi Sad, Niš, and Kragujevac — together produce the majority of the country's graduates in STEM fields, supplying skilled talent to innovative and startup companies. Research institutes conduct applied research in priority sectors such as ICT, biotechnology, and engineering. Through collaborative projects with industry, institutes facilitate the commercialization of academic research and enable environment for academic entrepreneurship.

Innovative centers and Technology transfer offices (TTOs) act as intermediaries between research institutions and the private sector, ensuring that scientific discoveries and technological advancements find their way into commercial application. In Serbia, TTOs are offering services such as intellectual property protection, licensing negotiations, and spin-off formation. Innovation centers, on the other hand, focus on applied research and product development, often in collaboration with private sector clients. By bridging the gap between scientific output and market demand, they play a crucial role in increasing the commercialization rate of Serbian research. It is important to highlight the significance of the Serbia Accelerating Innovation and Growth Entrepreneurship (SAIGE) project, which supports the ongoing reform of the scientific research sector, strengthens linkages between the business and academic sectors, and fosters the development of innovative enterprises [6].

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Innovation community support organizations include associations, non-governmental organizations, and networks that promote innovation culture, entrepreneurship, and startup growth across Serbia. Examples include ICT Hub, Digital Serbia Initiative, StartIT, Nova Iskra and others which provide co-working spaces, educational programs, and community-building events. These organizations often operate independently of government structures, enabling them to act flexibly and respond quickly to emerging needs within the startup community. Through hackathons, pitch events, and public awareness campaigns, they inspire new generations of entrepreneurs and connect them with mentors, investors, and international networks.

2.2. Pillar II - Financial Support & Funding Opportunities

Government financial support programs represent one of the most significant sources of early-stage funding for startups in Serbia, particularly in the pre-revenue and proof-of-concept phases. The Ministry of science, technological development and innovation, through the Innovation fund of Serbia, provides grants under programs such as the Mini grants program, Matching grants program, Smart start program and Catapult accelerator program. These programs are designed to de-risk investments in innovative ventures by covering more than 70% of eligible costs (depending on the program) and by encouraging co-investment from the private sector. The Startup ecosystem development strategy 2021–2025 explicitly emphasizes the role of these funding schemes in increasing the number of innovation-driven enterprises and improving their competitiveness in global markets [7].

Private initiatives for startup financing and business development support in Serbia have grown significantly over last decade, complementing public funding schemes and providing more flexible investment instruments. These initiatives are led by private accelerators, corporate innovation programs, and non-governmental organizations that provide seed funding, mentorship, and business development services to early-stage companies. Notable examples include Univerzum program, backed by the Mozzart Foundation, supports startups that have MVP while the StarTech program, funded by Philip Morris Serbia offers grants for innovative business ideas and commercialization of research. The Swiss Entrepreneurship Program financed by the Swiss Agency for Development and Cooperation, strengthens the operational capacities of local accelerators, hubs, and innovation organizations through mentoring program that include international expertise. The SEE UP Accelerator targets startups with proven market validation, providing seed funding, mentoring, and access to a network of investors. Many of these initiatives have strong international linkages, allowing Serbian startups to access global investor networks and integrate into regional innovation ecosystems.

Venture capital funds in Serbia provide equity investment to innovation-driven companies with high growth potential, typically in exchange for a minority ownership stake. The availability of VC funding in Serbia remains limited compared to EU averages, but trends indicate steady growth, particularly in the ICT, fintech, and agritech sectors. More recently, funds such as TS Ventures Fund (backed by Telekom Srbija) and ICT Hub Venture and new VC funds founded in 2024 - Omorica Venutures and Fifth Quarter Ventures, have expanded investment opportunities for early-stage companies, often combining capital with strategic industry connections. Strengthening the VC market is

identified as a priority in the Startup Ecosystem Development Strategy 2021–2025, which calls for regulatory alignment with EU investment frameworks [7]. The Innovation Fund of Serbia implements the Innovative Ventures program, which provides public cofinancing to encourage the establishment and expansion of VC funds.

Private investors and business angels represent an essential source of flexible early-stage financing for startups in Serbia, complementing institutional funding sources such as venture capital and government grants. In Serbia, the leading organized network is the DSI Business Angels Network, established by the Digital Serbia Initiative, which connects investors with startups across ICT, fintech, agritech, and other innovation-driven sectors. Investments from Serbian business angels typically range up to €50,000, targeting companies in the pre-seed and seed stages. Beyond capital, these investors often play a important role in shaping a startup's go-to-market strategy, refining product-market fit, and internationalization. The presence of angel investors in Serbia has grown last years, partly due to awareness programs, tax incentives, and networking events organized in collaboration with EU-funded projects. However, challenges remain in terms of market liquidity, standardized deal and negotiation structures, and exit opportunities which are still limited compared to more mature EU ecosystems.

Tax incentives in Serbia are designed to stimulate investment in innovation, R&D and the growth of startup companies, while also attracting foreign investment in high-value sectors. These incentives aim to lower the cost of innovation activities and improve the competitiveness of Serbian enterprises. The most important incentives include:

- *R&D Double Deduction* companies conducting research and development activities in Serbia may deduct qualified R&D expenses in double the amount when calculating corporate income tax, effectively reducing their taxable base [8];
- *IP Box* companies owning registered intellectual property may exclude up to 80% of qualifying IP-derived income from their corporate tax base, effectively reducing the applicable rate to 3% [9];
- Payroll Tax & Social Contribution Exemptions for R&D Staff companies engaging employees in R&D are entitled to up to 70% exemption on salary taxes and 100% exemption on social security contributions, proportionate to R&D involvement [8];
- *Investing in Innovative Startups (Tax Credit)* investors in newly founded innovative companies can claim a 30% tax credit on their investment, subject to eligibility criteria such as financial limits and R&D share [10];
- Tax Exemption for Startup Founders founders of innovative companies who are employed in their own startups can be fully exempt from paying salary tax and social contributions (up to 150,000 RSD per month, for up to 36 months) [11].

Bank loans remain a traditional source of financing for small and medium-sized enterprises (SMEs) in Serbia, but they are generally less accessible to early-stage, innovation-driven ventures due to stricter collateral requirements and the need for an established credit history. Most commercial banks provide financing options for entrepreneurship beginners, which are not specifically designed for startups but can still be used by them. Certain banks provide SME-focused credit lines, often in cooperation with international financial institutions. For example, through a special startup loan program in partnership with the Serbian Entrepreneurship Foundation (SEF), NLB Komercijalna banka offers newly founded micro and agro businesses financial support of up to €30,000, combined with a grant of up to €3,000 [12]. Nevertheless, startups in Serbia

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make limited use of bank loans, both because of their relatively small amounts and the eligibility requirements that early-stage companies rarely manage to meet.

EU programs and international grants play a significant role in financing startups and strengthening the startup ecosystem in Serbia, particularly by providing non-dilutive funding that does not require equity sharing. Through the Horizon Europe program, Serbian startups and research institutions can access significant grant opportunities for collaborative R&D projects, with funding amounts that often exceed €500,000 per consortium partner [13]. The European Innovation Council (EIC) Accelerator offers blended finance, combining grants of up to €2.5 million with equity investments of up to €15 million, targeting high-impact innovations with strong market potential [14]. Many international grants are channeled through national institutions, such as the Innovation Fund's Collaborative Grant Scheme funded by the EU, which supports partnerships between industry and academia. International development agencies, including USAID, Swiss SDC, and the German GIZ, complement EU funding by supporting sector-specific projects, accelerators, and ecosystem-building initiatives, increasing the competitiveness of Serbian startups and Serbian startup innovation ecosystem.

2.3. Pillar III - Policy bodies, agencies & government funds

In Serbia, policy bodies, national agencies, and government funds play a strategic role in creating an enabling regulatory environment, mobilizing financial resources, and fostering cooperation between academia, industry, and the public sector. The key institutions in this pillar are:

- Ministry of Science, Technological Development and Innovation of Republic of Serbia plays a central role in shaping Serbia's innovation policy framework and aligning it with European and global standards. It designs and implements national strategies, such as the Startup Ecosystem Development Strategy 2021–2025 and the Smart Specialisation Strategy, which set priorities for research, development, and commercialization activities. Through its programs, the Ministry channels public and EU funds into research institutions, startups, and innovation infrastructure. It also fosters inter-ministerial coordination to integrate innovation policy with education and industrial competitiveness. Since 2015 the Ministry has worked to build a predictable regulatory and funding environment by strengthening Serbia's capacity to generate high-value innovations and to compete in the global knowledge economy;
- The Innovation Fund of Serbia is a key financial instrument for supporting innovation-driven enterprises and commercialization of research results. It has launched a range of funding programs, such as the Mini Grants, Matching Grants, Smart Start, Katapult, which have collectively provided more than €50 million to over 400 projects. The Fund plays a catalytic role in attracting private investment by co-financing high-risk, high-potential ventures, often in partnership with EU programs like Horizon Europe. It also contributes to capacity building by offering mentoring, training, and international networking for startups and researchers;
- The Science Fund of Serbia plays a strategic role in financing high-quality research projects that form the basis for future innovation. Since its establishment in 2019, it has implemented competitive grant programs such as IDEAS, PRISMA, and PROMIS, with

a combined budget exceeding €80 million. By focusing on scientific excellence, the Fund supports academic projects across priority areas including ICT, biomedicine, environmental sustainability, and advanced materials. It fosters stronger collaboration between research institutions and the private sector, by accelerating the transfer of knowledge into commercially viable solutions;

- Chamber of Commerce and Industry of Serbia acts as a vital intermediary between the business sector, government institutions, and the international market. It provides startups and SMEs with access to advisory services, export promotion programs, and specialized training aimed at increasing competitiveness. It also plays a coordinating role in integrating Serbian companies into EU-funded programs and by promoting business networking, knowledge exchange, and market access, the Chamber contributes significantly to the growth of innovation-driven entrepreneurship in Serbia;
- The Development Agency of Serbia is responsible for implementing national economic development policies, with a strong focus on attracting investment and supporting the growth of SMEs and startups. It offers a range of financial and non-financial support instruments, including grants for equipment procurement, export promotion programs, and participation in international trade fairs;
- The Serbian Intellectual Property Office plays a crucial role in protecting and managing intellectual property rights, which are essential for fostering innovation and attracting investment. It provides services related to the registration of patents, trademarks, industrial designs, and geographical indications, ensuring that innovators can safeguard their creations. It also collaborates with the World Intellectual Property Organization (WIPO) and the European Union Intellectual Property Office (EUIPO) to harmonize Serbia's IP framework with international standards;
- The Office for Information Technology and eGovernment is a central government body tasked with developing Serbia's digital infrastructure and delivering advanced eGovernment services. By implementing projects such as the State Data Center in Kragujevac and expanding the eGovernment portal, it creates a more efficient and transparent public administration. For the innovation ecosystem, the Office's initiatives in open data, digital identity, and secure electronic communication provide startups and SMEs with essential digital tools to enhance their operations and service delivery.

2.4. Pillar IV - Legal Framework & Government Strategies

A coherent legal and strategic framework is essential for creating a predictable environment that supports innovation, entrepreneurship, and technology transfer. In Serbia, the legal framework defines the rights, obligations, and incentives for innovation actors, while national strategies set long-term priorities and coordinate the efforts of government, academia, and industry. Key laws and strategies include:

- The Law on Innovation Activity establishes the legal basis for supporting innovation and defines the instruments available for financing research, development, and commercialization of new products and services. It regulates the status of innovation organizations, the rights and responsibilities of innovators, and the mechanisms for state support. This law has been periodically updated to align with EU innovation policy and to expand the range of eligible beneficiaries;
- The Law on Alternative Investment Funds regulates the establishment, management, and operation of investment funds that do not fall under traditional collective investment schemes. For the innovation ecosystem, it provides the legal framework for creating

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venture capital funds and private equity instruments that can finance startups and highgrowth companies;

- The Law on Digital Assets establishes the legal framework for the issuance, trading, and use of cryptocurrencies, tokens, and other blockchain-based assets. It recognizes digital assets as a legitimate form of value exchange and investment, enabling startups in fintech and blockchain sectors to operate within a regulated environment;
- The Patent Law provides inventors and companies with exclusive rights to exploit their patented technologies by encouraging research and development activities. The law aligns with the European Patent Convention and international treaties administered by the World Intellectual Property Organization (WIPO). By ensuring legal certainty and effective enforcement, the Patent Law supports the commercialization of innovations in both domestic and international markets;
- The Law on Science and Research Activities sets the legal foundation for organizing and financing scientific research in Serbia. It defines the roles of research organizations, funding mechanisms, and evaluation criteria for scientific output. For the innovation ecosystem, it ensures a steady supply of high-quality research results that can be commercialized through startups and technology transfer;
- The Smart Specialisation Strategy identifies priority domains in which Serbia has the greatest potential for innovation-driven growth, it focuses on areas such as information and communication technologies, food for the future, creative industries, and sustainable energy. For startups, it creates a clear framework for identifying high-potential sectors and directing support instruments toward them;
- The Strategy for the Development of the Startup Ecosystem 2021–2025 sets the vision, goals, and measures for strengthening Serbia's startup environment. The strategy promotes collaboration between public institutions, the private sector, and academia to create a better support system for startups. For the innovation ecosystem, it acts as a roadmap for policy reforms, infrastructure and capacity building;
- The Strategy on Scientific and Technological Development outlines Serbia's priorities in advancing research and technological capacity. The strategy integrates scientific excellence with industrial needs, promoting the commercialization of research outputs. For the innovation ecosystem, it ensures that science and technology are leveraged to drive economic growth and societal well-being.

3. CONCLUSION

Serbia's startup ecosystem has significantly evolved over last decade through the expansion of innovation infrastructure, diversification of funding sources, and the establishment of a needed legal and strategic framework. Public and EU-funded programs, alongside emerging private initiatives, have improved access to resources for startups. However, challenges remain in commercialization of research, attracting private capital, and ensuring balanced regional development. Addressing these gaps is essential for increasing the global competitiveness and long-term sustainability of Serbia's innovation ecosystem. Strengthening of cooperation between academia, industry, and government will be critical to sustaining further development. Improvement of venture capital markets, technology transfer mechanisms, and innovation-friendly regulations will play a decisive role in supporting scale-up and international expansion.

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5. LITERATURE

- [1] Bandera, C., Thomas, E. (2018). *The Role of Innovation Ecosystems and Social Capital in Startup Survival*, Transactions on Engineering Management, pp. 542-551.
- [2] Official Gazette of the Republic of Serbia, *Law on Innovation Activity*, Official Gazette of the Republic of Serbia No. 129/2021, Belgrade, Republic of Serbia, 2021
- [3] How to bring startups to global markets (2025), European Investment Bank. (https://www.eib.org/en/stories/science-technology-park-belgrade-innovation-serbia.com, accessed 18 May 2025.)
- [4] Radosavljević, N., Dragićević, S., Đoković, M. (2024). *Empowering Student Entrepreneurship Education: The Role of Academic Innovation Incubators*, Technics, Informatics and Education TIE, Sep. 20-22.2024., Čačak, Serbia, p. 458.
- [5] Innovation incubators in scientific research organizations achieved outstanding results in their first year of operation (2025), Ministry of Science, Technological Development and Innovation of Republic of Serbia (https://www.nitra.gov.rs/en/ministarstvo/vesti/inovacioni-inkubatori-u-naucnoistrazivackim-organizacijama-ostvarili-izvanredne-rezultate-u-prvoj-godini-rada, accessed 18 May 2025.)
- [6] Serbia Accelerating Innovation and Growth Entrepreneurship Project SAIGE (2024), Innovation fund of Republic of Serbia (https://www.inovacionifond.rs/en/int-projects/serbia-accelerating-innovation-and-growth-entrepreneurship-project-saige, accessed 2 June 2025.)
- [7] Official Gazette of the Republic of Serbia, *Startup ecosystem development strategy of the Republic of Serbia for the period 2021-2025*, Official Gazette of the Republic of Serbia, No. 30/18, Belgrade, Republic of Serbia, 2018.
- [8] Tax Incentives for Research and Development (2023), CEE Legal Matters, (https://ceelegalmatters.com/briefings/23110-tax-incentives-for-research-and-development, accessed 2 June 2025.)
- [9] Serbia Tax Benefits for Companies Don't Give Away Your Money Just Yet (2023), Zunic Law, (https://zuniclaw.com/en/serbia-tax/, accessed 2 June 2025.)
- [10] Corporate tax credits and incentives Sebia overview (2025), PwC, (https://taxsummaries.pwc.com/serbia/corporate/tax-credits-and-incentives, accessed 16 June 2025.)
- [11] Manja osnovica poreza i doprinosa za zapošljavanje povratnika i stranaca (2024), Startap portal, (https://startap.gov.rs/olaksice-podsticaji/poresko-oslobodjenje-za-osnivace-startapa, accessed 18 June 2025.)
- [12] Mikro biznis startap-up krediti (2024), NLB Komercijalna bank, (https://www.nlbkb.rs/mikro-biznis/krediti-za-mikro-privredne-subjekte/mikro-biznis-start-up-krediti, accessed 23 June 2025.)
- [13] *Horizon Europe* (2025), European Commission, (https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe en, accessed 20 July 2025.)
- [14] EIC Accelerator (2025), European Innovation Council, (https://eic.ec.europa.eu/eic-funding-opportunities/eic-accelerator_en, accessed 20 July 2025.)