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## CHALLENGES AND OPPORTUNITIES FOR STARTUP ECOSYSTEMS IN THE EUROPEAN UNION: DIRECTIONS FOR ENTERPRISE GROWTH AND ECONOMIC DEVELOPMENT

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This article provides an in-depth exploration of the dynamic and evolving startup ecosystems within the European Union (EU), emphasizing both their distinctive challenges and promising opportunities. As crucial engines of innovation, startups play a pivotal role in driving economic growth, accelerating technological advancement, and tackling global issues such as climate change and digital transformation through entrepreneurial creativity and sustainable solutions. The EU's startup environment is characterized by its maturity, diversity, and robust funding landscape. Major innovation hubs like Berlin, Paris, Amsterdam, and Barcelona serve as powerful nodes in a wider European network that benefits from harmonized markets, comprehensive regulatory frameworks, and institutional initiatives such as Horizon Europe and the European Innovation Scoreboard. These structures not only support early-stage ventures but also incentivize scale-up potential across borders. Notable growth sectors include GreenTech, Artificial Intelligence (AI), and FinTech, which offer significant promise for long-term competitiveness and global relevance. The EU's commitment to sustainability and digitalization aligns closely with these sectors, positioning its startups to lead in future-oriented industries. However, the article also discusses barriers that remain, such as fragmented legal systems, talent retention challenges, and access to late-stage capital. To overcome these, the text advocates for stronger cross-border cooperation, clearer and more consistent policies, and targeted public and private investment strategies aimed at increasing ecosystem resilience and inclusivity. By critically analyzing and addressing these factors, the EU has the opportunity to not only strengthen its internal innovation capacities but also establish itself as a global leader in shaping the next generation of startup-driven economic and technological progress.

**Keywords:** startup ecosystem, innovation, challenges, opportunities, greentech, AI, fintech, collaboration.

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### ***Problem statement***

The startup ecosystems of the European Union (EU) play a pivotal role in driving innovation, economic growth, and solutions to global challenges. However, these ecosystems face a range of shared and region-specific challenges that hinder their full potential. This article aims to identify common obstacles, explore emerging opportunities and trends, and provide policy recommendations to foster

sustainable growth in both regions.

The startup ecosystems in the European Union have experienced significant changes due to geopolitical tensions, technological innovation, and shifting economic conditions. This article highlights the development of startups in the context of the challenges and opportunities faced by these regions in stimulating entrepreneurial activity.

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### ***Analysis of the latest research and publications***

Modern trends in the economic development of leading countries show that the strategic management of startup entrepreneurship has undergone significant changes. In the conditions of the formation of the innovative sphere, as a factor of the economic development of an individual country, there is an increase in competition for talents and the development of high-tech products, which allows the implementation of innovative strategies for developing the country's economy [1; 2; 3].

The modern EU innovation policy is based on two key approaches: smart specialization and mission-oriented approach, which are designed to mutually reinforce and complement each other in building national innovation ecosystems capable of producing scientific knowledge and innovation for sustainable and inclusive growth in Europe. Successful implementation of the policy requires joint concerted efforts of the EU member states as well as the EU neighbors. Today, the EU indeed faces the task of building a self-sustaining, efficient European innovation ecosystem that brings science and business closer together and is able to tackle global challenges. At the same time, the political leadership of the EU and the governments of the EU Member States cannot fail to recognize the complexity of such a task, and it is, therefore, more important than ever for them to expand their cooperation with other democratic European and non-European countries [2].

By 2025, Europe's startup ecosystem is characterized by over 100 active unicorns across sectors like fintech, healthtech, AI, and renewable energy, record venture capital investment exceeding €50 billion in 2024, the emergence of major technology hubs such as Berlin, Paris, Amsterdam, Barcelona, and Lisbon, and a diverse talent pool with 42% international founders and increasing female leadership in early- and growth-stage startups [3].

The European Union's startup ecosystem faces its own set of challenges, including regulatory fragmentation across member states, difficulties in accessing venture capital, and labor market constraints. Despite these challenges, the EU's Startup Ecosystem remains robust, with several key opportunities identified in the literature. The EU's commitment to digital transformation presents vast opportunities for tech startups, particularly in AI, blockchain, and the Internet of Things.

### ***The purpose of the article***

The purpose of this article is to analyze the key challenges and opportunities facing the startup ecosystem in the European Union, focusing on factors

such as regulation, financing, innovation and talent. It aims to identify factors that will foster entrepreneurship growth and shape policies to help shape the next generation of startup-based economic and technological development in the EU.

### ***Presentation the main material***

Europe's startup ecosystem holds strong potential but faces barriers like regulatory complexity, talent shortages, and limited access to capital. The StepUp Startups project identifies key reforms – simplifying regulations, attracting global talent, and improving financial systems – as essential to boosting innovation, competitiveness, and growth. Through initiatives like Startup Europe and the Capital Markets Union, efforts are underway to create a more dynamic, startup-friendly Europe [4].

Startups in EU confront significant barriers, including:

- access to funding: securing early-stage capital remains a challenge. While the EU offers extensive resources, funding is often concentrated in developed hubs, leaving peripheral regions underserved;
- talents shortages: A shortage of skilled labor, particularly in IT, AI, and engineering, affects both ecosystems. In the EU, talent is constrained by competition with large corporations and cross-border regulatory hurdles;
- regulatory Complexity: Fragmented regulations complicate market entry and scaling. In the EU, differing national laws create obstacles despite efforts at harmonization;
- market fragmentation: Linguistic, cultural, and structural diversity in both regions limits startups' ability to scale seamlessly across borders, presenting a persistent barrier to growth.

Table 1, titled "Key Elements of a Startup Ecosystem," outlines various components essential for fostering a thriving startup environment. It emphasizes the importance of strategic planning, collaborative partnerships, and supportive policies. The table also highlights the need for investment in education, financial mechanisms, and infrastructure. Additionally, it stresses the significance of promoting innovation, mentorship, community engagement, and continuous evaluation. In essence, the table provides a framework for understanding the key elements required to nurture a successful startup ecosystem.

By addressing these interconnected challenges and leveraging emerging opportunities, the EU can enhance their ecosystems, driving innovation and fostering economic resilience. This article explores strategies and trends that can shape their path toward sustainable and collaborative growth.

Table 1

Key Elements of a Startup Ecosystem	
№	Element
1	Strategies for Building and Nurturing an Startup Ecosystem
2	Startup Ecosystem
3	Collaborative Partnerships
4	Policy Reforms and Incentives
5	Investment in Education and Training
6	Financial Support Mechanisms
7	Infrastructure Development
8	Promotion of Innovation and R&D
9	Entrepreneurial Mentoring and Coaching
10	Community Engagement and Networking
11	Evaluation and Continuous Improvement

The startup ecosystems of the European Union (EU) are undergoing significant transformations, driven by global trends and regional dynamics that create new opportunities for growth. Among these, the rise of Green Technology stands out as a critical area for innovation. The increasing demand for sustainable solutions presents vast potential for startups focused on renewable energy, the circular economy, and ESG-driven innovations. Meanwhile, the EU continues to lead in GreenTech through ambitious initiatives like the European Green Deal and funding programs such as Horizon Europe, which prioritize sustainable innovations.

Digital transformation is another pivotal trend, with AI, fintech, and health tech driving innovation globally. In parallel, the EU benefits from well-structured regulatory frameworks and digital initiatives, such as the Digital Europe Programme, which supports the adoption of advanced technologies.

Decentralized Finance (DeFi) and blockchain are also gaining traction in the EU, offering innovative solutions in financial inclusion, digital identities, and payment systems. The EU provides a secure regulatory environment for blockchain startups. Collaborative frameworks and pilot projects for blockchain applications, particularly in public services, could strengthen these advancements.

Emerging regional hubs are reshaping the innovation landscape. Non-traditional hubs in the EU, such as Barcelona, Stockholm, and Lisbon, are diversifying the region's startup environment with competitive tax regimes and dynamic entrepreneurial networks. Fostering collaborations between EU and Ukrainian cities could further enhance these ecosystems.

Access to funding remains a critical barrier for startups, impacting their ability to scale and compete in global markets. Conversely, while the EU benefits from substantial investment volumes, disparities in funding distribution are a persistent issue. Established hubs such as Berlin and Paris attract a disproportionate share of capital, leaving startups in peripheral regions underserved. This imbalance restricts opportunities for less-developed areas to fully participate in the global startup landscape, undermining regional equity and cohesion.

In the EU, while the region boasts a highly educated workforce, startups often struggle to compete with multinational corporations offering higher salaries and superior benefits. Additionally, bureaucratic obstacles to hiring international talent constrain efforts to build diverse, competitive teams, further limiting the dynamism of the ecosystem.

Regulatory and market fragmentation pose additional hurdles for startups. In the EU, despite efforts at harmonization, the regulatory landscape remains fragmented, with each member state maintaining distinct legal frameworks and compliance requirements. This lack of uniformity creates barriers for startups seeking to scale across borders, imposing significant financial and administrative burdens that stifle innovation and growth.

Infrastructure deficiencies also hinder the development of robust startup ecosystems. While the EU generally offers more developed infrastructure, significant disparities persist between core and peripheral regions. Startups located outside established hubs face resource shortages that limit their competitive potential and reinforce existing inequalities within the ecosystem. Addressing these gaps in infrastructure is essential to fostering a more inclusive and dynamic startup environment.

Several promising sectors are driving growth opportunities for startups in the EU, despite the challenges faced by these ecosystems. GreenTech is emerging as a critical area of innovation, fueled by global sustainability goals and a rising demand for eco-friendly solutions from consumers and industries alike. Startups in this sector are advancing renewable energy technologies, circular economy innovations, and environmentally sustainable practices. Similarly, artificial intelligence (AI) and financial technology (FinTech) are dominating the innovation landscape, with significant progress in automation, data analytics, and decentralized finance. HealthTech is also a rapidly growing field, propelled by increased demand for telemedicine services, wearable health devices, and personalized healthcare solutions, particularly in the

wake of global health crises. These sectors present significant opportunities for both regions to drive technological progress and address critical societal needs.

The EU is advancing regulatory harmonization, with initiatives like the Digital Single Market aiming to eliminate cross-border barriers and create a unified space for innovation. These policy advancements are fostering conditions conducive to entrepreneurial activity and enabling startups to thrive in an increasingly interconnected global economy. Table 2 provides a comparative analysis of the challenges of the startup ecosystem in the EU.

Table 2

**Analysis of Startup Ecosystem Challenges**

Challenge	EU
Funding Access	Uneven distribution of investments
Talent Retention	Competition with large corporations
Regulatory Environment	Fragmented frameworks
Infrastructure	Underdeveloped regions

The European Union (EU) showcases distinct but equally impactful examples of successful startup ecosystems, each demonstrating the role of supportive environments in fostering innovation and growth. By fostering such collaboration, the EU aims to support sustainable development and energy innovation in partner regions.

In the EU, several cities stand out as leading examples of startup success. Barcelona has positioned itself as a hub for GreenTech innovation, leveraging its commitment to renewable energy and sustainability to attract startups focused on environmentally conscious solutions. Stockholm, on the other hand, has established itself as a FinTech powerhouse, with companies like Klarna revolutionizing digital payments and driving the sector's growth. These ecosystems benefit from access to funding, robust infrastructure, and a collaborative culture that fosters entrepreneurial activity. The EU's emphasis on harmonized regulations and targeted investments further supports the development of these hubs, enabling startups to scale and innovate effectively. Table 3 provides the examples of successful startups in the EU.

Table 3

**Examples of successful startups in EU**

Startup	Country	Description
Aviven	Finland	Open source cloud data management platform
Blablacar	France	Ride-sharing platform promoting sustainable travel
Blockchain.com	UK/Luxembourg	Cryptocurrency exchange & financial services firm
Celonis	Germany	Process mining software optimizing business processes
Klarna	Sweden	A FinTech company transforming online payments with “Buy Now, Pay Later” solutions. It provides seamless checkout experiences for consumers and merchants worldwide. Klarna is one of Europe's most valuable private startups
Revolut	UK	A digital banking platform offering multi-currency accounts, crypto trading, and financial management tools. It provides users with commission-free stock trading and international money transfers. Revolut has grown into one of the most prominent neobanks in Europe
Rapid	UK	Global payments infrastructure fintech
Northvolt	Sweden	A GreenTech startup focused on producing sustainable lithium-ion batteries for electric vehicles and energy storage. It aims to create an eco-friendly battery supply chain with minimal carbon footprint. Northvolt supplies major automakers like Volkswagen and BMW
BioNTech	Germany	A biotech company known for pioneering mRNA technology, particularly in COVID-19 vaccines. It partnered with Pfizer to develop one of the first widely distributed COVID-19 vaccines. BioNTech continues innovating in immunotherapy and cancer treatments

In the EU, companies such as Revolut and Klarna demonstrate the region's capacity to nurture startups that redefine industries and compete on the global stage. These examples illustrate the critical importance

of strategic support, cross-border collaboration, and investment in infrastructure to create environments where startups can thrive and lead in technological innovation.



Early-stage startups in the European Union (EU) continue to face significant challenges in securing adequate capital, despite overall growth in venture investments. However, these investments are unevenly distributed across the region. Germany, France, and the UK attract the largest shares of funding, with Germany receiving 25%, France 20%, and the UK 18%. These countries mainly draw investments in sectors such as FinTech, AI, GreenTech, HealthTech, and EdTech. On the other hand, peripheral regions,

which encompass a range of diverse sectors, receive only 8% of the total venture capital. This disparity underscores a critical issue: the lack of «patient capital» in less central regions, which impedes the growth of high-potential, innovative startups that often require long-term investment. Consequently, this uneven distribution of funding hinders the broader development of the EU's entrepreneurial ecosystem. Table 4 provides a comparative statistical table for startup investments in the USA and the EU in 2024.

Table 4

Comparative Statistical Table for Startup Investments in USA and EU in 2024

Category	USA	EU
Total Investment Volume	\$190 billion	\$75 billion
Number of Deals	8,500	5,200
Average Deal Size	\$22.4 million	\$14.4 million
Top Sectors Invested	AI, Fintech, HealthTech	ClimateTech, AI, Fintech
% Early-Stage Investments	48%	55%
% Late-Stage Investments	52%	45%
Median Valuation (Early-Stage)	\$25 million	\$16 million
Median Valuation (Late-Stage)	\$320 million	\$190 million
Share of Venture Capital Funds	63% global share	23% global share
Top Cities	San Francisco, New York, Austin	Berlin, Paris, Amsterdam
Government Support Programs	CHIPS Act, Startup Visa Reforms	Horizon Europe, EIC Fund
Average Time to Exit	6.2 years	6.8 years
Common Exit Routes	IPO, M&A	M&A, IPO

Source: compiled on [5; 6]

The startup ecosystem in the European Union has shown steady growth from 2020 to 2024. In 2020, there were around 60,000 startups, with 50 achieving «unicorn» status (startups valued at over \$1 billion). The key sectors included FinTech, MedTech, and E-commerce, with investment volume reaching approximately \$8.9 billion. By 2021, the number of startups grew to 65,000, and the number of unicorns rose to 75. The leading sectors shifted to FinTech, MedTech, and Travel Tech, with investments totaling \$14.5 billion.

In 2022, the EU startup ecosystem expanded further, with approximately 70,000 startups and 90 unicorns. The top sectors included FinTech, GreenTech, and EdTech, while investments reached \$18 billion. In 2023, the number of startups increased to 75,000, and the number of unicorns surged to 110. The prominent sectors were AI, Cybersecurity, and GreenTech, with investments amounting to \$20 billion.

Looking ahead to 2024, the number of startups is projected to reach 80,000, with 130 unicorns. The most promising sectors remain AI, FinTech, and GreenTech, and investments are expected to total \$22 billion.

In 2021, the United Kingdom emerged as a leader in the European startup ecosystem, with 13 new unicorns. The country attracted significant investment, totaling \$14.5 billion in the first half of the year. In terms of overall unicorn distribution, the UK had 100 unicorns, followed by Germany with 42, France with 22, and the Netherlands with 18. The UK's unicorns were primarily concentrated in the FinTech sector, which accounted for 34% of the total, followed by MedTech at 14% and Travel Tech at 8%. These figures highlight the UK's strong performance in the startup landscape, particularly in innovative industries like FinTech and MedTech, while also showcasing the growing importance of travel technologies.

In 2021, the UK saw significant growth in its startup ecosystem, with 13 new unicorns, nearly double the number of new billion-dollar companies in 2020. British startups raised a total of \$14.5 billion in investments during the first half of 2021, compared to \$8.9 billion in the second half of 2020. The UK became the first European country to reach 100 unicorns, followed by Germany with 42, France with 22, and the Netherlands with 18. The majority of UK unicorns are concentrated in the FinTech sector (34%), followed by MedTech (14%) and Travel Tech (8%).

In Spain, the startup ecosystem has grown significantly, with over 7,000 tech companies as of 2024, including 3,640 startups and 1,185 scaleups. The average age of Spanish startups increased from 2.2 years in 2019 to 3.19 years in 2024, signaling the maturity of the sector. The economic impact of Spain's startup ecosystem is valued at €100 billion, generating an annual economic effect of €11.5 billion and providing 100,000 direct jobs. Despite this growth, only 18% of Spanish startups report positive EBITDA, and revenues for medium and large companies remain stable with no significant changes [7]. In terms of investment, Spanish startups accounted for 20% of total investments in European startups in 2015, indicating strong investor interest in the Spanish market. Additionally, in December 2022, the Spanish Parliament approved the "Startup Law," aimed at improving conditions for entrepreneurs and attracting more investment to the tech sector.

The startup ecosystem in the European Union has seen significant growth in recent years, with a marked increase in venture investments, despite a slight slowdown in 2022 following the record-breaking year of 2021 [8]. Key startup hubs in Europe remain London, Berlin, and Paris, but other ecosystems, such as those in Amsterdam, Stockholm, and Barcelona, are also experiencing rapid development. The most attractive sectors for investment include FinTech, HealthTech, Artificial Intelligence (AI), and GreenTech.

Spain, in particular, has shown positive trends in its startup ecosystem. Investment volumes and the number of new startups continue to grow, with government support playing a crucial role through various programs and initiatives. Barcelona, as the leading startup hub in Spain, has experienced significant growth. In 2023, the city was home to 2,102 startups, marking a 4% increase from the previous year and nearly double the number from 2016. The dynamic nature of Barcelona's ecosystem is further evidenced by the fact that 48% of these startups were founded in the last five years. Catalonia's startup ecosystem reached a record combined turnover

of €2.1 billion in 2023, representing a 14% increase from the previous year. Over the last five years, Catalan startups attracted €5.3 billion in investment, a 231% increase compared to the previous five years.

Notable early-stage startups from Barcelona include Cafler (founded in 2021), which provides a platform for routine vehicle services and has raised €13.6 million in funding. Deale is a platform connecting entrepreneurs with investors, securing €3 million in funding. Emocional, a startup focusing on mental health, has raised €900k (Emocional.com). Feeder utilizes AI for customer behavior analysis in the video content sector, securing €637k in funding (getfeeder.com). MiMARK offers accessible diagnostic solutions for gynecological oncology, with €7 million in funding. Orikin Bio, a biotechnology firm, raised €5.5 million in 2022 [9]. Other growing startups include Piper, which uses AI to automate tasks for sales teams (€3 million in funding), and REVER, a SaaS platform in B2B e-commerce, which secured €8.4 million.

Barcelona's startup scene also focuses on sustainability, AI, big data, and blockchain technology. The city continues to attract talent and investments, solidifying its position as a major European startup hub.

The European venture capital market has shown a steady upward trend in investment volumes in recent years, driven by increased interest in innovation sectors and the proliferation of high-growth startups.

However, after record highs in 2021, there was a moderate slowdown in 2022, likely influenced by macroeconomic factors, including rising interest rates and geopolitical uncertainty [8; 10].

Major startup ecosystems such as London, Berlin and Paris continue to dominate the European innovation landscape, benefiting from established networks, robust talent pools and favorable regulatory frameworks.

However, secondary centers such as Amsterdam, Stockholm and Barcelona are gaining importance, reflecting the geographic diversification of innovation activity on the continent.

FinTech remains a leading area of investment, supported by Europe's mature financial services industry and growing consumer demand for digital and decentralized financial solutions.

Artificial Intelligence (AI) continues to be a critical area of focus, with applications spanning multiple industries, increasing efficiency and creating significant value propositions for both businesses and consumers.

Green technologies are experiencing accelerated funding streams due to increased regulatory pressures and societal demands.

The growth of new startup ecosystems highlights the interplay between local policy support, international cooperation, and availability of skilled labor as critical factors for development.

These trends highlight a nuanced picture in which traditional hubs maintain their leadership while new hubs and technology verticals contribute to the overall dynamics.

### **Conclusions**

To address the challenges and fully harness the potential of the startup ecosystems in the European Union (EU), a series of strategic recommendations are essential. Policy harmonization is critical to overcoming regulatory fragmentation. Simplifying and standardizing cross-border regulations within the EU would enable startups to enter and scale across markets more efficiently.

The startup ecosystems in the EU are distinct yet impactful, demonstrating the role of supportive environments in fostering innovation and growth.

The EU's startup ecosystem benefits from access to funding, robust infrastructure, and a collaborative culture that fosters entrepreneurial activity. Harmonized regulations and targeted investments further support the development of these hubs, enabling startups to scale and innovate effectively. Notable startups such as Revolut and Klarna from the EU, underscore the transformative potential of well-supported ecosystems.

The EU's startup ecosystem has experienced steady growth from 2020 to 2024, with key sectors including FinTech, MedTech, and E-commerce. Investment volumes have increased, and the number of unicorns (startups valued at over \$1 billion) has risen. The most promising sectors for future growth remain AI, FinTech, and GreenTech. Talent development is another priority for sustaining innovation and competitiveness. Investments in educational initiatives, such as coding boot camps, entrepreneurship programs, and STEM-focused curricula, are necessary to cultivate a robust talent pipeline. To address brain drain, governments should implement incentives for skilled professionals to remain in or return to their home countries, such as competitive salaries, tax benefits, and professional development opportunities.

Expanding funding mechanisms is vital to fostering early-stage innovation and supporting startups in underserved regions. Public-private partnerships can play a pivotal role in increasing the availability of financial resources, particularly in areas lacking venture capital presence. Promoting networks of angel investors and venture capitalists, alongside government-backed funding initiatives, would ensure a broader distribution of resources and empower more startups to thrive.

Infrastructure development is equally important for nurturing a vibrant entrepreneurial ecosystem. Increasing the number of incubators, accelerators, and coworking spaces in underserved regions would provide startups with access to essential resources, such as mentorship, funding channels, and collaboration opportunities. Strengthened support networks would also enhance connectivity within and between ecosystems, fostering knowledge exchange and innovation.

Such collaborations would drive economic growth, enhance resilience, and position both regions as leaders in the global startup ecosystem.

The EU's startup ecosystem continues to provide a conducive environment for growth, though challenges related to regulatory complexity and capital access remain. Strengthening strategic collaboration in technology and green energy will help both ecosystems overcome their challenges, foster innovation, and enhance economic resilience. Joint initiatives, regulatory alignment, and investment in sustainable sectors will pave the way for long-term growth, ensuring that both regions remain competitive and attractive to entrepreneurs and investors alike.

The European Union boasts one of the most dynamic and diverse startup ecosystems in the world. While significant challenges persist – particularly in funding access, regulatory fragmentation, and talent shortages – the EU's strategic focus on GreenTech, digital transformation, and regional ecosystem development provides robust growth opportunities. By addressing structural weaknesses and fostering collaboration, the EU can create a more integrated, competitive, and globally influential startup environment.

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## ВИКЛИКИ ТА МОЖЛИВОСТІ ДЛЯ СТАРТАП-ЕКОСИСТЕМ В ЄВРОПЕЙСЬКОМУ СОЮЗІ: НАПРЯМИ ДЛЯ ЗРОСТАННЯ ПІДПРИЄМНИЦТВА ТА ЕКОНОМІЧНОГО РОЗВИТКУ

Севастьянов Родіон

У цій статті поглиблено досліджено динамічні екосистеми стартапів, що розвиваються в Європейському Союзі (ЄС), з акцентом як на їх характерних викликах, так і на перспективних можливостях. Стартапи як ключові двигуни інновацій мають важливе значення у стимулюванні економічного зростання, прискоренні технологічного прогресу та вирішенні глобальних проблем, таких як зміна клімату та цифрова трансформація, завдяки підприємницькій креативності та сталим рішенням. Стартап-середовище ЄС характеризується зрілістю, різноманітністю та потужним фінансовим ландшафтом. Основні інноваційні центри, такі як Берлін, Париж, Амстердам та Барселона, слугують потужними вузлами у ширшій європейській мережі, яка отримує вигоду від гармонізованих ринків, всеосяжної нормативно-правової бази та інституційних ініціатив, таких як «Горизонт Європа» та «Європейське інноваційне табло». Ці структури не лише підтримують стартапи на ранніх стадіях, але й стимулюють потенціал для масштабування через кордони. До секторів, що розвиваються, належать «зелені» технології, штучний інтелект (ШІ) та фінансові технології, які пропонують значні перспективи для довгострокової конкурентоспроможності та глобальної актуальності. Прихильність ЄС до сталого розвитку та цифровізації тісно пов'язана з цими секторами, що позиціонує його стартапи як лідерів у галузях, орієнтованих на майбутнє. У статті також обговорюються бар'єри, що залишаються, такі як фрагментовані правові системи, проблеми з утриманням талантів та доступ до капіталу на пізніх стадіях. Для посилення транскордонного співробітництва, більш чітка та послідовна політика, а також цільові державні та приватні інвестиційні стратегії, спрямовані на підвищення стійкості та інклюзивності екосистем. Критично проаналізувавши та усунувши ці фактори, ЄС має можливість не лише зміцнити свій внутрішній інноваційний потенціал, але й утвердитися в якості світового лідера у формуванні наступного покоління економічного та технологічного прогресу, заснованого на стартапах.

**Ключові слова:** екосистема стартапів, інновації, виклики, можливості, зелена технологія, штучний інтелект, фінансові технології, співпраця.



# CHALLENGES AND OPPORTUNITIES FOR STARTUP ECOSYSTEMS IN THE EUROPEAN UNION: DIRECTIONS FOR ENTERPRISE GROWTH AND ECONOMIC DEVELOPMENT

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*This article provides an in-depth exploration of the dynamic and evolving startup ecosystems within the European Union (EU), emphasizing both their distinctive challenges and promising opportunities. As crucial engines of innovation, startups play a pivotal role in driving economic growth, accelerating technological advancement, and tackling global issues such as climate change and digital transformation through entrepreneurial creativity and sustainable solutions. The EU's startup environment is characterized by its maturity, diversity, and robust funding landscape. Major innovation hubs like Berlin, Paris, Amsterdam, and Barcelona serve as powerful nodes in a wider European network that benefits from harmonized markets, comprehensive regulatory frameworks, and institutional initiatives such as Horizon Europe and the European Innovation Scoreboard. These structures not only support early-stage ventures but also incentivize scale-up potential across borders. Notable growth sectors include GreenTech, Artificial Intelligence (AI), and FinTech, which offer significant promise for long-term competitiveness and global relevance. The EU's commitment to sustainability and digitalization aligns closely with these sectors, positioning its startups to lead in future-oriented industries. However, the article also discusses barriers that remain, such as fragmented legal systems, talent retention challenges, and access to late-stage capital. To overcome these, the text advocates for stronger cross-border cooperation, clearer and more consistent policies, and targeted public and private investment strategies aimed at increasing ecosystem resilience and inclusivity. By critically analyzing and addressing these factors, the EU has the opportunity to not only strengthen its internal innovation capacities but also establish itself as a global leader in shaping the next generation of startup-driven economic and technological progress.*

**Keywords:** startup ecosystem, innovation, challenges, opportunities, greentech, AI, fintech, collaboration.

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