EU Startup Ecosystem:

Driving change past, present and future

How and Why we should all act together

EU Startup Ecosystem: Driving change – past, present and future
How and why we should all act together

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About the Network and Strategic Initiatives Department
The Network and Strategic Initiatives Department intends to harness the network of the startup ecosystem stakeholders to support on policy trends and lead strategic projects to achieve ESNA's vision.

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Foreword

This document sheds light on the key areas where Europe must take decisive action to secure its position as a global innovation leader. It results from extensive research and the gathering of inputs from stakeholders, highlighting the challenges and opportunities the European startup ecosystem is currently faced with.

Europe possesses the talent, innovation, and ambition to lead on the global stage, but it has not yet fully realised its potential. One of the most pressing issues is the fragmentation of our ecosystem. Despite advancements in harmonising regulatory frameworks and creating a more unified Single Market, startups still encounter significant barriers when scaling across borders. The increasing implementation of legal sandboxes across the EU is a positive step, providing a safe space for startups to test innovative solutions within a controlled regulatory environment.

Equally important is the need to address talent shortages, particularly in STEM and clean technologies. Europe's ability to attract and retain top talent, preventing a "brain drain" of our most promising innovators to other regions, will shape our startup ecosystem.

As we advance in AI, clean energy, and digital infrastructure, we must ensure that European startups compete and lead in these fields. With sustained investment and a supportive policy environment, these sectors could drive the next wave of innovation, bringing economic growth and solutions to some of the world's most pressing challenges.

As Ursula von der Leyen noted in her Political Guidelines for 2024–2029, Europe must continue to push forward with policies that enhance sustainable prosperity, competitiveness, and digital sovereignty. This vision is echoed throughout this document, which provides the genesis of the European startup ecosystem, a snapshot of current policies and EU strategies, and how they come together to paint a broader vision. Finally, it calls for a coordinated strategy to align resources, reduce red tape, and foster a collaborative environment where startups can thrive.

At ESNA, our role is to ensure that the voices of the ecosystem are heard and that the policies shaping our future reflect the needs of those driving innovation. This document reflects that commitment, providing a detailed analysis of Europe's past and current startup ecosystem and a roadmap for the future.

Europe must keep pace in the race for innovation. By embracing a more integrated approach, fostering a supportive regulatory environment, and investing in the next generation of talent and technology, we can ensure that the European startup ecosystem becomes a global leader economically and as a force for positive societal change. I invite you to engage with the findings of this report and join us in shaping a startup ecosystem that is not only competitive but truly transformative for Europe.

Arthur Jordão
Executive Director, ESNA

Executive Summary

It was Robert Schuman, French Foreign Minister, and an influential voice for the collaboration and unity of Europe, who stated in 1950: “Europe will not be made all at once, or according to a single plan. It will be built through concrete achievements which first create a de facto solidarity”. Today, the solidarity of the Members of the European Union should be expressed in all areas of the economic landscape. And, on the uncertainty of time and the fast changes, the crucial role that the startup ecosystem can take by supporting the role of the EU today, must not be underestimated. This is exactly what this document intends to portray: the unity of diverse voices of the market under a clear mandate to improve the long-term conditions of the European startup ecosystem. Everything, under a unified vision to bring Europe to the forefront of this global sphere, under our core democratic values and considering the challenges that may arise during the next European Commission Mandate from 2024-2029. The European Union has, in the past few years, successfully put into effect significant digital regulations, the startup community has leveraged a set of manifestos and a series of documents and white papers mentioning the need of a more unified voice, under the logic of a Single Market. As stated by Enrico Letta (report 2024), “Much More than a Market”; The Single Market was established to strengthen European integration by eliminating trade barriers, ensuring fair competition, and promoting cooperation and solidarity among Member States.” In today’s world, the dream of a European Single Market continues to move forward as a tactical way to integrate all our members into one unique vision under European values. Bearing this in mind, the opportunity for Europe over the next few years is not to be underestimated. Europe not only has a legacy, but during the last decade, a set of new best practices born in this region of the world; together with the geopolitical landscape, have raised the need to work on a collaborative and integrated approach, especially when it comes to solving critical problems that may arise in the next couple of years. Throughout this document, which combines in-depth analyses, market outlooks, policy reviews, and strategic recommendations ESNA aims to serve and provide a valuable resource for the new European Commission college, as well as MS Gov’s, policymakers, entrepreneurs, investors, and other stakeholders of the ecosystem, with valuable insights and actionable strategies to enhance the competitiveness. On July of 2024, Ursula von der Leyen, President of the European Union Commission, on the “Political Guidelines for The Next European Commission 2024–2029” pointed out main topics that the EU should address with unity and cohesion with these words: “Defence and security. Sustainable prosperity and competitiveness. Democracy and social fairness. Leading in the world and delivering in Europe”. Under that logic, new technologies will become a core on the next wave of development regarding defence and

security. To accelerate new innovations either corporates or member states, having friendly sandboxes for startups can support the prosperity of the ecosystem. Furthermore, it is obvious that technology has made the day by day of many European citizens easier, some other deeper technological development has put Europe at the top of the pyramid when it comes to solving critical problems affecting the continent. Making startups and scale-ups a tool to enhance the growth and innovation for sectors such as energy, water, ageing and other critical industries. Moreover, The World Bank reports that digital inclusion in rural areas – which may be a positive outcome if the startup ecosystem becomes more competitive - can increase economic growth by 1.2% annually[1]. Finally, when it comes to pushing forward a more friendly startup ecosystem, the main topic constantly highlighted is the need of a less fragmented Union. As discovered in our market outlook, there is a consensus within the startup ecosystem stakeholders, that if Europe does not align forces and leverage resources in this area, there is a danger that Europe will lose a huge opportunity. Not only to provide for EU citizens, but to the overall society; new ways of doing business, leverage innovation, drive digital change with solutions, services and initiatives born from Europe to the world. In this sense, other corners of the world could end up serving other global players who are in a better position to exploit them, thereby undermining our strategic independence and economic security as well as European values. Action needs to be taken now. One option could be setting a unified set of rules and policies that can assure European global competitiveness. Another option of cutting excessive red tape preventing barriers to innovation from Europe to reach the higher levels, is something that cannot be underestimated.

Why this document?

Europe missed out on the digital Internet revolution, stretching the productivity gap between the EU and the United States even further[2]. The reason is mostly due to the growth of the technology sector; the global landscape change and joining a new way of doing business, led by a series of startups (recognised today). The options to scale faster and in a more dynamic way, together with new ways of operating business, proved that startups could provide, if allowed to operate, a positive outcome on national economies. However, Europe fell behind in the pace of this change. As highlighted in the Mario Draghi report, no EU company created in the last 50 years, has a market cap of over €100 billion, meanwhile all 6 companies with a value of €1 trillion in the United States, were created during this same period.

1 Digital Progress and Trends Report 2023 (worldbank.org) Page XVIII Executive Summary

2 "The dismal trajectory of Europe's productivity has been subject to much analysis. Most economists agree that European firms' failure to reap the efficiency gains brought about by information and communication technologies – or ICT for short – is one of the root causes. This shows up in both the capital stock and total factor productivity" (From laggard to leader? Closing the euro area's technology gap (europa.eu))

If competitiveness is to be achieved, creating and allowing policies to support the growth of the startup ecosystem is fundamental to push the EU economy forward to become a relevant participant, at a global scale. Increasing the numbers of startups and spin-outs that scale to other latitudes and facilitate the access to skilled talent, while improving the conditions for public and private investment to flow are essential actions to be done. In addition, to align under a general strategy allowing continual support for a positive legal framework, would provide a friendlier ecosystem for startups to operate and be acknowledged by all. Crucially, ESNA plays a political role in supporting those who shape the startup landscape within Europe: it is not only a bridge between startups' needs and policymakers, it also ensures that the voices of the ecosystem gain a new centralised channel to be heard and understood in alignment with policy makers. This is done, by actively participating in policy discussions and recommending startup-friendly legislation, ESNA drives forward the political agenda necessary for nurturing a thriving startup ecosystem. This document on one hand it portrays how the commitment of Members States to work together on behalf of the startup ecosystem under one unique voice can accelerate the placement of correct policies for this sector, on the other hand, it also provide the building blocks (following chapter 5 and 6) for the initial phase of an aspiration startup and scale up strategy. For this to take place, this document also acknowledge the need of a collaborative effort of particularly the Commissioner for Startups, Research and Innovation.

Understanding this document structure

Here you will find a first analysis of the EU startup ecosystem with a brief retrospective and the evolution of it during the last 20 years; highlighting some of the most relevant policies, startups and unicorns for the EU, as well as funding growth and technological approaches of the region. Following this will be a more in-depth look at the various policies implemented by the EU to support startups, including regulatory frameworks, incentives, and initiatives designed to foster innovation and growth. A special section is included with the detailed impact of legal sandboxes in the EU, including some best practices and configuration. The comparative analysis of the EU startup ecosystem relative to other global regions will be shown by evaluating various factors such as innovation hubs, funding availability, and regulatory environments. Following this, the core document contains more updated documentation, related to the monitoring and implementation of the 8 SNS, with suggested improvement needed. To provide new value, the next step is to showcase the Market Outlook, which includes the key findings of two main groups: ESNA Advisory Board Members and ESNA Members (Countries). The in-depth SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) of the

EU startup ecosystem, providing a strategic framework for understanding its position in the global market, is done to showcase the state of our ecosystem today in a concise way. Finally, aligned with the vision of President Ursula von der Leyen's Political Guidelines and the objective to shape a "New Plan for Europe's Sustainable Prosperity and Competitiveness", a starting point for a future Startup and Scaleup Strategy is initiated, by connecting the dots of the Map of Political Guidelines, Utmost goals and Commissioners Mission toward EU prosperity and competitiveness. This is follow by a set of Building Blocks (focus on five main topics: Talent, Investment, IP Rights, Legislation & Regulation (Red Tape) and Entrepreneurial Culture). We aim to support as a starting point a possible future-oriented vision closely aligned with the European Commission's goals to build together a more startup friendly EU ecosystem.

Chapter 1

Startup ecosystem: Why Does it Matter?

Chapter highlights

- Coverage of the EU startup ecosystem history over the last 20 years, divided by cohort.
- Opportunity of the EU in talent, cleantech, social entrepreneurship and early-stage investment.
- Opportunity for new regulations for a solid policy environment, such as: AI Act between other similar initiatives.
- Fundamental differences still exist when it comes to accessing private investment compared to other regions of the world.
- Strong public investment as a cornerstone of the future development of new ventures, especially, when focusing on deep tech or critical technologies.
- Entrepreneurial mindset and risk approach as a relevant factor that has been acknowledged as fundamental for the growth of startup communities.
- The EU updates of rules regarding digital systems with direct implications to all digital operators (also startups), such as the introduction of the Digital Market Act (DMA) and Digital Service Act (DSA) set a clear message to balance the game between gatekeepers and new ventures (startups) operating in Europe.
- Relocation: Movement of EU companies to the United States is a factor that needs to be well understood and provide new policies to make Europe a place where scaleups want to stay.

Review of EU startup ecosystem history

The current population is living in a time of change, clearly seen in many industries. Europe is not out of this scope and the recent years have proven that when Europe works together, solutions to critical problems can be easier to handle. The Pandemic was an example of European cohesion and highlighted that a positive outcome can take place when diverse sectors unite forces.

Initially, an overview of the startup ecosystem will be shown: A collective group of stakeholders that are mainly represented by startups (fast-growing companies that bring solutions to many European citizens and the world through developing, enabling or managing technology and/or digital infrastructure to generate innovation).

Europe has had many successful cases in which European citizens have managed to find and/or discovered, thanks to the use of technology, more efficient and effective ways to solve problems. The main changes come from the last two decades when Europe joined and became a recognised actor when it came to startup ecosystems globally, with world leading companies and hubs such as: London, Paris, Stockholm

and Berlin.

Since the appearance of Skype two decades ago, an example of a blend of European talent working together (founders came from Sweden and Denmark with a leading technical team operating from Estonia), the region opened itself to begin a global race to accelerate solutions that were tech enabled or tech based. A change that came supported by a new way of thinking and approaching problems, a more flexible and risk-taking approach to innovate in areas that were new.

Skype, which happens to be a key example in the European startup ecosystem, was born from one of the first picks of investment in Europe (2003). Today, Europe is proudly the home of over 500 unicorns[3], which include top players globally such as Swedish startup Spotify[4] that in 2006 revolutionised the industry of music streaming (reaching revenues of over $12 billion globally after the pandemic) or the French carpooling startup Blablacar[5], that proved to the world that carsharing was possible. Crucial companies including the German biotechnology company BioNTech, that due to an international partnership with the American pharmaceutical Pfizer, created the first Covid-19 vaccine.

This growth has been followed by an increase in investment, significantly support-

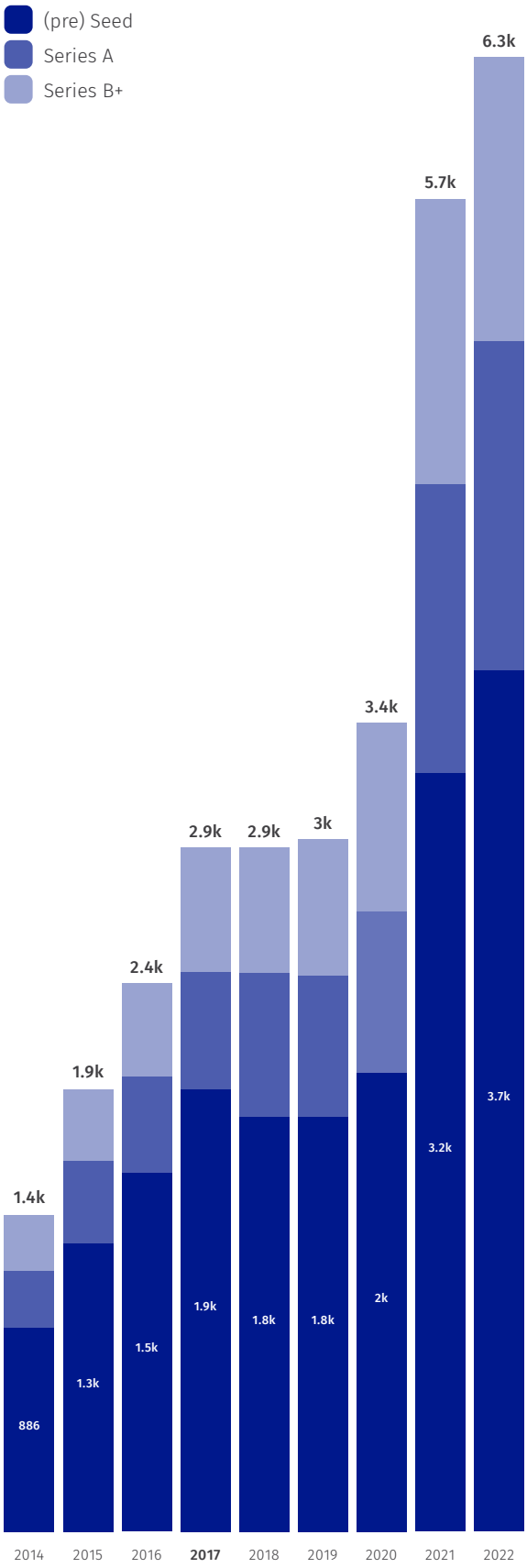


Figure 1. Number of European VC Investors by investment stage

SOURCE: Dealroom.co, August 2024

3 Note: a *unicorn is a tech company valued at over $1B. (Dealroom.co)*

4 Note: Spotify is a commercial music streaming service that provides restricted digital content from a range of record labels and artists.

5 Note: Blablacar is a French carpooling platform designed to connect drivers and passengers for shared rides, reducing transportation costs and environmental impact

ed by public EU funding, accompanied with remarkable growth in the venture capital investment community which reached $63 billion in 2023 across more than 10k funding rounds, with a positive global share increase of 20%, compared to the 5% from 20 years ago. Finally, Europe leads in areas such as early-stage funding as well as project links to cleantech and sustainability.

Not to make light of these positive examples, Europe still needs more. Indeed, there were some remarkable years such as 2014: that year under Horizon 2020, the European Commission DG CONNECT kicked off the Startup Europe Initiative (EC, 2014, 2016) with the aims to connect clusters and ecosystems around Europe[6]. Just the previous year, two globally recognized EU unicorns were founded: Bolt (Estonia) and Bending Spoon (Italy).

6 "The startup Europe ecosystem" – Publications office of the EU

Snapshot of the evolution of the startup ecosystem of the last 20 years

To understand the evolution of these 20 years in more depth, it is necessary to separate Europe into different stages of growth, for this, a brief history of this phenomenon will be provided.

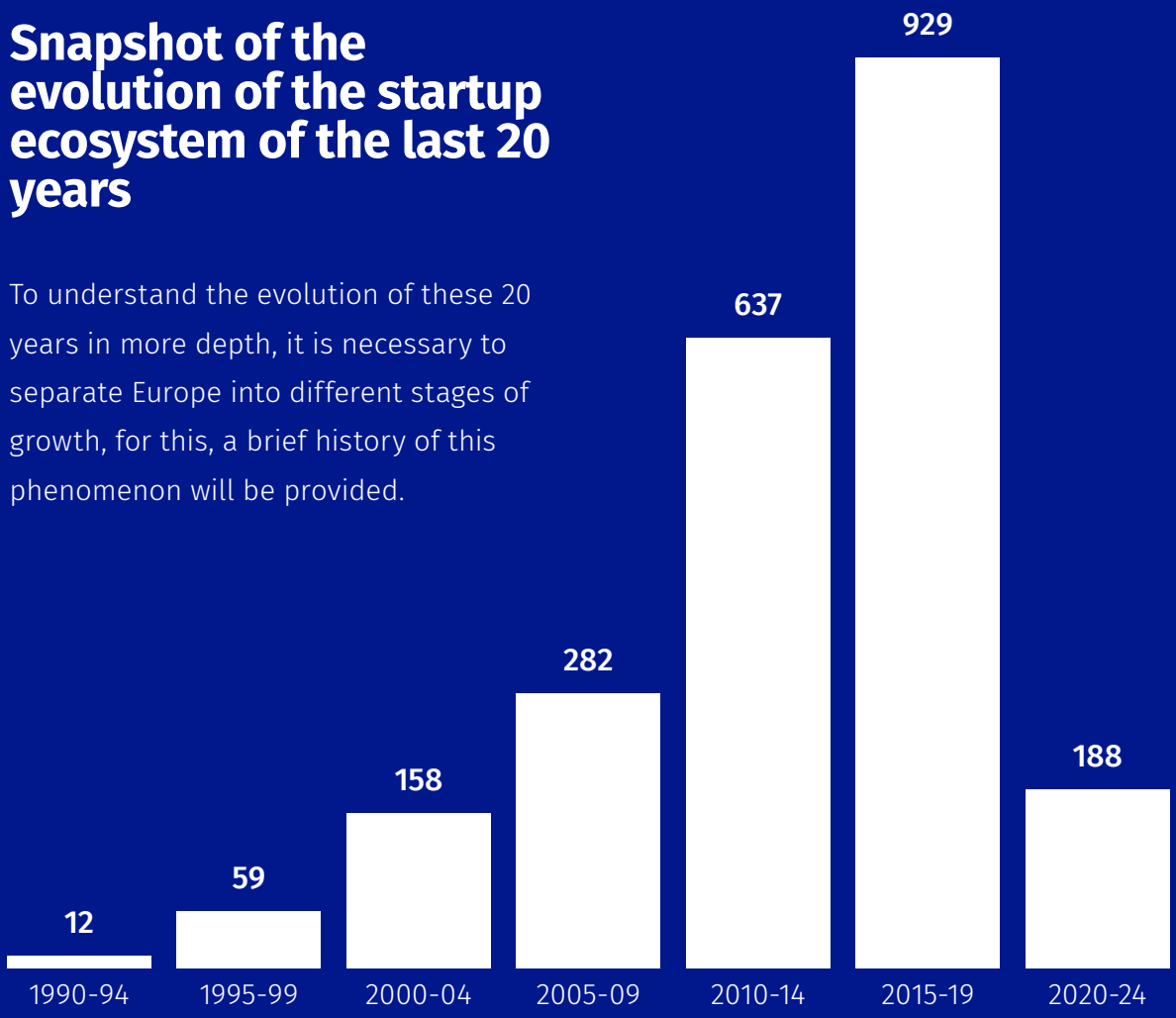


Figure 2. Number of EU-backed startups with 1M+total VC investment, per cohort
SOURCE: Dealroom.co, August 2024

Period 2005-2009

In the period of 2005 to 2009, more than 280 European startups received over one million euros in investment (total recorded: 282)[7]

During this period, positive legislation came into place, allowing new technological sectors to flourish. In 2005, the introduction of the EU's Emissions Trading System (ETS), which aimed to reduce carbon emissions, opened a new market for cleantech startups working on carbon reduction solutions, as well as setting a solid foundation to lead this sector today. European cleantech startups raised €6.8 billion, significantly outperforming other regions like the US and Asia.

It was also during this time that Europe struggled to capitalise on the rise of digital technology, especially compared to the United States. As stated in the Draghi Report, Europe had effectively failed to participate in the first digital revolution (led by the internet), which widened the productivity gap between the EU and the US.

In 2005, Skype was acquired by eBay (and later by Microsoft in 2011), and in 2006, Spotify (Sweden) opened a new market in music streaming, propelling the Nordic tech industry forward as talent began expanding ventures offshore. In line with this, one of the most significant M&A deals was Nokia's acquisition of Navteq, an American digital map provider, for $8.1 billion in 2007, reflecting the importance of digital mapping technologies and the growth of the Nordic region in this field.

During this same period, the European Union saw significant economic and geopolitical changes. The EU underwent a major expansion in 2007, welcoming Bulgaria and Romania, followed by the global financial crisis of 2008, which had lasting impacts on the region. This crisis affected Europe in unprecedented ways, leading to the bail-out of several EU banks and the beginning of austerity measures in countries like Greece. In the ICT sector, Europe struggled to keep pace with the US in digital technology innovation, missing opportunities in the first wave of internet-driven growth. The foundations for Europe's current innovation challenges, such as a lack of scale-up opportunities for tech ventures, began forming during this time. As noted in the Draghi Report: "After a trough in 2010, it took the US a little over two years for productive investment (as a percentage of GDP) to exceed the 2008 level, while it took the EU nine years to reach the pre-crisis level."

It was also after this period that cryptocurrency and digital finance were redefined, following Satoshi Nakamoto's creation of "bitcoin" and the rise of digital assets. A year later, Revolut was founded (2009) with the aim of disrupting traditional banking, igniting a fintech boom, especially in the UK.

At the same time, another critical industry

7 Dealroom.co, August 2024

was evolving in the United States: space. In 2008, SpaceX successfully launched the first private rocket into orbit, just a month after Airbnb was founded (August 2008). The following year in 2009, global players like Uber, Square, and Cloudflare were founded, companies that continue to dominate the market today. Meanwhile, the European startup ecosystem was still growing. In 2009, Niklas Zennström, co-founder of Skype, said, "The European startup ecosystem is on the verge of a renaissance, fuelled by creativity and a growing investor base willing to take risks." That same year, Spotify expanded its operations to the US to scale globally.

In parallel, the European Union laid the groundwork for its comprehensive digital strategy with the adoption of the i2010 initiative in 2005, which marked a significant step towards building a more integrated and forward-looking digital landscape across Europe. It aimed to unify the digital market by creating a Single European Information Space, removing barriers to cross-border online services, improving internet access, and bringing more harmonisation to media and telecommunication policies. As a key precursor to more recent EU digital strategies, such as the Digital Agenda for Europe (2010) and the Digital Single Market Strategy (2015), it helped further integrate Europe's digital economy.

On the environmental front, the EU adopted the 20-20-20 targets, a green legislative package aimed at reducing greenhouse gas emissions by 20%, improving energy efficiency by 20%, and ensuring 20% of energy consumption came from renewable sources by 2020. This marked the start of positioning cleantech companies and sustainable solutions around Europe, where the startup ecosystem has become fundamental for new EU ventures in this field. This process was later followed by the European Green Deal and the 'Fit for 55' in 2021, legislation that requires all sectors of the EU economy to reduce net greenhouse gas emissions by at least 55% by 2030.

Period 2010-2014

In the period of 2010 to 2014, more than 600 European startups received over one million euros in investment (total recorded: 637)[8]

The period of 2010 to 2014 was marked by the increased awareness of the financial system and how new startups could change the game, fintech companies began to rise, especially in the United Kingdom, marking the future potential of London as a hub (Revolut), but also small companies in this sector, such as the 2011 startup Wise was founded and later (2015) achieved a unicorn status. Fintech became a new and interesting sector for VCs, and during that same period, European venture capital investment more than doubled, rising from approximately €3.6 billion in 2010 to €7.5 billion in 2015.

Geopolitically, the EU faced significant chal-

8 Dealroom.co

lenges, including the 2014 Ukrainian crisis, which strained relations with Russia and led to sanctions, as well as the beginning of the refugee crisis. On the sustainability front, the EU advanced its commitment to green energy with the adoption of the 2030 Climate and Energy Framework in 2014, which set ambitious targets for reducing greenhouse gas emissions and increasing renewable energy use.

Meanwhile, the EU remained focused on recovering from the 2008 financial crisis, implementing austerity measures and bailout packages for countries like Greece, Ireland, or Portugal. The European Stability Mechanism (ESM) was established in 2012 to create a permanent crisis resolution mechanism for the Eurozone. While research and innovation funding increased, it remained fragmented across Member States, and bureaucratic hurdles persisted. Horizon 2020, founded in 2014, helped guide Europe's technological advancements, but the continent lagged behind the US, particularly in areas like AI, cloud computing, and fintech.

It was in 2015, when the digital single market strategy was released, aiming to "ensure a better access to digital goods and services across Europe, foster optimal conditions for digital networks and services"[9], for the potential of digital economy with Europe.

Furthermore, in terms of digital economy, the report: "Europe's Start-Up Ecosystem: Heating up, but still facing challenges"[10], mentioned that startups raising seed or angel funding between 2009 and 2014 in ecosystems such as the United States and even India, were twice as effective when moving startups from a Series C to Series D round of investment, showcasing a phenomenon that is similar today, when taking into consideration other studies, such as the Startup Genome Report 2024 (June 2024), where North America and Asia hubs keep leading on the development of tech/startups ecosystems.

Another interesting sector that started to flourish was AI. The startup DeepMind[11], founded in 2010 by three scientists based in London, was acquired by Google in 2014 and has become, until today, one of the top AI systems in the world. In the same year, Google pursued AI and smart home technology with its acquisition.

Yes, Europe had great cases during those years, but in contrast, US companies were rapidly gaining ground, with Snap Inc. (2011) and Coinbase (2012) becoming major players in social media and cryptocurrency. Microsoft strengthened its position in communication technology by acquiring Skype in 2011 for $8.5 billion, and Facebook made waves in 2014 with its $19 billion acquisition of WhatsApp, a European-founded messaging app.

In 2013, Martin Varsavsky, founder of several European tech companies, noted, "the European tech scene is maturing; the next decade will see Europe produce global leaders in technology, as the eco-

9 "Digital agenda for Europe", Fact Sheets on the European Union, European Parliament

10 Europe's start-up ecosystem: Heating up, but still facing challenges", McKinsey & Company, October 11, 2020

11 Note: Founders - Demis Hassabis, Shane Legg and Mustafa Suleyman

system has never been more supportive." This optimism was reflected in the media coverage of the burgeoning AI sector and Google's acquisition of DeepMind in 2014, which sparked discussions about Europe's potential to lead in AI research and development.

Period 2015-2019

In the period of 2015 to 2019, more than 900 European startups received over one million euros in investment (total recorded: 929)[12]

From 2015 to 2019, Europe experienced substantial growth in its startup ecosystem, especially in Fintech, AI, clean technology, and deep tech, with VC investment reaching $35 billion by 2019 and cities such as London, Berlin and Paris were already leading this new wave of investments. With over 99 unicorns by the end of 2019 and coming from over 20 countries (e.g.: UiPath (Romania), Klarna (Sweden), Deliveroo (UK), and Glovo (Spain) showcased the region's success.

Sustainability remained a priority, with the EU adopting the Circular Economy Action Plan in 2015, aimed at transitioning Europe towards a more sustainable, low-carbon economy. This plan encouraged recycling, reducing waste, and promoting sustainable production and consumption, cementing the EU's leadership in green initiatives, which increased efforts to stimulate tech investment, particularly in clean technologies and innovative sectors, a trend that has grown over recent years, setting Europe on top of global leagues.

In the political sphere, it was during this period that the European Union lost one of its top and most powerful hubs: London. In 2016, the Brexit referendum took place, shifting and recognising talent, new hubs and companies in the following years due to the United Kingdom's decision to leave the EU.

In 2017, the EU Commission created a fifteen-member High-Level Group of Innovators to support the creation of the European Innovation Council (EIC) in the framework of Horizon Europe, with a budget of €10.1 billion[13] to support the whole cycle of innovation: from early stage research, to proof of concept, technology transfer, and the financing and scale up of startups and SMEs.

On the digital front, the General Data Protection Regulation (GDPR) was introduced in 2018, representing a significant step in data privacy and protection, affecting companies worldwide. The GDPR's impact on global tech practices and the challenges of implementing such a comprehensive regulation were hot topics in the media, underscoring Europe's role in shaping the digital world.

Daniel Ek, co-founder of Spotify, remarked in 2019, "Europe has become a thriving hub for tech innovation, with a unique blend of

12 Dealroom.co

13 "Innovation Policy, Fact Sheets on the European Union, European Parliament.

creativity and technical expertise that is setting the pace for global digital transformation".

Period 2020-2024

In the period of 2020 to 2024, more than 150 European startups received over one million euros in investment (total recorded: 188)[14]

In the period of 2020 to 2024, we saw a drop due to the pandemic, reaching even lower numbers compared to 20 years ago with less than 200 European startups raising over a million in VC funding (total recorded: 188). The COVID-19 pandemic in 2020 accelerated digital transformation and prompted the adoption of new technologies across industries, further boosting the ecosystem. In 2021, €88 billion were invested in startups. This was done, thanks to the public efforts of the EU: The NextGenerationEU recovery plan, a €750 billion package to support member states' economies, was the biggest economic stimulus effort ever made by all member states and a clear alignment to move forward on the green transition, as well as the digital transformation. At that same time, the geopolitical landscape was also shaped by ongoing Brexit negotiations and the war in Ukraine, which led to further sanctions against Russia and increased military spending across Europe.

Spotify and Adyen surpassed the €50 billion valuations just after the pandemic, the UK online event platform founded after the pandemic reached, in less than 17 months since it was launched, €2.1 billion in valuation. Following the green transition movement, Northvolt[15] the Swedish company founded by two former Tesla Executives, has become today the leading company for sustainable battery manufacturing, something crucial for the EU's green energy transition, especially with the rise of Chinese and South Korean competitors[16].

Significant cases of startups that have disrupted the economy over the previous years are ARM (UK), with the biggest IPO since 2021, IONOS (Germany), which was not what the market expected and CAB Payments (UK), with a similar situation when it comes to market expectations.

14 Dealroom.co, August 2024

15 Northvolt is a Swedish company founded in 2015 and headquartered in Stockholm, specialising in lithium batteries for electric cars and electricity storage equipment

16 Note: Northvolt shows Europe's battery makers face make-or-break moment", Financial Times

In 2021, the EU Parliament adopted two relevant regulations: over the past 20 years, as has been stated on this timeline, digital platforms became a fundamental part of EU citizen's lives.

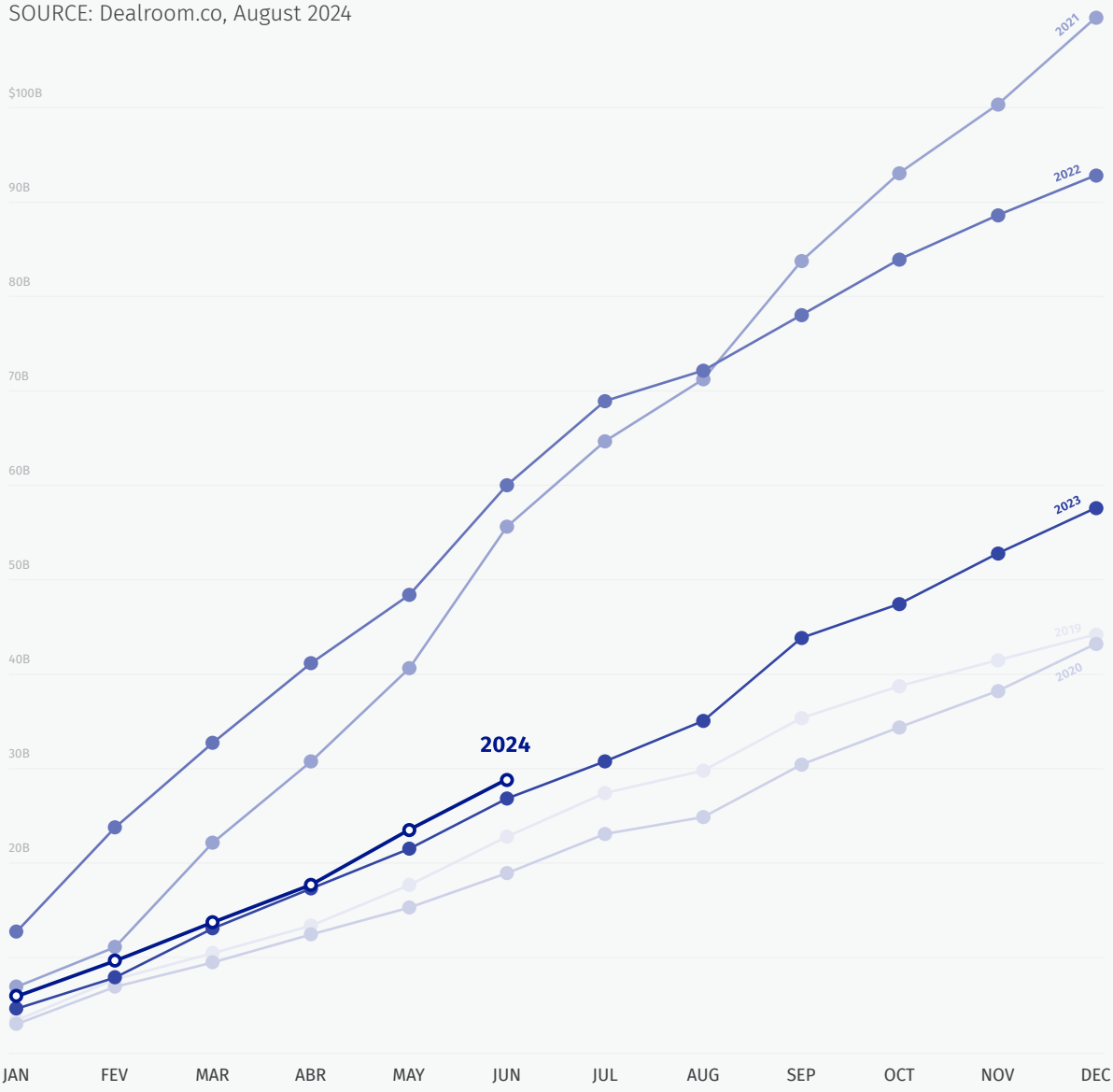
Big tech players or "gatekeepers" got such a dominant position in the market, providing them with significant advantages compared to smaller businesses and start-ups, sometimes determining the future of innovations and consumers choices. To balance the game, the EU updated its rules regarding digital systems with direct implications to all digital operators (also startups) introducing the Digital Market Act (DMA) and Digital Service Act (DSA)[17]:

"For too long tech giants have benefited

17 Note: The European Commission designated six gatekeepers - Alphabet, Amazon, Apple, ByteDance, Meta, Microsoft - under the Digital Markets Act (DMA).

Figure 3. European VC tracking 2019-2024

SOURCE: Dealroom.co, August 2024



from an absence of rules. The digital world has developed into a Wild West, with the biggest and strongest setting the rules. But there is a new sheriff in town - the DSA. Now rules and rights will be strengthened" (Christel Schaldemose [S&D], Denmark) Leading MEP on the Digital Services Act.

The support of EU's Horizon Europe program and the expansion of the ETS, particularly in sectors like deep tech and cleantech is becoming extremely important. From 2020 onwards, the focus on clean tech and sustainable technologies accelerated, with significant investments in renewable energy, electric vehicles, and hydrogen technologies. The private sector was also pushed: In Q1 2024 the Pitchbook Report mentioned that European cleantech startups raised €6.8 billion, surpassing other regions like the US and Asia.

The alignment in this sector is crucial, especially since 2019, after its introduction, the EU Green Deal continues its aim to make the EU climate-neutral by 2050, including plans for massive investments in renewable energy and sustainable infrastructure.

Finally, as mentioned in the Draghi report: "the EU lost market shares in VC in the space of a few years due to faster growth in the US and China. For example, regarding hydrogen and fuel cells, the EU represented 65% of global early-stage VC and 43% of late-stage VC from 2015 to 2019. However, this share declined to 10% and 26% globally, respectively, from 2020 to 2022". But on the positive sphere, in terms of venture capital, the number of active unique investors has doubled since 2020 to 2022[18] and this is seen in all stages. The early-stage phase being the most active, followed by Series A and B+.

It is true that as stated in the Draghi report, the regulatory hurdles and fragmented markets continued to limit Europe's ability to scale up innovative companies nevertheless it is also true that by working together this phase can be overcome.

18 "Europe", Dealroom.co, August 2024

New Generations and Entrepreneurial Culture

The new generation of entrepreneurs embodies a culture of risk-taking and innovation. Entrepreneurs, in this case, startup founders, deal with uncertainty as well as the unknown, on a constant basis.

Aligned with the vision that the world is facing uncertain times, a deeper understanding of the possibilities that come to accelerate the correct work of the European Startup ecosystem, is a must.

When we refer to a startup ecosystem, we are not only referring to the founders of fast and innovative companies, or latest cases of IPOs within the European barriers, but to a set of participants that comes from academia and research, from public policy and government, from early-stage investors to private equity funds. But, at the centre of any startup ecosystem is the startup itself.

The importance of this startup is that it arises after realising the vast opportunities that exist in a world that provides space for all these diverse players to create value chains that end up on high-edge innovations. During the previous years, Europe has received an interesting amount of global entrepreneurs that have moved to diverse nations of the EU thanks to a series of incentives (tax incentives in cases such as, Portugal, Malta, Spain – through the Canary Islands –, between others), but also this has been possible, due to the continent's robust technological infrastructure and supportive ecosystem. This environment enables them to pursue their ventures without geographical constraints, fostering a diverse and dynamic startup community. The rise of tech hubs in cities like Paris and Berlin showcases how hubs are being created, but also the set of new emerging hubs in Europe.

These hubs have become more relevant every day. In the global business context, startups are pivotal in shaping the future of economics and society. They connect the world by leveraging digital infrastructure and network services, positioning Europe as a hub for innovation. The World Economic Forum notes that startups are essential for fostering a connected and competitive global economy. A report by the World Economic Forum indicates that digital transformation can add $1.36 trillion to global GDP by 2025.

While the aging European population increases; a clear demographic phenomenon that the public opinion is aware of; the labour market faces certain challenges such as the working age population within the EU falling from 265 million in 2022 to 258 million in 2030. In this sense the aim to transition to a green and digital economy is pushing for a higher demand for specific skills in diverse sectors.

Startups represent the forefront of technological advancements, utilizing cutting-edge innovations to solve complex problems and creating new opportunities for the years to come. The pace of startups, sometimes criticised, is a fundamental tool to add speed to times that deserve to move forward into a new phase. Therefore,

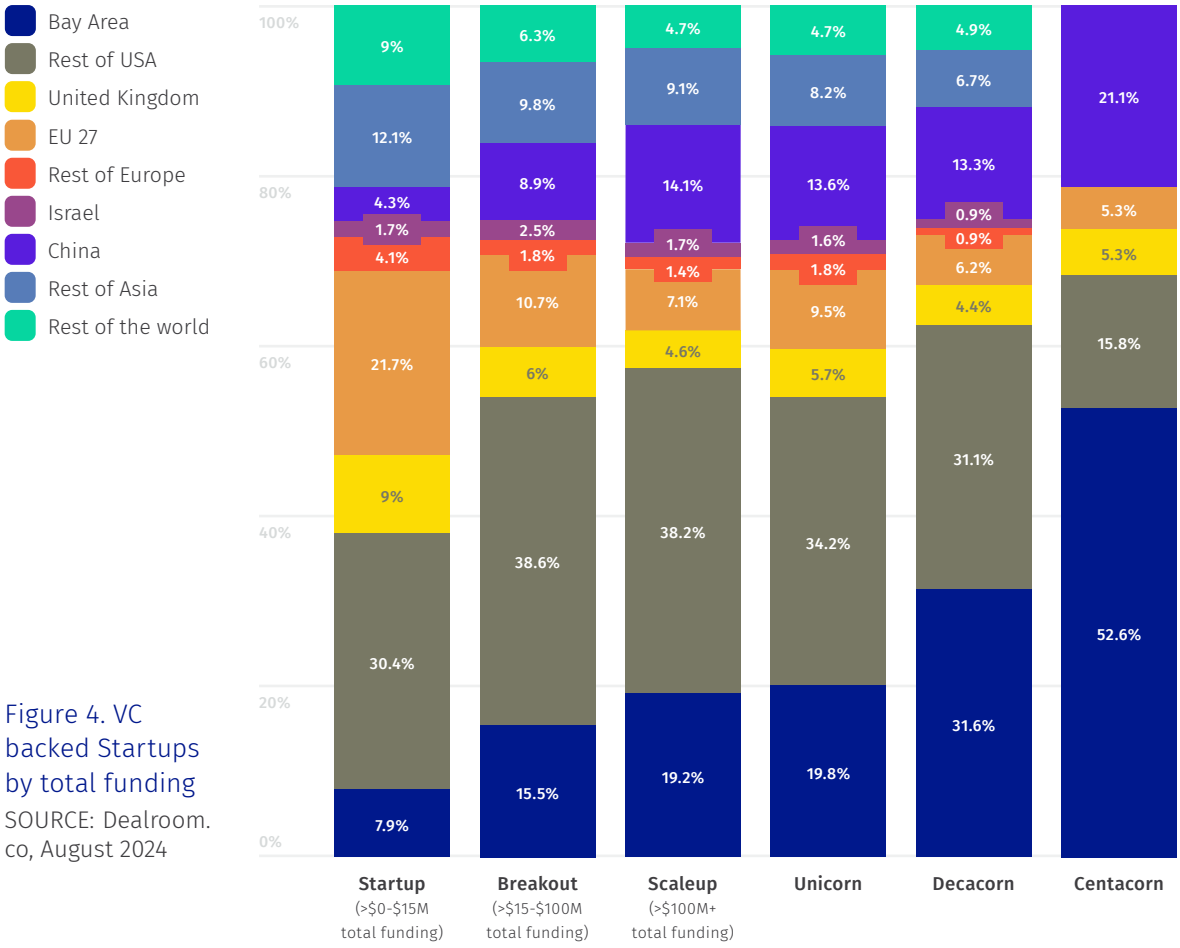


Figure 4. VC backed Startups by total funding

SOURCE: Dealroom.co, August 2024

acknowledging the need for the startup ecosystem to be treated as a topic to elaborate, handle and improve, since the area of vital importance for the economy is not to be forgotten.

Unfortunately, the numbers are not that positive; 2008 and 2021, 40 of a total of 147 European unicorns relocated their headquarters abroad, most of them in the United States.[19] Therefore, the challenges are not only allocated by attraction of talent, but also the continuity of valuable tech companies to stay in Europe. According to Eurostat, startups play a crucial role in reversing brain drain by retaining local talent and attracting global talent, with 60% of European startups employing a diverse workforce.

A. Transformative power of the startups

Startup's definitions are diverse depending on each country. A challenge that has been stated by many relevant voices of the ecosystem. Our task, at this moment, from our independent status, is not to establish a consensus definition on what we understand as a startup, but to be aligned with some general characteristics of this kind of business, allowing us to offer a harmonised and comparable perspective.

19 Draghi Report (ADD)

The new generation of entrepreneurs embodies a culture of risk-taking and innovation. Digital nomads and remote entrepreneurs thrive in Europe due to the continent's robust technological infrastructure and supportive ecosystem. This environment enables them to pursue their ventures without geographical constraints, fostering a diverse and dynamic startup community.

The average age of a startup founder in Europe is 38 years old (Startup Monito 2019); a younger generation of business owner. A figure that matches the global tendency of how many founders of billion-dollar tech companies over the last 15 years, began their ventures at 34 years of age.

Startups are characterised by their willingness to take risks and embrace uncertainty. Young entrepreneurs are increasingly driven by the desire to have their own businesses rather than follow traditional career paths. This entrepreneurial mindset fosters a culture of innovation and resilience, essential for navigating the dynamic business landscape.

It is interesting to address, that one of the main topics discussed in European landscapes, documents, manifestos as well as direct surveys, is the need of a cultural shift, a more entrepreneurial mindset to approach this new world. It is also of interest to acknowledge the need of the spread of the startup thinking: where actions are faster and less meticulous, but more flexible and ready to pivot if needed.

Another example in Europe is Estonia, often called the "startup nation," which has over 1,000 startups contributing significantly to its GDP, showcasing the transformative impact on society. Meanwhile, organisations such as Kauffman Foundation highlight that 48% of jobs created in the United States come from the innovation ecosystem.

Relating to the startup ecosystem, skills which have a connection to STEM are highly rewarded. The €250 billion budget to boost digitalisation in the EU from NextGenerationEU, comes in place not only to support basic digital skills of Europeans by 2030, but also other core skills.

As mentioned in the Draghi Report: "skill shortages are acting as a barrier to innovation and technology adoption and could potentially hinder decarbonization as well".

Europe is known for its high-quality talent in STEM but it is not enough. There are 850 STEM graduates per million per year compared to 1,100 in the United States. To add to this factor, every year young talent leaves the region in search of new opportunities outside Europe, over 60% of EU companies believe that the lack of skills has become a barrier for investment as well as to employed ICT specialist (42% of European lack basic digital skills, according to the Draghi Report).

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This understanding of the different way startups approach problems and structure their companies (from equity management to cap table organisations), has been well documented by the EU Commission. The amount of public funding and support that is provided to new groundbreaking research is real (95 billion euros), but only 20% of the total EU funding goes directly to SMEs (in which startups are presented)[20], even though they provide a good amount of the innovation in the region.

There is no doubt that startups are the key enabler of EU Digital Single Market strategy. The relevance of this point is the possibility to support the driving of the innovative ecosystem. Startups have been crucial in driving economic growth and job creation across the continent, with approximately 36% of them focusing on innovative technology solutions. According to the European Commission, startups in the EU have contributed to over 2 million jobs and a significant portion of GDP growth over the past few years.

The importance of Cleantech when it comes to talent

Europe, as previously mentioned has developed a strong cleantech ecosystem, 40% of global innovative companies in wind and heat pump technologies are born in Europe. Therefore, the EU is one of the largest markets for this kind of development, due to its policies regarding decarbonisation (e.g.: The EU Battery Regulation has become the world's most far-reaching environmental blueprint regarding battery lifecycle). This is a positive factor to acknowledge (investment for green transition should be around €450 billion a year between 2025 and 2030). One of the biggest efforts that we have seen in the EU funding support, goes along with critical industries, such as the generation of deep tech related to the green transition. New ventures in this area, such as startups solving via innovative services or technologies, are, also fundamental. For this to happen, talent is essential. For instance, just on the assembly of electric vehicles and manufacturing of batteries, by 2030, around five million jobs are expected to be created.

As stated in the Draghi Report, some critical sectors, such as clean technologies manufacturing industry are today affected by shortages of workers with the correct skills, actually job creation in this area grew by 12% from 2015 to 2020

20 Note: In their Recovery and Resilience Plans, Member States are committed to dedicate at least 20% to the digital priority (Europe's Digital Decade: Digitally empowered Europe by 2030 (europa.eu))

and "clean technology manufacturing saw job vacancy rates double from 2019 to 2023, with 25% of EU companies reporting labour shortages in Q3 2023". A challenge that Europe needs to look in detail at, especially when having other global economies, such as China where its annual manufacturing capacity for battery cells is expected to cover the level of global demand, as complemented in the report.

Talent Retention and Stability Insights [21]

- European labour laws contribute to a stable workforce: Employees tend to stay longer (an average of 10.6 years) compared to the US (6.6 years)
- For startups, this means better continuity, reduced turnover costs, and a focus on long-term growth
- By 2023 startups operating in Climatech are listed as top 1 for talent attraction in EU
- +10k net new people joined the EU tech scene in 2023
- The annual volume of founders starting a new startup in EU exceeds the United States

B. New technologies and startup potential

Startups have proven their innovation and transformative power by addressing critical societal issues, such as aging populations and quality of life improvements. During the set of previous periods analysed, we can see coherent strategies of government support, aligned with green transition policies as well as some remarkable cases founded in Europe. At the same time, we can perceive that there is still a lot to be done, especially, when it comes to other regions of the world.

Startups introduce new solutions that enhance living standards and contribute to sustainable economic development. It is well known that they have significant potential to increase the economy of a country, while adding new jobs to the market. As mentioned in the McKinsey article "How Europe's startup ecosystem can learn from each other to ignite and scale up entrepreneurship" the growth of US-based technology companies from 2000 and 2021 (the US GDP has grown from around $16 trillion to $26 trillion in the last 10 years), allowing the United States to close its "12-percent deficit compared to Europe (including the EU-27, United Kingdom, Switzerland, and Norway) in 2012 but also arrive at a 20-percent advantage over Europe in 2022"[22].

Lack of innovation compared to other areas of the world, has contributed to a reduction of its share on global market caps and profits (dropped around 15%)[23]. In the latest report of Dealroom, health represents the most funded sector in the EU in 2024, just after Fintech and Energy.

The falling behind of Europe in this matter,

21 "State of European Tech 23", Atomico Report 2023

22 "Reinventing our economy from within - How Europe's start-up ecosystems can learn from each other to ignite and scale up entrepreneurship", McKinsey

23 "Lessons from the best start-ups in Europe", McKinsey

Figure 5. Developer count Europe vs. US
SOURCE: Dealflow

can have many reasons. When it comes to the needs of developed technologies- In the publication: "Reinventing our economy from within" from McKinsey & Company Report 2023; an interesting analysis is made, following these same criteria, under an analysis of the next critical technologies; Europe lags behind in the Future of Programming (Even though today Europe has more developers than the United States), Trust Architecture (even though new hubs of this kind of technology have evolved recently), with cities such as Berlin and Lisbon joining the list[24]. Finally, the biggest discrepancy relates to cloud and cloud infrastructure in general, better defined as "Distributed Infrastructure".

Following another trend, more closely connected to academia and research, and a main criterion of interest for the general Market Outlook, is the development of new technologies with a highly technical as well as scientific approach. European cases, such as Mistral [25](French AI Startup competing with American based company OpenAI) or Helsing[26] (German defence startup born in 2021 now operating from Estonia) or Stability.ai (UK-based AI start-up) following the tendency of many other UK based AI solutions that have supported the countries innovation ecosystem by increasing its value by over 22% in 2024 compared to 12% in 2019[27].

To have a bigger picture of this phenomenon, it is relevant to see how just in 2023, an "estimated USD 8 billion in venture capital investment was made in AI in the EU, compared to USD 68 billion in the US and USD 15 billion in China", and for new ventures in generative AI models to scale from Europe to the world, this becomes a basic need so they do not relocate abroad. Today, 61% of global funding on AI for startups goes to the American companies and only 6% to EU companies.

24 "Crypto Hubs 2023", CoinDesk.com

25 Note: Paris in 2023 was Mistral.ai, the generative AI startup that raised over $500 million, becoming the leading global AI startup based outside the U.S (startup Genome Report 2024).

26 Note: Helsing, a German tech company, is a new type of security and artificial intelligence company, whose platform aims to provide the clearest picture possible in any operating environment.

27 "UK AI startups are now worth $256B", thenextweb.com

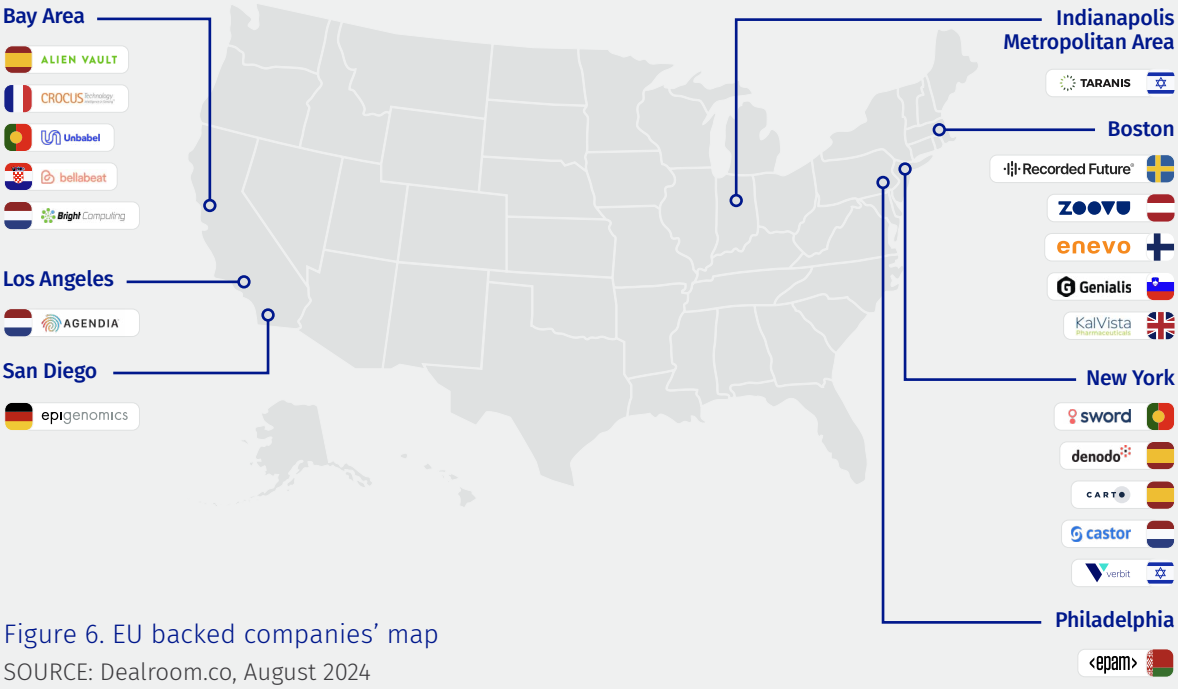


Figure 6. EU backed companies' map
SOURCE: Dealroom.co, August 2024

Relocation Snapshot

European companies moved abroad to seek better financing conditions, primarily relocating to the U.S, as mentioned previously, to avoid brain drain in Europe, a main factor to take into consideration is the reality on how many startups, once they reach a more mature state, decide to move to another region. As of today, the United States continue to be the number one option for European companies.

As stated in the Draghi Report, between 2008 and 2021, 147 "unicorns" were founded in Europe – startups that went on to be valued at over USD 1 billion. Of this, 40 relocated their headquarters abroad, with the vast majority moving to the United States.

The new generation of startups is increasingly connecting to specific industry verticals (such as AI, sustainability, cybersecurity and defence and ClimaTech) not only enhancing the relevance and impact of startups but also fostering stronger collaboration between different sectors of the economy.

In terms of European startups per area on development, over 1 million in investment has been raised; the top segment is deeptech, climate tech, and biotech (As shown in the image below). Meanwhile, some of the EU cases are:

- Battery recycling company CYLIB (Germany);
- Climeworks working on CO2 capture is born under ETH Zurich support

- BioNTech from Johanne Gutenberg University Mainz (Germany) leads research and business under biotech category at a global level
- German Aerospace Centre (DLR) with Agile Robots, falls on the category of "Robotics", valued at over €1.0bn today and an excellent case of a spin-off that is looking to bridge the gap between AI and robotics

One positive factor to add to the new segments is the area of EU's robotics industry over 82,000 industrial robots were installed in 2021, making Europe the "second largest market after China and a major supplier worldwide – today almost half of the over 1000 service robots suppliers worldwide are European"[28].

28 "The future of European competitiveness – A competitiveness strategy for Europe", page 79

Following this last trend, which relates to the appearance of applications in new technologies, such as AI in Europe, and its impact on the innovation ecosystem, it is important to highlight that AI expands to a wide range of sectors such as energy, healthcare, law and finance. And, that an increase in investment in AI has been seen in Europe, following the global tendency.

While AI is becoming a relevant topic on the news and academia, so is deep-tech. As will be highlighted in the next chapters, the need to improve the connection within research centres, academia and the startup world, is still, fundamental for these technologies to emerge and grow, since upfront R&D investment is a main factor for its expansion. As mentioned in the Draghi Report the strong position on the development of these technologies by countries, such as the United States is due to "the scale of cloud hyperscalers (inter-

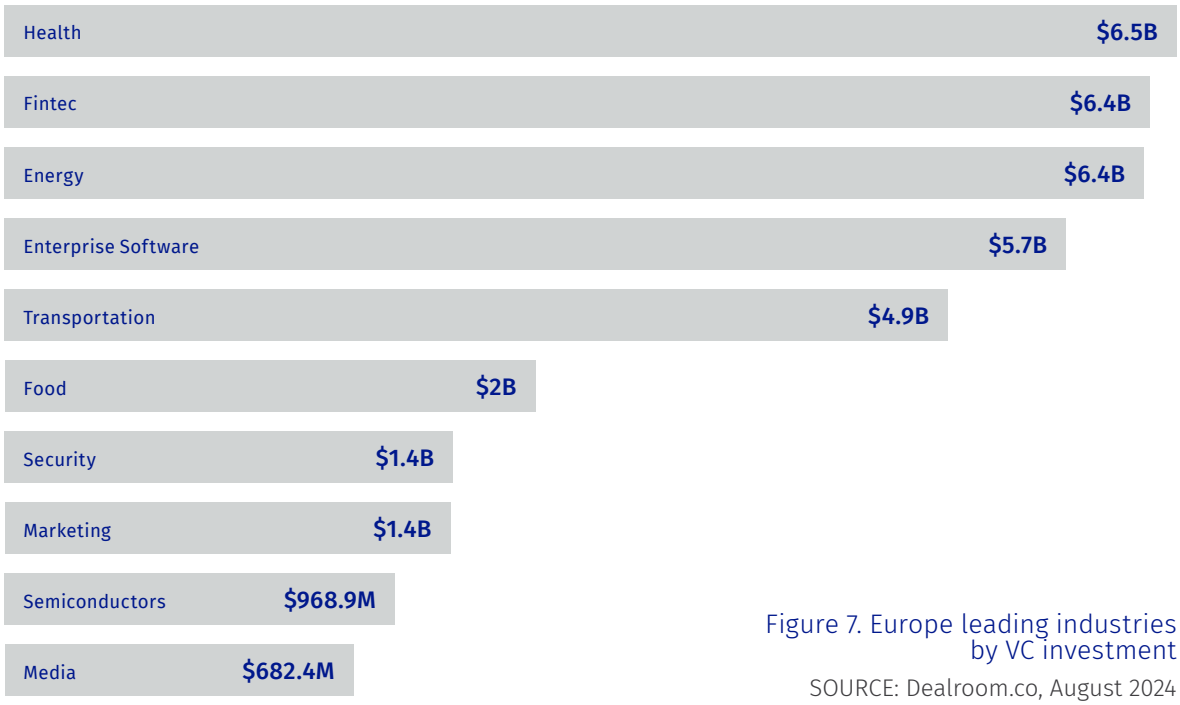


Figure 7. Europe leading industries by VC investment

SOURCE: Dealroom.co, August 2024

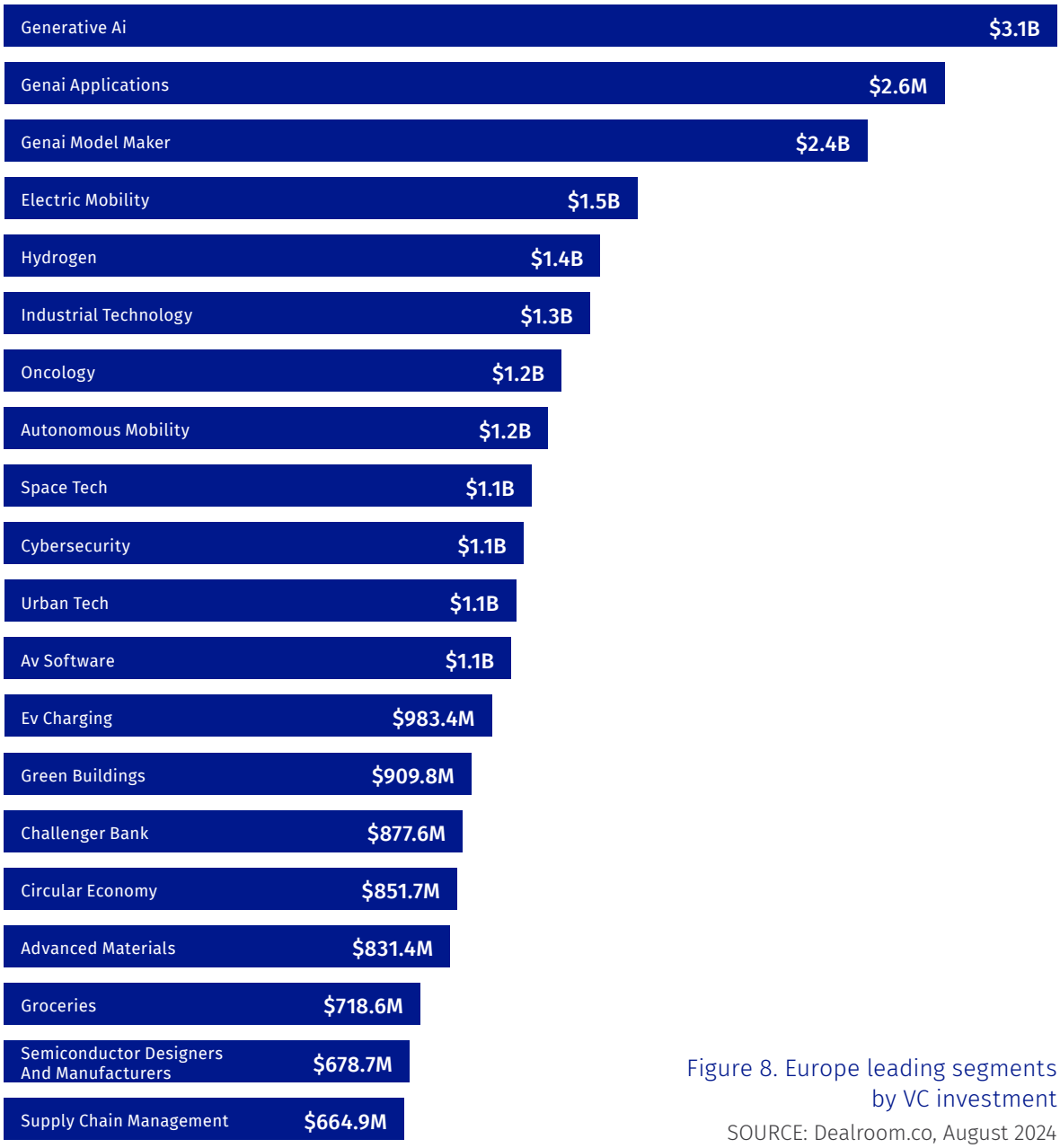


Figure 8. Europe leading segments by VC investment

SOURCE: Dealroom.co, August 2024

nally or through tight partnerships, like the one between Microsoft and OpenAI) and the availability of venture capital"[29].

There is an opportunity of development equal to the risk of losing leadership and profit of this kind of technology, such as AI if is not correctly and rapidly integrated in Europe. For example, as of today, only 11% of EU companies has adopted AI[30], increasing the risk that the region could become dependent on AI Models developed in other latitudes and be used in critical sectors such as automotive, banking, telecoms, health or mobility.

In the chart[31] below Europe ranks very

29 "The future of European competitiveness - A competitiveness strategy for Europe", page 79

30 "The future of European competitiveness – A competitiveness strategy for Europe", page 79

31 "Highly cited researchers 2023", Clarivate.com

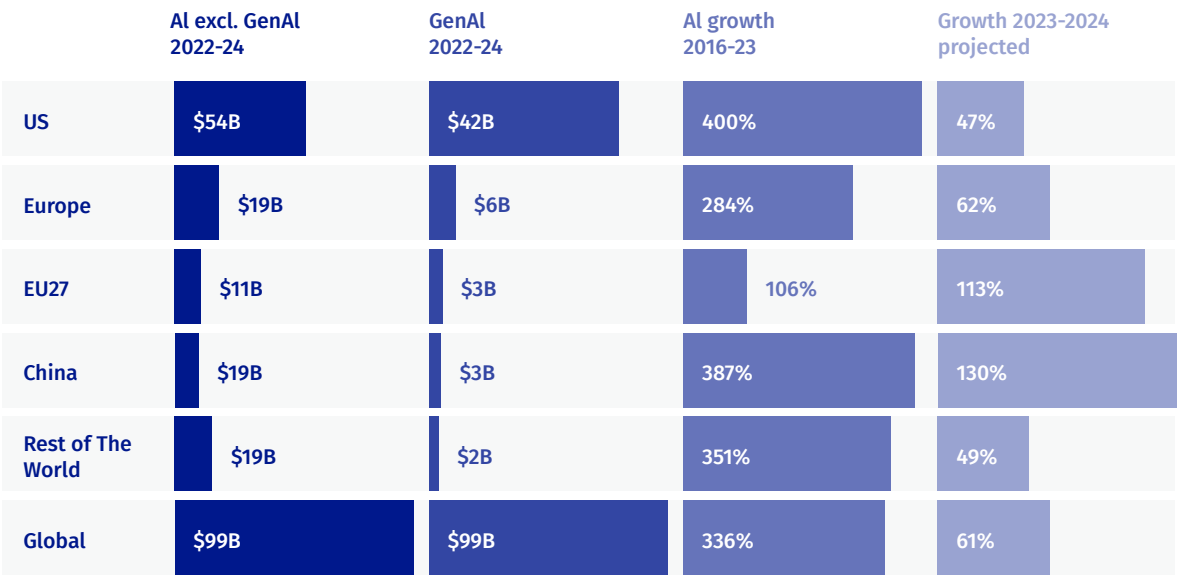


Figure 9. AI VC funding growth by region
SOURCE: Dealroom.co, August 2024

positively in Space Science (a considered deep-tech technology) [32]. An interesting factor meanwhile is the female focus in this area, Europe has remarkable cases, also in female tech lead companies, such as "The Exploration Company" for Space exploration (founded by a French-German engineer and space scientist[33]).

Snapshot of the ecosystems

The global startup ecosystem provides a comprehensive overview of economic activity and innovation across a range of industries.

As addressed in the Mario Draghi report (presented in September 2024), Europe's position on the global stage and challenges that the EU faces, especially, compared to the US and China, are highlighted. One of the points regards the level of investment made by these two major world economies, Draghi argues that the EU will have to mobilise €750bn to €800bn, annually, to keep pace with the growth and innovation of the US and China. This mobilisation implies an increase in EU investment from the current 22% to 27% of GDP.

A. European Ecosystems vs. the US and China

The European startup ecosystem, while growing in prominence, faces challenges in comparison to both the US and China. In the US, ecosystems like Silicon Valley, Boston, and New York are underpinned by

32 Note: Space Industry was identified by ESNA as an importance vertical and area for the future development of Europe and a great space for new startups to emerge

33 Hélène is the chairwoman and founder of Urania Ventures. In addition, she's co-founder and CEO of The Exploration Company, which aims to democratize space exploration. Before launching The Exploration Company, Hélène served for a number of years as VP Orion European Service Module at Airbus Defence and Space. (HéLèNE HUBY | URANIA)

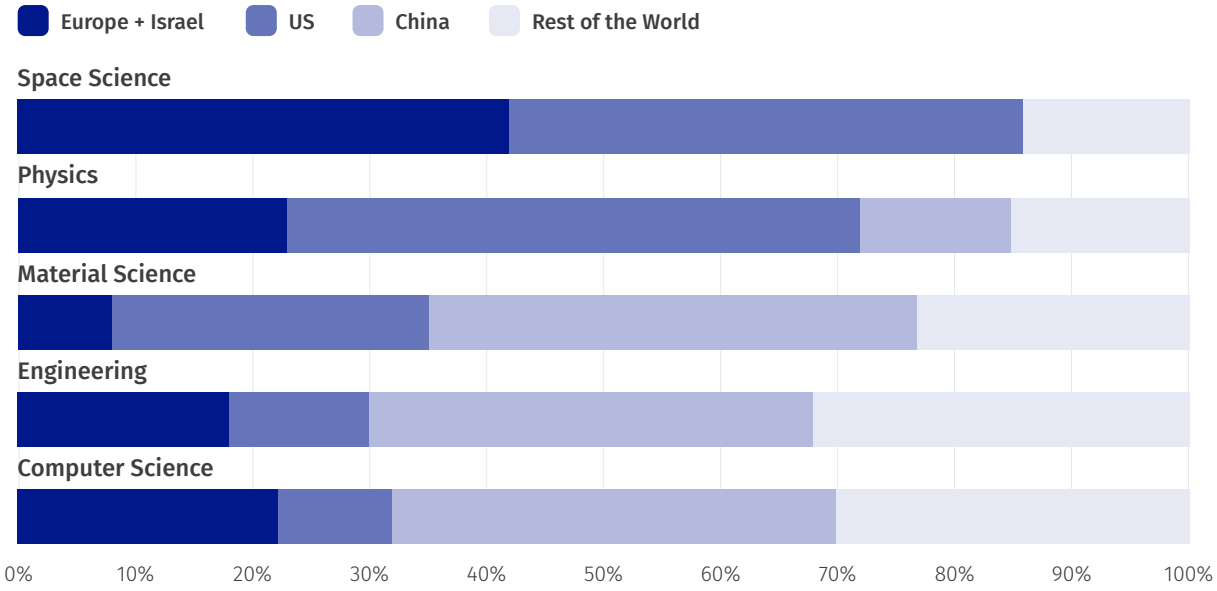


Figure 10. European research by location
SOURCE: Dealroom.co, August 2024

vast amounts of venture capital.

As stated in the Draghi Report: "EU's competitiveness will increasingly depend on the digitalisation of all sectors and on building strengths in advanced technologies, which will drive investment, job and wealth creation"[34]. When thinking about scaling the startup ecosystem, an entrepreneur that wishes to setup his business in Europe should expand the company roughly the 23 nations of the EU to achieve the same market size as the United States. The size of the European market and the region's recent low economic growth are well-established factors, but when discussing startups, it also refers to future growth possibilities through new innovations and technologies. In this context, referencing a McKinsey Study (2023), there are some gaps in key technologies of the future (e.g., cloud, edge computing, blockchain, zero-trust security/ cybersecurity) that may pose a risk to creating a solid startup ecosystem.

In 2024, the US startup ecosystem attracted nearly $72 billion in venture capital, significantly higher than Europe's collective total, which lags due to fragmented markets and regulatory barriers[35]. The US benefits from the scale of its unified market, large investment pools and world-leading academic institutions, all of which support a vibrant environment for high-tech ventures and startups .

The graph below shows the evolution of unicorns over time in the US and in the EU. It demonstrates the capacity of the US to attract and develop unicorns, against EU ability and even though the US keeps having more unicorns per 1M capita, since 2021

34 "The future of European competitiveness – A competitiveness strategy for Europe", page 67
Note: On the year of 2021, the ICT Sector represented 5.5% of the EU's GDP (EUR 718 billion of gross value added)

35 "Improving fortunes:Q2 2024 European VC trends in 5 charts", PitchBook.com

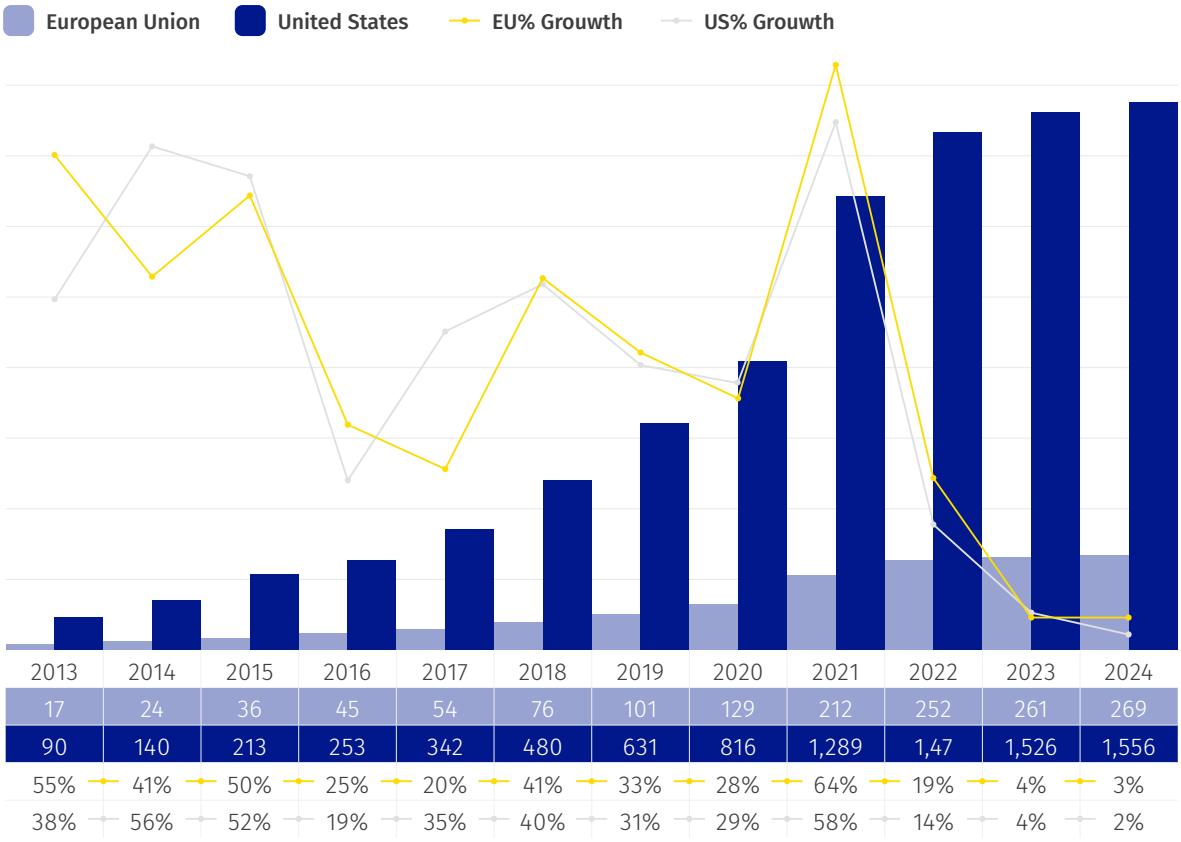


Figure 11. Unicorns evolution EU vs. US, between 2013-2024

SOURCE: ESNA, Dealroom.co

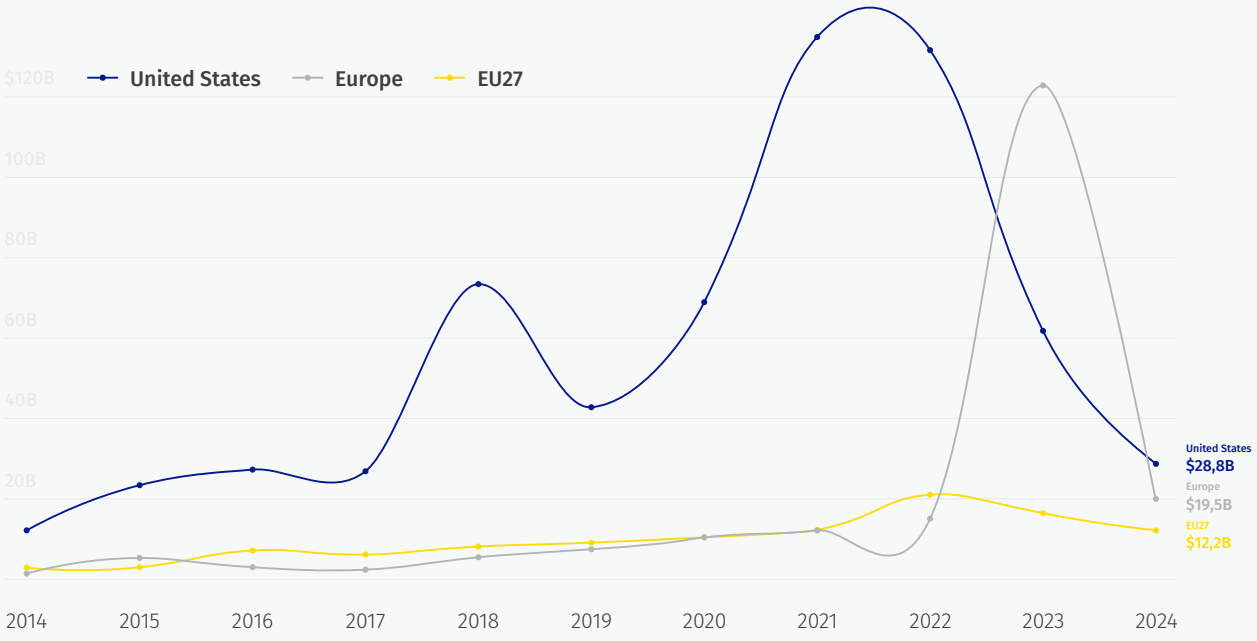


Figure 12. New VC raised by location

SOURCE: Dealroom.co, August 2024

the EU experienced consistently higher growth in terms of fostering new unicorns.
The Unicorn evolution of the startup ecosystem that is clearly seen in the last 20 years of EU startup history, can also be related to the amount of venture capital funding within the EU compared to the United States. However, there is still a positive view of the potential of the EU, with a specific example from a 2023 McKinsey study ("Reinventing our Economy from within"), highlighting the potential of the EU ecosystem and how it could support the market capitalisation if applied correctly (e.g.: startups could add 3.6 million to 8.1 million additional jobs to the European economy and contribute $1.2 trillion to $3.3 trillion in additional market capitalisation.
On the other hand, China presents a unique growth model driven by massive government support, rapid urbanisation, and technological dominance. Cities like Beijing, Shanghai, and Shenzhen have become critical hubs, especially for AI, e-commerce, and cleantech. Beijing, for instance, is second only to Silicon Valley in terms of ecosystem value, contributing to approximately 11% of the global startup ecosystem value in 2024. Additionally, China's dominance in sectors like 5G, autonomous driving, and electric vehicles (EVs) highlights its technological competitiveness.
Finally, as a global phenomenon, the increase in interest rates during 2023 and the uncertainty of the global economy, affected not just Europe. If we look at some numbers, there was a consistent reduction (2020-2023) in global private tech investment in Europe, the US, China, and beyond. What is interesting is that early-stage Investment in Europe, as well as some niche sectors, such as Cleantech and Sustainability, are top globally.
Moreover, as mentioned bellow; while main markets decreased in capital investment during this period, Europe continued to grow (+18%) compared to 2020.
Overall, due to the decrease of US investors activity in Europe, the need to have solid activity of European investors in all stages, became even more clear. Early-stage phenomenon: Raising capital for European Startup is a lesser issue, due to the factor that most initial rounds of capital come from domestic or pan-regional investors within Europe (80%). This share has stayed broadly consistent over the past five years.

B. City Benchmark: Snapshot to dynamism of diverse hubs

To provide a wider view of the European landscape in terms of geography and cities, during the last few years we have seen a growth of diverse hubs (usually emphasised as cities) that allow new companies to flourish.
In this sense, considering the last data of 2024, areas such as Silicon Valley (which accounts for 59% of the total ecosystem value, within the top 5 ecosystems according to the last Startup Genome Report 2024) New York, London and Tel Aviv/Los Angeles, continue to be top of the ranking, followed by places such as Boston, Singa-

pore and Beijing.

The strong presence of American cities in the ranking is not surprising, due to the robust venture capital environment, high investor confidence, and the sheer scale of innovation. It is the growth of the Asian hubs, with 4 cities in the Top 10 (Singapore, Beijing, Seoul, Tokyo), representing 4 nations (Singapore, China, South Korea and Japan), that may lead the economy in the following years.

Asian ecosystems such as Singapore, Seoul, and Tokyo have demonstrated exceptional growth in recent years. Singapore, ranked as the top startup hub in Asia, leverages its pro-business environment, government-backed funding initiatives, and strategic location. Similarly, South Korea's Seoul has climbed the ranks with strong government investment in AI and semiconductor technology, further solidifying its status as a top global hub. China's Beijing, Shanghai, and Shenzhen also reflect strong performances, driven by government incentives, robust industrial ecosystems, and immense market potential.

If this phenomenon is compared to what has happened in Europe, it can be seen that London keeps coming out on top and that Paris (14th) has moved up on the global ranking, being in the Top 15 globally.

Although London remains a dominant player, emerging hubs such as Stockholm, Munich, and Helsinki are becoming pivotal in the deep tech space. According to The European Deep Tech Report 2023, Stockholm,

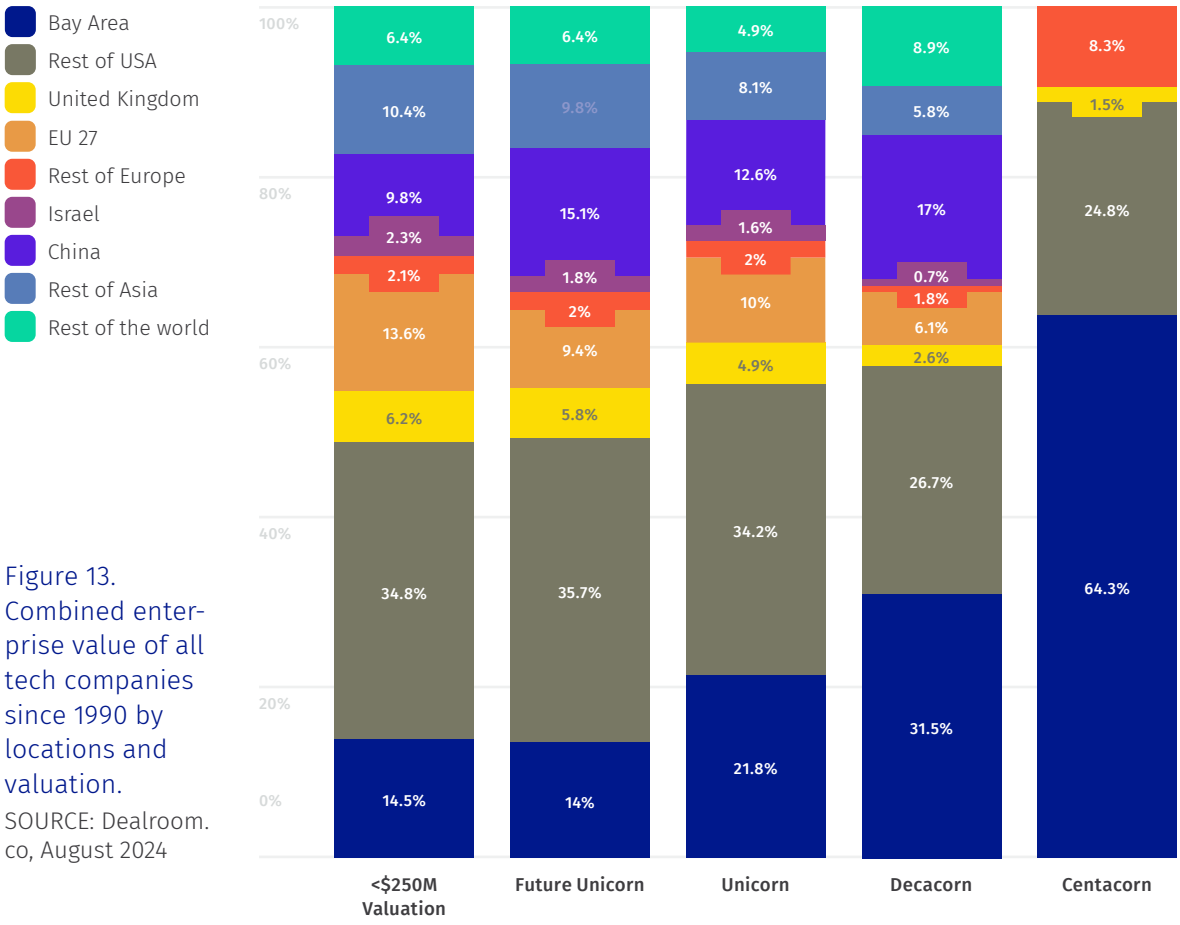


Figure 13. Combined enterprise value of all tech companies since 1990 by locations and valuation.

SOURCE: Dealroom.co, August 2024

for example, leads in venture capital funding for deep tech, attracting over $3.2 billion from 2018 to 2023, positioning itself as a hub for next-generation technologies like AI, bioengineering, and quantum computing. Furthermore, Munich and Helsinki are gaining momentum as key hubs for space tech and quantum computing startups. However, the concentration of VC-backed unicorns in Europe is still relatively low compared to the US and China, indicating that Europe needs to develop more substantial scaling mechanisms.

Legacy on EU Infrastructure: TELCO and Telecom Organisations Indicators

The historic development of solid European Infrastructure in today's world, has become an asset to be recognised when it comes to supporting the growth of companies that have digitalisation at its core: startups.

The data on global mobile internet usage in 2022 reveals significant regional disparities in connectivity. Europe leads with an 85% availability rate, closely followed by North America at 83% and China at 79%. These high percentages reflect the advanced infrastructure and widespread access to mobile internet in these regions. The Commonwealth of Independent States (CIS) has a 67% availability rate, while Latin America follows at 62%, indicating moderate levels of connectivity.

In contrast, regions like Pacific Asia, the Middle East and North Africa, and Sub-Saharan Africa lag behind, with access rates of 49%, 39%, and 23% respectively. These figures highlight the ongoing digital divide, particularly in Sub-Saharan Africa, where less than a quarter of the population has access to mobile internet.

Globally, 67% of the population, or approximately 5.8 billion people, were internet users in 2023. This figure underscores the significant global reach of the internet, although it also points to the substantial number of individuals who remain unconnected, particularly in less developed regions.

Main takeaways

1. Startup ecosystem: why does it matter?

Startups have played a vital role in boosting economic growth and job creation across Europe. The European Commission reports that startups in the EU have generated over 2 million jobs and significantly contributed to GDP growth in recent years.

2. Growth and Evolution of the EU Startup Ecosystem

The European startup ecosystem has seen significant growth over the last 20 years, evolving from a fragmented market to a global player with over 500 unicorns. Major hubs such as London, Paris, Berlin, and Stockholm have been instrumental in driving this growth, contributing to Europe's increasing prominence on the global stage.

3. Impact of Technological Innovation and Key Success Stories

Europe has produced globally influential tech companies, such as Skype, Spotify, DeepMind, and BioNTech. These companies exemplify how European startups can leverage technology to create impactful solutions and achieve global success.

4. Venture Capital (VC) Investment and Public Funding

VC investment in Europe reached $63 billion in 2023, with public EU funding playing a crucial role in supporting the startup ecosystem. There has been a significant increase in early-stage funding and investments in cleantech and sustainability, which Europe leads globally.

5. EU Startup support policies

Initiatives like the EU Green Deal, Horizon 2020, and the EU Chips Act, along with the Digital Single Market Strategy, aim to support startups and scale-ups by promoting sustainability, cleantech, and digital transformation. The EU's Emissions Trading System (ETS) and innovation policies foster a competitive startup ecosystem. Recent regulations like the Digital Market Act (DMA), Digital Service Act (DSA) and the Artificial Intelligence Act (AI Act), seek to balance the digital landscape, further supporting growth. These initiatives reflect the EU's commitment to technological leadership and a thriving startup environment.

6. Sectoral Growth in Fintech, AI, Deep Tech, and Cleantech

European startups have excelled in sectors like fintech, AI, deep tech, and cleantech. Startups like Revolut (fintech), DeepMind (AI), and Northvolt (cleantech) are examples of how Europe is driving innovation in these areas, often outperforming other regions in cleantech investments and technologies.

7. Challenges and the Need for Talent and Skills Development

Despite progress, Europe faces challenges in talent retention and skill shortages, particularly in STEM and clean technologies. While there are efforts to address this, such as the NextGenerationEU program, the region still faces a "brain drain" with many European unicorns relocating abroad.

8. The Pandemic's Impact and the Digital Transformation

The COVID-19 pandemic accelerated digital transformation and investment in startups, with a record €88 billion invested in startups in 2021. This period also underscored the importance of the green transition, leading to increased investments in sustainable technologies.

9. Global Position and Competitive Analysis

Europe's startup ecosystem is growing but still lags behind the US and China in terms of investment, scaling, and technological adoption. Despite this, Europe leads in early-stage funding, cleantech, and deep tech, demonstrating strong potential in these sectors.

10. Emergence of New Hubs and Regional Differences

European startup hubs like Berlin, Paris, Stockholm, and emerging cities such as Munich and Helsinki are contributing to a more diverse and dynamic ecosystem. These hubs are becoming increasingly relevant, especially in deep tech and AI sectors, reflecting Europe's growing influence.

Chapter 2

Maturity of the startup ecosystem

Chapter highlights

- The 8 Startup Nations Standards of excellence explained.
- More than 30 indicators to monitor the progress and implementation of the 8 SNS
- The 2023 SNS Report based on 91% response rate of ESNA's signatory members
- Regulatory Sandboxes and their impact on the startup ecosystem when applied
- Validation of the need of implementation of 8 SNS for a more friendly startup ecosystem and close previous gaps mention in Chapter 1

As previously discussed, public policies that facilitate a startup-friendly environment are essential to promote competitiveness in Europe. They do not only set the right frame for startups but allow all actors of the ecosystem to understand in depth the possibilities and constraints of running ventures in challenging times.

> *Currently, the European Union holds a vast but underutilised pool of data, expertise and startups. Without full utilisation, there's a risk that this wealth of resources could end up benefiting other global entities better positioned to capitalise on it and hamper our strategic autonomy and economic security (page 19 Enrico Letta Report).*

The EU Startup Nations Standard of Excellence Declaration was signed by 27 European countries on March 19th, 2021, to lay out eight guidelines known as the Startup Nations Standards (SNS) promoting a growth-fostering of the startup ecosystem. This set of recommendations ranges from digitalisation (SNS #8) to better access to finance (SNS #6) and talent attraction (SNS #2). These eight Standards serve as a foundation to increase Europe's overall competitiveness, but, overall, they have become a clear example of unified work by European member states to describe what a correct ecosystem should look like. Something, to highlight as a pivotal cornerstone of European collaboration as well as a global example to be followed, when uniting many nations under the same vision: to lead at a global level.

Furthermore, as SNS address a broad spectrum of issues, their implementation would facilitate smoother scaling processes. By eventually leading to a European ecosystem made up of a significantly higher number of scaleups, Europe would increase its position when it comes to European hubs.

As stated in chapter 1, highly innovative with a tendency to be disruptive, startups have the potential to drastically transform

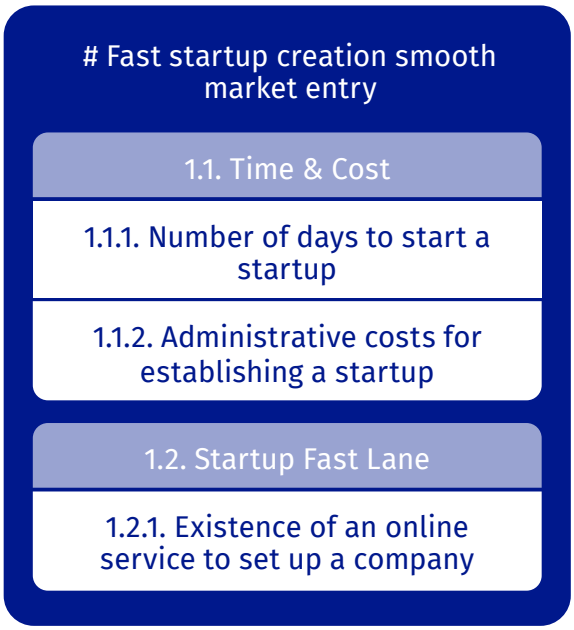
specific industries and society at large by boosting digitalisation. Additionally, this innovative mindset can positively impact areas such as regulation or public procurement, allowing for greater flexibility where necessary. Therefore, the eight Standards not only clearly identify areas of improvement, but also serve as a compass that, with ESNA's support, can be followed and implemented.

What are the Standards?

The eight Standards selected by the signatory Countries are divided into more than 30 indicators, created by ESNA based on official information, to be observed on a yearly basis in the SNS Report.

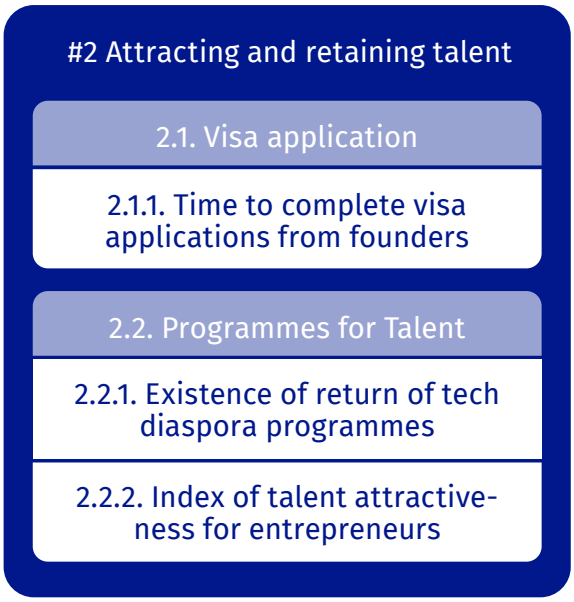
Standard #1

refers to Fast Startup Creation, Smooth Market Entry, addressing an easy startup creation process, crucial for entrepreneurs intending to start a new venture.



Standard #2

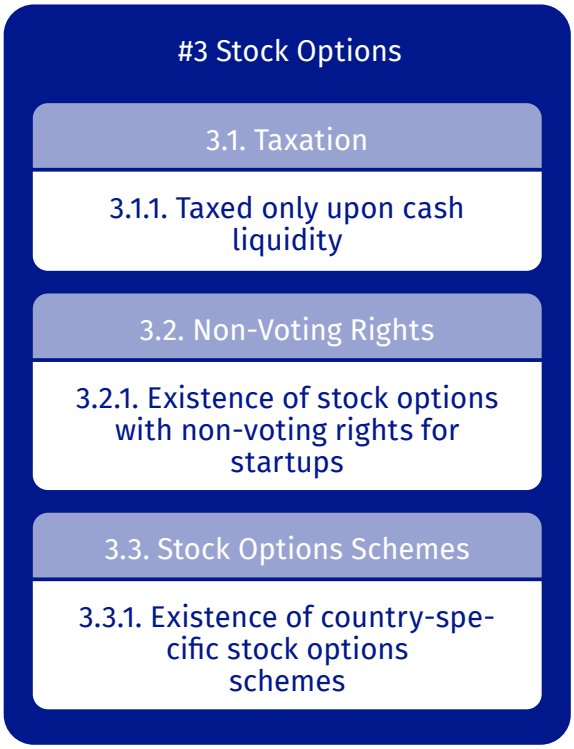
refers to Attracting and Retaining Talent, which is paramount for fostering favourable conditions for high-impact startups to set up a base in Europe and eventually scale globally. This standard is comprised of two dimensions: visa policies and talent programmes.



Standard #3

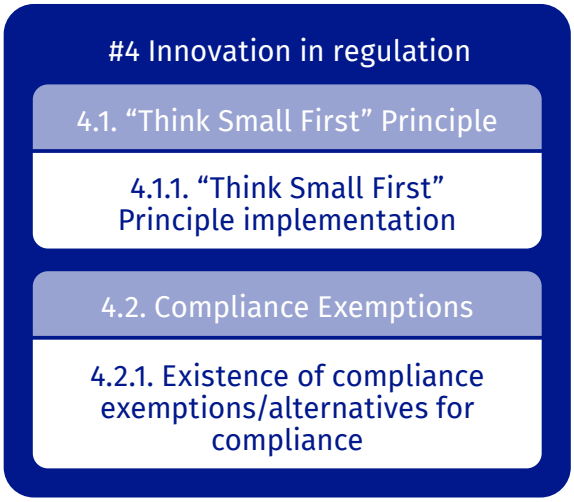
refers to Stock Options (SO); a mechanism with great potential to support startups. This Standard aims to promote a favourable system and encourages this practice in Europe, through a tax framework which entails only one moment of taxation and treats SO as capital gains instead of income. Additionally, Standard 3 addresses

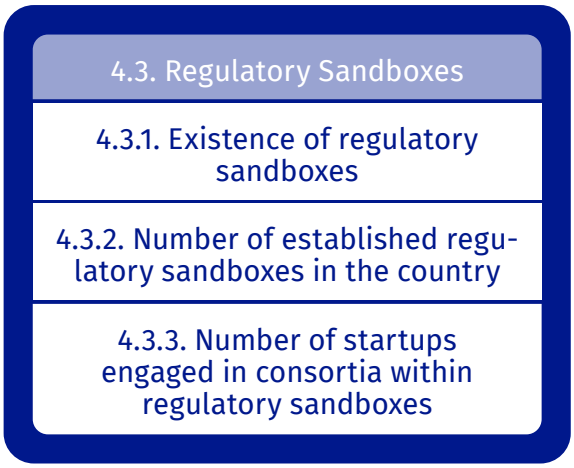
a concern with voting rights tied to the ownership of shares.



Standard #4

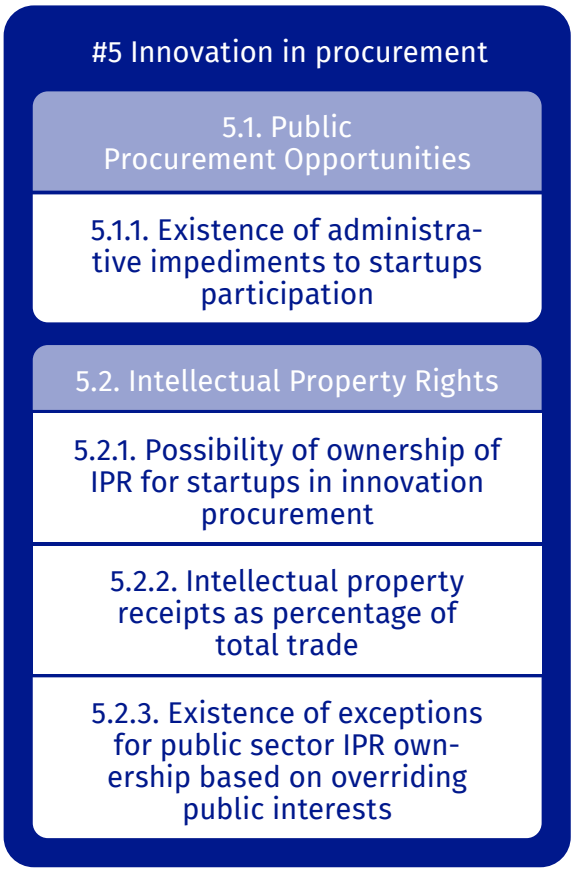
refers to Innovation in Regulation, an essential part of the policy frameworks that can support more competitive startups and scaleups in Europe, as their potential for success can be either enhanced or stifled by regulation.





Standard #5

refers to Innovation in Procurement, that entails the development of innovative solutions through public procurement processes, increasing startups' participation in this area.



- 5.3. Open-Source Assets
  - 5.3.1. Existence of startups actively supported and contributing with open-source assets
- 5.4. Tech transfer Policies
  - 5.4.1. Existence of policies for smooth tech transfer

Standard #6

refers to Access to Finance, which is essential at every stage of the development of a startup. It encompasses both public (e.g. direct grants) and private (Venture Capital) sources of funding.

#6 Access to finance

- 6.1. Public Grants
  - 6.1.1. Existence of RRF for VC for startups
- 6.2. Indirect Access to Finance
  - 6.2.1. Utilisation of EIB and promotional banks for VC investment gap bridging
  - 6.2.2. Adoption of initiatives to diversify private capital for high-growth startup co-investment
- 6.3. Tax Relief Measures
  - 6.3.1. Existence of tax relief for BA

Standard #7

refers to social inclusion, diversity and protecting democratic values. Going beyond the prevailing image of a startup founder and reducing entry barriers into the ecosystem. Standard 7 also broadens the pool of talents by unlocking a new array of innovative solutions.

#7 Social inclusion, diversity, and protection of democratic values

- 7.1. Incentives for Startups
  - 7.1.1. Existence of national awards and policies for startup role models
  - 7.1.2. Existence of social inclusion mobilisation Initiatives
  - 7.1.3. Existence of incentives for diversity hiring
- 7.2. Incentives for Founders
  - 7.2.1. Support to founders from underprivileged backgrounds

Standard #8 refers to the "Digital First" principle and emphasises the importance of having a digital approach for most public entities/startups interactions and having national digitalisation strategies in place.

#8 Digital First

- 8.1. Knowledge Sharing
  - 8.1.1. Existence of proactive engagement for digital knowledge sharing and best practices
- 8.2. Incentives for Startups
  - 8.2.1. Index of Digital Public services for businesses
  - 8.2.3. Existence of national digitalisation strategy implementation

A positive evolution of the results of the level of implementation of the SNS across the board are expected over the next few years, representing a favourable policy framework for the creation and growth of startups, no matter where they are created within the European context. In this sense, understanding the deep significance of harmonising the EU startup ecosystem, becomes a main priority for ESNA and its SNS implementation. Europe today has a set of standards of excellence that define the best outcome for a startup ecosystem to develop.

ESNA regularly monitors the progress of signatory countries as per the above eight SNS detailed, with an annual SNS Report, which identifies the EU's strengths and weaknesses through the lenses of the Standards.

The results published are based on various sources of information, one of which is official government data and thus aims to monitor the implementation of the SNS listed in the declaration.

The following graph shows the 2023 snapshot of the implementation level of each standard of excellence, based on yielding a 91% response rate of ESNA's signatory members (a total of 21 countries):

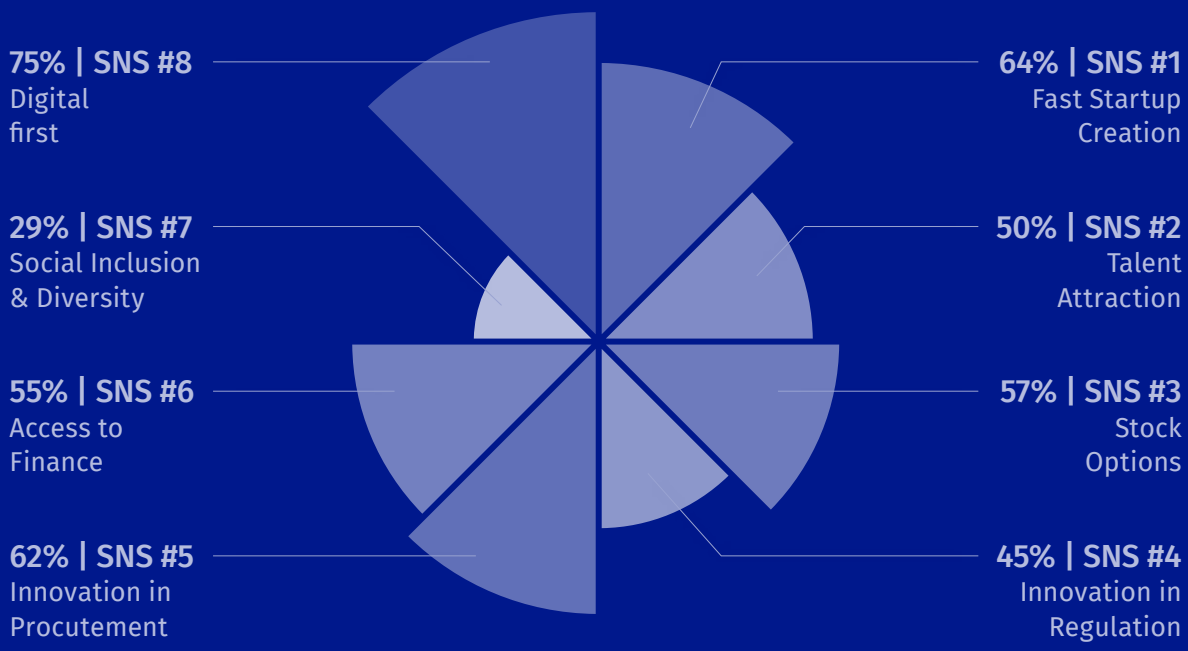


Figure 14. SNS Implementation level
SOURCE: SNS Report 2023, ESNA (2024)

According to this, the European Startup ecosystem achieved 5 of the 8 standards with more than 50% implementation in just the first year of its measurement, namely, Fast Startup Creation, Stock Options, Innovation in Procurement, Access to finance and Digital first.

Top and bottom performing standards and potential improvements: Results from SNS Report 2023

As to portray a more direct overview of how the 8 standards of excellence are monitored and have been implemented by ESNA Members. The first ESNA analysis of this implementation will be showcased in this chapter, regarding the evolution of the SNS, executed during 2023.

1. Top Performing Standards

Analysing the results from SNS Report 2023, the trend has to do with having a digital first approach, as is highlighted in Standard #8: Digital First, with the highest implementation value (75%) across the eight standards. Therefore, applying the digital first principle as the first step when creating policies that relate to startups, can be of great support. This initiative is not just one way of creating better conditions for new born companies, but a more effective way to increase access to a fast and digital interaction with public services: Using digital channels can also become a significant tool for providing access to founders and or investors, that are located in remote areas and come from different backgrounds. Allowing a more harmonised flow of information.

The maiority of surveyed countries offer most of their services to businesses in a digital manner, and 86% displayed evidence of having a national digitalisation strategy in place.

Additionally, and according to the latest results of the monitoring system, Europe has also made progresses in terms of the cost and time of setting up a startup, with streamlined processes, accessible to everyone with digitalised business services, and cross-borders adapted, as addressed by Standard #1: Fast startup creation, smooth market entry, with a performance of 64% in SNS Report 2023.

It is possible to set up a company in 1 day in 33% of the countries, and it is possible to do it with less than 100 euros in 57% of them. Additionally, 48% of the countries show evidence that legal documents from other EU countries may be used as evidence to establish a business.

2. Bottom performing Standards: Room for improvement

There is room for improvement in European startup policies. While certain areas and specific Standards exhibit poorer results, requiring a common and synergistic effort from European countries, there are also

notable differences between them. Therefore, policy work should be evaluated on a case-by-case basis with strategies adapted accordingly.

Starting with the performance achieved by Standard #4: Innovation in Regulation, 45%, the implementation of this SNS principle has the potential to be improved once EU countries are generally more concerned with red tape challenges. Thankfully there is a high interest in reducing bureaucracy for startups, following the general view of the startup ecosystem of most stakeholders in Europe.

Startups have a crucial role in the path to innovation. When looking at the European regulatory framework of sandboxes, it can be observed that this mechanism is being adopted in many countries. Nevertheless, startups are generally, not directly involved nor participate or engage in the process, therefore regulatory sandboxes must consider startups and actively support the testing of their solutions. A possible improvement regarding regulation in the startup ecosystem is the startups participation in Regulatory Sandboxes. For more information regarding the Regulatory Sandboxes topic, please see the ANNEX of Regulatory Sandboxes.

Content and opportunities in the EU today to improve are also a challenge for Standard #7: Social inclusion, diversity, and protecting democratic values. This Standard was the lowest-scoring SNS, with 29% of general implementation. While the part focused on incentives for startups performs better (47% implementation score), there is a clear lack of incentives for founders (10% implementation level). National awards targeted at startup role models are widespread (62% of the surveyed countries have some in place), however measures for encouraging more diverse hiring procedures are on the lower end, as only 24% of the surveyed countries are currently implementing such initiatives. When it comes to supporting founders from underprivileged backgrounds, most countries either only partially apply such incentives – by only focusing on one issue – or do not have any in place at all.

Main takeaways

1. The importance of Public Policies in fostering a startup-friendly environment

Public policies play a crucial role in creating a conducive environment for startups to thrive in Europe. These policies, like the EU Startup Nations Standard (SNS), help establish a unified framework that promotes competitiveness, innovation and a growth-friendly ecosystem across European member states.

2. EU Startup Nations Standard (SNS) as a guiding framework

The EU Startup Nations Standard of Excellence Declaration, signed by 27 countries, introduced eight key Standards to guide the growth of the European startup ecosystem. These standards range from fast startup creation, access to finance and talent attraction to innovation in regulation, procurement and promoting digital-first principles. They aim to harmonise the startup ecosystem and create a foundation for unified growth.

3. SNS Indicators

With more than 30 indicators, the SNS Report covers in detail the main areas of the startup environment. The main strength of these indicators' methodology is to allow comparisons between different countries in terms of SNS implementation.

4. SNS Report 2023

With 19 answers from countries, the SNS Report 2023 provides an overview of the European startup ecosystem, detailed by standard per country. The data collected from the survey sent to the countries was complemented by information from third parties, including desk research conducted by the ESNA Team.

5. #8 Digital First and #1 Fast Startup Creation as Top Performers

The "Digital First" standard (SNS #8) emerged as the most successfully implemented standard, with 75% implementation across surveyed countries. It emphasises the importance of digitalisation for startups and public service interactions, making processes faster and more efficient. The "Fast Startup Creation" standard (SNS #1) also performed well, showing Europe's progress in facilitating easier startup creation with reduced costs and faster setup times.

6. Challenges and areas for improvement – #4 Innovation in Regulation and #7 Social Inclusion

The standards for "Innovation in Regulation" (SNS #4) and "Social Inclusion, Diversity, and Protecting Democratic Values" (SNS

#7) were identified as the least implemented, with only 45% and 29% implementation, respectively. These areas need attention, particularly in reducing bureaucratic red tape and improving incentives for a more diverse and inclusive startup environment.

7. The role and opportunity of Regulatory Sandboxes

Regulatory sandboxes provide startups with a controlled environment to test innovative solutions, with Europe applying them in sectors like finance, AI, and energy. However, overall startup participation remains low across the EU. This highlights the need for more inclusive frameworks to better involve startups and accelerate innovation. Expanding participation in regulatory sandboxes presents a key opportunity to strengthen Europe's innovation ecosystem.

Chapter 3

EU Strategies, policies and recommendations impacting the startup ecosystem

Chapter highlights

- Overview of EU Strategies and political statements, regarding Europe Digital Decade 2030, New European Digital Innovation Agenda, Startup Europe, Enrico Letta and Mario Draghi reports as well as political declarations.
- EU Funds and Instruments: most relevant funding alternatives to the startup ecosystem in the EU.
- EU Policies and outcome of the Startup ecosystem: Map of active policies and its possible Impact

As stated in the previous chapters, the potential of the startups as critical drivers of economic growth, innovation, and job creation within the European Union (EU) is fundamental. Furthermore, the EU recognises the transformative potential of startups and has thus integrated them into its long-term strategic plans. Therefore, this chapter explores some of the most emblematic EU policies and strategies that are affecting the evolution of the startup ecosystem within Europe, it portrays concrete instruments being operationalised and highlights the main takeaways from Europe's competitiveness challenge.

To do so, relevant regulatory frameworks are highlighted and examined, in a high-level manner, the essential areas and technologies shaping the future of the European startup ecosystem at the moment, from AI to Data Privacy.

As Enrico Letta's report states: *"Even if the most powerful AI models have been developed outside our continent, the EU can still win the race to take the most of AI application"*, referring to the importance and priority of the fifth freedom mentioned in his report (research, innovation, data and knowledge).

A united voice to move forward

Enrico Letta expresses that the Single Market concept comes from an area where the world was simpler, smaller and less integrated. In his "Much More than a Market" Report, he reminds the reader how when in 1985, Jacques Delors introduced and presented the European Single Market, the EU was globally known as European Communities. It was at that moment that the concept was introduced for the Strengthen of European Integration.

Moving forward on the political and economic scene of today, supports a clear understanding that the Economic and Monetary Union, together with EU values and the willingness of the 27 member states to work together has been a success. But, as

will be elaborated in this chapter, there is much more to be done, to lead at a global scale, especially when referring to innovation and technology.

Innovation and technology are of relevance, since they are the sources for new companies to flourish and reach a mature stage that allows them to scale, a clear need that has been strongly taken into practice, especially after the Europe Digital Agenda in 2020.

A general European vision and consensus is present in the recent political statements, programs, reports and guidelines to what should be done next in the startup ecosystem of Europe.

The subject of competitiveness has been broadly mentioned not only in the already referred to Mario Draghi Report officially presented in September of this year, but also expressed in the next EU Political Guidelines, as well as mission letters to the next EU Commissioners and the Enrico Letta Report. This document aligned under the same principle of setting clear strategies for the following years of the EU on the mission to improve its leadership positively.

The topic of how Europe can lead "Europe Digital Sovereignty" continues to be as important a subject today as it was in 2020, when the European Digital Decade was announced. At that time, the ambition was to have a strategic framework to drive digital transformation in Europe by 2030. To do so, key sectors were targeted as a way to be on top of this new digital revolution: Digital skills and infrastructure, digital business and public services transformation are main areas within the Digital Compass. All of these areas, if developed correctly, can become cornerstones for the increase in competitiveness as well as the development of a more EU digital Sovereignty, as mentioned above.

Europe Digital Decade

As of 2020, when the Europe Digital Decade was launched, one of the ultimate goals was to make Europe more competitive following the EU values and main relevant topics such as sustainability and sovereignty. Today, as mentioned in most of the recent EU reports and documents, deep tech, cleantech and topics such as defence and cybersecurity have become fundamental for the EU and Global Agenda. A clear understanding of Digital Sovereignty is key. Following this constant improvement in key areas, in 2024 for the first time, the National Digital Decade strategic roadmaps were launched, to reach the digital targets and general objectives set by the Digital Decade Policy Programme. Digital skills, infrastructure and digitalisation of business and public services have specific objectives to be achieved by annual cooperation cycles by 2030.

Europe Digital Decade 2030

The Digital Decade 2030 is the European Union's strategic plan to position Europe as a global leader in the digital economy by 2030. The vision is built on four key pillars, crucial for driving this transformation:

Digital Skills	By 2030, the EU targets 80% of the population having basic digital skills, with 20 million ICT professionals, including a significant representation of women. This is seen as essential for fostering a competitive, innovative, and digitally empowered society.
Secure and Sustainable Digital Infrastructure	The plan emphasises expanding 5G and ultra-fast broadband to ensure widespread access to high-quality internet. It also prioritises the development of sustainable digital systems, including energy-efficient data centres and cloud services.
Digital Transformation of Businesses	By 2030, the EU aims for 75% of businesses to adopt cloud computing, big data, and AI technologies, boosting innovation and competitiveness. It also focuses on supporting start-ups and scaling up business initiatives across Europe.
Digitalisation of Public Services	The EU envisions 100% of key public services available online, including e-health and digital identity services, designed to be accessible and user-friendly for all citizens.

In summary, the Digital Decade 2030 aspires to create a fully digitalised Europe, driven by sustainability, innovation, and inclusivity, fostering a thriving environment for start-ups and tech entrepreneurship.

New European Innovation Agenda

The New European Agenda for Innovation is a strategic initiative launched by the European Union to boost innovation across Europe and enhance its global competitiveness and was unveiled in 2022. The need to create a more dynamic, inclusive, and resilient innovation ecosystem that is able to capitalise new opportunities and, eventually, become a new way to support new technologies, especially in strategic areas.

The agenda focuses on advancing "deep tech" innovations — those based on significant scientific and engineering advancements, such as AI, quantum computing, biotechnology, and clean energy technologies. Something that is clearly mentioned in recent publications as a pillar for the competitiveness of the region to increase. These innovations are seen as crucial for addressing major societal challenges like

climate change, health crises as well as digital transformation.

> ***"The lack of growth potential in Europe is particularly relevant for tech-based innovative ventures, and even more so for deep tech ones. For example, 61% of total global funding for AI start-ups goes to US companies, 17% to those in China and just 6% to those in the EU. For quantum computing, EU companies attract only 5% of global private funding compared with a 50% share attracted by US companies"***
> *"The Future of European Competitiveness – Part A /Chapter 2*
> *Mario Draghi*

A major goal is to create a more favourable environment for startups and scaleups in Europe. This includes improving access to finance, reducing regulatory barriers, and fostering a culture of entrepreneurship. The agenda aims to help these companies grow and compete globally, contributing to job creation and economic growth.
The agenda emphasises the importance of investing in human capital, which includes initiatives to upskill and reskill the workforce, particularly in digital and green technologies, to ensure that Europe has the talent needed to lead in innovation.

> ***"Collaborative efforts among governments, the European Union, and the private sector are essential to construct a resilient digital network, accelerate the digitization of public services and ensure that everyone has above-basic digital skills."***
> *Much More than a Market*
> *Enrico Letta*

Furthermore, the collaboration between the public and private sectors is also a key element of the agenda by encouraging joint efforts in research, development, and deployment of new technologies, to accelerate innovation and bring new solutions to market faster.

> **"In this spirit, I will propose to set up a European AI Research Council where we can pool all of our resources, similar to the approach taken with CERN"**
> Political Guidelines
> Ursula von der Leyen.

The New European Agenda for Innovation is closely aligned with the EU's broader policy objectives, such as the European Green Deal and the Digital Decade. It supports the transition to a more sustainable and digital economy, helping Europe achieve its climate and digital goals.

New European Innovation Agenda

The New European Innovation Agenda aims to strengthen Europe's innovation capacity, driving economic growth and tackling societal challenges through the following key areas:

Funding for Scaleups	Increasing investment in European startups and scaleups to help them grow and compete globally.
Deep Tech Talent	Focusing on education and skills development, particularly in deep tech, to attract and retain top talent across Europe.
Innovation Ecosystems	Creating interconnected regional innovation hubs to boost collaboration and drive technological advancements.
Regulatory Environment	Simplifying regulations to foster innovation, making it easier for businesses to bring new technologies to market.
Global Leadership	Strengthening Europe's role in global innovation, with a focus on green and digital transitions.

This New Agenda is designed to position Europe as a leader in innovation, enhancing competitiveness and addressing challenges like sustainability and digital transformation.

Startup Europe

Following the Covid-19 pandemic, the EU's New Industrial Strategy for Europe recognises startups as crucial players to secure a global competitive economy, especially when it comes to major topics such as driving digital transformation and achieving climate neutrality by 2050. For this to take place the European Commission launched in 2021 a precise initiative that focuses on supporting the startup ecosystem with EU Member States: Startup Europe is a clear case of support for the EU startup ecosystem and has also been linked to the importance of the digital transition, which is becoming a major achievement and will continue for the years to come.

Startup Europe aims, among other things, to support Europe to be less fragmented as a startup ecosystem, by ensuring that entrepreneurs can connect to and access other EU countries with better conditions, improve the access to finance via venture capital investment or other forms of finance, especially when compared to other global peers, thus, supporting the scalability of EU tech companies overseas and to align with the small and medium-sized enterprise (SME) strategy of the European Commission. To do so, the initiative is very strong on connecting startups, scaleups, investors, accelerators, corporate networks, media and universities and is sup-

ported via a portfolio of public EU funded projects and direct policy actions such as the EU Startup Nations Standards (SNS), Innovation Radar and Digital Innovation and Scale-up Initiative (DISC).

Startup Europe

Aimed at connecting high-tech startups, scaleups, investors, accelerators, corporate networks, universities, and the media

Supported by

EU Startup Nation Standard

The 8 standards of excellence that make up a Startup Nation is ESNA's benchmark of countries' performance on creating and developing startup-friendly policies to advance both the country and the EU's competitiveness in the global market.

Innovation Radar

The Innovation Radar Bridge aims to enhance links between EU-funded innovators, European investors, and policymakers in member states, particularly with regard to funding programs managed by EU Member States that support innovators.

Scale-up Initiative (DISC)

The DISC initiative is establishing the first regional investment facility dedicated to supporting digital innovations and scaling up digital startups in the region.

All main political declarations highlighted in this document, acknowledge topics that are aligned with the main EU Strategies that relate to digital and green transition: Topics such as European Sovereignty for it to reach its autonomy, the need to work in areas such as defence and energy are referred to. Furthermore, for the EU to achieve its global interest, there needs to be international collaboration as well as the need to work in a more united capacity. Finally, social cohesion is addressed in the declaration. All of these topics can relate directly or indirectly to the creation of a more friendly startup ecosystem, allowing, as stated in the Startup Nation Standards, for Europe to become a leading hub in this particular field, if policies are correctly implemented.

Political declarations
SNS, French Presidency EU and Spanish Presidency EU

The political influence on the startup ecosystem is clear, as the agenda continues to make substantial progress, with Member States showing a strong commitment to sustained efforts and ensuring continuity. Since the adoption of the EU Startup Nations Standards declaration in 2021, Member States have prioritised maintaining momentum by advancing the startup ecosystem agenda.

The declaration, from the Portuguese Presidency of the Council of the EU, outlined eight policy dimensions, known as the Startup Nations Standards, designed to enhance the ecosystem, which subsequently led to the establishment of ESNA. In 2022, the French Presidency of the Council of the

EU focused on two key standards, resulting in declarations on Tech Talent Attraction and the creation of a Fund of Funds for EU scale-ups.

In 2023, the Spanish Presidency highlighted the need for stronger coordination at the EU level, the establishment of EU regulatory sandboxes, and highlighting ESNA as an important forum in ensuring that Member States advance in implementing best practice policies for startups and scaleups under national competencies.

Political declarations

Startup Nations Standards, French Presidency EU and Spanish Presidency EU

Startup Nations Standards (SNS)

- The SNS declaration aims to create a supportive framework for startups across Europe, emphasising the need for collaboration among member states to foster innovation and entrepreneurship.
- The declaration outlines a set of eight standards designed to improve the conditions for startups, which include simplifying administrative procedures, enhancing access to financing, and providing better support for scaling businesses.
- It highlights the importance of sharing best practices and encouraging public-private partnerships to strengthen the startup ecosystem.
- The declaration calls for active commitment from member states to implement these standards, thereby boosting economic growth, job creation, and competitiveness in the global market.
- Ultimately, the initiative seeks to position Europe as a leading hub for startups and scaleups, contributing to overall economic and social progress.

French Presidency European Union

- Central to the declaration is the concept of enhancing European sovereignty, focusing on strengthening the EU's autonomy in crucial areas such as technology, defence, and energy to ensure Europe can assert its global interests.
- It also underscores a commitment to sustainability and climate action, aiming for stronger environmental policies and a greener transition. Digital transformation is another focus, with efforts to foster innovation and maintain Europe's competitiveness in the global digital arena, particularly by supporting startups and tech initiatives.
- The declaration prioritises social cohesion, addressing inequalities, and promoting inclusive growth, especially in the aftermath of the COVID-19 pandemic.
- It advocates for a more robust European presence on the international stage, reinforcing partnerships and collaborations with other nations.

Spanish Presidency European Union

- The declaration emphasises the importance of sustainable economic recovery, advocating for policies that support green transitions and environmental sustainability.
- It highlights the need for a stronger digital economy, aiming to enhance innovation and support digital transformation across member states.
- It is highlighted that startups and scaleups are essential to Europe's future economy and society, with the Digital Decade Policy Programme aiming to double the number of unicorns by 2030 and ensure over 90% of SMEs achieve basic digital intensity, supported by the SNS declaration and ESNA to foster growth and innovation.
- Spain also prioritises reinforcing the EU's global role, particularly in areas such as security, migration, and international relations. The declaration reflects Spain's vision for a united Europe that is resilient, equitable, and committed to addressing contemporary challenges through collaboration and shared values.

EU Funds and Instruments

In this document the evolution of the startup ecosystem during the last 20 years was clearly mentioned in Chapter 1, emphasising that while the EU market grew in early-stage funding, so did the support from the EU funding when it came to public money allocation and different kinds of programs to support the EU startup ecosystem. At the same time, to understand in more detail EU Funds and Instruments, here ESNA have congregated a set of instruments, funds and policies that aim to enhance both the structural and systemic aspects of entrepreneurial ecosystems. For this, the creation of consortiums and new ways to connect the diverse stakeholders, in recent years, has also become fundamental.

For instance, Horizon Europe, to increase competitiveness with €95.5bi, or Innovation Council, to identify, develop and scale breakthrough innovations with €10.1bi, as well as EIB, or EIF with €3.75bi, to benefit SME's, startups and innovative companies. The EU has made several investments to promote innovation through different EU Public financing programs. Alongside these investments, innovation support policies have been developed, of which the following policies in the graph below have been highlighted, as well as the corresponding amounts allocated to each one:

ERDF

€226bn
Cohesion, Resilience and Values 2021-2027

Horizon Europe

€95.5bn
to European investors (2021-2027)

EIC Fund

€70bn
Overall portfolio

EIF

€3.75bn
European Tech Champion Initiative

NATO Innovation Fund

€1bn
Venture Capital fund

EIT InnovEnergy

€140m
Private placement round of equity

JEDI
Joint European Disruptive Initiative

€50m and €100m
annual challenge grants by "European DARMA"

Horizon Europe

€95.5bn

The Horizon Europe Programme is the European Union's flagship funding initiative for research and innovation. Running from 2021 to 2027, Horizon Europe has a budget of approximately €95.5 billion, making it one of the world's largest research funding programs. The program builds on the success of its predecessor, Horizon 2020, and aims to tackle global challenges, boost Europe's competitiveness, and support sustainable development.

Cohesion Policy

€226bn

The Cohesion Policy of the EU is a strategy aimed at reducing economic and social disparities between the regions of Europe and promoting balanced development across the continent. The European Regional Development Fund (ERDF) is one of the primary financial instruments under this policy.
The ERDF provides funding to strengthen economic and social cohesion by correcting imbalances between regions. It focuses on less developed regions, helping them catch up with more prosperous areas of the EU.

JEDI
Joint European Disruptive Initiative

€50m - €100m

The JEDI is the precursor to a European advanced research projects agency (European ARPA), with the mission of positioning Europe as a leader in emerging and disruptive technologies. To achieve this, JEDI launches 'moonshot' research programs ("GrandChallenges") to push back the frontiers of science and innovation, with a radically new method based on targeted research, maximum speed, a total focus on excellence, high interdisciplinarity and strong, accepted risk-taking. Driven by humanist values, JEDI focuses on solving the major societal challenges of our time (environment, health, digital, education, oceans, space) through innovation.

EU INSTITUTIONS

European Investment Bank (EIB)

The EIB provides long-term financing to support innovation, research and development, and infrastructure projects that contribute to economic growth and competitiveness in Europe.
Within the various existing programmes, we highlight the innovation loans, which means direct loans to companies, research institutions, and public-private partnerships to finance innovative projects, especially in sectors like digital technology, renewable energy, and healthcare. Also, as a financing tool, the venture debt combines elements of debt and equity, targeting high-growth, innovative companies. This is particularly useful for firms that require significant capital to scale up their operations but may not yet be profitable. Lastly, the EIB funds large-scale R&D projects and infrastructure that support innovation ecosystems, such as research centres and technology parks.

European Investment Fund (EIF) €3.75bn

The EIF specialises in providing risk financing to benefit SMEs, startups, and innovative companies. It acts as a catalyst for attracting private investment into innovation.
The EIF invests in venture capital funds that, in turn, provide equity financing to innovative

startups and early-stage companies. This helps bridge the funding gap for startups with high growth potential.
Additionally, the EIF provides equity financing and mezzanine capital, which is a blend of debt and equity, to support the growth of innovative companies. This is especially relevant for companies that need capital but want to avoid diluting ownership. And lastly, the EIF offers guarantees to financial intermediaries, such as banks and funds, to encourage them to lend to innovative SMEs. This reduces the risk for lenders and improves access to finance for businesses

European Institute Innovation Technology (EIT)

€140m

The EIT aims to drive innovation across Europe by integrating education, research, and business, forming a dynamic ecosystem that fosters entrepreneurship and the development of new technologies.
The EIT operates through Knowledge and Innovation Communities (KICs), which are partnerships that bring together leading companies, universities, and research centres. These KICs focus on specific societal challenges, such as climate change, sustainable energy, health, digitalisation, and more. Each KIC works to develop innovative solutions, create new businesses, and educate the next generation of entrepreneurs.
Additionally, the EIT provides education and training programs to help entrepreneurs and innovators turn their ideas into successful businesses. This includes access to mentoring, networking, and funding opportunities. The EIT's activities are particularly focused on helping startups and scale-ups grow and compete globally.
Moreover, the EIT's approach is based on integrating the "knowledge triangle" of education, research, and innovation. By fostering close cooperation between these three areas, the EIT creates synergies that accelerate the development and commercialisation of new technologies.
Among different global challenges, EIT promotes the digitisation transition by keeping Europe at the cutting edge of digital innovation.

European Innovation Council

€70b

The EIC is an initiative of the European Union designed to support breakthrough innovations and help high-potential startups and SMEs scale up. It was established under the Horizon Europe program, and it aims to drive Europe's leadership in cutting-edge technologies and new markets by providing targeted funding, investment, and support services.
This program supports early-stage, high-risk research and innovation projects with the potential to create new technologies. It funds visionary projects exploring uncharted territories in science and technology, often with no immediate commercial application but with significant long-term potential.
The EIC offers a mix of grants and equity investments, known as blended finance, to support the growth of high-potential companies. This approach helps to attract private investment and reduce the financial risk for companies developing innovative solutions.
Based on the EIC Impact Report 2022, the "EIC has supported a portfolio of over 1.600 startups that have helped generate 12 deep tech Unicorns and 112 Centaurs here in Europe. EIC companies have attracted over €10bn of follow-on investment and the valuation of the EI portfolio of companies stands at over €40bn*

Implementation of EU Policies

EU policies, which are currently under operation, may impact the startup ecosystem. A set of these has been selected and takes into consideration recent topics of interest for EU stakeholders. For example: control of digital destiny as well as data sovereignty, which may require new companies to comply with new rules resulting in the data being protected.

The general European perception, when it comes to startup ecosystems, is a vast number of regulations, many times seen as a constraint in a world where speed is part of the value chain. Having a positive perspective of the legacy of the EU in this matter is something that European Citizens should be proud of: The general Data Protection Regulation (GDPR) set global standards for data privacy, ensuring that startups can operate with trust and transparency when operating personal data, something that is not a given in other regions of the world.

Furthermore, subjects that refer to protecting national interest from possible threats, such as the EU's Digital Services Act (DSA) and Digital Markets Act (DMA) are set together with the aim to create a safer digital space and establish a level playing field for businesses, with a strong emphasis on protecting new ventures and providing a more equal field for startups to flourish. Adding to that, the Digital Service Act (DSA) as well as the Digital Market Act (DMA) have been fundamental for the understanding of the need to have a digital, yet safer, evolution when it comes to new ventures, emerging technologies, new startups and the correct growth of scaleups.

Alongside this, the AI Act, a cornerstone that represents EU vision into a major technology of the next decades, sent a concrete message to the rest of the world on how Europe is working to align and create a regulated framework where these technologies will belong. Meanwhile EU values are clearly understood and indirectly or directly present in each of these policies.

It was in March 2023 when the European Parliament passed the first legal framework of Artificial Intelligence to the world, the AI Act. With this measure a new landscape arose for many EU and non-EU AI companies that would like to operate in Europe, since non-EU startups need to comply with this regulation also.

The United States has not yet implemented such a legislation (even though in October of 2023, President Joe Biden announced an executive order to coordinate a federal AI strategy). Meanwhile, China has also elaborated some approaches to regulate the sector (e.g. Generative AI Regulation 2023) and Abu Dhabi and Saudi Arabia are heavily investing in AI technology at government level. In the case of Latin America, the first country to follow the EU approach is Chile, under the risk-based regime logic.

Finally, defence and cybersecurity are two other industries where there is a need for innovation and startups may become a pillar for them. During the last NATO Summit

in Washington (July 2024), EU leaders reiterated the need for transatlantic cooperation to strengthen the innovation ecosystem, emphasising the role of startups in maintaining Europe's technological edge and economic security. These interconnected concepts of digital nations and sovereignty may shape how regulatory frameworks are thought about and created, as well as having a direct impact on the technological landscape and making Europe more digital.

Acts that are relevant to the startup ecosystem

As part of our exercise, ESNA selected a set of policies that are already launched in the EU that may have an expected impact on the startup ecosystem.

In chapter 6, each of these policies will be elaborated on again and in addition will be some other acts that were not previously mentioned, since they have not been launched yet.

Acts already operating in the EU that have connection with the startup ecosystem:

Artificial Intelligence (AI) Act

The new rules establish obligations for providers and users depending on the level of risk from artificial intelligence. While many AI systems pose minimal risk, they need to be assessed

The AI Act prevents any international startup that does not follow the regulation from operating in Europe, no matter if it operates on other latitudes. The startup will need to update their internal policies to be in compliance with EU regulations, this may prevent some high-tech companies in AI entering the EU market.

On the other hand, this Act marks a clear vision of the EU to be a global leader when it comes to safe AI. The regulatory framework, as expressed by diverse actors of the ecosystem, is based on human rights and fundamental values, under the mission to develop an ecosystem that takes all points under consideration (it also became a cornerstone to other nations outside Europe that are following a similar path). Finally, the timeline that Europe selected for this launch may be positive as it is the first one globally and may impact different areas of the economy bringing "innovative products and services, particularly in energy, security, and healthcare, as well as higher productivity and more efficient manufacturing for businesses"[36]

36 AI Act enters into force - European Commission (europa.eu)

Digital Services Act (DSA)
Relevance to the Startup ecosystem

The DSA regulates online intermediaries and platforms such as marketplaces, social networks, content-sharing platforms, app stores, and online travel and accommodation platforms.
Its Main Goal is to prevent illegal and harmful activities online and spread of disinformation.
It ensures user safety, protects fundamental rights, and creates a fair and open online platform.

The Digital Services Act establishes clearer rules for online platforms. A consistency that is needed for any digital platform (possible startup to scale and grow). This is done by enhancing transparency and accountability. It is an act that is aligned with EU values as well as taking into consideration the importance of having fair online platforms, allowing a safer digital environment, which builds user trust and benefits new companies that want to operate in the EU. Additionally, the DSA's proportional regulatory approach helps prevent undue burdens on smaller businesses, allowing startups to innovate and save costs of scaling to new EU markets.

Digital Markets Act
Relevance to the Startup ecosystem

DMA establishes a set of clearly defined objective criteria to identify "gatekeepers". Gatekeepers are large digital platforms providing so called core platform services, such as online search engines, app stores, messenger services.

The Digital Markets Act aims to create a more level playing field by curbing the dominance of large tech companies (also known as Gatekeepers: Alphabet, Amazon, Apple, Meta, Microsoft and ByteDance). The role that this act has on the startup ecosystem is of relevance, especially for developers of apps or games, whose business plays largely in the digital field and under two operating systems (iOS and Android). These are led by two of the big tech providers, who, due to their market power, can maintain high fees and control competition, not allowing other actors to fairly compete in the ecosystem. Therefore, this enhances competition, offering start-ups greater opportunities for innovation and market entry that was not previously on offer.

European Digital Identity Act
Relevance to the Startup ecosystem

It offers a harmonised approach to security, for citizens relying on a EDI representing them online, and for online service providers who will be able to fully rely on and accept digital identity solutions independently of where they have been issued. This proposal implies a shift for issuers of EDI solutions, providing a common technical architecture and reference framework and common standards to be developed in collaboration with the Member States.

The European Digital Identity Act enables secure, cross-border digital identities, to simplify user verification and compliance processes. This facilitates easier access to

services across the EU, proving that digital capacity is present and boosting market expansion opportunities for startups that need this to accelerate this verification. Additionally, it enhances trust in digital transactions.

Data Act
Relevance to the Startup ecosystem

Clear and fair rules for accessing / using data within the European data economy.

The Data Act promotes fair access to and sharing of data, enabling startups to leverage data for innovation and growth. By reducing barriers to data access, it levels the playing field between startups and larger companies. Additionally, the Act fosters a more competitive and transparent data economy.

Chip Act
Relevance to the Startup ecosystem

The Chip Act aims to bolster Europe's competitiveness and resilience in semiconductor technologies and application, supporting the digital and green transition.

The Chip Act aims to strengthen Europe's semiconductor industry, ensuring a reliable supply of chips essential for tech innovation. This reduces dependency on external sources, which benefits startups by securing access to critical components. Additionally, the Act supports R&D and new market entrants, fostering innovation and competitiveness in the tech sector.

Net-Zero Industry Act
Relevance to the Startup ecosystem

It has main goals to achieve a climate neutrality by 2050, increase economic competitiveness, by making the EU a hub for green technology innovation and to reach energy independence.

The Net-Zero Industry Act is aimed at accelerating the development of clean technologies and achieving net-zero emissions by 2050. The Act is designed to bolster the EU's leadership in green industries, ensuring that at least 40% of the EU's clean technology needs are produced within the EU by 2030, reducing dependence on external suppliers. As mentioned in the previous chapter, Europe is known for each cleantech startup boom. Measures such as the net zero act, provide a stronger policy validation to the ecosystem and political support for the vision of achieving and promoting new technologies and ventures to achieve climate neutrality by 2050.

Critical Raw Material Act
Relevance to the Startup ecosystem

This Act aims to reduce the EU's dependence on third-country suppliers by boosting local production, diversifying imports, and enhancing recycling; while ensuring a sustainable and secure supply of the raw materials needed for a green and digital future.

The Critical Raw Material Act is part of the EU's strategy to strengthen its autonomy in critical supply chains, especially those related to clean energy and digital transformation that can support this goal.

In this regard, startups that can provide new technology or achieve new ways to innovate on such critical factors for EU competitiveness can have support via a series of other initiatives that the EU is commanding that relates to Research, Innovation and Academia in general.

Recommendations High-Level

Mario Draghi and Enrico Letta Reports

Starting with the comprehensive analysis of the European Single Market done by Enrico Letta on "Much More than a Market", and his acknowledgement of the principle of the fifth freedom, where research, innovation and education play a fundamental role to achieve Europe's Competitiveness. This, alongside the latest focus of Mario Draghi´s report that states that with the current AI revolution in Europe - if Europe doesn't compete at a global level via novel technologies and innovation as a key, there is a general agreement that the opportunities for EU startups in the strategic field becomes even more relevant today.

In both documents there is a strong reference to the need to increase productivity in the EU as well as becoming more competitive by enhancing topics previously mentioned in EU strategies and policies; such as strengthen AI capacity and development, elaborate new actions to support in strategic areas such as space and defence, decreasing the international dependency of this new set of technologies and allowing a stronger private industry to flourish. To do so, more collaboration with academia, universities and research institutions is needed, as well as to support private venture capital that can choose the EU as a major opportunity to invest, supporting EU inventions to remain in Europe and not move abroad.

The rapid global technological advances have not allowed Europe to capture most of the innovation benefits in these past decades, compared to other counterparts, making Europe's external dependency very significant. For this to change, not only is innovation in public procurement needed, but a more robust investment environment. In addition to this, changes need to be made in red-tape and innovation in public procurement, this requires making rules more efficient. This is one of the many reasons why the cost and time for new companies in Europe may be more complex than in other places of the world and making the risk of offshoring higher.

Furthermore, both documents acknowledge the evolution of the European Market and how this may have affected the outcome of new innovation from the region. At the beginning of the millennium, the EU was still operating in positive fields compared to other counterparts when it comes to economic dominance. With time

this competitiveness has been challenged, as Draghi mentioned, especially by China, among others.

The 28th regime refers to the new Commission Mission letters, which are also mentioned in an open door to move faster on the proposal for the EU to own a wide legal framework, that will facilitate scalability of EU startups within the 27th nations with less cost and regulatory burden.

> ***"Innovation procurement through public tendering plays and important role together with an innovation friendly regulatory environment that facilitates the roll-out of new health technologies"***
> *Much More than a Market*
> *Enrico Letta*

There is an understanding to support high-edge technological development, even if they are high-risk investments (Invest EU Program is one solution to support this task). As well as this, facilitating cross-border collaboration in research and innovation, while addressing strategic gaps in skills, finance, and industrial capacity should end the constant updating of possible new strategies and policies to be implemented. Alongside this, the new EU Industrial Strategy comes as a support to improving the general business environment and, therefore, increases possibilities to secure funding for new innovations. Furthermore, a concrete example such as the need to mobilise private capital through the formation of a Savings and Investments Union (Capital Markets Union initiative) is also acknowledged.

This adds to the need to have more active private funding schemes for startups that are born in the EU. Additionally, there is also an agreement on how Academia, as well as R&I, can overcome the market if they had more private and commercial support. "EU produces almost one-fifth of the world's scientific publications, ranking ahead of the US and second only to China" and that the EU has a strong position when it comes to patent production (during 2021, 17% of the world patent applications were European), as the Draghi Report states. Continuing, he also established that: "Over the past two decades, the top-three US companies for spending on Research and Innovation (R&I) have shifted from the automotive and pharma industries in the 2000s, to software and hardware companies in the 2010s, and then to the digital sector in the 2020s", pushing European industrial structure to become static and not ready to be in the best position to allow innovation to growth or more investment to reach the EU.

> ***"Currently, there are only 12 European companies among the world's 50 companies with the highest R&D budgets, compared to 22 in the US"***
> *"The Future of European Competitiveness"*
> *Mario Draghi*

For the reinforcement of European resil-

ience and strength on the global supply chain, new startups in areas such as cleantech, space and defence are a topic well highlighted on both documents. Innovation is a key area to pursue green and digital transition. Furthermore, the need to look at the development and leverage of AI via Eu-wide AI verticals, as established by the Draghi Report, which refers to the use of AI in key industrial sectors (such as robotics and automotives).

In the case of energy related new ventures or cleantech startups, a major topic for both authors, the deep connection with current policies (such as the Net-Zero Industry Act or EU GreenDeal) and how this benefits the region to be top globally when it comes to the generation of these kinds of startups, it is mentioned as a positive opportunity. Thus for these major industries to develop required industrial strategies that combine multiple policies.

This support becomes fundamental when it comes to other strategic sectors. Enrico Letta refers to the need to foster Deep Tech Innovation and provides some practical action such as “facilitate the creation of an EU Deep Tech Stock Exchange thanks to specific rules and supervision”, allowing the EU to strengthen its strategic autonomy and economic security agenda.

Fragmentation of the defence and military industrial complex is also another major topic for both authors and an industry that needs to operate under a general framework and, therefore, be supported by funding from diverse sources, such as NATO. The need for new companies in this sector to avoid possible inefficiencies that this can bring opens the need to support new technologies in this area even more.

Space is another crucial area, with the promotion of cross-industry coordination and data sharing to accelerate the integration of AI into European industry, as mentioned in the Draghi Report, thus facilitating the growth of new startups in this sector. This included the possibility of granting a new contract to innovation in this area and allowing Europe to be less dependent on foreign technology.

The Mario Draghi Report refers to the term “New Space” which relates to the emerging of the private space industry and the emerging of new technologies and ventures (startups) and the acceleration of the commercialisation of many products and services. These include opportunities for new national space capabilities. In this case, Letta empathised with Europe’s strategic autonomy and security. It is mentioned as relevant or essential in the next year for the region to have autonomy of distribution. Also, insufficient financial instruments of the private sector have been identified as a challenge to still overcome compared to other regions such as Japan, China or the United States and the arrival of newcomers such as Canada, India, Israel and Australia.

> ***The value of the global space economy in 2023 stood at USD 630 billion and estimates for the future indicate that it could reach USD 1.8 trillion by 2035, growing at an average of 9% per year***
> *"The Future of European Competitiveness"*
> *Mario Draghi*

The need to reinforce these concrete industries from AI to Space, from Cleantech to Biotech was also reinforced by the European Competitiveness Fund to secure the development of strategic technologies from Europe to the rest of the world, as stated in the "Political Guidelines 2024 of Ursula von der Leyen".

Talent and Upskilling is another major topic of the startup ecosystem that is mentioned in both documents, due to the need of ICT specialists, following Ursula Von der Leyen: "legal migration based on the skills needs of our economies and our regions. We will help match the skills of third country nationals with labour market gaps in Europe and we will make it easier to attract the right talent with harmonised rules on the recognition of qualifications" the need is clear. On the other hand, Enrico Letta also states that "The increasing outflow of European talents in search of opportunities in third Countries is significantly undermining the European Union's capacity for innovation", pointing out how relevant talent becomes when we want to push this sector forward.

To conclude, topics such as fostering the innovation and 5th freedom, while improving the conditions for Research and innovation to develop and later growth via private and public support, closing the investment gaps by promoting public-private partnerships, decreasing the time and cost for new companies to operate in a simple manner on the Single Market by cutting red tape, having a core innovation in public procurement as well as considering regulatory sandboxes, can improve the condition of the startup ecosystem in Europe. Meanwhile, cross border expansion via strategic investment can allow novel technologies to flourish and be retained and to increase the chance to achieve Digital Sovereignty; these are some of the main topics to consider.

"Much more than a market"

Enrico Letta report: main concerns about the startup ecosystem

The April 2024 report by Enrico Letta, "Much More Than a Market," contains several key insights that have direct implications for the European startup ecosystem, namely:

Fostering innovation and a "5th Freedom"	The report introduces the idea of a "5th Freedom," which promotes the free movement of knowledge, research, and data across borders. This is vital for startups in sectors like tech, biotech, and research-driven industries, as it simplifies cross-border collaboration and access to research infrastructures. The focus on open science and creating a "European Knowledge Commons" encourages innovation and knowledge sharing.
Closing the investment gap	The report addresses the need to close the investment gap by promoting public-private partnerships and enhancing funding mechanisms for startups and SMES. This includes aligning financing opportunities with strategic goals like green and digital transitions, which are areas with high growth potential for startups.
Regulatory simplification for SME's	One of the core recommendations is simplifying regulations that are often burdensome for startups. By introducing digital solutions such as the Single Digital Gateway and promoting "Once-Only" data submission, the report aims to reduce bureaucratic hurdles for new businesses. Streamlined administrative processes will help startups focus on growth rather than compliance.
Scaling Up Through Strategic Investments	It emphasises the importance of scaling startups by creating an environment conducive to growth. Strategic investments in digital and physical infrastructure, coupled with initiatives like the European Innovation Council, aim to help startups scale beyond their national markets and compete globally.
Encouraging cross-border expansion	It highlights the need to better integrate startups into the broader Single Market by reducing barriers to cross-border trade and operations. This would make it easier for startups to expand beyond their home countries, tapping into a broader customer base and workforce across the EU.

Letta's report outlines a vision that strongly supports innovation, reduces regulatory barriers, and fosters investments in startups, making the EU more competitive and startup-friendly in the global market.

“The future of European competitiveness”

Mario Draghi report: main concerns about the startup ecosystem

Mario Draghi’s report on “The Future of European Competitiveness” outlines recommendations that significantly impact the startup ecosystem in Europe. The report emphasises the need for the EU to close the innovation gap with global leaders like the US and China. This involves tackling the fragmented nature of the European market, harmonising regulatory frameworks, and fostering a more dynamic and integrated innovation ecosystem.

Closing the Innovation Gap	It emphasises the urgent need for Europe to close its innovation gap with the US and China. It calls for improving Europe’s fragmented research and innovation landscape, enabling startups to access unified resources, funding, and market opportunities. This aims to boost the development of high-tech and research-driven startups.
Increasing investment and Capital Markets Union	The report calls for substantial investment (€800 billion) to strengthen the startup ecosystem, particularly in sectors like green tech and digital innovation. Creating a robust Capital Markets Union is essential for improving access to venture capital and reducing the reliance on bank financing, which is often a barrier for startups.
Harmonising regulatory frameworks	Startups often face heavy regulatory burdens when scaling across Europe. Draghi proposes streamlining regulations across EU countries and introducing an EU-wide legal status for innovative startups. This would reduce bureaucratic barriers and foster a more competitive environment
Strategic public procurement for innovation	The report suggests leveraging public procurement to promote innovation, including introducing innovation criteria. This change would benefit startups by increasing their participation in large-scale public projects, thus providing them with more opportunities to grow and innovate.
Cross-border collaboration and talent retention	It emphasises the importance of collaboration across EU member states to support innovation. Measures like closing the skills gap and fostering talent mobility within the EU are crucial for startups to thrive, ensuring Europe retains its talent and competitiveness in the global market.

These recommendations aim to create a more favourable environment for startups, supporting their growth and increasing Europe’s overall competitiveness.

Main takeaways

1. Regulatory Frameworks and Strategic Technologies

The chapters highlight the importance of regulatory frameworks such as the AI Act, Digital Services Act, Digital Markets Act, and European Digital Identity Act, which aim to foster innovation, ensure fair competition, and protect data privacy. These frameworks shape the future of startups by setting standards that promote safe AI development, secure digital environments, and innovation across industries.

2. Digital Sovereignty and the European Digital Decade

The EU's ambition to lead in the digital economy is evident in the Digital Decade strategy, which targets key areas like digital skills, infrastructure, and business digitalisation. Initiatives such as the National Digital Decade strategic roadmaps were launched in 2024 to achieve digital targets by 2030, enhancing Europe's competitiveness and digital sovereignty.

3. New European Innovation Agenda

Launched in 2022, the New European Innovation Agenda focuses on advancing deep-tech innovations (AI, quantum computing, biotechnology, etc.) to solve societal challenges like climate change and health crises. It emphasises improving access to finance for startups, fostering public-private collaboration, and upskilling the workforce to create a resilient, competitive innovation ecosystem.

4. Startup Europe's Role in Competitiveness and Scalability

Following the pandemic, the EU's Startup Europe initiative plays a key role in reducing fragmentation within the European startup ecosystem by improving access to finance and fostering connections across countries. The initiative aims to support the scalability of European tech startups, helping them grow and compete globally.

5. Strategic Funds and Instruments

The EU has developed several funding mechanisms like Horizon Europe, European Innovation Council, and institutions like the European Investment Bank and European Investment Fund to support startups and SMEs. These instruments focus on promoting innovation, competitiveness, and the development of critical technologies across sectors like AI, cleantech, and defence and for different stages of maturity of the companies.

6. Challenges to European Competitiveness

Reports from Enrico Letta and Mario Draghi point to the need for Europe to strengthen its innovation capacity, reduce red tape, and foster cross-border collaboration. They highlight Europe's lag in global technological leadership, particularly in sectors like AI and quantum computing, where US and Chinese companies dominate.

Chapter 4

Stakeholder's point of view

Chapter Highlights

- A general view of the startup ecosystem under main Manifestos: Internal Research and Analysis by ESNA
- Highlights of the Manifestos and Impact to the startup ecosystem.
- ESNA Members and Advisory Board Overview
- Main takeaways from both external outputs
- Winning Aspiration for the European Startup ecosystem
- Strategic verticals by order of relevance in terms of impact to the Startup ecosystem

One of the main objectives of this document is to be able to portray and show in a concise way what the EU Startup ecosystem vision is under the microscope of a representative group (with stakeholder and geographic diversity), regarding the future years of Europe. In that sense, we have considered the market outlook a representation of the voice of the market combined with ESNA's internal work. In this specific case the external analysis was assembled via two main groups: ESNA Members and the Advisory Board.

Internally, ESNA had already covered some main trends and identified main challenges by the deeper analysis done of diverse EU Manifestos, EU Strategies and political declarations (mentioned in the previous chapter).

During this process we opened the floor to diverse actors of the startup ecosystem to listen to their view and understand which may be the main pillars to highlight or focus our attention on.

The selected pillars under discussion that will be part of the building blocks of chapter 6 came to light during this process, which are: Talent, Investment, IP Rights, Legislation & Regulations as well as Culture (connected also to the topics of One Europe and Brand Identity).

As will be shown in this chapter, there seems to be a consensus on major topics, trends and strategic areas where to focus the attention on over the next few years.

A general view of some of the main Manifestos recently published as well as a concluded view of the output of ESNA Members as well as ESNA Advisory board is presented.

In these two last groups, the outputs are divided into strategic areas and thematic areas and part of this analysis is taking into consideration the development of two of the main three pillars of Chapter 6 "Laying the Foundation for Europe's Startup and Scaleup Strategy".

Finally, the representation becomes even more relevant, if the different profiles of the actors that have served as voices in

this process are taken into consideration. From university officials to academic researchers, startup founders and/or C-level executives of unicorn companies, investors and former government workers, as well as some players that have been working for and with startups within Europe for years.

A general view of the startup ecosystem under main Manifestos

One of the main topics mentioned in the Manifestos here listed is the need for Europe to remain competitive by harmonising regulations. The EU has passed, since 2019 13,000 laws compared to 3,000[37] in the US The EU president of the Commission, Ursula Von der Leyen, stated this year in the Mission Letter for Commissioner-designate for Startups, Research and Innovation that reporting obligations should be reduced by at least 25% overall and at least 35% for Small Business.

There is a clear alignment on the main topics that should occur during the next five years. Most of them are centred on boosting European tech leadership and resilience, ensuring the continent remains competitive in the global digital economy and can achieve the goal of having a more friendly startup ecosystem, where, as mentioned above, red tape is a major topic.

Allied for Startups, the focus is on strengthening the role of startups in policy creation, proposing that startups and scaleups play a central role in shaping future legislation and digital transformation strategies. While the Digital Europe manifesto echoes this need by advocating for a unified single market with a streamlined set of digital rules to reduce fragmentation across member states, fostering an environment that supports innovation and technological adoption. In parallel, European Tech Alliance talks about a European Lens for referring to the need of harmonised policies regarding the tech industry.

Another major topic in the Manifestos is the need to improve strategic investments, especially when referring to the latest stages of the startup journey. In this topic, the European Tech Alliance highlights the necessity for a cohesive European strategy that empowers home-grown businesses to contribute to Europe's global standing and support this by making a point with the need for the "strengthen Europe's resilience and technological autonomy". Followed by the need that European Tech companies have become an asset for the continent, and, therefore, they "deserve support and nurturing"[38]. Furthermore, France Digitale, also points out how the EU "should step up its efforts to complete the Capital Markets Union".

Green and digital economy is another relevant concept that emerge from most of the Manifestos. Following some of the points of Europe Digital Decade 2030, France Digitale manifesto calls for innovative policy making to focus on the promotion of voluntary

37 Politico Report

38 Tech Alliance Manifesto

data-sharing frameworks and sustainable growth through green technologies, in short a green agenda driven by innovation. Meanwhile, the Digital Europe manifesto further underlines the importance of implementing a 'Twin Transition Fund,'. As they stated, "Despite the 'Twin Transition' strategy, only two-thirds of companies are using Information and Communication Technologies (ICT) to reduce their emissions. This must rapidly increase to reach the potential 20% reduction by 2030".

Moreover, investment in talent remains a central pillar across all manifestos. Allied for Startups manifesto emphasises the need to establish digital upskilling programs, while France Digitale asks for a more diverse workforce, "leveraging accelerated visa procedures for third country nationals and harmonised stock options schemes to attract and retain the best talents" as to grant fast track to third world countries. Meanwhile, Digital Europe also focused on the need to collaborate with the private and public sector to acknowledge the "one million cyber skills gaps", recommending having a Cyber Skills Academy fully operational. Another topic highlighted is Infrastructure: Digital Europe's vision also highlights the importance of ensuring a 5G connectivity framework and establishing a fully online public services infrastructure to support remote work and digital skills development: "establishment of a single EU-wide spectrum governance authority to ensure consistent spectrum policy and binding EU decisions".

1. Allied for Startups

> ***"Allied for Startups is a worldwide network of advocacy organisations in 5 continents focused on improving the policy environment for startups"***

The "Allied for Startups" manifesto urges EU political leaders to create a more inclusive and influential role for startups in the policy-making process. One way to do so, as this organisation has been proposing; would be to have a dedicated startup and scale-up inter group at the European Parliament.

They also refer to the relevance of a startup visa as it may transform the process of accessing talent, while also mentioning the need for investment in digital skills. Along with the appointment of startup representatives in various EU institutions, such as the Commissioner's cabinet. Along with this it suggests the nomination of a commissioner specifically for Digital Entrepreneurship as a central point of contact for all startup-related programs and policies. It also emphasises an EU company status, allowing easier scalability within the 27 members, the need to strengthen a Digital Single Market to break down barriers. Following this same principle, they also mention the startup and scale-up test for all EU legislation.

Potential Impact on the Startup Ecosystem:

These measures would give startups a direct role in shaping the EU regulatory environment, allowing for more adaptive and relevant policies that foster innovation. The appointment of a Commissioner for Digital Entrepreneurship and the creation of a dedicated intergroup would significantly enhance startup representation, leading to more tailored policies that address the challenges of scaling, innovation, and international competitiveness.

2024 EU Elections | Startup Manifesto

Topic	Influence in Policy Creation
Measure	Startups and Scaleups to play a bigger role at the policy table: Create an Intergroup for startups and scaleups Dedicate a team in EPRS (European Parliamentary Research Service) to ensure knowledge stream from startups across relevant policies Task a specific committee for coordinating work with startups Nominate an official or a team in DGGROW, ECFIN (Economic and Financial Affairs), IRC (Joint research Centre) Nominate a startup representative in Commissioner's cabinet Assign a Commissioner for Digital Entrepreneurship New EU legislation to be tested by Startups before implementation
Potential Outcome For Startup Ecosystem*	**Enhanced Influence and Participation:** Startups and scaleups will have a stronger voice in policy-making processes, supporting the growth of a more friendly startup ecosystem. **Improved Collaboration and Communication:** Better interaction between startups, scaleups, and governmental bodies support the bootstrap of a more solid startup ecosystem. **Knowledge Sharing and Integration:** Startup innovations effectively integrated into broader policies. **Sector Representation:** Official nominations will represent startup interests across various economic sectors increasing the chances to be heard. **Prioritised Needs:** A Commissioner for Digital Entrepreneurship will prioritise startup needs at higher governance levels.

*Rephrased by ESNA team to highlight the potential practical outcome per each measure

Topic	One Europe
Measure	EU-wide startup visa EU-company status to remove bureaucracy when scaling across EU
Potential Outcome For Startup Ecosystem*	**Streamlined Processes for EU Attractiveness** Simplification of procedures to enhance the EU's appeal to new talent and founders **Unified Scaling:** Making it straight forward to scale a product or service across the EU, rather than dealing with 27 separate processes, decreasing the market fragmentation

Topic	Investments
Measure	Identify and disseminate best in class pan-European investment instruments
Potential Outcome For Startup Ecosystem*	**Showcase Investment Opportunities:** Make visible the diverse sources of investment, improving and facilitate the launch of new ventures within the Union

Topic	Talent & Social inclusion
Measure	Invest in digital programs to ensure EU workers have the right skillset to complete. Further investment in diversity, equity and inclusion as the best path towards Europe's continued growth and economic success
Potential Outcome For Startup Ecosystem*	**Expanded Talent Pool for the Digital Economy:** Facilitating the establishment of high-tech companies and high-standard tech workforce in more and diverse cities of EU **Innovative Solutions through Diversity:** Creating novel approaches by fostering diverse participation in new ventures **Greater Global Talent Attraction to EU Startups:** Increasing the potential to draw global talent into the EU startup ecosystem

*Rephrased by ESNA team to highlight the potential practical outcome per each measure

2. European Tech Alliance

> ***"EUTA represents leading tech companies born and bred in Europe that provide innovative products and services to more than 500 million users globally"***

The European Tech Alliance manifesto has a strong focus on home-grown tech business to achieve EU wider goals, therefore, promoting EU tech in policy discussions and facilitating smoother regulatory frameworks for tech businesses. They recommend three steps for this growth and innovation in Europe to take place: (1) European Tech for European Competitiveness, (2) Smart Rules for a Stronger Europe, (3) Better Enforcement for fairer Competition.

Potential Impact on the Startup Ecosystem:

By reducing regulatory fragmentation and simplifying laws, startups will find it easier to navigate legal hurdles across Europe, encouraging cross-border scaling and growth. The manifesto's proposal for a pan-EU regulatory framework would enable startups to operate more efficiently and harmoniously across member states, fostering a stronger and more unified European tech ecosystem that can better compete globally.

Topic	Influence in policy creation
Measure	Include EU tech at policy discussions
Potential Outcome For Startup Ecosystem*	**Competitive and innovative Ecosystem:** The startup ecosystem in the EU benefits by both EU and non-EU tech and or startup companies operating within EU boundaries

Topic	Policy
Measure	Before the introduction new regulation, allow time for existing ones to be fully implemented
Potential Outcome For Startup Ecosystem*	EU Legal Framework Strengthen the historic legal framework of the EU to ensure credibility and stability to the existing startups operating in the EU market

*Rephrased by ESNA team to highlight the potential practical outcome per each measure

Topic	One Europe
Measure	Remove the EU regulation fragmentation by having a pan-EU approach Encourage cooperation among national authorities to limit working in silos and put Europe as one market Consider having pan EU regulations that do not have country specific additional regulations
Potential Outcome For Startup Ecosystem*	**Harmonised Regulations:** Facilitating the growth of European startups globally, nationally, and regionally through regulatory alignment

Topic	Talent
Measure	EU and national authorities must invest in proper resources as people, time and technical expertise
Potential Outcome For Startup Ecosystem*	**Access to new talent:** Increased the access to high-technical talent, especially when it comes to deep tech ventures

3. France Digitale

> ***"We are an independent organisation (and it's rare enough to be highlighted!) that gathers startups and investors to defend innovation in France and in Europe"***

France Digitale's manifesto acknowledges that Europe is lagging behind in terms of competitiveness, mentioning some main numbers that refer to IPOs, VC funds and employment compared to the United States. The good news, as they stated, is that Europe has over 135 companies that are "ambassadors of European tech internationally". They set out a five-year plan for the new EU government, aiming to build a competitive, innovative, and sustainable tech ecosystem. It proposes reducing bureaucracy for grants such as Horizon Europe, simplifying digital regulations, and promoting voluntary data-sharing frameworks, among many others. Additionally, the manifesto focuses on improving investment opportunities by ensuring capital is available at all stages of the financial chain and de-risking innovation investments, thus

*Rephrased by ESNA team to highlight the potential practical outcome per each measure

encouraging more traditional investors to support tech startups.

Potential Impact on the Startup Ecosystem:

By simplifying access to funds and streamlining digital regulations, France Digitale's proposals would enable startups to scale more rapidly across Europe.
Reducing red tape around grants and investment could result in increased capital flow into the startup ecosystem, enhancing growth opportunities for new ventures. This would be particularly beneficial for early-stage startups seeking both funding and regulatory clarity. Finally, the clear timeline of five years provides a roadmap that allows not only to make innovation the driver of the green transition, but also develop strategic and innovative value chains that can create a favourable regulatory framework for innovative startups.

Topic	Influence in policy creation
Measure	EU Commission to facilitate dialogue with startups to collect feedback on legislation through a direct point of contact. Nominate VP for an Innovative Single Market that should head a team of Commissioners in charge of DDCNECT, DGGROW, DGENER and DGRTID
Potential Outcome For Startup Ecosystem*	**Enhanced Advocacy:** Startups assert their rights against anti-competitive practices, aligning with European legislation for fair competition **Strategic Alignment:** Streamlined processes prioritise innovation, fostering development within the EU's Single Market for a thriving startup ecosystem

Topic	Policy
Measure	Remove the bureaucracy for available grants such as Horizon for startups
Potential Outcome For Startup Ecosystem*	**Efficient Funding:** Applications are simplified and accelerated, while funding mechanisms become smarter and less fragmented, promoting smoother access to resources for European startups

*Rephrased by ESNA team to highlight the potential practical outcome per each measure

Topic	One Europe
Measure	Complete the Single Market by: 1. Enforcing one-market-one regulation principle 2. Create pan-EU legal framework 3. Streamline EU market access by “prove it once” principle
Potential Outcome For Startup Ecosystem*	**EU Certification Passport:** European startups benefit from a unified certification system, streamlining processes across borders. In the absence of EU-level certifications, a scheme of equivalences ensures recognition and facilitates cross-border operations within the EU

Topic	Investments
Measure	Ensuring capital is available at all stages of the financial chain De-risk innovation investment for traditional investors (e.g. pension funds) Improve exit opportunities for startups in EU EU to increase the InvestEU budget and give fresh fund-of-fund mandate to the EIF to back early stage, high risk VCs across the EU. EU should create the financial and regulatory incentives for institutional investors to fund European VCs
Potential Outcome For Startup Ecosystem*	**Expansion of InvestEU Budget:** Increased funding allocation and a fund-of-fund mandate to the EIF to support early-stage, high-risk VCs across the EU, enhancing capital availability for startups Financial and Regulatory Incentives Encourages greater participation in the startup ecosystem by institutional funds **Corporate Innovation:** Fueling innovation and maturity within the startup ecosystem, by opening to the possibility of buying startups and scaleup, especially when having public subside.

*Rephrased by ESNA team to highlight the potential practical outcome per each measure

Topic	Talent
Measure	Harmonising stock option schemes Grant fast track visas for talents Focus on training and retraining tech talents EU's Bluecard and a 1-month deadline to process visa applications
Potential Outcome For Startup Ecosystem*	**Employee Share Overship (SO) Schemes:** Incentivises employees, may reduce corporate tax burdens, thereby attracting more talent to Europe and expanding the talent pool for startup innovation **Talent Pool:** Support the lack of digital skill workers in the startup ecosystem, meanwhile it assesses a well-known issue when compared with other regions (access to talent)

Topic	Sustainability
Measure	Innovate in driving the green energy transition by: Developing an EU index of Leading European Tech Scale-ups (LETS) Enforcing a Buy European Tech Act, re-consider the R-rule (reduce, reuse, refurbish, repair, recycle) EU
Potential Outcome For Startup Ecosystem*	**Recognised green energy scale ups ecosystem:** Position EU and its stakeholders as a recognized green energy scale-ups ecosystem, bridging potential new investment opportunities and attracting new talent

Topic	Social inclusion
Measure	Promote diversity in tech
Potential Outcome For Startup Ecosystem*	**Talent Pool:** Allow the access to new talent to the tech world by decreasing the gap on the tech sector

*Rephrased by ESNA team to highlight the potential practical outcome per each measure

4. Digital Europe

> ***"DIGITALEUROPE is the leading trade association representing digitally transforming industries in Europe"***

The Digital Europe manifesto provides 20 concrete solutions to position Europe as a global leader in advanced technologies, such as AI and cyber tech. At the same time, it mentioned the need to boost the region's digital resilience, while everyone can benefit from these outcomes. It advocates for establishing a single set of digital rules across the EU, reducing duplications of documents, streamlining EU data rules, under the logic of putting the current rules to work, avoiding overlaps.

In terms of sandboxes, it refers to having compulsory sandboxing with companies even before the legislation comes into place, so as to achieve a new way to do the "competitiveness check". Finally, the manifesto also promotes international cooperation, particularly with regions, speaking positively of initiatives such as the EU-US Trade and Technology Council (TTC) as well as other agreements such as the EU-US Data Privacy Framework.

Potential Impact on the Startup Ecosystem:

The proposed pan-European legal framework would significantly reduce administrative barriers for startups operating in multiple EU countries, making it easier for them to expand and innovate. By creating a more cohesive digital market and fostering international partnerships, Digital Europe's

Topic	Influence in Policy Creation
Measure	Simplify and harmonise existing legislation Solve data access and interoperability issues Promote voluntary data-sharing frameworks Commission measured by new KPI's on digital transformation and ease of doing business Create a SME one-stop shop for every member state
Potential Outcome For Startup Ecosystem*	**Enhanced Data Sharing:** startups can gain access to information that can drive innovation and growth **Market-Driven Standardisation:** fostering interoperability, making it easier for them to develop products and services that can seamlessly integrate with existing systems **Accelerated growth and success for startups:** streamline communication, improve the efficiency of support services, and enhance the overall experience for startups. This can lead to faster problem resolution and better access to resources

*Rephrased by ESNA team to highlight the potential practical outcome per each measure

Topic	One Europe
Measure	One set of digital rules, scrutinising all draft proposals for duplications and removing unnecessary implementing acts Create a SME one-stop shop for every member state
Potential Outcome For Startup Ecosystem*	**One legal framework:** unify policies for all startups in Europe

Topic	Talent
Measure	European skills passport Certainty of applicable tax and social security rules to support remote cross-border working
Potential Outcome For Startup Ecosystem*	**Decrease talent gaps in the startup ecosystem:** improvements in remote cross-border operations can foster a more connected and efficient European startup landscape

Topic	Sustainability
Measure	A sustainable and healthy Europe: Green digital transformation strategies “Twin transition fund” Green and circular single market and take advantage of Digital Product Passport
Potential Outcome For Startup Ecosystem*	**Support sustainability:** Make the startup ecosystem of EU aligned with a more circular and long-term vision rewarding green transformation

*Rephrased by ESNA team to highlight the potential practical outcome per each measure

Topic	Investments
Measure	Increase the contribution to projects in the digital sector - up to 25% digital target across all EU funding programmes
Potential Outcome For Startup Ecosystem*	**Improve investment conditions:** Attractive conditions to stimulate industry participation - incentivising close-to-market innovations, simplifying reporting obligations and streamlining procedures

proposals would help startups become more competitive on a global scale, unlocking new opportunities for growth and collaboration across borders.

In conclusion, manifestos focus on policies and initiatives to improve **European startup competitiveness** on the global scene with a particular emphasis on having more influence in new policy formation, strengthening One Europe initiatives, enhancing talent retention and re-skilling and increasing available capital for startup funding.

ESNA Members and Advisory Board Main Overview

Main take away from both external outputs

This section merges the inputs of ESNA Country Members and Advisory Board Members with the aim of bridging their perspectives around the European Startup ecosystem. The proposal of this segment is to identify not only similarities in their visions, but also the topics where they diverge.

For this process to take place, ESNA provided an open-ended questionnaire for each group during a similar timeframe and taking into consideration all the previous internal research done and portrayed at the beginning of this chapter, as well as during the previous ones.

Finally, all previous inputs, insights and answers concluded to provide an understanding of the main strategic areas and verticals that complement a possible winning aspiration, culminating in a common profiled vision for the future EU Startup ecosystem landscape. Through this collaborative analysis, it is possible to set a strategy for targeted and effective initiatives that can impact the evolution of the Startup environment within the EU.

Winning Aspirations for the European Startup ecosystem

The visions of the ESNA Country Members and the ESNA Advisory Board Members

both have the same goal (creating a successful European Startup ecosystem), yet they emphasise different priorities based on their respective perspectives. Both groups share a belief that the EU has the potential to become a leader in this landscape, a vision that reflects the shared ambition for strengthening Europe's position in the global market.

According to top rated areas, the simplification of the Regulatory Framework for SMEs is rated at the highest level of relevance by Country Members compared to Advisory Board members. This indicates a strong belief by ESNA Country Members in the necessity for simplification of regulations to support SMEs. Talent Attraction is placed as one of the most relevant areas by Country Members.

The ratings for Funding, Scaling and Supportive Legislation from both ESNA Country Members and Advisory Board Members highlight similar perceptions of their relevance in the startup ecosystem. Yet, there are some nuances that should be addressed such as ESNA Country Members emphasising State Aid Rules, RTD Funding within Scaling cluster. Furthermore, both groups agree that securing adequate financial resources has an impact for future startups to innovate, scale, and succeed.

For a thriving startup ecosystem, an area of high importance for ESNA Country Members is One Single Market. Alongside, potential for spin-offs is also commented as moderate by ESNA Country Members and mentioned also alongside the importance of IP rights and investments by the Advisory Board. Finally, ESNA Country Members rate talent attraction significantly higher,

Figure 15. Strategic Areas: ESNA Country Member vs Advisory Board Members

Scale: where five represents the most relevant and zero the least relevant for the startup ecosystem

compared to the Advisory Board's rating, which indicates how each group views the impact of attracting and retaining skilled professionals to the startup ecosystem differently.

In this revision the three main and most repeated relevant winning aspirations focus were centred around:

1. The acknowledgement that European countries need to come together under one identity and "brand"

The ESNA Country Members highlight the Culture of Innovation and Entrepreneurial Mindset, while the Advisory Board Members place a clear priority on enhancing the EU's "brand" and having a One Europe voice. Although both subjects touch on different objectives, both have to do with uniting forces under one "brand" and mindset that drives innovation, since building a culture of innovation and promoting entrepreneurial mindset can help create a strong EU "brand".

2. Harmonisation on Legislations & Regulation within the EU

As a major cornerstone of the discussions, the clear understanding of the need of a Single Market that allows startups to operate faster and with less barriers within Member States and the acknowledgement of the excess of red tape for the ecosystem to flourish and thus become a global player, were topics of major importance. Even though there was this general consensus, ESNA Country members focused more on the need for tax facilities, reduced bureaucracy and strong regulatory frameworks; while the Advisory Board members focused more on legislation for the protection of intellectual property.

3. Access to Capital

ESNA Country Members and Advisory Board Members agree that access to capital, through funding and investment, is a winning aspiration for the EU. It is also the right place to start and a major strategic challenge for the region.

In the case of ESNA Members, an interesting commonality between several countries is their emphasis on different types of investment as being crucial to their growth strategies. For example, some highlighted the importance of angel investors, while others highlighted the value of greenfield investment and venture capital. Alongside these were proposals of measures to increase competitiveness in accessing European funding (e.g., Horizon Europe).

In the case of the Advisory Board Members, funding was mentioned as a strategic driver. There is a consensus that, to foster the growth of European Startups, it is essential to improve access to funding, either by simplifying the process, increasing funding mechanisms or reducing the gap in scaling capital. The Scaling Strategic area, also seen as one of the most relevant,

expresses this idea, including the need for supportive legislation to empower EU startups to grow and succeed on the global scene.

In summary, the visions of the ESNA Country Members and the Advisory Board Members present a complementary yet slightly distinctive view of the European Startup ecosystem's future. While the Advisory Board Members emphasise enhancing the EU's brand, effective legislation & Regulation, alongside investment strategies as crucial elements for achieving the EU's new mandate; the ESNA Country Members give more attention to disaggregated topics such as networking, mentoring as well as infrastructures as being important for supporting the startup journey. Thus, one of the key distinctions is that the Advisory Board Members focus on broader strategic aspirations rather than specific ones.

Stakeholder's Point of View: Market Outlook

Strategic verticals by order of relevance in terms of impact to the Startup ecosystem

Following the main strategic areas commented on by ESNA stakeholders, there are other main thematic areas or trends that were particularly highlighted by the ESNA Members and ESNA Advisory Board, which seem coherent with some major areas also highlighted in the Manifestos as well in the previous chapter when referring to policies that related to critical industries and areas for the latest EU Reports of Mario Draghi as well as Enrico Letta. Namely, areas such as Sustainability or Defence, including other previously mentioned underdeveloped industries such as Space and AI.

To bring together both visions, the same rationale was followed, separating thematic areas from strategic ones. By integrating insights from both ESNA country members and Advisory Board Members into the same realm, a complete and panoramic portrait of the future has been drawn. Finding a common language and bringing this analysis together will help to frame a system that supports innovation and entrepreneurship across the EU.

When comparing the top strategic verticals in terms of impact, the ESNA Country Members' top-rated verticals include Life Sciences/Health, Sustainable Environment, Technology and Digital, AI and Cybersecurity. The leading verticals for the ESNA Advisory Board are Technology and Digital as well as AI, followed by Cybersecurity, Defence and Sustainable Environment.

Therefore, there is an alignment of Digital Innovation, since both groups recognise the importance of Technology and Digital sectors, especially AI. The views on the impact of Cybersecurity and Sustainable Environment are also similar. What stands out in this analysis are Defence and Life Sciences/Health, areas where there are differentiated perspectives. ESNA Country Members recognise the importance of Defence along with Advisory Board Members.

This suggests a higher recognition of the area's impact, likely connected to current global trends.

According to their assessments, the Life Sciences/Health sector appears to have a higher impact rating from the ESNA Country Members compared to the AB Members. ESNA Country Members gave more importance to Mobility and Social Economy, making these sectors among the most contrasting viewpoints. Although Music Tech, Games & Media and Space receive low ratings, the Advisory Board pays them more attention than ESNA Country Members do.

The graph combines the two visions, summarising these findings.

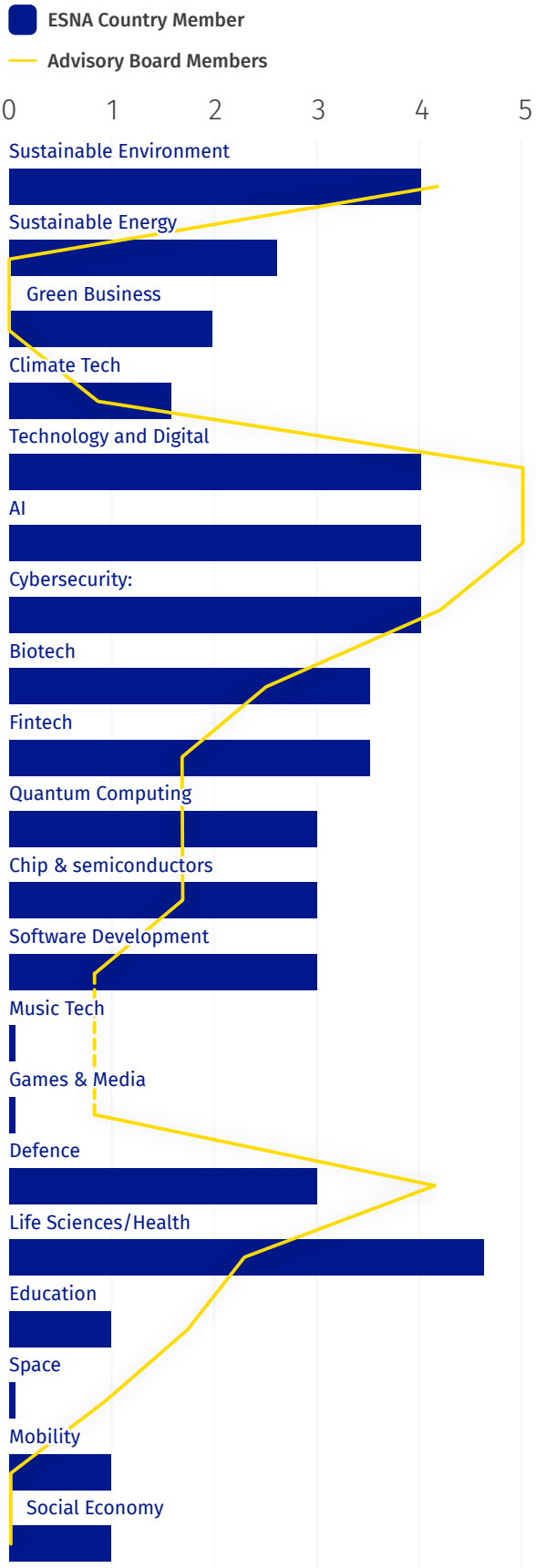


Figure 16. Thematic Areas: ESNA Country Member vs Advisory Board Members

Scale: where five represents the most relevant and zero the least relevant for the startup ecosystem

Main Conclusions

This section was dedicated to the analysis of the perspectives from both ESNA Country Members and the Advisory Board. Converging the perspective of each viewpoint, not only bridges the gap between their visions, but also reveals additional insights, creating a complete and complex portrait for the European Startup ecosystem. It brings access to a deeper understanding of the challenges, opportunities and strategies brought by stakeholders.

Distinct priorities between the two groups arise when facing the winning aspirations for the EU startup ecosystem. While both agree on the potential for Europe to be a leader in the startup landscape, the ESNA Country Members place greater emphasis on promoting a culture of innovation and entrepreneurship, networking, and practical support structures. On the other hand, the Advisory Board prioritises broader strategic issues, such as the EU's brand, legislation & Regulation alongside investment.

Common ground exists, particularly in the recognition of the importance of technology, digital innovation, and AI within the ecosystem. However, notable differences emerge in areas such as the significance of the Life Sciences/Health sector and the focus on Defence.

Overall, the findings of this section suggest that there is alignment in most strategic and thematic areas. A cohesive and effective strategy for a competitive and resilient European Startup ecosystem should address both broad and specific concerns of this analysis.

Main Takeaways

1. EU Startup Ecosystem Vision

The document portrays a shared vision for the European startup ecosystem, based on inputs from a diverse group of stakeholders, including the ESNA Advisory Board and country members. This vision encompasses key pillars such as talent, investment, intellectual property (IP) rights, legislation, regulations, and culture, which will shape Europe's future startup landscape.

2. Key Challenges & Opportunities

Internally, ESNA identified major trends and challenges through an analysis of EU manifestos, strategies, and political declarations. Externally, stakeholders highlighted the need for a unified market and regulatory simplification, especially for small businesses, as key drivers for innovation and economic growth.

3. Manifesto Analysis

A review of various EU manifestos revealed common themes such as the need for harmonised regulations, talent development, and increased investment in digital and green technologies. Manifestos like "Allied for Startups," "European Tech Alliance," "France Digitale," and "Digital Europe" emphasise reducing red tape, fostering innovation, and creating a stronger European tech identity.

4. Strategic Focus Areas

Based on stakeholder feedback, key areas of focus include simplifying regulations for SMEs, improving access to capital, promoting talent retention and development, and creating a unified market for startups. There is consensus on the importance of digital innovation, AI, cybersecurity, and sustainability.

Chapter 5

A geostrategic assessment of the EU startup ecosystem

The European Union's startup ecosystem faces unique geostrategic challenges and opportunities. This chapter aims to provide a high-level assessment that to some degree examines the ecosystem not only in terms of its internal strengths and weaknesses but also how it aligns with global trends, competition, and international policy. As the EU enters a new cycle that continues to pursue a strong position on the global landscape in innovation, the EU must navigate complex dynamics, from the increasing dominance of the US and China in technology investments to the heavy regulatory environment within Europe itself. This assessment explores how these factors shape the EU's capacity to foster high-growth startups, drive innovation, and compete on a global scale.

A SWOT analysis has been created to provide a more thorough understanding of two main factors: the general state of the startup ecosystem at an international level as well as a European vision that encompasses an understanding of how the external – opportunities and threats – and internal – strengths and weaknesses – of the startup ecosystem can be tackled.

This work has been assembled, by not only revealing a clear idea of the background but also making a secondary note about the environment around the startup ecosystem. The set of characteristics are not listed by order of importance or relevance.

SWOT analysis

S Strengths

- European set of values
- Public Funding Level
- Telco infrastructure and Network capacity
- The Euro and unified Monetary Policy
- Mobility and Flexibility: Schengen and Digital nomads'
- Science Technology Engineering Math (STEM) work force
- Social entrepreneurship, Impact Ventures and Cleantech

W Weaknesses

- 27 Different Jurisdictions and Fragmented national policies
- Legislation intensity, "red tape"
- Lack of private investment
- Scale-up gap
- Risk adverse mindset
- Cultural barriers
- IP Transfer Arrangements

O Opportunities

- Tech Sovereignty and the Global AI race
- Public Procurement
- Regulatory Sandboxes.
- Joint Venture and Corporate Innovation
- Internationalisation

T Threats

- Geopolitical instability
- Fall on the international Trade
- Inflation and Interest Rates
- Ageing population
- Dependence on foreign supply for critical technological resources
- Slow Policymaking and Anti-Competition Policies

Strengths

1. European set of values

The EU's foundational values—such as democracy, inclusivity, social justice, and environmental sustainability—provide a distinct strength for its startup ecosystem. These principles create a stable and transparent regulatory environment that fosters trust and reduces uncertainty for entrepreneurs.

The EU's commitment to human rights and equality encourages a diverse and inclusive talent pool, which boosts creativity and innovation across sectors. Sustainability-focused policies, like the European Green Deal, not only attract public and private investment but also position startups to lead in green technology and sustainable solutions.

Together, these values enable startups to thrive in a supportive ecosystem that aligns ethical governance with global competitiveness, promoting both economic growth and social progress.

2. Public Funding Level

The EU has been able to put together a complete system of support for new ventures and startups, when it comes to giving funding for the development of innovation, research and technology advancement.

When comparing public funding for startups between the EU and the USA, there is a notable difference in both scale and structure. The EU channels a significant portion of public funding into startups through various programs, such as Horizon Europe, to increase competitiveness with €95.5bi, or Innovation Council, to identify, develop and scale breakthrough innovations with €10.1bi, as well as EIB, or EIF with €3.75bi, to benefit SME's, startups and innovative companies[39].

Additionally, European governments often provide direct government funds, representing around 1% of venture capital in Europe, while the US has a minimal reliance on government-backed funds. Instead, the US relies heavily on private venture capital (While the EU has a stronger presence of public-backed initiatives, the US tends to focus more on private sector-driven startup funding, although both regions are increasing their focus on closing gaps in early-stage financing.

Is important to acknowledge that this strength can be done in a more effective manner. Cases such as the challenges for a newcomer to access known funding such as Horizon Europe, due to its complexity, as a result, the tendency is that it ends up just in a few existing applicants, alongside this its resources are split across too many fields, lacking focus and missing to covered some top EU priorities that may be crucial for the development of new technologies. Finally, another relevant point is that there

39 True it is that some EU programs, when compare to the United States, could be greater; European Innovation Council's (EIC) Pathfinder instrument, has a budget of EUR 250 million for 2024 A similar iniattive on the United States; US ARPA agencies have a higher value(DARPA: USD 4 1 billion for 2023; ARPA-H: USD 1 5 billion; ARPA-E: USD 0 5 billion)

is no mechanism to align the Research and Innovation spending priorities that were previously aligned with this EU program with the aims of local, national authorities and their needs tending to be a top-down approach, even though the importance in terms of the level of public funding provided to the overall innovation and, therefore, startup ecosystem, still is one of Europe's main strengths when comparing at a global level.

3. Telco infrastructure and Network capacity

The EU's telco infrastructure stands out as a significant strength for the development of its startup ecosystem. Europe has made substantial developments in expanding broadband coverage and 5G rollout, with the European Commission reporting that 99% of EU households had access to fixed broadband by the end of 2022, and 70% of urban areas were covered by 5G networks.

The EU's ongoing focus on closing digital gaps—especially through initiatives like the Digital Europe Programme and the Connecting Europe Facility—positions it strongly to foster cross-border collaboration and provide startups with access to critical infrastructure. The EU's commitment to universal high-speed internet access, alongside the creation of smart cities and digital innovation hubs, allows startups to scale effectively and benefit from reliable, cutting-edge telecommunications infrastructure.

For instance, the European 5G Observatory highlights that by mid-2023, Europe had reached nearly 350,000 5G base stations, a number expected to grow substantially with plans to ensure 5G coverage for all urban areas by 2030. This robust network is crucial for developing innovative technologies like AI, IoT, and digital services, offering European startups a competitive advantage in the global market. Also, a significant aspect is free roaming, with moderate intake, which makes it easier to move between different countries.

4. The Euro and unified Monetary Policy for the EU Members

The adoption of the Euro as a single currency across 20 countries offers significant advantages for startups, including reduced transaction costs and the elimination of exchange rate risks, which simplifies cross-border operations. By using a strong and widely accepted currency, startups can operate more seamlessly within the European market. Additionally, standardised financial procedures, such as those set by the European Central Bank's Harmonised Index of Consumer Prices (HICP), ensure, to a certain point, predictable financial conditions and price stability with a target inflation rate of 2%, fostering a stable economic environment. Tools like the International Bank Account Number (IBAN) further facilitate international transfers by minimising errors and ensuring efficient cross-border transactions. Collectively, these elements contribute to a supportive financial infra-

structure that is important for startups, enabling them to scale more easily and expand across multiple countries with less financial friction. This integrated system is crucial for startups aiming for growth and internationalisation within the Eurozone.

5. Mobility and Flexibility: Schengen and Digital nomads' programs

The Schengen Area and digital nomad programs significantly benefit the European startup ecosystem by enhancing mobility and flexibility. The Schengen Area allows seamless travel across 27 European countries without internal borders, fostering cross-border collaboration, talent acquisition, and market expansion for startups. Entrepreneurs and employees can move freely, creating a more integrated ecosystem where ideas, talent, and business opportunities flow easily across Europe.

In parallel, digital nomad programs are increasingly being adopted by EU member states, attracting skilled remote workers and entrepreneurs who contribute to local startup scenes. These programs, often providing temporary residency and tax benefits, help startups access a diverse talent pool while benefiting from remote work flexibility. Together, these initiatives make Europe an attractive hub for startups, enabling easier scaling, networking, and access to broader markets.

6. Science Technology Engineering Math (STEM) work force

When comparing the EU to the global landscape in terms of STEM workers, Europe stands as one of the largest regions for STEM talent, with around 19 million STEM professionals, representing approximately 5.5% of its labour market. Nevertheless, and even though EU STEM workers are being acknowledged as high-quality workers, it is also pointed out in the Draghi Report that there are challenges to address on the shortages of STEM talent and to maintain its leadership status: *"The EU turns out around 850 STEM graduates per million inhabitants per year compared to more than 1,100 in the US"*.

The EU's strength lies in its diversity, with member states contributing specialised talent across fields like engineering, biotech, and digital technologies. Europe's commitment to investing in STEM through initiatives like Horizon Europe and Erasmus+ increases this workforce, providing a solid foundation for the startup ecosystem. The availability of a large, skilled workforce is vital for startups, which often rely on cutting-edge research, technical skills, and innovation. In comparison to other regions, the EU benefits from its educational systems and funding for research and development, creating a pool of talent ready to contribute to innovative projects. Additionally, by promoting cross-border collaboration and talent exchange, the EU is well-positioned to leverage its STEM

workforce as a competitive advantage for startups looking to scale globally.

7. Social entrepreneurship, Impact Ventures and Cleantech

Social entrepreneurship, Impact Ventures, and Cleantech are pivotal strengths of the EU startup ecosystem, reflecting Europe's growing commitment to sustainability, social responsibility, and environmental awareness. The EU's focus on promoting businesses that aim to generate positive social and environmental outcomes aligns with global trends towards sustainable development. Social entrepreneurship and impact ventures are supported by extensive EU funding programs, including initiatives like Horizon Europe and the European Social Fund (ESF), which encourage startups that tackle societal challenges such as inequality, healthcare, and education.

The Cleantech sector in Europe, as mentioned in Chapter 1, captures 40% of global innovative companies in wind and heat pump technologies in the world, in accordance with the idea that the EU leads the way in tackling climate change through its Green Deal and Sustainable Development Goals (SDGs). Cleantech startups benefit from targeted public funding, tax incentives, and collaboration with research institutions, positioning the EU as a global leader in the transition to a low-carbon economy. According to the European Investment Bank (EIB), Europe is home to over 25% of global Cleantech venture capital funding, emphasising the region's commitment to clean energy, circular economy, and sustainable innovation.

This strong focus on social impact and sustainability not only meets the rising necessity from socially conscious consumers and investors but also enhances the EU's position as a hub for purpose-driven entrepreneurship. By leveraging these strengths, the EU startup ecosystem puts forward a differentiation characteristic that fosters resilient, sustainable businesses that contribute to both economic growth and societal well-being.

Weaknesses

1. 27 Different Jurisdictions and Fragmented national policies

Operating a startup in Europe comes with the unique challenge of navigating 27 distinct jurisdictions, each with its own legal, tax, and regulatory framework. While the Single Market facilitates the free movement of goods, services, capital, and labour, the presence of differing national policies for startup ecosystems in each country adds a layer of complexity for businesses aiming to scale across borders. Startups must deal with varied taxation systems, employment laws, intellectual property regulations, and compliance standards, which can increase operational costs and administrative burdens.

National startup policies vary widely across the EU. For example, France's La

French Tech program offers incentives such as tax credits and funding for R&D, while Estonia focuses on digital infrastructure with its e-Residency program. Various regions in Germany actively implement a range of incentives and support programs to attract businesses and stimulate economic development. These initiatives often include financial grants, tax incentives, and subsidies tailored to specific industries or business types, encouraging innovation, investment, and job creation across the country, while Spain has introduced its Startup Law to simplify bureaucracy for new businesses. These policies are beneficial but also create a fragmented ecosystem, requiring startups to adapt to the specific conditions of each country they operate in.

Additionally, market access can be burdensome by varying taxation systems, such as differing VAT rates, or bureaucratic hurdles, such as registering a company or getting permits. Despite the Single Market policies that promote the free movement of goods, services, capital, and labour, the lack of harmonisation in certain legal areas still creates inefficiencies, making it harder for startups to seamlessly operate and grow across borders.

Nevertheless, the EU has made strides to address these challenges through initiatives like the EU Startup Nations Standards and the Digital Single Market, which aim to simplify cross-border operations and reduce legal fragmentation. However, startups still face the dual task of adapting to the regulatory demands of both the EU and individual Member States, which can slow down growth compared to operating in more unified markets like the US

2. Legislation intensity, “red tape”

The European Union’s regulatory framework, while well-intended to harmonise practices across its member states, has led to significant inefficiency and complexity, particularly for startups. According to the Draghi Report, since 2019, the EU has passed approximately 13,000 pieces of legislation—substantially more than the US with its 3,000 new laws during the same period. This vast volume of regulation covers various sectors and results in fragmented, overlapping rules, making compliance a significant burden for startups. Whether it is related to data protection, taxation, environmental standards, or labour laws, startups face the challenge of navigating sector-specific regulations that differ across borders within the EU. Some inefficiencies have been pointed out and are especially claimed in sectors like fintech, where regulatory fragmentation means startups must adhere to different licensing requirements and financial regulations in each member state. Additionally, industry-specific standards such as those in cleantech and health tech require adherence to multiple layers of EU directives and national laws, further complicating cross-border operations.

The diversity of legislation, while providing high consumer protection and security standards, also slows the ability of start-

ups to scale efficiently. These regulatory barriers often lead to increased legal costs and compliance delays, dampening entrepreneurial innovation.

3. Lack of private investment

As previously pointed out in the Strengths segment, where public funding in the EU is considerably channelled into the startup ecosystem, its private funding landscape remains comparatively behind. An aspect of this challenge is the relative lack of participation from institutional investors in the startup ecosystem. To address the above idea, three areas are highlighted.

Capital Markets Union: The European Union's ambition to establish a Capital Markets Union (CMU) aims to deepen capital markets across member states and provide businesses, like startups, with better access to finance. However, the CMU has not reached the desired performance. According to the European Commission, while the CMU has made progress, the overall private equity market in Europe is still less mature than that in the US For example, in 2021, private equity investments in Europe totalled €108 billion, lagging behind the $329 billion in the US.

Pension Funds Investment: An estimated 0.02% (or €700 million) of the assets under management of EU pension funds is directed toward venture capital (VC) funds. Approximately 27 pension funds, representing around €3 billion, are currently in operation within the EU, highlighting a significant deficiency in mid-stage capital, often referred to as the scaleup gap (Aernoudt, 2017). The perception of inadequate risk/return ratios associated with early-stage investments discourages institutional investors.

Secondary Markets and Investment Culture: Another critical issue is the development of secondary markets in the EU, which are essential for providing liquidity to investors. In contrast to the US, where vibrant secondary markets exist that facilitate the trading of startup shares, the EU's secondary market infrastructure is less robust. This inadequacy restricts liquidity for early investors, making it challenging for startups to attract necessary funding at various growth stages. Furthermore, European pension funds tend to invest significantly in the US, with limited investments remaining in Europe. This trend not only constrains the capital available for EU startups but also underscores a broader lack of investment culture within Europe, as evidenced by the low uptake of private pension schemes among the general population. Few countries are exploring European personal pension programs, which could provide additional avenues for investment in local startups.

In summary, without robust private sector participation, European startups may struggle to scale effectively and compete on a global stage.

4. Scale-up gap

The "scale-up gap" that EU startups face when transitioning from early-stage ven-

tures to large-scale, global enterprises is challenging. While the EU has developed an impressive startup ecosystem, with strong public funding mechanisms and support for early-stage innovation, it lacks sufficient support for companies to grow beyond a certain point. This has created a significant gap, often forcing promising startups to relocate to other regions, where more substantial growth funding and access to larger markets exist.

European startups face significant hurdles in securing the large investments needed to scale their operations. While early-stage funding, particularly public grants, is relatively strong in the EU, growth-stage funding remains underdeveloped. This is due to a lower availability of large venture capital funds in Europe compared to the US or China. For example, European venture capitalists tend to offer smaller tickets for investment, leaving startups with fewer resources to fuel rapid growth. Also, several EU startups, particularly in tech, are acquired by non-EU companies, often US-based. This limits the opportunity for European startups to scale into global champions. The report *"The End of the Startup M&A Era? – Tech Startup M&A 2024 Report"*, although it pointed out that the M&A has been slowing down globally, it still demonstrated that data shows that US companies exhibit a far greater appetite for acquiring startups compared to European firms. On average, European Fortune 500 companies have acquired 1-2 startups over the past five years. In contrast, American corporations have acquired 3-4 startups during the same period. While tech giants from Silicon Valley are even more aggressive, acquiring an estimated 12-15 innovative companies each over the same timeframe. This highlights a significant gap in acquisition activity, reflecting differing levels of corporate innovation strategies between the regions.

Finally, talent retention is also an issue for later stage startups. As startups in the EU grow, they often face difficulties in retaining talent. Top-tier engineers, business developers, and executives are frequently attracted by opportunities in more established ecosystems like Silicon Valley, which offers higher salaries, stock options, and a more mature ecosystem for scaling.

5. Risk averse mindset

The risk-averse mentality in Europe significantly impacts entrepreneurship and the startup ecosystem, reflected in various indicators that highlight this cautious approach. A set of indicators can better explain this reality.

Failure Rate Fear: A survey by the European Commission found that over 60% of Europeans view fear of failure as a major barrier to starting a business. This is substantially higher than in the US, where only about 40% express the same concern. This fear discourages many potential entrepreneurs from pursuing innovative ventures.

Risk Tolerance: According to the Global Entrepreneurship Monitor (GEM) 2021/2022 report, only 37% of Europeans believe they have the skills and knowledge to start a

business, compared to 56% in the US This lower confidence level is indicative of a broader risk-averse mindset, where potential entrepreneurs hesitate to take the leap into entrepreneurship.

Startup Rates: Data from Eurostat shows that the rate of new business startups in the EU is approximately 10% lower than in the US This disparity highlights the lower inclination towards entrepreneurial activities among Europeans.

Investment in Startups: The European Investment Bank notes that only about 29% of European startups feel they have sufficient access to capital, which is a critical element for risk-taking and growth. In contrast, US startups report a much higher rate of access to venture capital.

Cultural Attitudes: The European Commission's "Entrepreneurship 2020 Action Plan" emphasises that European culture generally places higher value on job security and stability, resulting in fewer people willing to take risks associated with starting a new business compared to more risk-taking cultures, like that in the US

6. Cultural barriers

Cultural barriers can present significant challenges for the EU startup ecosystem, affecting cross-border collaboration, market expansion, and the overall entrepreneurial landscape. Key aspects include:

Language Differences: With 24 official languages across the EU, communication issues can arise, particularly for startups seeking to scale across different countries. This can hinder smooth market entry, partnerships, and customer acquisition, as well as complicate investor relations and networking across the region.

Diverse Business Norms: Each EU member state has distinct business cultures and regulations, affecting how startups engage with local markets. What works in one country might not resonate in another, meaning startups must adapt their strategies for each market. This complexity can slow down international expansion and create inefficiencies, particularly for early-stage ventures with limited resources.

Investor Sentiment: According to the European Investment Fund (EIF), local knowledge and relationships play a crucial role in investor decisions, making them less inclined to fund startups from countries with unfamiliar business landscapes. This preference limits the ability of startups from smaller or less-developed markets to attract venture capital from larger, wealthier countries, preventing cross-border expansion.

These cultural complexities contribute to an uneven startup landscape in Europe, where integration can be slower compared to more unified regions like the US, potentially stifling the growth of the EU startup ecosystem.

7. IP Transfer Arrangements

The IP ownership challenge within the EU is still a weakness when compared to other regions of the world. The need to improve how IP transfers work, would bring not only

a possibility to have more innovation in critical areas, but increase the possibilities of investment in spinoffs that are coming from research centres and/ or academia.

Research and innovators are not able to fully exploit economies of scale in Europe; collaboration networks for R&I activities in just some scenarios extend outside each nation's borders. Therefore, Challenges surrounding patent rights, and their cross-transfer is still a need between EU countries, due to the fragmented and complex ecosystem. Cross collaboration, an increase of international alliances and university exchange, has become a crucial factor for development of new technologies.

Additionally, in more detailed consideration, the correct rules and understanding of how to generate fair and competitive cap tables, when academia or universities are involved in new development, to allow them to commercially scale and growth, are also something to continue working on.

Opportunities

1. Political Support

Political support is a powerful catalyst for any startup ecosystem, providing the necessary resources and frameworks to nurture growth and innovation. By prioritising the "startup agenda", governments recognise them as motors for economic transition, facilitating the shift towards more developed and competitive economies. This emphasis not only helps stimulate job creation and technological advancement but also positions startups as essential contributors to the broader economic landscape.

The EU, to some extent, exemplifies this dynamic, having established various initiatives aimed at fostering entrepreneurship, innovation, and scalability across its member states, political frameworks like the EU Startup Nations Standard (SNS) and Horizon Europe, are examples of this. Horizon Europe has allocated €95.5 billion to innovation, research, and startup funding for the 2021-2027 period. Another critical initiative is the European Innovation Council (EIC), which has an overall budget of over €10 billion to support high-risk startups with groundbreaking technologies.

By leveraging political support effectively, the EU can enhance its startup ecosystem, making it a competitive player in the global market.

2. Tech Sovereignty and the Global AI race

Tech sovereignty presents a unique opportunity for the European Union (EU) to foster a competitive startup ecosystem, especially in the context of the global AI race. Tech sovereignty refers to a region's ability to develop and maintain control over its technological infrastructure, data, and innovation without relying on external powers. For the EU, this goal aligns with efforts to reduce dependence on non-European tech giants, particularly those from the US and China, while promoting innovation within its own borders.

Fostering Local Innovation and Growth: By prioritising tech sovereignty, the EU can create a fertile environment for startups that develop homegrown technologies and solutions. This could drive growth in critical sectors like AI, cybersecurity, and digital infrastructure. The EU startup ecosystem could benefit from policies that prioritise European-built solutions for data governance, digital services, and AI, ensuring that the region's innovations serve its unique regulatory frameworks and values. Initiatives like the European Innovation Council and the Digital Europe Programme are already providing significant public funding to support this aim.

Tech Sovereignty in Global AI Competitiveness: In the broader AI landscape, the EU's focus on tech sovereignty could allow European AI startups to lead in developing alternatives to big tech companies' offerings. Europe's commitment to ethical AI could position its startups as trusted providers globally, particularly in markets concerned about privacy and ethical issues in AI. As the US and China dominate AI in terms of sheer scale, Europe's unique positioning on governance and responsible AI could carve out a distinctive role, especially as international norms evolve.

Decreased Reliance on Foreign Tech Giants: The EU's focus on tech sovereignty can reduce its reliance on foreign tech companies for essential infrastructure, such as cloud services, data storage, and AI technologies. This shift could also prevent potential economic and geopolitical risks associated with over-dependence on non-European tech firms. As the EU ramps up investments in digital infrastructure, it creates space for European startups to innovate in cloud services, AI solutions, and other areas where they can offer sovereign alternatives to US or Chinese providers.

3. Public Procurement

Startups often face challenges in gaining credibility and proving the value of their innovative solutions, particularly during the early stages of development. A major obstacle is establishing proof of concept and securing a solid client base. One way to overcome this challenge is through government procurement programs, where public institutions include startups in their spending budgets. This not only provides startups with revenue streams but also gives them legitimacy and exposure to

larger markets. By leveraging government spending, startups can secure crucial early contracts, demonstrate the effectiveness of their solutions, and scale their businesses.

Government spending in the EU presents a significant opportunity for startups, especially in sectors like technology, health, and sustainability. EU governments are among the largest buyers of goods and services, with public procurement accounting for roughly 14% of the EU's GDP. This amounts to more than €2 trillion annually in public contracts. Such spending, if directed towards innovative solutions provided by startups, can significantly boost the startup ecosystem.

The EU Startup Nations Standards of Excellence (SNS) emphasise the critical role of innovation in public procurement as a way to support the growth of startups. By encouraging EU governments to adopt innovative procurement practices, the SNS aims to provide startups with early and reliable clients, helping them scale their solutions more effectively.

4. Regulatory Sandboxes

Regulatory sandboxes represent a significant opportunity for the startup ecosystem, especially for those developing innovative technologies that challenge existing regulations. These frameworks allow startups to test their products, services, and business models in a controlled, real-world environment under the supervision of regulators. This reduces the risk of non-compliance while enabling innovation.

Reduced Regulatory Burden: Sandboxes provide a relaxed regulatory environment, allowing startups to innovate without the immediate risk of penalties for non-compliance with traditional regulations. This is crucial for sectors like fintech, Healthtech, and cleantech, where strict regulations tend to delay rapid innovation.

Regulatory sandboxes can improve a faster time to market by working directly with regulators, startups can identify and address legal and compliance hurdles early, reducing time-to-market delays and increasing their ability to scale rapidly.

From an investment lens, Startups that successfully operate within sandboxes are seen as less risky investments, as they have already shown they can meet compliance requirements. This can potentially increase their appeal to investors, particularly in highly regulated industries.

Another aspect is the Public Sector involvement. Governments are increasingly using sandboxes to drive digital transformation and support economic growth by encouraging innovation in emerging technologies. Countries like the UK and Singapore have pioneered regulatory sandboxes, particularly in fintech, which has led to a boom in new startups and innovations in these sectors. The EU has also adopted these frameworks in several sectors.

The EU is increasingly embracing regulatory sandboxes as presented in the ESNA Standards report, where It was observed that 11 out of 21 countries showed evidence

of currently having regulatory sandboxes in place.

The EU Startup Nations Standards of Excellence (SNS) also highlights regulatory sandboxes as a key tool for fostering innovation, ensuring startups have a conducive environment to experiment and scale across member states.

In an environment where innovation is often stalled by complex regulations, regulatory sandboxes provide startups with a unique opportunity to test and grow within flexible, guided frameworks. By fostering collaboration between regulators and innovators, they reduce the friction that startups face and help drive new technologies across sectors, making them a critical component of a thriving startup ecosystem.

5. Joint Venture and Corporate Innovation

Joint ventures (JVs) and corporate innovation initiatives represent significant opportunities for the growth of the startup ecosystem. In recent years, there has been a growing recognition within the private sector of the need to collaborate with startups to accelerate both internal innovation and market competitiveness. This trend is reshaping how large corporations approach innovation, turning them into partners rather than competitors of startups.

Corporate innovation programs are one of the primary channels through which established companies engage with startups. These initiatives help corporations inject fresh ideas into their business models by leveraging the creativity and agility of startups. For startups, collaborating with large corporations provides access to extensive resources, market knowledge, infrastructure, and established customer bases, which would otherwise take years to build.

In Europe, corporate innovation initiatives have been growing steadily. According to a study by Nesta, the number of European corporations running startup engagement programs more than doubled between 2015 and 2020. These programs often manifest as accelerators, incubators, corporate venture capital (CVC), or direct collaborations through joint ventures.

Joint ventures between startups and large corporations provide mutual benefits. For startups, forming a joint venture with a larger partner means sharing resources, risks, and knowledge while gaining access to new markets and customers. Such partnerships can significantly reduce the time it takes for startups to enter markets or scale their operations by leveraging the established infrastructure of larger firms. For corporations, joint ventures allow them to access disruptive technologies and maintain a competitive edge.

In Europe, public initiatives are also encouraging these collaborations. Programs such as Horizon Europe and the European Innovation Council support partnerships between corporates and startups, often through funding schemes designed to foster private sector innovation. These efforts align with the EU's broader objective to strengthen industrial competitiveness and reduce dependence on external technologies.

The rise of corporate-startup collaborations signals a growing recognition that innovation is best achieved through partnerships. This trend presents an unparalleled opportunity for startups to scale and for corporations to stay ahead in increasingly fast-paced markets.

6. Internationalisation

Globalisation presents a major growth opportunity for startups by allowing them to access markets beyond their domestic borders. By expanding internationally, startups can increase their customer base, diversify revenue streams, and reduce their dependency on a single market, which is especially important in industries with limited local demand or saturated markets.

Free Trade Agreements (FTAs) and regional economic agreements, like the European Union's Single Market, reduce barriers such as tariffs, customs duties, and regulatory obstacles, making it easier for startups to expand into new regions. Trade agreements like the EU-Japan Economic Partnership Agreement or CETA (Comprehensive Economic and Trade Agreement) between the EU and Canada open additional doors for European startups, facilitating access to international markets outside the EU without facing excessive tariffs or restrictions.

Internationalisation offers startups the ability to mitigate risks, diversify revenue, and access a broader customer base. By utilising FTAs, trade blocks, and tapping into emerging markets, startups can scale rapidly and become global players. For the EU startup ecosystem. Initiatives that enhance cross-border trade and reduce barriers further fuel these opportunities. Similarly, expanding into new markets not only benefits startups financially but also foster innovation, creating stronger, globally competitive enterprises.

Threats

1. Geopolitical instability

Geopolitical instability presents several threats to the startup ecosystem, primarily by disrupting economic dynamics, altering political landscapes, and affecting global supply chains. Here is how these factors pose risks:

Geopolitical tensions can lead to significant economic shifts. For startups a volatile geopolitical environment often leads to lower venture capital (VC) funding or investors adopting a more conservative approach, limiting the availability of growth capital. The EU Startup Ecosystem already faces challenges in raising adequate funding, and geopolitical instability exacerbates this by making capital less accessible, particularly for companies looking to scale.

For example, global events like Brexit or the ongoing Ukraine conflict have led to disruptions in financial markets, which can cause startups to lose critical investor confidence and face difficulties in securing funding, and eventually Venture Capital money flowing outside the region.

Startups thrive in environments where

the regulatory frameworks are stable and predictable. Geopolitical instability, such as the rise of populism or political conflict, often leads to abrupt changes in trade policies, taxation, or even local startup regulations. In extreme cases, this might cause companies to relocate or reconsider expansion plans due to uncertainty about policy continuity.

Also, many startups rely on global supply chains to source materials, components, or services. Geopolitical instability, such as trade wars, sanctions, or political conflicts, often disrupts these supply chains. This can lead to delays, increased costs, or even total unavailability of critical resources.

Startups, which usually lack the financial muscle of larger companies, find it harder to absorb such disruptions, making their operations more vulnerable to supply chain volatility.

2. Fall in the International Trade

A fall in international trade can pose several significant threats to the startup ecosystem, particularly in areas such as market access, funding, and operational sustainability. Here are some of the main impacts:

Startups often rely on international markets to expand their customer base and revenue streams. A decline in international trade can limit access to these markets, making it difficult for startups to scale their operations. This reduction in potential customers can stifle growth and innovation, particularly for startups with products or services tailored for global audiences.

Also, many startups depend on global supply chains for raw materials, components, or even finished products. A decrease in international trade can lead to supply chain disruptions, increasing costs and lead times for acquiring necessary inputs. This can hinder a startup's ability to produce goods efficiently, negatively impacting their competitiveness.

Trade wars between major powers, like the US and China, can further complicate this landscape. Such geopolitical tensions may force startups to rethink their supplier networks or face escalating costs, threatening their competitiveness and survival.

3. Inflation and Interest Rates

Inflation and rising interest rates present significant threats to the startup ecosystem, impacting various aspects of operations and financial stability.

Inflation drives up the cost of goods and services, making it more expensive for startups to operate. This includes higher costs for raw materials, utilities, and labour. As operational expenses rise, startups, particularly those with limited financial reserves, may struggle to maintain profitability.

Startups reliant on supply chains are particularly vulnerable to inflation. Increased transportation costs and disruptions can further exacerbate the financial strain,

leading to potential delays in production and service delivery.

Rising interest rates lead to increased borrowing costs for startups, making it more expensive to secure loans or lines of credit. Startups often depend on external funding for growth and expansion; thus, higher interest rates can limit their access to necessary capital.

In an inflationary environment, investors may become more risk-averse, preferring to invest in established businesses rather than startups. This shift can result in decreased venture capital funding, further limiting growth opportunities.

Decreased Demand: As inflation rises, consumers may cut back on discretionary spending, affecting startups focused on consumer goods and services. Lower demand can lead to reduced revenues, forcing startups to pivot or scale back operations.

Startups may struggle to pass increased costs onto consumers without losing sales. If startups raise prices too much, they risk alienating price-sensitive customers, leading to potential declines in market share.

The unpredictability of inflation and interest rates complicates long-term financial planning for startups. This uncertainty can delay strategic decisions regarding investment, hiring, and expansion.

Startups often operate on tight cash flows, and inflation can exacerbate this issue by increasing costs while potentially decreasing revenue. Cash flow problems can lead to operational difficulties and even bankruptcy if not managed carefully.

4. Ageing population

Europe's ageing population presents a significant challenge to its startup ecosystem, with several potential negative effects.

Talent Shortage: As Europe's population ages, the proportion of younger, working-age individuals decreases. This can lead to a shortage of skilled workers, especially in the tech and innovation sectors. Startups often require young, adaptable talent with technical skills and fresh perspectives, but with fewer younger individuals entering the workforce, there is less access to this critical resource. By 2050, nearly 30% of Europe's population is expected to be over 65, further aggravating this issue.

Entrepreneurship Decline: A younger population is generally more entrepreneurial, as younger people tend to take more risks and are more willing to innovate. With fewer young people in Europe, the natural pool of potential entrepreneurs is smaller, leading to fewer new businesses being created. According to the OECD, entrepreneurial activity tends to decrease with age, and Europe's ageing population could limit the growth of new startups.

5. Dependence on foreign supply for critical technological resources

The dependence on foreign supply chains for critical technological resources, particularly microchips, presents a significant threat to the startup ecosystem for several

reasons:

Startups often rely on microchips for their products, especially those in tech-driven sectors such as IoT, automotive, and consumer electronics. Disruptions in the supply chain, caused by geopolitical tensions, natural disasters, or pandemics, can lead to delays in production and fulfilment. For example, the COVID-19 pandemic highlighted how disruptions in the semiconductor supply chain can halt production across various industries, negatively impacting startups that depend on timely access to these components.

Foreign dependence on microchips can lead to increased costs, as companies may face price fluctuations due to geopolitical tensions, trade disputes, or tariffs. Startups operating with limited budgets might struggle to absorb these increased costs, resulting in reduced margins or even the need to pass these costs onto consumers, potentially harming their competitiveness.

Limited Innovation: Startups thrive on innovation and agility. When dependent on external suppliers for crucial technology, they may be constrained in their ability to innovate rapidly. For instance, reliance on foreign microchip manufacturers can limit a startup's ability to pivot quickly in response to market demands or technological advancements, thereby stifling creativity and competitive edge.

6. Slow policymaking and Anti-Competition Policies

Startups in rapidly evolving sectors (e.g., fintech, AI, or biotech) are particularly vulnerable to slow or outdated policymaking. Regulations that are not updated to reflect new technologies or business models can create uncertainty and deter investment.

In emerging sectors like decentralised finance (DeFi) or cryptocurrencies, unclear or shifting regulatory landscapes can prevent startups from planning their long-term strategies, making them more vulnerable to sudden regulatory crackdowns or changes.

Protectionism is another concern, where policies favouring established corporations over startups can limit market access and competition. If policymaking favours incumbents and large corporations through subsidies, bailouts, or other forms of support, startups may be unable to compete on a level playing field. Policies that promote monopolistic behaviour or limit market access for new players can discourage innovation and make the startup ecosystem more vulnerable to stagnation.

Anti-Competitive Practices: Policies that do not adequately address anti-competitive behaviour can allow large firms to stifle competition by acquiring or under-pricing smaller startups. This limits market dynamism and reduces opportunities for startups to thrive.

In summary, the EU startup ecosystem benefits from its strong values, extensive public funding (even though there is still a lot to be done when it comes to allocating this funding in a more effective way) robust telecom infrastructure, and unified monetary policy, all of which create a supportive

environment for innovation.

Additionally, mobility within the Schengen Area, a large STEM workforce, and leadership in social entrepreneurship and cleantech further bolster the region's competitiveness. However, challenges such as regulatory fragmentation and competition from the US and China remain critical factors to address.

Operating a startup in Europe is challenged by navigating 27 distinct jurisdictions, each with its own legal and regulatory framework, which complicates cross-border scaling. The EU's Single Market promotes free movement, but varying national policies create fragmentation and increased operational costs. The regulatory landscape has been burdened by approximately 13,000 new laws since 2019, leading to compliance issues. Additionally, the EU suffers from a low private investment landscape, which diminishes growth-stage funding opportunities and contributes to a scale-up gap, forcing startups to relocate for better opportunities. Cultural barriers, including language differences and diverse business norms, further delay.

The European startup ecosystem can benefit significantly from a combination of political support, tech sovereignty, public procurement, regulatory sandboxes, joint ventures, and internationalisation opportunities. Political backing, such as initiatives from the EU like Horizon Europe and the European Innovation Council, provides essential funding and framework to stimulate growth. By fostering tech sovereignty, the EU can encourage local innovation, especially in AI and cybersecurity, reducing reliance on foreign tech giants and positioning its startups as ethical alternatives. Additionally, leveraging public procurement allows startups to gain legitimacy and secure early contracts, while regulatory sandboxes enable them to innovate without immediate compliance risks. Collaborations with large corporations through joint ventures offer startups access to vital resources and markets, further enhancing their competitiveness. Alongside this, internationalisation through free trade agreements facilitates market expansion, enabling startups to diversify revenue and foster innovation. Together, these factors contribute to a dynamic and competitive startup landscape in Europe.

Finally, geopolitical instability poses significant threats to the startup ecosystem by disrupting economic dynamics, altering political landscapes, and affecting global supply chains. Startups often struggle to secure venture capital in volatile environments, leading to limited growth capital and decreased investor confidence, especially during events like Brexit or the Ukraine conflict. Additionally, rapid changes in trade policies and regulations can force startups to reconsider their expansion plans, while reliance on global supply chains exposes them to increased costs and operational vulnerabilities. This instability, coupled with rising inflation and interest rates, holds back startups' ability to maintain profitability, access funding,

Disclaimer: All references of the SWOT analysis, can be found under general sources.

and manage cash flows. Also, demographic challenges, such as an ageing population, reduce the availability of skilled labour and entrepreneurial talent, further constraining startup growth. Dependence on foreign supply chains for critical technological resources, like microchips, limits innovation and increases costs, making startups less competitive. All things considered, slow policymaking and anti-competitive practices can stifle innovation by favouring established corporations, leaving startups struggling to compete and thrive.

Chapter 6

Laying the Foundation for Europe's Startup and Scaleup Strategy

1. Laying the foundation for Europe´s startup ecosystem as a collective effort that involves multiple commissioners and supportive structures who have been entrusted with both direct and indirect responsibilities over the startup ecosystem.

2. Map of Political Guidelines, Utmost goals and Commissioners Missions towards EU prosperity and competitiveness: appointed set of commissioners that will influence the future of the startup ecosystem

3. Key Contributions to the Startup and Scaleup Strategy: understanding the missions and the possible expected impact on the startup ecosystem as a baseline for a future startup and scaleup strategy.

4. Identification of five core building blocks: Each building block, closely aligned with European Commission missions, outlines specific challenges and recommended actions, helping address strengths, opportunities, threats, and weaknesses to advance the startup ecosystem.

Introduction

As Europe seeks to enter a new era of sustainable prosperity and competitiveness, the strategic role of startups and scaleups in fostering innovation, driving economic growth, and securing global leadership is more critical than ever. This chapter will lay down a foundation of a strategy for startups and scaleups, closely aligned with the vision set forth in President Ursula von der Leyen's Political Guidelines for the mandate at the European Commission. At the heart of these guidelines is the objective to shape a "New Plan for Europe's Sustainable Prosperity and Competitiveness." In pursuit of this, the European Union recognises the need to nurture a dynamic entrepreneurial ecosystem where innovation can thrive, enabling startups to grow and scale into global leaders. This requires a robust, future-oriented strategy that not only embodies a self-awareness of its strengths and weaknesses, but also considers the opportunities and threats, by addressing current market dynamics that anticipate the evolving challenges posed by technological transformation, and political shifts.

The ambition to bring Europe into the world's leadership of the startup and scaleup ecosystem is not exclusive to one commissioner or Director General of the European Commission. Instead, it is a collective effort that involves multiple commissioners and supportive structures who have been entrusted with both direct and indirect responsibilities over the startup ecosystem. This chapter maps out how the collaborative efforts of these key leaders — particularly the Commissioner for Startups,

Research and Innovation — will converge to build the comprehensive strategy Europe needs.

This chapter is backed by the research and consultations mentioned in the previous chapters of this document and linked to the EU Startup Nations Standards, which serves as a basis for this strategy. These standards have set critical benchmarks for supporting entrepreneurship and streamlining the pathways for startups to scale, helping to harmonise efforts across the Union. The upcoming strategy should be deeply rooted in these benchmarks while also pushing beyond them to meet the challenges of tomorrow.

The role of startups within the context of Europe's broader mission for sustainable prosperity cannot be overstated. The goals outlined in President von der Leyen's agenda — including the European Green Deal, a Digital Europe, and an Economy that Works for People — are all intrinsically linked to the success of the startup ecosystem. As the strategy is developed, each mission will be tied back to the overarching objectives of sustainability, digital transformation, and equitable growth. The following sections will provide a detailed framework on how the startup and scaleup ecosystem can become the driving force behind this ambitious new chapter for Europe, while ensuring the continued collaboration of key stakeholders across policy, industry, and academia.

Connecting the dots: Map of Political Guidelines, Utmost goals and Commissioners Missions towards EU prosperity and competitiveness

The table below intends to provide a perspective that focuses on the Startup area relevance to the current structure from the political guidelines of the new EU Commission cycle, specifically on the Sustainable prosperity and Competitiveness segment. It maps out the appointed set of commissioners that will influence the future of the startup ecosystem and their respective missions and tasks to address.

Political Guidelines

President Ursula von der Leyen's overarching guidelines set the tone for the European Commission's strategic goals. Seven broad objectives are defined:

A. A new plan for Europe's sustainable prosperity and competitiveness.

B. A new era for European Defence and Security.

C. Supporting people, strengthening societies and social models.

D. Sustaining quality of life: food security, water, nature.

E. Protecting democracy, upholding values.

F. A global Europe: leveraging power and partnerships.

G. Preparing the EU for the future.

	Political Guidelines | Ursula von der Leyen – European Commission President	A. A new plan for Europe's sustainable prosperity and competitiveness	B. A new era for European Defence and Security	C. Supporting people, strengthening our societies and our social mode	D. Sustaining our quality of life: food security, water and nature	E. Protecting our democracy, upholding our values	F. A global Europe: Leveraging our power and partnerships
	UTMOST GOALS 1. A new plan for Europe's sustainable prosperity and competitiveness	**A.1. Make business easier and deepen our Single Market**	**"A.2. Build a Clean Industrial Deal to decarbonise and bring down energy prices"**	**A.3. Put research and innovation at the heart of our economy**	**A.4. Boost productivity with digital tech diffusion**	**A.5. Invest massively in our sustainable competitiveness**	**A.6. Tackle the skills and labour gap.**
Direct responsibility on the Startup ecosystem	Executive Vice-President for Tech Sovereignty, Security and Democracy*	• Digital Networks Act • European Data Union Strategy (simplified legal framework)		• Europe´s 2030 Digital Decade • EU Cloud and AI Development Act	• Europe´s 2030 Digital Decade • EU Cloud and AI Development Act • European Digital Rulebook	• Defence industrial competitiveness • Europe´s 2030 Digital Decade • EU Cloud and AI Development Act	
	Executive Vice-President for Prosperity and Industrial Strategy*	• Horizontal single market strategy • SME passport • Single Digital Gateway	• Clean Industrial Deal • New Industrial Strategy • Industrial Decarbonisation Accelarator Act / Net Zero Industry Act • EU Biotech Act	• Innovation, research, science and tech at the heart of EU economy • Have capital markets that invest in Innovation • European Competitiveness Fund • Intellectual property policy	• New Industrial Strategy	• New Industrial Strategy • Have capital markets that invest in Innovation • European Competitiveness Fund • Invest EU programme • Critical raw materials act	
	Commissioner for Startups, Research and Innovation*	• EU Startup and Scaleup strategy	• EU Biotech Act	• European Research Area Act - "fifth freedom" • Strategy European Research Infrastrcuture • Strengthen Universities Alliances • European Innovation Act • EU Startup and Scaleup strategy • Startegy fo European Life Sciences • Advanced Materials Act	• EU Startup and Scaleup strategy	• EU Startup and Scaleup strategy • Startegy fo European Life Sciences	• EU Startup and Scaleup strategy
	Executive Vice-President for a Clean Just and Competitive Transition*		• European Green Deal • Clean Industrial Deal • Circular economy			• New approach to competition policy • SME´s and small midcaps killer acquisitions • European Competitiveness Fund • Strenthrn and speed up enforcement of competition rules	
	Executive Vice-President for People Skills and Preparedness*	• Facilitate labour mobility		• Strengthen Universities Alliances	• Impact of digitalisation in the world of work	• Pact for Skills	• Quality Jobs Roadmap • Union for Skills • Talent Pool • STEM Education Strategic Plan • Pact for Skills
	Commissioner for Financial Services and the Savings and Investments Union*	• Review regulatory framework to help startup financing • Increase availability of venture and other risk capital		• Review regulatory framework to help startup financing		• → Increase availability of venture and other risk capital	
	Commissioner for Economy and Productivity*	• Digital Euro • SME and competitiveness check "one in, one out"		• Enhance EIF to finance high-potential and fast growing EU companies		• Enhance EIF to finance high-potential and fast growing EU companies	
	Commissioner for Democracy, Justice and the Rule of Law*	• 28th regime					

* Missions that contribute (directly or indirectly) to the utmost goals

The work below exclusively focuses on the "A. A new plan for Europe´s sustainable prosperity and competitiveness", as it is the one most closely linked to the upcoming startup and scaleup strategy.

A new plan for Europe's sustainable prosperity and competitiveness Utmost Goals:

Six key goals underpin the Commission's approach to fostering prosperity and Competitiveness:

A.1. Make business easier and deepen the Single Market.
A.2. Build a Clean Industrial Deal to decarbonise and bring down energy prices.
A.3. Put research and innovation at the heart of the economy.
A.4. Boost productivity through digital tech diffusion.
A.5. Invest in sustainable competitiveness.
A.6. Tackle the skills and labour gap.

The six key goals underpinning the Commission's plan and approach to fostering prosperity and competitiveness are directly tied to nurturing Europe's startup ecosystem. Making business easier and deepening the Single Market ensures that startups can scale across borders with fewer barriers, accessing a larger consumer base and talent pool. Building a Clean Industrial Deal promotes sustainable innovation, providing startups with opportunities to lead in green tech while benefiting from lower energy costs. Placing research and innovation at the heart of the economy supports cutting-edge startup ventures, enabling them to capitalise on breakthrough technologies. Boosting productivity through digital tech diffusion empowers startups to drive digital transformation across industries; while investing in sustainable competitiveness ensures they have the tools and frameworks to remain globally competitive. Finally, tackling the skills and labour gap is crucial for providing startups with the skilled workforce needed to innovate and grow in an increasingly competitive global market.

Commissioners' Responsibilities:

Various commissioners have missions that either directly or indirectly contribute to these utmost goals, particularly regarding the startup and scaleup ecosystem:

Executive Vice-President for Tech Sovereignty, Security, and Democracy:

- Tasks related to security, tech sovereignty, and democracy, which indirectly influence startups, especially on data and innovation security.

Executive Vice-President for Prosperity and Industrial Strategy:

- Direct focus on industrial strategy, innovation, and prosperity. They contribute significantly to the EU Startup and Scaleup strategy, especially in strengthening market conditions and fostering innovation.

Commissioner for Startups, Research and Innovation:

- This commissioner leads the EU Startup and Scaleup strategy, directly influencing all key goals, particularly research, innovation, productivity, and competitiveness.

Executive Vice-President for a Clean Just and Competitive Transition:

- Focuses on sustainability and transition to a green economy, contributing to decarbonisation and competitiveness, essential for scaling startups.

Executive Vice-President for People Skills and Preparedness:

- Plays a crucial role in addressing the skills gap, which is critical for the growth of startups and scaleups.

Commissioner for Financial Services and the Savings Investments Union:

- Facilitates easier access to capital markets, crucial for creating and scaling businesses.

Commissioner for Economy and Productivity:

- Drives productivity initiatives, crucial for enabling startups to become competitive global players.

Commissioner for Democracy, Justice and the Rule of Law:

- Drives initiatives or missions that are tied to promoting democratic principles, justice, and upholding the rule of law, including solutions that can potentially facilitate businesses to navigate more easily across the EU

Key Contributions to the Startup and Scaleup Strategy

The EU Startup and Scaleup strategy will become a common thread connecting these missions, ensuring that research, innovation, skills development, access to finance, and industrial strategy all contribute to the same goal: to make the EU a global leader in the startup ecosystem. The following table then assesses the level of impact of the different assigned missions and EU policies, on the startup ecosystem, identified for the several utmost goals. For the sake of not duplicating some of them, the missions were categorised to the goal that was considered more accurate.

Utmost Goals	Missions	Impact on the Startup ecosystem*
A.1. Make business easier and deepen our Single Market	1. Digital Networks Act	High
	2. European Data Union Strategy (simplified legal framework)	Medium High
	3. Horizontal single market strategy	High
	4. SME passport	Medium High
	5. Single Digital Gateway	Medium High
	6. Facilitate labour mobility	High
	7. Review regulatory framework to help startup financing	High
	8. Digital Euro	Medium
	9. SME and competitiveness check ""one in, one out""	High
	10. 28th regime	High
A.2. Build a Clean Industrial Deal to decarbonise and bring down energy prices	11. European Green Deal - Clean Industrial Deal - Industrial Decarbonisation Accelarator Act / Net Zero Industry Act - Circular economy"	Medium High
A.3. Put research and innovation at the heart of our economy	12. EU Cloud and AI Development Act	High
	13. Have capital markets that invest in Innovation	High
	14. Intellectual property policy	High
	15. European Research Area Act - ""fifth freedom""	High
	16. Strategy European Research Infrastructure	High
	17. Strengthen Universities Alliances	Medium
	18. European Innovation Act	High
	19. Advanced Materials Act	Medium High
A.4. Boost productivity with digital tech diffusion	20. Europe´s 2030 Digital Decade	Medium High
	21. European Digital Rulebook	Medium High
	22. Impact of digitalisation in the world of work	Medium
A.5. Invest massively in our sustainable competitive-ness	23. Defence industrial competitiveness	Medium
	24. New Industrial Strategy	Medium High
	25. European Competitiveness Fund	High
	26. Invest EU programme	High
	27. Critical raw materials act	Medium High
	28. New approach to competition policy	Medium High
	29. SME´s and small midcaps killer acquisitions	High
	30. Increase availability of venture and other risk capital	High
	31. Enhance EIF to finance high-potential and fast growing EU companies	High
A.6. Tackle the skills and labour gap.	32. Quality Jobs Roadmap /Union fo Skills / Pact for Skills	Medium
	33. Talent Pool	Medium High
	34. STEM Education Strategic Plan	High

* ESNA Analysis

1. Digital Network Act

Advanced digital network infrastructures and services are poised to play a crucial role in enabling transformative technologies like Artificial Intelligence (AI), Virtual Worlds, and Web 4.0. These infrastructures will not only power these cutting-edge digital innovations but also address pressing societal challenges in key sectors such as energy, transport, and healthcare. Moreover, they will foster innovation in creative industries, unlocking new opportunities for startups to develop solutions in these fields.

For the startup ecosystem, this means access to powerful digital platforms and networks that will accelerate their ability to innovate, scale, and compete globally. Startups will benefit from the integration of advanced technologies to create smarter solutions, optimise operations, and address real-world challenges. Furthermore, as these infrastructures advance, they will eventually lower the barriers for startups to enter high-potential industries, fostering more agile, tech-driven companies and encouraging cross-sectoral innovation.

2. European Data Union Strategy

The European strategy for data emphasises a people-centric approach to technology, ensuring that European values and rights are upheld in the digital world. Data is seen as a crucial driver for economic growth, innovation, job creation, and societal progress. By fostering the development of data-driven applications, the strategy aims to bring numerous benefits, including improved healthcare, safer and cleaner transport systems, new products and services, lower public service costs, and enhanced sustainability and energy efficiency.

For the startup ecosystem, this strategy will be transformative. The creation of Common European Data Spaces will provide startups with access to vast amounts of high-quality data, enabling them to innovate more effectively. Startups will be empowered to develop data-driven solutions across sectors like healthcare, transport, and energy, while maintaining control over the data they generate. This approach will potentially foster a more competitive and innovative environment, helping startups create scalable products and services while contributing to Europe's data sovereignty and global competitiveness.

3. Horizontal Single Market Strategy

The Single Market Strategy is expected to introduce a roadmap for services with clear timelines and milestones aimed at simplifying and harmonising EU rules. Priority will be given to reducing regulatory complexity, enforcing uniform EU rules, and

ensuring equal access through improved connectivity. By applying the principle of mutual recognition and focusing on digital tools, the strategy will remove obstacles to cross-border activities, lower compliance costs, and enhance European businesses' ability to scale and compete internationally.

For the startup ecosystem, this strategy can result in a profound impact. Simplifying regulations and reducing administrative burdens will make it easier for startups to operate and expand across EU member states, creating a more unified and accessible market. The focus on digitalisation will streamline processes for startups, enabling faster compliance and scaling opportunities, while improved connectivity will allow them to reach broader markets more efficiently. By reducing fragmentation and enhancing enforcement of clear, predictable rules, the strategy will foster a more competitive, resilient, and innovative business environment, empowering startups to grow and contribute to the EU's broader goals of sustainability, social progress, and global competitiveness.

4. SME Passport

The SME passport is a project the European Commission is exploring to enhance access to finance, simplify regulatory frameworks, and promote innovation by reducing administrative burdens and costs for small and medium-sized enterprises (SMEs). Its main goal is to create a more streamlined, supportive environment for SMEs to operate and scale across Europe.

For the startup ecosystem, this initiative could be transformative. By simplifying regulations and improving access to capital, startups will face fewer barriers when expanding across borders and scaling their operations. The reduction in administrative burdens will free up time and resources for innovation, allowing startups to focus on growth and product development. Additionally, easier access to finance will provide startups with the funding needed to innovate, grow, and compete on a global scale, fostering a more vibrant and competitive entrepreneurial environment across the EU.

5. Single Digital Gateway

The Single Digital Gateway aims to provide easy online access to key information, administrative procedures, and assistance services for individuals and businesses operating within the European Union (EU). It will help resolve problems related to exercising internal market rights, whether living in or conducting business in an EU Member State.

For the startup ecosystem, this is beneficial. By centralising access to

important administrative procedures and support, startups will be able to navigate regulatory requirements and market challenges more efficiently. This will reduce time and complexity in expanding their operations across EU countries, allowing startups to focus on innovation and growth. The gateway is intended to facilitate smoother cross-border activity and enhancing startups' ability to scale in the Single Market.

6. Facilitate labour mobility

> *"...further facilitate labour mobility, whilst ensuring that rules are properly enforced with the support of a strong and empowered European Labour Authority. You will work on the modernisation, simplification and digitisation of social security coordination."*

Mission letter to Executive Vice-President-designate for People Skills and Preparedness.

For the startup ecosystem, this guideline can have several positive impacts. Enhanced labour mobility means startups will have easier access to a broader talent pool across the EU, making it simpler to recruit skilled workers from different member states. The modernisation and digitisation of social security coordination will reduce administrative burdens, saving startups time and costs when hiring cross-border employees. By simplifying these processes, startups can focus more on innovation and growth, while accessing top talent with fewer bureaucratic hurdles. Overall, this will contribute to a more flexible, dynamic, and competitive startup environment across the EU.

7. Review regulatory framework to help startup financing

Current EU regulatory frameworks, like MiFID II and the Prospectus Regulation, can be an obstacle to innovative, fast-growing startups from accessing capital. MiFID II's strict reporting requirements and the separation of research costs from trading fees have led to reduced investor visibility for smaller companies, making it harder for them to raise funds. Additionally, compliance burdens and fragmented capital markets across the EU create barriers for startups seeking to expand. Venture capital and private equity regulations also sometimes restrict access to vital funding.

Improving these regulatory frameworks — such as by simplifying compliance, increasing research coverage for smaller firms, and harmonising rules across the EU — would make it

easier for startups to access finance and scale their operations. This would reduce administrative burdens, increase investor interest, and open more funding opportunities, fostering a more dynamic and competitive startup environment in Europe.

8. Digital Euro

The digital euro would be a digital form of cash, provided by the European Central Bank (ECB), allowing everyone in the euro area to make free, secure electronic payments. Currently, people lack access to public money in a digital form, despite the increasing shift toward electronic payments. A digital euro intends to modernise the single currency for a digital economy, ensuring public money remains accessible and trusted, while also ensuring cash continues to be accepted.

For the startup ecosystem, a digital euro could offer significant benefits. It would simplify digital transactions, making it easier and faster for startups to handle payments across the euro area, reducing reliance on intermediaries and lowering transaction costs. This secure, universally accepted digital currency could boost e-commerce, fintech innovation, and cross-border operations, providing startups with a stable, efficient payment infrastructure, fostering trust in digital finance, and promoting further innovation in the financial sector.

9. SME and competitiveness check “one in, one out”

The European Commission has adopted a “one in, one out” approach, introduced a mandatory competitiveness check and strengthened the SME test for evaluating new proposals. It is also targeting a 25% reduction in reporting burdens, with 41 initiatives already proposed in the 2024 work programme. These include reforms like the Union Customs Code, which could save €2 billion, and the revision of the Regulation on European statistics, expected to save €450 million.

For the startup ecosystem, these measures are highly beneficial. Reducing the administrative and reporting burdens will free up valuable time and resources for startups, allowing them to focus on innovation and growth. Cost savings from regulatory reforms will improve operational efficiency, helping startups scale more easily and compete effectively across Europe. By ensuring new regulations are competitiveness-friendly and SME-conscious, the Commission is fostering a more supportive environment for startups to thrive.

10. 28th regime

The EU's 28th regime refers to a proposed EU-wide legal framework designed to create a unified legal status for businesses across the European Union, beyond the individual regulations of the 27 member states. The idea is to offer companies, particularly innovative and fast-growing startups, the option to operate under a simpler, harmonised set of rules that apply across the entire EU. This would reduce regulatory complexity, cut administrative costs, and eliminate the need to navigate different legal systems in each member state.

For startups, the 28th regime has the potential to be highly beneficial as it would streamline the process of scaling across borders, provide legal clarity, and reduce barriers to entry in multiple markets. By simplifying compliance, it would allow startups to focus more on innovation and growth rather than dealing with regulatory fragmentation. This would foster a more competitive and dynamic business environment, making it easier for startups to expand within the EU and attract investment.

11. European Green Deal /Clean Industrial Deal / Industrial Decarbonisation Accelerator Act / Net Zero Industry Act / Circular economy

The European Commission is focused on decarbonising and industrialising the economy under the European Green Deal, with initiatives like the Clean Industrial Deal, simplifying regulations, investing in clean tech, and ensuring affordable energy. Additionally, the Net-Zero Industry Act (NZIA) promotes net-zero technology production, removes barriers to scaling, and improves market access for clean technologies. The Commission is also focusing on creating a Circular Economy through new legislation that promotes the use of secondary materials and a unified waste market. Efforts to simplify REACH regulations and address "forever chemicals" like PFAS are in progress. A new Critical Medicines Act will aim to reduce dependency on limited suppliers for vital medical products.

These measures have the potential to benefit the startup ecosystem by creating opportunities for clean tech, renewable energy, and circular economy innovations. Startups will have clearer regulatory frameworks, predictable targets, and better access to funding, enabling them to scale more effectively. The focus on a circular economy will foster demand for innovative solutions in waste management and secondary material markets, creating new sectors for startups to thrive. Additionally, healthcare startups will benefit from a resilient supply chain for critical medicines and new opportunities in preventive health and

medical innovations. These initiatives will ultimately help startups contribute to a more sustainable and resilient European economy.

12. AI Development Act

The EU AI Act as a regulatory framework for artificial intelligence, aims to ensure the safe and ethical use of AI technologies while fostering innovation. The Act categorises AI systems based on their risk levels—unacceptable risk, high risk, limited risk, and minimal risk—and applies different levels of regulation to each category. High-risk AI applications, such as those used in critical sectors like healthcare, law enforcement, and employment, face stricter regulations and compliance requirements. The Act also aims to promote transparency, accountability, and human oversight in AI systems.

Overall, for the startup ecosystem, while the EU AI Act aims to strike a balance between promoting innovation and ensuring safety, it could be a double-edged sword, offering opportunities in low-risk sectors but posing challenges for those developing high-risk AI technologies that could slow down innovation and make it harder for startups to compete, especially if they lack the resources to navigate complex regulations.

13. Have capital markets that invest in Innovation

Deepening Europe's capital markets is crucial for enhancing the EU's single market and attracting investments. Open and well-functioning capital markets not only foster growth and innovation but also create jobs and enhance overall competitiveness. While the EU has made progress through the Capital Markets Union, which aims to create a unified capital market across member states, a notable gap remains in the development of these markets. Current European capital markets roughly approach 50% of GDP relative to the levels seen in the US, indicating that there is significant potential for growth and integration. Strengthening these markets would allow companies, particularly SMEs, to diversify their funding sources, facilitate cross-border investments, and enhance the stability and competitiveness of the financial system.

Deepening capital markets in Europe would significantly benefit the startup ecosystem by improving access to venture capital and reducing reliance on foreign investments. Currently, many European startups face funding challenges, often leading to acquisitions by US firms due to a more abundant venture capital environment. By developing more robust capital markets, startups would gain the financial resources necessary to scale and remain

competitive globally. This improved access to diverse funding options would not only foster innovation but also enhance the EU's appeal as an investment destination, enabling startups to thrive and contribute to the region's economic growth while supporting essential green and digital transitions.

14. Intellectual Property Policy

For innovation, investment and competitiveness to boost within Europe, harmonising EU patent rules is fundamental. Intellectual property (IP) is a key driver for economic growth and allows companies to gain value from their intangible assets. This becomes an important topic to address, for startups to take advantage of their inventions, new technologies and contribute to EU technological Sovereignty. Navigating the complex and fragmented IP systems across member states is still a challenge; this includes a diverse set of intangible assets like brands, designs, patents and data. Today research and innovators are not able to fully exploit economies of scale within Europe. As stated in the Draghi Report, collaboration networks for R&I activities in just some scenarios extend outside each nation's borders: only 13% of the co-patents that are filed yearly included organisation in two different countries.

The value that IP brings to the startup ecosystem is critical, especially when it comes to scaling up green innovation, clean tech startups and fostering a sustainable digital transformation. Leveraging IP Rights and Policies provides a harmonised field for new startups to create and applied with a clear legal framework a new application of technologies. At the same time, patents can potentially de-risk investment (as they can become collateral when it comes to raising funding). The impact that a correct set of policies may bring, such as facilitating the access to IP rights and collaboration between organisations within Europe, is fundamental to build a strong startup ecosystem in times where research and innovation are becoming essential. It provides the first step to reinforce innovation and create new technologies from the EU to the world. Finally, Research Centres, Universities and Academia, play a fundamental role when it comes to assessing new inventions, becoming a cornerstone in the rise of new deep-tech startups that, due to the nature of their research, can scale and generate a global impact, while keeping the rights of their invention within Europe.

15. European Research Area Act - "fifth freedom"

Former Italian Prime Minister Enrico Letta proposed a "fifth freedom" for the Euro-

pean Union's single market, encompassing research, innovation, data, and knowledge as essential drivers of modern economic growth. Letta argues that the EU has underutilised its resources, which mainly benefit global tech giants, and emphasises the need for the EU to leverage these assets to foster new technologies and create leading industrial ecosystems, particularly in sectors like artificial intelligence and biotech. He believes prioritising innovation is crucial for the EU's economic success, especially given its lagging productivity growth compared to the US since the 2008 financial crisis.

If the European Research Act aligns with Letta's vision, it could greatly benefit startups by creating a more innovation-friendly environment. This shift would encourage investment in advanced technologies, enhance access to resources, and level the playing field against larger firms. A borderless approach to research would facilitate collaboration across member states, accelerating development and increasing competitiveness. Ultimately, implementing this fifth freedom could empower startups to drive technological advancements and contribute significantly to Europe's economic growth and strategic autonomy.

16. Strategy European Research Infrastructure

Research Infrastructures (RIs) are vital facilities that provide essential resources and services for research and innovation, including scientific equipment, data collections, and computing systems. The Strategy for European Research Infrastructure aims to reduce fragmentation in the research ecosystem, improve coordination, and avoid duplication of efforts. It focuses on developing new pan-European infrastructures, fostering international collaboration for large-scale projects, and enhancing the innovation potential of RIs by raising industry awareness of available opportunities. Access to principles and guidelines are also established to facilitate effective use of these infrastructures.

The Strategy for European Research Infrastructure will benefit startups by granting them access to advanced facilities and resources that were once limited to established institutions. This enhanced access will facilitate collaboration with researchers, accelerate innovation, and reduce time-to-market for new products. Additionally, the focus on international collaboration will enable startups to engage with global experts, further strengthening the innovation ecosystem.

17. Strengthen Universities Alliances

Strengthening university alliances is a key initiative to the new EU Commission. This

involves enhancing collaboration between universities across Europe to share resources, knowledge, and best practices. Such alliances can lead to joint research initiatives, student exchanges, and collaborative educational programs, ultimately creating a stronger research and innovation ecosystem.

Strengthening university alliances will significantly impact the startup ecosystem by fostering collaboration among universities across Europe, enabling them to share resources, knowledge, and best practices. This enhanced cooperation can lead to joint research initiatives and collaborative educational programs, ultimately cultivating a stronger research and innovation environment. As a result, startups will benefit from access to cutting-edge research, a skilled talent pool, and innovative solutions, all of which are essential for driving growth and competitiveness in the marketplace.

18. European Innovation Act

One of the EU Commission's new missions focuses on creating a European Innovation Act aimed at streamlining the regulatory framework to support innovative startups and scaleups. This initiative will facilitate access to venture capital, allowing these companies to secure the necessary funding for growth. The Act will also encourage testing new solutions and technologies through regulatory sandboxes, which provide a controlled environment for startups to experiment without the full burden of regulations. This aligns with the fourth standard of the Startup Nations Standards, which emphasises innovation in regulation and the use of such sandboxes.

This approach could be crucial for the startup ecosystem as it lowers barriers to entry, accelerates innovation, and promotes a more flexible regulatory environment. By simplifying regulations and providing resources for experimentation, the EU aims to nurture a vibrant startup culture that can drive economic growth and competitiveness on a global scale.

19. Advanced Materials Act

The Advanced Materials Act will aim to create a dynamic and secure materials ecosystem in Europe, positioning the EU as a leader in research and innovation while ensuring sustainability and safety. Inspired by the Advanced Materials for Industrial Leadership, it calls for coordinated efforts between the EU, national, regional, and private sectors to boost investments in advanced materials. The act focuses on five key pillars: promoting European research and innovation, speeding up the transition from lab to production ("lab to fab"), increasing access to finance, fostering the

production and use of advanced materials, and establishing a robust governance framework to oversee these efforts.

For the startup ecosystem, this initiative will unlock opportunities by enhancing access to capital and fostering innovation in advanced materials. Startups working on cutting-edge materials technology will benefit from faster routes to market, supported by increased funding and collaboration opportunities. By prioritising sustainability and safety, the act also encourages startups to focus on developing eco-friendly materials, aligning with Europe's green and digital transitions. This overall framework can help startups scale more efficiently and contribute to Europe's leadership in advanced materials.

20. Europe's 2030 Digital Decade

The EU Digital Decade 2030 strategy outlines the European Union's vision for digital transformation by 2030, aiming to strengthen Europe's leadership in the digital world. It focuses on four key areas: digital skills, secure and sustainable digital infrastructures, digital transformation of businesses, and digitalisation of public services. The strategy sets ambitious targets for widespread internet connectivity, upskilling citizens, promoting innovation, and fostering a competitive digital economy.

The startup ecosystem plays a crucial role in achieving these goals by driving innovation and technology adoption in key areas such as artificial intelligence, fintech, cybersecurity, and green tech. Startups are essential for creating new digital solutions, scaling innovative ideas, and contributing to Europe's global digital competitiveness. By supporting the growth of startups, the EU can accelerate the digital transformation needed to meet its 2030 targets, such as the percentage of businesses using cloud, AI or Big Data or the contribution of the ecosystem to the ICT specialists pool, ensuring that Europe remains at the forefront of technological innovation and economic development.

21. European Digital Rulebook

The EU Digital Rulebook is a comprehensive framework of regulations designed to govern the digital economy in the European Union. It aims to create a harmonised legal environment across all member states, ensuring fairness, competition, and innovation while safeguarding fundamental rights. Key legislative acts under the rulebook include the Digital Markets Act (DMA), which prevents monopolistic practices by large online platforms, the Digital Services Act (DSA), which focuses on user safety and content transparency, and the AI Act, which sets ethical and operational standards for

artificial intelligence. Other initiatives, like the Data Governance Act and Data Act, promote data sharing and set rules for data usage across the EU.

For startups, the EU Digital Rulebook offers both opportunities and challenges. It simplifies cross-border operations by providing a unified regulatory framework, making it easier for startups to scale their services across the EU. However, compliance with these regulations, particularly in AI and data handling, might require additional resources and expertise. Despite this, the rulebook's emphasis on fair competition and market access is designed to level the playing field, which could benefit startups by fostering innovation and reducing the dominance of large tech companies.

22. Impact of digitalisation in the world of work

The digitalisation of the workplace, accelerated by technologies like AI, robots, and remote work tools, has transformed work environments, especially post-pandemic. While digital advances improve efficiency, their uneven impact on employment and job security is a concern, particularly for lower-skilled workers. Research shows a growing digital divide and mixed results regarding gender equality in the digital workforce. Additionally, there are limited studies on the health impacts and job insecurity linked to AI and digital surveillance.

The startup ecosystem plays a critical role in shaping the digital workplace by driving innovation in areas like AI, automation, and digital communication tools. Startups often introduce new technologies that transform traditional work environments, making processes more efficient and flexible. As they pioneer advancements in platform work, remote work solutions, and algorithmic management, startups influence how work is structured and managed. Their agility allows them to quickly adapt to the digital demands of modern workplaces, providing businesses with cutting-edge tools for growth and efficiency.

23. Defence industrial competitiveness

The EU plans to enhance its defence industrial competitiveness by building a single market for defence goods and services. Furthermore, to increase European defence industrial readiness, Member States need to invest more, better and together: to reach the goal is to boost Europe's strategic autonomy and make its defence sector more competitive globally.

This initiative impacts the startup ecosystem by opening new opportunities

for defence-related innovation. Start-ups specialising in advanced technologies can benefit from increased funding, contracts, and partnerships with established defence companies and governments. Additionally, by integrating defence goods and services into a single market, startups gain easier access to cross-border collaboration and investment, stimulating growth and technological advancement in this high-potential sector.

24. New Industrial Strategy

For its new term (2024-2029), the EU Commission aims to refine its industrial strategy by focusing on better coordination, increased investments, and fostering more innovation. The strategy will leverage the single market and the EU's trade policies to create favourable conditions for companies to invest, decarbonise, and boost their competitiveness. The overarching goal is to strengthen Europe's sovereignty in critical sectors and technologies, such as green energy and digital infrastructure, that are expected to define the future economy.

This is highly relevant for the startup ecosystem as it creates a supportive environment for innovation and growth. Startups, particularly in cutting-edge sectors like green tech and digital solutions, will benefit from increased funding opportunities, clearer regulations, and enhanced access to cross-border markets. This strategy will empower startups to scale their operations, drive technological breakthroughs, and play a pivotal role in shaping the EU's economic future.

25. European Competitiveness Fund

The proposal for a new European Competitiveness Fund aims to enhance Europe's ability to invest in strategic technologies, including AI, clean tech, space, and biotech, within the context of the next multiannual financial framework. This fund will not only bolster the development and manufacturing of these technologies in Europe but will also leverage public investment to attract and de-risk private funding for collective goals. Additionally, the fund will support Important Projects of Common Interest (IPCEIs), simplifying the financing and implementation processes for ambitious projects, which have previously been applied to sectors like batteries and hydrogen.

The establishment of the European Competitiveness Fund will impact the startup ecosystem by providing critical financial support and fostering collaboration among various stakeholders in strategic technology sectors. Startups focused on emerging technologies will benefit from increased funding

opportunities, enabling them to scale their operations and innovate without relying solely on private investment, which can be limited in Europe. By streamlining the financing process for IPCEIs, startups have the possibility to engage in larger, collaborative projects, enhancing their market presence and competitive edge.

26. InvestEU programme

The InvestEU programme is a key initiative by the European Union aimed at boosting investment across Europe. It provides financial support through guarantees, aiming to unlock private and public investments in areas like sustainable infrastructure, innovation, research, and digital transformation. InvestEU focuses on creating jobs, stimulating economic growth, and fostering innovation across the EU.

For the startup ecosystem, InvestEU is relevant because it facilitates access to funding, especially for high-risk, innovative startups. By supporting investments in early-stage and growth-stage companies, the programme helps startups scale, innovate, and expand in sectors critical to Europe's future economic growth, such as green tech and digital innovation.

27. Critical raw materials act

This Act focuses on securing the supply of essential raw materials that are crucial for high-tech industries, including renewable energy, defence, and digital technologies. It aims to reduce dependency on non-EU countries, particularly China, and to diversify sources of critical raw materials, ensuring their sustainable sourcing and recycling. The goal is to enhance supply chain resilience and support the EU's green and digital transitions.

The Critical Raw Materials Act (CRMA) is crucial for startups, particularly in high-tech sectors like clean energy and electronics, by ensuring a stable supply of essential materials such as lithium and cobalt. It reduces the risk of shortages or price volatility, allowing startups to focus on innovation. The CRMA also encourages the development of new technologies for sourcing, recycling, and substituting critical materials, creating opportunities for startups to lead in these areas. Additionally, it unlocks investment and funding, supporting startups working on sustainable solutions related to critical raw materials.

28. New approach to competition policy

The EU plans to adopt a new approach to competition policy aimed at better supporting companies as they scale up in global markets while ensuring that busi-

nesses and consumers benefit from effective competition. The focus is on creating a level playing field where businesses are incentivised to invest, innovate, and grow, while consumers are protected from rising prices and declining quality. This new policy approach will also address resilience in the face of geopolitical threats, supply chain disruptions, and unfair competition from foreign subsidies.

For startups, this new competition policy is of significance as it promotes fair competition and growth opportunities. It can ensure that startups can scale without being restrained by monopolistic practices and helps them compete on equal footing with larger companies. By encouraging innovation and investment, this policy creates an environment where startups can have better chances to succeed.

29. SME's and small midcaps killer acquisitions

The EU Commission's concern with the "killer acquisitions" refers to large incumbents acquiring startups or nascent companies to eliminate potential competition or control disruptive innovations early on. These acquisitions often prevent startups from evolving into full-fledged competitors, stifling competition and innovation. Major technology companies, such as Alphabet, Amazon, Apple, Meta, Microsoft and ByteDance, have engaged in numerous such acquisitions to integrate innovations into their existing ecosystems or eliminate potential future threats.

By addressing this issue, the EU, through more stringent competition policy and merger control aims to protect startups from being prematurely acquired by dominant players. This will ensure that startups have the opportunity to grow independently, innovate, and contribute to market competition, creating a more dynamic and competitive business landscape in Europe.

30. Increase availability of venture and other risk capital

The new EU Commission intends to explore additional measures to increase the availability of venture and risk capital, with a focus on promoting scaling-up investment funds and removing barriers to the consolidation of stock exchanges and post-trading infrastructure. These steps aim to strengthen the financial environment in Europe, making it easier for businesses, especially startups, to access the funding they need to grow and compete on a global scale.

For the startup ecosystem, this initiative is highly relevant as it directly addresses one of the most critical challenges faced by startups: access to capital. By enhancing venture capital

availability and scaling-up investment funds, startups will find it easier to secure the financial backing required for innovation and expansion. Additionally, removing barriers to capital markets consolidation will create a more efficient and unified market for raising funds, supporting growth, and ultimately driving a more dynamic and competitive entrepreneurial environment across Europe.

31. Enhance EIF to finance high-potential and fast-growing EU companies

The EU intends to support innovative projects through financial instruments, particularly in cases where market-based investments fall short or fail to provide sufficient support. By doing so, the EU aims to address market failures that may hinder the growth of high-potential projects. The European Investment Fund (EIF) will play a key role in this strategy, stepping up its financing efforts for fast-growing European companies.

For the startup ecosystem, this is particularly significant as it means increased access to funding for innovative startups that may otherwise struggle to secure investment through traditional market channels. This intervention helps startups overcome financial barriers, enabling them to scale, innovate, and compete in the global market. The focus on high-potential companies ensures that Europe's most promising ventures receive the resources they need to thrive.

32. Quality Jobs Roadmap / Union for Skills/ Pact for Skills

The importance of investing in active labour market policies, help individuals secure and retain jobs, can stimulate job creation, foster economic growth, and assist regions in achieving social and economic equity. the new Commission plans to introduce a Quality Jobs Roadmap, developed in collaboration with social partners, along with initiatives like the Union for Skills and the Pact for Skills, to ensure fair wages, good working conditions, and adequate training for both workers and the self-employed.

This is relevant for startups as a well-trained and job-ready workforce it is crucial for their growth and success. By enhancing employability and ensuring a quality labour force, startups can benefit from access to skilled talent, enabling them to innovate and compete effectively. Furthermore, the focus on fair job transitions and training supports an environment where entrepreneurship can flourish, fostering a vibrant startup ecosystem.

33. Talent Pool

The EU Talent Pool initiative aims to address labour shortages in the EU by facilitating legal migration for skilled workers from non-EU countries. It will help employers recruit job seekers in areas where there are skill gaps, simplifying and accelerating international recruitment procedures. By providing access to a broader talent pool, the initiative will offer employers valuable information on recruitment and legal migration processes, while ensuring fair recruitment practices and working conditions.

This initiative is crucial for the startup ecosystem, as access to a diverse and skilled workforce can drive innovation and growth. As established on the Startup Nations Standards (#2. Talent attraction and retention) Startups often face challenges in finding qualified candidates with specific skills, and the EU Talent Pool can help bridge this gap. By attracting talent that meets the EU's labour market needs, startups can enhance their competitive edge, foster innovation, and ultimately contribute to economic growth within the region.

34. STEM Education Strategic Plan

Europe's competitiveness and fostering innovation in key industries. According to the Draghi Report there are challenges to address on the shortages of STEM talent and to maintain its leadership status:

> "The EU turns out around 850 STEM graduates per million inhabitants per year compared to more than 1,100 in the US".

To address this skills gap, the EU Commission is prioritising initiatives to enhance STEM education, aiming to equip the workforce with the necessary skills to meet the demands of structural changes driven by climate goals, digitalisation, and sustainability strategies.

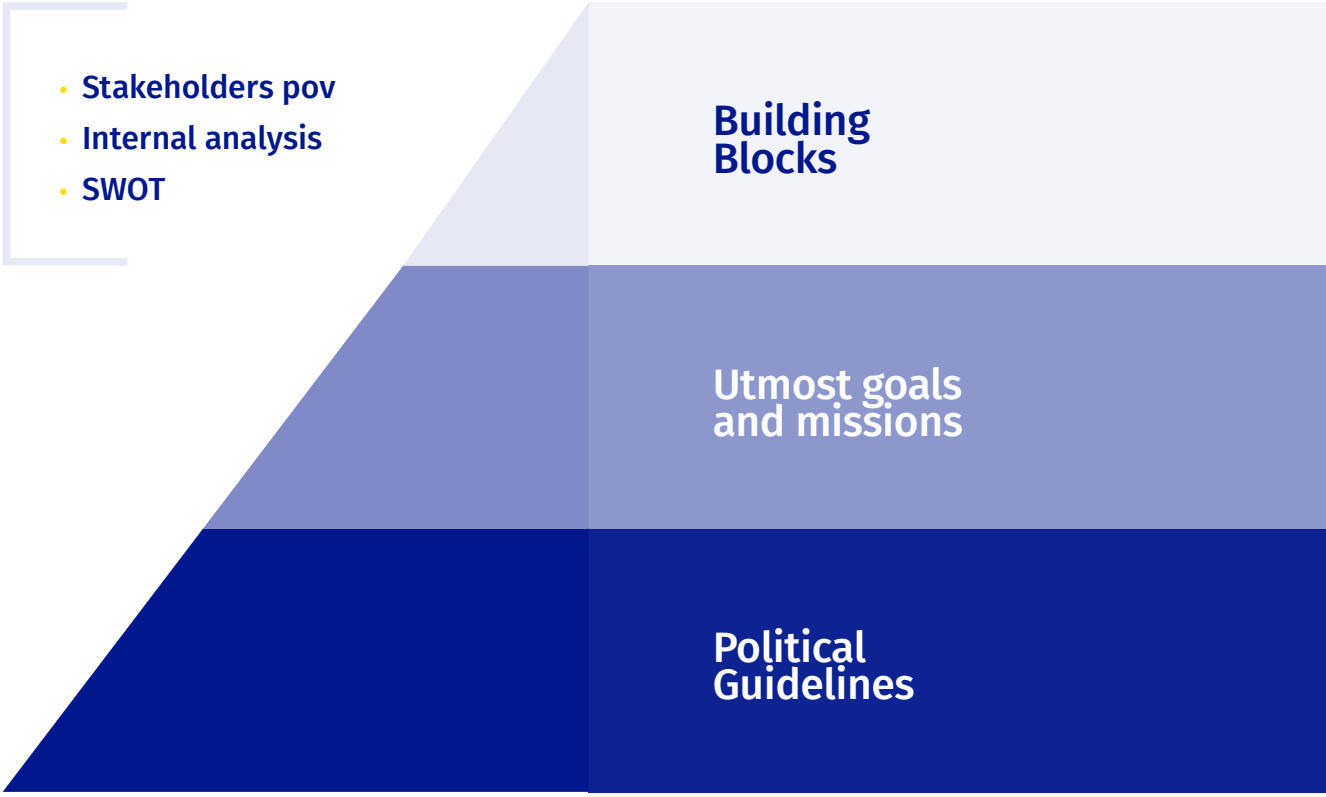
This focus on improving STEM education will impact the startup ecosystem. By cultivating a skilled workforce with robust STEM competencies, startups will have access to the talent necessary for driving innovation and developing new technologies. A stronger pipeline of STEM graduates will empower startups to enhance their competitive edge and contribute to economic growth. Ultimately, fostering a culture of STEM education will not only benefit individual startups but also strengthen the broader European economy by ensuring a dynamic, adaptable workforce ready to meet the challenges of the future.

Building blocks for the EU startup ecosystem:

As to lay the foundation, after having revised the Political Guidelines and later moved forward to identify the Utmost Goals and Missions as to set a unique framework some elaborations include “Key Contributions to the Startup and Scaleup Strategy” as to align some fundamental policies that related to critical areas or areas that can directly or indirectly affect the startup ecosystem. To provide some recommendations on where to start building, we have identified five main building blocks of a future pathway to follow. Each building block has a clear set of challenges or constraints as well as some main actions recommended to possibly solve each of the challenges identified.

Finally, these five main areas that are strongly related to the startup ecosystem, were selected through the outcome of an internal Analysis which takes into consideration the state of the Europe Startup Ecosystem today and the possibilities for it to grow in the next couple of years. They are also aligned with specific missions of the European Commission and, therefore, directly or indirectly correlated to policies that are actually in place within the EU; the previous SWOT analysis provided on this document also facilitated the understanding of which strengths and opportunities as well as threats and weakness related to each block and how this plays out in favour or not to a possible set of actions recommend per each under this chapter.

- **Stakeholders pov**
- **Internal analysis**
- **SWOT**



I. Building blocks

Considering ESNA's Stakeholder's point of View (Chapter 4), we have identified five main building blocks, for the future Startup and Scaleup Strategy, that are related and impact directly on the evolution of the startup ecosystem in Europe: Talent, IP Rights, EU Legislation & Regulation (Red Tape), Investment and Entrepreneurial Culture.

Each of these building blocks have some major constraints identified that the startup ecosystem today suffers from and possible practical answers per each point. This is a starting point, that works as an aspiration to achieve the Startup and Scaleup Strategy within the EU.

Talent

Introduction

The importance of the tech talent in the Startup ecosystem is vital to provide an innovative idea, an efficient strategy plan to implement, as well as a competitive advantage for the company. In a highly competitive market, talent emerges as a strategic key for the resilience and changes that the business can undergo, with constant innovation issues arising. Based on the Political Guidelines announced by the EC President, it is relevant *"to create conditions for researchers to thrive (...), attracting new talents and retaining the best and brightest minds here in Europe"*. Additionally, it is also mentioned as a

measure to *"help [to] match the skills of third country nationals with labour market gaps in Europe and (...) [to] make it easier to attract the right talent with harmonised rules on the recognition of qualifications"*.

Key problems identified have to do with European startups fighting to attract the best talent and thus are not sufficiently open to diversity (SNS 7), and at the same time, the need for new skills to make the rapid shift towards digital transformation. Alongside this, climate neutral Europe will bring a new approach and way of operating, that needs the right skills. The opportunity is there.

As mentioned in previous chapters, as of today, Europe has more developers than the United States. At the same time, although Europe is strong in STEM as well as other subjects, the US is generating STEM graduates at a higher rate.

Without focusing on these numbers, there is still a general perception that in the startup sector (mostly connected to tech enablers companies or tech-based companies), there is a lack of talent that has pushed European companies, with a global scope, to open their doors to talent from all corners of the world. For this, some actions are already in place. ESNA, itself, is leading the creation of a Tech Talent Desk Platform which will display in a harmonised manner relevant information, for these profiles, about the EU and its Member States, with the objective of facilitating access and mobility of talent from the world to Europe.

Talent

Main Objective	**Talent Need:** Europe boasts a diverse and highly skilled workforce
Reasoning behind	Europe's startup ecosystem faces a talent shortage, worsened by an ageing population and lower STEM graduate output. To stay competitive, startups urgently need re-skilling initiatives to align the workforce with rapidly advancing tech and sustainability demands
Outcomes for the EU startup Ecosystem	• Increased Availability of Skilled Talent • Enhanced Competitiveness of EU Startups • Improved Adaptability to Emerging Technologies • Higher Retention of Talent within the EU • Strengthened Workforce for Digital and Green Transitions • Boosted STEM Graduate Pipeline
Startup Nation Standard impacted (chapter 2)	#2 Attracting and retaining talent; #3 Stock Options; #7 Social inclusion, diversity, and protection of democratic values

Main challenges or constraints

1. Mismatch in Talent Supply and Demand:

a. Growing demand for highly skilled talent, especially in STEM fields, does not align with current supply, creating a significant gap for startups seeking professionals ready to drive Europe's shifting tech scene.
b. This scarcity restricts the ability of start-ups to scale, reducing competitiveness and slowing growth across the ecosystem.
c. Compounding this issue, Europe's ageing population is expected to reduce the talent pool over the long term, adding further strain on the region's talent pipeline.

2. Urgent need for Re-Skilling and Up-Skilling:

a. As digital transformation accelerates, startups require talent proficient workers in areas like deep-tech and climate technologies to advance a sustainable digital transition, as highlighted in Chapter 1.
b. Re-skilling initiatives are crucial to equip the workforce with skills in specialised tech areas such as AI, blockchain, and sustainable tech.
c. In line with Mario Draghi's observations, Europe produces fewer STEM graduates than the US, creating a competitive disadvantage and underscoring the urgency to bolster STEM education and training across the region.

Action Areas

1. Digital Education

Improving digital education can significantly boost the prosperity of the startup ecosystem by equipping individuals with essential skills needed for innovation, adaptability, and competitiveness in a tech-driven market. With a strong foundation in digital skills, future entrepreneurs are better prepared to leverage technology effectively, from understanding software development and data analysis to utilising digital marketing and automation tools. This enhances their ability to build, scale, and manage startups.

A digitally educated workforce also benefits startups by filling talent gaps in critical areas such as AI, cybersecurity, and software engineering, which are increasingly in demand. As more people gain digital literacy, the startup ecosystem gains access to a larger pool of qualified talent, enabling faster growth and innovation.

- Micro Certification or similar module actions that can provide official certificates in areas such as cybersecurity and Artificial Intelligence, among others.

2. Re-Skilling and Up-Skilling

Reskilling and upskilling programs are vital for a thriving startup ecosystem because they prepare the current workforce for rapid advancements in technology, ensuring that businesses can stay competitive and innovative. As technology evolves, startups need employees who understand and can work with the latest tools in areas like AI, blockchain, data analytics, and sustainable tech. By updating the skill sets of the existing workforce, these programs close crucial talent gaps and reduce the dependency on hiring new talent solely from a limited pool of recent graduates. Some examples:

- Talent and skills: A state-funded internship program aimed at students across all disciplines to work in the startup sector. This could help bridge the gap between academia and industry, provide valuable work experience, and encourage employment in the startup ecosystem.

Take into consideration the needs of the startup ecosystem when it comes to program generation on digital education and Reskilling Programs[40].

3. Talent attraction

Talent Visas aligned with the Startup Nation Standard #2 (talent attraction) can significantly enhance a startup ecosystem by facilitating the entry of skilled professionals and entrepreneurs from around the world, directly addressing critical talent

40 Note: As stated on the EU Skill Agenda (a five-year plan with 10 actions and connected to previous work that have been stated on the 2016 Skill Agenda), as well as in the European Digital Strategy, the EU would like to support the achievement of better and qualified talent that can support the economy of the future. European Skills Agenda - Employment, Social Affairs & Inclusion - European Commission (europa.eu)

shortages in areas like software development, AI, and engineering. This standard encourages EU nations to adopt policies that streamline visa processes for international talent, making it easier for startups to recruit highly skilled professionals, especially in high-demand tech fields.

By simplifying immigration pathways, Talent Visas not only help startups access a diverse, top-tier talent pool but also make the EU an attractive destination for global entrepreneurs to establish new ventures, fostering local job creation and economic growth. Some examples:

- **a.** Talent and visas: Simplify and expedite the visa application process across the EU making it a more attractive and accessible destination for global talent: As to increased talent attraction by supporting global talent relocation and access.
- **b.** Talent and visas: Lower the financial and procedural barriers for startups wishing to attract and relocate international talent to the UK, through government support or subsidies for visa fees, or by simplifying the visa application process to encourage a more diverse and skilled workforce within the tech ecosystem.
- **c.** Talent and visas: Advocate for policy changes that allow companies in one European country to easily employ people in other European countries without the need for setting up separate legal entities in each country.

IP Rights & Spin-Outs

Introduction

Intellectual Property rights are crucial for the startup ecosystem. Once it is established, innovation (from talent) is protected. Moreover, IP rights can also be seen as a competitive advantage and an attraction for investment. A Startup ecosystem with a strong connection between the three vertices of the triangle – academia, startup founders and investors - has a greater potential to create and sustain a successful economical and knowledgeable business.

We refer to “spin-outs,” as startups formed from intellectual property (IP) developed through university research as a fundamental practice, as highlighted by our Advisory Board that, if correctly done in Europe, can be one of the drivers for the deep-tech development in the region. To do so, dynamic partnerships between universities and high-tech spinouts need to happen on a daily basis. Something that some regions of the world have put into practice with government programs and strategies (e.g. the UK).

When these practices are done well, chances to attract investment and accelerate the growth of the ecosystem can increase and become more recurrent. The truth is, that most of the time, when we refer to these kinds of practices they focus mainly on science and technology, however it is relevant to point out that humanities, social sciences and the arts, are also areas with the potential for spin-out creation.

Main challenges or constraints

1. Challenge: Identifying results and claims

a. Comprehensive Results Ownership List, Consortium Agreement and extensive reports;

b. Communication among projects stakeholders during and at the end of the project;

c. Researcher mobility and claims on results;

d. Unclear licensing conditions among all stakeholders.

2. Challenge: Dual role of TTO/ University: negotiate with and support researchers simultaneously

a. Understanding and awareness of TTO process for entrepreneurial researchers;

b. Past contributions vs future contributions as justification for equity in cap-tables;

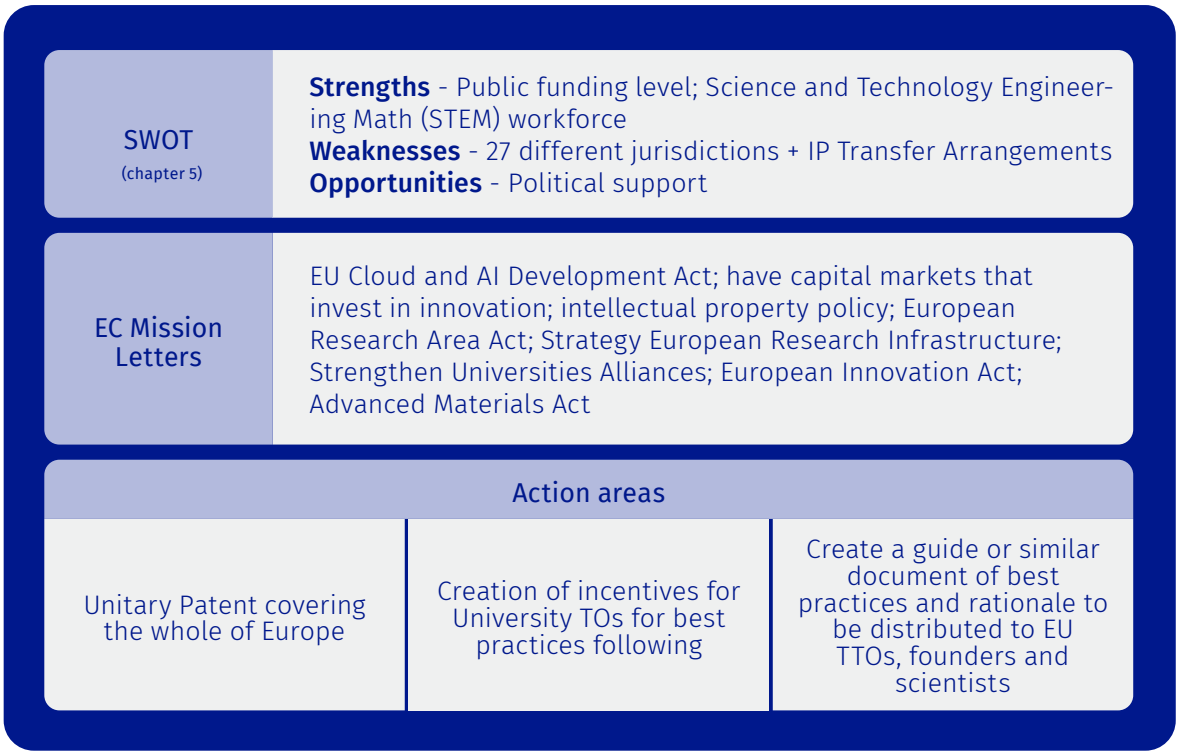
c. (Real time) for researchers to transition to spin-outs;

d. Researchers as founders, consultants or first employees of spin-outs.

IP Rights

Main Objective	**Knowledge transfer:** proper management of IP transfers, ownership and rights for academia, startups and investors
Reasoning behind	Ownership of IP right is a fundamental asset for new startups, equally important is the elaboration and operation of IP created in Academia and then launch to market. To provide a deeper understanding on how these two worlds can be connected is still pending.
Outcomes for the EU startup Ecosystem	• Enhanced commercialisation of Academic Research • Increased startup access to cutting-edge IP • Greater incentive for Academic-Industry collaboration • Accelerated innovation cycle
Startup Nation Standard impacted (chapter 2)	#5 Innovation in Procurement

Main Ecosystem Players involved		
Startups (broad definition regardless of their maturity stage)	Academia	Investors



Action Areas

1. Unitary Patent covering the whole of Europe

a. Promoting the European Unitary Patent System. The European Unitary Patent (EUP) system holds significant potential to boost the competitiveness of European businesses and research institutions in the global market. By centralising the patent application process and reducing costs, the EUP provides a single patent valid across multiple EU member states. However, the system's success hinges on its widespread adoption by member states and the development of robust legal and administrative frameworks to support its implementation. By advocating for its widespread adoption and supporting the development of necessary legal and administrative frameworks, stakeholders can help realise the full potential of this innovative system.

b. Enhancing Patent Examination Standards. Establishing standardised frameworks for patent examination processes and promoting greater transparency in the granting system. Recently, numerous stakeholders have voiced concerns regarding the existing patent examination standards, citing issues such as incomplete searches, elevated revocation rates, and ambiguity surrounding the definition of patent quality. The conversation about patent quality is further complicated by differing definitions and expectations among various stakeholders. This absence of a unified perspective poses significant challenges in implementing meaningful reforms.

c. Enabling Patents as Collateral. Working with financial institutions to develop guidelines and frameworks for using pat-

ents as collateral for loans; Providing loan guarantees or risk-sharing mechanisms to encourage banks to accept patents as collateral. By implementing these measures, policymakers can help create an environment that fosters innovation, supports SMEs in protecting their intellectual property, and enables them to access the financing they need to grow and succeed.

2. Creation of incentives for University TTOs for best practice

a. Assessing University Criteria's: Acknowledge the importance of focusing on the set of criteria in which global universities are being evaluated (If we compare World University Ranking; creation of spin-off is not really taken into consideration as a high criteria on the ranks). Possible solution: Create a ranking methodology that highlights the importance of university spin-off as university component.

3. Create a guide or similar document of best practice and rationale to be distributed to EU TTOs, founders and scientists

a. Create Guidelines similar to other nations, following examples such as Ten-U[41] to improve the collaboration at an international level as to allow research to be commercialised thus creating value and social impact to society (e.g: Promote the 10 EU Initiatives).

b. Develop standardised criteria to effectively evaluate IP assets that encompasses the identification, valuation, and protection of various IP types, including patents, trademarks, copyrights, and trade secrets.

c. Improve the awareness of the importance of equity sharing by universities and academia to be fair from a business perspective, as to avoid that those innovations are retained in their facilities, without scaling to the market, thus avoiding the arrival of private funding by investors.

41 Note: TenU is an international collaboration formed to capture effective practices in research commercialisation and share these with governments and higher education communities. Its members work together to increase the societal impact of research (link: About — TenU)

Investment

Introduction

The investment in the European Startup ecosystem is always a permanent concern. Completing the Capital Markets Union is an ambition of the Political Guidelines highlighted by the new EC President, which ensures *"could attract an extra €470 billion of investment per year"*. An opportunity raised by a development of a secondary market or a creation of a marketplace at EU level will provide access to capital, liquidity and growth possibilities to the Startup ecosystem.

In the cases of having more flexibility and new possibilities for investment, by fostering access to finance, the topic of supporting the investment of pension funds ventures into Venture Capital. Approx. 27

operating funds already do this in Europe[42], not a mere representative number[43], especially when compared with places, such as, the United States where they have become significant investors, playing a crucial role as key financial backers (especially in later stages of the startups)[44]. Reversing this trend would subsequently benefit all EU citizens within a thriving European tech ecosystem.

Furthermore, a topic that has been on the agenda since 2014 is the creation of an EU Capital Market Union (CMU), since the capital market is still fragmented and the flow of capital is still not at its desired levels, the need to remove barriers for innovation and, therefore increase the option of new companies to grow and scale, allowing risk capital to also increase.

Main challenges or constraints

1. Lack of Liquidity of the Market: There is a need to attract more venture capital to invest in the region.

2. Pre-IPO: Lack of EU companies listed and/or listed in Europe (versus the United States).

3. EU Public Funding: complex and not allocating their budget in the most effective way.

4. Alignment in Regulations; ESOP, Liquidity Constraints, risk diversification.

5. Lack of a unified stock market framework to tackle arbitrary regulatory obstacles: Need for harmonisation

42 Source: "Navigating Startup Policies: Insights from ESNA's Advisory Board" report, February 2024

43 Note: Information gathered by ESNA on the first Advisory Board Meeting on 2023.

44 Note: a. European pension funds participation on the EU startup ecosystem is limited: In 2023, the commitment was as such: "EUR 6.5 billion (11 %) of new funds raised by PE funds and only EUR 0.6 billion (5 %) of new funds raised by VC funds". This represents 0.4 % and 0.02 % of pension funds' total assets

Investment

Main Objective	To establish a unified, flexible, and harmonised European capital market framework that enhances access to funding, encourages cross-border investments, and supports startups in scaling effectively across the EU
Reasoning behind	Europe can create a more attractive and accessible market for both investors and entrepreneurs, ultimately enhancing innovation, competitiveness, and economic resilience across the EU.
Outcomes for the EU startup Ecosystem	• Increased cross-border investment • Streamlined scaling across borders • Enhanced access to capital for startups • Higher investment Attraction from global players • Improved efficiency in Public Funding allocation

Startup Nation Standard impacted (chapter 5)	#3 Stock Options; #6 Access to Finance

Main Ecosystem Players involved	
Startups (broad definition regardless of their maturity stage)	Investors

SWOT (chapter 2)	**Strengths** - Public funding level; The Euro and unified Monetary Policy; Social Entrepreneurship, Impact Ventures and Cleantech **Weaknesses** - 27 different jurisdictions; Lack of private investment; Scale Up gap: Risk adverse mindset; **Opportunities** - Political support; Joint Venture and Corporate Innovation; Internationalisation **Threat** - Inflation and Interest rates Geopolitical instability, Slow policymaking and Anticompetition policies
EC Mission Letters	Defence industrial competitiveness; New Industrial Strategy: European Competitiveness Fund; Invest EU programme; New approach to competition policy; SME's and small midcaps kicker acquisitions; increase availability of venture and other risk capital; enhance EIF to finance high-potential and fast-growing EU companies

Action areas		
Develop a secondary market	Create a marketplace at EU level (Pre-IPO)	Updated of Grant Agreements and Public Funding Criteria's
Promote that EU (public) funding Leads Investment rounds	Make more flexible policy & funding schemes	Unified stock market framework

Source: "Closing the gaping in the capital market for EU start-up- the role of pension funds" no_90_-_closing_the_gaping_hole_in_the_capital_market_for_eu_start-ups_-_the_role_of_pension_funds.pdf
b. United Kingdom case: As of 2023; At least 20 Venture Capital firms in the United Kingdom committed to support investment on startups.
Source: "20 UK VC firms commit to plan to direct pension funds cash to startups". 20 UK VC firms commit to plan to direct pension funds cash to startups | Sifted

Action Areas

1. Develop a secondary market

With the logic to support more startups and to allow innovation to not just stay in a consortium, academia or closed doors, but having a secondary market for innovative companies, where there could be fair access to investment opportunities (buying and selling shares, providing liquidity for the startups and stock options to whoever wants to buy), may accelerate the growth

and cash flow within the region, providing new opportunities to access capital and increase the impact of the startup ecosystem in Europe.

This may be critical for early-stage investments that have not yet existed within the last 5 years, allowing business angels to sell their participations and recycle capital. This would increase liquidity and market dynamism. Additionally, by pooling these investments into funds and listing them on stock exchanges, smaller investors could access early-stage opportunities, democratising investment and accelerating the circulation of money in the ecosystem.

2. Create a Marketplace at EU level (Pre-IPO)

To have an open marketplace within the EU for the acquisitions of startups would allow private equity funds, corporate and other possible buyers, to check in more efficient ways the different companies that may be open minded to be bought (following the logic of their own exit strategy).

This setup has the potential to strengthen the EU startup ecosystem by facilitating successful exits, attracting more investment, and enabling startups to scale with a clear pathway for strategic acquisition. By fostering this marketplace, the EU could improve its dynamic, interconnected environment that encourages growth, innovation, and the development of globally competitive businesses.

3. Updates of Grant Agreements and Public Funding Criteria

Be more aware of the existing constraints that attach themselves to EU related Grant Agreements. Usually, these are related to the amount of equity the Academia (or Research Centres) may own of a specific innovation, not allowing it to scale as it could, or indirectly blocking access to the market, due to lack of flexibility or control of the terms and agreements.

To improve the impact of innovation grants like IRD, the key challenge lies in helping startups successfully go to market. One way to measure progress is to assess whether the startup involves business angels or venture capital from the outset, as this can increase the project's valuation. Additionally, having advisors focused on enhancing the startup's go-to-market strategy can further boost its potential for success.

E.g.: Horizon Europe; a unique instrument that Europe has, to support the startup ecosystem, as well as development, technology and innovation and research in general, that relies on diverse tools.

4. Improve Guidelines for EU Funding Grants

a. Resources are split across too many fields and priorities; programme lacks focus.

b. Access to the programme is not easy or smooth; lack of new applicants, making the

funding concentrated on just some already existing beneficiaries.

c. High level of oversubscription, where over 70% of high-quality proposals not getting funding (as stated in the Draghi Report).

d. General perception that the rules tend to be complex and should be simplified.

e. Standard Contracts (include eventual terms check alignment) templates to facilitate the work between legal documentation between all EU nations.

5. Make more flexible policy & funding schemes

a. Decreasing the perception of risk allocation to some funds, such as pension funds, as well as requirements Funding: Utilize pension fund savings and other innovative funding mechanisms to inject capital into the ecosystem, could offer a way to better finance startups and scale-ups in need, particularly through difficult economic periods

b. Allocate a % (even if is symbolic) of public spending to early-stage project, to move from the conservative logic to choose for early-stage services, early-stage projects.

c. Development of a Capital Market Union to mobilise capital within the EU with less barriers for cross-border flows of capital to support the arrival of funds to innovative ventures, startups and scaleups with the aim to improve access to investment.

d. European Entity: harmonised procedures from reporting to criteria of investment, Similar regulations for ESOP and for other topics, such as opening a new company in terms of time and cost and tax breaks.

6. Unified stock market framework

To reduce, improve and simplify EU legislation impacting startups and scaleups *(perform Stock Stake)*.

a. Ensure legal and regulatory frameworks that apply to startups and scaleups continue to be fit for purposes and take account of the startups and scaleups ecosystem evolution and make it as clear and simple as possible

b. Minimise intervention in technical and product developments until a mature state is in sight and the policy objectives are clarified

c. Checking overlapping legislation is as clear and prescriptive as possible (e.g. do not leave too many technical rules since leaving overly technical regulatory technical standards to level 2 legislation often provides room for ambiguity).

Legislation and Regulation (red tape)

Introduction

A harmonised legislation and regulation (red tape) which allows the free movement of startups within the EU and facilitates the implementation of the single market concept was another topic mentioned as an enhancer to the European Startup ecosystem. As the new EC President mentioned in

the Political Guidelines, "legislation must also be simplified and designed with small businesses in mind and in a spirit of subsidiary. This will notably be done though a new SME and competitiveness check to help avoid unnecessary administrative burdens, maintaining high standards".

The EU's legal and regulatory complexity poses significant challenges for startups and SMEs, with tax compliance alone consuming around 2.5% of turnover, per the European Commission. For founders, especially in the early years, the focus should ideally be on developing ideas rather than navigating administrative hurdles. Simplified regulatory processes and easy access to standard contracts (a common practice in the US) could greatly alleviate these burdens. Additionally, facilitating seamless movement across EU countries would enhance flexibility, reduce costs, and help startups thrive in an integrated market.

An EU-based startup seeking the same market access as in the United States faces a daunting reality: it would need to enter nearly 23 different countries at once to achieve comparable market size, given the fragmented regulatory and business environment within the EU. This fragmentation, with each country having its unique administrative, tax, and legal standards, imposes considerable barriers. Meanwhile, US startups enjoy a unified market and regulatory system across all states, simplifying scale and reducing entry costs

To address the complexity startups face in navigating the EU's fragmented market, leaders and policymakers have begun discussing solutions to create a more unified business landscape. In response to these challenges, Ursula von der Leyen recently emphasised a proposal for an EU-wide legal framework tailored to innovative companies. This "28th regime" would simplify regulatory requirements across member states, enabling startups to operate under a consistent set of rules and more effectively scale across borders. Her proposal, part of the "Political Guidelines for the Next European Commission 2024-2029," signals a mission to strengthen the Single Market, streamlining growth opportunities for EU startups.

Recommendation focuses on ranges such as conducting a stocktake of all existing, ongoing policies as well as slowing down regulatory intervention as excessive regulatory intervention risks stifling competition and creates preconditions for market fragmentation.

Main challenges or constraints:

1. Heavy, complex and unharmonised regulatory processes within the EU

2. Lack of Document Standardisation:

a. Need of a new approach when developing startups or scale up new strategy with Think Small First (or SMEs test) as an anchor.

b. Protectionism and anti-Competition Policies acting as a barrier to the EU startup Ecosystem.

EU Legislation & Regulation (red tape)

Main Objective	**Legislative harmonisation:** harmonisation of the different policies to create a single market
Reasoning behind	Europe can achieve and increase its leadership on the startup scene by having an actual single market with harmonised legal frameworks for new companies to operate in a friendlier and easier way via a coordinated manner focused on reducing bureaucratic barriers and having a unified approach as to simplify, cross-border operations, digital expansion, and access to EU-wide funding and support programs.
Outcomes for the EU startup Ecosystem	• Increased EU competitiveness at global level • Cross-border innovations & research on high-edged technologies • Increased cross-border investment and cash-flow withing EU • Cross-border hiring of new tech talent • Reduce time and cost of opening new ventures
Startup Nation Standard impacted (chapter 2)	#1 Fast startup creation, smooth market entry; #2 Attracting and retaining talent; #3 Stock Options; #4 Innovation in Regulation; #5 Innovation in Procurement; #6 Access to Finance; #7 Social inclusion, diversity and protecting democratic values; #8 Digital-first
Main Ecosystem Players involved	
Startups (broad definition regardless of their maturity stage)	Policy Makers
SWOT (chapter 5)	**Strengths** - The Euro and unified Monetary Policy **Weaknesses** - 27 different jurisdictions; Legislation intensity, "red tape" **Opportunities** - Political support; Tech sovereignty and the global AI race; Public Procurement; Regulatory Sandboxes **Threats** - Slow policymaking and Anticompetition Policies
EC Mission Letters	Digital Networks Act; European Data Union Strategy (simplified legal framework); horizontal single market strategy; SME passport; Single Digital Gateway; facilitate labour mobility; review regulatory framework to help startup financing; Digital Euro; SME and competitiveness check "one it, one out"; 28th Regime

Action Areas

1. Standard Contract Templates and simplification of the EU rulebook

To foster a more efficient and supportive legislative framework for startups and investors, the EU could benefit from a streamlined regulatory agenda that emphasises simplicity and accessibility in its laws. Developing standard contract templates and simplifying the EU rulebook would remove complexities in investment and compliance procedures, making it easier for startups to navigate regulatory requirements and for investors to engage confidently across borders, this principle connected with action 2.

2. ”Think small first’ approach and it should be applied on a more recurrent basis [45]

SME test (also referred to as the Think Small First approach), should be applied by the European Commission as well as by the European Parliament and the Council. For this to take place an analysis should be done to consider the indirect and cumulative impact of legislation on SMEs and/or startups today. The recommended principle would be to have a case-by-case approach, as the diverse scenarios for tech companies (Startups) may differ regarding, especially, industry. In terms of legislation, this may also vary[46].

To do so, some concrete actions must relate to the need of having a: Horizontal review of all EU legislation applying to startups and scaleups and seeking to minimise requirements applied by host Member States to startups and scaleups passporting services to other Member States (e.g. payment services).

3. Streamline Regulatory Processes: One-Stop Shop to EU Startups

Aim for the creation of a “One-Stop Shop”

45 Note: The SME test should also be performed for implementing and delegated acts

46 Note: The SME test should also be performed for implementing and delegated acts

for startup registration (under a shared EU Identity) and compliance, reducing bureaucracy and simplifying legal processes to help startups launch and operate smoothly on any of the 27 EU member states

- Removal of cross-border barriers/obstacles for startups and scaleups. Progress should be adequately monitored and measured (e.g.: setting KPIs).

4. Ensure Fair Competition Policies

Evaluate the level of protection that exists that can eventually limit the market penetration of new startups, now allowing them to compete at the same level due to action that could favor large corporations. A rigid legal framework regarding competition, even though it reduces the abuse of power to maintain a competitive market, it may play against new players, discouraging innovation to be present or flourish; not allowing the startup ecosystem to grow at the velocity that it should.

5. EU-wide legal status to help innovative companies grow

This regime would offer an alternative to the complex web of national laws by creating a streamlined, EU-wide legal status for businesses. The goal is to reduce regulatory complexity, cut administrative costs, and remove the need to navigate multiple legal systems, which currently impose high costs and hurdles, especially for fast-growing startups.

For startups, the 28th regime, or any other similar legal framework presents a transformative opportunity to scale operations across borders with far fewer legal barriers. Startups could benefit from simplified compliance requirements, legal clarity, and the ability to enter multiple EU markets more efficiently. By reducing these regulatory hurdles, the 28th regime would enable startups to focus more on core business activities—innovation, product development, and market expansion—rather than diverting resources to comply with fragmented regulations. This streamlined framework would not only make the EU a more attractive environment for entrepreneurship but also foster a competitive, dynamic business landscape that draws increased investment and talent.

Additionally, Startup Nations Standard #1, which focuses on fast-tracking startup creation, serves as a valuable intermediate improvement while the EU works towards establishing the ambitious 28th Regime. This standard sets practical and immediate steps to support the EU's startup ecosystem by encouraging member states to enable company formation for less than €100 within a single day. It also promotes the mutual acceptance of legal documents from other EU countries, simplifying the process of establishing business across borders.

Entrepreneurial Culture

In Chapter one the concept of the entrepreneurial mindset and the need to have a

different approach to what it means to innovate, take risks and operate in a changing environment, were highlighted. Under this logic, understanding to create, execute and operate on uncertainty, is a must for new ventures and projects to be born.

Innovation happens under this framework of entrepreneurial culture, which, is something constantly commented on and pointed out in the most respected startup hubs of the world. The concept of failure is understood and seen with other eyes, as innovations require many trails and being open to execute on a future that is not, yet there. Therefore, having one of the points of this document, the understanding that Europe needs to have, under its respective values, a unique culture of entrepreneurship to lead at a global scale, is important.

Furthermore, we are also putting together some concepts such as One Europe, as well as having a concrete European Identity/ Brand, but moreover building together a set of values that promote innovation.

Additionally, by increasing public understanding of startup investing and making it accessible, these initiatives can foster a culture where everyday citizens are more inclined and able to contribute financially to the growth of the EU startup ecosystem.

Entrepreneurial Culture

Main Objective	Create and unify a narrative to transmit the cultural values and a positive message of EU, connected to the existing strengths in various sectors, particularly in early-stage investment.
Reasoning behind	Having a risk culture and open mind when it comes to think and act on high-edge technologies, allows EU to have more founders as well as more investors willing to invest on innovation; while building upon a unified voice and European Identity to identify the EU startup ecosystem under one same core of values and image at an international level.
Outcomes for the EU startup Ecosystem	• EU startup ecosystem recognised under a common matrix of values and image at a global level • EU founders to be linked to the EU wide startup ecosystem as a strong validator • Increased of media awareness of EU startup legacy • More traditional investors open to participate on Venture Capital initiatives • More young and talented EU citizens open to innovate with their own companies
Startup Nation Standard impacted (chapter 2)	#7 Social inclusion, diversity and protecting democratic values

Startup Nation Standard impacted (chapter 2)	#7 Social inclusion, diversity and protecting democratic values

Main Ecosystem Players involved		
Startups (broad definition regardless of their maturity stage)	Academia	Investors

SWOT (chapter 5)	**Strengths** - European set of values; Public funding level **Weaknesses** - Risk of adverse mindset; Cultural barriers **Opportunities** - Political support
EC Mission Letters	All EC Mission Letters co-relate with the Entrepreneurial Culture mindset

Action areas	
Promote a Risk Culture Mindset	Collaboration between startups and corporates for a faster innovation cycle in critical industries
Unify European ID Branding to identify the EU startup ecosystem	Financial Literacy

Main challenges or constraints:

1. Lack of a risk culture due to negative view of failure

2. Lack of collaboration between startups and corporates: Daily for a faster achievement of innovation in critical industries

3. Lack of a Unified European ID Branding: That identify the EU startup ecosystem

4. Lack of financial literacy

Main Actions

1. Promote a Risk Culture Mindset

As to increase the number of entrepreneurs and investors, it is fundamental to promote a risk culture that can manage uncertainty and be open to generate innovation. This will play in favour of having new founders creating companies and more investors willing to invest due to the increase in the number of companies and to the approach of a risk mindset that would push them to be more open and able to invest in high-risk ventures (such as startups and scaleups)[47]

47 Note: The recent announcement done on October 21st to launch the Trusted Investors Network to bring together the first group of 71 European Investors, including venture capital funds, public investment banks and foundations and corporate funds (representing €90 billion of assets), opens a new door to position this network as a key stakeholders to push the ecosystem further, as well as a real example on how there is an effort to work together an invest with more risk on the solution of the next years.

- **Integrating failure and approach to risk into education:** Encourage the inclusion of subjects such as failure (new approach to risk management) in university and school curriculums. Collaborate with private entities and EU programs to drive initiatives that prepare students to embrace entrepreneurial mindset as to understand how to work under uncertainty.
- **Entrepreneurship training/mindset for researchers:** Launch programs that provide entrepreneurship training for researchers and Ph.D. students (in terms of mindset as well as business/commercial approach for future innovations). This initiative will combine technological innovation with business & commercial skills, to boost the possibilities of increasing the numbers of future founders in Europe that come from the research area or can be involved in it. Thus, creating opportunities for them to launch startups or innovative projects and bridge the gap between academia and the startup world.

2. Collaboration between startups and corporates for a faster innovation cycle in critical industries

- **Creating a network of EU Ambassadors:** Build a network of European startup ambassadors (e.g: recognised founders) who share testimonials about why Europe is a good location to launch and grow a global startup. To do so, actions such as a. positioning European founders at major international events and stages, b. Generate a broader media awareness and ambassador network actions, plays in favour of the aim to position Europe into a global innovation hub.
- **Facilitate innovation partnerships between startups and corporates:** The importance of creating actions to improve the collaboration of big firms with startups is fundamental for any startup ecosystem to be developed, therefore, the corporate innovation and its approach to new ventures, such as innovation labs or accelerators co-run by corporates and startups, is of relevance (below there is a list of practical actions recommended by some of our members).

Corporate and Startup Cooperation

- Increased the relationship between corporate and founders
- Provide guidance on spin-off and internal innovation
- Accelerate the corporate venturing as a practice
- Provide support for corporate venture fundings as a positive discrimination critera
- Incentivised the investment in startups in pre-seed and seed stage with fair terms sheet
- Provide access to best practices of corporate venturing
- Provide guidelines on how to support the creation of corporate accelerators and co-workspaces with the aim to boost local hubs along
- Europe, through a private-public strategy
- Provide open-source guide about joint ventures and other mechanism to acquired early-stage startups that can boost the interest of corporate to accelerate this innovation by corporate acquisitions of startups
- Advocate for a more straightforward path to direct licensing by

regulatory authorities for new fund managers and fintech founders, alongside a reduction in operational overheads related to regulatory compliance based on the size/capital of the company

- Advocate for EU-wide acceptance of digital reporting and receipts to replace paper requirements. Facilitating digital tax submissions and recognising digital reports across all Member States would enable more efficient operations for tech companies
- Clear demarcation and specification of roles among the political level, the Commission, and the private sector. Each entity should have a defined function, with the political bodies setting the direction and the Commission ensuring implementation, to protect the interests of all parties involved, especially the private sector
- Simplifying public procurement processes, by creating specific programs for startups or establishing a clearer path for tech companies to engage with the public sector, could unlock significant opportunities for both startups and government agencies seeking to engage with them. This theme is linked to corporate/startup collaboration

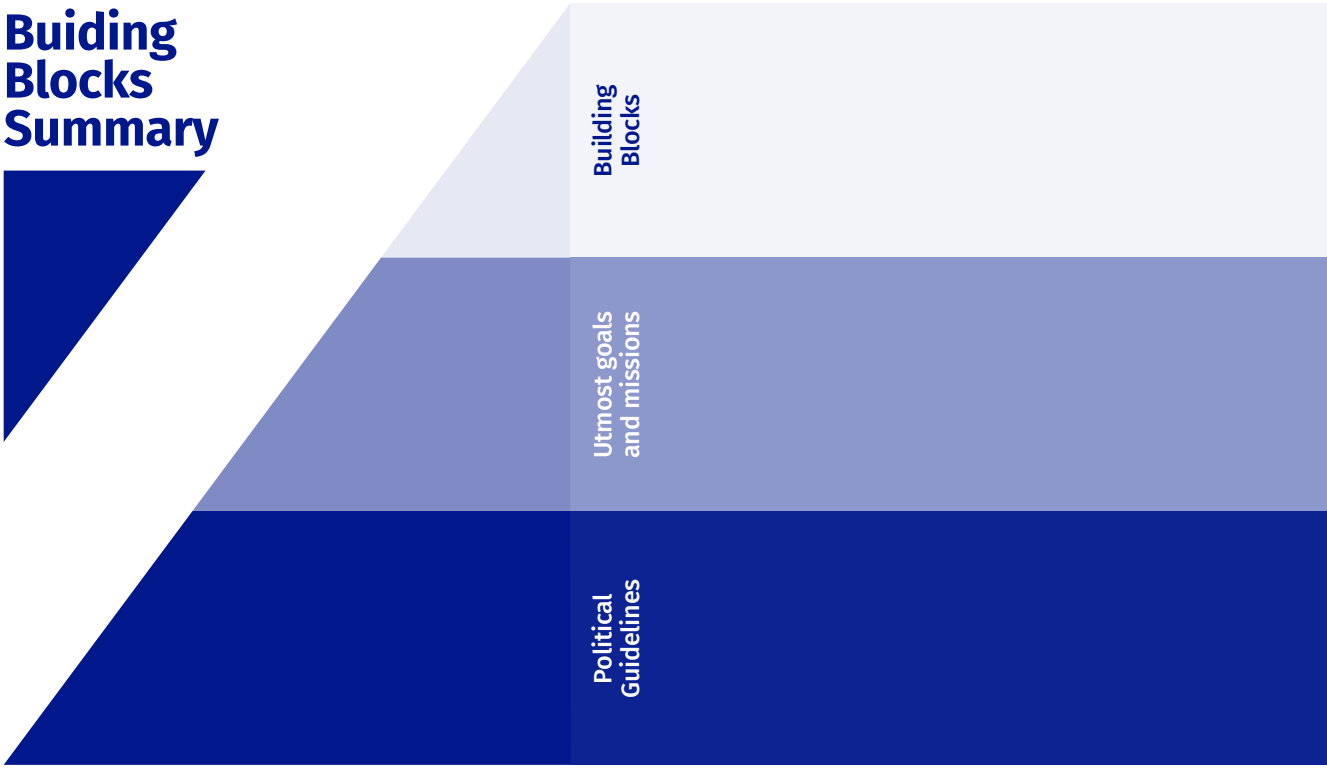
3. Unify European ID Branding to identify the EU startup ecosystem

- **Publishing studies highlighting European startup success:** Regularly publish comprehensive studies and cases focused on how European startups are addressing critical trends and areas (such as the ones mentioned in this chapter as well as chapter 1) and how this could validate Europe's possibilities to compete in global leagues. Following these actions, publishing case studies and highlighting specific cases of success can become a communicational support for the creation of a strong European brand (another point highlighted by ESNA Members as well as Advisory Board as mentioned in Chapter 4), by showcasing data and success stories, reinforcing the EU's position in the global innovation landscape.
- **Boosting media coverage of startup ecosystems:** Promote the creation of niche media outlets, following the cases of other nations of the world, where startup content is a daily highlight on major media outlets and opinion leaders' formal messages. To be open to focus on the European startup scene with cases and facts, may provide a support for the diverse stakeholders of the startup ecosystem of Europe, such as success stories, best practices, and critical data such as investment deals. Select main critical industries that are part of the EU vision (e.g.: DeepTech, Artificial Intelligence, ClimaTech). Furthermore, to raise awareness and visibility of the EU startup ecosystem; also contributes to the previous actions highlighted here as: entrepreneurial thinking (mindset). Finally, boosting media coverage of startup ecosystems may also become a support for another objective which was also mentioned by ESNA Members as well as the Advisory Board, promoting a unified European identity.

4. Financial Literacy:

• Increasing financial literacy within the education system is crucial for the long-term health and growth of the EU startup ecosystem. By embedding financial literacy early on, future generations are better prepared to understand, support, and participate in entrepreneurial ventures. It also helps develop a broader base of everyday investors who support early-stage ventures, reducing startups' reliance on traditional funding sources. It promotes informed risk-taking, where individuals feel more comfortable with the risks and rewards of startup investments, fostering a culture of innovation and growth. A financially educated population also strengthens the economy, enabling smarter financial decisions that benefit the entire startup ecosystem. Financial literacy encourages more people to consider entrepreneurship, equipping them with skills to manage finances and secure funding, which diversifies and enriches the startup landscape. Additionally, a financially savvy society fosters stronger partnerships among startups, investors, mentors, and institutions, creating an environment where businesses can scale and thrive.

Buiding Blocks Summary



Building Blocks	Action Areas	EC Mission Letters
Talent	Digital education Reskilling & upskilling programs Talent attraction	Quality jobs roadmap/Union for skills/Pact for skills Talent pool STEM education strategic plan
IP Rights	Unitary Patent covering the whole of Europe Creation of incentives for University TTOs for best practices Create a guide or similar document of best practices and rationale to be distribute to EU TTOs, founders and scientists	EU Cloud and AI Development Act Have capital markets that invest in innovation Intellectual property policy European Research Area Act Strategy European Research Infrastructure Strengthen Universities Alliances European Innovation Act Advanced Materials Act
Investment	Develop a secondary market Create a marketplace at EU level (Pre-IPO) Updated of Grant Agreements and Public Funding Criteria's Promote that EU (public) funding Leads Investment Rounds Make more flexible policy & funding schemes Unified stock market framework	Defence industrial competitiveness; New Industrial Strategy European Competitiveness Fund Invest EU programme New approach to competition policy SME's and small midcaps kicker acquisitions Increase availability of venture and other risk capital Enhance EIF to finance high-potential and fast-growing EU companies
EU Legislation & Regulation (red tape)	'Think small first' approach Standard Contract Templates and Simplification of the EU rulebook Streamline regulatory processes: One-stop shop to EU startups Ensure fair competition policies EU-wide legal status to help innovative companies grow	Digital Networks Act European Data Union Strategy (simplified legal framework) Horizontal single market strategy SME passport Single Digital Gateway Facilitate labour mobility Review regulatory framework to help startup financing Digital Euro SME and competitiveness check "one it, one out" 28th Regime
Entrepreneurial Culture	Promote a Risk Culture Mindset Collaboration between startups and corporates for a faster innovation cycle in critical industries Unify European ID Branding to identify the EU startup ecosystem Financial Literacy	All EC Mission Letters co-relate with the Entrepreneurial Culture mindset

Main takeaways

1. Strategic Role of Startups

Startups and scaleups are vital for fostering innovation, driving economic growth, and securing Europe's global leadership in sustainability and competitiveness as stated in major EU documents, missions and the previous chapters.

2. Alignment with EU Vision

This chapter aligns with Ursula von der Leyen's Political Guidelines, particularly the goal of a "New Plan for Europe's Sustainable Prosperity and Competitiveness".

3. Collaborative Leadership

The success of the startup ecosystem requires the collective efforts of various EU Commissioners, particularly those responsible for startups, innovation, and industrial strategy as well as the understanding of the voice of the market and all the stakeholders that play a fundamental role to create this puzzle and push EU startup ecosystems to the next level.

4. Strategic Foundation and Policy Alignment

The EU's startup ecosystem framework is built on a foundation of revised political guidelines and key contributions to the Startup and Scaleup Strategy. This alignment with fundamental EU policies aims to address critical areas that affect the startup environment, setting a clear framework to foster growth and sustainability in the ecosystem.

5. Building blocks

Identify five building blocks with specific challenges and possible actions to improve the startup ecosystem in Europe: Talent, IP Rights & Spinoffs, Investments, Legislation & Regulation (red tape) and Entrepreneurial Culture.

Conclusion

Conclusion

This document marks the beginning of a journey that was done by taking into consideration major documents and publications concerning the EU Startup ecosystem and the wider European innovation landscape, along with practical requests and discussions with major stakeholders.

From the Political Guidelines set forth by Ursula von der Leyen for the upcoming term (2024-2029) and the missions assigned to the newly designated commissioners, to the recent reports from Mario Draghi and Enrico Letta, a cohesive narrative has emerged: there is a growing recognition and consensus around the need for a more competitive Europe and in particular a renewed EU strategy focused on supporting startups and scaleups.

This combination of insights and directives provides a robust foundation for advancing a more comprehensive approach to strengthening Europe's startup ecosystem. The recent advance in the setting of regulations such as the world's first AI Act or the European Digital Rulebook that provide a comprehensive framework of regulations that aim for a correct governing of the digital economy. Furthermore, initiatives such as the Universities Alliances for collaboration between universities and knowledge sharing, or actions such as the 28th Regime and the EU-wide Legal Status, set a positive start for what is to come. Some initiatives are newer than others, but all of them align to the "Fifth Freedom" of the Enrico Letta Report or the need to focus on the development of critical industries for Europe with the support of deeptech and defence innovations, as stated in Marios Draghi's Report (Critical Raw Material Act and the Advance Material Act, play a crucial role in here).

This document goes from past to present and from present to future, highlighting diverse policies and instruments in the EU as well as supporting the digital and green transition that Europe aims for its competitiveness to rise. In this line, one of the messages here is that by supporting the EU startups and scaleups, we are supporting EU global competitiveness. Therefore, this document is both a blueprint and a call to action, born from 20 years of progress in European entrepreneurship, we have a legacy already accomplished and a starting point.

Over these two decades, we have witnessed Europe's startup landscape mature from isolated hubs into a more interconnected ecosystem, yet it remains hampered by fragmentation, regulatory complexity, and uneven access to investment, especially in later stages. The need for unified strategy has become a European aim.

Our approach reflects the lessons of the past 20 years (Chapter 1). A retrospective analysis of Europe's startup ecosystem reveals significant achievements: pioneering companies such as Skype, Spotify, and BioNTech have set a precedent for innovation and impact. Despite these strides, according to the recent reports of Mario Draghi and Enrico Letta, Europe has not been doing enough to maintain global

competitiveness.

It also reflects the present with a picture of the maturity of the startup ecosystem (Chapter 2), the EU policy advancements, like the Digital Markets Act, the Artificial Intelligence Act, Data Act between many others and the financial public support that the EU has leveraged during the past years, portrayed by the series of financial instruments to leverage innovation and research within Europe, all of them, with a defined goal and mission (Chapter 3).

The document also brings forward ESNA internal analysis as well as our stakeholder's point of view — ESNA Members and ESNA Advisory Board — who have identified challenges and needs. A general voice of the market, which enhance a collective shift towards creating a regulatory framework that not only nurtures innovation but ensures new companies to emerge from Europe to the world, while working on an EU wide level vision, brand and supporting the values of a Single Market (Chapter 4).

All of this to understand and build a unified future, a main factor of this document and the starting point that lays the foundations for the future by understanding not only the economic and political landscape of Europe, but the actual power of working all together (Chapter 5 and 6).

Their perspectives have underlined critical issues such as access to cross-border funding, simplified regulations, talent retention and cutting of red tape. In this point, Chapter 6 serves as the cornerstone of this strategy, detailing the foundational building blocks to achieve this: Tech Talent, Investment, Intellectual Property Rights, Legislation and Regulation (Red Tape) and Entrepreneurial Culture.

Tech talent is fundamental to the startup ecosystem, providing not only innovative ideas but also strategic implementation and competitive advantage. In today's fast-evolving tech market, talent is a strategic asset that drives resilience, adaptation, and innovation. Aligning with the European Commission's Political Guidelines, there is a strong focus on creating a nurturing environment for researchers, attracting top international talent, and harmonising the recognition of qualifications to ease the integration of third-country nationals. European startups must work hard to attract diverse talent, and there is a critical need to cultivate new skills for digital transformation and climate neutrality, as a sustainable and tech-driven future requires a specialised skill set.

Investment remains a core concern for the EU startup ecosystem. Completing the Capital Markets Union (CMU), a key goal in the Political Guidelines, could unlock €470 billion in additional annual investments. Establishing an EU-wide secondary market or marketplace would provide startups with greater access to capital, liquidity, and growth potential. Additionally, fostering pension fund investment in venture capital, as seen in the US could bolster the financial backbone of later-stage startups, broadening growth opportunities within Europe.

Intellectual Property (IP) rights are another pillar for innovation, providing protection for valuable ideas and encouraging investment. IP rights enhance competitiveness, making startups more attractive to investors. Furthermore, fostering strong collaborations between academia, startup founders, and investors — particularly through university spin-outs — holds significant promise for Europe's deep-tech landscape. Establishing dynamic partnerships between universities and high-tech spinouts, as seen in other regions like the UK, can drive cutting-edge development and accelerate ecosystem growth. While science and technology remain central, humanities and social sciences also present opportunities for IP-driven spin-outs.

Addressing the "red tape": An EU startup hoping to reach a market size comparable to that of the US faces the challenge of navigating nearly 23 different jurisdictions, each with unique regulatory and administrative standards. In contrast, US startups operate within a unified regulatory framework. Addressing this issue, recent discussions among EU leaders have focused on creating a consistent, EU-wide legal framework under a proposed "28th Regime." This regime would enable startups to operate across borders under a single set of rules, reducing complexity and fostering an integrated business landscape. This proposal aligns with von der Leyen's Political Guidelines for 2024–2029, supporting growth opportunities and further solidifying the Single Market.

Finally, the need for a robust **entrepreneurial culture** in Europe is essential for fostering innovation and global leadership. Embracing a culture that values experimentation, risk-taking, and resilience can drive forward-thinking startups. The EU must cultivate this entrepreneurial mindset, developing a unique European identity that celebrates innovation and aligns with core EU values. Public understanding of startup investment, paired with accessible entry points, can encourage a broader segment of citizens to participate in and support the EU's startup ecosystem.

This starting point of a possible future-oriented vision aligns closely with the European Commission's goals for sustainable prosperity, competitiveness, and digital sovereignty. Such a strategy can transform Europe from a reactive participant in the innovation race into a proactive leader on a global scale.

As we take these first steps, this document, and contained building blocks, is intended not as a final solution but as a framework upon which to build. It invites stakeholders to participate actively in shaping a European startup ecosystem that exemplifies global leadership in this topic.

By fostering collaboration, aligning policy, and committing to a future-driven approach, Europe is positioned to become not only a hub for innovation but a defining force in global startup and scaleup development. This journey is just beginning, and it calls for unified commitment, vision and adaptability, a known characteristic of

the entrepreneurial mindset, so needed today to ensure that the European startup ecosystem flourishes and becomes a major pillar for EU Competitiveness.

Relevance of ESNA

Establishing ESNA

Policies Role under a Political Mandate

After the pandemic, a new road to support the creation of a more robust and friendly startup ecosystem came to life. An entity that can support the startup ecosystem by providing eight standards to facilitate a more welcoming environment for founders, encouraging them to choose Europe as their top destination.

Having Europe, again, as the centre of the world, when it comes to the most innovative companies, is a crucial move to support global EU competitiveness in a rapid and constantly changing world. This is why in early 2021 ESNA was founded during the Portuguese EU Presidency, arising from the broad commitment to the "EU Startup Nations Standards of Excellence" (SNS), becoming a pivotal force in the European entrepreneurial landscape.

Due to an official mandate, endorsed by 26 EU Member States plus Iceland, eight essential practices were outlined and designed to cultivate startup-friendly environments across Europe, which are referenced as the 8 SNS, under the critical mission to foster a robust startup ecosystem by accelerating the growth of European startup ecosystems, through enhanced policy frameworks. Finally, the European Startup Nation Alliance (ESNA) was stablished.

ESNA operates as a central hub of information for its members, a platform that serves as a repository and dissemination tool for the EU Startup Nations Standards of Excellence offering a comprehensive map of the startup ecosystem. It aims to enable members to access critical data, share best practices, and track compliance with the established standards.

Core Values: ESNA Ambition

ESNA's ambition is to elevate Europe to a leadership position in the global startup ecosystem. This vision involves aligning with EU policies to create a unified and supportive environment for startups across the continent. ESNA strives to be a fundamental tool in the European economy, driving sustainable growth and fostering innovation through the continuous development of best practices and the provision of up-to-date, actionable data.

ESNA's positioning is deeply intertwined with EU policies. The constant alignment and day by day work with the network of focal points to coordinate its activities with broader European policies aimed at strengthening the startup ecosystem in a deeply collaborative way. By advocating for the adoption of the SNS and working closely with EU institutions, ESNA ensures that its initiatives complement and reinforce EU-wide objectives.

ESNA's primary goal is to position Europe at the forefront of global innovation and entrepreneurship. By standardising best practices and continuously updating policy frameworks, ESNA aims to create a conducive environment for startups, thereby

ESNA's strategic vision and mission and the accomplishment of the 3 main objectives are the foundations for all future activities of ESNA

01.
Gather data from members and provide up to date key information on the ecosystem through a data driven open platform and analytics

02.
Improve National Policy Frameworks of Member States through monitoring of SNS adoption and best practice benchmarking, sharing and exchange

03.
Promote a proactive and open communication strategy on the European entrepreneurship agenda and policies

driving economic growth and global competitiveness.

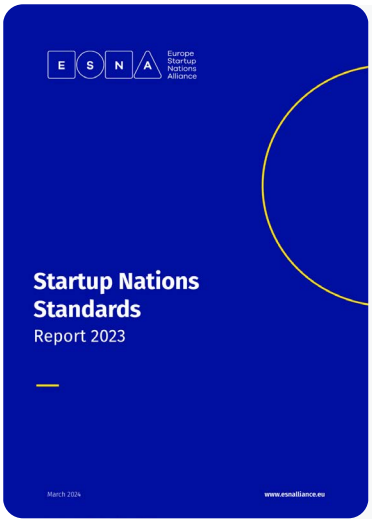
By working directly with government officials and policymakers from 27 nations, including the 26 EU member states and Iceland, ESNA ensures that policies across Europe are connected and focused on the same objectives.

Globally wise, the top cases of fast and solid growth of startup ecosystems show how coordinated efforts can boost startup success rates, and therefore the power as a whole of its stakeholders.

Through harmonisation and the sharing of best practices, ESNA enables member states to develop more effective policies that support the new wave of companies and startup founders and allow Europe to be in the global eye as a possible top hub for the fastest and more robust tech initiatives to come.

The Eight Standards

ESNA's mandate includes the monitoring and improvement of the 8 SNS, which cover essential aspects of startup policy, such as business creation, facilitation, talent acquisition, tax incentives and regulatory innovation. These standards serve as the cornerstone of ESNA's recommendations and actions, guiding member states in enhancing their startup ecosystems.



Amongst the Action Areas defined for the Europe Startup Nation Alliance (ESNA) is to start the process to support the development of the 8 Startup Nations Standards in all signatory countries from the Startup Nations Standard (SNS) declaration.

01 **Fast startup creation, smooth market entry**

02 **Attracting and retaining Talent**

03 **Stock options**

04 **Innovation in Regulation**

05 **Innovation procurement** (including tech transfer policies)

06 **Access to Finance**

07 **Social inclusion, diversity, and protecting democratic values**

08 **Digital-First**

This monitoring is portrayed in this document as a way to show how the measurement and follow-up of policies that allow the achievement of each of the 8 SNS, enables the correct implementation of a more friendly startup ecosystem, under one unified voice.

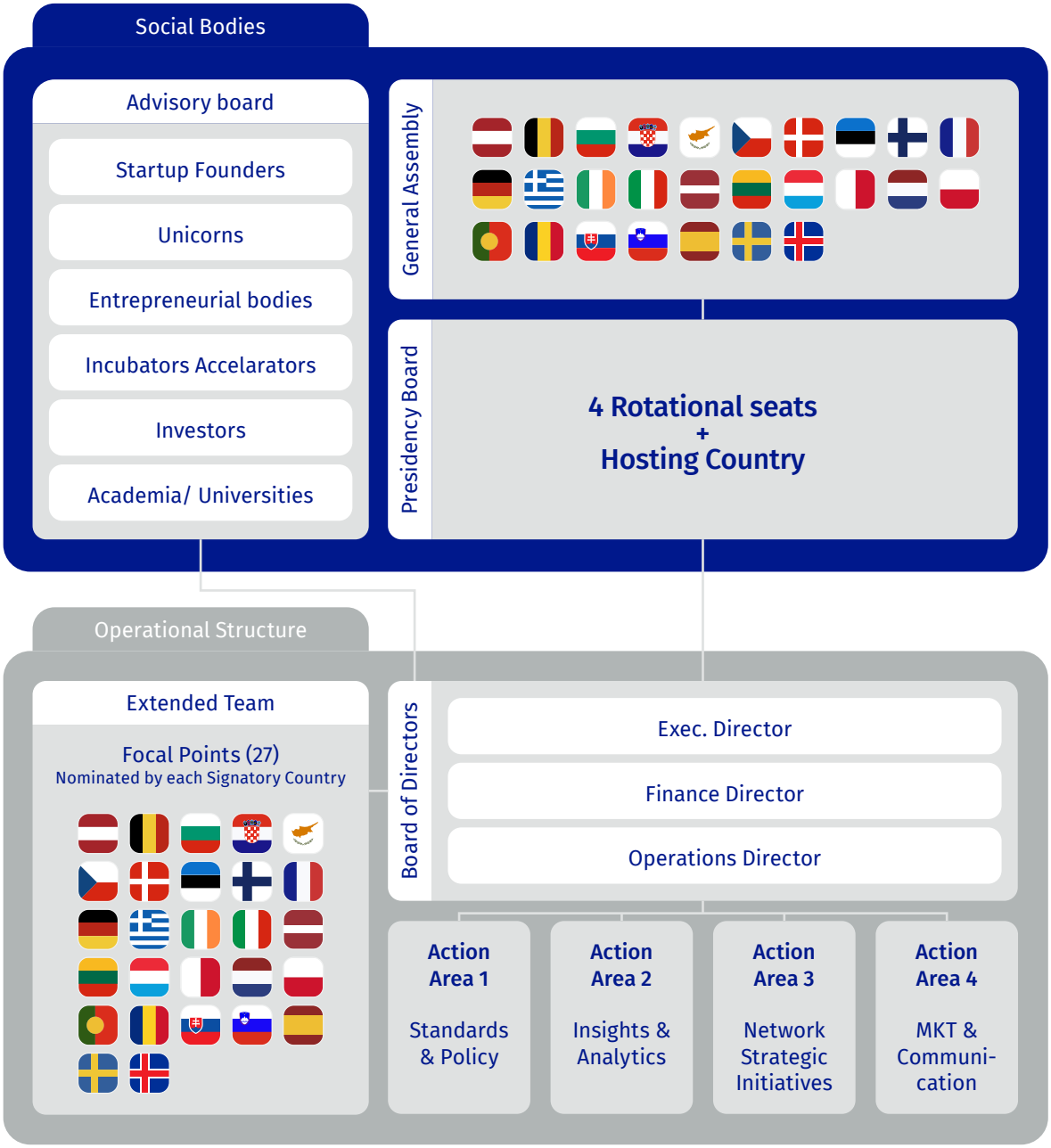
ESNA Members

The general assembly is made up of 27 nations and the Presidency Board is composed by the host country (Portugal) and the two past nations and the next two nations that will lead the presidency of the EU. As of 2024, the Presidency Board is composed of Portugal (host nation), Spain, Belgium, Poland and Sweden. ESNA has a Board of Directors that leads the organisation and its four action areas, also, referenced as ESNA Departments.

As external entities that provide guidelines and support, ESNA has an Advisory Board that represent the voice of the market composed by diverse profiles of experienced actors of the startup ecosystem. Alongside this, ESNA has an extended team in each nation, known as the focal points, which have one representative per country (officially selected by each government after a signed declaration).

ESNA's governance model includes a diverse range of stakeholders, each contributing to the Alliance's objectives.

The visual representation provides an overview of ESNA's membership and governance:



Annexes

The relevance of legal Sandboxes within the EU

Europe is globally known for the process when it comes to regulating different kinds of sectors. In this case, the application of sandboxes offers startups a controlled environment to test their innovation on behalf of their products, services and initiatives.

As stated in the "EU Startup Nation Standard of Excellent Ministerial Declaration"; *Experimentation and innovation for startups is promoted and enabled through regulatory sandboxes: there is an agreed policy or programme (with rules and capacities, administrative support and guidance) and concrete examples for the use of regulatory sandboxes by sectors in which innovations can be tested in cooperation with supervisory authorities*, this is exactly the main principle of SNS #4 "Innovation in Regulation", which aims to design a path toward regulation frameworks that actively promotes innovation. Principles such as "Think Small First", which were also highlighted during ESNA Market Outlook research, are also present under this SNS.

Following ESNA's previous work on this topic: we can state that startups are catalysts to support new economic growth. Therefore, having the existence of legal sandboxes in place supports this accomplishment.

Sandboxes explained

Technology has been developing at a fast pace, and regulation often fails to keep up with new developments, ending up either stifling innovation or failing to protect consumers. Regulatory sandboxes are therefore a tool to enable technology and innovation progress, but also to guarantee safety, ensuring the risks related to innovation are studied, foreseen, and prevented through adequate regulation.

Regulatory sandboxes configurations

As a recent, innovative, and experimental mechanism, regulatory sandboxes are not yet being developed throughout the whole of Europe, and their structures and approaches may differ across borders and sectors (Attrey, Lessher, & Lomax, 2020).

Startups participation in Regulatory Sandboxes

As mentioned in Chapter 2, startups are not so involved in Regulatory Sandboxes, as the following graphs show.

Country	No. Reg. Sandboxes
Austria	3
Belgium	n.a.
Bulgaria	0
Croatia	0
Cyprus	1
Czechia	0
Denmark	3
Estonia	2
France	3
Greece	0
Ireland	0
Lithuania	2
Luxembourg	2
Malta	3
Poland	0
Portugal	2
Romania	0
Slovakia	0
Slovenia	0
Spain	5
Sweden	0

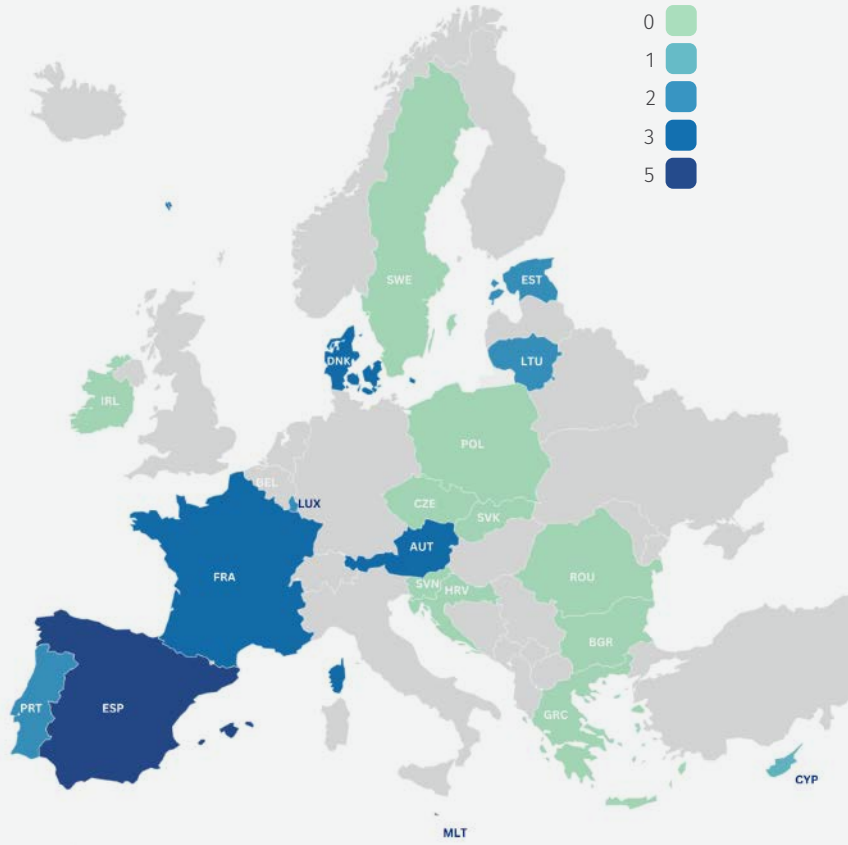
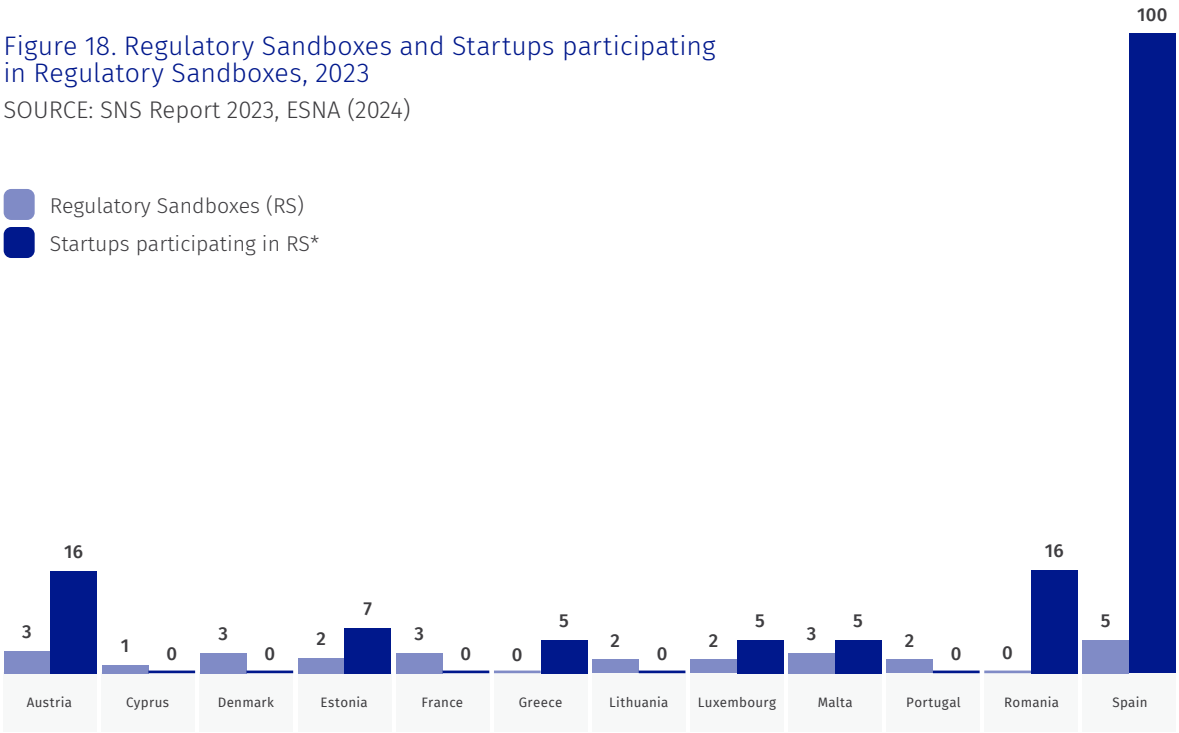


Figure 17. Number of regulatory sandboxes established in ESNA countries

SOURCE: SNS Report 2023, ESNA (2024)

Figure 18. Regulatory Sandboxes and Startups participating in Regulatory Sandboxes, 2023

SOURCE: SNS Report 2023, ESNA (2024)



The involvement of multiple stakeholders in the process of regulatory sandboxes is a positive success factor. Therefore, to have more startups involved in the process, may be a game changer when it comes to accelerating innovation in new and unexplored areas.

In spite of this, the overall startup involvement remains fairly low, with the only exception being Spain with 100 startups engaged in regulatory sandboxes.

Some relevant examples

Austria has three regulatory sandboxes in place in the transportation, energy, and financial sectors, which involve 16 startups in total. The regulatory sandbox in the transportation sector was established for testing automated mobility on public streets. The legal framework was established through a national regulation, based on the National Type Approval Law, which governs vehicle registration. The so-called "Automated Driving Regulation (Automat-FahrV)" has specific legal requirements for different testing cases of automated mobility. The applications are open for all entities that want to use this temporary framework for testing new transport solutions. The framework has been in place since 2016, and in 2019, the first amendment to the law was made, stating that driver assistance systems do not require the driver to have a hand on the steering wheel of vehicles used on public roads in Austria.

Malta has created the Technology Assurance Sandbox (TAS) aiming at companies developing solutions based on Innovative Technologies such as Blockchain and Artificial Intelligence or solutions deployed in critical environments, to enable the correct nurturing of such solutions in line with recognised standards. The sandbox is aligned with early phases of deployment since they prove to be cheaper than rectification in a post-development stage.

Additionally, TAS was designed with startups and SMEs in mind. It "grants ultimate flexibility in the selection of which controls shall be applicable at which stages within the Sandbox residency, as defined by applicants themselves, thus seamlessly integrating within the development plans of the individual applicant. The MDIA-TAS also presents low administrative costs and the possibility of applying for government grants to substantially cover System Auditor Assessment-related costs".

Spain has five sandboxes in place. They cover finances, AI, the electricity sector, high renewable energy production, as well as local scale sandboxes. These results may be a reflection of the new Startup Law ("Ley de Fomento del Ecosistema de la certificación Empresas Emergentes") that includes efforts on the implementation of regulatory sandboxes. One example worth mentioning is the Law 7/2020 of November 13th for the digital transformation of the financial system ("Ley para la transformación digital del sistema financiero"), which implements a sandbox specifically in the financial sector. It launches projects such as "Sistema Multilateral de Negoci-

ación Basado en Technología de Registro Descentralizado" (technology-driven multilateral trading system), "Proyecto Akura" (AI-supported app to identify behavioural patterns), and "Open Brick" (real estate token market).

The sandbox application process has an admission procedure through six steps: submission of access requests, prior evaluation, negotiation of the testing protocol, testing period, and exit where the promoters prepare a report evaluating their results, and the competent supervisory authority publishes a report of conclusions in this regard.

Moreover, it is worth highlighting that Spain is currently developing its most recent project in collaboration with the European Commission for a pilot of the first regulatory sandbox on the Artificial Intelligence (AI) Act. This sandbox aims to bring competent authorities close to companies that develop AI in order to define best practices that will guide the implementation of the most recent regulation (Artificial Intelligence Act).

Opportunity of Legal Sandboxes and the startup involvement

We can conclude that regulatory sandboxes are designated spaces that include special legal frameworks for testing innovative solutions: 52% of the surveyed countries in the SNS Report 2023, have regulatory sandboxes in place, indicating potential for broader adoption in Europe. Moreover, the overall implementation level across countries (26%) related to the number of sandboxes in place demonstrates that these regulatory tools are not yet widely adopted.

As they are vectors of innovation, the integration of startups within regulatory sandboxes is of great importance. Only 35% of the surveyed countries include startups in sandbox initiatives. Startups are ideal candidates to participate in regulatory sandboxes as they often find themselves burdened with inefficient regulation. It would have the benefit to foster engagement with various public and private entities. However, administrative and financial issues such as unequal access to tenders and limiting rules for applicants are an impediment to startup participation. This can lead to an incomplete representation of the ecosystem, which may lead to potentially overlooking important factors by involuntarily excluding some stakeholders.

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