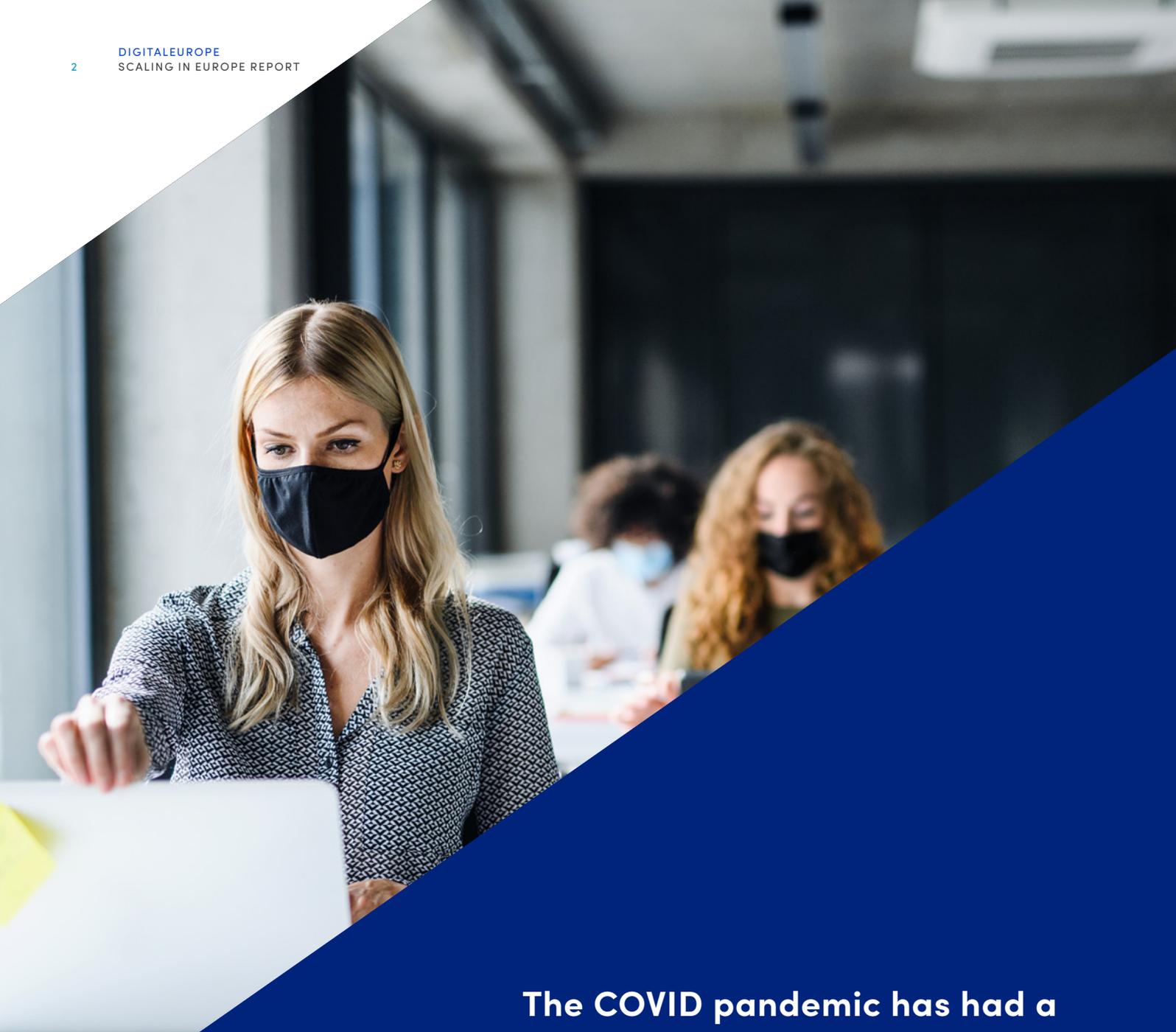


SCALING IN EUROPE



DIGITALEUROPE





The COVID pandemic has had a devastating impact on our citizens and our economy, but there is reason to be optimistic about the future. The unprecedented €750 billion stimulus package presents an historic opportunity for Europe and its Member States to create a more innovative, green and resilient society. Digitalisation will be at the forefront of that transition, with 20 per cent of the funding dedicated to it.

Foreword

In October 2020, DIGITALEUROPE published its [Investment Plan for Europe](#). In that report, we highlighted ten continental investment projects and targets for Europe's digital leadership, across a whole range of areas, like connectivity or digital skills.

With our **Scaling in Europe** business survey, we want to zoom in on our continent's most promising high-growth companies. What are the investments and policy measures that will help Europe's scaleups grow?

For this report, **we have interviewed 37 European high-growth businesses from 22 different European countries**, to understand which kind of investments and policy measures would be most beneficial to support the European scaleup ecosystem.

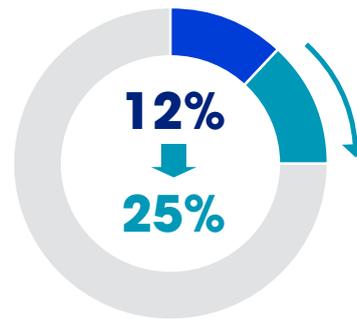
Scaleups – meaning tech companies with more than \$1M funding raised¹ – are essential to Europe's prosperity. More than just an engine for innovation, scaleups are businesses that keep on hiring highly skilled workers, raise Europe's productivity, and champion European values across the world. Supporting scaleups is not only Europe's best chance at producing home-grown tech giants, but it is also a smart choice for economic prosperity. This may be truer than ever in the context of the recovery from the pandemic, where traditional companies have struggled and younger, high tech companies have adapted quicker. In fact, **80 per cent of companies interviewed reported growth over this period.**



Cecilia Bonefeld-Dahl
Director General
DIGITALEUROPE

Europe has delivered meaningful growth for its scaleup ecosystem with a 20 per cent increase in the number of European scaleups every year in the past decade. By 2018, there were over 7000 scaleups in Europe, which raised over €100B in investment capital.² Yet those figures remain far behind the United States, which experienced over three times as many scaleups, benefitting from nearly six times more funding.³

That partly explains why Europe is only home to 12 per cent of unicorns⁴ globally. DIGITALEUROPE has set out an ambitious target to increase Europe's share of unicorns to 25 per cent by 2025. This report provides insights as to how we achieve that.



By 2025, Europe should be home to 25 per cent of the world's Unicorns



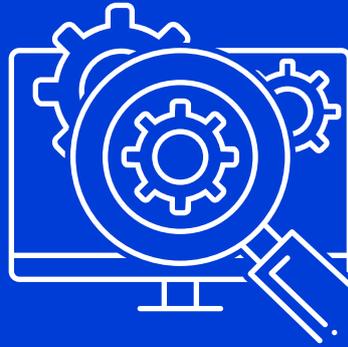
Gábor Mátrai
Board Member
IVSZ

¹ There are multiple definitions of scaleups, to remain consistent with the data used in this report we used the one from the [Tech Scaleup Europe – 2019 Report published by Mind the Bridge](#)

² Mind the Bridge, [Tech Scaleup Europe – 2019 Report](#), 2019

³ Ibid.

⁴ Note: A unicorn is defined as a private company with a valuation over one billion USD.



Survey methodology

The data in this report is derived from interviews with 37 European startups and scaleups that were nominated to DIGITALEUROPE's Future Unicorn Award since 2018. The companies interviewed are from 22 different European countries and the interviewees mostly consist of their CEOs. Most (81 per cent) of the companies interviewed were B2B, 8 per cent B2C and 11 per cent B2G.

We interviewed the companies with two broad goals in mind:

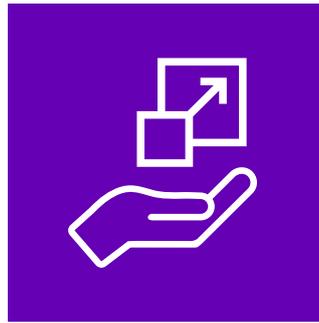
Understanding which investment priorities are the most important to scaleups and why.

Mapping out main barriers to growth and collecting scaleups' recommendations to European policymakers to remedy them.

The full list of interviewees is available on the acknowledgments page.



Overview of findings



Investment priorities to support the European scaleup ecosystem

90%

companies interviewed consider **digital education in schools** a high priority

- ▶ **At national level, digital education in schools is seen as the area of highest priority for investments.** Almost nine in ten companies interviewed considered it as a high or very high priority. In addition to preparing the next generation of young talent for a digital future, digital education is a critical catalyst in changing the public's mindset, who often do not understand and, as a result, do not trust new technologies.
- ▶ **The creation of common European Data Spaces is seen as an important investment area.** The EU should invest in creating data spaces with standardised open data in a vendor and application neutral format, to create an ecosystem where innovative technologies can thrive. Implementation is crucial to ensure that smaller players can also benefit from such data ecosystems.
- ▶ **Research funding, like Horizon Europe, is essential to spur high tech innovative companies, but it needs to be adapted to smaller companies.** The interaction between industry, academic research and public funds, was considered a crucial part of the innovation ecosystem by interviewees. However, many expressed frustration at procedures and payment processes which were unsuitable to the cash-flow and resources of scaleups.



Recommendations from scaleups on addressing structural barriers to growth

1. Adapting regulations to new technologies

Europe needs a legal framework that is adaptable to the pace of technological developments. This could be supported by an agile approach to regulatory proposals and their implementation, based on the innovation principle and iterative testing that closely involves scaleups to ensure that both laws and implementing instruments are fit for purpose. Regulatory sandboxes should also become the norm to create an innovation-friendly legislative framework adapted to smaller companies.

2. Bridging market fragmentation

To help European companies to scale, Europe needs a single administration centre for businesses with centralised administration of e.g.: product authorisations, patents, cross border taxation, GDPR compliance, data access that provides support for scaleups on entering new markets. Three quarters of scaleups interviewed considered the creation of a Europe-wide e-Administration portal a high priority.

3. Improved investment framework

Europe also needs an improved investment framework with increased expertise and diversity on evaluation panels.

Further promoting criteria supporting a long-term vision in granting investment is key. Scaleups need bigger injections of capital with more flexibility and much more efficient approvals and reporting.

4. Better access to talent

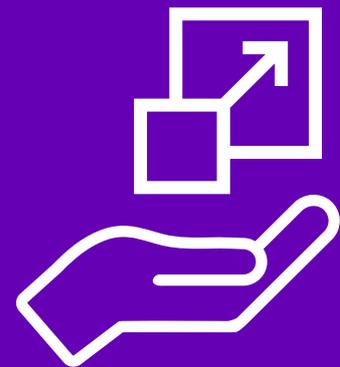
Digital education is key for the next generation of talent, but in the meantime, scaleups need additional tools to help them in the competition for highly-skilled professionals. The legal framework should allow for easier migration rules, and equip them with options to offer company shares to employees – scaleups can seldom match salary ranges offered by large corporations.

5. Improved data cooperation

Standardised open data that is vendor and application neutral is also key for scaleups in creating an ecosystem for innovation. 90 per cent of scaleups consider the creation of European data spaces a high priority. GAIA-X, as a European project supporting data spaces, was mentioned as a step in the right direction, but it is important to ensure fair access for scaleups.

90%

of scaleups consider the creation of **European data spaces** a high priority



INVESTMENT PRIORITIES TO SUPPORT THE EUROPEAN SCALEUP ECOSYSTEM

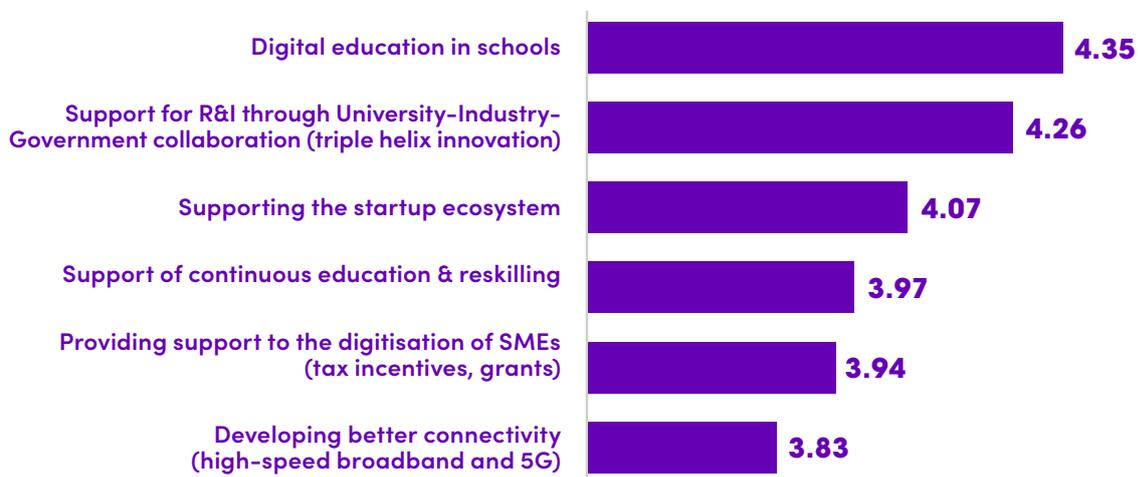


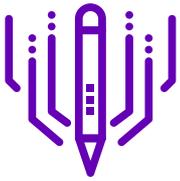
Governments across Europe are all investing in digital. This is particularly true in the context of the economic recovery following the global pandemic. The European Commission has also earmarked 20 per cent of the Next Generation EU fund for digital.

We asked scaleups which area of digital investments they believe governments should prioritise to foster an environment conducive to a strong European digital industry.

DIGITAL EDUCATION IN SCHOOLS IS CONSIDERED THE HIGHEST PRIORITY BY INTERVIEWED COMPANIES TO FOSTER AN ENVIRONMENT CONDUCTIVE TO A STRONG DIGITAL INDUSTRY.

Average priority score given by interviewees to investment areas
(1 = lowest priority, 5 = highest priority)





Digital education in schools

- ▶ Teaching computer science classes as part of the basic curriculum in schools was considered a priority by all interviewees, and some would welcome better basics in science as well. Digital education in schools both addresses the lack of ICT specialists and tackles a myriad of digitalisation barriers, such as the lack

of understanding and trust towards new technologies. By increasing the general understanding across all sectors of the economy, Europe would go through a faster digitalisation process, and innovative startups would not need to spend so much of their valuable resources on educating their stakeholders.



Support for research & innovation through university-industry-government collaboration

- ▶ Startup ecosystems often spawn at the crossroads between government-funded academic research and industry. This interaction between industry, academic research and government funds, referred to as the 'triple helix model' of innovation, is considered

a crucial part of the innovation ecosystem by interviewees. Those local networks often spawn outstanding startups. Particularly successful examples of those ecosystems include the Eindhoven or Cambridge campuses.



Supporting the startup ecosystem

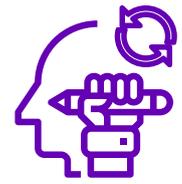
- ▶ Initiatives meant to support startup ecosystems are seen as critical, either at a European level such as the **Startup Europe Club**, at a national level such as **La French Tech**, or the level of cities like **Startup Amsterdam** or **Station F** in Paris. The scaleups interviewed highlighted that those

initiatives are essential to access the right network of support. However, many interviewees expressed that, similarly to support for university-industry-government collaboration, those initiatives need to be done right or risk being a waste of resources.

Support for continuous education & reskilling

► COVID-19 has intensified the need for reskilling the European workforce. Workers in a range of sectors – such as tourism, manufacturing and healthcare – have seen their jobs radically change in the past few years, and this has accelerated during the pandemic. Supporting continuous education has the double advantage

of giving people the ability to pursue their calling and to allow businesses to gain skilled workers. Many interviewees also considered this a matter of social inclusion. **Today about 52 per cent of European workers need reskilling.** Ensuring that people receive the training they need is a matter of social cohesion.



Providing support to the digitisation of SMEs

► The COVID-19 pandemic has demonstrated the importance of digitisation of businesses. Out of the 37 European scaleups interviewed for this report, almost 80 per cent grew throughout the pandemic, demonstrating the resilience of digital businesses. Besides, many white-collar jobs were only able to

continue their activities by digitising their processes. Supporting the digitisation of SMEs, which represent 99 per cent of businesses in Europe, through tax incentives and grants has the triple advantage of helping them grow, increasing the resilience of the European economy, and creating new customers for digital scaleups.



Better connectivity

► Connectivity is a fundamental requirement for businesses to grow, but rural areas often do not receive the support needed. While most of the scaleups interviewed felt fortunate enough to run their business unimpeded, some, situated in rural areas, highlighted that their high-connectivity needs remained unmet.

► When it comes to 5G, especially in industrial areas, the opinion of interviewees was mixed. While this ranked as lowest in our list of priorities, it was also one of the issues with the most significant divergence. More than a third of interviewees gave it the highest priority score.



What do scaleups invest most of their resources in?

About two thirds of the companies interviewed dedicated the bulk of their resources to the development of their products or services. Usually followed by HR & talent acquisition and then business development.



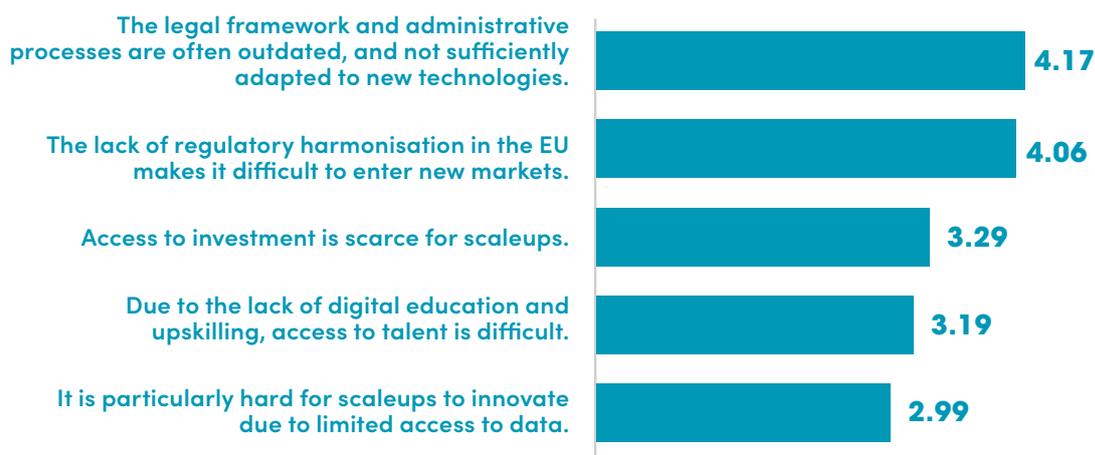
RECOMMENDATIONS FROM SCALEUPS ON ADDRESSING STRUCTURAL BARRIERS TO GROWTH



DIGITALEUROPE has set an ambitious target for Europe to host 25 per cent of the world's unicorns⁵ by 2025 instead of the current 12 per cent.⁶ Investment needs to be coupled with structural changes to ensure that SMEs have a nurturing growth environment and can scale to become future unicorns. We asked scaleups to share their recommendations on how to address key barriers to growth.

RESPONDENTS RANKED THE LACK OF ADAPTABILITY AND FRAGMENTATION OF THE LEGISLATIVE FRAMEWORK HIGHER THAN INVESTMENT, EDUCATION AND ACCESS TO DATA, WHEN ASKED ABOUT MOST IMPORTANT BARRIERS TO GROWTH.

Average score given by interviewees to common barriers to growth
(1 = strongly disagree, 5 = strongly agree with the statement)



⁵ Note: A unicorn is defined as a private company with a valuation over one billion USD.

⁶ CB Insights. (n.d.). [The Complete List Of Unicorn Companies](#). Retrieved January 25, 2021



1. Adapting regulations to new technologies

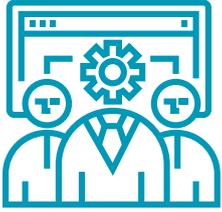
Europe needs a legal framework that is adaptable to the pace of technological developments. This could be supported by an agile approach to regulatory proposals and their implementation, based on the innovation principle and iterative testing that closely involves scaleups to ensure that both laws and implementing instruments are fit for purpose. Regulatory sandboxes should also become the norm to create an innovation-friendly legislative framework for scaleups.



Outdated legal frameworks are an especially thorny issue for advanced technologies and the digitalisation of established sectors (healthcare, energy, finance), which is a severe barrier for innovative scaleups trying to reach the market. This can be due to the sluggishness of legal processes that might take years to implement laws, or to the lack of intersectionality between national authorities requiring duplicative approvals for cross-sectoral innovations. Procurement rules often focus on outdated criteria, making it impossible for small innovative actors to qualify.

For example, the use of AI in medical technologies is limited by the inability to introduce in the market algorithms that are able to adapt over time. AI systems used today in the sector are 'locked', meaning that once certified for the EU single market, they are prevented from exploiting their inherent self-learning capabilities and 'learn' from real-world experience. This translates, potentially, into huge lost opportunities to improve patient-treatment in the future.





2. Bridging market fragmentation

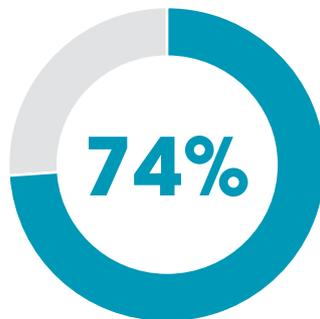
A single European administration centre for businesses, with centralised registrations schemes (company registry, product authorisations, unitary patent scheme, etc.) and an active information network that provides guidance on entering new markets and connects scaleups with relevant national authorities and organisations.

Due to the lack of regulatory harmonisation in the EU, companies face disproportionate barriers to entering relatively small markets. Often even with a harmonised EU legislation, differences arise from the instruments used and how laws are implemented at the national level. Additionally, localisation can be particularly difficult in some countries due to cultural barriers and tendencies towards protectionism, which sometimes makes it practically impossible to enter a market without a local partner.

For example, there is a complicated scheme of public transport providers in Europe, with differences at the national, regional and municipal level, and strong tendencies towards favouring well-established national businesses in the mobility sector. This makes it very difficult for collaborative mobility tech companies to break through, even though they could improve interconnectedness and provide a better consumer experience, like a mobility roaming for Europe.



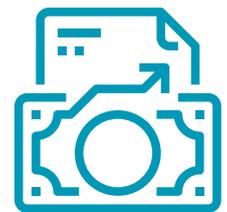
3/4 of scaleups interviewed considered **the creation of Europe-wide e-Administration portal** a high priority





3. Improved investment framework

Europe needs an improved investment framework with increased expertise and diversity on evaluation panels, as well as a network of venture capitalists better connected to scaleups. Further promoting criteria supporting a long-term vision in granting investment is key. Scaleups need bigger injections of capital with more flexibility and much more efficient approvals and reporting.



Access to funding in the EU is great for innovation and research. Yet, after the early funding stages, it soon becomes an issue to sustain access to capital, which is impatient and highly risk-averse in Europe. This risk-aversity often forces companies to push underdeveloped products to the market or to look for risk-bearing investment at a high cost. There are differences in access to funding not only between funding stages but also in areas of investment, as it is harder to get capital for hardware than software. Additionally, European scaleups have lower valuations as the amount of investment available in Europe is lower than in China or the US. For example, in 2018, European scaleups raised \$18 M on average, while American scaleups raised \$32 M and Chinese ones \$34 M.⁷

Finally, evaluation panels often lack the necessary expertise, fail to recognise important evaluation criteria such as societal impact, and lack diversity in representation that leads to structural biases in funding.

For example, some technologies, like deep tech for energy solutions, need years to develop before they can enter the market and need longer horizon investment, which falls outside most EU and national investment schemes that require revenue in the short-term. Such promising scaleups are forced to look for patient capital elsewhere, where their long-term potential is recognised.



⁷ Mind the Bridge, [Tech Scaleup Europe](#) – 2019 Report, 2019



4. Better access to talent

Digital education is crucial for cultivating the next generation of talent. Still, in the meantime, scaleups need intermediate tools in the competition to attract and retain talent, such as legal options for offering company shares to employees and simplified migration rules for highly qualified professionals.

While some scaleups find access to talent as the most significant barrier to growth, others do not see it as an issue. The lack of access to talent disproportionately affects scaleups focusing on deep technologies and those based in remote rural areas, who find it particularly difficult to compete with large companies, as they cannot match the same salary levels.

For example, in some countries, the legislative framework does not allow for **option pools**, which means that companies cannot reserve a stock of their shares for employees as a benefit on top of their salaries. This can force scaleups to set up their businesses elsewhere, as the competition for talent is fierce, and they do not have the same financial instruments as large corporations.



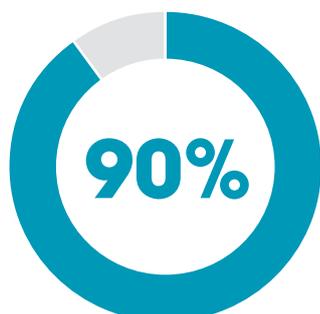


5. Improved data cooperation

Common European data spaces with standardised open data that is vendor and application neutral to ensure that data is interoperable across industries and Member States, creating an ecosystem for innovation that is inclusive towards scaleups.

Data is often not interoperable and lacks standardisation not only between different Member States but often at the organisational level as well, which results in invaluable information laying unused in siloes. GAIA-X, as a European project supporting data spaces, was mentioned as a step in the right direction, but it is important to ensure fair access for scaleups.

For example, e-Identification companies are often unable to access databases about public documents issued in different Member States to do electronic verification, as the data collected at the national level is currently not sufficiently standardised.



90 per cent of scaleups interviewed considered **the creation of European data spaces** a high priority

Acknowledgments

This report was completed by interviewing companies nominated to the Future Unicorn Award since 2018. The following 37 companies were interviewed:

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DIGITALEUROPE represents the voice of digitally transforming industries in Europe. We stand for a regulatory environment that enables businesses to grow and citizens to prosper from the use of digital technologies.

We wish Europe to develop, attract and sustain the world's best digital talents and technology companies.

DIGITALEUROPE's members include over 35,000 companies in Europe represented by 76 Corporate Members and 39 National Trade Associations.



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@DIGITALEUROPE

For more information please contact:

Chris Ruff, Director of Communications & Political Outreach
chris.ruff@digitaleurope.org
+32 485 55 22 54

DIGITALEUROPE

Rue de la Science, 14
B-1040 Brussels
Info@digitaleurope.org
+32 2 609 53 10

DIGITALEUROPE