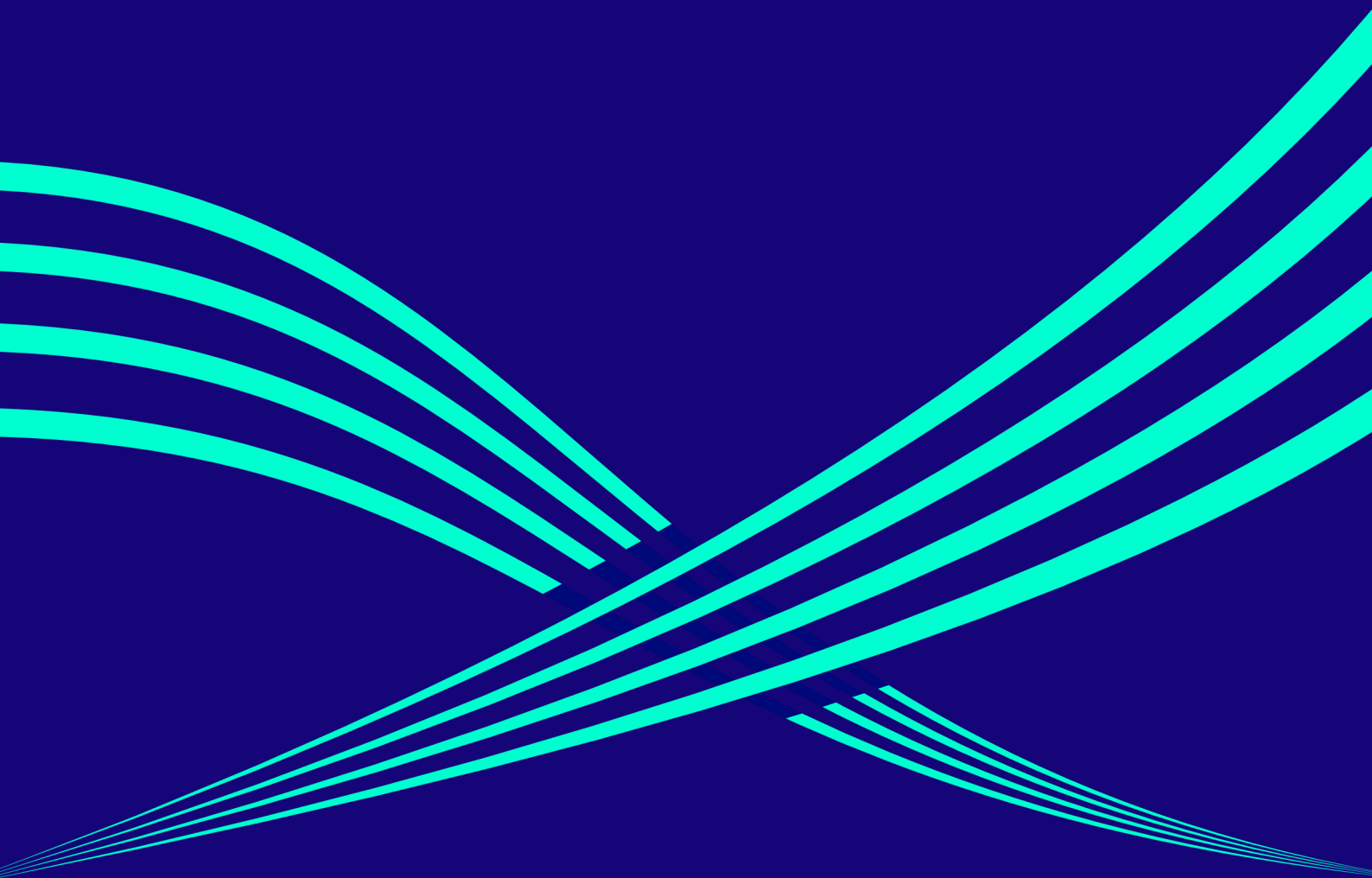


Choiseul x France Digitale

**For Europe's digital and
innovation champions**

#PFUE2022



Foreword

Approximately every twelve years, the «PFUE» offers a rare opportunity to rethink European public policies. **The French Presidency of the Council of the European Union (PFUE), which begins on January 1, 2022, is expected to be decisive, particularly for issues related to tech, digital and innovation.** It comes after of an unprecedented 750 billion euro recovery plan and will coincide, among other things, with the Conference on the Future of Europe and the deployment of the Strategy for a Europe Fit for the Digital Age. The last few years have seen European innovation ecosystems become aware of their strength, their shared ambition, their common challenges and their uniqueness. This «PFUE 2022» is **a valuable opportunity for France to give impetus to the European Union (EU) strategic orientations in support of innovation.** What better platform than the EU to imagine and build digital, technological and industrial autonomy?

Driven by this historical opportunity and a common desire to advance European innovation, we have **joined the forces of two among the most prominent French economic organizations.** The **Institut Choiseul**, a think and do tank specialized in international economic issues, gathers the first French network of under-40 executives, corporate leaders, officials and SMEs founders. **France Digitale**, Europe's leading startup association, with 2,000 members among entrepreneurs and investors, has the mission of creating European digital champions and animating the startup ecosystem in France.

The objective of our joint effort is simple: **bringing together the driving forces of the digital industry and the younger generation of French decision-makers** to open up the traditional spaces of discussion, leverage collective intelligence, speak freely about the common challenges of this French Presidency of the Council of the EU 2022 - and find solutions. Our common desire is to **promote the emergence of a truly European ecosystem of tech, digital and innovation.**

This document is a synthesis of several discussions that have taken place throughout 2021 and a platform for concrete proposals to support European digital and innovation champions. What are the main takeaways of this process? Two priorities: **the need to create a more technologically autonomous Europe and to put European innovation at the service of a more sustainable world.** How can we achieve this? By **boosting investment** and **attracting the best talent.**

On January 1, 2022, let's seize the opportunity to make the voice of innovation heard in Europe!



Pascal Lorot
President
Institut Choiseul



Frédéric Mazzella
Co-president
France Digitale

Methodology

The « **For Europe's digital and innovation champions** » initiative by France Digitale and the Institut Choiseul marks the unprecedented collaboration of two among the most influential French associations around a series of discussions about digital and innovation at European level.

During **several workshops** held between April and July 2021, members of France Digitale and the Institut Choiseul met to discuss **four main issues**: the definition of a possible European technological autonomy; the role of innovation in tackling climate change; the strengthening of investment in tech and innovation; the future of work and the shortage of talent in the tech and digital professions. **A special round table took place in April 2021 with Mariya Gabriel, European Commissioner for Innovation, Research, Culture, Education and Youth.** In parallel, the output of the discussions was complemented with a **questionnaire** gathering participants' opinions and recommendations on the above-mentioned topics.

All of the discussions and proposals were studied by the France Digitale and the Institut Choiseul teams, who eventually selected 3 key proposals for each of the 4 themes, for a total of **12 proposals**.

This document is a synthesis of the discussion and a **platform of concrete recommendations** that calls for action by the French and European public authorities during the French Presidency of the European Union (PFUE) 2022. It will be handed over to Cédric O, Secretary of State for Digital Transition and Electronic Communications of the French Government, during an official event attended by the participants of the initiative.

Partners

France Digitale and the Institut Choiseul warmly thank the partners of the initiative for their operational support and for their active participation in the discussions.



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01

Towards strategic autonomy



Time has come for Europe to take its technological destiny in its hands. While the distinction between the terms «sovereignty» and «autonomy» is blurred in the current European political discourse, a clear consensus emerged among participants on the need for a truly «European» digital and tech industry and on the promotion of «European excellence». In other words, they advocated for the emergence and strengthening of European digital champions capable of competing on the world stage. In that regard, adopting a proportionate and risk-based approach to the new framework regulating digital markets will be crucial to prevent the creation of barriers to the growth of European champions. Participants also agreed on the need for European technology to enable freedom of choice and for governments, businesses and consumers to rely more on European assets and solutions, which should be guided by values like sustainability, impact, and data protection, as they represent strong differentiating factors on the global market.



Against this backdrop, participants identified three major objectives for Europe to achieve technological autonomy:

- Become unreliant on third-party digital infrastructure and essential services

European players should guarantee their independence in [maintaining critical digital infrastructures and fundamental services](#). To this end, the EU should take back control over its key digital resources, including its data, industrial know-how and essential applications.

- Reinforce freedom of choice in tech and content

Autonomy is conditional on the availability of alternative solutions to existing non-European products and services and therefore on the fundamental notion of *freedom of choice*, for hardware, software and content, as the latter is an instrument of significant soft power. This does not mean taking a protectionist approach towards European tech or content, rather, [support the emergence of European solutions that can compete in quality and performance](#) with their US and Chinese counterparts, thus constituting a realistic alternative. Standards like reversibility, interoperability and data portability should further be advanced to prevent user lock-in. This should be coupled with efforts to [encourage European consumers, businesses and public institutions](#) to seriously consider local technological solutions, including in corporate and public procurement.

- Focus innovation policies on strategic sectors and technologies

European leadership is still possible in several technological fields. [By leveraging its world-class industrial base, Europe can direct research and investment towards concrete applications](#). In parallel, EU Member States should regularly review the list of sectors and technologies considered strategic. [Big data, cloud infrastructure, AI, edge and quantum computing](#) are the technologies that should currently be prioritized. On a sectoral basis, technological issues related to [cybersecurity, defense, health, energy and agri-food](#) should be the main focus of European and national authorities. Concretely, this would require two complementary levels of action: the [adoption of strategic priorities by the Council and the definition of ambitious programs to implement them](#). Such programs should draw upon and improve existing schemes, like Horizon Europe, the Quantum Technologies Flagship and the European Cloud Initiative.

To achieve these objectives, participants recommend that the French Presidency of the Council to implement the following actions:

1

Develop a coordinated industrial policy adapted to the digital era

Europe must have a clear strategy of [public and private support for strategic sectors and technologies and invest massively in use cases](#) that would allow Europe to differentiate itself from competitors, thus securing European leadership in those fields. In this respect, there is much to be gained by [positioning the European economy as a champion in edge computing](#). Coupled with 5G, edge computing enables the real-time processing of industrial data and has therefore the potential to drive the development of a more efficient, less polluting and competitive European industry 4.0. Similarly, the EU should take the lead in the [large-scale development of cybersecurity solutions](#) to tackle the increasing exposure of companies and individuals to cyberthreats. The establishment of private-public collaborations and the definition of interoperability standards are key for the achievement of this objective.



Europe is home to many tech companies with a strong expertise in their field: the European Union has a role to play in supporting their development and thus in strengthening the positioning of European tech on the world stage. In order to claim sovereignty and global excellence in digital technology, the EU can no longer limit itself to regulating the market. Like other world powers, it must adopt an active industrial policy featuring investments, regulatory flexibility and the assertive choice of a preference for European solutions.



Marie Even
Deputy Director General
Cdiscount

2

Boost public-private partnerships (PPS)

In order to **remove technological barriers, support long-term R&D and bring breakthrough innovation to commercial applications**, the common goal of private and public actors should be to support strategic sectors with **investment and research throughout the whole innovation cycle**. The French Presidency of the Council should openly define Europe's ambition to become a leader in disruptive innovation by politically supporting the development of public-private partnerships (PPPs) at EU level to enable the development of native European technologies in strategic sectors. Such ambition should be reflected in a clear mandate with a long-term horizon. There are **three possible configurations** to materialize this political and institutional project:

- the **harmonization of national innovation agencies**;
- a more in-depth **coordination of existing European innovation agencies**, such as the European Space Agency (ESA) and the European Defense Agency (EDA)
- the creation of a **dedicated European agency based on the US DARPA model, but for civilian applications**. This option would require a strong political will, a binding and long-term commitment by EU Member States and a significant change in the management practices of EU agencies¹. The latter would include, for example, ensuring that the agency is relatively unaffected by broader economic and political conditions, has a stable budget independent from traditional performance indicators and is operationally agile.



DARPA is a frequently cited model, not only because of the amounts invested, but especially because of the discretionary nature of its programs. This paradigm is not sufficiently adopted in Europe. Tech growth funds, on the frontier of private equity, should also be developed on the continent.



Fabrice Aubert
Secretary General
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Former Advisor- Institutions, Public
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3

Introduce a preference for European technology in public procurement

Public procurement accounts for over [14% of the EU's GDP](#)² and is therefore a major lever for innovation and autonomy. Participants call for measures that will allow more startups and SMEs to participate in public tenders, based on the model of the [US Small Business Act](#). Such measures should include supporting SMEs in building for public sector needs and facilitating access to public procurement processes for smaller players.

Public procurement rules should also reflect the [challenges of technological autonomy](#). One idea is to [extend the differentiated treatment of third country operators](#) enshrined in EU legislation for the utilities, postal, transport³ and defense sectors⁴ [to the other strategic sectors](#). Such sectors should correspond to those already listed in the Foreign Direct Investment Screening Regulation, that is, digital infrastructure (e.g. 5G, communications, data processing or storage) and critical technologies (namely AI, robotics, semiconductors, cybersecurity, aerospace, energy storage, quantum and nuclear technologies, nano technologies and biotechnologies)⁵. The goal of such differentiated treatment would not be to exclude foreign suppliers altogether but to ensure that, [when faced with equivalent offers in terms of price and quality, public buyers give a preference to European technology](#).



It is about making our administration and our companies aware of the need to buy in Europe. By focusing on innovative European startups with a BETA (Buy European Tech Act), we can ensure that a fair share of European public purchases is made from innovative European SMEs and startups.



Alexandre Ervimy
CEO
PrestaShop

02

Achieving a digital green deal



Today, the Information and Communication Technology (ICT) sector accounts for some 4% of total electricity consumption and 1.4% of global carbon emissions⁶. According to a recent study, total traffic data in 2020 was over ten times higher than in 2010, yet ICT energy use has remained roughly constant⁷. Technological advances like hyperscalers and adiabatic cooling have in fact enabled data centres, which alone account for ¼ of global ICT electricity consumption, to keep energy use stable⁸. This suggests, on the one hand, that the digital industry needs to take additional steps to reduce its environmental impact and on the other hand, that technology can help reduce the carbon footprint of digital and other sectors.



To ensure that Europe stays ahead of the twin digital and ecological transitions, participants recommend the French Presidency of the Council to focus on the following three objectives :

- **Develop technology that is «green by design»**

Environmental considerations should be accounted for since the early stages of technology development. Concretely, this means building products that are energy-efficient, rely on locally-sourced and/or renewable materials and are not subject to planned obsolescence, rather, that are **made to be repaired, reused or recycled**. This is not only a necessity to adapt and, where possible, **mitigate climate change**, but also an opportunity to **differentiate European tech** and **reduce its dependence** on global supply chains.

- **Take the ecological transition closer to citizens**

One of the greatest challenges for the mainstreaming of environmentally responsible tech is that it remains little known, accessible or attractive⁹. Consumers are often hesitant towards refurbished electronics for a variety of reasons, including price-sensitivity, durability worries and quality bias¹⁰, while investors are put off by the lower and lengthier returns on green investments. The EU should therefore raise awareness among consumers and investors about the long-term benefits of environmentally-responsible technology, while also facilitating its identification and providing incentives for its adoption.

- **Make the EU the world leader of the circular economy**

With an average recycling rate of 48%¹¹ and the total quantity of waste sent to landfill cut by 7.6% between 2010 and 2018¹², **the EU is the best placed region in the world to implement a circular economic model**. After falling behind the first waves of digitalisation (personal computers, online platforms, cloud computing...) ¹³ Europe has a chance to lead the future, sustainable development of the industry by capitalizing on its existing [green tech champions](#) and encouraging the emergence of new ones.

To achieve these goals, participants propose the following actions:

1

Rely on tech to reduce the environmental footprint of digital and other sectors

The improvement of established technologies like cooling systems and the adoption of advanced ones like Artificial Intelligence (AI), Internet of Things (IoT) and edge computing can significantly **reduce energy consumption and waste production** across many industries. Big data analytics, for example, can **optimize logistics routes** and **adapt electricity production to actual needs**, thus cutting carbon emissions and compensating for the intermittency of renewable energy sources. AI may enable the **prediction of the environmental footprint** of new products. More generally, **eco-design** should become part of tech education and training curricula, while **data sharing** across the block should become standard practice. Initiatives like the European Green Deal data space are an important first step in this direction. By making geospatial, weather, biodiversity and other types of environmental information available as **open data**, the EU can empower businesses, investors and citizens in their transition towards a more sustainable economic model. For example, open green data **can be used to integrate climate change and environmental impact considerations in risk management, construction and investment practices**, while also informing consumer and policymakers decisions.



At QuantCube we believe in driving sustainable finance through data and AI. Our innovation is to combine alternative datasets such as satellite data with advanced technologies such as computer vision to accurately measure physical and transition risk at the corporate and asset level. Technology enables us to bridge the environmental “data gaps” and provide real-time, granular and reliable environmental impact indicators investors increasingly need.



Ghislaine Amrani
Co-founder & COO
QuantCube

2

Make green tech more attractive for consumers and investors

To divert consumer spending towards sustainable products, the narrative around impact tech must become more enticing. An important first step in this sense is the introduction of the [reparability index](#), a 10-point scoring system developed by the French Ministry of Ecological Transition to encourage users to choose products that will last longer. The index is based on several criteria, including ease of disassembly and availability of spare parts, and is compulsory for 5 categories of electronic devices (smartphones, laptops, TVs, washing machines and lawnmowers). Initiatives of this kind should be coupled with major investments into the recycling, reconditioning and second-hand industries: Only by increasing the amount and variety of products not made from newly extracted natural resources can we provide users with viable alternatives. One way of encouraging such investments would be to provide fiscal incentives along the recycling, reconditioning and second-hand value chains, for example proportionally to the rate of recycled materials in final products. Another idea is to introduce tax cuts on circular economy-oriented R&D activities, for example by expanding the existing Crédit Impôt Recherche (CIR). On a broader level, the EU should leverage its high environmental standards and regulation in the negotiation of trade agreements, to encourage international commercial partners to opt for green technologies and sustainable products.



At Zack, we fight against electronic waste. Our biggest challenge is desirability. The circular economy is a topic that remains very vague and is often seen only through the prism of recycling, so it's not very desirable for citizens. The circular economy measures that we are going to push must take this into account, and address issues like job creation, increased purchasing power and disruptive innovation, rather than only the reduction of our environmental footprint. We also need to build an exceptional narrative presenting Europe as the leading continent in terms of sustainability rather than regulatory standards and constraints.



Pierre-Emmanuel Saint-Esprit
CEO
Zach

3

Develop a common framework to measure the environmental impact of tech

To help consumers choose the most sustainable products and companies assess their progress towards reducing their environmental footprint, the EU should develop an impact measurement framework. Such a framework should be **equally valid across the EU**, based on **simple and transversal criteria** and measurable with **standardized tools** inspired by existing life cycle analysis. The assessment should **not be limited to carbon footprint**, rather, it should provide a holistic overview of the environmental impact of products, accounting for all the steps in the supply chain. Such impact should be summarized in an **intuitive indicator** similar to the A-D energy efficiency score of electronic supplies and be included in corporate **Environmental Social Governance (ESG) performance reports**. Companies that achieve a certain degree of sustainability should be awarded a label making them easily recognizable by customers and suppliers alike. The b-corp rating may provide a blueprint for such a label. Lastly, corporate impact metrics should be made available as open data to ensure **transparency and accountability** in reporting.



At EcoVadis, we assess the sustainability performance of companies and help them reduce their carbon footprint. This is an extremely complex subject, it is very difficult to obtain reliable data without going into production details or life cycle analyses. There are two steps: measuring the level of maturity of companies on their carbon impact reduction strategy, and then making calculation and data collection tools available on a shared platform (with 75,000+ companies) so that they can commit to this measurement approach.



Frédéric Trinel
CEO
EcoVadis

03

Boosting investment in European tech



Over the past few years, **innovation investment in the EU has lagged behind other regions**. Between 2014-2020 the EU only allocated €142 billion to competitiveness and innovation¹⁴, against US\$770 billion invested by the US¹⁵ and US\$400 billion devoted by China over the same period¹⁶. Today, the EU has the opportunity not only to catch up on its international competitors, but also to adopt a responsible, future-proof investment strategy that puts **digitalization and sustainability first**.



To allow the EU to stay competitive on the world stage, participants recommend the French Presidency of the Council to focus on the following three objectives:

- Increase European investment from seed to growth

In 2020, investment in European startups was just above US\$ 30 billion, against some US\$ 70 billion in Asia and almost US\$ 150 billion in the US¹⁷. For disruptive technologies like AI and blockchain, the investment gap is estimated at a record €10 billion¹⁸. In some Member States like France, capital is missing at the late stage, whereas in others like Belgium and the Netherlands at the pre-seed stage. The EU needs to take action to **bridge the gaps at all stages of the financing cycle** if it wants to give startups the opportunity to emerge and thrive across the block and compete on the global stage.

- Encourage closer startup-corporate collaboration

Corporations play a key role in the life of startups, first as incubation and mentoring partners, then as clients and eventually as an exit opportunity via acquisitions. At the same time, startups can provide large companies with **high-tech, easily implementable solutions for their everyday challenges**, from process automation to customer management.

By fostering this symbiotic relationship, the EU can increase growth opportunities for startups while also supporting the continuous innovation of established players. To this end, the EU should support Corporate Venture Capital (CVC) funds in investing in innovative European companies. In addition, European corporations and industrial players should be encouraged to adopt startups solutions and buy national technologies.

- Provide attractive exit options for European startups

As of 2021, Europe is home to 17% of world unicorns, while Asia to 25% and the US to 53%¹⁹. The total valuation of European tech firms is estimated at US\$3 trillion, against US\$24 trillion of their US counterparts. These figures suggest that European champions not only have **a harder time growing** than their competitors, but also that they are faced with **lower valuations**. To prevent the most successful European companies and talents from seeking capital in and relocating to other regions, the EU needs to create more favourable conditions for **startups and scaleups to go public on European stock exchanges**.

To achieve these goals, participants propose the following actions:

1 Set up a European «late stage fund»

Launched by the French government in January 2020 with a €6 billion engagement by 21 French **institutional investors**, the Tibi fund has now leveraged over €18 billion for late stage tech investments. 36 among growth, venture and first-time funds have already benefited from the program, which will soon expand to biotech and medtech²⁰. The success of the Tibi fund demonstrates that **institutions can provide the right incentives** for private investors to **direct capital towards the stages and sectors that needed it the most**. By scaling this type of initiative across the block under the **coordination of the European Investment Fund (EIF)**, the EU can address the investment gap faced by European startups today.

« 2021 has seen the European tech scene thriving with record fundraising rounds. In parallel, US investments in Europe have also been hitting an all-time high. EU investors need sufficient funding to compete at later-stage and continue to support the development of our regional tech leaders while bringing them unique market knowledge.



Amélie Lemoine
Innovation Director
Kering

2

Strengthen the role of European Corporate Venture Capital funds (CVCs)

CVC investment into startups is uneven across the EU, yet it is crucial to take the European startup ecosystem to the next level. **One strategy to crowd in corporate investment is to couple it with public capital.** The French Ministry of Industry, for example, has recently suggested the creation of a fund pooling resources from large corporations, medium enterprises, Bpifrance and the government's 4th Future Investment Program (PIA4) to finance pilots by industrial startups²¹. Under the **management of the EIF**, the EU could set up similar funds at European level, not only with industrial players but also with European corporations active in other sectors.



After several years working with large corporations and startups, I am convinced that we collectively have an interest in developing and accelerating collaboration by creating ecosystems that make it possible to promote and scale innovation, agility and raise new global champions in Europe.



Seddik Jamaï

Head of Innovation and Strategy
Frog France-Capgemini Invent

3 Create a European NASDAQ

Launching an EU-wide stock exchange with a strong tech focus has been a long held ambition of European investors, yet attempts made so far have fallen short of expectations²². This suggests that a more gradual approach may be needed. A first step could be **to increase data sharing among existing European exchanges** under the coordination of the EIF. This would enable the EIF to study and compare historical performances, identify strengths, weaknesses and potential synergies, while also laying the basis for the future integration of the leading European exchanges.



The European Union is a global leader in green innovation but unclear exit paths and asset-heavy business models could discourage investors. Strengthening the capacity of EU capital markets is an absolute requirement.



Robin Rivaton
Investment director
Eurazeo

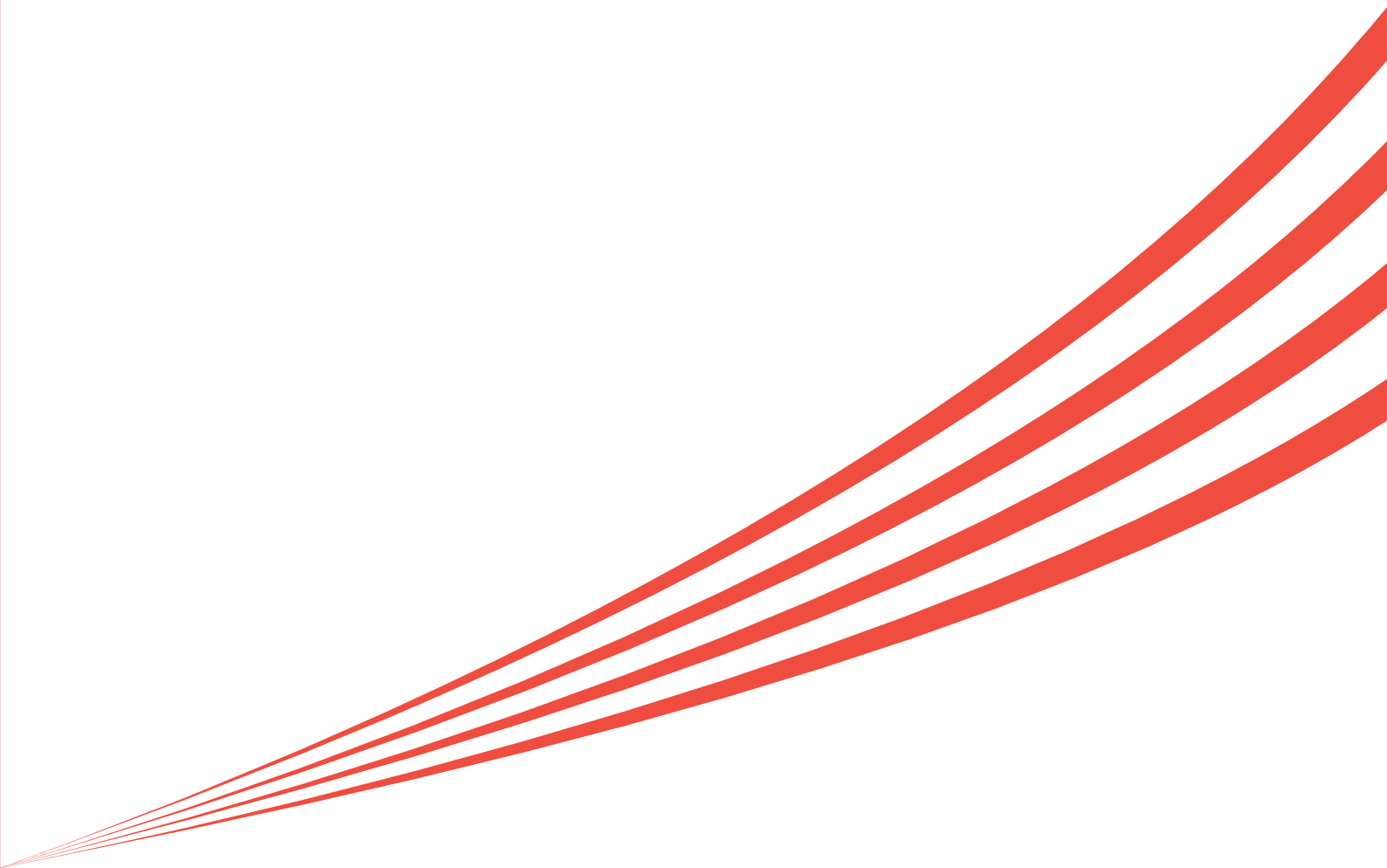
D4

Future of work and talent shortage in tech

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The abrupt changes brought about by the Covid-19 crisis, notably the massive adoption of teleworking, have given European companies and workers the opportunity to assess the pros and cons of remote work, especially in terms of internal communication and work-life balance. The transition towards remote or hybrid work models has also exposed the persistent talent gap faced by the tech and digital industries across all levels and professions. Attracting international talent, retaining European talent and growing a digital and tech job market should therefore be priorities for the EU. Efforts should in particular focus on training and employability. At the same time, the EU should capitalize on the geographical expansion of the recruitment pool enabled by teleworking to partly address the talent shortage in the digital and tech industries.



The discussions among participants led to the identification of three main objectives for the future of work in general, and the tech and digital market in particular

- Adapt organizations to the needs and expectations of the digital age

To embrace innovative ways of working and meet the expectations of a new generation of tech professionals, data and technology should be **integrated consistently across company processes, management and organizational structures**. At the same time, digital technologies provide us with an opportunity to rethink team relations and introduce more horizontal and flexible work methods, promoting intergenerational environments and giving room to often underrepresented groups such as women and minorities. **An open and inclusive digital world**, enabling social mobility and an effective avenue for professional retraining, should become a driver for the European economy as a whole.

- Make the European tech and digital job market more dynamic

In 2018, 58% of companies in the EU reported difficulties recruiting digital talent (up from 38% in 2014)²³. According to Korn Ferry, Northern European countries will face a shortage of 70,000 engineers by 2022²⁴. Alarming forecasts are numerous. **This talent shortage is a structural impediment to the sustainable development of a mature and competitive European tech and digital economy**. It is necessary to focus efforts on the job market for tech and digital professions, both in terms of increasing the pool of European talent and the mobility of these talents across European countries, companies and ecosystems.

- Adapt professional education to the demands of the job market

By strengthening the collaboration between companies and secondary and higher education institutions, the EU can **boost the employability and career prospects of young talents**, increase the retraining opportunities of more senior professionals and ensure the long-term relevance of the education and training provided in academic settings.

To achieve these goals, participants propose to put the following solutions on the agenda of the French Presidency of the Council:

1

Differentiate the talent economy from the gig economy

More and more talented digital professionals are leaving traditional employment in favor of freelance work to **increase their freedom, autonomy, and purchasing power**. These new forms of collaboration improve performance while also speeding business processes: while it takes an average of 6 months to recruit an employee²⁵, it only takes 6 days to work with a freelancer²⁶. Despite this advantages and the fact that 63% of startups cite recruiting as the number one barrier to growth²⁷, the legislative environment in Europe still severely restricts the growth of skilled freelance workers. Part of the problem is that freelance work is often associated with the gig economy and therefore with low-skill, low-pay and relatively precarious jobs. **The EU should support the rapid emergence of a pan-European talent economy based on the intellectual services of qualified workers**. This would help address the issues of geographic mobility brought about by remote work as well as the rising demand for flexibility of voluntarily self-employed workers. It would also contribute to the intermingling of European talents, both at domestic and European level, thus enabling the pooling of talent and a more harmonious growth across the block.

Concretely, the **specific requirements of the talent economy should be recognized in national and European regulations and policies**, in particular by providing clarity and adequate protections to employment contracts for expert and qualified freelancers. This would serve a societal and economic objective while also asserting Europe's leadership on the definition of the future of work.



Europe is lagging behind in supporting the talent economy, leading European corporations to lose in competitiveness. The biggest companies of the CAC 40 and the DAX decide not to benefit from the expertise and agility of independent consultants for fear of a requalification as an employment contract or of some law that was designed to protect independent mobility workers like drivers and riders.



Alexandre Fretti
Managing Director
Malt

2

Co-construct a European tech skill certification framework

To ensure the long-term relevance of training programs, their clarity for students and economic actors alike, as well as their alignment with market reality, industrial players should cooperate more closely with academia in the design of digital and tech curricula. This collaboration could result in the **co-construction of a sector-specific European skills certification system**. This would enable the **recognition of microcredits by economic actors**, thus favoring post-training employability. **An independent skills accreditation agency should be entrusted with the implementation of the system**. Lastly, the comparability and mutual recognition of training courses provided by national education institutions should be ensured under the European Higher Education Area.



The cross-fertilization between the academic and industrial worlds is a real source of value creation. Knowledge sharing and dissemination should be embodied by teachers-researchers but also faced with the view of practitioners and economic experts to ensure that all training, especially in the tech and digital sectors, has the desired impact.



Larbi Touahir

Development Director

École Polytechnique Executive Education

3

Accelerate the creation of hubs centralizing education, research and business

Innovation hubs can provide a solution to several issues affecting peripheral areas, in particular training availability and regional relevance, while also untapping potential sources of growth for certain sectors. The EU could largely benefit from the mainstreaming of the «campus» or «innovation ecosystem» model across the block. By **closely associating academic players, research and innovation centers, startup incubators, local SMEs and corporations**, the EU can set up places for **training, research and business development**. As hubs for a particular industry or technology, such campuses would have an impact on the surrounding area while also bringing together talents, technologies and companies. As physical locations, they could also be decentralized through the sharing of datasets, contacts and other relevant information. Lastly, the establishment of synergies among the campuses set up across the EU would enable the **definition of a regional specialization strategy**.



The successful digital transformation of peripheral areas is the primary objective behind the creation of the two ArcelorMittal France Digital Labs in the Hauts de France and Grand Est regions. The ArcelorMittal Digital Lab in Dunkirk specializes in safety, environment and energy. The upcoming Lab in Uckange will focus on quality, maintenance and Big Data. Both locations are organized in their daily operations around three pillars:

- A digital academy, where ArcelorMittal will continuously train its employees and those of the SMEs with whom the group collaborates on digital-related topics;*
- A digital factory, where large groups and mature startups can co-develop and share their experiences;*
- A digital community, federating the Digital Lab ecosystem with collaborative tools and allowing stakeholders to benefit from the network of the ArcelorMittal group.*



David Glijer
Chief Digital Officer
ArcelorMittal

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France Digitale is the largest startup organization in Europe, bringing together 1800+ startups and 100+ VCs. The association is co-chaired by Frédéric Mazzella (Founder, Bla-BlaCar) and Benoist Grossmann (CEO, Eurazeo).

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- INSTITUT - CHOISEUL

The Institut Choiseul is an independent think and do tank dedicated to the analysis of contemporary issues and to the promotion of economic driving forces. It structures several networks of young economic leaders in France, Africa and Russia and organizes dozens of high-level events each year.

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