

absorptive capacity, i.e. the capability to incorporate external knowledge. The challenge of business model innovation and design driven innovation is not how to incorporate external knowledge (which can be usually easily done), but it's at a higher level: how can we recognize the value of an innovation that redefines the parameters of value in an industry? The challenge in other words is not knowledge driven, but perceptive. It's not about solving, but about framing. It's not a matter of R&D, but of leadership, entrepreneurship and cultural change. Most innovation nowadays is widely available, but the problem of organizations is that they simply cannot recognize their value because they play on new performance parameters. Especially when, as in design-driven innovations, these parameters are symbolic and emotional. On top of this, concepts are difficult to articulate, protect, license. Their circulation is easy. Their interpretation is hard.

Hence the need to investigate how open innovation occurs when what is at stake is not knowledge, but concepts.

4.3 THE EUROPEAN INNOVATION COUNCIL: STRATEGIC REFLECTIONS¹³¹

Daria Tataj and Roberto Verganti

4.3.1. INTRODUCTION

This second section reflects and discusses the establishment of a possible European Innovation Council (EIC) with as central aim the strengthening of European innovation policy while at the same time promoting a more open culture of innovation and entrepreneurship across Europe. The idea is to consider the EIC as an instrument to bring innovation policy in Europe in line with the characteristics of today's open and collaborative innovation as discussed before, providing at the same time an impulse to innovative renewal at all levels of society.

The success of the EIC would manifest itself in the long-term by evidence that its initiatives have created an innovation-friendly environment and new policy instruments, which significantly facilitated the growth of high-potential 'scale-up' firms by helping them access large markets, talent, funding and strategic decision makers.

The core innovation principle of today "scale-up or fail fast" needs different policy tools than those designed in the past. The creation of complementarities and synergies, adaptations and adjustments motivating and pulling in new stakeholders across a number of existing institutions, policy instruments, constituencies would be central to the EIC.

The EIC would focus on a few strategic elements, notably building synergies between different EU level instruments for innovation to maximize their added value on the European level, promoting the focus on people, openness and iterative results, and moving towards a new narrative around innovation and innovators.

¹³¹) This section has been prepared on the basis of inputs from RISE experts from the Open Innovation Delphine Manceau, Anders Hvid, Stephan Morais, Christopher Tucci, Francisco Veloso and Open Knowledge Markets working groups in particular João Caraça, Luke Georghiou, Frederique Sachwald, Luc Soete, coordinated by Daria Tataj and Roberto Verganti.



4.3.2. OPEN INNOVATION IN A CLOSED EUROPE

As highlighted in the previous section, over the last year, innovation has not just changed conceptually; it has also changed in its concrete applications. Open or collaborative innovation¹³², user-driven innovation¹³³, design-driven innovation¹³⁴, frugal innovation¹³⁵, workplace and remote working innovation have become the norm with a crowd-sourcing¹³⁶ of ideas and crowd-funding of new, often highly motivated stakeholders (see the cases on Eataly included in appendix as an example of how new innovation models arise and grow). Innovation has taken the form of new business models¹³⁷ often anchored in 'shared economy' (see the case on BlaBlaCar in the Appendix) and emerged under new forms of social entrepreneurship, intrapreneurship, digital nomads, impact investment as well as industry-led sustainability and social responsibility programs. While competing on novel technologies such as artificial intelligence, machine learning, biotech or brain science can provide Europe a technological edge, the shift towards service economy and value-added manufacturing are critical for growth and jobs in Europe.

At the policy level area, it could be argued that the European Union has a relatively sound track record. The establishment of the European Research Area and European Higher Education Area, Framework Programs, new institutions such as the European Research Council, the European Institute of Innovation and Technology and its Knowledge and Innovation Communities, Joint Technology Initiatives, are now all part of the European innovation system. Recently, there have also been efforts to strengthen the entrepreneurial drive across Europe, with the Small Business

Act, Start-up Manifesto and Europe's winners of tomorrow: The Startup and Scaleup initiative¹³⁸ being key examples of these attempts.

However, viewed from a global perspective, Europe has lagged on the scaling up of innovation into global economic value¹³⁹. In addition, the global war for talent has often drained Europe of some of its most creative and entrepreneurial innovators¹⁴⁰. The traditional policy instruments, which already struggled in the past, do not really match the new innovation context. In the era of digital society, experience driven competitiveness of products and services, and the emergence of industry 4.0 the world changes ever more rapidly. And so should innovation policy and its instruments.

At the dawn of the mid-term Horizon 2020 review, this is the time to rethink what it would take to get more out of Europe's investment in research and innovation, to boost economic growth, create new and better jobs, stimulate future European leading companies in all the key industries of the future, and advance our ability to mitigate key challenges and anticipate mega-trends of our times. The challenges are many: demographic changes and migration, climate change and mortal diseases, security – including cyber security, food and social unrest. But with challenges always come opportunities.

A possible European Innovation Council ('the EIC') would be an opportunity to renew innovation policy while strengthening a new, open culture of innovation and entrepreneurship across Europe. Its success would ultimately manifest itself by evidence that its initiatives have significantly facilitated the growth of high-potential

¹³² Henry Chesbrough (2003), Larry Huston and Navil Sakkab, (2006), Gary P. Pisano and Roberto Verganti (2008).

¹³³ Eric Von Hippel (2005), Karel Vredenburg, Scott Isensee, and Carol Righi (2002). Robert W. Veryzer, and Brigitte Borja de Mozota (2005).

¹³⁴ Roberto Verganti (2009), Donald A. Norman and Roberto Verganti (2014) and Tim Brown (2009).

¹³⁵ Abhijit Banerjee and Esther Duflo (2012).

¹³⁶ eff Howe (2009).

¹³⁷ Alexander Osterwalder and Yves Pigneur (2014), W. Chan Kim and Reneé Mauborgne (2005). Alexander Osterwalder, Yves Pigneur, Greg Bernarda, Alan Smith, Trish Papadakos, (2015), Delphine Manceau and Pascal Morand, (2014).

¹³⁸ COM(2016) 733 final

¹³⁹ Giovanni Dosi, Patrick Llerena and Mauro Sylos Labini (2006)

¹⁴⁰ See for instance Bruegel (2015).





‘scale-up’ firms, by facilitating access to markets, talent, funding and strategic decision makers. Scale-ups are important drivers of innovation-led growth and employment creation¹⁴¹. It would also be relevant if it would promote different sources and types of breakthrough innovation, whether it is led by research, business models, design, organization, customer experience.

4.3.3. A NEW EU PERSPECTIVE

In this new business environment, policy makers necessarily need to change the set of policies and policy instruments which support innovation. And the global and collaborative nature of such changes creates a gap that should be filled at the EU rather than Member State level. This is particularly relevant for breakthrough innovation that scales up into large businesses, also referred to as “market-creating innovation”. This specific kind of innovation is more likely to happen if addressed at the EU level.

First, breakthrough innovation needs a pool of specialized and talented resources as well as “early adopters” to help achieve market success. Market-creating innovation is inherently more risky, which implies acceptance of failures, hence larger budgets and deal flows. Local policies, that have smaller deal flow and budgets, can hardly afford the ratio of successes/failures that lead to breakthrough innovation. This innovation also cuts across different fields, and therefore it requires a broad horizontal scope of action. Local policies, that have limited resources, are effective when focusing their budget on specific fields or industries. A set of instruments at the EU level could complement local policies by supporting the most unpredictable innovation, the innovation that moves horizontally across the borders of existing industries, that comes unplanned from the bottom up, and from unexpected networks. This necessarily requires a span of action and a scale that moves beyond national borders.

Second, an instrument to intervene at the European level needs to focus on enabling innovation that creates substantial growth. The focus is accompanying talented innovators from idea exploration, to development, to scale-up into large businesses with a European and worldwide reach. This scaling up can be more successful if orchestrated at the EU level for many reasons. The first aspect is that it will benefit from the single market advantage, which is critical to scale-up rapidly. All too often high potential start-ups move to the US because they can access a larger market faster, while lacking a door that would allow them to follow the same path in the EU market. (see the case on Feedzai in section 4.3.4 as an illustration to this point). In particular, European start-ups have a short supply of growth capital which is a function of a chronic lack of appetite for risk from European institutional investors, is stark contrast to their US counterparts that deploy vast amounts of capital to the Silicon Valley based Venture Capitalists that are behind most global technology champions. EU based Venture Capital firms are therefore much smaller and fragile than their counterparts and hence most European success stories become American at some stage (see Abris-Capital¹⁴² for an example of these challenges). An EU approach can also rapidly capitalize on best practices across Member States benefitting the integrated tools and solutions, but also helping disseminate such practices across the EU. An integrated perspective would also help championing innovation friendly regulation at EU level, an increasingly critical element in today’s sharing and digital economies. Finally, an EU approach also seems to be the only way to strengthen and deepen growth capital, particularly funding beyond “the Valley of Death,” an area where Europe is severely lacking.

The EIC as a European Union initiative should leverage its convening power to develop more ‘switching capacity’ between diverse, multilayered innovation networks. Thus, it would facilitate the emergence of a more open, collaborative, agile innovation eco-system across all Member States linking peripheries of innovation networks to major hubs and facilitating flows of knowledge, talent and funding.¹⁴³

¹⁴¹) A ‘scale-up’ firm is an enterprise with average annual growth in employees or turnover greater than 20 % per annum over a three-year period, and with more than ten employees at the beginning of the period. See the so-called UK Scale-up Report <http://www.scaleupreport.org>. «Sherry Coutu’s ‘Scale Up Report’ zooms in on one of the most pressing growth challenges faced not only by the UK but many other advanced economies: how do you move beyond creating start-ups, and prepare the ground for companies to grow and create meaningful economic impact? This focus on the quality and not just the quantity of entrepreneurship helps the reader to gain new insights into what policy steps should be taken.” (Michael Porter, 2015)

¹⁴²) See section 4.3.4 for more details on the history of the emergence of each of those cases.

¹⁴³) Daria Tataj in her book *Innovation and Entrepreneurship. A New Growth Model for Europe beyond the Crisis (2015)* offers a perspective how to build a replicable model of networked innovation ecosystems on national, regional and pan-European scale. The book is based on research conducted under the guidance of Professor Manuel Castells and experience in establishing the EIT and its first Knowledge and Innovation Communities.





Complementarities with other EU Actions

In pursuing its mission, the EIC would complement the actions of the ERC (European Research Council) and the EIT (European Institute of Technology) with its specific networks of businesses, universities, research institutes and non-profit organizations called KICs (Knowledge and Innovation Communities).

It would complement the ERC (that focuses on blue-sky research), by providing an empowered arena to transform research into successful innovation and relevant business extending in principle the value chain from the frontier of science to the frontier of innovation.

In doing this, it would complement the EIT and the KICs by providing a wider context of innovation-friendly environment and scale-up opportunities for ventures coming out of KICs. By creating a one-stop-shop for innovators of any nature, and in particular addressing innovation that: (1) is driven by any driver (i.e. not only technology, but also, for example, business model innovation, or design-driven, customer experience driven, or organization driven innovation); (2) happens openly beyond specific fields, i.e. that does not occur within the fields of the EIT, or happens at the intersection of those fields; (3) can be easily accessed by players who do not belong to established KICs yet but who can become their partners catalyzing the dynamics of the whole networks and extending their value chains across global markets.

These are important arguments to develop the support for breakthrough innovation at the EU level. Thus, an instrument to act at this level should integrate these opportunities and develop a value proposition that brings in single market advantage, access to a larger pool of talent, knowledge and capital, orchestrates different European and local initiatives.

4.3.4. THE EUROPEAN INNOVATION COUNCIL: SOME BASIC PRINCIPLES

Mission

The key mission for an EIC is to bring innovation policy in Europe in line with the characteristics of emerging modes of innovation, providing at the same time an impulse to innovative renewal at all levels of society. The innovation principle of today is “scale-up or fail fast”. This would be reflected in the design of the EIC and manifested through its lean administration, digital presence, openness to experiment, trust-driven rather than control-driven culture, and bias towards disruptive innovations.

Given its purpose and mission, the EIC would in its initial phase focus on creating complementarities and synergies, adaptations and adjustments, motivating and pulling in new stakeholders across a number of existing institutions,

policy instruments and constituencies, helping existing instruments and initiatives achieve a larger impact and maximize their added value on the European level.

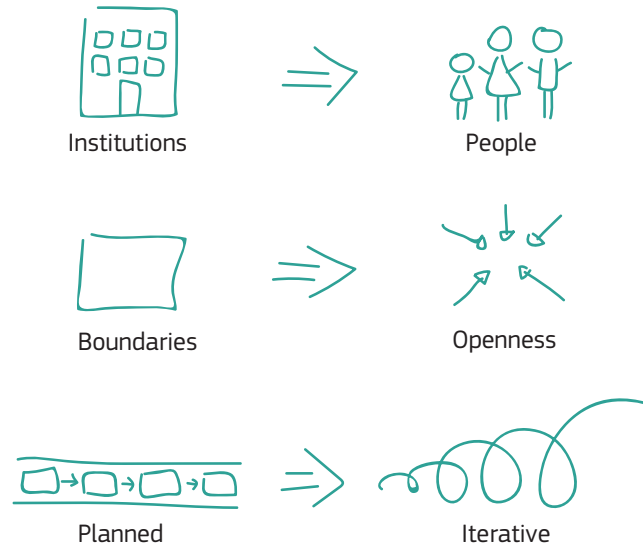
To fulfil its mission, the EIC should empower the best innovators. Similarly to what happens to the ERC, that attracts the talented researchers, the EIC wants to attract and support talented innovators: both innovators with a successful track record, but who are not finding support to their latest development, and the top innovators “to be”, i.e. those who have the best potential. It should foster openness and build its success on accountability and ambition of innovators supporting them adequately at different stages with a seamlessly integrated funding scheme following a value chain thinking. The focus on people, openness and iterative results, and moving towards a new narrative around innovation and innovators is thus at the core of this perspective for the EIC (see Figure 0I.3)

Focus on people

The key players of innovation are people, not institutions. Ideas, knowledge, motivation, engagement comes from talented people working in team. The EIC should be the one-stop-innovation hub for people, wherever they work (in start-ups, small, or large organizations, research organizations). “Not everyone



Figure 01.3: New dynamics of innovation



Source: Authors

can become a great artist, but a great artist can come from anywhere,” says restaurant critic Anton Ego in the movie *Ratatouille*. This suggests that individuals who harbour interesting hypotheses may lie in unexpected pockets of the socio-economic system. Only an open, internationally scoped organization can help them to emerge. In addition, an EU level organism, means that top innovators who are stuck into local existing networks, and can't find local support, have a chance to break outside of these existing networks by moving at an European level (both in terms of selection of their proposals, identification of the team of innovators, and choice of hosting organization). Indeed, the most successful programs that focused on people (Erasmus, Marie Curie, and now the ERC), have operated on an European level.

This means that promotion, funding, and other actions should be addressed to the talented people with an innovative idea, passionate to transform this idea into a successful business. The users would be responsible for the project, to be conducted within a Hosting Organization (any setting public or private, new or established would be possible; see below). She/he would not act alone of course, but in cooperation with a Team that she/he identifies and leads.

Breakthrough innovation requires ingenuity, energy and leadership. Leadership is a key factor since disruptive change requires a clear vision and a clear sense of commitment towards nurturing the innovative idea

and catalyzing different resources. It is well known that successful venture capital fund managers judge the qualities of the entrepreneurs-to-be and their teams rather than only their idea and market potential. Thus, a focus on people and leadership might also facilitate assessment procedures, as it is often more important to evaluate the potential of people, than the potential of an idea.

The EIC wants to promote innovation at the pre-involvement stage of private funding. This innovation typically comes from people whose ideas struggle to be recognized by their normal organizational settings. As a result, such innovation would mature slowly, or not mature at all, in the absence of public support, because it is usually too early in the development stage, or too far from the strategic priorities of an existing organization, or perhaps too risky for private investors. By targeting individuals, the EIC therefore would support development of those breakthrough innovative ideas that transform organizations, beyond existing trajectories, and therefore become disruptive in the market. Yet, while targeting these breakthrough ideas which are inherently risky, the use of public funding still requires accountability. A people centric approach may also facilitate such accountability because there would be a person, the innovator, responsible for the initiative.



Last but not least, focus on people would promote an innovation policy that is designed around Europeans as agents of change instead of European institutions. The EIC would be contributing to establish a community of the best innovators in Europe.

Focus on openness

To fulfil its mission, the EIC should promote open, collaborative and crowd-sourced modes of innovating. This means the EIC should not define a priori any type of area, industry or market in which to focus, but adjust its funding policies to emerging challenges led by citizens as consumers and by public needs. If this is the case, the innovator would decide on a project, and on the best team to support her/him in the innovation endeavour. This would mirror what happens in the ERC, where the Principal Investigator can employ researchers from any nationality as team members.

Such an approach would mean *no traditional boundary conditions typical to European funding schemes defining number of countries involved, type of organizations (businesses, academic), size, amount of subcontracting, nationality of the team members*. The assessment of a project would consider the quality of the team and the quality of support provided by a possible organization, as well as the level of potential market disruption and expected return on investment to make the project attractive for subsequent private funding.

The timing of proposal submission should be very flexible, with high frequency of deadlines, and quick decision making process, leveraging elements of assessments conducted under other European schemes.

Focus on iterative results

How to select promising but far-fetched ideas in a fast changing and uncertain world? The answer is simple: it is impossible. Definitely, the old approach of innovation policy measures, based on long complicated procedures (planning-calling-screening-controlling), does not work for promoting innovation today. Access to funding in the EIC should be based on simple, steadfast and iterative procedures.

First, it is important to avoid traditional planning and the notion of calls (see the principle of openness above). The EIC should be open to receive proposals

at frequent deadlines in any field. Applying should be made easy and fast, because support is to be provided in small chunks, following a process of similar to that of the SME instrument. Thus, a project that already received support should be able to quickly apply for further funding. This keeps risk of failure to small amounts, screens off unpromising paths early along the 'fail fast' principle, and avoids the impossible long-term planning and unrealistic a priori long-term evaluation of projects.

Second, screening would naturally consider the potential of the project, but the qualities of the *person[s] and team* who propose them (past track record and assets) would be especially relevant on the initial stages of the project. Moreover, following an iterative approach, the results of earlier stages would be used to assess support decisions for follow-on stages. Depending on the nature of the project, the role of the host organization might also be considered in the assessment; its serious embracement of the project should in any case be part of the evaluation.

Third, the EIC should control results rather than focus only on input or throughput indicators. Innovation can hardly be recognized ex-ante, but can be more easily recognized ex-post. Every EIC project should be carefully controlled ex-post on results. Failure in achieving results would not necessarily be punished, as failure is very likely to happen in innovation, but any loss would be limited given that projects are small and iterative. However, failing to achieve results prevents access to subsequent stages of funding, and enters into the track record of the innovator and her/his team, thus diminishing their chance to get funding in the future.

Last, the EIC should develop a new incentive system for the evaluators. Venture capitals firms carefully select promising entrepreneurs because they have an incentive on seeing them succeed. The expert evaluators of EIC should operate in a similar way. Their compensation should be in some part dependent on the success of the project they screen. In addition to a base compensation for every proposal they screen, they could get an additional bonus when a project achieves innovative results and market value. Similarly, finding ways to involve private funds and investors at every stage of the decision and funding process would naturally align incentives and help evaluation processes.



The consequence of the principles above is that the policy tools of EIC would mirror the nature of current innovation. They would be fast, simple, open, and attractive to any European citizen with good ideas and a strong commitment to innovate.

Principles and implementation

To assure that such principles are appropriately considered, several elements are to be pondered when designing instruments. First, an EIC would need to bring about synergies amongst existing funding instruments for innovation and entrepreneurship support at EU level, consolidating and restructuring of the complex landscape of EU policy instruments. Moreover, it would be important to build on the most open and bottom up instruments that exist today, such as SME Instrument, FET Open and Fast Track to Innovation and/or Eurostars. An EIC could pull those instruments closer together, improve their evaluation procedures and streamline their governance. A related element would be to assure the establishment of a (digital) platform to help navigate European funding for innovators and for innovative firms with 'scale-up' track record or high potential. Such platform would be an important basis for this integration and streamlining.

The second important element is the concern with the EU missing out on a flow of breakthrough innovative projects that scale-up to become major global players (see Adamed case for an example of these growth steps and challenges). Breakthrough innovations are simply getting lost along the various development stages. Such concern requires the EIC to have instruments that can support, increase and accelerate the creation of these breakthrough projects, and accompany them through the scaling-up process. EIC funding instruments should therefore cover the different phases of the innovation process into scaling-up, and to do that with an EU perspective.

When considering earlier stages, this often means tackling a lack of adequate funding on the market, especially "fast money," such as small grants for rapid prototyping. But it should also mean having a more encompassing perspective on the nature of projects, and the organizational setting of the promoters. In fact, it would be important to consider independent entrepreneurs who fail to explain their intuition to investors, researchers that don't quite understand how their technology can be

ported into a product that a client will buy, but also people who work within firms struggling to show the value of their ideas to top executives. It is critical to be able to target ideas that grow within existing organizations but that remain unexplored because their value is not fully recognized within processes geared towards incremental change. Most entrepreneurial initiatives are born and start to grow within existing organizations, including universities, research and technology centres, as well as larger established firms. When they start to mature, they are launched as autonomous spin-off firms. Many very successful firms, including ASML (a semiconductor production systems company which emerged from Philips) and Circassia, (a biotech company from Imperial College) have emerged through such a process.

And if the goal is to induce or source new ideas, it would be relevant to consider tools such as "Idea competitions" across the EU, which could reward particularly innovative ideas sourced from anywhere, and might be specifically designed to address the societal challenges mentioned in the EU 2020 Strategy. Complementary, the use of crowd-funding markets can be stimulated, by engaging citizens in funding issues of global importance, such as societal challenges.

The EIC should thus provide any person with a great idea and great will the tools and support that allows her to explore her idea until to a level of maturity to be presented to investors. As noted above, the approach should leverage and improve existing successful policy instruments such as the SME instruments and the funding scheme of the ERC, with its focus on principal investigators and hosting organizations, ease of access, and flexibility.

The other critical element that ought to be at the core of any EIC tools and instruments to be developed is to increase the availability of growth capital. Yet, a critical question when considering any public funding for scale-ups, even if there is a demonstrable market failure, is how to assess project quality, while making sure that it does not crowd out private agents. A way to address these concerns is to consider co-investment schemes, whereby accredited European VCs with demonstrable track record are pre-qualified or called to lead investment rounds in promising scale-up firms, with public funds matching their investment. This would enhance greatly the fire-power of European VCs. In developing scaling-up instruments, the EIC might partner with the innovation arm of EFSI, exploiting fully the technical and financial expertise of EIB and EIF.



Finally, it is also important to consider the key role played by large corporations in the scale-up of breakthrough innovation. The EIC can have a positive contribution by bringing corporations and start-ups/spin-offs closer and therefore increasing the likelihood of scale ups emerging. The EIC can engage institutionally with hundreds of corporations throughout Europe and effectively promote the matchmaking with start-ups that want access to corporate partnerships.

From Innovation to Innovators. A New Narrative

The EIC could also have a mandate to promote European success stories worldwide, creating benchmarks and cases that can be used to spread the word, both as role models and measures of high achievements. The aim is to promote and sell European entrepreneurial innovation outcomes and impacts across the world.

A communication plan should be implemented so as to show how EIC funding has made a difference on some projects, and also how European talent can create radical innovation.

The objective is also to make Europe appear as key area in the innovation world map. The key principle here would be to tell the stories of people, i.e. the innovation team. The story of people, rather than merely the description of the innovative product, or quantitative output, is crucial to inspire others and to give depth to the communication (for an example of a narrative of a European success story see the case on Adamed).

The following tools could be used:

- Compile and communicate success stories of European innovators that are game changers in their industries and have a global reach.
- Gather those innovators in an annual events where journalists, experts, innovators could exchange practices and present their story.
- Organize idea challenges around these events, prize competitions for the most talented European innovators each year.

In time, these success stories will also enable to provide a general analysis of the impact of EIC. Now these success stories of European innovators are impressive yet dispersed

as demonstrated by the case studies below. Bringing them into one place also virtual would reflect a fascinating way how Europeans change the world of hundreds of consumers and users for better.

In order to make EIC more visible, another part of the communication plan would go beyond successful innovators and gather data on the evolution of innovation and entrepreneurship within the EU. Since a key objective of EIC is to promote an entrepreneurial mindset within the EU, it could follow how mindsets evolve throughout Europe. The idea would be to not only monitor the direct impact of EIC funding, but the dynamics it creates or accelerates within Europe about innovation and entrepreneurship. Indicators such as number of start-ups created in Europe, amount of private capital invested in start-ups, number of European students creating their company just after graduation, number of European companies being leaders in key innovative industries, number of gazelles, shall be monitored at the EU level so as to see how things evolve within Europe. Another indicator to be followed would be the number of start-up head offices being delocated from Europe and relocated in Europe with relevant re-immigration policy.

Measuring impact

To measure impact the EIC should engage the public rather than only statistics and numbers. It should harness the collective intelligence of people at all levels of the innovation process including users, which could be potentially also involved in some of the EIC funding schemes to assess a relevance of an idea or solution. Crowd-sourcing approaches are aligned with the 3 O's policy of Commissioner Carlos Moedas.

The EIC and its initiatives should have goals and measures of success. While it is premature to propose exactly what those indicators should be, they could possibly include:

- Customer satisfaction surveys among applicants and beneficiaries of the EIC programs
- Attraction of talented innovators
- Progress and success factors of the EIC instruments and programs
- Attraction of external private and public funding
- Recognition by general public and by stakeholders





The EU Innovators – Exemplar stories

Daniel Ek, a 33-year-old Swedish entrepreneur, founded his first company at the age of 14. He then created and was a part of many companies: the Nordic auction company Tradera (later acquired by Ebay), Evertigo, Advertigo which he sold in 2006... Also in 2006, Ek was briefly the CEO of μ Torrent, working with μ Torrent founder Ludvig Strigeus. This ended when μ Torrent was sold to BitTorrent in 2006. This same year, together with Martin Lorentzon, he set up the concept of Spotify, a music streaming service. Note that Strigeus who had founded μ Torrent would join Ek as a Spotify developer. In 2008, the legal music streaming service Spotify AB was launched. Daniel Ek still serves as the CEO of Spotify. Initially, Spotify ran on a peer-to-peer distribution model, but switched to a server-client model in 2014. Spotify is now a music, podcast and video streaming service that provides digital rights management and protected content from record labels and media companies. It is available in 50 countries, in North and South America, Europe, the Middle East, Australia, South-East Asia. It now has more than 100 million active users, 30 million paying subscribers worldwide and about half a billion registered users.

Cristina Fonseca, the 29 year-old co-founder of the very successful cloud call-center company Talkdesk is a Portuguese female entrepreneur that built up her company from scratch over the last 5 years. Talkdesk currently employs hundreds of highly skilled employees in Lisbon and Silicon Valley and counts as clients companies such as Dropbox and Shopify. Having raised significant capital from 500 Startups, Salesforce Ventures, Storm Ventures and DFJ Venture Capital, Cristina was recently named a Forbes 30 under 30.

Jacques-Antoine Granjon, 54, created his first company with a friend when he was 23. Cofotex was specialized in the wholesale of overstocked goods. It then progressively moved into the concept of flash sales – sales that last only a few days or a few hours. In 2001, with 7 associates, Jacques-Antoine Granjon launched vente-privee.com, the first online flash sales platform. Originally specialized in fashion goods, the site progressively enlarged product categories to be sold, including travels, music and food. It now operates with 6000 brands and generated a turnover of 2 billion € in 2015 in 13 countries (including Spain, Germany, Italy, UK, Austria, Netherlands, Denmark...), with 5 million users and a staff of 4000 people. In 2011, Jacques-Antoine Granjon launched with several partners l'École européenne des métiers de l'Internet. He also invested in several projects and companies, as well as in a theatre and a music festival. He strongly supports the Paris start-up scene.

Olga Malinkiewicz, 34, is a Polish scientist turned entrepreneur. She pushed the boundaries of science by developing a novel technology for the production of low-temperature technology of ultra-thin and flexible perovskite-based photovoltaic cells. Instead of pursuing a career at the University of Valencia, where she filed for the patent, she returned to Poland to start a company. In 2014 Saule Technologies was founded and became one of the first companies in the world to succeed in developing a working prototype for the commercial use of perovskites. The road to the success was bumpy with access to funding as the major issue. In 2015 the company got over 6 million EUR grant from the funds of the National Centre for Research and Development, leading agency managing European Union and National funds for research and innovation in Poland. The same year, Saule Technologies signed the investment agreement with Hideo Sawada, a Japanese businessman. Olga has been greatly recognized internationally. Published in Nature, featured by Forbes Poland, she received the prestigious Photonics21 award in a competition organised by the European Commission and the title Innovator under 35 by the MIT Technology Review. Her entrepreneurial success would have never been possible if not for her ambition as well as her business partners, Piotr Krych and Artur Kupczunas, two experienced businessmen who have helped Saule Technologies grow globally.



While there would be a number of quantitative indicators to monitor and assess the impact of the EIC, there would surely be other impacts that are harder to capture with numbers. They should range from strengthening the process towards better European legislation for innovation; empowering successful commercially-minded innovators some of whom may choose to stay in/return to Europe; engaging European citizens in decision making and funding innovations; and building the brand of European innovation around the globe.

While the ideas for the EIC drafted in this section require further thought, they are presented as a reference point to stir discussions among innovation actors, entrepreneurs, investors and policy makers. But the key question to be answered is the 'how' question: how to stand up to the ambition, how to ensure fast execution, how to make the innovation system more agile and flexible, how to integrate funding schemes from start-ups to scale-ups and how to mobilize private funding? These are by no means trivial challenges. The speed of change will surely depend on empowering entrepreneurial talent to drive transformation of innovation and entrepreneurship policies in Europe and implement them across the Member States.

4.3.4 CASE STUDIES

It would be important for the EIC to promote European success stories that could be considered one way or the other as typical examples: "role models" of what an EIC could over time achieve. Based on individual national expertise, this section presents a list of such success stories coming from different Member States, different sectors, some well-known others far less. This collection briefly presents the stories of BlaBlaCars, Feedzai, Abris-Capital, the Adamed Group, the Green Group and Eataly. The cases illustrate that in different formats, under different historical conditions, covering very different regions in Europe, such success stories do exist.

BlaBlaCar: New innovation models

Delphine Manceau

BlaBlaCar is a pertinent example of innovation as it occurs today. Its carpooling concept is innovative in terms of user behavior and experience as well as business model. It is not a technology push innovation, even though digitalization is a key component enabling supply and demand to communicate and match. In line with sustainability issues and the better use of goods, it creates new markets and does not fit in any existing industries, neither public transportation nor the car industry. Incumbent companies such as the car manufacturers or car insurance companies wonder how they should integrate this new approach in their own development models.

BlaBlaCar was founded by Frederic Mazzella, a French entrepreneur. He discovered ride sharing during his student days in the US where, every morning, he shared a car with three friends to go to university. At the time, there were public incentives for carpooling on California highways.

But the idea behind BlaBlaCar came up in 2003, when, travelling home for Christmas, he observed many empty car seats available but no way to access them. He realized that there was no website providing a list of seats available in cars for long distance journeys. His vision was then to create a ride sharing service that would enable carpooling throughout France between people who do not know each other. The idea was to operate as an online marketplace and to pair motorists with passengers needing a lift between cities.

During the process, Frederic Mazzella partnered with Nicolas Brusso and Francis Nappes and those three cofounded the company.

In 2008, the concept was launched as the "2.0 web community covoiturage.fr", conceived as a mix between a travel agency and a networking tool in which "Booking meets Facebook." It was originally both C2C (free)