EUROPEAN DIGITAL FORUM

The 2016 Startup Nation Scoreboard

How European Union Countries are Improving Policy Frameworks and Developing Powerful Ecosystems for Entrepreneurs

By David Osimo and the Startup Manifesto Policy Tracker Crowdsourcing Community

Cover photos

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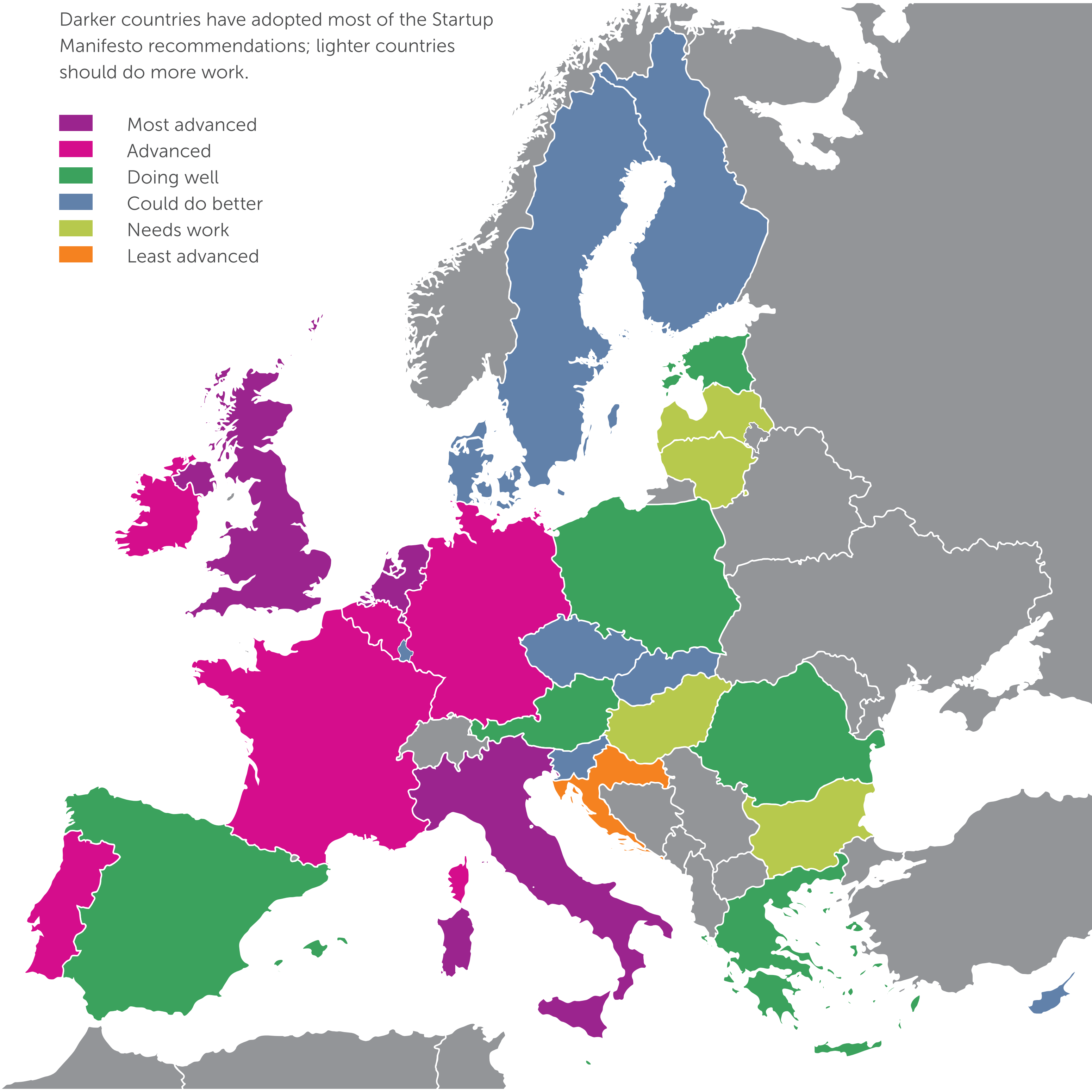
Darker countries have adopted most of the Startup Manifesto recommendations; lighter countries should do more work.



Source: European Digital Forum Crowdsourcing Network

The 2016 Startup Nation Scoreboard

The creation of a new Silicon Valley is probably one of the oldest goals in European innovation policy. Yet in reality, only recently have policymakers and society-at-large begun to recognise so-called "startups" as an important growth engine in Europe.[1] Indeed, many European countries have proven much keener to support national champions and incumbents than disruptive young companies built and championed by outsiders. As a result, of the top 500 globally listed enterprises, European companies are typically much older than their global counterparts.[2]

> 'There is finally clear evidence that new companies are actually making up for one of the most important policy failures in recent years: they are creating jobs.'

In recent years, European policymakers have started to take startups much more seriously. Research has begun to demonstrate their increasingly evident economic significance.[3] Web-based startups in particular are no longer just hitting the headlines because they reached their first 100 million people in a matter of years; indeed, several of these startups have quickly become the largest companies in the world in terms of market capitalisation.[4] And there is finally clear evidence that new companies are actually making up for one of the most important policy failures in recent years: they are creating jobs.[5] Startups are today responsible for the majority of new jobs created in the U.S.[6] And the app economy itself is believed to have created as many as 1.8 million jobs in the European Union alone.[7]

Attention in policymaking circles is growing, but the problem has moved from discussion of whether to act towards analysis of what should be done. This is not an easy question: making public policies for startups is notoriously difficult, as the complex arrangement of public governance is often at odds with the agile and emerging work culture of startups. It is telling that the best-known book on government policies for startups is titled "The Boulevard of Broken Dreams."[8]

For this reason, in 2013 nine successful European entrepreneurs – founders and co-founders of eight fast-growing, cutting-edge, globally competitive Internet startups – teamed up to write the **Startup Manifesto**, a 14-page roadmap containing 22 action points, drafted to spur discussion on improving the startup ecosystem and digital-era performance in the European Union's 28 member states (visit http://www.startupmanifesto.eu for more).[9] To date, more than 8,000 people have signed the Manifesto, which has grown into a trans-

1 A "startup" is commonly defined as an entrepreneurial venture designed to search for a repeatable and scalable business model. These newly created companies are usually highly innovative, and typically based on ideas, technologies or business models that did not exist before. See https://en.wikipedia.org/wiki/Startup_company for more.

2 Charles Edquist and Leif Hommen, *Public Technology Procurement and Innovation, Vol. 16* (Berlin: Springer, 2000).

3 Ryan Decker, John Haltiwanger, Ron Jarmin and Javier Miranda. "The Role of Entrepreneurship in US Job Creation and Economic Dynamism," *The Journal of Economic Perspectives* 28.3, 2014.

4 PricewaterhouseCoopers, *Global Top 100 Companies by Market Capitalisation.* (London: PwC, 2015).

5 Steve Denning, "The Surprising Truth About Where New Jobs Come from," *Forbes*, 29 October 2014. http://www.forbes.com/sites/stevedenning/2014/10/29/the-surprising-truth-about-where-new-jobs-come-from/#2d3b6e2147d9

6 Kauffmann Foundation, *The Importance of Young Firms for Economic Growth* (Kansas City: Kauffmann Foundation, 2015).

7 Mark Mulligan and David Card, *Sizing the EU App Economy* (Austin: Gigaom, 2014).

8 Josh Lerner, *The Boulevard of Broken Dreams: Why Public Efforts to Boost Entrepreneurship and Venture Capital Have Failed – and What to Do About It* (Princeton: Princeton University Press, 2009).

9 The eight companies were Atomico, HackFwd, The Next Web, Rovio, Seedcamp, Spotify, Tech City Investment Organisation (TCIO) and Tuenti.

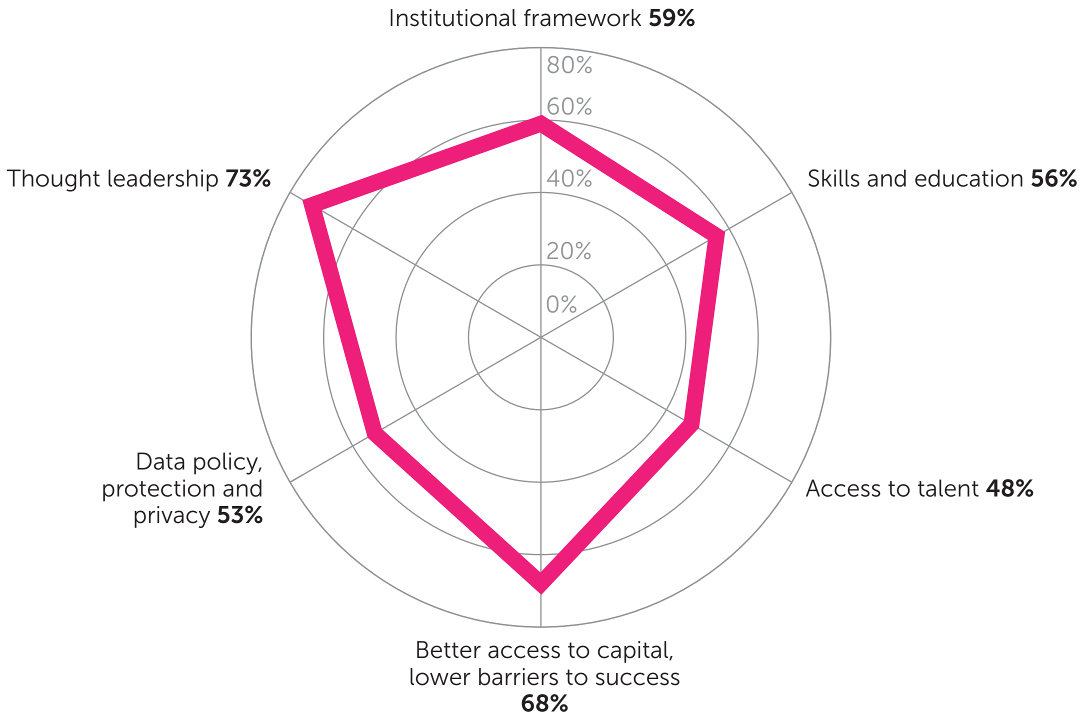
European campaign and spawned more than 10 national startup manifestoes in the European Union member states.[10]

> 'In recent years, European policymakers have started to take startups much more seriously.'

Of course, the Startup Manifesto has many limitations. It is not an official document, and the authors do not officially represent all the startup community. We don't have the full evidence to demonstrate that these recommendations are the most effective. Some of the recommendations can be criticised as wishful thinking; others as unnecessarily one-sided, free-market ideology.

Yet if there is one thing that we have learned from startups, it is that we can't wait for the full evidence and the perfect solution. We need to adopt a trial-and-error, fail-fast, permanent-beta approach to public policy, too. As a common saying goes, ideas are a dime a dozen, what matters is execution. This is why we can't let the Startup Manifesto remain only a manifesto. We should transform it in a full-fledged platform for action with its own metrics, its own platform for feedback and analysis and its own community of guardians and advocates.

Progress of Startup Manifesto across priorities



10 Among the Manifesto's 22 recommendations was the creation of a "Digital European Forum," whose purpose would be to monitor and evaluate success on implementation of the Startup Manifesto. To date, volunteers in all 28 EU countries have taken it upon themselves to create national digital fora, as can be seen on the relatively high score on "thought leadership," the sixth of the six policy areas we cover. At the European level, the Lisbon Council, a Brussels-based think tank, and Nesta, the United Kingdom innovation-based foundation, took it upon themselves to create the European Digital Forum, which today serves as the hub and guardian for the original Startup Manifesto and is the publisher of this paper.

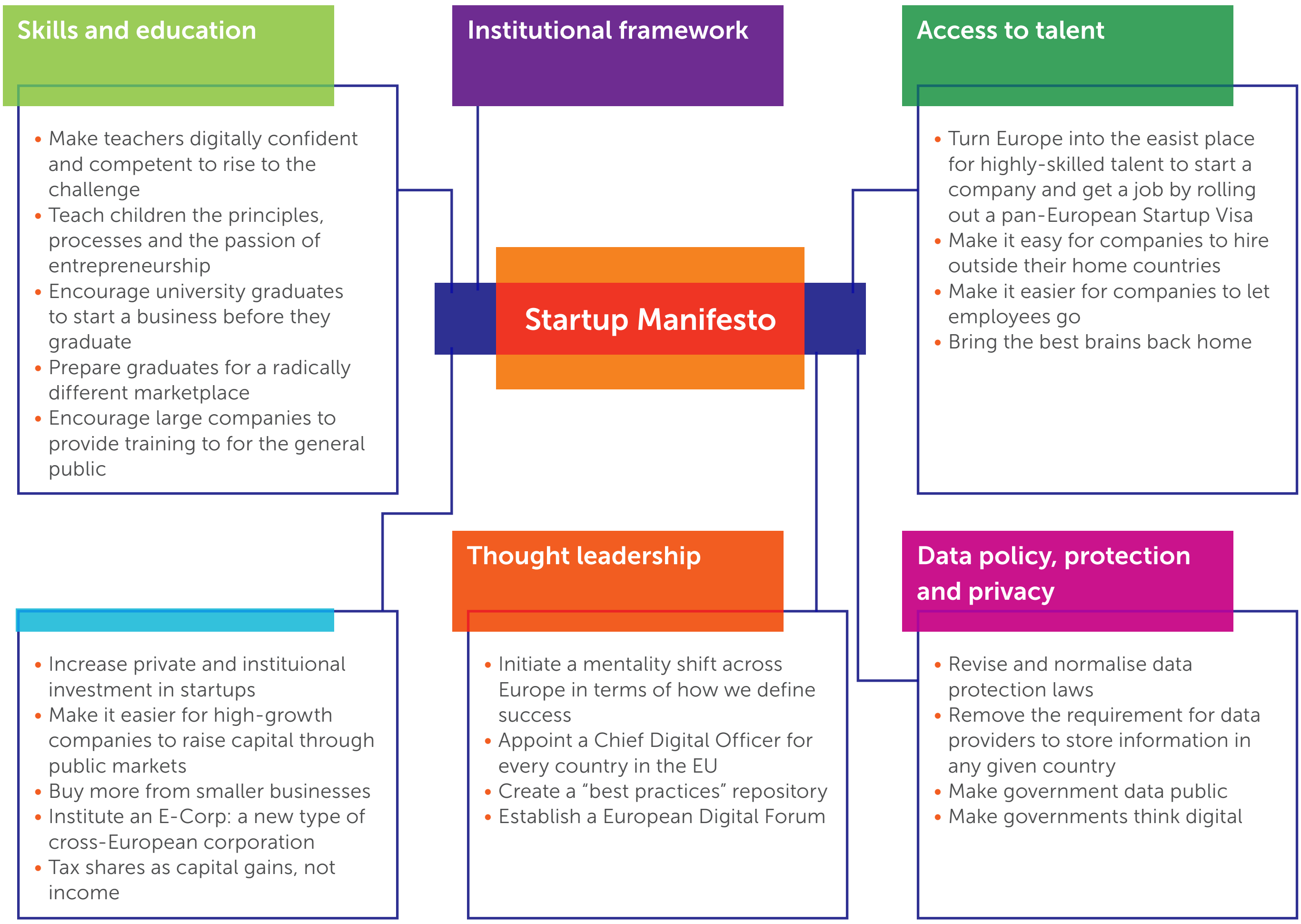
That's the objective of this report: to ensure there is a follow up to the ideas in the Startup Manifesto; to recognise governments that have done more (or less) to bring their national legislation into line with an agenda that favours the creation and growth of startups; and to encourage mutual learning on how policies are being designed to deliver the goals of the manifesto.

Crowdsourcing a Manifesto

The **Startup Manifesto Policy Tracker** began as an online experiment. Less than a year after publication of the Startup Manifesto, we created a website (www.europeandigitalforum.eu/startup-manifest-policy-tracker) to invite crowdsourcing on national policy progress towards implementing success in adopting the measures set out in the Startup Manifesto. To be sure, this involved taking some shortcuts. First and foremost, the original Startup Manifesto was woefully vague on what precise measures needed to be adopted – or what the criteria for success would entail. To correct for this, we organised the Startup Manifesto into six priority

Chart 1. Startup Manifesto Policy Tracker: Six Key Pillars

The Startup Manifesto has five key pillars. We added a sixth pillar on "overall institutions framework," and broke the five categories down into concrete actions where we could measure progress.



areas: the five policy areas cited in the Manifesto (skills and education, access to talent, better access to capital, data policy and privacy and thought leadership) and an additional "institutional framework" ranking introduced to track the general environment for startups in all 28 EU member states (see Chart 1 on page 8 for a breakdown of how we divided the Manifesto's 22 policy recommendations into six key policy areas). We also translated the 22 recommendations into concrete yes/no indicators, whose implementation – or non-implementation – could be observed and followed.[11] We then began building up a network of national "experts," as it were, who took it upon themselves to begin gathering data and evaluating legal reforms in the countries they knew best (a list of the 33 people involved in the **Startup Manifesto Policy Tracker Crowdsourcing Community** appears on page 73).[12] The intention was to shed light on what is or isn't happening at the member-state level – and to inspire action when and where it counts.

'The European Union average Startup Manifesto adoption level stands at 60%, a sign that startup policy has improved in recent years.'

Key findings

The results are fascinating. Here are some key findings (a summary of country-based performance, broken down by member state, begins on page 45):

1 The European Union average Startup Manifesto adoption level stands at 60%, a sign that startup policy has improved in recent years.

2 At the country level, the Netherlands ranks No. 1 on overall adoption of Startup Manifesto-driven recommendations with an 85% adoption rate. Italy ranks No. 2 (with 82% adoption), and the United Kingdom ranks No. 3 (with 77%). Overall 12 countries are above the EU average and 16 below.

3 The most progress has been made in the "thought leadership" category, where European countries register an impressive 74% adoption rate. This is not surprising, and reflects an increase in startup-driven initiatives and rhetoric-driven policy-support schemes.

4 Most EU member states now have programmes to facilitate access to finance for startups and small- and medium-sized enterprises (SMEs) (a 69% average completion rate), with Belgium (No. 1 at 97%) leading the way.

5 France, Italy and the Netherlands tie for No. 1 (with a 69% completion rate) on the measure to increase access to talent, with tailor-made programmes to attract foreign entrepreneurial talent.

11 The methodology is designed to limit the risk of subjectivity: each action in the manifesto has been translated into 72 clear yes/no indicators, where each yes answer has to be corroborated by textual evidence (e.g. a link to the relevant source or legal document). Where possible, the selected indicators refer to existing EU-level policy frameworks and indicators to increase data availability and consistency. The crowdsourced data has also been double checked for consistency across different EU member states and with existing measurement frameworks. Finally, the results were aggregated at the level of a single recommendation as a simple percentage of completed measures to ensure that each action and each area have the same weight. This "smart crowdsourcing" approach has been extensively tested within previous projects. See European Commission, *Implementation of the Digital Agenda for Europe:* http:/www.daeimplementation.eu; Ibid, *Evaluation of the eGovernment Action Plan:* http://www.egovap-evaluation.eu; Ibid, *Pledge Tracker of the Grand Coalition for Growth and Jobs:* http://www.linkedpolicies.eu/pledge/.

12 Photos of the country experts appear on the cover of this publication.

6 But more broadly speaking, measures to improve access to skills and education lag, with a roughly 50% completion rate around the EU.

7 The study finds a significant east-west divide within the EU in overall adoption of Startup Manifesto-based recommendations. In general, eastern countries remain behind in terms of structural adoption of key EU legislation in areas that would help startups. Bulgaria (No. 25 at 45%), Lithuania and Latvia (tied at No. 26 with 44%) and Croatia (No. 28 with 32%) bring up the bottom of the list for overall adoption rates.

8 Overall, policy initiatives are still drawn too much from traditional policy kits, with too many initiatives based on everyday European innovation support structures. Europe needs to focus more on tougher decisions, such as putting in place entrepreneurship-enhancing tax, data-protection and employment policies; and inventing bold new measures, such as involving startups in promoting coding literacy across all schools and providing genuine second chances for entrepreneurs.

9 Future iterations of the Startup Manifesto should focus more on concrete metrics and ambitious targets. The Startup community itself should remain an active part of this process, partly through crowdsourcing projects such as this one.

To be sure, there are important caveats. For starters, the Startup Manifesto Policy Tracker only measures the extent to which EU member states have implemented the policies called for in the Startup Manifesto itself. In other words, it does not show the "best countries for creating startups," but only the countries that have been most active in designing policies for startups. Therefore, there are some outstanding countries which house some of the EU's best startups, such as Finland and Sweden, that show surprisingly low results in the Startup Manifesto Policy Tracker only because there have been little government activities following up to the Startup Manifesto.

> 'We need to adopt a trial-and-error, fail-fast, permanent-beta approach to public policy, too.'

Results for Europe

The average adoption rate for Startup Manifesto-based recommendations is a surprisingly robust 60%, considering all actions across the board. This can be considered a sign of the increasing policy attention devoted by government to startups.

The most active country is the Netherlands, which ranks No. 1 on overall adoption of Manifesto-driven recommendations with an 85% rate. Next is Italy (No. 2, with 82% adoption), the United Kingdom (No. 3, with 77%), Ireland (No. 4, with 72%) and, perhaps surprisingly, Belgium and Portugal (tied at No. 5 with 71%).[13] These are very different countries with very different policy contexts, but they share an apparent interest in making their home territory a more friendly place for startups to take root – and grow. See the map on page 5 for a visual assessment of the level of adoption in all 28 EU member states.

It is also encouraging to see high results for some of the countries most seriously affected by the crisis (Ireland at No. 4 and Portugal at No. 5), which shows that successful startup policy is not just relevant for Europe's most successful economies. But there also seems to be a significant east-west divide within the EU. Bulgaria (No. 25 at 45%), Lithuania and Latvia (tied at No. 26 with 44%) and Croatia (No. 28 with 32%) bring up the bottom of the list. This is due both to the structurally lower completion of EU initiatives in some countries that only recently joined the EU as well as actually lower adoption rates of specific startups-dedicated initiatives.

Scandinavian countries, usually at the top of the rankings related to innovation, appear less active in adopting new startups-oriented legislation. Finland and Sweden are tied at No. 16 (with 56% adoption rates), while Denmark weighs in at No. 20 with 53% adoption). This could be a sign of complacency in these traditional strongholds of European startup activity – or it could simply reflect that in such an innovative context startups are in less need of ad hoc measures.

13 To date, there are 10 national startup manifestos, with three more on the way.

'Eighteen European Union member states have a national strategy in support of startups.'

Table 1. Adoption of Manifesto Recommendations

Rank	Country	Adoption rate
1	Netherlands	85%
2	Italy	82%
3	United Kingdom	77%
4	Ireland	72%
5	Portugal	71%
	Belgium	71%
7	Germany	70%
8	France	69%
9	Austria	68%
	Poland	68%
	Romania	68%
12	Spain	63%
	EU Average	**60%**
13	Estonia	60%
14	Greece	57%
	Malta	57%
16	Finland	56%
	Sweden	56%
18	Slovakia	55%
19	Czech Republic	54%
20	Cyprus	53%
	Denmark	53%
22	Slovenia	52%
23	Luxembourg	48%
24	Hungary	46%
25	Bulgaria	45%
26	Lithuania	44%
	Latvia	44%
28	Croatia	32%

Source: European Digital Forum Crowdsourcing Network

Looking at all European countries taken together, by far the most progress appear to have been made in the "thought leadership" category, where European countries collectively register an impressive 74% adoption rate. This contrasts with the lower completion rate (59%) in the more concrete and substantial "institutional framework" category. This suggests that startup policy, at this stage, is more about generic promotion of startups than tough policy choices.

Among the more topic-related priorities, most policy adoption has been in access to capital (with an average, EU-wide adoption rate of 69%), while other key areas (such as education, access to talent and data policy) linger at around 50% completion. The implication is that European governments well aware of the problem of access to finance in terms of market failure – and also more familiar with the solutions.

> 'Policy initiatives are still drawn too much from traditional policy kits, with too many initiatives based on everyday European innovation support structures.'

The Six Priority Areas

1 – Institutional Framework

In recent years, there has been an increasing awareness by policymakers that "one size does not fit all." In other words, policy decisions have different implications for different kinds of businesses. In particular "SMEs can be affected by the costs of regulations more than their bigger competitors," in the words of the European Commission.[14] This awareness paved the way to many ad hoc measures in EU member states that give consideration to small business from the early stage of policy development (the so-called "SME test") and to dedicated policy measures for startups. While the Startup Manifesto does not cover this "framework" aspect, we believe it is an extremely important policy re-orientation and the achievements in this area should not be overlooked. Therefore, we created a new indicator to assess the extent to which countries have built deliberate, proactive framework policies dedicated to SMEs in general and startups in particular. The national ranking is presented in Table 2 on this page and the main sub-indicators are presented in Table 3 on page 14.

Overall, the Netherlands ranks No. 1 with an impressive 100% completion rate. At the other extreme, Bulgaria and Lithuania tie for No. 27, with only two actions implemented. The overall EU average is 59% of completion with strong scores on implementing the e-commerce directive (100%) and taking measures in support of a digital single market (100%). But concrete measures to support SMEs and startups are less frequent, with particularly low scores EU-wide for legislation enabling new business models (18%).

In terms of dedicated policy frameworks for startups, 18 EU member states have a national strategy in support of startups. This normally falls within broad policy actions such as a digital strategy (Belgium, Germany, Ireland and Luxembourg),

> 'In recent years, there has been an increasing awareness by policymakers that "one size does not fit all."'

Table 2. Institutional Framework

Rank	Country	Adoption rate
1	Netherlands	100%
2	United Kingdom	88%
	Belgium	88%
	Romania	88%
5	Italy	75%
	Portugal	75%
	Austria	75%
	Cyprus	75%
9	Ireland	63%
	Poland	63%
	Spain	63%
	Estonia	63%
	Greece	63%
	Malta	63%
	Luxembourg	63%
	EU Average	**59%**
16	Germany	50%
	France	50%
	Sweden	50%
	Slovakia	50%
	Czech Republic	50%
	Denmark	50%
	Slovenia	50%
	Croatia	50%
24	Finland	38%
	Hungary	38%
	Latvia	38%
27	Bulgaria	25%
	Lithuania	25%

Source: European Digital Forum Crowdsourcing Network

14 European Commission, *Report of the Expert Group – Think Small First – Considering SME interests in policy-making including the application of an 'SME Test'* (Brussels: European Commission, 2009).

'Only 12 countries have introduced legislation or given special status to startups, mainly by limiting the liability of the company, simplifying administrative requirements, reducing capital requirements or applying special tax rates.'

SMEs and entrepreneurship (Croatia, Malta, Portugal and Spain) or the broader reform agenda (Czech Republic). But if we look at hard regulatory measures, the results are less impressive. Nineteen of 28 member states have reached the target of three business days to open a business, but only 11 member states routinely perform the SME Test to systematically assess the impact of legislation on SMEs.[15] In other words, SMEs and startups are not yet taken into full account while developing policies in all places. Only 12 countries have introduced legislation or given special status to startups, mainly by limiting the liability of the company, simplifying administrative requirements, reducing capital requirements or applying special tax rates.

Table 3. Institutional Framework: Measures Adopted

Action	EU adoption rate
Does the country effectively apply SME Test to systematically assess the impact of legislation on SMEs?	39%
Has an E-commerce Directive been fully implemented by the country?	100%
Has the country created a national startup manifesto?	43%
Has your country introduced legislation defining startups and providing special status to them (startup status related legislation)	43%
Have measures in support of the principles of a digital single market been undertaken on a national level?	100%
Have provisions enabling new legally challenging business models of sharing economy such as BlaBlaCar, Airbnb, Uber?	18%
Is the time taken to start a business equal or below EU target of three days?	68%
Is there a national strategy in support of startups in place?	64%

Last but not least, only three countries (the Netherlands, Portugal and the United Kingdom) have taken significant initiatives related to adapting legislation to emerging business models such as the sharing economy. The United Kingdom government has formulated positions on both digital currencies and the sharing economy, while the Portuguese government has facilitated local lodgement for Airbnb and has also legislated on crowdfunding.[16] In the Netherlands, the Ministry of Economic Affairs is working with other government agencies and the private sector to look for ways to give innovative technology-based companies such as Uber and Airbnb more space to develop within the legislation.

15 The countries that have not reached the three-day registration target are Austria, Bulgaria, Finland, France, Germany, Lithuania, Malta, Slovakia and Sweden. Those who effectively apply the SME test and the Think First Principle are Austria, Belgium, Denmark, Estonia, France, Germany, Greece, the Netherlands, Romania, Sweden and United Kingdom.

16 República Portuguesa, *Alojamento Local: Informação Técnica* http://www.turismodeportugal.pt/Portugu%C3%AAs/turismodeportugal/newsletter/2015/Pages/Alojamentolocalnovalegislacao.aspx

Dedicated startup frameworks

Italy

The Italian Startup Act, passed in late 2012, encompasses a vast and diversified package of measures aimed at creating the enabling regulatory framework for the setup and growth of high-tech startups. Far from being static, Italian policy for innovative startups is in constant evolution. More recent legislative measures (Decree Law 76/2013, known as the "Decree on Labour," turned into Law 99/2013; Decree Law 3/2015, known as the "Investment Compact," turned into Law 33/2015) have improved and broadened the range of measures in favour of innovative startups. The Italian Startup Act has provided a clear and comprehensive definition of innovative startup (in brief, any new or newly-incorporated limited company the core business of which deals with technological innovation) and has launched new instruments and support measures regarding subjects which have an impact on the whole lifecycle of a company, including the introduction of flexible corporate management tools, new ways to remunerate workers and consultants, facilitation in the access to capital and investment and support in the process of internationalisation. All this was achieved without distinguishing between sectors or introducing age limits for entrepreneurs. For more, visit http://www.mise.gov.it/images/stories/documenti/Executive_Summary_Italy's_Startup_Act_02_03_2016.pdf

France

The 2004 Finance Act introduced a specific status for young innovative companies ("*Jeunes entreprises innovantes*") realising R&D projects. Under several conditions, these companies can benefit from tax reliefs and simplified administrative procedure.

2 Skills and Education

Education is the first priority area in the Startup Manifesto, where it is noted with concern that "20% of secondary-level students have never (or almost never) used a computer in their school lessons and information-technology training for teachers is inadequate." This points to an evident structural problem in the European education system, which has become even worse in the context of the economic crisis. Despite the fact that a quarter of the population below the age of 25 are unemployed, employers struggle to find the skills they need.[17] In a recent survey, one-third of employers report that "lack of skills is causing major business problems, in the form of cost, quality or time."[18]

> 'Throughout the EU, there are many programmes in place to encourage university students to start a business before they graduate.'

Broadly speaking, Europe does relatively well with 56% of actions in place – though one could argue that a 50% completion rate in an area identified as a strategic priority is not

17 Eurostat, *Youth Unemployment*, 2015. http://ec.europa.eu/eurostat/statistics-explained/index.php/Youth_unemployment .

18 McKinsey, *Education to Employment: Getting Europe's Youth into Work* 2014 (New York, McKinsey Center for Government, 2014).

fast enough. Interestingly, in this area we don't detect a strong east-west divide as in other areas. The two leading countries are Romania (No. 1) and Poland (No. 2), where numerous measures have been enacted in recent years.

The progress on the different priorities is quite homogenous, but notable progress can be seen in the strategic approach and preparation of teachers, and in the entrepreneurship education of children. With regard to teacher training, 23 countries say they now use e-learning to deliver training to teachers. The inclusion of information and communications technology (ICT) in school curricula is a recognised priority by most member states. Twenty-three have a strategic programme, although in almost all cases this document is not part of national educational policy but sits with the digital strategy of the country, where it can be expected to be less impactful. Only the United Kingdom puts these initiatives directly into the all-important education bill.

To date, 17 countries have actually introduced ICT and coding as part of the core school curriculum, but only five (Estonia, the Netherlands, Poland, Portugal and the United Kingdom) proactively involve startup and developers in the training of teachers and students.

With regard to entrepreneurship teaching, 16 countries report some activity – either by introducing entrepreneurship skills in the core curriculum or by taking an active role in the initiatives such as the Entrepreneurial Skills Pass through national focus groups. In general, we find entrepreneurship education is more present at the level of secondary than primary school. On the bright side, most countries (22) report having a system in place for traineeship in the 12- to 18-years-old age.

'With regard to entrepreneurship teaching, 16 countries report some activity – either by introducing entrepreneurship skills in the core curriculum or by taking an active role in the initiatives such as the Entrepreneurial Skills Pass.'

Table 4. Skills and Education

Rank	Country	Adoption rate
1	Romania	90%
2	Poland	87%
3	United Kingdom	85%
4	Netherlands	82%
5	Italy	74%
6	Portugal	73%
7	Ireland	66%
8	Finland	63%
9	Germany	59%
10	Cyprus	57%
	Slovenia	57%
	Sweden	57%
	EU Average	**56%**
13	Spain	55%
14	Hungary	54%
	Greece	54%
	Czech Republic	54%
17	France	53%
	Bulgaria	53%
19	Slovakia	52%
	Austria	52%
	Malta	52%
22	Estonia	50%
23	Denmark	49%
24	Latvia	45%
25	Belgium	38%
26	Lithuania	31%
27	Luxembourg	27%
28	Croatia	4%

Source: European Digital Forum Crowdsourcing Network

Teacher's training

Denmark

Teaching for Tomorrow is an online e-learning course with characteristics of a Massive Open Online Course (MOOC). The course is particularly aimed at lecturers who have an interest in online teaching and learning and lecturers who already undertake online teaching and learning activities or expect to do so in the future. It is offered in the academic year 2015/2016. The purpose of the course is to give lecturers the competences necessary to design and deliver online courses. Furthermore, the course aims to provide lecturers with an opportunity to network across the partner institutions and find collaboration partners with a view to designing and delivering joint online courses to students. For more, visit http://www.eun.org/c/document_library/get_file?uuid=cf683d8b-f441-4b12-9fd9-5a62d43053a6&groupId=43887

Estonia

There are startup courses for university students in place that attract startup founders as lecturers in the study process. Moreover, Information Technology Foundation and Education (HITSA) delivers continuously both online and face-to-face training courses for teachers about ICT usage in school and for enhancing teaching and learning processes at all school levels. All programmes including Future Teacher, Proge Tiger and DigiJuht are financed by the Ministry of Education and Knowledge of Estonia and free to attend for the participants. For more, visit http://www.ttu.ee/projects/mektory-eng/events-2/startup/ and http://www.hitsa.ee/en

Table 5. Skills and Education: Measures Adopted

Action	EU adoption rate
Skills and Education	**56%**
Make teachers digitally confident and competent to rise to the challenge.	61%
Teach our children the principles, processes and the passion for entrepreneurship from young age.	68%
Encourage university students to start a business before they graduate.	52%
Prepare graduates for a radically different marketplace (digital skills + vocational training).	58%
Encourage large companies to provide training for the general public (for management, leadership and communication skills).	42%

Throughout the EU, there are many programmes in place to encourage university students to start a business before they graduate: only six countries don't have at least one such programme[19]. These programmes cover different measures: from incubators in universities and by local municipalities to instruments developed within the EU structural funds, to seed capital funds and Erasmus for Entrepreneurs programme, which is becoming increasingly

19 The six countries without programmes to encourage university graduates to start businesses are Austria, Croatia, Cyprus, Czech Republic, Luxembourg and Slovakia.

Startup incubators at the national level

Slovenia

In Slovenia, a key innovation support ecosystem infrastructure has been established that is comprised of university and regional incubators and technology parks whose infrastructure facilitates the building of communities of startup companies. Three university incubators (Koper, Ljubljana and Maribor) are active in university environments and are important in the pre-incubation phase of startup companies comprising of activating talent and launching startups. Researchers, lecturers and students who establish high-tech companies based on top know-how and breakthrough ideas are their most important target group.

Malta

The government has allocated €100,000 to a seed capital fund to help graduates and entrepreneurs start a new business (the fund will be run jointly by the Ministry of the Economy and Investment and the Ministry of Education).

Poland

The Ministry of Labour and Social Policy in cooperation with a financial institution launched preferential credit lines for university students during the final year of studies and for alumni during two years after graduation. For more, visit http://wsparciewstarcie.bgk.pl/program/.

The Technological Incubator Foundation organised a mentorship programme for youth aged 18-35 who are provided with a mentor that guides throughout the pre-incubation stage of developing a business. Additionally, the participants take part in business workshops and are given access to capital. For more, visit http://ybp.org.pl/.

Italy

In 2013, the Italian Ministry of Education, University and Research and the Ministry of Economic Development have drawn up a pilot project for the creation of Contamination Labs, the aim of which is to offer university students a stimulating environment in which to develop innovation projects with a business dimension. These spaces encourage students from different academic backgrounds to interact, while promoting entrepreneurship, innovation, an interdisciplinary perspective and new models of learning. Four Contamination Labs have been selected and funded in Regio Calabria, Catania, Cosenza and Naples.

Romania

In Romania, the Erasmus for Young Entrepreneurs programme is promoted at the national level by six organisations based on national events that were implemented, seminars with the students and TV shows participation. The national strategy for business promotion on equal terms sets out eight goals for developing the business promotion system up until 2020 – including working for change where women and men, regardless of ethnicity and age, have the same opportunities to start, run and grow businesses.

popular.[20] On the down side, only five countries (the Netherlands, Poland, Portugal, Romania and Sweden) report dedicated support measures for women entrepreneurs at the undergraduate level, and in most cases these are generic measures for employability rather than for entrepreneurship.

Entrepreneurial education at the national level

Estonia

Although the economics and entrepreneurship studies aren't mandatory at school, entrepreneurial behavior is recognised as a core competence seventh- to ninth-grade students have to acquire. For more, visit http://entrepreneurialskillspass.eu/605-countries/national-focus-groups/667-estonia-national-focus-group.html

Poland

The 2012 reform of the national curriculum of secondary education introduced changes in teaching the foundations of entrepreneurship and stressed the importance of developing essential in entrepreneurship practice-oriented skills. For more, visit http://www.nowaera.pl/nowe-serie/krok-w-przedsiebiorczosc-reforma-2012.html

But the Startup Manifesto is not only about making students more entrepreneurial, it is also about making them more prepared for a changing marketplace. The proposed idea of a digital certificate course has been taken up only by only eight EU member states, and mostly in the form of the European Computer Driving License which is a very basic form of certification.[21] Greater uptake can be seen with regard to EU-level initiatives: about half of the countries (15) have created a national coalition for digital jobs in the context of the EU-level Grand Coalition, and all countries but two have implemented the digital agenda action No. 68 with regard to the introduction of e-learning in national policies.[22]

Finally, the Startup Manifesto urges large companies to collaborate by providing training for the general public. While this is not a direct task for EU member states, they can provide a catalysing role by promoting university-business collaboration. We mentioned already that about half of the countries surveyed have initiated national coalitions; on top of that, 19 countries also report measures to create university-business knowledge alliances or include work placement in the curriculum, although in most cases it refers to individual initiatives of universities and chambers of commerce and only rarely to national-level initiatives, such as the tax credit for university business collaboration in the Czech Republic.[23]

> 'Access to capital continues to be one of the main challenges for European companies, particularly innovative startups and SMEs.'

20 Erasmus for Young Entrepreneurs: http://www.erasmus-entrepreneurs.eu/

21 The eight which have taken up the measure are Czech Republic, France, Hungary, Ireland, Malta, Poland, Romania and the United Kingdom. The other 20 still need to act.

22 Paul Hofheinz, *Europe 2020: Why Skills Are Key for Europe's Future* (Brussels: the Lisbon Council, 2009). http://www.lisboncouncil.net/publication/publication/54-skillseuropesfuture.html

23 Education, Audiovisual and Culture Executive Agency, *Erasmus+ Key Action 2 – Knowledge alliances* https://eacea.ec.europa.eu/erasmus-plus/actions/key-action-2-cooperation-for-innovation-and-exchange-good-practices/knowledge-alliances_en. The nine countries not reporting actions are Belgium, Croatia, Denmark, Estonia, Hungary, Lithuania, Luxembourg, Malta, Sweden.

Initiatives promoting university-business collaboration

Spain

The Knowledge Alliance for Advanced Urbanism (KAAU) aims to promote the innovative education and training required by the extensive adoption of emerging technologies in the built environment (smart city). "KAAU will develop an educational and training platform in partnership with higher education institutions and well-established industrial partners and companies. The objective of this platform is to offer participants the possibility to engage in a semi-professional environment, and develop projects with the support and expertise of individuals and institutions that are commercially involved in their field of expertise. In that manner, it provides a potential jumping platform into future professional opportunities while offering companies a fresh research and development environment where to propose new design challenges and applications." For more, visit http://www.ersilia.org/en/plataforma-educativa-per-un-urbanisme-avancat/

Czech Republic

From 01 January 2014, tax credits available for companies wanting to co-operate with training institutions were included in the Income Tax Act.

3 Access to Talent

Attracting the right talent to young innovative companies is very often a "make or break" choice for them. Yet talented professionals are the scarcest resource and the most expensive one. While much of the "brain drain" happens within Europe, mainly from southern to northern countries, all countries are facing a particular "high-quality" brain drain: Europe lost 120,000 post-secondary educated workers in the years after the launch of the euro, and the loss is four times larger for research and development (R&D) workers and PhD holders.[24] The Startup Manifesto reports that "there are an estimated 50,000 Germans in Silicon Valley, and an estimated 500 startups in the San Francisco Bay area with French founders."

The Startup Manifesto recognises that the European Union has made Europe itself a much easier place to hire and attract talent within its borders with freedom of establishment and free movement of services. But the authors call for further improvements in this area, and particularly at the European and national level. Their concrete proposals: make Europe an easier place for high-skilled workers to set up a company, get a job, hire talent outside of their home countries, bring talent back home and work with new, more flexible working arrangements.

> 'The vast majority of countries have also undertaken measures to improve access to finance for startups in the areas of easing access to public procurement tenders for SMEs.'

24 Edoardo Campanella, "Come Home, Europeans," *Foreign Affairs*, 10 October 2014. https://www.foreignaffairs.com/articles/europe/2014-10-16/come-home-europeans

Overall, across the countries, only 48% of the proposed actions have been fulfilled – a sign that Europe still has much work to do in this vital area. The Netherlands, Italy and France tie for first place, with a 69% fulfilment rate. Germany is No. 4 at 63% fulfilment. Portugal, Slovakia and Romania tie for No. 5 at 60%. Latvia and Hungary (tied at No. 27), and Croatia (No. 26) are the least active in access to talent initiatives with the results way below the average (21-23%). Interestingly, the United Kingdom (tied with Sweden at No. 24) scores low in the field (with 33% completion rates) as well as two prominent Scandinavian countries (Denmark is No. 25 with 35%). In the case of the UK, the reasons might be twofold. London is one of the cities that attracts the most startup talent in Europe and has a relatively easier time in this thanks to a flourishing startup scene.[25] But there may be a darker lining to the cloud as well; UK startups are confronted with the prospect of a government looking for ways to make it harder for businesses to recruit non-EU workers to the UK in the quest for ways to reduce migration. On top of that, the UK already does not participate in EU schemes to facilitate immigration of workers from abroad, such as the Blue Card Directive[26] or the EU Scientific Visa.[27]

The overall average score of 48% is unimpressive – mainly due to the lack of specific initiative on the European as well as national level aimed at making it easier for the companies to hire employees within the EU without the need of setting up a subsidiary. Flexible cross-border working arrangements, also called cross-border remote work or cross-border telework, have yet to be addressed on the European level. Though the attempt to promote the telework concept was made in 2002 with the European Framework Agreement on Telework, it did not cover remote cross-border work.[28] Nevertheless, many young startups find their way around these restrictions by hiring talent as external self-employed consultants. The employment law and taxation issues in this area are still unclear, and are very complex and particular for each EU country.

25 Omar Mohout, "Mind the Gap – London, Europe's Biggest Startup Scene," *Whiteboard*, 2015. http://www.whiteboardmag.com/mind-the-gap-london-europes-biggest-start-up-scene/

26 EU Blue Card Network: https://www.apply.eu/Questions/

27 European Commission, *Scientific Visa Package* http://ec.europa.eu/euraxess/index.cfm/services/scientificVisa

28 EUR-Lex, *Teleworking* http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3Ac10131

'Attracting the right talent to young innovative companies is very often a "make or break" choice for them.'

Table 6. Access to Talent

Rank	Country	Adoption rate
1	Italy	69%
	Netherlands	69%
	France	69%
4	Germany	63%
5	Portugal	60%
	Romania	60%
	Slovakia	60%
8	Finland	56%
	Austria	56%
10	Belgium	54%
	Spain	54%
	Poland	54%
	Estonia	54%
14	Ireland	50%
15	Bulgaria	48%
15	Greece	48%
	EU Average	**48%**
17	Malta	46%
18	Luxembourg	44%
19	Lithuania	40%
	Czech Republic	40%
21	Denmark	35%
	Cyprus	35%
	Slovenia	35%
24	United Kingdom	33%
	Sweden	33%
26	Croatia	23%
27	Hungary	21%
	Latvia	21%

Source: European Digital Forum Crowdsourcing Network

High-growth companies and their employees are faced with a lot of questions. Does a company have to set up a formal subsidiary in the country where it is trying to hire or is it possible to get a payroll identification for a cross-border employee without it? Which taxation rules apply in such cases: taxation of the country of residence or the country of employment? Do the countries in question have bilateral agreements on double taxation? Are social contributions paid in the same country as tax or not – and how?[29]

Table 7. Access to Talent: Measures Adopted

Action	EU adoption rate
Access to Talent	**48%**
Bring the best brains back home (EU countries must launch targeted campaigns aimed at bringing their talent back home, through research grants, logistical support and public recognition).	68%
Make it easier for smaller companies to let employees go (special flexibility in human resources management for small companies).	62%
Turn Europe into the easiest place for highly skilled talent to start a company and get a job by rolling out a pan-European startup visa.	61%
Make it easy for companies to hire outside their home countries in the EU.	0%

The Startup Manifesto Tracker does not discuss this matter in detail, nor provide many answers. Instead, it highlights how important the matter is for startups and yet how unresolved it is from the European perspective.

On the rest of the actions of the access-to-talent priority, EU countries have similar overall performance (around 60% adoption) with a slightly better result in the implementation of policies aimed at attracting talent back home (at 68% adoption). The indicators for the latter action revolve around adopting by countries the European initiatives enhancing mobility of the researchers (EU Scientific Visa[30] and HR Strategy and the European Charter and Code for Researchers[31]) as well as developing national/regional strategies to attract high-skilled labour. With the exception of Denmark and the United Kingdom, almost all countries implemented the Researchers Directive (EU Scientific Visa). The Scientific Visa helps researchers to obtain a permission to enter and

> ‘The European Union does not have a highly developed market where young new companies can gain capital through public offerings. But there are a number of initiatives aimed at making public markets more attractive and accessible.’

29 Social contribution rules are not directly connected to income tax rules. Read more: Katrin Distler and Ger Essers, *Guide for Mobile European Workers* (Brussels: European Trade Union Confederation, 2011) https://www.yumpu.com/en/document/view/50513839/brochure-guide-travailleur-mobile-en

30 Council Directive 2005/71/EC of 12 October 2005 on a Specific Procedure for Admitting Third-Country Nationals for the Purposes of Scientific Research http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32005L0071

31 European Commission, *The European Charter and Code for Researchers* http://ec.europa.eu/euraxess/index.cfm/rights/whatIsAResearcher

work in the member states for the purpose of carrying out scientific research. It streamlines the process of obtaining a residence permit for researchers wishing to carry out research for a short-term (up to three months) or long-term (more than three months) in the EU.[32]

Moreover, HR Strategy for Researchers is acknowledged by the research institutions in the vast majority of countries.[33] However, less than 50% of the countries report a national/regional strategy to attract high-skilled labour through programmes aimed at attracting students back, recruiting international students and visas for graduates seeking employment.

National programmes to retain talent

Estonia

Talendid Koju programme is focusing on young Estonians from foreign companies and universities to return and work for local companies. For more, visit http://www.talendidkoju.ee/projektist

The Netherlands

The programme Make it in the Netherlands! strengthens the country's ties with international talent. Furthermore, the Netherlands offers a job-search visa for graduates *("zoekjaar").* For more, visit https://www.epnuffic.nl/en/study-and-work-in-holland/make-it-in-the-netherlands and https://www.government.nl/documents/reports/2013/11/25/actionplan-make-it-in-the-netherlands-2013-2016.

The recommendation to make it easier for startups to let employees go is certainly a controversial one, although the point is not to make it easier to fire people but ultimately to make it less risky to hire them in the first place. This relates to the concept of flexicurity, an integrated strategy for enhancing flexibility and security at the same time in the labour market.[34] A set of common flexicurity principles identified by the EU is implemented by the countries through four components: flexible and reliable contractual arrangements, comprehensive lifelong learning strategies, effective active labour market policies and modern social security systems.

> 'To date, 17 countries have introduced measures to support a business angels-friendly environment, a reform that is at the heart of the Startup Manifesto recommendations.'

In terms of two components that are more relevant from the Startup Manifesto perspective – flexible and reliable contractual arrangements, modern social security systems – 18 countries showed performance above average.[35] While it is difficult to assess the implications

32 European Commission, *Scientific Visa Package* http://ec.europa.eu/euraxess/index.cfm/services/scientificVisa

33 The exceptions are Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta and Sweden. http://ec.europa.eu/euraxess/index.cfm/rights/strategy4ResearcherOrgs

34 European Commission, *Flexicurity* http://ec.europa.eu/social/main.jsp?catId=102

35 European Commission, *Flexicurity in Europe* (Brussels, European Commission, 2013) http://ec.europa.eu/social/BlobServlet?docId=10227&langId=en

of this indicator in itself, in particular because different people can have different interpretations of labour-market flexibility, these results are used for assessing country performance.

Furthermore, the Startup Manifesto proposes the creation of a pan-European startup visa to make it easier for the non-EU companies to set up a business and to make it easier to hire outside of Europe. The overall result across EU countries on this point oscillates around 61%. The European Blue Card Directive (Directive 2009/50/EC) aimed at facilitating the admission and the mobility of highly qualified migrants and their family members does not apply in four countries only at the moment (Cyprus, Denmark, Ireland and the United Kingdom).

Half of EU countries report national policies in support of attracting foreign startups, of which the example of Estonia's digital e-residency is probably the most innovative one. Several other countries have prepared a national startup visa programme or introduced new rules to streamline the process of setting up a business by non-EU, skilled talent, though some additional prerequisites may apply. In Lithuania, for example, a residence permit can be issued for non-EU nationals in the course of one month, provided capital investment into the business reaches certain threshold and the company recruits at least three local employees.

E-residency in Estonia

In 2014, the status of the e-resident in Estonia was established in order to encourage migrants' entrepreneurship (both from EU and third countries). E-residency is a state-issued secure digital identity for non-residents. It allows digital authentication and the digital signing of documents. A holder of e-residence may for example register his or her business electronically and sign business documents without having to physically be in Estonia. For more, visit https://e-estonia.com/e-residents/welcome/

'The Startup Manifesto aims to make government regulation and policy fit for the age of big data by improving data protection and making government more open and effective through technology.'

National programmes streamlining business establishment

Denmark

Startup Denmark is an initiative by the Danish government to help talented entrepreneurs relocate and grow high-impact startups in Denmark. It offers two-year work and a residence permit for non-EU/EEA founders seeking to start and grow their businesses in Denmark. It focuses on high-growth and globally minded entrepreneurs, and permits are given for up to two founders for two years, renewable for another three years thereafter. For more, visit http://www.startupdenmark.info/.

The Netherlands

The startup permit is a national scheme implemented on 01 January 2015, that makes it possible for international entrepreneurs to apply for a temporary residence permit in the Netherlands. It grants these entrepreneurs one year to launch and develop an innovative business in the Netherlands provided that their startup will be guided by an experienced mentor based in the Netherlands. After one year the startup can apply for the self-employment scheme under favourable conditions. Also for U.S. and Japanese citizens more favourable conditions apply, based on the Dutch-American Friendship Treaty and the Treaty of Trade and Navigation between the Netherlands and Japan. For more, visit https://ind.nl/EN/business/investor-self-employment-start-up/Self-employment/Pages/default.aspx

France

France offers a residence permit called *Compétences et talents* (The Skills and Talent Visa) that grants visa for entrepreneurs that "are likely to make a significant or lasting contribution, through their skills or talents, to France's economic development or to its intellectual, scientific, cultural, humanitarian or athletic prestige, and directly or indirectly, to that of their own country."

Ireland

The Startup Entrepreneur Programme enables non-EEA nationals and their families to acquire a secure residency status in Ireland provided that they commit to a high potential startup business in Ireland. The programme was established by in 2012 to stimulate investment in Ireland and to offer residency to dynamic business professionals with a record of success. For more, visit http://www.inis.gov.ie/en/INIS/Guidelines%20for%20Start-up%20Entrepreneur%20Programme.pdf/Files/Guidelines%20for%20Start-up%20Entrepreneur%20Programme.pdf

4 Better Access to Capital

Better access to finance is a complex subject that encompasses a broad range of issues from public procurement and debt financing through measures aimed at facilitating access to venture and seed capital to new alternative sources of financing such as crowdfunding and mini-bonds.[36] For the purpose of this study, they have been structured around four main transversal themes: easier access for small business to government contracts, improved access for startups to loans, enhanced access to public capital (including alternative finance) and special tax regimes for startups.

Access to capital continues to be one of the main challenges for European companies, particularly innovative startups and SMEs. It was recognised as the most challenging Small Business Act principle at national level in the EU-28[37] and 79% of Europeans declared it as an issue preventing them from starting up their own business.[38] Whereas most European SMEs rely on a bank loans as a primary source of financing,[39] funding for growing firms through equity capital or other forms of alternative financing are underdeveloped in Europe.[40] Moreover, European companies have much more limited access to venture capital than their U.S. counterparts – Europe invests €15 billion less in venture capital than in the U.S.[41]

Overall, we found that all EU countries had introduced certain measures aimed at facilitating access to finance for young and small companies. In the forefront, Belgium comes in at No. 1, with 97% implementation. France and Italy are tied for No. 2 with 87% implementation. Croatia, Slovakia,

Table 8. Better Access to Capital, Lower Barriers to Success

Rank	Country	Adoption rate
1	Belgium	97%
2	France	88%
	Ireland	88%
4	Italy	87%
	United Kingdom	87%
6	Finland	86%
7	Germany	82%
8	Netherlands	80%
	Spain	80%
10	Portugal	78%
11	Lithuania	70%
12	Hungary	69%
	EU Average	**69%**
13	Denmark	68%
14	Austria	67%
15	Sweden	66%
	Luxembourg	66%
17	Cyprus	65%
	Romania	65%
19	Latvia	64%
20	Poland	63%
	Malta	63%
22	Estonia	59%
23	Bulgaria	56%
24	Slovenia	53%
25	Czech Republic	49%
	Greece	49%
27	Slovakia	44%
	Croatia	44%

Source: European Digital Forum Crowdsourcing Network

36 See Sergey Filippov, *From Startup to Scaleup: Growing Europe's Digital Economy* (Brussels: European Digital Forum, forthcoming).

37 European Commission, *Annual Report on European SMEs 2013/2014*, July 2014, p. 28-30; http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm. The Small Business Act (SBA) is a set of 10 principles, which guide the design and implementation of policies in favour of SMEs both at EU and national level. They are aimed at improving the administrative and legal environment to allow SMEs to unleash their full potential and growth

38 WEF, *Enhancing Europe's Competitiveness – Fostering Innovation Driven Entrepreneurship in Europe, Insight Report*, June 2014, p. 19; http://www3.weforum.org/docs/WEF_EuropeCompetitiveness_InnovationDrivenEntrepreneurship_Report_2014.pdf

39 European Commission, *Annual Report on European SMEs 2013/2014*, July 2014, p. 28-30

40 European Commission, *Building a Capital Markets Union*, 18 February 2015, COM(2015) 63 final http://ec.europa.eu/finance/capital-markets-union/docs/building-cmu-action-plan_en.pdf

41 European Commission, *Europe 2020 Flagship Initiative Innovation Union*, Brussels, 6.10.2010 COM(2010) 546 final, p. 13

Czech Republic and Greece bring up the bottom of the league table, with 44% (Croatia and Slovakia) and 49% (Czech Republic and Greece), well below the EU average of 69%.

Table 9. Better Access to Capital: Measures Adopted

Action	EU adoption rate
Better access to capital	**69%**
Buy more from smaller businesses.	70%
Increase private and institutional investment in startups.	82%
Institute an E-Corp: a new type of cross-European corporation.	100%
Make it easier for high-growth companies to raise capital through public markets.	55%
Tax share options as capital gains, not income, to attract talent to startups (special tax regime for startups).	38%

The 100% implementation rate on the recommendation regarding the e-corporation needs to be put in perspective: it derives from the fact that the European Commission has already introduced related legislation as well as because all countries managed to transpose the directives on the Statute for European Company and the Services Directive into national legislation.

Putting that aside, the highest percentage of measures introduced (82%) is in increasing private and institutional investments in startups. However, this is also an area with the biggest potential for further developments. In September 2015, the European Commission adopted an *Action Plan on Building a Capital Markets Union* setting out 20 key measures to achieve a true single market for capital in Europe, including measures to improve financing for innovation, startups and non-listed companies.[42] The vast majority of countries have also undertaken measures to improve access to finance for startups in the areas of easing access to public procurement tenders for SMEs as well as have undertaken measures to improve short-term financing (the Late Payment Directive has been transposed in all countries except for Greece). These are also areas where the European Commission has been focusing its efforts over the last 15 years. The lowest rate of adoption refers to the area of special tax regimes for startups and their investors.

'New methods for innovative young firms, such as crowdfunding, can constitute additional means to access finance at a time when obtaining equity funding is difficult.'

The analysis below focuses on four main themes: easier access for small business to government contracts, improved access for startups to loans, enhanced access to public capital (including alternative finance) and special tax regimes for startups.

42 European Commission, *Capital Markets Union* http://ec.europa.eu/finance/capital-markets-union/index_en.htm

> ‘Nineteen EU countries take part in the Open Government Partnership, a voluntary collaboration of countries taking additional commitments to deliver Open Government.’

Easier access for small business to government contracts

In times when young innovative companies struggle to obtain financing, the Startup Manifesto calls for governments to facilitate access to finance for SMEs by ensuring that governments procure more from SMEs themselves.[43] In all countries, the measures to promote public procurement from SMEs have been introduced. They include such steps as introducing an electronic procurement system which facilitates SME participation and also increases the success rate; providing SMEs with online information and guidance on public tenders; dividing big tenders into smaller lots; facilitating collective bidding by SMEs and creating central and joint purchasing by governments. In 17 countries, SMEs’ share in the total value of public contracts awarded was above the EU average (29% in 2013); only in five countries is the percentage above 50%.[44] For example, in Latvia the share of public contracts awarded to SMEs has reached 74%. This is due to several amendments to public procurement law that made the public procurement process more transparent, more open for SMEs and less burdensome.[45]

Promoting innovation procurement in Austria

In 2011, “innovation-promoting public procurement” was included as a priority in the Austrian federal strategy for research, technology and innovation. Since September 2013, the central Austrian competence centre on innovation procurement offers training, documentation, assistance and financial support to Austrian procurers. In addition, in 2014 a monitoring system was set up to measure annual expenditure on innovation procurement in Austria.” For more, visit https://ec.europa.eu/digital-agenda/news/innovation-procurement-initiatives-around-europe

Improved access for startups to debt financing

To enhance SME access to finance, the European Commission recently implemented financial instruments under COSME and Horizon 2020 that can be used by European countries.[46] Nevertheless, the level of uptake is still to be enhanced. For example, through InnovFin SME Guarantee Facility, the EU and European Investment Fund allow the provision of more debt financing to innovative SMEs and small and mid caps (with up to 499 employees), yet the financial intermediaries are still not set up in all the countries.[47]

43 The state aid subsidies are covered by the State Aid Modernisation package (SAM) that came into force on 1 July 2014.

44 The countries are Bulgaria, Greece, Hungary, Latvia and Lithuania, according to PricewaterhouseCoopers. PwC, *SMEs’ Access to Public Procurement Markets and Aggregation of Demand in the EU* (Oslo: PwC, 2014).

45 European Commission, 2015 Small Business Act Fact Sheet – Latvia

46 The European Commission introduced financial instruments under COSME mainly in the form of loan guarantees and venture capital, channelled through selected financial intermediaries: 1) The Loan Guarantee Facility (LGF) providing counter-guarantees and other risk-sharing arrangements for guarantee schemes (including co-guarantees) and direct guarantees plus other risk-sharing arrangements for other financial intermediaries;2) The Equity Facility for Growth (EGF) aimed at mobilising venture capital investment (risk capital). Financial instruments of InnovFin under Horizon 2020 programme aim to facilitate access to risk finance for innovative R&D businesses. Moreover, SME Instrument and Eurostars II under Horizon 2020 also enhance access to finance for innovative companies. Nevertheless, the level of uptake is still to be broaden.

47 The InnovFin SME Guarantee Facility is a demand-driven, uncapped instrument that builds on the success of the risk sharing instrument. The InnovFin SME Guarantee Facility will be deployed by eligible local banks, leasing companies, guarantee institutions, etc. which are selected after a due diligence process. Once selected by EIF, these local partners act as financial intermediaries. EIF, acting for both EIF and the EU as the implementing body, covers a portion of the losses incurred by the financial intermediaries on loans, leases and guarantees between €25,000 and €7.5 million which they provide under the InnovFin SME Guarantee Facility. http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm

In addition to European measures, most countries report national measures to enhance debt-financing for startups. The majority of countries created national institutions or programmes to manage guarantees for enterprises, such as Bpifrance (France), National Guarantee Programme (Czech Republic), the National Loan Guarantee Scheme Government-backed Loans for Small Businesses (Hungary), Funding For Lending Scheme (United Kingdom) or the SME Credit Guarantee Scheme (The Netherlands). Furthermore, many countries provide a variety of additional loan schemes for startups.

Loan guarantee programmes for the SME sector in Poland

In 2013, Poland started a programme of *de minimis* guarantees for loans on working capital as a counter-crisis measure. The scheme was very well received and was extended to cover investment loans. The scheme provided €7 billion of guarantees for almost 39,000 SMEs, covering €12 billion of credit over 2013. BGK (Bank Gospodarstwa Krajowego) supports the SME sector mainly in the forms of guarantees and loans. In 2013, BGK launched a new guarantee programme granting to commercial banks portfolio guarantees for working capital and investments loans for SMEs. It supported more than 38,000 SMEs with the guarantees amounting to 6.99 billion Polish zlotys (circa. €1.7 billion) in 2013.[48]

Access to public capital

Enhanced access to public capital is a key deliverable in the Startup Manifesto, which proposes making it easier for companies to gather money through public markets and introducing tax incentives for venture and seed capital in order to attract capital to high-growth companies. Access to public capital not only implies incentives for venture capital funds but should also include support of an environment friendly to business angels.

The European Union does not have a highly developed market where young new companies can gain capital through public offerings.[49] Nevertheless, there are a number of initiatives in Europe aimed at making public markets more attractive and accessible for high-growth companies. On the European level, in order to make it easier for venture capitalists to raise funds across Europe for the benefit of startups, the European Venture Capital Funds (EuVECA) regulation has been adopted.[50]

> 'The Startup Manifesto calls for a more flexible approach to data storage and notes that EU regulations in this area are "outdated" and "more restrictive" than elsewhere.'

In 15 EU countries, SMEs have the possibility to raise public money through dedicated segments on the main national stock exchange or dedicated markets that are specifically

48 Network of European Financial Institutions for Small and Medium Sized Enterprises, *Bank Gospodarstwa Krajowego, Poland* http://www.nefi.eu/our-members/poland-bgk/

49 Hatim Tyabji, Vijay Sathe and Vijay Sathe, "Venture Capital Firms in Europe vs. America: The Under Performers," *Ivey Business Journal*, March / April 2011. http://iveybusinessjournal.com/publication/venture-capital-firms-in-europe-vs-america-the-under-performers/

50 Regulation (EU) No 345/2013 of the European Parliament and of the Council of 17 April 2013 on European venture capital funds http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0345&from=EN

designed to enable SMEs with a high growth potential to access capital markets.[51] Examples include High-Growth Segment of the London Stock Exchange, Polish growth stock market NewConnect, Irish IEX (Irish Enterprise Exchange) market, Euronext Paris' *Nouveau Marché*. Several countries offer opportunities through alternative markets with fewer obligations, such as AIM Italia, Madrid's Mercado Alternativo Bursatil (MAB), London's Alternative Investment Market (AIM), Alternativa in Sweden and AIM Italia.[52] Moreover, the pan-European dedicated markets have been created, including Alternext and Enternext in Belgium, France, Netherlands and Portugal, First North for Finland and Sweden, and First North Baltics for Estonia, Latvia and Lithuania.

Dedicated pan-European public markets for small high growth companies

Alternext and Enternext

They are the subsidiaries of the Euronext Group in Belgium, the Netherlands, France and Portugal. EnterNext is designed to develop and promote its stock markets specifically for SMEs. Alternext offers a market access with fewer obligations intended primarily for small- and mid-cap companies making them available to a wide range of investors. The market is not a regulated market within the meaning of EU directives. For more information, visit https://www.enternext.biz/ and https://www.euronext.com/en/listings/alternext

First North

First North is Nasdaq's European growth market, designed for small and growing companies. It operates in Finland and Sweden. Having a simplified rulebook than that of the main market, "the First North market provides companies more room to focus on their business and development while still taking advantage of all the positive aspects of being a listed company." For more information, visit http://www.nasdaqomxnordic.com/about_us/firstnorth.

Nasdaq OMX Alternative Market First North Baltics

In the Baltic countries, First North is harmonised across the exchanges in Riga, Tallinn and Vilnius to fit the needs of growth companies and investors and automatically accessible to all members of those. For more information, visit http://www.nasdaqomx.com/listing/europe/growthmarket/firstnorthinthebaltics.

> 'Amazingly, all 28 EU countries surveyed have set up associations at national level for pursuing the objectives of the manifesto.'

51 The 13 countries where this is not possible are Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Greece, Hungary, Luxembourg, Malta, Romania, Slovakia and Slovenia.

52 "The basic principles of operation of alternative marketplaces are very similar to those of regulated markets and stock exchanges. However, there are some notable differences. Alternative marketplace issuers are able to obtain virtually the same benefits as on a regulated market, but with lower resource consumption both financially and in terms of man-hours spent" http://www.nasdaqomx.com/listing/europe/growthmarket/firstnorthinthebaltics

Supporting a venture, private equity and business angels friendly environment

To date, 17 countries have introduced measures to support business angels-friendly environment, a reform that is at the heart of the Startup Manifesto recommendations.[53] These initiatives include special legislation regime and fiscal incentives for private equity and business angels, as well as the creation of co-funds (private-public partnership funds) and other support measures such as promoting business angels networks.

Business angel law in Romania

In Romania, the Business Angel Law was adopted in 2015. The law regulates the conditions in which individuals named individual investors, business angels can benefit from tax incentives as a result of acquisition of shares through investments in micro and small enterprises, as defined by Law no. 346/2004 regarding the establishment and development of SMEs. For more information, visit http://codfiscal.net/43513/legea-1202015-stimularea-investitorilor-individuali-business-angel.

> 'In most cases these are bottom-up initiatives, sometimes in competition, that are becoming the "voice" of startups at national level and become recognised by government.'

Furthermore, measures to promote private-public investments have been at a focus on EU level as well as in the member states. Almost all EU member states introduced initiatives to promote private-public investment. The European Investment Fund (EIF) is taking a lead on many initiatives, such as the European Angels Fund, a pan-European co-investment fund created as vehicle for the EIF to co-invest with business angel. There are also several fund of funds initiatives, such as the Baltic Innovation Fund[54] and the Dutch Venture Initiative.[55]

The European Angel Fund: a successful pan-European initiative

The European Angels Fund (EAF) is an initiative advised by the European Investment Fund. It provides equity to business angels and other non-institutional investors to finance innovative companies in the form of co-investments in the seed, early or growth stage. "The activity of the European Angels Fund is adapted to the business angels' investment style by granting the highest degree of freedom in terms of decision making and management of investments." The initiative is currently operational in Austria, Germany, Ireland, the Netherlands and Spain. For more visit, http://www.eif.org/what_we_do/equity/eaf/.

Moreover, there are numerous examples of the national co-investment funds, funds of funds and dedicated venture capital funds supporting innovative startups.

53 Business angels can be defined as "high net worth individuals who invest their own money, along with their time and expertise, directly in unquoted companies in which they have no family connection, in the hope of financial gain. Source: *World Encyclopedia of Entrepreneurship*

54 Baltic Innovation Fund http://www.eif.org/what_we_do/resources/BIF/

55 Dutch Venture Initiative http://www.eif.org/what_we_do/resources/dvi/

Scotland

The Scottish Co-investment Fund is a public-private partnership where the due diligence is carried on the co-investment partners (business angels and business angel syndicates) instead of on the deals. The fund forms contractual partnerships with active venture capital funds and business angels from the private sector rather than negotiating investment deals on its own. For more, visit http://www.eban.org/wp-content/uploads/2015/12/Co-Investment-Funds-2015-17-12-2015_FINALV51.pdf

Portugal

The Competitiveness Factors Operational Programme (COMPETE) is a business angel co-investment programme in Portugal. In the first phase, until business angels receive their investment, the repayment ratio is 80% to the business angel and 20% to COMPETE. In the second phase, until COMPETE receives its loan back, the repayment ratio is 20% to the business angel and 80% to public investor. In the third phase, the ratio becomes equal 50-50%.

‘As an example, the Startup Manifesto has inspired 10 national manifestoes (with three more on the way).’

Slovakia

Slovak Growth Capital Fund (*Slovenský rastový kapitálový fond, j.s.c. – SRKF*). provides funds in the form of venture capital investment for SMEs based in Slovakia. Slovak Development Fund (*Slovenský Rozvojový Fond, j.s.c. – SDF*) provides venture capital investment for SMEs in development phase operating in Slovakia.

Spain

Fond-ICO Global in Spain is a public venture capital fund of funds of the state-owned bank *Instituto de Crédito Oficial*. With a total of $1.2 billion [€1.1 billion] available, the fund seeks to promote privately managed venture capital funds. Until the end of 2014, ICO helped to create 23 new venture capital and private equity funds, committing €631 million.

Lithuania

In Lithuania, two risk capital funds – the Seed Fund and the Startup Fund – have been set up to support SMEs in the high technology sector. The Seed Fund will invest in the development of the initial idea or concept of a SME while the Startup Fund will support SMEs for product development and marketing.

Ireland

In Ireland Innovative High Potential Start Up (HPSU) fund has been established by Enterprise Ireland to help support the startup and development costs of high potential startups (HPSUs), i.e., the companies that can develop innovative products and services that can be further sold on international markets. The Innovative HPSU fund enables Enterprise Ireland to purchase equity in a client on a co-funded basis.

Estonia
The Estonian Development Fund is a state-run public institution that makes early starting phase investments into SMEs with high growth potential. The investments are made with private investors and are implemented through the subsidiary venture capital fund AS SmartCap.

Denmark
Vækstfonden (The Growth Foundation) supports Danish companies by helping to finance R&D, internationalisation and skills development projects. It invests in early stage ventures that focus on life science and high tech, and provides mezzanine financing (a loan where the costs are dependent on the success of the firm) to a broad range of industries. For more information, visit http://www.vf.dk.

Fiscal incentives for venture capital, private equity and startup angels

Special incentives of this type have been set up in 13 countries, although they are fragmented and vary in scope from a 0% tax rate on capital gains to up to 105% tax relief on unsuccessful investment. For example, in Slovenia a special rate of 0% applies to venture capital companies through specific fiscal deductions to a limited or unlimited amount. In the United Kingdom, tax relief is available under the Enterprise Investment Scheme (30% of their investment back in income tax relief)[56] and Seed Enterprise Investment Scheme (up to 78% back on successful investments in 2015).[57] The Italian Startup Act introduced robust tax incentives for corporate and private investments in startups made by individuals (19% tax credit up to a maximum investment of €500,000) and legal entities (20% fiscal deduction up to a maximum investment of €1.8 million) for the years 2013-2016.

Alternative financing

New methods for innovative young firms, such as crowdfunding, can constitute additional means to access finance at a time when obtaining equity funding is difficult. Yet provisions for facilitating secure access to alternative sources of funding has been addressed in only nine European countries (Austria, Belgium, France, Germany, Italy, the Netherlands, Portugal, Spain and the United Kingdom).

Special tax regimes for startups and SMEs

The Startup Manifesto also proposes special tax regimes for startups and their investors. Preferential tax rates for young underfinanced companies and other incentives are very often make or break. Similarly, fiscal incentives encouraging reinvesting capital gains in startups could help to access finance for the companies.

The Startup Manifesto Policy Tracker shows that still not many countries introduced favourable fiscal regimes for startups and if, the tax regimes are very fragmented. Belgium, France, Hungary, Ireland, Italy, Latvia, Luxembourg, the Netherlands, Portugal, Romania, Spain and the United Kingdom (12 countries in all) have special tax regime for startups and SMEs with preferential tax rates ranging from 3% to 32%.

56 UK Government, *Enterprise Investment Scheme* https://www.gov.uk/government/publications/the-enterprise-investment-scheme-introduction/enterprise-investment-scheme

57 UK Government, *Seed Enterprise Investment Scheme* https://www.gov.uk/guidance/seed-enterprise-investment-scheme-background

Regulatory framework for crowdfunding

The Netherlands
In the Netherlands equity crowdfunding, mezzanine instruments or convertible notes are possible but there is no specifically designed applicable law. In terms of scope, equity-based crowdfunding is regulated by the European Union's Markets in Financial Instruments Directive (MiFID) whereas loan-based crowdfunding is regulated by national law. In addition, the Authority for the Financial Markets (AFM) has issued a list of requirements for crowdfunding platforms, which aim at ensuring consumer protection.

Belgium
In Belgium there is no dedicated law to crowdfunding, but Belgium amended their prospectus rules to better fit the crowdfunding business.

Spain
In 2015, the Spanish Parliament passed the law that establishes the framework governing crowdfunding financing in Spain. It covers both securities and lending crowdfunding. The Law 5/2015 on Promoting Business Financing Act (or "*Ley de fomento de financiacion empresarial*" or "LFFE") was published on 28 April 2015.

Germany
A "crowdfunding" exemption is set out in the *Kleinanlegerschutzgesetz* – Small Investor Protection Act – that entered into force in 2015. The legislation applies to profit-participating, subordinated loans or other investment products which grant the right to interest and repayment. In addition, The German Investment Act is intended to cover two business models of lending-based crowdfunding.

United Kingdom
The new regulatory framework for crowdfunding, Regulation PS14/4, was adopted on 01 April 2014. The resulting regime is generally felt to have achieved a sensible balance between promoting crowdfunding as an alternative financing method for individuals and businesses, whilst offering an appropriate level of protections to investors.

Portugal
The new rules on donation-based and reward-based crowdfunding entered into force on 01 October 2015. The Portuguese financial markets authority released as well a draft of the proposed rules for equity and lending crowdfunding, which was available for public consultation until 21 January 2016. Legislation establishing sanctions applicable to the infringement of the new crowdfunding rules is yet to be passed.

Italy
In accordance with the Italian Startup Act, in July 2013, the "regulation on the raising of venture capital by innovative startups through online portals" was published. A public consultation recently held by the Italian Securities and Exchange Commission (CONSOB), led to an upgrade of the equity crowdfunding regulations.

France
The French legal framework for crowdfunding activities is applicable as from 01 October 2014 (Ordinance no. 2014-559 as later detailed on specific provisions by Decree no. 2014-1053 dated 16 September 2014). The new legislation includes lending and securities-based crowdfunding platform. Donation-based crowdfunding platforms can adopt on a voluntary basis the status of *Intermédiaire en Financement Participatif.*

Austria
The Alternative Financing Act which came into force in August 2015 covers shares, equity shares, bonds, shares in cooperative, participation rights, silent partnerships and subordinated loans. In terms of crowdfunding it covers both securities and lending-based crowdfunding.

Tax relief for research and development

The Netherlands

Entrepreneurs that run a business in the Netherlands and carry out research and development may be eligible for reduced income tax. [*Wet Bevordering Speur- en Ontwikkelingswerk (WBSO)*]. Profits derived by corporate taxpayers from innovations are taxed at an effective tax rate of 5%. The innovation must be self-developed and only profits attributable to the innovation are taxed at a 5% rate.

United Kingdom

There are currently two R&D tax credit schemes in the United Kingdom, which differentiate between the size of the company. Both allow companies an enhanced tax deduction for their qualifying R&D expenditure. The rate of relief in the large company scheme is 130% and the rate of relief in the SME scheme is 225%. SMEs have the option to convert taxable losses attributable to R&D relief into a payable cash credit at a rate of 11%.

Italy

Innovative startups and SMEs can benefit from two important measures in favour of technological innovation: 1) Tax credit for R&D: The fiscal benefit up to 50% for investments in R&D relative to: employment of highly qualified staff; or costs for research “extra muros,” meaning in collaboration with universities and entities or research organisations and/or with other companies, such as innovative startups. 2). Patent Box: the Budget Law 2015 (art. 1, paragraphs 37-45) introduced fiscal benefits on income deriving from the use of intellectual property. The so called “Patent Box” allows companies the option to exclude from taxation 50% of income deriving from commercial use of intangible assets (copyrights, industrial patents, commercial brands). The more recent Investment Compact has enhanced such an instrument, fully including trademarks and commercial brands among the intangible activities subject to tax benefits.

Belgium

A patent income deduction for SMEs was introduced for the fiscal years 2014 and 2015 in order to support investment.

In terms of tax reliefs to reduce the tax on capital gains for entrepreneurs the situation is even less satisfactory. Belgium, Cyprus, Finland, France, Ireland, Italy, Portugal, Sweden and the United Kingdom (nine countries in total) introduced such measures. However, countries also put in place additional measures to ease startups’ burden such as reduced social contributions (Belgium and Poland), tax incentive with regard to the interest payable on loans for the purpose of purchasing or manufacturing tangible assets (Hungary and Latvia) or tax relief for certain research and development costs (Belgium, Italy, Latvia, the Netherlands and the United Kingdom).

5 Data Policy and Privacy

The Startup Manifesto aims to make government regulation and policy fit for the age of big data by improving data protection and making government more open and effective through technology. The case for a reduced fragmentation in data protection is well-known: more than 90% of Europeans say they want the same data protection rights across the EU, and the current, pre-General Data Protection Regulation legal framework is estimated to cost EU companies up to €3 billion per year in additional administrative burden.[58] Open government has been one of the most important digital policy initiatives of the last decade, and open data in particular has been recognised as a fundamental resource to build online businesses: opening up government data with easy access for free or marginal cost of distribution, the re-use activities could increase by up to €40 billion for the EU27.[59] Greater use of big data by government is expected to lead to potential saving of €300 billion per year in Europe alone.[60]

Overall, 53% of the actions proposed in the Startup Manifesto around this policy area have been implemented. Italy, at No. 1, stands out with all actions but one implemented, while at the bottom we see several East European countries. Overall, the greatest progress in this area is in the area of open government data, while little action has been done by member states on more flexible and integrated approaches to data protection.

'Open government has been one of the most important digital policy initiatives of the last decade, and open data in particular has been recognised as a fundamental resource to build online businesses.'

Table 10. Data Policy, Protection and Privacy

Rank	Country	Adoption rate
1	Italy	88%
2	United Kingdom	83%
	Netherlands	83%
4	France	78%
5	Germany	73%
6	Austria	69%
	Estonia	69%
8	Ireland	66%
	Sweden	66%
10	Slovakia	64%
11	Belgium	59%
12	Spain	54%
	EU Average	**53%**
13	Portugal	53%
	Poland	53%
15	Finland	51%
16	Greece	46%
	Romania	46%
18	Denmark	41%
	Latvia	41%
20	Czech Republic	36%
	Malta	36%
	Lithuania	36%
	Hungary	36%
	Bulgaria	36%
25	Slovenia	34%
26	Cyprus	31%
	Luxembourg	31%
28	Croatia	28%

Source: European Digital Forum Crowdsourcing Network

58 European Commission, "Impact Assessment of General Data Protection Regulation," *Commission Staff Working Paper* – SEC(2012) 72 Final

59 Graham Vickery, *Review of the Recent Studies on PSI Re-Use and Related Market Developments* (Paris: European Commission, 2013)

60 James Manyika, Michael Chui, Brad Brown, Jacques Bughin, Richard Dobbs, Charles Roxburgh, and Angela Hung Byers, *Big Data: The Next Frontier for Innovation, Competition, and Productivity* (San Francisco: McKinsey Global Institute, 2011)

With regards to data protection, the Startup Manifesto calls for a more unified approach to data protection across EU countries. The main initiative in this sense takes place at EU level with the forthcoming new General Data Protection Regulation, proposed in 2012 by the European Commission and due to be approved in 2016.

> ‘These findings could perhaps be the basis of a renewed, reinvigorated Startup Manifesto – a Startup Manifesto 2.0 – which would draw on learnings from the original Startup Manifesto.’

Still, member states can adopt policy measures, in particular to ensure faster uptake of cloud computing. But we find that only 12 countries have developed a cloud computing strategy, and in the vast majority of cases these are related to “government clouds,” with the idea that public administration could catalyse the growth of cloud computing as a lead market. Only 13 member states are taking part in the European Cloud Partnership or in the Cloud for Europe initiative.[61] France, at No. 4, is the only country to have substantially invested in a cloud computing strategy towards the private sector as well through the government funding of consortia that were supposed to compete with U.S. players (e.g. Amazon and Google), although so far the results have not lived up to expectations.[62]

Table 11. Data Policy, Protection and Privacy: Measures Adopted

Action	EU adoption rate
Data Policy, Protection and Privacy	**53%**
Revise and normalise data protection laws (unified data protection law in Europe).	52%
Remove the requirement for data providers to store information in any given country.	43%
Make government data public.	64%
Make governments think digitally (unified technological platform).	54%

The “iStrategy”in the Netherlands

On 15 November 2011, the Minister of the Interior presented the Dutch Government’s “iStrategy.” The general aim of the iStrategy is to replace the fragmented i-infrastructure with its many different internal service providers, with an infrastructure based on state-of-the-art, proven technologies. The new i-infrastructure should be based on the concept of “cloud computing” and subject to the necessary data security and data ownership requirements. After carried out a review of ICT facilities, the Dutch government published the Netherlands’ cloud computing strategy, promoting the implementation of cloud computing with certain caution.

61 The 13 countries taking part in the European Cloud Partnership or the Cloud for Europe initiative are Austria, Belgium, Estonia, France, Germany, Italy, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia and Spain.

62 Sandrine Cassini, “Cloud Souverain, un Gâchis à la Française,” *Les Echos*, 24 February 2015. http://www.lesechos.fr/idees-debats/editos-analyses/0204173981400-cloud-souverain-un-gachis-a-la-francaise-1096130.php

The Startup Manifesto also calls for a more flexible approach to data storage and notes that EU regulations in this area are "outdated" and "more restrictive than the U.S., putting U.S. companies and the U.S. in general at an advantage." It is not further specified what the main differences are, so it is difficult to identify precise indicators, but there is clearly a need for identifying new innovative solutions between data protection and data re-use. However, while most countries have developed programmes to encourage the re-use of government data, only the UK has devoted a dedicated effort to promote the re-use of personal and private data and greater consumer empowerment through the Midata programme.

'The Startup Manifesto also calls for a more flexible approach to data storage and notes that EU regulations in this area are "outdated" and "more restrictive than the United States.'

The midata programme in the United Kingdom

The aim of the midata programme, launched in 2011, is to enable consumers to have access to the information held by companies about their transactions in a reusable format. Since 2011, voluntary agreements have been reached with the main players in the banking and energy sectors to provide data back to customers to enable them to perform analytics and choose the best solution. Following this progress, the government is expected not to implement possible legislation on personal data compulsory release by companies. For more information, visit https://www.gov.uk/government/news/the-midata-vision-of-consumer-empowerment

Open government is today a well recognised policy priority in most countries and widely embraced at EU level by the Malmö Declaration and the EU eGovernment Action Plan.[63] Opening up government data is its most visible aspects, as it is deemed to lead to greater accountability and innovation. The major action in the last year in Europe has certainly been the new Public Sector Information Directive 2013/37/EU, which makes opening up government data the rule, rather than the exception. The vast majority of countries have a general obligation for public sector to allow for re-use of government data (21 countries), and in particular prohibits the granting of exclusive rights unless justified by public services' reason (23 member states, all but Belgium, Finland, Germany, Hungary and Slovenia). However, 11 countries haven't yet implemented the Directive.[64] Nineteen EU countries take part in the Open Government Partnership, a voluntary collaboration of countries taking additional commitments to deliver Open Government. With regard to scientific data, only nine countries have policies that support open access to data, while most countries have embraced the concept of open access to publication.[65]

63 European Commission, *Evaluation of the eGovernment Action Plan* http://www.egovap-evaluation.eu/

64 European Commission, *The ePSIplatform, The PSI Scoreboard* www.epsiplatform.eu/content/european-psi-scoreboard

65 European Commission, *European Research Area Progress Report 2014* http://ec.europa.eu/research/era/eraprogress_en.htm

Ireland
Contracts or other arrangements between a public sector body and a third party in respect of any document shall not grant exclusive rights to re-use the document, unless such a grant is necessary for the provision of a service in the public interest.

With regard to government digital thinking, the progress is slower. Most countries have aligned their interoperability framework with the European one (21 reach more than 50% of alignment), but only 11 have built analytical tools to deliver better public services by making better public use of internal datasets.[66]

Italy
The Data4all initiative regroups several projects carried on by the Presidency of the Council of Ministers with a common target: to improve the efficiency of public administration and the quality of public services through open data and analytics. It includes soldipubblici.gov.it, a simple tool to control expenditure data with the help of interactive tools; italiasicura.gov.it, a portal that allows the display of data regarding the hydrogeological situation and, in particular, the state of emergencies (such as floods and landslides) and the related work carried out by the Government; and OpenExpo – dati.openexpo2015.it, a portal to show the progress of Expo2015 – financial flows, purchases and payments, the state of construction site – in a more transparent way, easier to navigate by using simple visualisation tools.

United Kingdom
Barclays, the multinational banking and financial services company, runs a programme called “Barclays Local Insights.” It uses anonymised financial data to provide UK members of parliament with economic facts and figures about people and small businesses in their constituencies in England and Wales. These free-of-charge reports offer valuable up-to-date insights in spending habits, mortgages and business activities that lead to evidence-informed policymaking, and ultimately contribute to the society’s wellbeing. As more data from various sources becomes available, data analytics will proliferate and more importantly, it will be increasingly predictive – being able to produce ex-ante, not ex-post insight.

> ‘Open government is today a well recognised policy priority in most countries and widely embraced at EU level by the Malmö Declaration and the EU eGovernment Action Plan.’

66 According to the State of Play of Interoperability in Europe – Report 2014, Belgium, Croatia, Ireland, Latvia, Luxembourg, Romania and United Kingdom reach less than 50% alignment.

6 Thought Leadership

Despite the emergence of many globally successful startups, some Europeans still seem reluctant to celebrate entrepreneurial success and are notoriously wary of failure. Rather than advocating concrete measures, this part of the Startup Manifesto aims to promote a cultural change in the perception of startups in EU society by raising awareness through communication and removing the very concrete stigma of failure. One way of doing this is by creating national fora for communication and dialogue, such as the European Digital Forum, the publisher of this paper.

Overall, this theme shows very high compliance rates with 74% of the action in place. Once again, we see a strong difference between East and West European countries, and Scandinavian countries showing data below the average. The greatest progress has been achieved in establishing national platforms for policy dialogue while less work has been carried out on knowledge-sharing activities.

The first action deals with awareness raising and promotion of an entrepreneurship-friendly environment. Twenty-four countries report mass media or social media campaigns (even reality shows), as well as a wealth of startups competitions, startup-related events and mentoring services.[67] These events are often part of European or global campaigns such as Startup Week or Startup Weekend. There are many initiatives also aiming to promote women entrepreneurship, although in the majority of member states these are not specifically aimed at digital startups.

'One way of doing this is by creating national fora for communication and dialogue, such as the European Digital Forum, the publisher of this paper.'

Table 12. Thought Leadership

Rank	Country	Adoption rate
1	Netherlands	100%
	Italy	100%
	Ireland	100%
4	Belgium	94%
	Germany	94%
	Czech Republic	94%
7	United Kingdom	88%
	Portugal	88%
	Austria	88%
	Poland	88%
11	Greece	81%
	Malta	81%
	Slovenia	81%
14	France	75%
	Spain	75%
	Denmark	75%
	EU Average	**74%**
17	Estonia	63%
	Sweden	63%
	Lithuania	63%
20	Romania	56%
	Slovakia	56%
	Cyprus	56%
	Luxembourg	56%
	Hungary	56%
	Latvia	56%
26	Bulgaria	50%
27	Finland	44%
	Croatia	44%

Source: European Digital Forum Crowdsourcing Network

67 The four that don't yet have this extensive outreach and awareness raising are Croatia, Germany, Lithuania and Sweden.

While awareness raising is high on the agenda of the vast majority of countries, much less common (14 member states) is the provision of dedicated measures allowing a second chance for entrepreneurs.[68] In most cases, these measures pertain only to a simplification and streamlining of bankruptcy in order to enable greater survival rates and limit the negative consequences of bankruptcy. However only in a few cases do we find initiatives deliberately aimed at facilitating second chances.

Table 13. Thought Leadership: Measures Adopted

Action	EU adoption rate
Thought Leadership	**74%**
Initiate a mentality shift across Europe in terms of how we define success – promoting entrepreneurship.	77%
Appoint a Chief Digital Officer for every country in the EU.	71%
Create a 'best practices' repository.	50%
Establish a Digital European Forum.	96%

Lithuania

Over the past few years, the public agency Enterprise Lithuania has been telling the success stories of entrepreneurs who started a new business for the second time. Given the difficulties in this area, some "second chance" activities are included in the Entrepreneurship Action Plan 2014-2020. They are awareness-raising, mentoring, training and giving "second chance" entrepreneurs access to business networks. Measures aimed at improving the public image of honest failed entrepreneurs are also in place. Since the beginning of 2015, the courts appoint the bankruptcy administrators in bankruptcy proceedings using a computer programme. The purpose of these changes is to ensure a transparent process of appointment of bankruptcy administrators and shorten bankruptcy proceedings. The bankruptcy regulation on the sale of assets by public auction in bankruptcy proceedings was modified. The amended regulation came into force on 01 September 2015. It allows the sale of assets by electronic auctions, to make the bankruptcy procedure faster and more transparent.

'Twenty-six EU countries (all but Estonia and the United Kingdom) currently have a digital champion to promote digitisation throughout the different policy areas, although in most cases this is a different person from the political figure in charge for the policy area.'

Italy

The Startup Act has introduced a "fail fast" procedure: by exempting startups from the standard regulations on failure, this measure avoids that the entrepreneur is "stuck" for ages because of the liquidation procedure and allow him to start a new business project as soon as possible without suffering reputational and financial cost.

68 The 14 countries that don't yet have second-chance measures are Belgium, Bulgaria, Croatia, Czech Republic, Estonia, Finland, Greece, Hungary, Latvia, Luxembourg, Malta, Romania, Slovakia, Sweden.

Cyprus
The new insolvency law covers natural and legal persons in order to give, under certain conditions, a second chance to bankrupt, legal or natural persons to start again. The life-long stigma of bankrupt entrepreneurs is also dealt with. Based on the new law, cooperative and honest entrepreneurs are discharged from bankruptcy three years after they have been declared bankrupt.

Spain
The "second-chance law" (passed on 28 February 2015) includes a host of important policy initiatives, such as the reforms of the bankruptcy legislation and the introduction of a new legal status of "entrepreneur with limited liability" to protect an individual's personal assets and reduce the fear of failure. It complements the March 2014 law on urgent measures for refinancing and restructuring companies' debt.

Twenty-six EU countries (all but Estonia and the United Kingdom) currently have a digital champion to promote digitisation throughout the different policy areas, although in most cases this is a different person from the political figure in charge for the policy area. Only 14 countries report setting up knowledge exchanges on supporting startups, and in most cases these are *ad hoc* projects rather than established initiatives, such as for example the Italian Dinameeting. There appears to be limited integration and exchange between the different initiatives.

> 'There are many initiatives also aiming to promote women entrepreneurship, although in the majority of member states these are not specifically aimed at digital startups.'

Often, these knowledge exchanges are attached to a forum-like organisation. Most fora have such a representative organisations in place, although in most cases these are bottom up initiatives. Amazingly, all countries have set up associations at national level for pursuing the objectives of the manifesto, and all but three (Luxembourg, Malta and the United Kingdom) have representatives in the Startup Manifesto Policy Tracker Crowdsourcing Community. Occasionally, these associations are set up by government, such as Startup Denmark, but in most cases these are bottom-up initiatives, sometimes in competition, that are becoming the "voice" of startups at national level and become recognised by government.

Slovenia
The Initiative Start:up Slovenia is an answer to the increasingly larger gap in the evolution of the Slovenian startup ecosystem. In 2011, the leading players started collaborating into the Initiative Start:up Slovenia in order to champion startup policies and to support startups across Slovenia. The annual PODIM conference encourages socialising, exchanging knowledge and experience as well as networking between entrepreneurs, investors and other stakeholders of the national and international startup ecosystem.

The Netherlands
StartupDelta was launched beginning this year, led by special envoy Neelie Kroes. Together with the 10+ hubs in the Netherlands, StartupDelta makes the Netherlands the largest startup ecosystem in Europe. See www.startupdelta.org.

Conclusions – and Next Steps

The data gathered through the Startup Manifesto Policy Tracker have revealed a dazzling array of different, multifarious initiatives in EU member states. But it is time to look beyond rankings and percentages to identify some common challenges across priority areas that should be taken into account for future action in this area.

First, we see throughout this scoreboard that the startup ecosystem is still extremely fragmented both between and within each country. In most countries, reported initiatives are oftentimes more the result of a dispersed effort by many players than the result of an integrated strategy. The activities reported in the Policy Tracker are typically not the activities of just the national government, but a mix of government and civil society initiatives. This is probably a good thing, insofar as startup policies by definition need to be distributed and flexible. But the lack of an organic strategic framework also leads to redundancies and overlaps.

The fragmentation between EU member states remains a problem, but appears less important than in more traditional policy areas, since the startup community is by nature global and connected. As an example, the Startup Manifesto has inspired 10 national manifestoes (with three more on the way), and there are clear signs of a progressive restructuring of the community at national and European level through startup associations and bodies. Indeed, with the flourishing of events and associations, it is in some cases challenging to recognise exactly who "speaks for startups."

But the generally high completion rate for Startup Manifesto-inspired reforms shown here should be taken with a grain of salt. Many of the activities cited in this policy brief are neither new nor original; to the contrary, they often come from a very traditional government innovation policy toolkit. Governments have used and advocated public-private partnerships, training, guarantees, incubators and awareness raising for many years, and it is difficult to see or find genuinely original and disruptive initiatives among those described in this policy brief. In this sense, the high completion rate in such traditional policy areas as better access to capital reaffirms this impression. In other words, startup policy is not yet in most cases a new way of doing policies. It is still too often based on the adaptation of traditional government measures to a new priority – some would call this "old wine in new bottles." In line with this, throughout the five Startup Manifesto priorities, we find the most successful achievements in strategies, frameworks, communication and concepts, rather than in hard measures. Startup policy, in other words, is still more about words than deeds.

'Throughout the five Startup Manifesto priorities, we find the most successful achievements in strategies, frameworks, communication and concepts, rather than in hard measures. Startup policy, in other words, is still more about words than deeds.'

But the Policy Tracker has proven to be an effective tool for retrofitting smart indicators onto the Startup Manifesto and gathering rich data from those who know the situation best. The choice of future indicators should be further developed together with that community. The goal should be to identify smart variables that are able to reward EU member states that put a real effort into adapting policy frameworks to startups. For future policy cycles, it is important that indicators and monitoring are developed "by design" – in the inception phase of policy creation. This should be the goal of future work in the Startup Manifesto area, too. And it should perhaps be the basis of a renewed, reinvigorated Startup Manifesto – a Startup Manifesto 2.0 – which would draw on learnings from the original Startup Manifesto. We believe this new manifesto should contain better, more focused metrics and, like startup policy itself, should consciously draw from real-life experience to provide more relevant policy recommendations for generations to come.

'For future policy cycles, it is important that indicators and monitoring are developed "by design" – in the inception phase of policy creation.'

Austria

With a Startup Manifesto-based policy adoption rate of 68%, Austria is above the EU average (60%). It ranks No. 5 in institutional framework and excels in thought leadership (with 88% adoption for a No. 7 place finish). It shows only modest performance in adoption of skills- and education-based measures (ranking No. 19 with a 52% rate).

Recent years have seen Austria – and in particular Vienna – evolve from an entrepreneurial desert to a promising home for young startups. Still, despite the improving infrastructure and growing awareness of entrepreneur-driven issues (aided by successful local exits and flourishing business angels), there is a lack of venture capital for follow-up financing – and of the right entrepreneurial spirit. One of the initiatives to promote entrepreneurship in Austria is Pioneers Festival, an annual event gathering startups, investors, and technology-driven corporations with a specific focus on Europe, especially Central and Eastern Europe. Labour costs are also high, due to payroll-taxes and health insurance costs, but perhaps the biggest issue for entrepreneurs is a lack of real tax incentives for startups and startup investors. There are some political initiatives to adapt current law to modern day requirements. The government has recently presented its digital strategy, which echoes several suggestions of the Startup Manifesto.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**9**	**68%**
Institutional framework	5	75%
Skills and education	19	52%
Access to talent	8	56%
Better access to capital, lower barriers to success	14	67%
Data policy, protection and privacy	6	69%
Thought leadership	7	88%

Policy highlight

Action 2.1 "Turn Europe into the easiest place for highly skilled talent to start a company and get a job by rolling out a pan-European startup visa"
In mid-2011, a new criteria-led point-based immigration system was established in Austria, which introduced the combined residence and work permits "Red-White-Red Card" and "Red-White-Red Card Plus." These permits are intended for the following groups of qualified and highly qualified third-country nationals: very highly qualified workers, skilled workers in shortage occupations, other key workers, graduates of Austrian universities and self-employed key workers.

Belgium

Belgium shares the No. 5 place (together with Portugal) in the adoption of the Startup Manifesto recommendations with a 71% adoption rate. But it tops the rankings in several key categories, including better access to capital (No. 1), institutional framework (No. 2) and thought leadership (No. 4). More needs to be done in the skills and education area, where Belgium is a disappointing No. 25.

Belgium is home to a vibrant, active and fast growing startup scene. Startup Weekends, Hackathlons, Café Numériques, Meetups, Open Coffees and other events are very common in every part of the country. Every large town has its own acceleration programme; and co-working spaces are mushrooming. In early 2015, a group of successful Belgian entrepreneurs launched the Belgian Startup Manifesto. And a few months later, Alexander de Croo, deputy prime minister and minister of development co-operation, digital agenda, telecom and postal services, announced a bold plan to give entrepreneurs extra benefits to grow their new venture. The policies will focus on making crowdfunding easier and keeping lower labour costs for startups. This commitment to innovation is an opening move and is expected to impact upon the local entrepreneurial scene. A Startup Plan to Stimulate Growth for Newly-Formed Companies is a concrete first step to encourage young and beginning entrepreneurs to set up new businesses in innovative sectors. The plan provides more accessible financing, such as a tax shelter for startups, tax incentives for crowdfunding, and lower labour costs for newly formed companies. SMEs and micro-enterprises investing in digital will also receive incentives.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**5**	**71%**
Institutional framework	2	88%
Skills and education	25	38%
Access to talent	10	54%
Better access to capital, lower barriers to success	1	97%
Data policy, protection and privacy	11	59%
Thought leadership	4	94%

Policy highlight

Action 3.2 "Make it easier for high-growth companies to raise capital through public markets"
The tax shelter for startups is a new fiscal instrument to encourage young Belgian entrepreneurship. People who invest in a Belgian startup can count on a significant tax deduction on personal income. This ranges from 30% to 45% of the investment. The tax shelter for startups comprises a tax reduction of 45% for investment in new shares of a startup (micro company) and a tax reduction of 30% for investments in new shares of an SME or startup fund. The individual investor must hold the shares for four years. There is an investment threshold of €100,000 or 30% shareholding in the startup company. The startup company may raise up to €250,000 through the tax shelter regime.

Bulgaria

With an adoption percentage of 45%, Bulgaria is near the bottom of the country ranking at No. 25. The completion rate across all areas varies from 25% to 56%. Access to talent, where Bulgaria has a 48% adoption ratio, is the only area where the country performs above the EU average (ranking No. 15).

The startup ecosystem in Bulgaria has emerged recently and is evolving significantly. Thanks to co-working spaces such as Betahaus, SOHO and CowOrKing as well as local venture funds (LAUNCHub and Eleven) – boosted by investment through the Joint European Resources for Micro and Medium Enterprises (JEREMIE) programme of the European Investment Fund – the startup ecosystem is growing. Several international venture capital funds and strong angel investors backed local companies and there are a few dozen global success stories today. The boom of information-technology outsourcing, hardware and software solutions opened the eyes of a lot of international companies, resulting in a rising reputation for Bulgaria as an excellent source of bright minds. These developments activated entrepreneurship, as many professionals with years of corporate experience started their own ventures and were motivated to reach international recognition and investment. But there is still a long way to go to implement all recommendations of the Startup Manifesto.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**25**	**45%**
Institutional framework	27	25%
Skills and education	17	53%
Access to talent	15	48%
Better access to capital, lower barriers to success	23	56%
Data policy, protection and privacy	20	36%
Thought leadership	26	50%

Policy highlight

Action 1.2 "Teach our children the principles, processes and the passion for entrepreneurship from young age"
For professions requiring a third-level vocational qualification, entrepreneurship is a compulsory subject for all students. For professions requiring first- or second-level vocational qualifications, with the exception of the vocational field "business management and administration," entrepreneurship is optional. Student mini-companies are included in the teaching of entrepreneurship as an optional subject in vocational economic and non-economic high schools in 10th and 11th grade. Sessions are either twice weekly (72 hours) or four times a week (144 hours).

Croatia

With a total adoption rate of 32%, Croatia ranks No. 28 at the very bottom of the country ranking. It also ranks at the bottom of all individual rankings apart from institutional framework, where it ranks No. 16. This disappointing performance is due both to the structurally lower completion of EU initiatives in the newest EU member state, and actually lower activity on specific startups-dedicated policy initiatives.

But the newest EU member state is catching up. The startup scene in Croatia was already dynamic and well developed before the accession to the economic bloc, and its relatively recent EU membership lowers barriers for Croatian startups to expand further into Europe and bring fresh investment to the area. Despite good intentions, there are still regulatory challenges, and more concerted efforts need to be done to implement the Startup Manifesto recommendations.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**28**	**32%**
Institutional framework	16	50%
Skills and education	28	4%
Access to talent	26	23%
Better access to capital, lower barriers to success	27	44%
Data policy, protection and privacy	28	28%
Thought leadership	27	44%

Policy highlight

Action 3.1 "Increase private and institutional investment in startups"
Proof of concept private – financing of entrepreneurs pre-commercial activities in the early developmental phase of new products, services and technological processes Croatian Business Angels Network (CRANE) is a Croatian network of business angels and private investors interested in investing in productive and innovative company in the very early stages of development (http://www.crane.hr). An entrepreneurial impulse support programme provides direct financial contributions to SMEs in the information-technology sector in the form of grants (http://www.investcroatia.hr).

Cyprus

Ranked No. 20 with a 53% completion rate, Cyprus stands below the 60% EU average. It scores high on the institutional framework (No. 5), but its weakest areas are new initiatives in access to talent (No. 21) and data policy (No. 26).

The government of Cyprus has implemented some policy initiatives in line with the Startup Manifesto recommendations, with the pro-active support of authors of the inspiring national startup manifesto. The country has incorporated the national startup manifesto in the National Policy Statement for Entrepreneurship ratified by the Council of Ministers in December 2015, a concise action plan. Since then, Cyprus rightly positions itself as a good place for any startup to be at the beginning of their lifecycle, as you get the benefit of five times cheaper running and living costs than most other major cities. With a thriving and buzzing supportive ecosystem under the umbrella of Startup Cyprus, Cyprus is evolving into a hot European startup ecosystem driving change, supported by a liberal economy with competitive startup and investment incentives. Its small size makes minimum viable products testing really lean and mean, while funding carries organisations longer with significantly lower rental prices and availability of highly educated talent well versed in English.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**20**	**53%**
Institutional framework	5	75%
Skills and education	10	57%
Access to talent	21	35%
Better access to capital, lower barriers to success	17	65%
Data policy, protection and privacy	26	31%
Thought leadership	20	56%

Policy highlight

Action 5.1 "Initiate a mentality shift across Europe in terms of how we define success – promoting entrepreneurship"

The new Insolvency Law of Cyprus passed into law in early April 2015. The provisions of this bill cover natural and legal persons. It is geared at giving, under certain conditions, a second chance to bankrupt, legal or natural persons to start again. The lifelong stigma of bankrupt entrepreneurs is also dealt with. Based on the new law, co-operative and honest entrepreneurs are discharged from bankruptcy three years after they have been declared bankrupt.

Czech Republic

Czech Republic finishes in the No. 19 place with a 54% adoption rate. The country's performance in most areas is below the EU average.

Startups play an important role in the Czech economy, where they are known to quickly innovate, find market gaps and create new jobs. The Czech Republic is popular for skilled and relatively cheap information-technology skills, especially among big corporations (e.g. Novartis established its global information and communications technology hub in Prague). But many interesting young companies have also been born there – GoodData, Socialbakers, Cognitive Security, to name a few. The Czech government acknowledges the critical importance of tech entrepreneurship and the pivotal role of startups for the economy. CzechInvest, a government agency, runs accelerator, incubation and mentorship programmes. Recently, CzechInvest launched a new website portal CzechStartups.org. Under one roof, it provides information on incubation possibilities, contacts and consulting as well as possibilities of financing. There are several strong private incubation and venture-capital funds.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**19**	**54%**
Institutional framework	16	50%
Skills and education	14	54%
Access to talent	19	40%
Better access to capital, lower barriers to success	25	49%
Data policy, protection and privacy	20	36%
Thought leadership	4	94%

Policy highlight

Action 3.1 "Increase private and institutional investment in startups"
In the National Reform Programme 2015, the government restored the idea of a public instrument to support innovative SMEs through venture capital in the new programming period 2014-2020. The creation of a pilot National Innovation Fund (NIF) is intended to provide capital not only to startups in early phases, but also to help commercialise research and development projects. The fund will co-operate with private investors and be operational by 2017. The idea to establish such funds comes as a reaction to a weak risk capital market.

Denmark

Denmark achieves a total score of 53% adoption, ranking No. 20 in Europe. This advanced Scandinavian economy performs above the EU average in the thought leadership area (ranked No. 14 with 75% adoption rate) and just below the EU average in the access to capital area (ranking No. 13 with a 68% adoption rate). However, the completion rates are low in other areas.

Denmark has produced some of the hottest tech startups on the planet. The capital, Copenhagen, is vibrant. Many exciting programmes have been established to promote entrepreneurship. ICT is widely taught in educational institutions. The national government leads Startup Denmark, an initiative to promote entrepreneurship and startups. It is meant as a gateway for talented foreign entrepreneurs to Denmark's vast startup opportunities, such as accelerators, co-working spaces, investment funds, research centres, as well as grassroots initiatives.

Category	Rank	Percentage
Adoption of manifesto recommendations	**20**	**53%**
Institutional framework	16	50%
Skills and education	23	49%
Access to talent	20	35%
Better access to capital, lower barriers to success	13	68%
Data policy, protection and privacy	18	41%
Thought leadership	14	75%

Policy highlight

Action 1.1 "Make teachers digitally confident and competent to rise to the challenge"
In the 2015-2016 academic year, Denmark offers an online e-learning course with characteristics of a massive open online course (MOOC). The course is particularly aimed at lecturers who have an interest in online teaching and learning. The purpose is to give lecturers the competences necessary to design and deliver online courses. The course is a collaboration of a Danish-German regional network of academic institutions called Videnregion.

Estonia

Estonia comes No. 13 in the overall ranking with the total percentage of the Startup Manifesto adoption standing at 60% – just at the EU average. The progress in all areas is even, ranging around 60%. The country excels in data policy, occupying the No. 6 place, well above the EU average.

Estonia has highly developed e-government and a business-friendly environment. The country has made progress in promoting entrepreneurship and providing support to fast-growing innovative firms, and it has the potential to become a strong startup hub. Its e-services, mobile communications and Internet applications are among the most progressive in the world. Estonians are adaptable towards new technologies, and use them willingly. The large number of foreign investors doing business in Estonia and the dominance of world-renowned foreign companies in several economic sectors is evidence of the country's high investment attractiveness. This small Baltic nation is home to around 400 startups, and the number is set to grow. Recently, the Estonian government launched Startup Estonia. The aim is to boost the development of the Estonian startup ecosystem with training activities to support the emergence and development of startup companies and improve their accessibility for "smart money." The mission and objectives are consistent with the objectives of the Startup Manifesto.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**13**	**60%**
Institutional framework	9	63%
Skills and education	22	50%
Access to talent	10	54%
Better access to capital, lower barriers to success	22	59%
Data policy, protection and privacy	6	69%
Thought leadership	17	63%

Policy highlight

Action 2.1 "Turn Europe into the easiest place for highly skilled talent to start a company and get a job by rolling out a pan-European startup visa"
Estonia is the first country in the world to offer e-residency. This programme was launched in 2014. The aim is to encourage foreign entrepreneurship (both from the EU and third countries) to launch businesses in Estonia. E-residency is a state-issued secure digital identity for non-residents that allows digital authentication and the digital signing of documents. Digital authentication allows access to different e-services (provided both by the public and private sectors), and to log in to any online portals that recognise this type of authentication (such as internet banks, government portals, etc.). Digital signing allows users to sign securely any type of documents from anywhere in the world. A holder of e-residence may for example register his or her business electronically and sign business documents without having physically to be in Estonia.

Finland

Finland ties with Sweden at No. 16 with a Startup Manifesto implementation rate of 56%. Finland performs well in better access to capital (at No. 6 with an 86% ratio, above the EU average). Measures to improve the institutional framework and thought leadership deserve more attention.

Just a few years ago, the Finnish startup ecosystem was relatively small and inward-looking. Now it is drawing in the brightest high-tech minds and most innovative companies from around the world. The startup scene in Finland has given birth to two "unicorns" (startups whose valuation exceeds the value of €1 billion) – Rovio (Angry Birds) and Supercell. Since 2009, more than 200 gaming startups have set up shop in Finland. The trend can be attributed to the successes of Nokia's mobile and tech innovations, now carried on by hundreds of ex-employees. ICT is strongly embedded in the Finnish education system that excels in STEM (science, technology, engineering and mathematics) subjects. Helsinki is home to Slush, an annual mega conference where thousands of startups showcase their products to investors and media. Historically, Finland hasn't had a strong culture of serial entrepreneurship and the access to risk capital has been very limited. That is changing now: there is an influx of local venture capital funds and an increase in direct investment from international venture capitalists. One of the players helping local startups is Tekes, a state-run funding agency that provided funding to Rovio and Supercell.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**16**	**56%**
Institutional framework	24	38%
Skills and education	8	63%
Access to talent	8	56%
Better access to capital, lower barriers to success	6	86%
Data policy, protection and privacy	15	51%
Thought leadership	27	44%

Policy highlight

Action 3.1 in "Increase private and institutional investment in startups"
The Finnish government has increased the availability of venture capital considerably, in particular through fund-of-fund investments to leverage private-equity funding. The €230 million of government investment allocated for 2013-2017 is expected to raise more than €1 billion in venture-capital investment in total. Firms' growth is also promoted through a programme of 10 accelerators comprising about 100 portfolio firms. About €220 million of private funding has been raised for these firms in addition to €70 million of public funding. Seed Fund Vera Ltd is a nationwide seed fund for enterprises at their early stages. With its investment activities, the fund aims to facilitate and accelerate the growth of targeted enterprises and support them in becoming an interesting investment target for other investors and industrial partners.

France

France occupies the No. 8 place with a total adoption level of 69%. The country tops the rankings in access to talent (No. 1 with 69%), better access to capital (No. 2 with an 88% adoption rate) and data policy (No. 4 with 78% completion). Presently, the country ranks No. 16 (with a completion rate of 50%) on the institutional framework side. Another area than requires attention is measures to support skills and education, where France is No. 17 (with a 53% completion ratio).

A buoyant legislative movement around tech entrepreneurship started in France a few years ago, engaging a vibrant and energetic community of entrepreneurs, technology geeks and policymakers. Launched in 2013, *La French Tech* is aimed at fostering and supporting a collective movement around the startup ecosystem. It is financed by the French Economy Ministry and supported at the highest political level. The fact that the policymakers are already strongly engaging with the startup community probably explains why there is no national startup manifesto; a diagnosis has already been made and political leaders understand it's a priority to make France a "startup nation." Thus, the emphasis is now on legislative actions and implementation of a startup–friendly environment. On 26 January 2016, the French National Assembly adopted a law "Towards the Digital Republic." Axelle Lemaire, minister of state for digital affairs, introduced the bill, which was the product of a large public consultation. It intends to tackle many of the uncertainties faced by tech startups and to simplify rules.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**8**	**69%**
Institutional framework	16	50%
Skills and education	17	53%
Access to talent	1	69%
Better access to capital, lower barriers to success	2	88%
Data policy, protection and privacy	4	78%
Thought leadership	14	75%

Policy highlight

Action 3.5 "Tax share options as capital gains, not income, to attract talent to startups (special tax regime for startups)"

To direct savings towards business, tax on capital gains has been reduced and new financial products have been developed. Any individual domiciled in France for tax purposes who has made an investment in a suitable SME is eligible for the tax reduction. To qualify for the personal income tax reduction, the eligible company must also be either a company that was created less than five years ago in seed, startup or expansion stage, employing less than 50 employees and with an annual turnover or total assets of less than €10 million. In the case of an equity share in a SME purchased directly or indirectly, the total wealth tax reduction is set at 50% of the total payments made. The tax reduction is capped at €45,000.

Germany

Germany is well on the way to implement the Startup Manifesto recommendations. It scores high in thought leadership (94%) and measures to improve access to talent (63%), being above the EU average in these categories. The overall score is 70%, putting Germany in the No. 7 place.

Germany's thriving startup scene is one of the most unique in Europe. The capital Berlin is home to a mixture of tech entrepreneurs, digital startups, experts and scientists that are making waves in the technology scene. A large and growing number of co-working spaces, accelerators, incubators, innovation labs and entrepreneurship programmes provide the infrastructure for creative ideas to flourish and develop into successful new businesses. The challenge for entrepreneurship in Germany is a low tolerance for failure. According to the 2014 edition of the German Startup Monitor, 63.3% of startup entrepreneurs say this attitude is widespread in German society. Still, startups create jobs and contribute to growth. The country is home to unicorns like Delivery Hero, Home24, Rocket Internet and Zalando. The German government has highlighted their support for startups in their "High-Tech Strategy," recognising the importance of startups to support today's and tomorrow's needs for research and development to sustain economic wellbeing.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**7**	**70%**
Institutional framework	16	50%
Skills and education	9	59%
Access to talent	4	63%
Better access to capital, lower barriers to success	7	82%
Data policy, protection and privacy	5	73%
Thought leadership	4	94%

Policy highlight

Action 1.3 "Encourage university students to start a business before they graduate"
Led by the Federal Ministry of Economy and Energy, the non-technology-specific funding programme "EXIST – promotion of university-based startups" (*EXIST – Existenzgründungen aus der Wissenschaft*) supports technology-oriented startup teams originating from university environments, and does so while they are still in such environments. EXIST also supports the development of a culture of entrepreneurship at universities and research institutions. The EXIST Business Startup Grant supports students, graduates and scientists in preparing innovative technology and knowledge based startup projects. The EXIST Transfer of Research funds both the resource development necessary to prove the technical feasibility of startup ideas based on research and the preparation necessary to launch a business.

Greece

Greece's performance in terms of Startup Manifesto implementation is relatively good. With a total score of 60%, Greece stands slightly below the EU average in the No. 14 spot. The country does particularly well on the institutional framework side (where it ranks No. 9 thanks to recent startup-friendly measures). Greece's dire financial situation is reflected in its low score in better access to capital, where it ranks No. 25 with a 49% adoption rate).

As the authors of the Greek Startup Manifesto – the first national startup manifesto – put it, the Greek economy has experienced an unprecedented collapse since 2009, resulting in a gross domestic product decrease by almost 30% (the greatest for any European country in peace time), unemployment of 28% and youth unemployment as high as 65%. For Greece to recover, the country needs to achieve high growth rates – rates which no traditional economic activity promises to provide in short and medium term. Technology-enabled businesses, and especially highly innovative startup companies offering disruptive solutions with global reach, are well positioned to generate growth and employment. Greece is today definitely not the country of choice for startups for a variety of reasons. Among the most important is a complex and volatile tax framework as well as excessive bureaucracy and digital infrastructure that lags behind the EU average.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**14**	**57%**
Institutional framework	9	63%
Skills and education	14	54%
Access to talent	15	48%
Better access to capital, lower barriers to success	25	49%
Data policy, protection and privacy	16	46%
Thought leadership	11	81%

Policy highlight

Action 5.4 "Establish a Digital European Forum"
The aim of Hellenic Startup Association is to promote entrepreneurship as a massive, universal social choice with innovative features, openness and rapid growth.

Hungary

Hungary, at No. 24, still has a long way to go with an overall adoption rate of 46%. It is at the bottom of most individual area rankings with better access to capital (No. 12 with 69% and skills and education (No. 14 with 54%) as the most successful areas.

Hungary's capital Budapest is one of the most attractive metropolitan cities in Europe, and it also has a young, blossoming startup scene. Several successful Hungarian companies – Ustream, Prezi and LogMeIn – managed to build exceptional products and enter global markets. These startups are a big inspiration to a lot of people and had a significant impact on the startup culture emerging in Hungary. The startup scene is just awakening and the ecosystem in Budapest has only started its growth. As it evolves, it fosters new ideas and ways of doing business, and it makes it easier for aspiring young talent to get enthusiastic about starting a business. A startup ecosystem of accelerators, funding sources and co-working spaces is also emerging.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**24**	**46%**
Institutional framework	24	38%
Skills and education	14	54%
Access to talent	27	21%
Better access to capital, lower barriers to success	12	69%
Data policy, protection and privacy	20	36%
Thought leadership	20	56%

Policy highlight

Action 3.5 "Tax share options as capital gains, not income, to attract talent to startups (special tax regime for startups)"

The Hungarian tax system offers three types of simplified corporate tax schemes that SMEs or micro enterprises may opt for. As of January 2013, additionally to the simplified enterprise tax (EVA), small businesses are able to choose from two more optional tax schemes: a small taxpayers' lump sum tax (KATA) and a small business tax (KIVA). Under the KATA scheme, micro businesses will pay a fixed 50,000 forints (€162.00) per month for a full-time self-employed associate and half of this for a part-time self-employed associate in place of the main taxes on profits and payroll. As of 01 January 2014, taxpayers can opt for a lump-sum tax of 75,000 forints (€243.00), which comes with a raised social security benefit base. KIVA is an option for businesses with 25 or less employees and annual revenue of below 500 million forints (€1.62 million). Under this scheme, a business will pay a flat 16% on its cash-flow profits and payroll. Losses can be carried forward.

Ireland

Ireland, at No. 4 overall with a 72% adoption rate, leads the EU in thought leadership measures as well (No. 1, with 100% adoption). The country has made substantial progress in other areas, where its scores range from 50% (on access to talent, where it comes in at No. 14) to 88% (on better access to capital for a No. 2 spot).

Ireland, whose growing economy has had the highest growth rate in the eurozone in recent quarters, has been generating a lot of buzz in the startup community recently. Many of the international tech giants – such as Facebook, Google and Twitter – have European headquarters there and cities like Dublin are ablaze with startups. Uber recently announced that it will open a centre of excellence in Limerick that will initially generate 150 jobs and enable the city to further promote itself as a smart hub. Irish entrepreneurs have enthusiastically committed to creating a Startup Manifesto for Ireland in advance of hosting the Startup Nations Summit in Ireland in November 2016 (this is the first time this conference will take place in Europe). Startup Ireland, representing the Irish startup sector, aims to make Ireland the best place in the world to establish a high-growth startup by 2020. Ireland's startup ecosystem seems to be at a phase of network growth where individual pockets of excellence are increasing in density and starting to connect with each other nationally. Arguably, this process could be accelerated by further adoption of the triple-helix model – deepening university, business and government collaboration with high-growth startups.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**4**	**72%**
Institutional framework	9	63%
Skills and education	7	66%
Access to talent	14	50%
Better access to capital, lower barriers to success	2	88%
Data policy, protection and privacy	8	66%
Thought leadership	1	100%

Policy highlight

Institutional Framework "General regulatory environment for startups"
In July 2013, Ireland launched its National Digital Strategy, which has sections dedicated to supporting traditional enterprises to realise the full opportunities of online transactions and trade, realising the full benefits of digital in the classroom and providing continued support for Ireland's digital enterprises and entrepreneurs. From the perspective of supporting digital startups, the strategy promotes the continued activity of the Irish National Digital Research Centre, which sponsors collaborations between research bodies and commercial enterprises and acts as an accelerator for digital startup projects.

Italy

The political determination to provide policy support to startups is reflected in Italy's No. 2 ranking (with 82% adoption). It is ranked No. 1 in adopting access-to-talent measures (69%), data policy (88%) and thought leadership (100%). Its ranking in all other categories is within the Top 5.

Since 2012, Italy – the second manufacturing country in the European Union and the fifth in the world – has endowed itself with a powerful arsenal of legislation aimed at strengthening the national startup ecosystem. The groundbreaking Italian Startup Act provides the following: 1) Italian startups can be incorporated online and for free; 2) they are exempted from any fee otherwise due to the Chambers of Commerce; 3) they have a free-of-charge access to an online, bilingual, tailor-made platform for national and foreign investors, called #ItalyFrontiers; 4) the team can be paid with variable performance-based salaries; 5) employees and consultants can be remunerated with stock options and work for equity tools, taxed only in the event of capital gain; 6) they can raise money in exchange for shares through equity crowdfunding campaigns (this is the first *ad hoc* regulation in the world); 7) startups get access to free, automatic public guarantee on bank loans; 8) they benefit from robust tax relief on equity investment made by individuals (19% tax credit up to a maximum investment of €500,000) or legal entities (20% fiscal deduction up to a maximum investment of €1.8 million); 9) in case things go wrong, startups benefit from a fail-fast mechanism. Recently, the Investment Compact Decree has extended most of the benefits previously attributable just to innovative startups to a broader range of companies:

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**2**	**82%**
Institutional framework	5	75%
Skills and education	5	74%
Access to talent	1	69%
Better access to capital, lower barriers to success	4	87%
Data policy, protection and privacy	1	88%
Thought leadership	1	100%

Policy highlight

Action 2.1 "Turn Europe into the easiest place for highly skilled talent to start a company and get a job by rolling out a pan-European startup visa"
Launched in 2014 by the Italian Ministry of Economic Development, the Italia Startup Visa programme has introduced a rapid, exclusively online, centralised and simplified mechanism for granting working visas to attract non-EU talents who intend to set up a new innovative startup in Italy or join an existing one as a shareholder. In addition, as regards talent retention, in late 2014, along the lines of Italia Startup Visa, the programme Italia Startup Hub was launched, with which the applicability of the fast-track procedures was extended to non-EU citizens that are already in possession of a regular residency permit (obtained for example for study reasons) and intend on staying beyond its expiry to launch an innovative startup.

Latvia

Latvia is in the No. 26 place near the bottom of the country ranking with a total adoption rate of 44%. Despite the disappointing results in most categories, it performs rather well in better access to capital (64%).

A former Soviet republic, this Baltic state is an otherwise dynamic and vibrant economy whose growth has been fuelled by foreign direct investment. Now Latvia rediscovers entrepreneurship. In 2015, the Latvian startup community platform "Labs of Latvia" was officially launched. The platform provides information from and about Latvian startups to the world. Its database includes more than 100 Latvian startups, investors and communities. The 2015 Latvian presidency of the Council of the European Union was crucial too. Riga hosted #InnoWeek2015 – "First Innovative Enterprise Week," with a focus on access to finance for research, innovation and SMEs. The conference brought together EU policymakers and Baltic startup scene representatives. Despite these positive developments, the country still faces many challenges in adopting Startup Manifesto-based recommendations.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**26**	**44%**
Institutional framework	24	38%
Skills and education	24	45%
Access to talent	27	21%
Better access to capital, lower barriers to success	19	64%
Data policy, protection and privacy	18	41%
Thought leadership	20	56%

Policy highlight

Action 3.3 "Buy more from smaller businesses"
Latvia is top of the EU in this area and has kept its leading position for a long time. SMEs benefit from a well-established electronic procurement system, which facilitates participation and increases the success rate. In 2008, the share of public contracts awarded to SMEs was 64%. Five years later, it reached 74%. These results are due to several amendments to public procurement law that have been adopted and implemented since 2008. These have made the public procurement process more transparent, more open for SMEs and less burdensome. The Public Procurement Bureau provides information on changes in legislation so that all parties involved know about and understand new regulation.

Lithuania

Lithuania ranks No. 26 with an overall adoption rate of 44%. The country's performance is uneven, ranging from 25% adoption in institutional framework to 70% in access to capital.

When it comes to startups, this tiny country of three million is starting to make a name for itself. There are more than 100 annual events, meetups, hackathons and workshops in Lithuania. Among those gathering the most participants yearly are LOGIN (attracting more than 80 speakers and 3500 visitors from all over the world), StartupWeekend Lithuania and SV2B. Currently there are several co-working spaces: Hub Vilnius, StartupHighway X, Namas Hub, Sunrise Valley and Talent Garden Kaunas. Lithuania offers the lowest corporate profit tax rate among its neighbours. It has about 1.5 million people in its labour force, including 26,000 IT professionals. Half of all Lithuanians have higher education and are fluent in at least two foreign languages. Lithuania has a very low cost of living, with labour running roughly a quarter of the EU average. Enterprise Lithuania, a state agency tasked with supporting the establishment and development of competitive businesses in Lithuania, runs the Startup Lithuania initiative. It aims to foster the Lithuanian startup ecosystem by providing consultancy, mentoring, matchmaking with venture capital funds and improving the political and economic environment for startups to flourish.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**26**	**44%**
Institutional framework	27	25%
Skills and education	26	31%
Access to talent	19	40%
Better access to capital, lower barriers to success	11	70%
Data policy, protection and privacy	20	36%
Thought leadership	17	63%

Policy highlight

Action 5.1 "Initiate a mentality shift across Europe in terms of how we define success – promoting entrepreneurship"
State-run agency Enterprise Lithuania has been telling the success stories of entrepreneurs who started a new business for the second time. Some "second-chance" activities are included in the Entrepreneurship Action Plan 2014-2020. They are awareness-raising, mentoring, training and giving "second-chance" entrepreneurs access to business networks. Measures aimed at improving the public image of honest failed entrepreneurs are also in place. Since the beginning of 2015, courts appoint the bankruptcy administrators in bankruptcy proceedings using a computer programme.

Luxembourg

Luxembourg ranks No. 23 with a 48% adoption rate. The country's performance ranges from 27% on measures to increase access to skills and education to 66% in better access to capital. The Grand Duchy benefits from its position as a global financial centre. Seemingly, large multinational corporations and financial institutions are seen as policy priorities. More needs to be done to support startups and enact startup-friendly legislation.

The startup community in Luxembourg is wide, dynamic and international. The country boasts a stable business environment and political system as well as easy access to administrations and government and favourable taxation environment. Businesses have access to good digital infrastructure. The Luxembourg Entrepreneur and Startup Community has quickly become one of the fastest-growing communities made up entirely of entrepreneurs, investors and startup aficionados. Hundreds of members have joined the network and attended the numerous meetups organised each month, with early adopters, techies, entrepreneurs, investors and others. On the government side, LuxInnovation, a state-run agency, provides support to startups and other innovative businesses. "Fit for Start" supports startups in their establishment phase by offering early-stage funding and coaching. The aim of the programme is to improve the startup conditions for young innovative enterprises in the ICT sector.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**23**	**48%**
Institutional framework	9	63%
Skills and education	27	27%
Access to talent	18	44%
Better access to capital, lower barriers to success	15	66%
Data policy, protection and privacy	26	31%
Thought leadership	20	56%

Policy highlight

Institutional Framework "General regulatory environment for startups"
The Luxembourg government presented its *Digital Lëtzebuerg* initiative in October 2014. It aims to strengthen and consolidate the country's position in the ICT field. In mid-2013, a new action plan for SMEs was announced, confirmed in the new government programme. The plan will be the framework for a more dynamic policy in support of SMEs. The government has created a legal framework to support development and innovation by formally approving for instance the legislation paving the way for the so-called "one-euro company."

Malta

At No. 14 and an adoption rate of 57%, Malta is very near the EU average. It has been particularly successful in thought-leadership measures (with 81% adoption), strongly above the EU average. Measures to improve data policy (36%) is the weakest area.

Malta is a stable eurozone economy, offering a safe business environment, friendly taxation and good business ownership regulation. For startup companies, Malta offers a history of small enterprise, a vibrant location with a workforce of young naturally English-speaking graduates. Startup Weekend Malta is a 54-hour event that brings together designers, developers, entrepreneurs, and experts from all domains. All Startup Weekend events follow the same basic model: anyone is welcome to pitch their startup idea and receive feedback from their peers. Teams form around the top ideas (as determined by popular vote) and embark on a three-day frenzy of business model creation, coding, designing, and market validation. The weekend culminates with presentations in front of local entrepreneur leaders with an opportunity for critical feedback. On the government side, state-owned Malta Enterprise provides support to startups and dynamic businesses, including financial support, seeking to implement the Startup Manifesto recommendations. Malta's recently launched Digital Strategy echoes the Startup Manifesto and translates its recommendations into specific national policy priorities.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**14**	**57%**
Institutional framework	9	63%
Skills and education	19	52%
Access to talent	17	46%
Better access to capital, lower barriers to success	20	63%
Data policy, protection and privacy	20	36%
Thought leadership	11	81%

Policy highlight

Action 1.3 "Encourage university students to start a business before they graduate."
The University of Malta's new Centre for Entrepreneurship and Business Incubation has been setup to put knowledge-intensive entrepreneurship at the top of the University of Malta's outreach agenda. The Centre is currently targeting knowledge-intensive sectors such as science, technology, engineering and creative media.

The Netherlands

The Netherlands is No. 1 with a Startup Manifesto-based adoption rate of 85%. It excels in institutional framework (No. 1 at 100%), thought leadership (No. 1 at 100%) and access to talent (No. 1 at 69%). Its weakest performance is on better-access-to-capital-based measures, where it scores No. 8 (with a completion rate of 80%).

The Netherlands is a relatively small country with a relatively large entrepreneurial impact. It all happens in 10+ leading innovation hubs that are 90 minutes apart – giving entrepreneurs access to top talent, technology and ecosystems to help them grow their business. The Netherlands is a fast-changing, dynamic economy that presents opportunities to all entrepreneurs, innovators and great minds who think on an international scale. Startups, such as Booking.com and Adyen, are changing the way we travel and pay. The Netherlands has a unique proposition as a "testbed" and "launch pad" for startups and scale-ups. Dutch consumers are also very open to change and tech savvy. To give an extra boost, the government has initiated the StartupDelta initiative: a dedicated team with excellent connections in enterprise, government, research and all aspects of the startup community. StartupDelta, led by Special Envoy Neelie Kroes, former European Commission vice-president for the digital agenda, closely collaborates with the innovation hubs to make the Netherlands the leading startup ecosystem in Europe. To support the European initiative in this area, local entrepreneurs launched the Dutch Startup Manifesto.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**1**	**85%**
Institutional framework	1	100%
Skills and education	4	82%
Access to talent	1	69%
Better access to capital, lower barriers to success	8	80%
Data policy, protection and privacy	2	83%
Thought leadership	1	100%

Policy highlight

Action 3.2 "Make it easier for high-growth companies to raise capital through public markets"
Launched in 2013, EnterNext is a subsidiary of the Euronext Group designed to develop and promote its stock markets specifically for SMEs. Drawing on its pan-European presence, EnterNext brings together all Euronext Group initiatives for companies with market capitalisations under €1 billion, including companies listed in the B and C compartments of its regulated European markets and on Alternext, the market tailored to the needs of SMEs. EnterNext comprises the 750 listed small and mid cap companies on Euronext markets in Belgium, France, the Netherlands and Portugal.

Poland

Poland is in the Top 10 of Startup-Manifesto-related policy adopters with an overall adoption rate of 68%. However, progress is uneven. Its highest achievements are recorded in thought leadership (No. 7 at 88%) and skills and education-enhancing measures (No. 2 at 87% adoption). Poland's performance in better-access-to-capital-based measures (No. 20 at 63%) is modest.

Entrepreneurship has deep roots in Poland, and has helped the country achieve a level of independence and relative strength over the years. There is an ever increasing number of innovative companies which strengthen and develop the Polish startup ecosystem. Successes achieved in complex industries like biotechnology and programming demonstrate the unlimited potential of Polish talent. However, in order to fully utilise this capacity, there is a need for an ecosystem that supports innovation in Poland.
The country is well on the way of implementing the recommendations of the Startup Manifesto. Importantly, this work is supported by the national Startup Poland association and echoed in Poland Startup Manifesto.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**9**	**68%**
Institutional framework	9	63%
Skills and education	2	87%
Access to talent	10	54%
Better access to capital, lower barriers to success	20	63%
Data policy, protection and privacy	13	53%
Thought leadership	7	88%

Policy highlight

Action 5.1 "Initiate a mentality shift across Europe in terms of how we define success – promoting entrepreneurship"
The "Polish Product of the Future" competition is aimed at promoting and disseminating innovative products and technologies. It also helps change attitudes and raise awareness of the need to implement innovative ideas, and of the benefits of collaboration between the research and development sector and business. The competition is organised by the Polish Agency for Enterprise Development and its honorary patron is the minister of economy. Over 800 innovative projects have competed during the 18-year history. Many products developed from the awarded innovations have been successfully launched on Polish and international markets.

Portugal

Portugal is No. 5 with an overall adoption rate of 71%. In particular, it scores high in institutional framework (No. 5 with 75% adoption), access to talent (No. 5 with 60% adoption) and skills and education (No. 6 at 73%). The country stands above the EU average in all individual scores apart from data policy (53%) where it stands exactly at the EU average.

After several years of economic hardship, Portugal is witnessing a real entrepreneurial boom, as more young people are choosing to start their own business. This has resulted in an explosive growth in the number of startups. To boost entrepreneurship even more, the Portuguese government created an investment agency called Portugal Ventures, a €450 million fund focusing on investments in innovative, scientific and technology-based companies. In the last year several Portuguese startups – such as Aptoide, Anubisnetworks, Feedzai, OutSystems, Talkdesk, Unbabel, Uniplaces and Veniam – raised significant amounts of international capital (more than €150 million in total). Moreover, the new government just announced a new strategy named Startup Portugal, that will include a very ambitious programme of investment tax incentives and matching funds for business angels and venture capital, along with a strong focus on accelerators and incubation networks, and incentives for startups and innovation. A number of startup incubators have been established, offering new businesses an office or desk to get them off the ground. Startup Lisboa, for example, one of the largest incubators in the country, hosts around 80 startups at any one time from various areas of business, from tech to tourism and everything in between. Based in Lisbon, Beta-i is an organisation with the mission to improve entrepreneurship through creating and boosting a network of entrepreneurship, accelerating startups with global ambition (over 550 in the last five years) and facilitating their access to investment (over €50 million raised). In June 2014, Beta-i was recognised as the biggest startup and entrepreneurship promoter in Europe by the European Enterprise Promotion Awards.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**5**	**71%**
Institutional framework	5	75%
Skills and education	6	73%
Access to talent	5	60%
Better access to capital, lower barriers to success	10	78%
Data policy, protection and privacy	13	53%
Thought leadership	7	88%

Policy highlight

Action 4.4 "Make governments think digitally (unified technological platform)"
Portugal was among the first European countries to develop a national open data portal (http://www.dados.gov.pt) in line with its e-government agenda. In order to promote the reuse of open government data, the country supports the developing of applications based on open data. Portugal is also one of the participating countries in the pilot Cloud4Europe.

Romania

Romania ranks No. 9 with a Startup Manifesto-inspired policy adoption rate of 68%. This is thanks to Romania's relatively strong performance on adopting new skills-and-education-based measures (No. 1 with 90%) and institutional framework (No. 2 with 88%). The result comes from a series of pro-business reforms implemented in March-December 2014 under the leadership of Florin Jianu, minister for small- and medium-sized enterprises, business environment and tourism.

Romania's troubled past and extremes of economic hardship have given rise to an enforced entrepreneurial culture of self-sufficiency and resilience, which has spawned a strengthening business sector, a wealth of technical skills and resources and a flourishing startup community. A strong culture of programming, innovation and incubation is emerging. Universities in Bucharest, Timișoara, Cluj-Napoca, Iași and Constanța provide a regular source of talented people and drive tech innovation. The Romanian startup ecosystem now boasts numerous incubators, co-working spaces and dedicated events to help emerging entrepreneurs. National startup figures are modest, but growing. However there are barriers to business growth including a lack of startup funding, bank lending and equity investment, as well as a relatively small domestic consumer market.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**9**	**68%**
Institutional framework	2	88%
Skills and education	1	90%
Access to talent	5	60%
Better access to capital, lower barriers to success	17	65%
Data policy, protection and privacy	16	46%
Thought leadership	20	56%

Policy highlight

Institutional Framework "General regulatory environment for startups"
In October 2014, the Ministry of Economy published the National Strategy for SMEs and Business Environment – Horizon 2020. The strategy's overall objective is to create a favourable environment for business, private initiative and entrepreneurship, stimulating the creation and development of SMEs and support to increase the competitiveness of the local business environment but also the development of existing businesses and creating new jobs by the end of 2020. The SME Law adopted in 2014 includes as one of the main features applying the SME Test, to be done by the initiator of legislation. It consists in conducting a survey on potential effects arising from the activities of SMEs in introducing new proposed regulations.

Slovakia

Slovakia is No. 18 in the ranking with a Startup Manifesto adoption rate of 55%. The completeness of individual areas ranges from 40% to 60%, with access to talent being the most successful (a No. 5 ranking with 60% adoption).

Slovaks are natural problem solvers, and the forefathers of the Slovak tech scene started to work on their first business ventures not long after the collapse of communism in 1989. A big advantage is the small size of the country. Everyone knows everyone, and mentors, angel investors and venture capitalists are easily approachable at various events. It is also a great test market for business-to-business products as one can easily meet top-level executives and corporate partners. SAPIE (The Slovak Alliance for Internet Economy), a major driver of the innovative and Internet economy in the country, was formed two years ago with over 40 members ranging from multinational players to domestic business icons. Slovak President Andrej Kiska – a former serial entrepreneur himself – avidly promotes an innovation agenda that would unite ecosystems with a strong vision. In 2015, the Slovak government in co-operation with SAPIE prepared and passed the first wave of pro-startup legislation. Among the key elements are new forms of enterprise structure tailored for the needs of high-growth companies, a plan for tax incentives and support for angel investors.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**18**	**55%**
Institutional framework	16	50%
Skills and education	19	52%
Access to talent	5	60%
Better access to capital, lower barriers to success	27	44%
Data policy, protection and privacy	10	64%
Thought leadership	20	56%

Policy highlight

Action 5.1 "Initiate a mentality shift across Europe in terms of how we define success – promoting entrepreneurship"
The country participates in the European network of female entrepreneurship ambassadors. The Slovak Guarantee and Development Bank (*The Slovenská záručná a rozvojová banka – SZRB*) offers the Businesswoman Loan (*Loan PODNIKATEĽKA*). It grants direct loans to startups and expanding small entrepreneurs in the Slovak Republic. The loan is aimed at businesses that are for a majority female owned or have a high proportion of female employees. The fund offers short-term and medium-term loans to fund working capital (receivables, inventory, goods, etc. but not including wages and overheads), fixed assets (tangible and intangible), and to refurbish and modernise fixed assets.

Slovenia

Slovenia is No. 21 with a score of 52% adoption. The country performs best in thought leadership (No. 11 at 81%) and skills and education (No. 10 at 57%). Better access to capital (No. 24 at 53%) and data policy (No. 25 at 34%) are the weakest areas.

Startup companies and the high-tech industry in Slovenia are growing and expanding. Unfortunately, it still happens on a small scale, and the impact on the overall Slovenian economy is limited. The Slovenian startup ecosystem is still fragile and fragmented. The country has developed a framework for general support to entrepreneurship but it doesn't yet bring as many results as it could, as there is still no differentiation between entrepreneurship and startups, and tailored startup-oriented measures are lacking. Some foundations of a national startup ecosystem have been developed but still more has to be done. Local entrepreneurs have produced a Slovenian Startup Manifesto – a national roadmap in support of the (European) Startup Manifesto. Over the course of the next five years, the initiative aims to create hundreds of new jobs in startups, to connect at least 50 startups with the most important startup ecosystems in the world and to create or attract high-impact startups with global potential.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**21**	**52%**
Institutional framework	16	50%
Skills and education	10	57%
Access to talent	21	35%
Better access to capital, lower barriers to success	24	53%
Data policy, protection and privacy	25	34%
Thought leadership	11	81%

Policy highlight

Action 5.4 "Establish a Digital European Forum"
In 2011, leading Slovenian innovators came together through Initiative Start:up Slovenia to create a national programme for encouraging entrepreneurship, and to ensure a network of comprehensive support for launching and building startup companies across Slovenia. The national competition Start:up of the Year initially identified more than 100 startups, which have been promoted, educated and integrated into a growing network of contacts, financing and other support services of the Slovenian entrepreneurship ecosystem. Start:up Slovenia is the organiser of PODIM, one of the largest international startup and business conferences in the Central and Eastern Europe region.

Spain

Spain ranks No. 12 with a 63% Startup Manifesto adoption rate. However, it is in the Top 10 when it comes to institutional framework (63%), better access to capital (No. 8 at 80%) and access to talent (No. 10 at 54%). Adoption of measures to improve skills and education (No. 13 at 55%) is the only area in which Spain performs below the EU average (56%).

Some 89% of employment in Spain is generated by companies with 20 employees – or less. And yet, the Spanish startup ecosystem lacks connection between different initiatives as well as useful and objective information about available resources. Furthermore, since the ecosystem is so young, there is a large disproportion of experienced and unskilled entrepreneurs. The Spanish entrepreneurial ecosystem has made a lot of progress in the last couple of years. However, there are still some individual and cultural elements that damage entrepreneurial activity and affect personal and corporate decision making processes. To drive the much-needed change, a group of entrepreneurs launched the Spanish Startup Manifesto in support of the Startup Manifesto.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**12**	**63%**
Institutional framework	9	63%
Skills and education	13	55%
Access to talent	10	54%
Better access to capital, lower barriers to success	8	80%
Data policy, protection and privacy	12	54%
Thought leadership	14	75%

Policy highlight

Action 3.2 "Make it easier for high-growth companies to raise capital through public markets"
In 2014, the Government of Spain adopted a draft law regulating venture capital companies and closed-end collective investment schemes. This law is expected to create new institutions known as "SME venture-capital companies" which will benefit from a more flexible financial framework to make use of debt instruments. They would be required to invest at least 70% of their assets in SMEs, to take part in their management and to provide them with advisory services. The law is also expected to reduce administrative burdens and speed up administrative procedures for venture capital companies.

Sweden

Sweden ranks No. 16 with an adoption score of 56%, slightly below the EU average. Scores range between 50% (institutional framework) and 66% (better access to capital and data policy) with measures to increase access to talent being the weakest area (33%).

Sweden is one of the most competitive economies in the world with a strong business environment and an efficient public administration. The country has a large and diversified export market reaching beyond Europe. Sweden is – paradoxically enough – the second best country in the world when it comes to producing modern billion-dollar startups. Only Silicon Valley beats Stockholm when it comes to unicorns per capita. But this refers to only a handful of companies. Ninety-nine percent of all companies in Sweden are small businesses and today they account for four of five jobs. This is not reflected in Sweden's politics where the focus lies on big corporations, and where the biggest slice of state funds are allocated to mature companies and regional policy regulations, with a very slim investment in, and understanding of, new and growing businesses. To overcome this problem, leading Swedish entrepreneurs have joined forces to promote the Startup Manifesto. They produced the Swedish Startup Manifesto with an ambitious goal – to make Sweden the most startup-friendly country in the world where many young companies can grow, thrive and stay.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**16**	**56%**
Institutional framework	16	50%
Skills and education	10	57%
Access to talent	24	33%
Better access to capital, lower barriers to success	15	66%
Data policy, protection and privacy	8	66%
Thought leadership	17	63%

Policy highlight

Action 3.2 "Make it easier for high-growth companies to raise capital through public markets"
First North is Nasdaq's European growth market, designed for small and growing companies in Finland and Sweden. Using a less extensive rulebook than the main market, the First North market provides companies more room to focus on their business and development while still taking advantage of all the positive aspects of being a listed company. And unlike the regulated main market, every company on First North has a Certified Adviser to ensure that companies comply with all requirements and rules. Many large and established companies began their journey on First North, creating growth and gaining experience. Many of these companies went on to listing on the Nasdaq regulated main market.

United Kingdom

The United Kingdom is No. 3 with a total adoption score of 77%. The country excels in all categories, achieving the completion percentage in most areas within the rage of 80-90%. The only area where the progress has been modest is increasing access to talent, where the UK dips to No. 24 (33%). This is due to the UK's restrictive immigration policy overall, and a special status in the EU (it opts out from common European migration policies).

The United Kingdom is an advanced, high-income market economy. The services sector dominates the UK economy, contributing up to 80% of its gross domestic product; the financial services industry is particularly important. The United Kingdom also has one of the most vital startup ecosystems worldwide. A vibrant cultural scene, an international workforce and a wide network of tech hubs and accelerators also help London continue to attract young businesses. The national government is business-oriented and seeks to create a startup-friendly climate in the country. In September 2014, the Coalition for a Digital Economy (COADEC) launched the UK Startup Manifesto, to support the Startup Manifesto and translate its recommendations into country-specific initiatives. It has been backed by over 200 leading startups and investors, including founders and partners from King, TransferWise, SwiftKey, Lovestruck, Funding Circle, MOO, Index Ventures, Passion Capital, Seedcamp and Accel Partners. The UK Startup Manifesto sets out 24 ways the government can make the UK a world leader on digital innovation.

Category	Rank	Percentage
Overall adoption of manifesto recommendations	**3**	**77%**
Institutional framework	2	88%
Skills and education	3	85%
Access to talent	24	33%
Better access to capital, lower barriers to success	4	87%
Data policy, protection and privacy	2	83%
Thought leadership	7	88%

Policy highlight

Action 3.1 "Increase private and institutional investment in startups"
The UK Future Technologies Fund (UK FTF) is a £200 million [€255 million] technology focused fund-of-funds launched in February 2010 by the European Investment Fund and the UK Government. It invests into venture capital funds in the ICT, life sciences and advanced manufacturing sectors. The fund should have a UK focus and an emphasis on early and development stage companies. But it also considers European teams that have shown an ability to invest successfully into UK businesses.

Startup Manifesto Policy Tracker Crowdsourcing Community

Austria: **Alexander Zuser**, managing director, P R O – Professionals for Policy and Regulation

Belgium: **Karen Boers**, managing director and co-founder, Startups.be; president, European Startup Network

Bulgaria: **Chris Georgiev**, board member, StartUP Bulgaria

Croatia: **Jan Jilek**, president and co-founder, Interactive Advertising Bureau (AIB) Croatia; founder, 1000startupsEU

Cyprus: **Stavriana Kofteros**, special entrepreneurship and development adviser, deputy press spokesperson, Democratic Rally Cyprus; director, Cyprus chapter, the Founder Institute; co-founder, StartupCyprus.org, the startup ecosystem of Cyprus body

Czech Republic: **Maria Staszkiewicz**, deputy executive director, Aspen Institute Prague

Denmark: **Mette Lysdal**, former head of section, Danish Business Authority

Estonia: **Mari Vavulski**, head, Startup Estonia; supported by **Rivo Riistop**, project manager, Estonian Development Fund

Finland: **Greg Anderson**, co-founder and editor, ArcticStartup

France: **David Monteau**, director, La French Tech

Germany: **Niklas Veltkamp**, managing director for startups, Bitkom

Greece: **Dimitris G.E. Tsingos**, founder, CEO and head of entrepreneurship, StartTech Ventures; and **Dimitris Drakoulis**, president, Greek Association of Computer Engineers

Hungary: **Laszlo Tar**, founder, Startups.hu

Ireland: **Eoin K. Costello**, CEO and co-founder, Startup Ireland; supported by **Thomas Cooney**, professor, Dublin Institute of Technology; board member, Startup Ireland and **Jamie Meehan**, doctoral candidate, Dublin Institute of Technology

Italy: **Stefano Firpo**, director-general for industrial policy, competitiveness and small and medium enterprises, Ministry of Economic Development, Government of Italy; supported by **Mattia Corbetta**, policy officer, directorate-general for industrial policy, competitiveness and small and medium enterprises, Ministry of Economic Development, Government of Italy

Latvia: **Eduards Filippovs**, managing director, Latvian SME Forum

Lithuania: **Rimantė Ribačiauskaitė**, startup coordinator, Enterprise Lithuania

Luxembourg: **Sergey Filippov**, associate director, the Lisbon Council

Malta: **Sergey Filippov**, associate director, the Lisbon Council

Netherlands: **Lieke Vollenbroek**, senior policy adviser, StartupDelta

Poland: **Eliza Kruczkowska**, CEO, Startup Poland

Portugal: **Pedro Rocha Vieira**, president, Beta-i

Romania: **Florin Jianu**, president, Young Entrepreneurs Association of Romania

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About the European Digital Forum

The **European Digital Forum** is a think tank dedicated to empowering tech entrepreneurs and growing Europe's digital economy. The initiative is led by the Lisbon Council, a European think tank based in Brussels, and Nesta, the United Kingdom's innovation foundation, in collaboration with the European Commission's Startup Europe initiative. The European Digital Forum was launched at the World Economic Forum in January 2014 as a vehicle to intellectually accompany the 22-point action plan put forth in the **Startup Manifesto** (www.startupmanifesto.eu) written by the Leaders Club, an independent group of founders of world-leading technology companies based in Europe, including Atomico, HackFwd, Rovio, Seedcamp, Spotify, Tech City Investment Organisation (TCIO), Tuenti and The Next Web. In the manifesto, which was drafted to spur discussion on improving Europe's startup ecosystem and digital-era performance, the European tech leaders proposed establishing a permanent independent think tank to explore and elaborate a more decisive approach to startups, an invitation which was seized and carried forward by the Lisbon Council and Nesta in 2014. Among the founding partners of the initiative are the European Investment Fund (EIF), Banco Bilbao Vizcaya Argentaria (BBVA) and Telefónica. Accenture is a partner. Follow the European Digital Forum on twitter at www.twitter.com/edf_eu.

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