



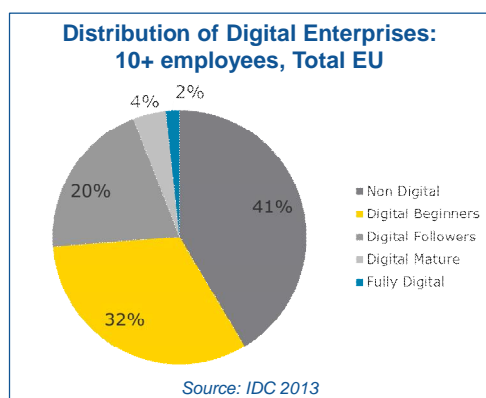
## STRATEGIC POLICY FORUM ON DIGITAL ENTREPRENEURSHIP

### Fuelling Digital Entrepreneurship in Europe

#### Background paper

##### Introduction

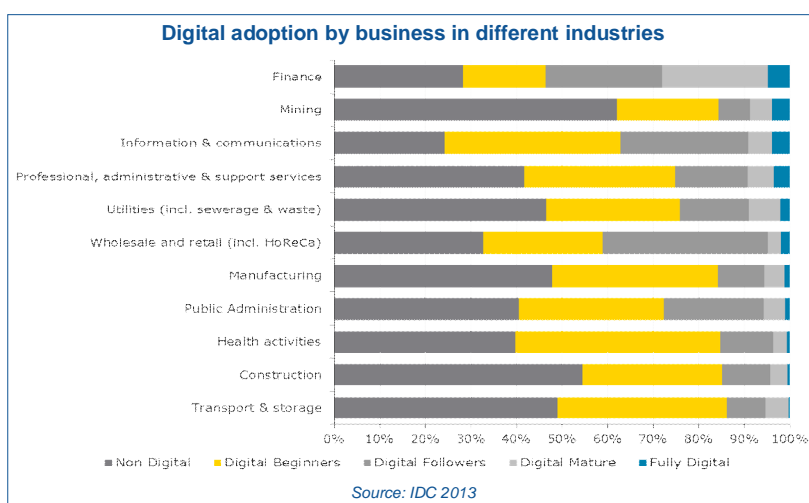
The digital economy is developing rapidly worldwide. The digital economy already contributes up to eight per cent of GDP in G-20 economies, powering growth and creating jobs. In Europe, studies have shown that SMEs grow two to three times faster, creating new jobs, when they embrace novel digital technologies. Growth in the adoption of technology and subsequent benefits are not just restricted to ICT businesses. Technologies can be used by existing or ‘traditional’ businesses to transform all areas of business activity.



Novel technological trends, such as mobile and social solutions, cloud computing, data analytics, digitisation of manufacturing, including digital

technologies for the design, prototyping and testing of industrial products, as well as collaborative technologies, offer a new range of opportunities for business services in the knowledge economy.

These technologies hold potential for the creation of new business value to EU companies, thanks to new market opportunities, higher revenue streams, faster times ‘to-market’, enhanced service provision, increased productivity and competitiveness. The digitisation of manufacturing transforms the entire manufacturing industry. It also enables opportunities for the re-location of industry in Europe. How well and how quickly European businesses adopt digital technologies will be a key determinant of growth in future years.



However, this huge potential is dramatically under-exploited in Europe, with 41% of enterprises being non-digital and **only 2% taking full profit of the digital**

**opportunities** (embracing the four main digital technologies -mobile, social media, cloud and data analytics).

And the adjacent figure shows that digital adoption varies significantly by sector.

Government and business leaders throughout Europe should make it a priority to encourage and support SMEs to make full use of the latest digital technologies and realise the associated economic benefits. Greater use of advanced digital technologies by SMEs can boost both growth and employment<sup>1</sup>. There is ample room for improvement.

Experts suggest that we are still only just at the beginning of the potential digital growth, with only one per cent of the potential digital connectivity achieved so far. The number of connected devices creating data, automating processes and providing services is exploding. According to IDC estimates, by 2020 the ICT industry will generate nearly €4 trillion in spending worldwide and approximately 40 per cent of the sector's revenue and almost all of its growth will be driven by novel digital technologies that today represent just 22 per cent of ICT spending<sup>2</sup>.

Many EU entrepreneurs are already leveraging digital technologies to create successful businesses and significant economic impact, but it is essential that EU companies keep up to speed, avoiding competitive disadvantage with companies in other regions of the world. It is estimated that 1.5m additional jobs would be created in the EU Internet Economy, if the entire EU mirrors the performance of US or Sweden<sup>3</sup>.

### *The EU policy response*

Digital entrepreneurship embraces all new ventures and the transformation of existing businesses by creating and using novel digital technologies.

Digital enterprises are characterised by a high intensity of utilisation of novel digital technologies (particularly social media, big data analytics, mobile and cloud solutions) to improve business operations, invent new business models, sharpen business intelligence, and engage with customers and stakeholders. They create the jobs and growth opportunities of the future.

SMEs and digital enterprises are recognised by policymakers and researchers as central to economies across the world through their contributions to wealth creation, income generation, output and employment.

With limited resources policymakers are faced with difficult decisions about the policies, programmes and initiatives that should be used to foster Digital Entrepreneurship. Indeed, there is frequently a lack of understanding of the ways in which programmes, projects and initiatives contribute to supporting digital enterprises and SMEs.

The European Commission recognises the key role that digital technologies can play in improving the business landscape in Europe. The Europe 2020 strategy for growth and jobs, and its flagships – i) the Digital Agenda for Europe, ii) the Single Market Act, iii) the Industrial policy for the globalisation era, and iv) the Entrepreneurship 2020 Action Plan – provide a solid foundation in setting the scene and passing a strong political message to achieve the goal of making the digital single market a reality.

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<sup>1</sup> BCG, 2013. "Ahead of the Curve: Lessons on technology and growth from small-business leaders", [https://www.bcgperspectives.com/content/articles/technology\\_software\\_globalization\\_ahead\\_curve\\_lessons\\_technology\\_growth\\_small\\_business\\_leaders](https://www.bcgperspectives.com/content/articles/technology_software_globalization_ahead_curve_lessons_technology_growth_small_business_leaders)

<sup>2</sup> IDC, 2012. "IDC Predictions 2013: Competing on the Third Platform", <http://www.idc.com/getdoc.jsp?containerId=238044>

<sup>3</sup> Online Jobs Boosting Europe's Competitiveness – Vlerick Business School, Feb 2013

In the Entrepreneurship 2020 Action Plan, the Commission highlights the potential of the smart use of ICT as an enabler of entrepreneurship, growth and jobs. The Commission is dedicated to accelerate the creation of new business opportunities and the transformation of the European business environment through novel digital technologies.

Based on intensive dialogue with stakeholders and policy analysis, a policy framework has been developed to describe the vision and key priority areas for policy intervention. The framework is structured along five pillars, each describing key factors and actions influencing Digital Entrepreneurship. The Commission is committed to working towards the deployment and implementation of this five-pillar plan.

ENABLING DIGITAL ENTREPRENEURSHIP				
Digital knowledge base and ICT market	Digital business environment	Access to finance	Digital skills and e-leadership	Entrepreneurial culture
<i>Enhancing digital innovation, commercialization and the ICT sector</i>	<i>Strengthening digital infrastructure, the regulatory framework and improving ease of doing business</i>	<i>Facilitating access to finance and enhancing digital investments</i>	<i>Fostering e-leadership skills through education and training</i>	<i>Creating a supportive entrepreneurial culture</i>
<ul style="list-style-type: none"> <li>▶ Public and/or private sector support the creation of new companies and foster the development of existing ones that embrace digital</li> <li>▶ Knowledge diffusion to enhance digital innovation is encouraged.</li> <li>▶ ICT sector acts as an engine for diffusion and commercialization of new services/ideas.</li> </ul>	<ul style="list-style-type: none"> <li>▶ A clear and supportive regulatory environment makes doing digital business simple, market entry is facilitated and there is an active and dynamic supply and demand of digital technologies</li> <li>▶ Access to and trust in digital markets is heightened, as a result of an improved ICT infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>▶ Enhanced access to finance is available, targeted at the creation, survival and growth of digital entrepreneurs</li> <li>▶ Traditional forms of lending are complemented by innovative mechanisms targeted at enhancing digital investments</li> <li>▶ Fiscal and tax frameworks are supportive and help to enable all business to embrace digital technologies</li> </ul>	<ul style="list-style-type: none"> <li>▶ A supportive education system exploits the new opportunities arising from ICT development, so individuals have the skills and the knowledge to improve business efficiency and develop new business models powered by digital</li> <li>▶ Entrepreneurs and business leaders are more e-competent and able to enhance growth and internationalization</li> </ul>	<ul style="list-style-type: none"> <li>▶ The entrepreneurial culture is more supportive and embraces digital entrepreneurs. They are fully integrated in this context and their image and role in society are both improved and emphasized.</li> </ul>

Relevant actions and initiatives launched to-date include:

- Open dialogue with key stakeholders and the study on “Doing Business in the Digital Age”<sup>4</sup> identified the key technological trends and proposed a five pillar strategy and 21 recommendations for actions cutting across policy areas, at EU, national/regional level. It also provided recommendations for the public and private sectors. Proposed actions cut across different policy areas. They included boosting digital and entrepreneurial skills to leveraging the Single Market, innovation campaigns, awareness and mentoring, access to finance, crowdfunding, visas for highly skilled entrepreneurs, and the reinforcement of clusters.
- The **Digital Entrepreneurship Monitor**<sup>5</sup>: a tool to monitor the key technological and market trends, emerging business opportunities, new business paradigms and their impact on the European economy, as well as relevant policy initiatives all over Europe.
- A major pan-European awareness raising campaign and eMentoring ecosystem to catalyse and support new business ideas. The objective is to

<sup>4</sup> [http://ec.europa.eu/enterprise/sectors/ict/ebsn/digital\\_supply\\_chains/digital\\_age\\_en.htm](http://ec.europa.eu/enterprise/sectors/ict/ebsn/digital_supply_chains/digital_age_en.htm)

<sup>5</sup> <http://ec.europa.eu/enterprise/dem>

sensitise entrepreneurs on the changing business landscape and the new business opportunities offered by novel digital technologies. It will establish a European eMentors ecosystem to inspire and support new entrepreneurs and intrapreneurs. Activities will include training, advice and hands-on coaching on how to do business in the digital age and match-making events among stakeholders to explore new partnerships. This action started in January 2014 and will run for two years.

- Complementary studies to analyse competences and e-leadership skills, focusing on scientific and creative disciplines, and managerial and entrepreneurial skills to address new technologies and markets.

To ensure the **governance** of this policy initiative, the **Strategic Policy Forum on Digital Entrepreneurship is set up** to reinforce dialogue among industry, science, and politics and advise the Commission on a EU vision, strategy and roadmap on digital entrepreneurship. The launch meeting of the Strategic Forum will take place on 28 February 2014.

### ***Member State Initiatives to support Digital Entrepreneurship***

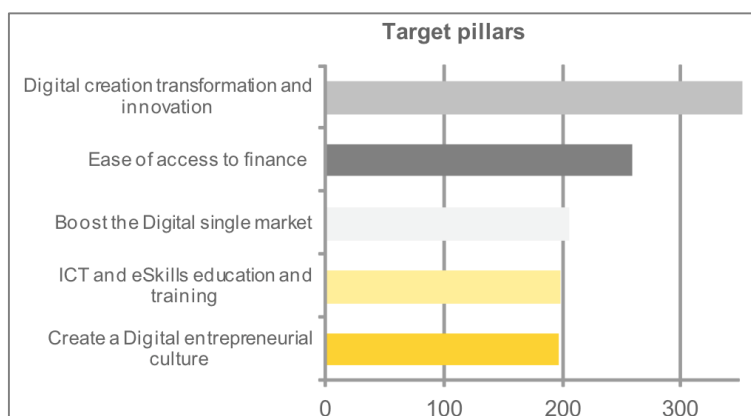
The Digital Entrepreneurship Monitor<sup>6</sup> identified more than 1,000 inspiring examples of initiatives provided by public, public/private and private sectors and non-governmental organisations to support the development of digital entrepreneurship. Although not exhaustive, the set of policy initiatives is comprehensive enough to derive some trends shaping the EU contextual framework.

705 initiatives/policies were identified in EU28 Member States, and a further 300 initiatives were found in other countries. It is evident that EU countries attempt to foster a supportive environment; especially for micro-enterprises (<10 employees), which dominate the SME sector. Three quarters of the initiatives targeted micro-enterprises. Support targeting other companies, such as start-ups and fast growing companies, was also notable.

As might be expected during a time when many national and regional governments are keen to enhance business growth and competitiveness, public sector led initiatives were dominant (45 per cent). But it was also notable that the public sector had worked in tandem with the private sector to provide almost one quarter of all initiatives (23 per cent).

The majority of initiatives are not sector specific. However, a relatively large number were focused on the supply side - a fifth of initiatives targeted the ICT sectors that produce the digital technologies used by Digital Enterprises.

Initiatives identified by the Monitor were categorised by the five pillars of the Digital Entrepreneurship Framework (shown on page 2). The first pillar, which focuses on digital enterprise creation, transformation and innovation was the most



<sup>6</sup> <http://ec.europa.eu/enterprise/dem/initiative-database>

popular for the initiatives (52 per cent). The second most popular area was enhancing access to finance (Pillar 3), this area had 37 per cent of initiatives. Initiatives with an holistic approach to boosting Digital Entrepreneurship across all five pillars were very rare: only 3 per cent of the initiatives had this breadth of focus.

Nevertheless, a number of governments have developed strategies to support the development of Digital Entrepreneurship and showcase its achievements among existing SMEs and start-ups across the five pillars. In September 2012, the UK publishes a blueprint on how to boost Digital Entrepreneurship through policy actions. A number of initiatives were developed, such as: awards that recognize and place the spotlight on success in Digital Entrepreneurship, including the Digital Entrepreneur of the Year (which rewards both business leaders who spot commercial opportunities for digital, and the technical minds that work behind the scenes on digital advancement); the “Entrepreneur First” initiative, encouraging young students to start a career as entrepreneurs directly after University, etc. In June 2013, the UK launched its Information Economy Strategy, featuring actions to help local businesses and organisations, especially SMEs, to be able to confidently use technology, trade online, seize technological opportunities and increase revenues in domestic and international markets.

Also in the summer of 2013, Ireland published 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. The proposed actions include a voucher scheme for small businesses wishing to develop their online trading presence through investments in technology as well as accessing suitable expertise, technical or training supports to achieve this. From the perspective of supporting digital start-ups, the Strategy promotes the continued activity of the Irish National Digital Research Centre (NDRC), which sponsors collaborations between research bodies and commercial enterprises and acts as an accelerator for small digital start-up projects. It does so by creating high-impact ventures out of opportunities in the research base and by accelerating business model innovations to the point where the ventures secure commercial follow-on investment.

Other key examples exist in Germany, Denmark and Italy. In Germany, the eCompetence network helps companies to increase their efficiency using ICT applications and to digitize their business processes by providing valuable knowledge, practical information, expert assistance and support in the selection and use of appropriate ICT solutions.

Similarly, the Danish IBIZ Centre (a public-private partnership) has made it its mission to promote the uptake of novel digital technologies by SMEs. Some of the activities of IBIZ include the organization of “Denmark tours”, which bring IT suppliers out to the rural areas where many Danish SMEs are located, as well as the development of simple self-help tools that business owners can use to uncover hidden potential for efficiency gains.

In Italy, the DINAMEETING initiative represents a way of creating a digital entrepreneurial culture as it consists in promoting and disseminating best practices for businesses looking to invest in ICT. It does so through a B2B model, whereby it is companies that provide advice to other companies. DINAMEETING has identified 10 SME "champions" which, as a result of adopting ICT, have scaled up or have radically changed their operating models. Through these champions, other aspiring businesses have been encouraged and given advice on investing in new technologies and experiencing a growth curve similar to that followed by the champions.

These examples provide a flavour of the variety of initiatives that countries are already implementing to support Digital Entrepreneurship. They also demonstrate the necessity to learn from each other, join forces, and coordinate action at EU level, to unleash the new business opportunities and re-launch the economy based on the digital lever.