



Internal Market, Industry, Entrepreneurship and SMEs Directorate General

Building-up regional and urban ecosystems for digital transformation

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Regions and Cities as poles for Digital Transformation

Regions and Cities can create vibrant ecosystems **to improve the life of their Citizens**, through **digital transformation** of businesses, organizations and public administrations



Blueprint for cities and regions

- ✓ Being a digital launch pad entails the **creation of the right environment** to accelerate the digital transformation of businesses and organisations
- ✓ We have identified **four attributes** which local stakeholders can leverage to truly help their regions to go digital
- ✓ Based on the thorough analysis of qualitative data collected from **different city stakeholders acting in different contexts** and in territories with uneven levels of digital maturity



Digital transformation initiatives and best practices

There is significant scope for businesses, organisations and citizens from the same or different territories to collaborate and learn from one another. The examples below provide illustrations of different initiatives, collaborative projects, organisational structures, policy measures and programmes created by ambassadors for digital transformation at the local level. The uptake of similar initiatives is key to accelerate the digital transformation of Europe's cities and regions.

Opening up access to city data to facilitate the development of new solutions to local urban problems

- Bristol City Council is set to transform Bristol into one of the most important 'Internet of Things' testbeds in the world, assisting international cities in their quest to become smarter and more digitalised.
- The council intends to establish the first ever smart city operating system that is pro-open standards. The system will also offer bandwidth to meet the demand of developers and service providers.



Bristol

Bringing together local ambassadors and community stakeholders to drive the "local" sharing economy

- Amsterdam Sharing City acts as a joint initiative connecting different local stakeholders to harness the opportunities of the sharing economy in the city.
- Amsterdam has become the first 'Sharing City' of Europe. The city is home to several successful sharing businesses such as the borrowing platform Peerby. It also offers extensive digital infrastructures, services and tools which have enabled the Sharing City to come alive.

amsterdam sharing city

Amsterdam

Connecting actors and problem owners in an open innovation process

- Future by Lund is an innovation platform stimulating an entrepreneurial culture through the focus on three challenges faced by the city: mobility, smart energy systems, and lighting and illumination.
- Future by Lund does not only connect local stakeholders, the platform also serves to assist them throughout their digital initiatives in an open innovation process.



Lund

Redesigning layoffs: enabling Nokia employees to find new jobs and launch their ventures

- Nokia launched the "Bridge" programme in 2011 to provide new career opportunities to its laid-off employees.
- The city of Espoo along with the national government, Nokia and education providers have developed collaborative strategies to reskill or assist laid-off employees in their entrepreneurial ventures. The programme contributed to the creation of more than 400 companies in Finland with 40% of firms operating in the ICT sector.



Espoo

Tallinn

Collaborating to design ubiquitous urban digital services

- Tallinn is cooperating closely with the city of Helsinki and through this cooperation it has been able to achieve many successes in the fields of energy, transport and smart cities integrated solutions.
- The FINEST Twins Center of Excellence (CoE) is set to become the first EU cross-border Smart City center of excellence and demo lab.



FIN EST Twins

Commercialising technologies and intellectual property

- NYU's seed-stage venture capital fund invests exclusively in startups from current NYU students, faculty members, and researchers.



New York

Luxembourg

- Public-private partnership for digital reskilling.
- The "R4coding" programme was established by Luxembourg's job centre with the support of major companies and co-financed by the European Social Fund.
- The coding course is offered at a new Webforce3 school opened at the Beval Technoport and it provides job seekers with the required skills to work as integrators or junior developers.

WEBFORCE3

Hamburg

Going digital to enhance the efficiency of businesses

- smartPORT Logistics (SPL) is one of the most innovative digital solutions of the port of Hamburg.
- The SAP Connected Logistics based solution manages the traffic by interconnecting businesses, partners and customers of the port.



Łódź

Creating supportive environments for entrepreneurs and technology industries

- Łódź Special Economic Zone facilitates investments, especially innovative ones, to modernise industries, expanding business in comprehensive IT services and research and development.



ŁÓDŹ SPECIAL ECONOMIC ZONE

Trento

Opening up and using mobility data to improve user experiences

- OpenMove is a smart mobility solution ideated by a local start-up, Lucien Srl, to optimise public means of transport services.
- The major step that led to the development of OpenMove was the decision taken by the Trentino Alto Adige region to make mobility data open to the citizenship. Through Open Move App, citizens are given the possibility to purchase ski lifts, parking, bus, and train tickets both for urban and extra-urban routes; the validation is possible on-board by shooting the QR code.



Nice

Tracking the latest technological advances to anticipate changes

- As an advisory board gathering representatives from local businesses and chaired by the president of Amadeus, the global IT company, was created by the economic development agency of the French territory "Côte d'Azur". This strategic board enables the leaders of the agency to keep pace with the latest technological advances likely to have an impact on the region's economy.



Rethinking the human habitat with the help of digital technologies

- The FabLab Barcelona is one of the leading laboratories of the worldwide FabLab network.
- FabLab Barcelona currently supports and/or develops initiatives of different scales, from smart devices for data collection by individuals, to the development of the new generation of Fab Labs in the Green Fab Lab project or to the new production models for cities with the Fab City project.



Barcelona

Lisbon

- Nurturing entrepreneurs to guarantee their success.
- The Start-up Lisboa business incubator selects the most innovative and promising startups on mobile, software development, web platforms, marketplace.
- The private non-profit organization developed by Lisbon Municipality provides entrepreneurs and companies with office spaces and a support structure, thus maximising their chances of success.

Start up Lisboa

Find out more and submit your own digital transformation initiatives at www.digitallytransformyourregion.eu





European Commission

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Leadership and collaboration for a smart governance of the local digital ecosystem



Digital skills & entrepreneurs

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to accelerate the digital transformation process



Are you a digital ambassador in your city and region?



www.digitallytransformyourregion.eu

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Key infrastructures and investments for digital launch pads



Access to data and technologies for applied solutions to local challenges



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Engaging the “shakers and makers” of the digital ecosystem

Mayors & Presidents of regional councils

Engage all actors in the definition of the digital transformation strategy of the city or region

CEOs of SMEs

Adopt and invest in digital technologies to innovate and improve your competitiveness

Cluster managers

Organise networking events and provide spaces for people to meet and encourage knowledge exchange between members and digital companies

Creative & cultural actors

Explore, create and entertain with digital technologies

Journalists

Raise awareness about the unprecedented opportunities offered by digital technologies

Researchers & academics

Conduct fundamental and applied research on digital technologies and their impact on society, the economy and the environment

Citizens & NGO representatives

Encourage the prototyping and testing of new digital solutions to improve the community

Entrepreneurs & founders of start-ups

Lead the way by innovating, creating and applying new digital technologies

Social partners

Mobilise all stakeholders in the reskilling of the workforce

Investors

Provide capital to finance the required local technology infrastructure

City managers

Create an entrepreneurial spirit in their public administration to seize digital opportunities

Managers of intermediary organisations

Provide guidance, inspiration, open spaces and digital tools to support local firms and entrepreneurs in their digitalisation efforts

**Ambassadors
for digital
transformation**

Leadership and collaboration for a smart governance of the local digital ecosystem

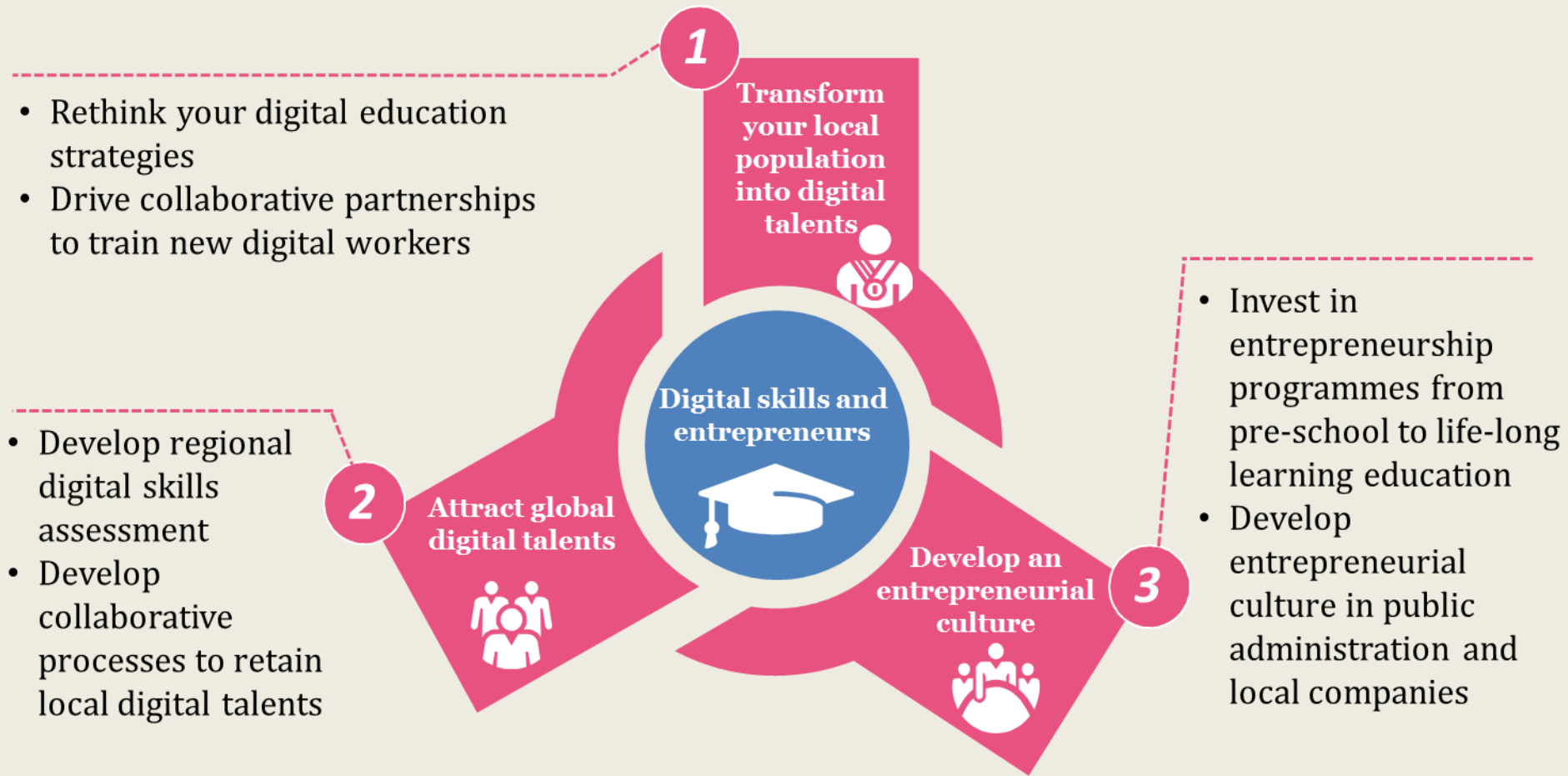
- Digital territories can be supported by local leaders from diverse sectors and backgrounds
- The development of smart digital ecosystems requires **coordinated action on multiple levels**: between local businesses but also between businesses and local governments, universities, citizens and support organisations
- Understanding the role of collaborations (practical and digital), networks and **how stakeholders in the digital ecosystem can complement each other**, interact and cooperate is crucial to bring forward win-win opportunities for all parties



3 key success factors

- ✓ **1** Create a forward-looking digital strategy and build a shared vision around it
- ✓ **2** Build long-lasting partnerships and trust relationships
- ✓ **3** Collaborate across sectorial boundaries and value chains

Digital skills and entrepreneurs to accelerate the digital transformation process



Access to data and technologies for applied solutions to urban challenges

- Access to data and technologies increases:
 - ✓ **the accountability** of local governments
 - ✓ the creation of **citizen-centric and more efficient public services**
 - ✓ the **emergence of the right framework** for local firms to experiment, innovate and develop real-time city technologies



3 key success factors

- ✓ **1** Develop a digital city strategy
- ✓ **2** Open access to data through the launch of open data platforms
- ✓ **3** Ensure local access to digital technologies

Key infrastructures and investments for transformative ecosystems

- ✓ New digital solutions **address the challenges brought by an increasing urban population**
- ✓ Key investments and the existence of **critical physical infrastructures** are however required to develop and successfully implement these solutions at scale
- ✓ Urban centres and metropolitan areas are increasingly integrating **cyber-physical technologies** to **optimise the use of resources** and enable a higher quality of life

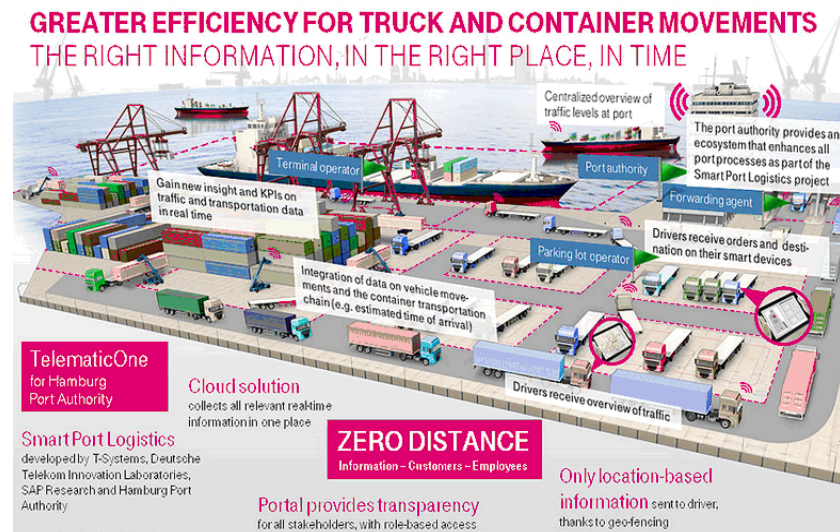


3 key success factors

- ✓ **1** Ensure the availability of **critical digital infrastructures** for the digital transformation of local businesses
- ✓ **2** Secure investments in **digital infrastructures**
- ✓ **3** Ensure the **economic sustainability** of local investments in **digital infrastructures**

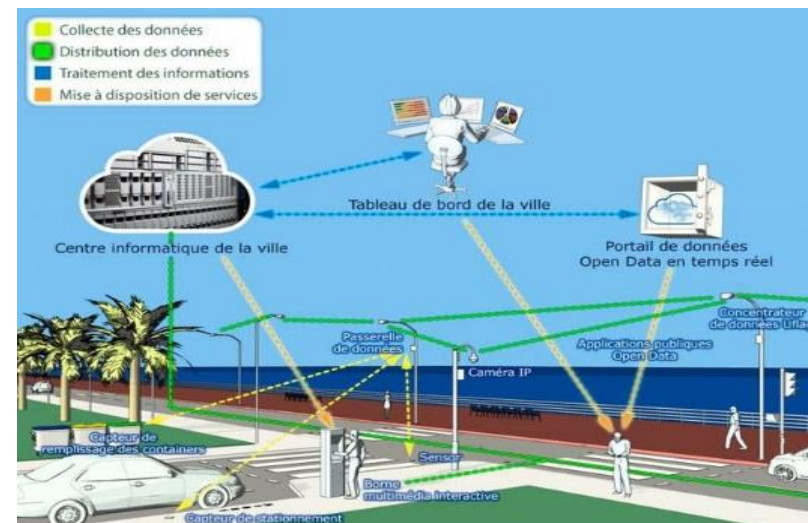
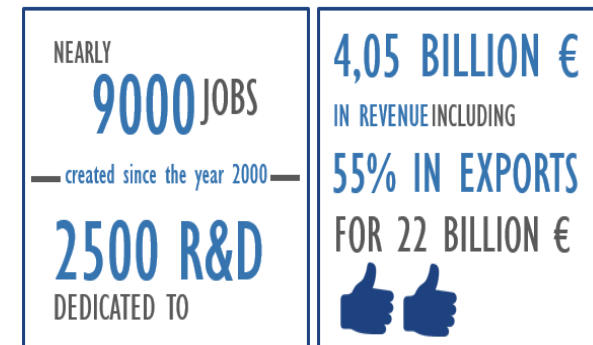
The Case Study of Hamburg

- ✓ **Strong digital entrepreneurship culture** (second highest start-up rate in the country)
- ✓ "Digital City Strategy" as **holistic visionary strategy** for digitalisation
- ✓ **MoU for the creation of pilot projects** around smart traffic, smart street lighting, infrastructure sensing and remote citizen services
- ✓ **next.media.Hambourg** as initiative for media and digital industries
- ✓ **SmartPORT** logistics and **HafenCity** as key infrastructures for digital transformation



The Case Study of Nice

- ✓ Shift from a **service-based economy relying heavily on tourism to an increasingly diversified economy** putting a great emphasis on advanced technologies
- ✓ **Job protection plan** in order to retain the laid off employees
- ✓ **Active participation** of multiple relevant stakeholders
- ✓ Creation of **learning infrastructures** oriented towards digital technologies
- ✓ Pioneer in the **"Smart Grids" and "Smart Cities" sector.**



Upcoming actions by the EC: Transforming Regions and Cities into launch-pads for Digital Transformation



Overall Budget :
2.8 million EUR
(2 years)

**Network of
regional and
urban
ecosystems**

**Development
of EU-wide
interregional
collaborations**

**Open call for
expressions of
interest
(CoR and EC)**

Raising awareness

- ✓ **Call for Expression of Interest** for participation: Promotion in collaboration with DG REGIO and the **Committee of the Regions** (April 2017)
- ✓ Targeted communication addressed to **regional and urban authorities**
- ✓ Networking events, outreach through conferences, social media, newsletters, etc.
- ✓ Promotion through the **Watify** campaign and **EEN**



Further reading & contact:

Digital transformation of industry and enterprises:

http://ec.europa.eu/growth/sectors/digital-economy/index_en.htm

Reports of the Strategic Policy Forum on Digital Entrepreneurship:

http://ec.europa.eu/growth/sectors/digital-economy/entrepreneurship/strategic-policy-forum/index_en.htm

Blueprint for cities and regions as launch-pads for digital transformation

<http://www.digitallytransformyourregion.eu/>

Thank you !

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