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NEWSLETTER 1

The rapid advances in technology are reshaping our economy and society. Technology has been incorporated by cities for many years. However, the pace at which this adoption takes place is increasing rapidly as disruptive digital technologies have the potential to solve major metropolitan challenges. As a consequence, urban areas transform into 'smart cities'. In this transformation, disruptive technology is only one of the drivers. The second ingredient of smart cities is data, the lifeblood of smart solutions. The challenge is to use the power of data to create smart solutions that address real needs of city users and are perceived as meaningful by them. Their intuitive design causes them to be adopted naturally, resulting in changes of behaviour that are lasting. Last but not least, smart solutions are all about human behaviour, with the third cornerstone of smart cities - those digitally smart people who run businesses.

About „ Smart by Design "

The aim of the project is to develop the competences of SME managers and owners to drive smart disruptive technology business. The duration of the project is two years, starting in October 2019. The project will provide a map of digital disruptive technologies and a training programme for smart disruptive innovation. The project embraces 3 very important elements: Design thinking, Technology, Smart innovation.

Target groups

Primary Target Group
SME Managers & Owners of
Smart City Technologies Businesses

Secondary Target Group
VET trainers

Outputs

By combining management and digital skills the project will provide: a map of digital disruptive technologies and a training programme with modules and materials for smart innovation.

IO1 Map of digital and smart disruptions

Key areas of smart technology innovation - we will conduct a study to narrow the scope of technology areas of smart innovations and define key success factors and applications to prepare the map.

Case studies collection and focus groups - each partner will select two SMEs in the field of smart technologies and have interviews with their managers/owners to create a state-of-the-art case study. This will generate a case study collection and initial contacts of the target group to be further involved in the project.

IO2 Training program for smart disruptive innovation

We will develop a programme covering analytical, interdisciplinary critical thinking, management and technological skills; we will define the key topics of interdisciplinary knowledge across technology, social sciences and management disciplines.

Capabilities framework of smart innovation - common framework with key competences, skills and knowledge.

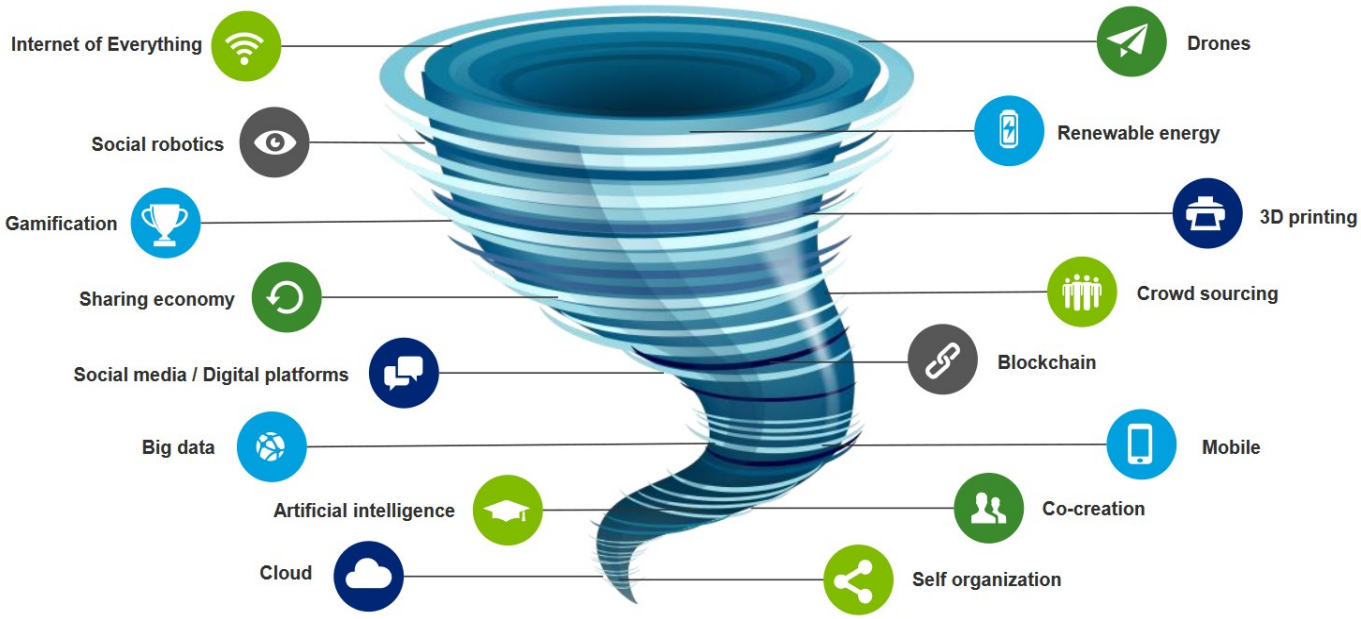
Training modules for smart innovation - specific modules with learning elements and assessment criteria, including self-assessment tools, thesaurus, materials.

Partners:

- **KISMC** - NGO that is focused on developing competences in innovation management, creativity and entrepreneurship;
- **SULSIT** - Bulgarian State university of library studies and information technology that offers undergraduate, masters and doctoral degree programmes, and supports innovation and technology transfer in Bulgaria;
- **ARIES TRANSILVANIA** – industrial cluster and BSO that contributes to designing; implementing the smart city strategy of Cluj in Romania, supports digital transformation and creates digital innovation hubs;
- **GAIA** - cluster BSO that unites companies from the knowledge and applied technologies industries and supports policy and deployment of ICT, Engineering and Electronics in Basque Country;
- **UNIVERSITY OF DEUSTO** - leading university in Spain specialized in educating and training in the innovation and entrepreneurship, design thinking and IoT Smart city solutions through its Business School and the Faculty of Engineering;
- **UNITED ACADEMICS** - Foundation in the Netherlands that promotes, supports and maintains open-access library and publishing that results in faster scientific communication, wider influences of scientific knowledge on the industry, government, and education.

Smart Cities, Deloitte, 2015 … fuelled by a combination of disruptive technologies and social innovations …

Most new technologies and social innovations are disruptive on their own. The combination of them is even more powerful and creates a 'perfect storm' of disruption.



A positive quality of life involves enhancing every aspect of the daily existence of citizens. From safe streets to green spaces, from a reasonable commute to access to art and culture, a smart city creates an environment that promotes the best of urban living and minimizes the hassles of city life. Smart cities are ultimately great places to live.

Mapping the needs and opportunities for disruptive technologies for smart cities (Level of penetration analysis)

We have realized during the implementation of the project so far and as a result of our study that the most important and those with enough predictive potential to transform the cities into smart cities are the following technologies (technology areas): Artificial Intelligence, Data analytics, Cloud Computing, Internet of Things, Cyber physical systems, Smart sensors, Collaborative robotics, Cybersecurity, Blockchain, Augmented reality, Virtual reality.

Areas / Technology	Smart economy	Smart People	Smart Governance	Smart Mobility	Smart Environment	Smart Living
Artificial Intelligence			very weak		weak	
Data analytics						
Cloud Computing	very high		medium			
Internet of Things						
Cyber physical systems						
Smart sensors				high		
Collaborative robotics						
Cybersecurity						
Blockchain						
Augmented reality						
Virtual reality						

The ultimate purpose of a map is to improve the scenario planning of businesses and the cities in the process of their transformation into smart cities and to point out the opportunities for involvement of businesses in the process. Thus, this can be treated as a sample of an opportunity map for every city in the process of urban management and for every company in the process of innovation management.

For more information, please have a look at the website of the project:
https://www.smartbydesign.eu/