Creative Design Labs

Innovation Hubs for Smart Cities Sergio Dávila & Juan Ramón Dávila

why Creativity & Innovation in Smart Cities?

The Creative Design Lab is a space of human enhancement, a center to put in practice tools and activations that will give value in the future to the dynamics of the Smart City, and in the present, this space aids into the experimentation & forecast of **future developments & possibilities** for the Smart City.

A large part of the Smart Cities' citizens and of the society around the Smart City, works and interacts with digital tools, trough this environments and with their future developments **the Smart City can start interacting** with all this agents trough this Lab, helping to integrate important concepts such as the cities Urban, Smart and Livable visions, aiding thus into the creation of integrated virtual and digital regions. The Creative Design Lab will help to bring closer **technical and technological aspects of future developments** to the physical state of the Region & its urban area considering for the experimentation and future forecast the surroundings and rich ecosystems of the cities settlement.

The Lab can provide **tools that facilitate experiences** such as a Smart Home interactions or Urban and Livability interactions, citizen's participations that forecast future possible human interactions in the region's habitable spheres.

The Smart City interacts with it's citizens via a digital layer that merges both instances, digital and physical, and the City is going to have citizens that starting form a digital



environment will be identified with the region in several ways; they will want to be **participants of solutions, startups, digital proposals, academic experiences** in different scenarios... and all this possibilities will be explored along with the different agent's participation in the Smart City different creative activities.

Therefore the region's Creativity & Innovation Lab must differentiate Place and the Space, the Place **where the urban space exists** and the Space that has a **digital layer** where we can test different technologies that are based on digital interactive hypermedia.

A Creative Design Lab can become a spaces where actual and future citizens will

reunite: Leads, teams, institutions, organizations, and talent (incorporated through startups, skylabs or individual proposals), and in this spaces they can interact envisioning new paths for the city's solutions, in a Creative Design Lab we can find integrated tools such as Design Thinking or Social Activation Projects, that help into the evolution of ideas, creating new methodologies that will build & enrich the future version the Smart City, showcasing along the path this innovative solutions into global awareness & media attention pull. Creative Design Lab helps to attract creative and disruptive profiles that will become part of the exploration in the Lab, participating then, into the future expansion of human capabilities and thus into the evolution of the City.

why a Creative Design Lab?



The Creative Design Lab **aligns the city's goals** for its citizens where all digital technology that is generated follows Livability & Urban aligned principles and the humanistic concept of "People First".

The Creative Design Lab becomes the **center of future forecast dynamics**, a space for collaboration and development in digital technologies & Urban project concepts generation that can aid into the **teamwork integration and co-creation of solutions within sectors** and, as a human technological center, it can attract talent in the world.

The Creativity & Innovation Lab **fosters entrepreneurship** and the creation of solutions within the holistic vision of the Smart City region, integrating in this path it's physical and digital environments.

The Lab will opens a network of links with the industry to find the **best partnerships and services** to be established as future experiences and developed into the Smart City's realities.

A network of talents

The Creative Design Lab aids into the **networking & connection of the Smart City sectors & solutions**, providing physical and digital spaces to interact, promoting the use of speculative & forecast tools, and encouraging methodologies such as Design Thinking or SkyLabs as a trigger for innovation and creativity to empower the Region's proposals and future developments, helping into the evolution of ideas into their future iterations.

In a few examples of how the Creative Design Lab can intermediate the connections with the Smart City internal & external agents we can look into:

- **Implementation from education** models of learning and teaching to promote gamification & interactions between the city & it's citizens.

- **Promotion of gaming** culture to help evolve the sectors & solutions
- **Development of digital & mixed** contents
- **Start up and add creative value** to certain nascent sectors such as digital tourism
- Creation of solutions for accessible roles
- Forecast the creation of **new spaces** and infrastructures in the Region
- **Applicability of solution**s in environmental spaces such as the smartisized beaches.
- **Digitized City concepts** to involve citizens into the construction of the City.
- Global Awareness Generation and networking.

A Creativity & Innovation Research Center

The nature of the Creative Design Lab is to **develop & evolve**, in this path Research is an important aspect of this process, to envision contributions from different academic or research related environments is to **enrich the results and possible scenarios**, research keeps creativity & innovation in focus, identifying clear goals into the development of Future solutions.

The physical space of a Creative Design Lab should be designed to **encourage and to facilitate both Creative and Innovative creation**, and also to promote research and linkage with external academic and research centers around the world. Creativity is a tool that must be tested, tasks must be done, and even creativity should be tested and worked upon, and promoted among future talents. **To inspire the** creation a network with diverse ideas is to open minds and to be collaborative, this generation of ideas needs a space of creativity and that space is the Creative Design Lab.

Technological wave is unstoppable and we do not want it to become a tsunami of outdated solutions for the Smart City, so what we are going to do in a Creative Design Lab is to surf this wave of the digital society and to manage it is necessary to get wet, in the Creative Design Lab creative minds can get wet and use **research as pointer** towards the best solutions for the City.

The Creative Design Lab is a space to imagine the City as a **holistic vision** and the Creative Research tools act as laboratory for management & development of this improved and adapted -to the City's environment- solutions.

Creativity & Innovation Lab



In the Creative Design Lab we want sectors and teams to participate together in possible scenarios, it is an **open space to share & evolve ideas.**

A Smart City must think about the Creative Design Lab as a Hub of **new technology generation**, aiding in the construction of the future of the region where the digital technology facilitates the Livability of its citizens.

The Creative Design Lab experiments with the **versions of the Smart City** that can

be in different iterations, acting as a country within a country, we can even expand the radius of action within the talent of the country itself, that is, the Creative Design Lab is open to the country and the world that will finally link up to the City, aligned with this vision we must unite **both intelligent cooperation with the different sectors of the City, and an open version of the Smart City** to the world.

Tools for Creativity & Innovation



In the Creative Design Lab Tools such as **Design Thinking or Social Activation** will help the development of processes that identify, pilot and implement Sustainable Smart Solutions that impact and have an impact on Smart Livability & Urban management as well as the implementation of Smart Environmental Solutions (i.e. Smartisized Beach).

In a Livability focused Urban Development it will be necessary to develop **integral approaches to design** and operate them in space and digital infrastructures contexts, in order to fit out the city, citizens should experiment this new urban spaces as SMART; the Creative Design Lab can help with the **envision of this future Smart Developments though simulations, visualizations and digital virtual interactions,** with tools such as an Interactive Strategic Board or a command Center tool (i.e. WarRoom)

In relation of the Human Centered Creative Design Lab, authors such as Carlo Ratti (Decoding the City: Urbanism in the Age of Big Data , 2014) talk about the concept of Senseable, as a Lab that integrates an interac-



tive urban design that unites human interactions with the digital urban space, making it clear that the physical and digital world have to converge, as a Real Time City where technology is not seen as a solution, but as a discovery of the human aspects of the city. In a quote Ratti mentions: "When sensing technology is deployed, forward is deployed from Top Down". Cities of the future should have a horizontal vision to create sensory and sensitive metropolis, alive cities.

United with these thoughts Boyd Cohen (The Emergence of the Urban Entrepreneur: How the Growth of Cities and the Sharing Economy Are Driving a New Breed of Innovators, 2016) writes on the cities in the world visualizing them as not flat, and advises into the focus of the cities in where One Self lives and defines the concept of "Urbanpreneur". The Creative Design Lab is an ideal space to position the brand of the Smart City because it allows to organize SMART International Forums or Digital Experiences that link with Academic & Research Centers and from there into the perspective of Academic Creativity & Innovation , a vision that can help into the positioning of the Smart City's Region as a **leading entity of future forecasting and digital experimentation.**

The Creative Design Lab transforms and socializes at both digital and analog (physical) environments the vision of the City, transversalizing its principles & goals into experimentation scenarios that can forecast diverse solutions previous to their final implementation.

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