INNOVATION, THE GAME AND THE SMART CITY

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ABSTRACT

At our times the gap between opportunities and practical applications of the “Smart City Concept” is very large, and the risk for Administrations is to exceed in pilots primoted by large Public Companies in order to promote their products and services regardless of the local identity and social capital.
“Connected City Council” is a project of a real/virtual platform created with the goal of encouraging the promotion of the “genius loci” and the increase of “quality of life” in urban centers as a certification of “smartness”.
The basic idea is to tie innovative academic research, the IT industry, SMEs and practitioners of innovation in the creation of a number of tools to be used (remotely or in presence) for the assessment and the definition of different future scenarios related to every City as a Smart City .

“Connected City Council” is an online platform providing:
• The design of a Method of assessment for Governement, Utilities, and Organisations, according to Qualitative Criteria, based on the Gamification and Serious Game principles.
• A Method of Scenarios Planning, aimed to identify the development prospects for the urban areas becoming “smart”;
• The development of a online tool allowing stakeholders to evaluate their behaviour and their governement paths in a simple but effective methods, providing a preliminary representation of their situation.
• The opening of “territorial meetings” designed to meet and dialogue with stakeholders in order to share both the expressed and the latent needs, spreading the culture of smart city as a value fot the territories.
• The creation of an analysis tool that allows the collection of data and API in order to assess the evolution of the model.

The goal is to create a network of Cities sharing their experience, reuse projects and tools, and to innovate business models related to the public administration, multi-utilities and all public and private entities lifes, creating tools that can provide a set of tools, with basic services free of charge. The aim is to enable them to have a representation of their condition compared to the theme of smartness and its sustainability.
Connecting City Council is now in a beta version, www.connectedicitycouncil.com, realized by 3 Italian SMEs, with the cooperation of hepia.ge and funded by Lombardy Region. The project aims to be in an european scale in 2015.

1 CONNECTING CITIES

Today the debate whether the smart city is the one who is equipped with technological infrastructures, the one that frees their data, or the city simply and strategically well-governed is fast growing.
The question arises from the inherent meaning of the word “smart”, rich in the native

language, and difficult to translate in practical ways. And therefore difficult to solve for the industries linked to public administration.
The supply chain working in the “smart city – system” is in fact extremely articulate, with heterogeneous actors that move independently.

Connected City Council in this context is therefore a virtual/real platform, which aims to tie in an innovative academic research, the IT industry, SMEs and innovation professionals in the creation of a number of tools to be used both online and offline for training, scenarios planning, the integration of existing products and platforms, the realization of smart products by integrating different skills or even simple Urban Development plans.

The project will be able to pool knowledges and sensitivities to provide a system analyzing 4 different urban layers: the technological, the social, the territorial, the administrative.
Gamification (from role playing to “risiko”, through surveys and “trivial”, is the connector, with its democratic and simply reality. Games are “sharing tools” in theirselves, giving every player the capacity of plan and work using timelines, cooperative strategies, sharing datas and competencies etc.
The new Smart City will be a Connected City.

1.1 Smartness and cooperative governement

Today we have several kind of Smart City Ranking. Both Academic and Professional world develop their own system to evaluate one town level of smartness.
The most used and accreditated is the one coming from the Vienna University of Technology , which already at the end of 2007 , together with the department of Geography, University of Ljubljana, and Institute of Living, Mobility and Urban planning of the Delft University of Technology has developed "Smart Cities - Ranking of European medium sized cities".

After 7 years, given what happened in the technological industry, and how much people in cities has changed their habits using connected devices and producing datas 24/7, it is now necessary to think about an innovative approach that somehow changes the playing field and make the Smart Index really valuable, immediately accessible, and functional not only for the large scale, but to a diverse set of stakeholders in all kind of sizes.

In summary, the objectives of the project are:
• Increasing awareness of the smart cities issue between all size of urban involved stakeholders
• Viralizing smartness scope, increasing collaboration between various stakeholders and heterogeneous subjects
• Developing of a best practices "smartness handbook" provinding paths to increase the level of smartness
• Providing operational support to those involved to increase the level of smartness of their territory.

In a more extended way we can say that Connected City Council wants to give a vision of smart city shared among all the actors (government, technology providers and citizens), vision that at the time still seems like a mirage. The same concept of “smartness” is still under discussion at the international level, both in the academic and industrial sectors.

Another objective was to overcome the notion that the smart city is a goal to achieve. The theme here is rather different, the “Smart City” must be seen and understood as a Process.

1.2 Expected Results

In a transversal way we want to finally get to a multidisciplinary dialogue between the different actors, overcoming the situation in which city governments speak of themselves in their own language: territorial planning, infrastructures, business development and tourism services to citizens and businesses, while vendors are focused to promote their technologies and their products (wifi, internet of thing, smat grids, xRMs) and citizens are simply stucked in the administrative queues or... lost on facebook.

The new vision and quantitative proposal aims to stimulate awareness among stakeholders in a practice that can be immediately translated into action on the development of specific operational areas and the whole. The expected results can be monitored over time by drawing the same set of indicators that are the subject of the work proposed here.
Working simultaneously on the quantity (for an example the amount of bike lines) and quality (the quality of urban integration of the bike lines themselves) will generate a feedback much more rich and varied than those currently available.
Owners will be evaluated also according to the capability of making relationships with the environment (or merge with other municipalities for planning a bike line in service of a larger territory).
Creating a network will enhance the dialogue between cities and the merge of different territorial planning, respecting every local politics, but facilitating the development of projects for large areas, able to optimize the choices.
“Smart” is no longer for single joints (often too small and that will produce sub-optimal solutions).

The expected benefits will touch even the private companies, which can be reinforced by the platform in two ways:
• on one hand, they can have processed and structured informations for all the territories in order to assess investments and carrying out benchmarking;
• on the other hand, they will have data to understand the industry and the target market.

The benchmarks will be those proposed by the Vienna University of Technology, and namely:
• Smart People
• Smart Governance
• Smart Mobility
• Smart Environment
• Smart Living
• Smart Economy

People, Living, and Governance are the first coordinates to provide the idea of an evolved community both inclusive and democratic. The absence of these parameters will ensure that a city is not smart , regardless of the "quantity" of technology adoption.
The criterion to be adopted as a driver will not be intensty and quantity, but the quality and the will of evolution of the smart systems.
A few examples:
• reducing of bureaucracy
• interaction between governance and city users: interactive web interface, open presence on social networks
• degree of integration between the multiutilities management and local government authorities to use the data, IT tools and the involvement of the population.
• purcentage of self- administration compared to the political environment;
• methods of communication and interaction with citizens, local operators and the tourism.
In all cases, will be decisive the ability and the knowledge to manage the data in a useful and transparent way, according to a grid of priorities aimed at creating economic and social value of the community.

2 CONNECTING CITIES, HOW TO

The idea is to devise a system of modular assessment , structured according to the principles of gamification replicating an example of educational games such as Trivial Pursuit for adults. In this context , the first assessment (Light Assessment) can be imagined as the " container" for a plan of basic information, necessary and sufficient to allow the institution to enter the CCC network. This basic information will expand according to the six dimensions of smart whose level of depth and specialization depend on the outcome of subsequent information such as the census of initiatives , their degree of integration, the goals it has seats and the proposed budget to achieve the same. The light assessment is then represented as the basic status of the analysis and subsequent specializations represent a level of thematic analysis that can be solved either by operation of refinement and through in-depth meetings.

2.1 The Development Timeline

2.1.1 The Scenario Method
The method of “scenario creating”, or the method by which it will be possible to outline the visions of possible future -strategic and concrete paths through which realize the Smart City, is based on data fusion and Boolean analysis. The scenarios process we are thinking can be seen as a circuit combining data from the various actors involved in the city-system, and thanks to the algebra of Boole will be possible to represent this network and its evolution with a logic function and a table that returns the value of the expression for each possible configuration of the variables.
The introduction of an effective tool that can reduce the complexity to a series of potentially infinite homogeneous indicators, which can formalize scenarios according to different perspectives, will exit the evaluation scheme of the "smartness" of a city in accordance with the criteria of the entity subjective assessment (linked to different conceptualizations of the smart city - environmental sustainability , technology, participation...).

2.1.2 From Smart City to Smart Politics.
To ensure the achievement of the objectives the online platform will provide a "game" interface, enticing the user to fill in with the highest level of details and informations. This gives the opportunity to invite more users to fill it, in order to ensure the presence of all stakeholders and ensuring heterogeneous information that are not available to a single user, but of all those who have interacted in the process. There will also be elements of collaboration designed to cooperate in the compilation of this data and is also a system of "achievement" relating to the objectives. The instrument will also have advanced technological components : the editing of georeferenced information and cartographic that the purpose of the data processing engine in the assessment and therefore the output in scenario of the smartness of the territorial areas .

2.1.3 Territorial Meetings
Territorial Bar Camps organized and provided to offer the possibility of contacts with the Connected City analysts, based on the Gartner OnetoOne method.

2.1.4 Detecting Data
Taking advantage of the wealth of data collected from the territories will get the platform able to perform analysis and reporting to understand the smartness of the territories with different levels of aggregation. Some reports, including maps, will be available for the wide public, while others, more complex, will be used to ensure continuous improvement of the site assessment.

2.2. Connecting cities means Transversal envolvement

The idea under Connected City Council is to move from a traditional context for the analysis of large urban projects to migrate on an analysis of all the urban dimensions. The topic we stress is that “Smart City concept” has taken a great momentum and a high profile in the media, everywhere. The risk of this attention and approach is to confuse the goals and reserve smart city options to an important critical mass, or to cities that are of significant sizes. So far, in fact all the indexes that are normally found have emphasized the metropolises in the world creating self referential benchmarks.
Europe is full of joints of different sizes, and every one of them deserves a smart poilitics and a smart way to develop.

Moving from a quantitative approach to a mix of quantitative and qualitative, and engaging directly with local “terminals” in data collection: this will give great importance to evaluations and "weights" of a qualitative nature (for example: not only the number of non-profit organizations , but also their impact on the share capital) will be one of the innovations strenght in the proposed model.

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