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SMART CITY: A GEOGRAPHICAL PERSPECTIVE

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Abstract: Smart cities are communities able to support green initiatives able to generate income and employment, and to allow citizens and businesses to benefit from more efficient services. In order to identify the realities that can represent a benchmark for other cities, the article provides an analysis of the actors that affect the birth and the development of smart city. The the article presents an overview of main smart cities of Europe.

Key words: Geography, Smart city, Geocity

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INTRODUCTION

Smart cities occupy an important place in the global political debate as they represent a development driving force for growth and employment. The combined efforts of the Italian Government and the European Commission for the development of these realities has led to the Venice Declaration of 8 July 2014 and the European Council of October 2015 Digital in which it was stated that cities must become the laboratory for a more dynamic and digital. The assumption is that if the Digital Economy allows the recovery of competitiveness and employment, in the presence of growing urbanization the cities must become the center of interest in government policies that make them more and more smart.

Smart cities are characterized by high-quality public services, better living standards, new job opportunities generated by a more innovative entrepreneurial ecosystem, greater environmental sustainability and lower public resources through the involvement of private finance and networking of large industrial groups and SMEs. In a smart city must coexist more elements. First intelligent electricity infrastructure, capable of supporting and encouraging energy conservation plans and the use of a mix of sources. Then an infrastructure of ICT and TLC integrated to it that spread pervasively connectivity and pursue an internet of everything connected to sensors, devices and services. A smart services platform enabling, pervasive, innovative, reusable, integrated and evolving that allow citizens to get the best out of infrastructure. Finally, public and private finance instruments that implement these models. You need a

favorable environment in which the rules of engagement between public and private actors are known, shared, transparent and non-changeable. This requires identifying the actors are able to remove the existing constraints, encouraging the sharing of best practices thanks to a constantly open transatlantic dialogue to experience pilot cases in which the model is implemented.

SMART CITY

To make an intelligent city is necessary, therefore, to develop more and more the potential of the digital economy, the green economy, infrastructure, transport and energy.

Develop integrated solutions across Europe enables the industry to offer what the cities and regions need with better quality and at lower cost for the benefit of society. The data can be used as a service that makes it possible to more effectively inform decision making and designing new activities.

Technological innovation can improve the quality of public services and the growth of local economies services, but the main challenge is how to integrate new technologies. And in the implementation it has not been enough progress. The development of transport in the smart cities is an opportunity to give a sense of inclusion for people living in areas outside the city. A fair and balanced distribution of the urban transport network, in fact, strengthen social cohesion, would allow greater mobility and avoid isolation in modern urban ghettos. Energy efficiency is the most effective way to reduce CO_2 and to ensure a better and healthier environment through its development in transport, buildings and industry.

Smart cities can become a cornerstone for a new economic policy, physical and virtual places to promote and enhance because they are able to accommodate functional initiatives to technological SwitchOn the country. The process of realization of the smart city must involve universities and research centers that develop the knowledge, companies and public entities that support both the research and business. Dwelling on the analysis of these three types of partners emerge key features and major activities to be examined.

As for universities and research centers, the productivity and quality of scientific activity are considered to be an indispensable prerequisite for the emergence and development of a smart city. Besides this pre-requisite, there are still further conditions to be examined that play an important role. The first concerns the entrepreneurial culture and attitude to risk internal academic organization. In fact, in the centers of knowledge, where there is a strong entrepreneurial culture, they are able to offer and promote easily meaningful and sustainable research results to the social fabric. I n contrast, however, know little of the centers likely to have an entrepreneurial approach turn out to be less open to exploitation of research processes.

As for companies, the most important aspect identified as a key factor in the positive support of the territorial level research exploitation of these processes is the ability to carry forward the innovations produced and presented on the market. According to this approach, the fabric of the local companies can play different roles.

The first sees businesses as funder of research activities carried out by universities and research centers. The launching of joint projects between companies and research institutions, in fact, on the one hand allows the

enterprise to outsource certain processes that would otherwise require an organizational effort far-reaching; on the other hand, it allows you to extend the available financial resources of the research institutions and organizations to address these strongly connected research trajectories to the application outcomes of the activities. The joint deployment requires, however, that the part of companies there is the ability to develop trusting relationships with the academic and scientific world. In this context, companies have the task of promoting business initiatives, making use of the innovations developed by the scientific community, and to direct the efforts of researchers to easily exploitable activities from an economic standpoint.

Another role that companies can play in contributing to the success of a smart city is linked to the possibility to be the first direct users of research.

Finally, companies can also act as a carrier to the final market of a scientific or technological break through an academic spin-off process, which provides for the creation of a new company through the exploitation of the economic potential inherent in an innovation made possible the researchers applied the initiative.

The third important aspect in the development of a smart city, for public entities at local and national level dealing with set the rules for defining the interventions in support of the economic value of the research process. The size recognized as relevant to local and national institutions are selective measures and the intensity of the same. The first shows how interventions can be focused on a small number of research enhancement initiatives, selected through complex screening procedures to assess the application potential of the implemented innovations, or implement policies that support is provided to the widest possible of initiatives. The second dimension, the relative intensity of the interventions, it is possible to distinguish cases where the support policies are limited to only some of the moments of the search enhancement process to others where it is limited to the number of services provided.

The determinants of the success of a smart city, as a result of the combined action of universities and research centers, enterprises and public institutions, on the assumption that the characteristics of these types of actors go to build a suitable mixture suportare processes in time long lasting valorisation of research.

These three determinants have been described as a triple helix.

The first helix is represented by centers of knowledge, who with their different orientation to academic entrepreneurship are more or less open to the processes of transfer and commercial exploitation of its scientific results.

The second helix is represented by companies, who by their ability to link innovation with the markets are able to attract and convey human and financial resources.

The third helix, finally, is represented by public institutions that with targeted policies to ensure the removal of obstacles to the development of a smart city and the support necessary to make the nonlinear percprso more fluid carrying a scientific discovery from the laboratory in which it is It was carried to the markets in which creates value for customers in the form of product or service.

Together these three propellers can facilitate the identification of a referent for innovation in every branch of public administration, it is imperative for him to manage the smart process and to have a constant dialogue with the mayor.

Then it is appropriate to initiate a thorough reflection on the data to be shared with the public and at the same time of those concerning the private sector that can useful to the public administration. Another challenge to be faced in order to achieve smart, sustainable cities and on a human scale and that is to promote the culture of risk, accepting the possible failures. Being smart means new ground, but this implies that sometimes the result is not what you hoped for. Indispensable, then, it is the basic technological infrastructure. Everyone, from administration to the citizen should have access to computers, email, wi-fi, web / hosting and so on. Finally, to build a truly smart city should be given off to the young, to new ideas and creativity.

The positive effects of the interaction of these three main actors can be enormous. First, a comprehensive policy for smart cities with innovations in terms of infrastructure and services can derive a great plan of public procurement intelligent, and can generate spaces for rewarding research and development by large, medium and small companies that integrate to provide valued solutions by end-users. They can then be favored the transformation of enterprises and industries in the area, and the attraction of new realities, generating growth and employment even in traditional sectors, revised according to new paradigms. The energy efficiency investments can also be a positive driving force for the economy, but also create a relapse on public sector savings and private, as well as on health and national energy policy. Smart cities so conceived can promote replicable solutions potentially everywhere.

EUROPEAN ANALYSIS

The European Union has put in place a number of programs to stimulate the emergence of Smart City. In 2012 he kicked off the European Innovation Partnership (EIP) for Smart City and Community, made up of representatives of industry, research and cities aiming to dealing with the energy, transport and information technology, and communication. The Commission has allocated around 200 million euro for smart cities and communities in the budget 2014-2015 of the research and innovation program Horizon 2020 in order to accelerate progress and expand the distribution of solutions that aim to Smart Cities. The European Economic and Social Committee actively supports programs related to the development of the city towards sustainable and efficient environmental conditions. The development of smart cities was the result of choices of individual local authorities with different results and start patchy. In Europe, there are cities that do fly like Amsterdam and Barcelona, London and Copenhagen, which are the closest to the reality of US performance. These smart cities are born in order to ensure high quality of life, environmental sustainability, innovative technology at the service of our time and of our needs and a lot of creativity. Their development can further relate to the implementation of modern app to book the place in line at the post office or bank, the reduction of emissions due to plans for the efficiency of the buildings, new mobility systems such as car and bikesharing.

Vikki (Helsinki, Finland) is totally ecological, with buildings constructed in compliance with as many as 17 environmental criteria. Italy is not far away from the experiences of other European countries. However, according to the President of the Observatory Smart City of the National Association of Italian Municipalities (ANCI), the country ends to disperse its potential because of the lack of a common management model and poor communication between local

authorities. In order to overcome these obstacles we need to work on four different platforms and complementary. The first concerns the projects. Gather information on the initiatives carried out in Italy and analyzing the state, participants, objectives and funding. Realize a common database of experiences to share and easy to access for all stakeholders is a necessary precondition for the development of a common reality. The second platform, however, is based on listening to the citizens. A smart city must be to measure citizen. It is impossible to imagine it being imposed from above, it should rather be considered as the result of a comparison with end users participated. The third platform takes into account the measurement indicators. To this end it is useful to consider the work by ISTAT about the references to be considered for assessing the performance of projects. Finally, there is a funding platform.

Make information system for projects, response of citizenship, results and funding will allow municipalities to set up master-plan and accelerate the modernization of Italy. Overall in the last few years have been presented over 1,700 smart projects, for a total investment of more than 4 billion euro. There is no difference between North and South Italy in the development of such projects. common limitations are the lack of a national direction and the spatial extent of Commons. The larger ones proceed in a more expeditious manner since the development of metropolitan cities also accelerates the one of the smart cities.

CONCLUSIONS

Europe lacks a common plan, a comprehensive policy for the development of smart cities. If there was a clear Community framework and defined, it could promote the development of common European smart cities. There would be positive effects on the employment front, and it is also why in Europe is starting a careful reflection on the development of these realities. The creation of joint projects is an ambitious goal for the European Union. Cities continue, in fact, to attract a growing number of people from rural areas, where most depopulated. This phenomenon leads the authorities, infrastructure, population and the environment of the city to new challenges. To maintain its sustainability, you need to find innovative ways of adapting and developing. We need to create interconnected cities, which use urban technologies and adopt policies on transport, which promote economic and social development, they are arranged in a manner most favorable to your environment and adopt a model of sustainability for future generations. These cities represent the type of Smart City that we want to develop, but all this can be achieved only through the involvement and close collaboration of citizens, local and national authorities and European institutions.

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