Seven conditions for creating a Smart City through Partnerships

There is no doubt that the world has become urban. According to United Nations data, the number of people living in cities is growing in total by more than 60 million every year. Overall, the latest UN projections from World Urbanization Trends estimate that the total urban proportion is expected to rise from 54% in 2014 to more than 66% by 2050[1]. This means that by the middle of the 21st century, more than 2 out of 3 people will be urban dwellers.

With increasing levels of urbanization taking place in every region of the planet, cities are becoming the main drivers of the world's economic, political and social trends. More people means more economic activity; more production, distribution and consumption of goods and services; therefore, more business activity and profits within urban areas. As a result, megacities are even outperforming countries in terms of economic activity, while changing how the world's economic structure is set out. As an example, cities such as Chengdu, New York or Seoul have bigger economies than many countries around the world[2].

Meanwhile, societies are facing unprecedented challenges that need to be tackled in order to foster a sustainable, fair and prosperous future. As cities are where most power, people and money are concentrated, they are the stages upon which most of humanity's challenges will be played out in the future.

The rise of Information and Communication Technologies (ICTs) and technological innovations allows cities around the world to supply the necessary services and provide solutions for urban problems in a more effective and efficient way, leading to the creation of so-called Smart cities.

Smart cities are an opportunity to provide effective and innovative solutions to the challenges that urban areas will have in the future.

Rather than introducing ICT in our cities, the question is more about integrating new technologies in an intelligent and coordinated manner. The aim is to develop urban centers that are at once integrated, habitable and sustainable, allowing the fueling of a more prosperous, fair future in order to tackle the problems ahead and achieve the United Nations Sustainable Development Goals.

In order to become *Smart* and integrate effective technology, we believe that cities and local authorities should:

1. Have a clear and defined set of goals and challenges to overcome, always with the prime objective of becoming sustainable.

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[1] https://esa.un.org/unpd/wup/publications/files/wup2014-highlights.Pdf
[2] https://www.ted.com/talks/parag_khanna_how_megacities_are_changing_the_map_of_the_world

2. Foster collaboration between all stakeholders in an organized and systematic way.

Regarding the second point, fostering cooperation in cities and creating effective partnerships is not an easy task for local authorities. It has been found that, in many cases, Public-Private Partnerships (PPPs) have been subject to corruption and have served as a tool to move public resources to private hands without providing value for citizens and society as a whole, as seen in the [UNECE Declaration on a Zero Tolerance Approach to Corruption in PPP Procurement](). Moreover, many cases have shed light on the potential for PPPs to create projects that cost large amounts of money for citizens, but which are actually unnecessary.

Therefore, in order to foster successful collaboration within urban areas, local authorities should follow a number of conditions for success regarding PPPs in Smart Cities. These conditions apply to any collaboration, ranging from public procurement and standard PPPs to agreements with tech-firms more centered on sharing economy business models. The conditions identified are:

1. **Value creation.** As with any public policy, a detailed analysis should be carried out by policymakers before the implementation of a PPP. Local authorities should put forward a Cost-Benefit Analysis in order to see whether the project is worth doing. Also, in some cases, a Value-For-Money analysis can bring insight to local authorities to understand if the specific public-private arrangement chosen does indeed serve as the best model for the delivery of the public service.

Moreover, in order to obtain maximum value from the project, it is essential to select the best possible partner for the development of the PPP, as it will bring valuable and scarce resources that will ultimately create value for the project. This should be done through a selection process (tender) that includes incentives for the bidders to participate in the design of the project (competitive dialogue), which is an open and transparent process.

2. **Governance and transparency.** PPPs require special attention to governance issues (tailored to local circumstances) and stakeholder engagement, so that they can be part of a shared vision, as outlined previously in the document. Transparency, openness, and engagement between stakeholders are necessary conditions for a public-private collaboration to succeed.

Public authorities should develop mechanisms to facilitate the growth of existing mutual trust for the benefit of each of the agents. That will be critical within a context of incomplete contracts, as not all possible future events can be incorporated within a contract.

Lastly, governments should foster the creation of independent institutions that monitor the entire collaboration process. In this way, an independent institution can ensure that the project will have the provision of benefits for citizens, and not only for private firms, governments or public officials, as its goal.

3. **Innovation and contract flexibility.** Innovation is key to fostering a more efficient supply of public services.

In order to obtain maximum benefits from innovation, it is necessary to provide contracts with the necessary flexibility for the concessionaire to innovate. For this reason, contracts should focus on outcomes rather than a detailed definition of inputs, and services rather than assets, so that the firm can innovate.

That being said, it also implies the use of better supervision controls to guarantee the correct provision of the service to citizens and to minimize the risk of firms' misbehavior.

4. **Externalities and agglomeration effects.** Cities are, ultimately, an agglomeration of people, firms and institutions. This is beneficial in many ways, as the positive externalities that a public-private collaboration can lead to are spread widely among all agents within the urban context. In this sense, local authorities should investigate how implementing specific projects within the urban context can have deeper and more complex effects on the economy when developing analyses of the benefits and costs of the project.

5. **Participation.** As mentioned previously, bringing all stakeholders into the project is crucial for the development of successful public-private collaborations. Local authorities can benefit from the expertise of the private sector, as well as from the knowledge of citizens' needs provided by citizens and communities.

6. **Payment systems and new business models.** Within the urban context, local authorities should also evaluate the possibility of using new payment systems that go beyond subsidies and user fees when developing projects (using other systems such as advertisement income or capturing land surplus value from infrastructure construction), taking advantage of high population density projects in cities.

7. **Using Big Data.** The constant interaction and use of public and private services by individuals in urban areas creates a massive amount of information that can be of use both to the public and private sectors. The rise of the so-called Big Data revolution can give insights both to public and private players regarding citizens' behavior, as well as on how to provide services in a more cost-efficient and effective way. Local governments should try, whenever possible, to foster private players' access to public data, in order to allow them to create new uses which will lead to an improvement in services.

By implementing these seven conditions in order to obtain a Smart City thanks to Partnerships, cities will at least be able to deal with the challenges their citizens are facing, and light the path towards achieving the United Nations Sustainable Development Goals, through cooperation between all the partners living and interacting in cities.

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