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Smart city development: The Milan model

by Ludovic Bonduel | Nov 6, 2018 | The Urban Media Lab

Milan has been ranked 1st Italian smart city for the fifth consecutive year by the <u>ICity Rate</u> 2018 report, and 2nd on <u>Ernst & Young's Italian smart city index 2016</u>, following closely behind Bologna.

But what does it mean exactly for a city to be "smart"? Although many attempts have been made at defining the main attributes of a smart city, there is currently no consensual academic definition. Bianca Wylie considers that behind the smokescreen of the marketing language, it is simply a term "usually used to describe the use of technology and data in cities" [1]. As such, the smart city is often criticized as a concept which only focuses on technology to depoliticize urban phenomena, ignore issues of social justice, and favour new incursions of large tech firms in the shaping of urban infrastructures. Other authors try to define the smart city in broader terms that go beyond the sole focus on technology. Gillinger et al. (2007[2]) for instance, ranked 70 European cities on six dimensions: smart economy (competitiveness), smart people (human and social capital), smart governance (participation), smart mobility (transport and ICTs), smart environment (natural resources), and smart living (quality of life).

ICity Rate's ranking is based on the analysis of 15 dimensions, including social (social inclusion), political (civic participation), economic (economic solidity), technological (digital transformation), and environmental ones (green infrastructures). Milan mostly owes its first position to its results in terms of economic solidity, research and innovation, employment, and cultural attractivity, while it scores far lower on environmental dimensions (e.g. land and territory, air and water). The fact that Milan only reaches the second place on the Italian Smart Index 2016, is probably due to the much greater focus this ranking put on technological dimensions.

In this short piece, we propose to discuss what makes the originality of Milan's approach to the smart city. To this question, we will answer that its originality essentially resides in its model of participatory governance and social innovation.

Participatory governance

The development of Milan's smart city approach can be traced back to the election of Mayor Giuliano Pisapia in 2011, at the head of a left-wing coalition. That year, Milan's city council voted a Local Government Plan focusing on issues of greening, infrastructures, and public services. The plan both required citizen's participation from the early stages of the process and promoted the contribution of private actors (non-profit and for-profit) to public interest objectives. The Plan did not specifically focus on the development of ICTs. However, many of its programs were later reframed and integrated to a wider smart city strategy, that implied increased investments in ICT infrastructures.

In 2012, the municipality chose to adopt a strategy based on coordination rather than implementation, in the construction of its smart city agenda. The responsibility for the coordination was given to two members of the municipal administration: the Councillor for

Employment Policies, Economic Development, University and Research, and the head of the department in charge of Economic Innovation, Smart City, and University. The coordination developed was simultaneously internal – assuring the coherence of the multiple smart-related projects within the municipality – and external – assuring the coherence of the interactions between the different stakeholders and the citizens. The smart city strategy was co-produced with the citizens and selected categories of stakeholders (firms, universities, financial institutions, the third sector, other public administrations). In the consultation process, six working groups were created corresponding to six smart city pillars (smart economy, smart living, smart environment, smart mobility, smart people, smart governance), and one large public and participatory event was organized for each pillar. The Chamber of Commerce of Milan was also actively involved in the organization of the process.



This model of participatory governance based on coordination, facilitation of co-creation and shared decision processes, shows the specificity of Milan's approach to the smart city, as opposed to, Barcelona's smart city model for instance, in which the public hardly participates to anything (Gasco et al. 2016[3]). Apart from the overall construction process of the smart city strategy, other specific projects illustrate the participatory model of Milan's smart city approach. For example, Milan has decided to manage 9 million euros of its budget through a participatory approach. Within the four months following the launching of the project in July 2015, 60 meetings were organized throughout the city to collect suggestions and proposals from citizens. These suggestions were then processed by nine working groups, that received the support of the municipality's technical staff and have been attended to by more than 200 citizens.

Social innovation

Since the election of Mayor Pisapia in 2011 and continuing with the election of Mayor Sala in 2016, Milan has chosen to put social innovation at the centre of its smart city framework. This means that the framework is not only about the promotion of ICTs in the making of the city, but is essentially concerned with addressing relevant social problems and promoting a sustainable and inclusive model of development. Armondi and Bruzzese (2017[4]) claim that "social innovation, as a principle, can be assumed to be the antithesis of the conventional smart city rhetoric", and even that "the "Milan model" of smart city policy has the potential to contest the

existing neoliberal smart city framings criticized in literature". While we should probably remain sceptical at such enthusiastic statements – especially considering the large influence the private for-profit sector had in shaping and implementing Milan's smart city strategy – we must acknowledge that the municipality's insistence on social innovation, far from being mere rhetoric, is rather substantial.

A result of the consultation process previously described, was the delineation of the "Milan IN-Policy" which has two interrelated dimensions:

- The promotion of innovation to foster the development of the regional economic ecosystem, through policy making and financial resources invested by the municipality in innovative start-ups, fab labs, incubators and the collaborative economy.
- The promotion of social inclusion, through the creation of employment especially in the collaborative economy and through initiatives in critical neighbourhoods.

An essential leverage to achieve these objectives has been the renovation and reuse of vacant public real estate, related to the Municipality resolution n. 1978/2012. Numerous buildings owned by the municipality contain abandoned spaces which have lost their original functions (they used to be shops, workshops, warehouse, offices, recreational spaces...). The city owns 869 of these diverse units, the average surface of which is of 60 square meters. The city also counts about five million square meters of former industrial areas, that have been progressively abandoned with the decline of the industry since the 1980's. These sites usually do not belong to the municipality but are left unused in a context of stagnation of the real estate market. The municipality's smart city agenda has thus been focusing on these spatial opportunities, by renovating vacant public properties and supporting private actors willing to renovate abandoned industrial sites. The municipality has invested 1.5 million euros in the restoration of public buildings, which resulted in the regeneration of approximately 300 spaces.



FabriQ Milano

Here are some of the results of this policy:

• Base (2016): an innovative mixed-use space promoting new relationships between culture and economy, future and everyday life, and between democracy, wellbeing, and the knowledge economy. It used to be an abandoned industrial building owned by the municipality.

- Mhuma (2017): aspires to be a central fab lab for Milan and the whole country, as well as a service and learning centre for the international makers community. It used to be an abandoned industrial building owned by the municipality.
- FabriQ (2014): an incubator for social economy and innovation, opened in Quarto Oggiaro, a deprived public housing neighbourhood cumulating multiple social problems (social segregation, unemployment, poverty...). FabriQ supports non-profit enterprises, as well as for-profit enterprises with a clear social orientation.
- Speed Mi Up (2013): Incubator for innovative start-ups.
- Nine accredited fab labs were developed on vacant public properties.
- 58 accredited co-working spaces with a total of 364 co-workers.



Base Milano

References:

Armondi S. & Bruzzese A. (2017) Contemporary Production

and Urban Change: The Case of Milan, Journal of Urban Technology, 24:3, 27-45

Ernst & Young, Italia Smart, Rapporto Smart City Index 2016

Gascó, M., Trivellato, B., & Cavenago, D. (2016). How do southern European cities foster innovation? Lessons from the experience of the smart city approaches of Barcelona and Milan. In Smarter as the New Urban Agenda (pp. 191-206). Springer, Cham.

Farhad Manjoo, "How tech companies conquered America's cities", The New York Times, June 21, 2018

FPA Digital 360, ICity Rate 2018

Meteoweb.eu, "ICity Rate 2018: ecco qual è la città più "smart" d'Italia per il 5° anno consecutivo, 20 città del Sud fanalino di coda", October 17, 2018

Sgaragli F., Montanari F., Milan White Paper on Social Innovation: accelerating Milan's local ecosystem for social innovation

Wylie B., "Searching for the Smart City's Democratic Future", August 13, 2018.

- [1] Searching for the Smart City's Democratic Future, Bianca Wylie, August 13, 2018.
- [2] Giffinger, R., Fertner, C., Kramar, H., Kalasek, R., Pichler-Milanovic, N., & Meijers, E. (2007).

Smart cities: Ranking of European medium-sized cities. Vienna: Center of Regional Science. Quoted in Gascó, M., Trivellato, B., & Cavenago, D. (2016). How do southern European cities foster innovation? Lessons from the experience of the smart city approaches of Barcelona and Milan. In Smarter as the New Urban Agenda (pp. 191-206). Springer, Cham.

- [3] Gascó, M., Trivellato, B., & Cavenago, D. (2016). How do southern European cities foster innovation? Lessons from the experience of the smart city approaches of Barcelona and Milan. In Smarter as the New Urban Agenda (pp. 191-206). Springer, Cham.
- [4] Simonetta Armondi & Antonella Bruzzese (2017) Contemporary Production and Urban Change: The Case of Milan, Journal of Urban Technology, 24:3, 27-45