
ServDes2018 - Service Design Proof of Concept
Politecnico di Milano
18th-19th-20th, June 2018

Municipality as a platform: the case of Manifattura Milano

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Abstract

The City of Milan, like other big cities on a global level, is experiencing the transition from the Third to the Fourth Industrial Revolution. After a process that in just a few decades has seen an industrial urban economy transform into a post-industrial economy based on services, the emerging paradigm of the Fourth Industrial Revolution leads the City of Milan to rethink its economies by bringing the material production of goods back to the center of their interests. To facilitate this transition, the Municipality of Milan has launched a multi-year program of urban policies that take the name of Manifattura Milano. It is an action aims to facilitate the formation of a new urban manufacturing community, to support the development of an open ecosystem of places and services for the materialization of goods, and to stimulate the integration of technological, social and design-driven innovation. Manifattura Milano thus becomes an action with which a Municipality puts itself at the service of a transformative process, transforming itself into an inclusive and enabling *policy-for-making* platform.

KEYWORDS: policy for making, Fourth Industrial Revolution, (new) urban manufacturing

From cities as stages to cities as experimental platforms

Creative, Smart, Sharing, Inclusive, Open, Resilient, Digital, Maker, Circular, Productive, Fab.

In recent years, all these *labels* have been associated with the "City" and the "cities" (in particular the European ones) thanks to experimental and research projects that stimulate the transformation of contemporary urban contexts combining technological innovation, social innovation, sustainable development. These initiatives, often co-developed by networks of cities, have sediment pilots and demos working to increase an urban lab culture aimed at activating and involving institutions, citizens and businesses across the board, stimulating them to co-design innovation initiatives.

Milan, like other global cities, has been increasingly involved in many of these initiatives, experiencing first-hand the transition to the so-called Fourth Industrial Revolution. It is a transition that in a few decades has seen an urban industrial economy transform into a post-industrial service-based economy. The new emerging paradigm of the Fourth Industrial

Revolution is now challenging the City of Milan (and other cities) to bring again the material production of goods at the center of its interests.

But what exactly does it mean to produce in the city today? There is a big challenge that lies in many contemporary politics agendas and research contexts: how to reconcile a model of advanced, democratic and equitable development, with the progressive affirmation of a vision of social, economic and environmental sustainability.

In the last decade, in some global cities, has started a (re)birth and (re)localization of manufacturing activities. This phenomenon has been initially called *Small Urban Manufacturing* (Byron and Nistry, 2011; Lester et al, 2013) is now becoming mainstream. It includes a heterogeneous group of individuals interested in production such as growers, hackers, makers, designer-craftsmen, DIY people, crafters, craftivists, and fabrication units such as micro-breweries, mini-factories, mobile food units, micro-farms, makerspaces, hackerspaces, manufacturing hubs *hi-tech* and *biotech* start-ups. These forms of materialization of goods see the urban population as a potential localized market, which see *on demand* and *taylor made* manufacturing as an alternative to the mass production, see in the democratization of design and manufacturing tools (and technologies) a social process of re-access to the means of production. (Bianchini and Maffei, 2013). A phenomenon, the latter in particular, that can find a further evolutionary thrust with the vision of "Industry 4.0", a concentration of economic and fiscal devices and measures that favour investments in robotic and computational technologies, consultancy and training in workers and businesses.

Testimonies of this process are cities such as New York, Chicago, Detroit, San Francisco, Amsterdam, Barcelona, Paris, Boston, Toulouse, Shenzhen, and Santiago where a new generation of urban manufacturing operators is trying to create economic development and new jobs thanks to the meeting and the contamination between technologies, crafts, start-ups, design and making. Chicago, Detroit, San Francisco work on developing local and national alliances of urban manufacturers by setting up collaborative services that support companies dealing with logistics, distribution, shared purchasing of raw materials, promotion. Food, design, 3D printing, new manufacturing and industrial areas recovered as Brooklyn Navy Yard represent for New York a strategic asset of the urban economy¹. Shenzhen offers a distributed system of electronics and hardware micro-manufacturers², Paris works on the development of crafts studios and incubators in the city center and push to localize the "industries of the future" in the suburbs. London stimulates the re-zoning of innovative forms of production centered on a mix craftsmanship, making and manufacturing 4.0 thanks to emerging initiatives like MakerMile³. Finally, Barcelona is aggregating an international network of cities interested in developing forms of circular economy developing a global initiative named Fab City⁴.

Manifattura Milano

Starting from EXPO 2015, the City of Milan has progressively regenerated the activism of its institutions, companies, universities, creative professionals and citizens becoming a vibrant context that support the rise of communities of innovators active in the social, economic, technological, creative and cultural fields. These communities are aggregating themselves around hybrid social and experimental spaces, distributed in the city.

Nowadays, Milan has over more than one hundred co-working spaces, ten Fab Labs and makerspaces, incubators and business accelerators, cultural and creative hubs. It is an emerging ecosystem to which are added the universities, more and more committed to opening up their heritage of structures and skills to the city, businesses, professionals and

¹ See https://nycfuture.org/pdf/Making_It_Here_July_2016.pdf

² See www.seedstudio.com/document/pdf/Shenzhen%20Map%20for%20Makers.pdf

³ See makermile.cc/vid/

⁴ See Fab.city

citizens. In Milan, this new innovation ecosystem is not only structuring but is also being structured to design, prototype and test initiatives, products and services on an urban scale in different sectors: agri-food, manufacturing, digital technologies, energy, healthcare.

In recent years, the City of Milan has in fact been configured itself as a platform that has activated, collaborated, supported or participated a set of initiatives: incentives in favor of Fab Labs and makerspaces, establishment of a qualified list of Fab Labs, initiatives of matching between Fab Labs and companies, creation of urban labs and hubs (Mhuma, Smart City Lab), research projects and innovation on an urban scale (OpenCare⁵, OpenAgri), projects for the development of digital skills in young people (Mi Generation Lab⁶). All these initiatives configure a urban platform that aggregates and integrates policies, actors, places and institutions around the theme of new manufacturing. This is the concept of Manifattura Milano, a policy program that promotes the development of urban manufacturing and new crafts, starting from the manufacturing and artisan roots of the city and from the comparison with similar initiatives in other European cities. Manifattura Milano has been connected on the existing urban productive system: Milan is the first Italian city for manufacturing consistency - over 36,000 companies, 350,000 jobs and 13,000 craftsmen engaged in manufacturing (25% of total turnover generated in the city) and number of manufacturing startups.

Manifattura Milano defines the vision and the set of policy projects to stimulate the growth of the urban manufacturing ecosystem. It works to improve the ability of the city to attract economic activities also increasing the role of Milan internationally; it works to combine innovation, inclusion and sustainability to generate job opportunities (especially for young people) and stimulate the rebirth of the suburbs; finally, it works to regenerate mature productive sectors and supporting the parallel emergence of future economies based on digital manufacturing. Manifattura Milano was set up in 2017 through a co-design process that involved companies and their associations, universities and research centers, makerspaces and coworking in the development of a six-pillars strategy: *studies and research, communication, laboratories and services, reuse of disused urban spaces, investment support, education and training*. The set-up of the policy program was based on three activities: 1) *Desk*, in terms of collecting data, case studies and analysis of research policies; 2) *Live*, in terms of organizing focus groups and bilateral meetings with the different protagonists of culture and the urban and international manufacturing scene⁷; 3) *Online*, in terms of establishing relationships with the community of citizens and companies.

The preparation and approval of Manifattura Milano in 2017 saw the sudden organization of a public launch event in BASE Milano, a new symbolic cultural urban open space. During this event, local and national policymakers interact with the urban manufacturing communities in order to introduce and sharing vision and activities of the policy program, its logic of development and the timing of implementation. Cristina Tajani, assessor for production activities of the Municipality of Milan, said during the presentation of Manifattura Milano: "*We used to think the city as a place where deindustrialization is managed and governed, while today we want to be promoters of a process of reconvertng unproductive spaces in production places*". The first major initiative was the first edition of the ManifatturaMilanoCamp (March 17, 2018), an opportunity to converge and aggregate three communities linked to digital manufacturing projects very connected internally but poorly connected externally: the community of start-ups that realize projects, products and services with high technological content for Industry 4.0; the community of crafts and manufacturing SMEs present mainly in the hinterland that innovate their production processes combining traditional know-how and new technologies; finally, the vibrant "urban" community of designers, makers, artisans, Fab Labs, coworking and self-producers. At Camp, for the first time, these three community were together in the same place. They met and shared their experiences creating a big

⁵ See opencare.cc

⁶ See www.migeneration.it

⁷ Over 50 subjects involved in meetings: universities, training centers, foundations, trade associations, trade unions, Fab Labs and makerspaces, experts and influencers.

networking event that saw the participation of 112 speakers from 88 different organizations, organized in 18 thematic sessions.

Manifattura Milano constitutes the first embryo of a manufacturing ecosystem connected with the city and its manifold services able to generate a dynamic alignment between the local demand for and supply of products and productive capacity (also of services)

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