

## **SMART CITIES AND SMART CITIZENS**

### ***The apps and the technologies that make cities more inclusive and open***

Simone d'Antonio - Ella Tanskanen

Even just walking on Via del Corso in Rome or on Esplanadi in Helsinki it is possible to notice how much people live their city through the smartphones, but we rarely focus on how the use of the new technologies is contributing to promote inclusion and participation to the life of the urban contexts. The metropolitan areas of Helsinki and Rome offer unexpected examples of how the quality of life is even more going through applications and technologies that step by step are changing the way of living and thinking about the city. A daily revolution that often is unnoticed by the residents but that is changing in the deep the ways in which a city welcomes old and new residents, encouraging their economic and working inclusion in continuously changing urban contexts.

It doesn't matter if everything is just the result of well-defined political strategies or a series of projects and actions unrelated to each other. The projects ongoing in these two metropolitan areas are showing how the concept of smart city can be defined in different ways depending on the aspirations and urban perspectives. However, the focus on people, and in particular on the most disadvantaged groups of people, is a constant factor sometimes less visible but definitively relevant.

#### **How the institutions are promoting the use of new technologies for the well-being of cities and citizens**

The promotion of new technologies to improve the quality of life goes through the realization of an ecosystem suitable for the creation of innovation. The Helsinki Region Infoshare represents a perfect example in the metropolitan area of the Finnish capital of how public authorities can support local innovation through open data. A total of 1100 datasets have been released in the last four years by 14 local governments in the region of Helsinki, giving to researchers and developers data on a large number of urban phenomena, from the labor force to transport as well as on public and private housing. Making transparency and open data part of the daily work of the public administrations involved is a priority of the project, which is gradually changing the way of working of the different departments and municipal services by acting as "a true Google of Helsinki Data", as the director Asta Manninen states. "Open data foster efficiency in governance and create new jobs and economic growth - says Manninen - Having a wider access to all the data is also a way to combat social exclusion and structuring better public policies".

Funded by the Finnish Innovation Fund Sitra and the Ministry of Finance, the Helsinki Region Infoshare allowed through its action the birth of many applications related primarily to public transport and land management, such as the one made by HSY, the Helsinki Regional Environmental Service Authority, (<http://www.hsy.fi/en/Pages/Default.aspx> ) that has crossed the dates of construction of buildings with the age of the residents to structure local policies more effective on environment and energy saving and especially in the suburbs or in area where the average incomes are lower.

The actions of institutional coordination and data collection are supported by a constant attention to the world of developers, which created a community able to foster mutual cooperation for the realization of apps and programs able to solve daily problems of citizens through a series of events and the platform Helsinki Loves Developers (<http://dev.hel.fi/> ). Many of these apps are available for download from the portal of the Helsinki Region Infoshare and range from those that indicate the presence of the snowplow in the winter period (Aurat Kartalla, <http://www.auratkartalla.com/>) to those pointing out the position of the ramps for disabled people (result of the competition launched by App4Finland <http://www.apps4finland.fi/> ).

The support to social inclusion through the innovation takes place in Helsinki also thanks to structures such as the Forum Virium Helsinki that fosters the collaboration among innovators, public bodies and enterprises. Several projects carried out in the framework of Forum Virium are part of the common action in the Finnish capital and contributed to improve the daily lives of many of the most disadvantaged residents of the city. In addition to projects already completed, as Borough Health and Apollon, which helped to promote an healthy lifestyle and better standards of living for elderly people and residents of the neighborhoods Herttoniemenranta, Roihuvuori and Tammisalo, the most innovative and

visionary project in course is the one regarding the area of Kalasatama. Smart Kalasatama project will enable by 2030 the settlement of more than 20000 residents in the former brownfield of the port, testing a variety of solutions to improve civic participation and to promote a social mix which is at the core of every new strategy of urban regeneration. "We are inviting citizens, startappers and researchers to participate with their ideas to the redevelopment of the area - said the project manager of Forum Virium Helsinki Veera Mustonen – The area will be characterized by the presence of a unique and original structure of social and health care because it will be co-designed by the residents starting from their real life needs". The project that involves this area very close to the city center strikes the attention not only for the mix between good quality buildings and social housing (with buildings that will send real-time data on energy consumption and air quality), but also because of the activism of old and new residents who are undertaking cultural activities and playgrounds to promote the livability of this part of the city in the course of regeneration.

The need to encourage the reuse of public spaces and to strengthen, at the same time, social cohesion in the most central areas of the city, characterized by the coexistence of old and new residents (often of foreign origins) are the priorities that the City of Rome is instead pursuing through a series of projects which, unlike Helsinki, are based on a less pronounced technological structure but aiming, in the same way, at fostering collaboration among government and stakeholders in the name of social inclusion. The project Cross goes exactly in this direction, making the City of Rome main actor of an international project (together with Turin, Manchester and Seville) aiming at supporting young developers in the creation of apps which fosters the use of public services, in particular by the most disadvantaged groups of residents. "In a period of economic crisis for local governments is necessary to involve local associations to intercept the demand for social services, which is particularly strong in the most central area of Rome is because of the presence of major infrastructure such as the biggest city stations - says the councilor in charge of social policies of the I Municipality of Rome Emiliano Monteverde - The use of new technologies, so far yet in widespread use in major urban areas like Rome, is creating a new way of providing the social services, that will see more and more investment in this framework. "

### **Apps and services that improve the quality of life and urban inclusion**

Encouraging a better use of urban services by some groups of people that often have more problems in acceding to it is the goal of many apps and projects carried out by public and private bodies in Rome as in Helsinki, demonstrating how innovation is concretely changing the way of living in the city.

Rome focused on the E-lisir project (<http://e-lisir.net/>) to encourage a better communication between deaf people and public administration, through the installation of an app on the tablets of the public officers of the registry services which allows to obtain in real time a translation of the requests made at the desk by deaf people in sign language through a remote connection with an interpreter. The service is thus able to make the City Hall more accessible to everybody and to solve with limited costs a particular problem experienced by a considerable amount of users (in the first four months of test over 100 persons have already used the service).

"We hope – says Anna Mastrapasqua, one of the users of E-Lisir – that this system will be adopted by all the public offices, as well as by hospitals, malls and transport infrastructures in order to enable us, deaf people, to gain an independent use of urban infrastructures".

In Helsinki, the pedestrian mobility of the blind people is facilitated by the app Blindsquare, which integrates the data of the famous application Foursquare with an audio navigation system that allows the blind person to be guided by his phone through urban places and points of interest. The progressive integration between this and other applications, such as those on the real time situation of the public transport, is revolutionizing the way of living the city by the blind people and, at the same time, is creating a networking of experiences and projects implemented by a genuine network of urban developers.

Spread in over thirty countries and available in 23 languages, Blindsquare is the proof of how a vibrant urban setting, such as Helsinki, can contribute in producing innovations applicable and replicable in other cities of the world, starting by "an ecosystem that, from App 4 Finland and other similar competitions, have brought Finland nearly five years forward

compared to the rest of Europe" as pointed out by the inventor of Blindsquare Ilkka Pirttimaa. "It is not only the presence of ICT companies or the collaboration with the public authorities to make the difference - explains Pirttimaa - but the presence of widespread skills that makes Helsinki a city founded on the hackaton and the collaboration among more than a thousand experts in open data, connected through social networks and ready to help each other in real time". What anywhere else is essentially perceived collaboration between innovators and technicians away from reality, in Helsinki it contributes to improve the daily lives of hundreds of people.

"I use this app every day, especially when I move into the city and when I go to parts of the city that I do not know – says Johanna Herranen, one of the users of BlindSquare - The use of this application helps in becoming more independent and to have more courage to go to new places, as it happened to me using this app even abroad, specifically in Tallinn when only typing the name of a bus stop I have been guided by the app that indicated me the right stop to get off to".

The action of the local governments in favor of the inclusion and the quality of urban life is not limited, however, to encourage the use of new technologies but to integrate them into its administrative activities in an innovative way, combining it with a new approach of proximity to citizens aimed at easing their participation to the life of their communities.

Particularly revolutionary in this sense is the choice of the City of Helsinki to move its Virka Office from the East of the city to the headquarters of the municipality in Aleksanterinkatu. Virka is the unique information center both for visitors and residents, where a series of innovative services of orientation on integration opportunities offered by the city are handled. "The idea of establishing the office in a district with a strong presence of immigrants (more than 27% of the total residents of the city, ed) tended to produce even a physical closeness to the users - says the officer of the City of Helsinki Ahmed Khalil, of Egyptian origins - Moving this info center in the heart of the city's public life has also a symbolic importance that was perceived positively by the residents".

The progressive improvement of the quality of the services offered to migrants, a phenomenon particularly recent in Finland if compared with the situation of other Scandinavian countries, has been accompanied by a mix of actions that have combined physical proximity (with projects such as 'Työtä' aiming at the reduction of unemployment and social problems through a constant orientation to work and education) to the use of new technologies. The innovative system of assistance via infochat to foreigners who wish to leave their country of origin to settle in the Finnish capital has improved communication with the newcomers: an innovation, among many others, that is the result of a strong political commitment but also of a democratic society capable to respond effectively to the waves of skepticism and racism advocated by groups, such as the True Finns (Perussuomalaiset) which achieved good results in the occasion of the last European elections. In Finland as in Italy, the disaffection of citizens towards politics is a cause of worry while the only possible relief is the necessity of reporting in a clear and efficient way the work done by local authorities.

These needs are met In Helsinki by the Ahjo Open system, which aims at making the effects of the decisions of the City Hall more easily understandable and identifiable by citizens. The geolocation in different districts of the city, up to the level of a single road, of the decisions taken by the board and council municipal allows citizens to know better what has been achieved by the different City departments in order to reduce the gap between citizens and local authority, testified by a constant decrease of voters in local elections, especially in neighborhoods on the East side of the city (such as Mellunkylä and Vartiokylä) with the highest concentration of foreigners. "We are promoting the use of Open Ahjo especially in these areas - said the officer in charge of the platform at the City of Helsinki Katja Räisänen - but it is hard to fill the gap with the residents, who often don't know what the local administration is doing". The integration of this tool (<http://dev.hel.fi/apis/openahjo> ) to others as 'Kerrokartalla' (a map tool for citizen participation) and 'Ruuti' (an interaction channel for young people in Helsinki), which promote dialogue and participation of different categories of urban residents, trace a pattern of dialogue and communication followed in different ways also in Italy.

The recent widespread diffusion among the municipalities of the Rome region (Lazio) of the app Comunicacity, which promotes a better communication among local governments and residents of small and medium-sized towns, shows how the new technologies can become a decisive tool to enhance the way citizens use urban services and to reduce the

distance between citizens and institutions. Nevertheless, the way to go to improve the interaction is still long. "Especially in small towns as in the suburbs of the city, often the citizens are not aware of the services provided by the municipalities - says Benedict Pacitto, developer of Comunicacity - Only 10 per cent of municipalities that have joined the initiative have required the activation of services that allow citizens to send their feedbacks to the government: a sign that there is still a lack of familiarity in managing the dialogue with citizens, especially in rural and peripheral areas "

### **When citizens lead innovation**

Enhancing collaboration between citizens and local authorities on concrete issues is the priority of many initiatives that are taking place in Rome and Helsinki making the residents main actors of the urban change through the use of specific portals and apps. The experience of City Hound in Rome intends to foster this kind of collaboration to make a better use of the abandoned spaces, through the creation of a social network in which the residents can report possible sites to be regenerated in their neighborhood. Created by the team of architects T-Spoon, the project has been tested in the I Municipality of Rome and combined with the activities of the URBACT Tutur project, which intends to accomplish in the district of Montesacro a new model of collaboration among public and private actors in the temporary regeneration of disused spaces. These initiatives also aim at allowing a better communication between people, facilitating the match between demand and supply of space to create new initiatives of working and social inclusion, as well as innovation in the urban area.

Applying the rationale of the social network to the relations among neighbors, in order to improve the care of the common areas and to create a new sense of community, it is also the priority shared by hundreds of Social streets (<http://www.socialstreet.it/>) emerged recently on Facebook throughout Italy: these groups, created on the most popular social networking, are fostering the meeting among residents of the same street who come out from the virtual square and decide to meet in the real life and take action in the area where they live.

Piazza Santa Maria dei Fornaci, just behind the St. Peter Church, is one of the best examples in Rome of this activism from the bottom born from the social network, with over one hundred people involved in activities of regeneration such as the maintenance of the gardens of the square as well as the organization of convivial activities in the streets of the neighborhood. In this district the social street has an increasing importance in the integration of new foreign residents and to include some of the most disadvantaged residents of the neighborhood, such as the homeless of the square that were aggregated by residents of the neighborhood to recovery actions, encouraging the creation of better living conditions and their gradual inclusion in the district. " I live in this area since more than one year - said the Polish homeless Jaroslav - and thanks to this kind of initiatives I get more help and support from residents and shops of the area and I give them in exchange an help in keeping the gardens of the square safe and clean".

Also in Finland spontaneous groups emerged from social networks are collaborating closely with associations or groups of citizens and local governments to encourage the participation from the bottom and at the same time the inclusion of the most vulnerable categories of people. However, it is in the field of public communication that are taking place some of the most interesting initiatives of joint production of materials, mostly diffused on the Web, which help to strengthen the sense of community starting from the experience of young people and migrants. The activities of Stadi.tv (<http://stadi.tv/>) and VantaaKanava (<http://vantaakanava.fi/>), made respectively in Helsinki and Vantaa, suggest the importance of the involvement of the people which risk more to be victim of social exclusion involving them in their self-representation and in the representation of the community they are part of. "These channels contribute to the creation of a local identity - says Katja Savopirtti, editor in chief of VantaaKanava – This channel is for all the citizens, and we hope it will give a voice also to minorities living in the city." If it is true that a city can't be a smart city without smart citizens, the combined use of the apps, social networks and new social technology is radically changing the everyday urban experience, as shown by the experiences of Helsinki and Rome, with attentions more or less strong to the use of innovative technologies or to the involvement of people. The challenge of the integration between technological and social innovation passes through here, also using a mix of technology and participatory approach to restore that capital of confidence decisive for open and inclusive cities.

*(This reportage was made possible thanks to the contribution of the program Medians of the Council of Europe)*