## FOREWORD



"By opening up unprecedented prospects to the city, the digital economy is radically changing the relationship between local authorities and their citizens, and so the modes of urban governance." Nicolas RENARD - Director of Foresight, Veolia Institute

Digital technology is changing everything: infrastructure is changing; the relations between local authorities and citizens are changing; services are changing; the city is changing. More than a revolution, "digital technology is a civilization"<sup>1</sup>.

Although poorly defined, the smart city has become the new frontier for urban planning for one simple reason: combining their respective power, connectivity and big data are exponentially growing the universe of the possible. Over the years, they have been put to use to improve transportation in congested cities, public health by monitoring atmospheric pollution, resilience to natural catastrophes and management of municipal waste, to name just these.

In emerging countries, the Internet has made it possible to professionalize and build on informal practices, together with the appearance of collaborative services to make up for the failings

of public operators. Still, digital technology will never be able to overcome a lack of basic infrastructure. No digital technology will be able to make a drinking water, wastewater or electricity network operate more efficiently where there is none.

In developed countries, the digital shift is paving the way to the more efficient, more fluid and more economical operation of local services. It is also resulting in the creation of bouquets of interactive services that make life easier and lift a region's prosperity and image. Based on high value added, there can be no denying the success of these new services, simply look at the silent vote exercised daily by millions of people in support of Uber or Airbnb.

Cities are unequal in the face of the digital revolution. In theory, it allows each its chance; in practice, it polarizes the urban world even more: smart cities connect with their peers and look far ahead, at the risk of abandoning their hinterlands. In truth, the smart city gets as much damning as positive praise. Digital

1 Milad Doueilhi, Professor of Digital Humanities at Paris-Sorbonne University technology may be liberating but it also bears the seal of ambivalence. Digital technology is a powerful tool, but used for what, by whom, with what purpose and with what controls? Software is not neutral: the choices made by programmers remain a mystery to users. Through their data-based activities, citizens leave a digital trace everywhere that can be used without their knowledge.

So, how can we achieve the promise of the smart city while avoiding its downsides? Up to what point is the digitalization of urban services relevant? How do we make the shift from connected to smart city? To whom does this mine of data, the black gold of the 21<sup>st</sup> century, belong? What areas should the municipality retain in order not to lose its sovereignty? Who will control the smart city: GAFA, the citizens or elected officials? How do we protect citizens' privacy? These are the questions on which this issue of FACTS attempts to shed some light.

Both a solution and a problem, digital technology can lead either to social progress or an Orwellian nightmare. On the one hand, it has democratized access to economic initiative, reinforced multijobbing, encouraged the emergence of an economy of sharing, energized innovation, and stimulated local service business. On the other hand, the digital mutation is unsettling: precarization of casualized labor, reduced social welfare cover, unequal sharing of value added between freelance workers and the intermediary platform, flawed taxation. Above all, in many professions, the ramp-up of digital technology will result in the massive destruction of jobs. It is therefore the responsibility of mayors, together with business leaders and civil society to refocus digital technology on the priority needs of their cities, including employment and reduced inequality. Without which there is considerable risk that the "digital disruption" will bring "social disruption" in its wake.

After smartphones, social media and the Internet of Things, the smart city is another facet of the digital revolution. However, the digital economy is exploding the city's management systems. By opening up unprecedented prospects to the city, it is radically changing the relationship between local authorities and their citizens, and so the modes of urban governance. Crucial for their future, the governance of smart cities is yet to be defined.