



*INNOVATIVE STATE.  
HOW NEW TECHNOLOGIES  
CAN TRANSFORM  
GOVERNMENT*

Aneesh Chopra

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Aneesh Chopra's book *"Innovative State. How New Technologies Can Transform Government"* summarizes the work he accomplished during his years in the White House as Chief of Technology Officer (CTO) under the direction of President Barack Obama whose objective was to promote a change in the administration by increasing its transparency, public-private collaboration and the participation of citizens through Internet-based technologies. He was appointed for this position in 2009 and he performed until 2012. He obtained a master's degree in Public Policy from Harvard University in 1997, and his professional life has always been linked to new technologies and his desire to seek solutions through the application of innovation and promotion of a collaborative management model between public and private sectors.

Throughout his book, Chopra describes the four policy tools that were implemented during his time in the White House to carry out an open innovation

project that would transform the public sector and allow to reduce the gap in the use of technology between the federal government and the private sector: (1) open data, (2) standards and convening, (3) prizes and challenges and (4) attracting talent-lean (government) startups.

**1.- Open Data.** This policy aims to make available to citizens information and data held by the government, which until now had been used internally. The first objective of this policy is to guarantee transparent management that allows citizens to know the government's activity, answering how and on what the tax money is spent. As a consequence of greater transparency, a greater degree of accountability is ensured on the part of the public sector for its actions and therefore greater legitimacy. With this idea was launched Data.gov or FederalRegister.gov.

However, the idea developed by Chopra in his book goes beyond these objectives (transparency and accountability). This policy of open data must also seek to make information available to the citizen in a way that is useful and that its reuse is a benefit for society. The government's mission, in this case, is to ensure that information/data reach citizens in an accessible way, adding value to the country's economic activity or in the day-to-day life of citizens. To achieve this objective, it is not enough for the government to release its data and make it available to the citizen. As Harrel, C. (2013) explains the data will only be useful if it is correctly aggregated, presented and is possible to interact with.

There are many cases where open data actions have brought benefits to society (citizens and companies). The European Union Open Data website, for instance, lists the existing Open Data applications developed by the European Institutions, agencies and as well as third parties, as for Open Opps where it is possible to find easily, daily updated opportunities for public contracts from all over the world. Spain's Energy Department developed the platform "geoportalgasolineras" which compares petrol, diesel, and premium fuel prices all over the country, helping citizens to find the best-priced gas stations. The data as designed also allow the energy department to detect possible antitrust practices among companies in the sector.

**2.- Standards and Convening.** Since the industrialization of the economy at the beginning of the twentieth century, many countries have played a fundamental role in its development by setting standards to ensure the products we use are safe and reliable, and those different appliances and pieces of equipment can connect and work together for a better experience. The NIST (National Institute of Standards and Technology) was created for this purpose in 1901 and continues to provide an essential service for the development of the economy (in Spain, this role is played by UE, Asociación Española de Normalización <https://www.une.org/>)

and at European level, this work is coordinated by the European Committee for Standardization).

Chopra underlines that interoperability of systems and technology is essential to ensure progress and innovation, however, he encourages a different way to achieve the desired harmonization, establishing the need for any standardization activity to involve the private sector, to reduce the high costs involved in NIST activity and accelerate standardization processes. In this way, the state takes on the role of promoter of this activity. These efforts were focused among others in the energy sector, establishing the goal of modernizing the electricity grid and creating a smart grid technology that allows for "(1) create jobs, (2) reduce energy use, and (3) expand renewable energy production".

**3.- Prizes and Challenges.** The introduction of technology in the administration has meant the allocation of large budget lines for the contracting and implementation of IT developments, but, according to Shark (2015), between 2003 and 2012 only 6.4% of the large-scale projects developed were successful ("the government invest in over 6,000 IT projects every year yielding more than 75 billion in cost"). These circumstances and the need to avoid lengthy procurement processes, made Chopra propose an alternative solution, which incentivizes the call for Awards or Prizes. He advocates this strategy "as a way to get out of government procurement.". To foster Prizes among the Federal government in 2011 passed the America Competes Act granting authorization to all agencies to convene prizes up to \$50 million per prize. This alternative to contracts and grants is used with some frequency in the non-profit sector, for example, the *UN Climate Action Awards* that allow the United Nations to select the best and brightest solutions to climate change, led by communities, governments, businesses, and organizations around the world.

**4. Attracting Talent-Lean (government) startup.** Finally, Chopra applies to lean startup philosophy and defends how its principles may be implemented in the public sector. The Lean start movement was defined by Eric Ries and according to Blank, S. (2013), encourages experimentation, customer feedback, and iterative design. This policy has two aims, first, it gives entrepreneurs access to key positions in the government thus they can promote innovation and technology to achieve the agency's objectives and second, favors professional relationships between public servants and entrepreneurs. This idea was developed by President John F. Kennedy when creating the "Talent Hunt Committee" to hire key positions in his government, Chopra, A. (2014).

An excellent example where the tools described by Chopra have been used (open data, standards, collaboration and attracting talent) is explained by Bibiana McHugh, who has worked in TriMet's, the public transit agency in Portland, Oregon (McHugh, B, 2013).

The success of this case lies in how the public sector makes its data available to the citizen to facilitate and promote access to public transport in the city. To do so, it has a large amount of data that must be designed and provided attractively and simply. Instead of initiating a long procurement process, TriMet calls for collaboration with a technological company that, while promoting a common good, obtains benefits, thus greatly reducing the cost to the administration and resolving the situation in record time. In this way, an open data policy together with the attraction of talent gives an optimal solution to the need that the public sector wants to cover.

In summary, Chopra describes what it can be considered as a New Public Governance (NPG) model (as opposed to the New Public Management model) in which the role of the state is focused on guarantee, in a holistic approach, the common good, and on the coordination and direction of the different external agents involved in the resolution of a problem (Morgan, 2013). This model can be presented as a more appropriate solution, than NPM, to confront complex/wicked problems. But it can be considered that this new model of governance cannot be applied to all the issues that the administration has to face, or sometimes it is necessary to use techniques corresponding to the two models of public management. In this sense, while performance indicators are developed in NPM, similarly effectiveness and efficiency indicators are incorporated in the model of NPG as well, so the two models share common features (Klijn E.H., 2012).

Another debate arising from the use of technology is the confrontation between technological determinism and social constructivism, doctrines that attempt to answer the question of who controls technological change (Dafoe A., 2015). Chopra's proposal ultimately seems to side towards technological determinism, because the role of the government is reduced to coordinate and guide different stakeholders to pursue the common good, but without establishing the specific characteristics of the service to be provided to society, and that could lead us to think that it is technology that controls and decides how to meet our needs.

Eventhough this book was first published in 2014, it is still very up-to-date, especially in this "new normal Post Covid-19 context" where governments must bet on new technologies for their necessary transformation. The objective that Chopra pursues: "to make government better, not bigger, through the application of technology, data, and innovation" is still valid and fully relevant.

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