The Government That Mexicans Deserve: Challenges and Opportunities in the Digital Divide

by Manuel De Tuya and Monica Schurr

EDITOR'S SUMMARY

Mexico's political history has seen several parties rise and fall in the 21st century, and amidst the many transitions, the Mexican people have seen a divide growing in their society. This divide covers many areas, such as economic standing, access to healthcare and education, and access to digital technology. The digital divide means that access to internet service and smartphones is often limited to the affluent. However, access to technology is just one aspect of the digital divide. Citizens also require training and education in how to use the technology and where to access information. Currently, the vast majority of internet users in Mexico are 24 years of age and younger, meaning that older generations need the access and education in technology use. With more Mexican citizens given access to technology, more can actively participate in government and create a government that they deserve.

KEYWORDS

Mexico	information access
government	access to resources
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Manuel De Tuya is a doctoral student studying information science at the University at Albany, Albany, NY. His research interests include smart cities, information technology in the public sector and information sharing and information policy within urban contexts. He has over 20 years of industry experience in information technology and currently works for Regeneron Pharmaceuticals Inc. He can be reached at mdetuya<at>albany.edu.

Monica Schurr is a doctoral student studying information science at the University at Albany, Albany, NY. Her research interests include assessment and evaluation, information technology in learning and education in the smart cities context. She has a background in secondary education and program evaluation, and currently works at the Center for Technology in Government at the University at Albany. She can be reached at mlmeissner<at>albany.edu.

Alejandro Gonzalez Iñárritu was living the dream. His movie, *Birdman*, was nominated for nine Academy Awards. By the end of the ceremony, *Birdman* had won Best Cinematography, Best Original Screenplay, Best Picture and its creator went home with the Oscar for Best Director. That night, he delivered a speech that most likely moved the millions of Mexican viewers watching the live broadcast from Hollywood. It ended with a prayer that his fellow Mexicans would finally get the government that they deserved.

This was a direct criticism of the current state of affairs between the Mexican government and Mexico's civil society, a conflict stemming from multiple, complex factors. However, one significant challenge in achieving his vision has to do with the so-called digital divide. This article presents the history of governmental struggles in Mexico and places it in the context of Mexico's people: their challenges in the digital divide and their opportunities for coming together to create a government that serves them as they need and deserve. Specifically, the article explores education, information and communication technologies (ICTs) and citizen-government involvement – and what it might look like if Mexican citizens have access to gaining the digital, technological and civic literacy necessary to actively and effectively participate in their government.

Democracy in Mexico – A Tale of Two Parties

Mexico's political and social history could be considered a repetitive tale of missed opportunities due to the myopic vision of its governments. From the War of Independence (1810-1821) to the onset of the 20th century, Mexico re-invented itself as a country more than once. Unable to establish peace among the power-hungry players long enough for economic and social growth to materialize, the Mexican society saw the end of the revolutionary

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period, around 1930, as the best opportunity to finally prosper after a civil war that killed more than two million people. However, politicians did not share society's vision. Influenced by the socialist movements from Eastern Europe, the former revolutionary generals, now turned politicians, decided that founding the welfare Mexican state, based on a socialist and revolutionary ideology, should give them legitimacy. The plot worked and the Institutional Revolutionary Party (PRI) rose to and stayed in power for over 70 years, from 1930 to 2000 [1].

The PRI did not have any major challengers until the late 1980s when a leftist candidate, Cuauhtemoc Cárdenas, gave an acceptance speech on election night – and the official candidate was declared the winner after a very shady vote counting process. The Mexican electorate demanded a change of government, but more importantly, a change in the culture of corruption that had permeated civil society and that had allowed the same group of politicians to control the country for so long [2].

It took Mexico 14 years more to finally get a president from a party other than the PRI. In 2000, conservative former business executive Vicente Fox promised that his government was going to be a fresh start for the country – without cronyism, corruption and, most importantly, with the hope of a brighter future for the more than 30 million Mexicans living in extreme poverty. The conservative party – the National Action Party (PAN) – was in power for 12 years. Constricted by an unfriendly congress, neither Fox nor his successor, Felipe Calderon, were able to deliver on their campaign promises of a more equal society. To the contrary, the gap between the rich and the poor got wider and by the end of Calderon's six years in power it was estimated that Mexico had over 45 million people living below the poverty line and the perception of the general public was that corrupted practices within the conservative government were no different from those

demonstrated by the PRI. To make matters worse, drug cartels with diversified lines of business created a climate of insecurity and despair throughout Mexico [3].

The PRI was brought back to power in 2012 thanks to the general perception that Mexico was a dangerous place to live and do business in; a war on drugs that killed more than 30,000 people; and the message that "experienced politicians know best." With an amicable congress, current President Enrique Peña Nieto has been able to enact legislation to modernize some of the Mexican political and governmental structures that supposedly will take the nation back among the most competitive democracies in the world [4]. However, corruption and cronyism have become endemic in the Mexican way of doing politics and governing and the self-declared "new PRI" is no exception [5]. The failure of President Peña Nieto's team combined with the onset of yet another financial crisis due to falling oil prices and the resilience of organized crime and its capabilities to infiltrate all levels of government have left Mexicans asking for yet another change. But how can Mexican society propel this demand for reforms?

The Digital Divide – Beyond Accessing the World Wide Web

In the 21st century, information and communication technologies (ICTs) are seen as highly influential factors in economic development and social advancement. As a consequence, governments around the world have been forced to develop policies to avoid the so-called digital exclusion [6]. The paradox is that with increased technological evolution, this inundation of technology and information is actually "structured for exclusion" [7] and can be considered a new form of social exclusion [8]. The digital divide separates those who have and those who do not have access to web-based technologies and the education necessary for effectively using such technology.

The concept of digital divide could be framed as a tension between ruling groups and underserved sectors of the population or between well-established socioeconomic forces and emerging trends. Around the world there are large groups of people struggling to achieve economic growth and social advancement due to falling behind in the knowledge, skills and dispositions needed to fully access and use new digital tools. In response to these issues, governments identified the need to make technology and communications media and devices more accessible to those sectors of the population. But questions arise when implementing such public policies: what would suffice to close the technology gap within a specific society? Is access to a PC and the internet enough? Or with the proliferation of mobile devices, is access to broadband the way to go? Should human or social factors be taken into consideration when designing a potential solution? And, how can/should the public be educated so that they are armed with the necessary knowledge, skills and dispositions to fully utilize current and emerging technologies?

One example comes from Armenta, Serrano, Cabrera & Conte [9], who propose a framework of reference for digital inclusion in rural areas that takes a systemic approach to the implementation of ICTs. Another example is the conception of the "learning city" [10], put into practice and exemplified in Hume, Australia, where conditions are created for civil society to learn – in all its forms – and, as a consequence, participate in their communities *and* governments [7].

Political participation has also gone digital. The concept of digital political participation (DPP) is the result of the enablement of internet-based tools that facilitate the political involvement of citizens. However, its dependency on the availability of internet access makes DPP highly related to the digital divide. De Marco, Robles and Antino [11] conclude that age, education and economic status are linked to a citizen's digital skills, in particular internet literacy. They also conclude that internet skills play a role in determining whether citizens are engaged in digital political participation. This specific finding within the literature on the digital divide is significant because modern ICTs provide a more direct medium for citizens to participate in proposing public policies that they, the constituents, deem relevant.

Education is the key here: there is a flow from education promoting the availability and accessibility of ICTs, which in turn promotes the ability to participate in government. In this way, education and knowledge do indeed serve a social cause as citizens gain not just digital/media literacy skills but information, technological and civic literacy. (For a discussion of education and civic literacy, see Morgan [12].

The Tequila Effect of the Digital Divide

The history of the internet in Mexico can be traced back to the late 1980s and early 1990s when big private universities and some government agencies established the first connections to the web. This initial charge was followed by the dominance of a duopoly (Telmex and RTN) and a timid attempt to open the market to others. However, the Mexican government failed to create a competitive market, and subsequently Telmex still dominates.

In an attempt to close the provision gap, the government mandated Telmex to provide services at reduced costs to rural areas of the country. When the telecom giant found bigger and stronger competition in high-demand areas, it couldn't afford operating at a loss in low-demand rural markets. The solution from the Mexican government was a program called e-Mexico, whose main objective was to create community-organized telecenters, which would offer internet services in remote areas of the country. e-Mexico never took into consideration that besides the infrastructure factors, such as computers and internet access, adoption of a new technology also requires the acquisition of a certain skillset in order to understand (necessary knowledge and concepts) and operate (necessary technical skills) the technology correctly [6].

Tello-Leal, Sosa-Reyna and Tello-Leal [13] describe how Mexico, still labeled as a developing country, ranks slightly above the generalized indicators of access to the internet and a computer and that the vast majority of internet users in Mexico are less than 24 years of age. There is a gap in access to internet technologies for older sectors of the population, groups that could be more influential and participative in the country's political process.

The new learning environment in Mexico promoted new forms of social behaviors – the cyber-café was the incubator of the digital conscience of a segment of the population for whom web-based socialization and learning is second nature now.

In summary, Mexico's digital divide is a very complex socio-technical phenomenon with three main streams of influential factors: a technical stream (oppression of market forces by a duopoly that controls the infrastructure); a macro-economic stream (wealth inequality, inadequate government regulation and inconsistent foreign direct investment); and a social stream (a generational gap when it comes to digital/technological literacy).

Information Policy and the Digital Divide

In Mexico, palliative measures have emerged from the public sector. Fuentes [14] describes how the concept of the cyber-café (internet café) provided access to technology and information to groups of the population who were affected by the digital divide. But the cyber-café, Fuentes argues, also played the role of a classroom where people were able to acquire technical skills through an interactive process. A similar and interesting example hails from India's School in the Cloud, where "self-organized" learning was brought to the slums of India and has resulted in unique opportunities and access for children to engage in technology itself as well as self-directed educational opportunities while using that technology.

The new learning environment in Mexico promoted new forms of social behaviors – the cyber-café was the incubator of the digital conscience of a segment of the population for whom web-based socialization and learning is second nature now. A factor that facilitated such acquisition of knowledge, skills and behavior is that access to the internet has become more available thanks to the proliferation of mobile devices and more affordable options for accessing broadband [13]. Whether this access was the result of effective public policies that facilitated the expansion of broadband services even to remote locations of Mexico or the appetite of Telmex for expanding its

markets and getting even more control of the telecommunications realm cannot be known.

Regardless, having access to infrastructure and web-based technologies is only part of the equation. In recent years, researchers have explored two new variables that may have an effect on the digital divide: usage intensity and usage purpose. Castaño-Muñoz [15] identifies intensity and purpose as key influential factors in the ability of individuals to effectively learn content taught through the internet. Castaño-Muñoz also argues that ICTs by themselves are not conducive to the effective acquisition of knowledge; there is a need for formal guidance so that time and intention are aligned with specific learning goals and objectives. The relationship between intensity and purpose in the teaching-learning process is important because public policies should be aimed to treat the digital divide as an evolving phenomenon that requires providing citizens with the means and, to some extent, the purposefulness for accessing and using internet-based technologies; this combination is indeed one of the features of the so-called "learning city." "Learning city" is just one of the conceptual relatives or terms used alternately for smart cities [16]. Others include, for example, creative, humane, knowledge, intelligent, information and digital city.

The municipality of Hume, Australia, offers an example of this approach, where civil society and social justice are being built because citizens have the opportunity for and access to forms of education that increase their technological, information and, perhaps most importantly for the purpose of policy-making, civic literacy. Learning is positioned as a shared, community experience situated in a certain context. In this way, citizens can learn together, engage in social action together and create the conditions in their specific cities that are conducive to civic participation. How could this concept be applied to Mexico? Can it? Governments may be inclined to push

their ideological agendas or to comply with lobbyists. For civil society, the learning city should be seen as the opportunity to promote those values that could facilitate Gonzalez Iñarritu's prayer, and one avenue that could involve embracing the values and activities of a learning city.

Calling Birdman

Mexico has historically been a country with deep and broad societal gaps fighting for scarce governmental resources. Inequalities in the distribution of wealth, lack of access to appropriate health care for millions of citizens and the educational marginalization of large sectors of the population are examples of such gaps. External variables like criminality and a faltering economy hinder the improvement of the conditions of poverty and education. Solutions to these issues need to come from consensus since governments cannot operate without the involvement of public entities, the civil society and the consideration of cultural trends when it comes to the definition of *information policy* [17]. How could Mexican society take advantage of the advances in technology to close the societal gaps that had prevented the country from realizing its fullest potential?

ICTs are a conduit to information, from which comes the creation of knowledge, and therefore they are seen as instruments in the fight against poverty [18] again. However, for an individual to take full advantage of the cascade of information and knowledge an internet connection can offer, there are some more basic needs that need to be covered such as housing, food and health for the over 40 million Mexicans who are now living below the poverty line.

An acceptable position from the policy development perspective is to ensure that the Mexican government takes care of the infrastructure thread of the digital divide, expanding broadband and other technologies that can be used to access the internet. For the social thread, the solution is a generation away. The younger sectors of the population, those between the ages of six and 17 who now comprise the largest group of Mexicans using the internet, need to develop dispositions of value to eradicating Mexico's social and economic disparities. Such dispositions may include, for example, the realization of and commitment to knowledge and education serving a social cause; and valuing cognitive and technical skillsets involving media, information, technology and civic literacy.

The appropriate application of technology can contribute to such purposes. Investing in the right projects, those that take into consideration the socioeconomic surroundings of the targeted market and can deliver tangible, measurable benefits, should be adopted as a common practice. The internet gives people the opportunity to participate in policy decisions more directly and such participation is something that Mexicans need to exploit. Making their voices heard by government officials might be a click away. This participation can be a way to narrow the digital divide: giving people access to the education they need in order to attain knowledge and skills necessary for citizen-government participation; allowing more people to participate in deciding the direction their communities need to go; and leading them to get elected officials that share such a vision.

In this way, Mexicans might finally be able to achieve Alejandro Gonzalez Iñárritu's vision and get the government that they deserve. ■

Resources on following page

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