



Maestría en Gestión e Innovación Tecnológica

Title

**Axes of the digital divide in México a diagnostic
of the situation**

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Axes of the digital divide in México

A diagnosis of the situation

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1. Introduction

According to the Organization for Economic Cooperation and Development (OECD), the Digital Divide (DD) is *the socioeconomic gap between those communities that have access to the new technologies of information and communication technologies (ICT) (Internet, mobile phone, computer, broadband and other devices) and those who do not*. In this sense, the gap between Mexico and countries such as Argentina, Brazil, Chile, Costa Rica and Uruguay is illustrated in Figure 1 [1]. Moreover, the average percentage of households with access to the OECD, of which Mexico is a part, was 71.6% in 2011, that of Mexico is 30.7% in 2013. Figure 2 [1].

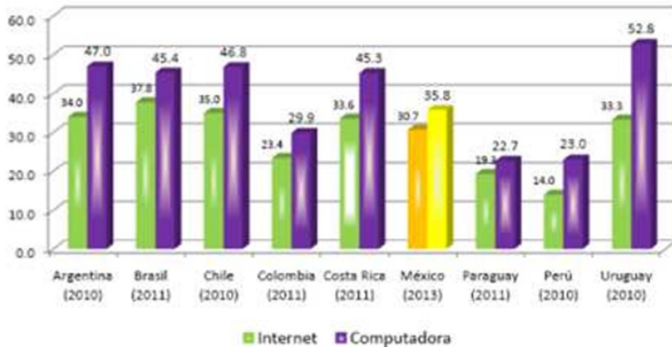


Figure.1 Percentage of households with Internet and computer some Latin American countries, 2010-2011 (Source ITU/ICT)

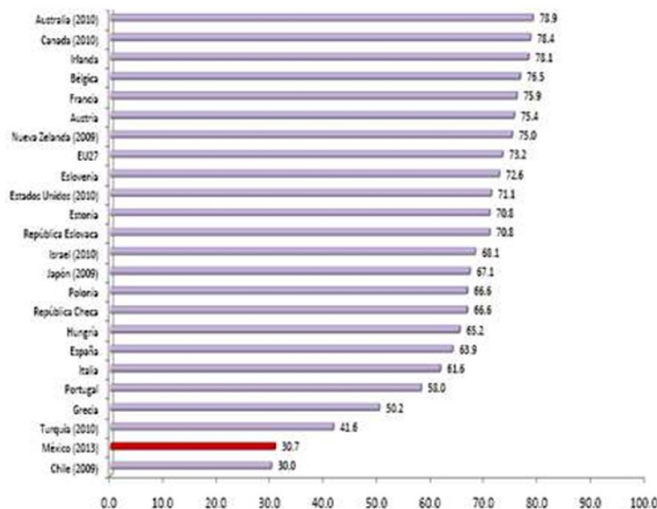


Figure.2 Percentage of households with Internet access in OECD countries, 2011. (Source OECD, INEGI, MODUTIH 2013).

3. Method

Was started from the research question ¿What are the axes that impact in reducing the DD in Mexico?. In order to meet the actors, actions and management of ICT technology and telecommunications, a methodology based on the analysis of qualitative data and relevant theoretical sources was proposed. The broadband is characterized by lack of use and development of ICT as well as the lack of broadband internet (see Figure 3).

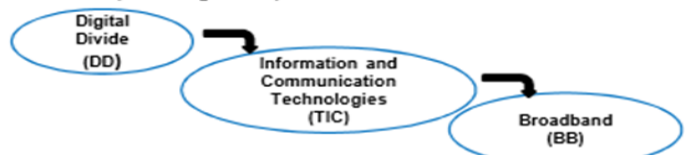


Figure.3 Digital Divide, ICT, Broadband.

Information was analyzed globally recognized agencies. (Figure 4). Each of these institutions have conducted studies regarding the DD, ICT and BB. Detecting the impact of these activities in all sectors of the economy. (see Figure 5). Thus, the qualitative analysis consisted of the preparation and description of information, data reduction and analysis application. This was carried out by selecting and discriminating information, so as to define the axes on the digital divide.

Institution	Study
The Economist	Smart policies to close the digital divide
AMPICI + ITESM	Agenda digital para elaborar un PDD 2012-2018
CEPAL, ITU, WEF	Banda ancha, digitalización y desarrollo en América Latina.
INEGI	Módulo sobre Disponibilidad y Uso de las Tecnologías de la información en los hogares 2013 (MODUTIH 20139)
ITAM	Tesis: Determinantes de la penetración de BA en países en desarrollo
ITU	El impacto económico de la BA y desafío para superar la BD
IMCO	Diagnostico del sector TIC en México
WEF	The Global Information Technology Report 2014

Figure.4 Studies consulted Institutions for the analysis.

Acronym: Instituto Tecnológico Autónomo de México (ITAM), Asociación Mexicana de Internet (AMPIC), Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM), Comisión Económica para América Latina y el Caribe (CEPAL), International Telecommunication Union (ITU), Instituto Mexicano para la Competitividad (IMCO), Instituto Nacional de Estadística y Geografía (INEGI) and World Economic Forum (WEF).

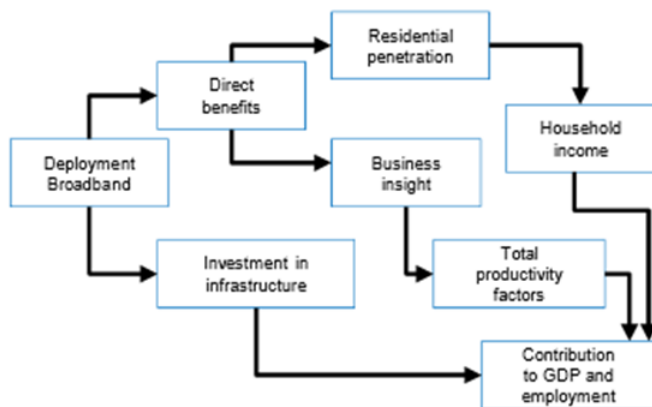


Figure. 5 Economic Impact of Broadband (Source ITU)

4. Results

Data was analyzed using a qualitative analysis. Eleven technological domains that will be the framework of actions carried detected, applying the model of the triple helix (CEIS del ITESM) (Figure 6)(CEIS-ITESM) [2].

Technology Domains	
1 Role of Government	7 Application of ICT
2 Infrastructure	8 Inclusion programs
3 Access to information and knowledge	9 Media communication
4 Creating digital capacity	10 Ethical dimensions of the information society
5 Building confidence, security and development	11 Cooperation programs
6 Enabling environment	

Figure. 6 Dominios tecnológicos como marco de referencia [2]

The findings detected by contrasting the international experiences of countries like; Brazil, Chile, Uruguay, India and Australia regarding Mexico are presented in Figure 7 (The Economist).

Findings	
1	The government's role as an enabler
2	They have a broadband plan
3	Initiatives involving vulnerable groups
4	Inclusion programs and e-capacity building with multisectoral participation.
5	Launching programs, policies and specific actions for creating user confidence and certainty.
6	Have an effective and competitive regulatory framework.
7	Regional cooperation projects.
8	E-health, e-government and e-business.

Figure. 7 Findings.

Finally, the following areas were defined; lack of broadband and infrastructure, skills usage ICT and Digital governance and government (Figure 8).



Figure. 8 Axes identified in the analysis.

5. Conclusion

According to the analysis identified three main axes, thus inferred the following conclusions : 1) It requires a coordinated strategy with the different sectors, 2) ICT is critical for development, innovation and competitiveness, 4) A legal and regulatory framework that promotes development through ICT, 5) Develop digital skills for ICT use in production and daily life of people, 6) Innovation as a core part of technology companies, 7) A humanistic vision where society are the basis of digital project and 8) Effort by public institutions (SCT, IFT, universities).

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