

# Digital Divide and Gender in Dominican Republic

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## ABSTRACT

Gender 2nd level digital divide in the Dominican Republic is big<sup>1</sup>. Efforts were and are being made to reduce this divide. A government Program for Digital Alphabetization<sup>2</sup> have trained on ICTs, government officials with an interest on women (fig. 1 and 2). New data for 2013 showed that Dominican women use electronic government services more than men (see figure 8) also the data showed that although Dominican Government employs more women than men (fig. 3), this percentage is reverted when it comes to high paying or managerial positions<sup>3</sup> (fig. 4). The analysis of the data also showed some interesting facts about today's developing country's women and technologies. It is our view that this set of facts points towards an ever increasingly involvement of Dominican women in Dominican technological workforce. Although equality is yet to be achieved in high posts, use and knowledge of ICTs on professional, academic and public sector.

**Categories and Subject Descriptors:** [Information and Communication Technologies] [IT Governance]: Knowledge & Information Society, Electronic Government, Gender Digital Divide, and Gender Equality. **General Terms:** Research on electronic government implementation, digital divide and gender equality. **Keywords:** Information, Technology, Communication, ICT, Information Society, Electronic Government, Knowledge, e-government, Gender Equality, Digital Divide.

## 1. INTRODUCTION

The many initiatives introduced by Dominican Republic government to improve government processes by using ICT's include the publication of information on websites or portals to support transparency and accountability, also, the creation of a government hotline to provide telephone and mobile access to government services and training of government officials on ICTs. Using such facilities the research team was able to acquire data from government Ministries websites, government contact center (hotline) and digital training program to obtain the data used for this study. Additional data was obtain from the draft report on the latest household statistics from the Dominican Statistical Office and several telecommunication information came from the telecomm regulation institute of the Dom. Rep. The research team's interest on available data segregated by sex was key to elaborate a thesis on women's improvements on the use of ICTs in the Dom. Rep.

## 2. APPROACH

The research team compiled its body of data from several sources: Digital training and Government Hotline data from the Agency in charge of electronic government initiatives in the Dominican Republic: OPTIC. All other data was obtain from government websites and their transparency pages. Those institutions lacking these pages as of September 2013 were not included in the study. In total, 216,089 public employees from 17 of 20 ministries of the Dominican Government were included, representing 64.26% of central government employees. Even though according to National Statistical Office (ONE), internet, computer and mobile phone use lean slightly towards women we didn't see a significant divide in those areas (see figures 6, 7 and 8).

A sample of 152,093 citizens serviced in the government hotline on the months of September and October 2013, were used to calculate, analyze and classify calls (by sex, type of call and reason for calling) to obtain electronic government's services usage. OPTIC Training Center's Registry data for 18,955 public officers trained under the Digital Alphabetization Program (PAD) were also analyzed and the results have been included in this study.

This research explores the differences in how Dominicans use the internet for information retrieval. We were able to discern if there is a "second-level digital divide" in the making as the Web spreads to the majority of the Dominican population.

## 3. FIGURES/CAPTIONS

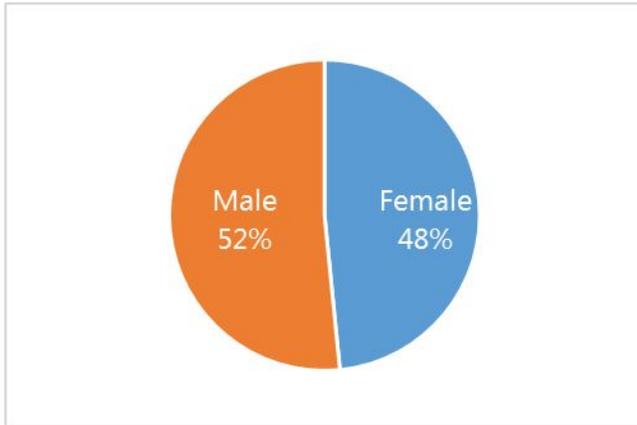
The detailed analysis of collected data produced the following results: Dominican Republic's women use electronic government services more than men. Of a total of 152,093 citizen services provided by the government's hotline in the months of September and October 2013, 70.21% were to women and the remaining 29.79% were to men (see figure 8). In government, a program called PAD (Digital Alphabetization Program) have trained on ICTs, government officials with an interest on women. Dominican Republic's central government as of September 2013 had a total of 336,235 employees<sup>3</sup> and 18,955 of those have been benefited with this program<sup>2</sup>. That's

5.63% of all government employees of which 48% are female<sup>2</sup> (fig. 1). In 2013 that percentage rose to 55.54% (fig. 2). Dominican Government employs more women than men. 65.75% of public sector employees are women (see figure 3), but this percentage is reverted when it comes to high paying or managerial positions, on which only 37.22% are women (see figure 4).

Household use of computers are dominated by females. Today 51% of home computer users are female<sup>5</sup>.

In Dominican Republic, the use of internet's social media sites have increased tremendously. In the past 5 years, as of July 2013 there were 2,427,560<sup>6</sup> internet accounts and 3.2 million Facebook accounts, additionally 1 million are twitter users<sup>7</sup>.

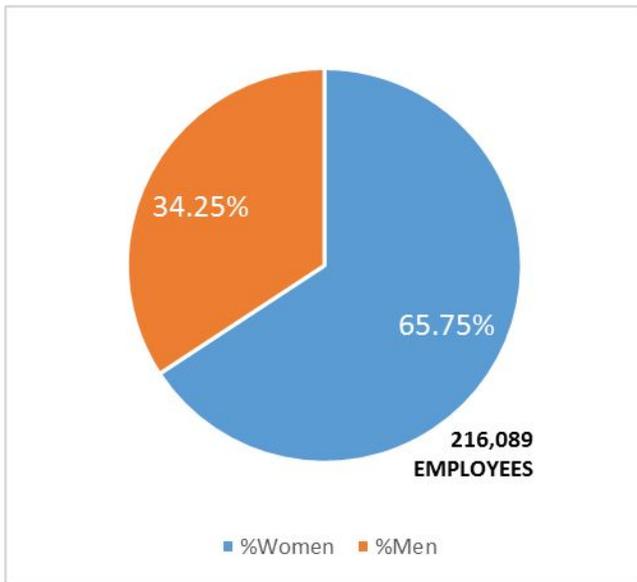
Dominican Republic is ranked 13 of 28 in Latin America and The Caribbean and 4 of 8 in the Caribbean region on internet connection speed.<sup>8</sup> There is however room for improvement in this area.



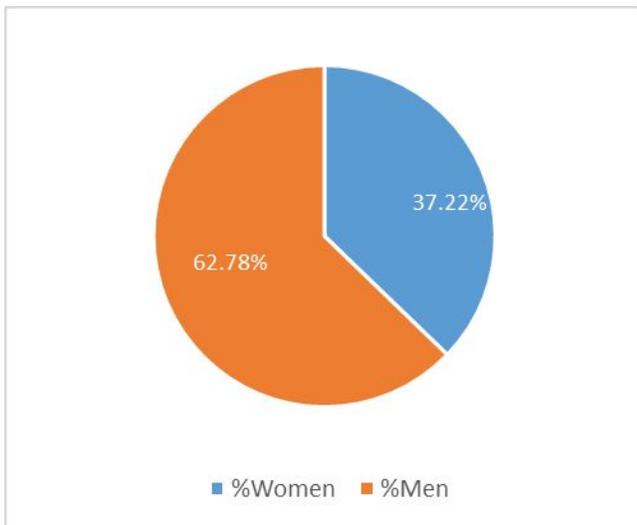
**Fig. 1. Proportion of students graduated on the Digital Alphabetization Program<sup>2</sup>**



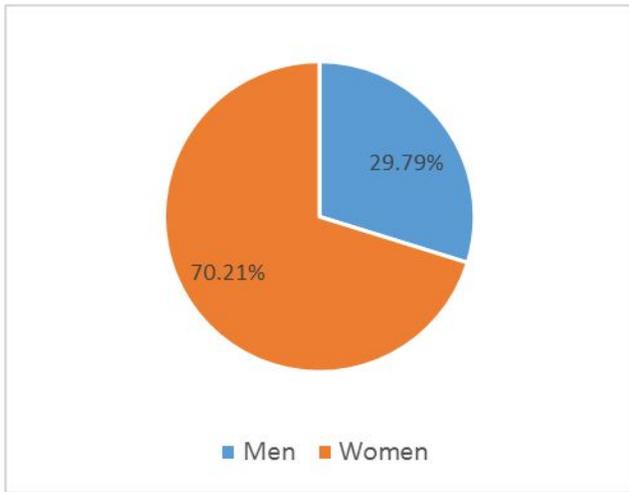
**Fig. 2. Proportion of students graduated on the Digital Alphabetization Program by Sex by Year<sup>2</sup>**



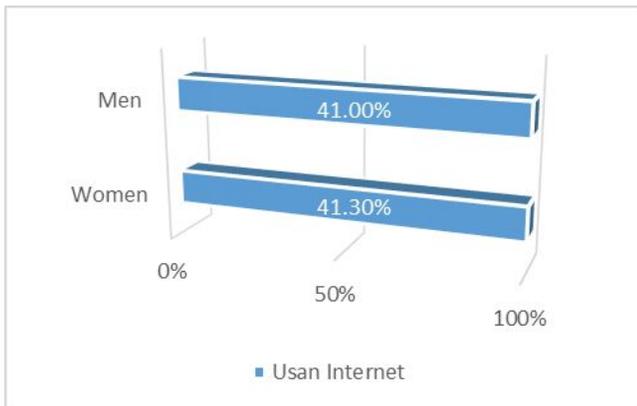
**Fig. 3. Proportion of men and women employed in Dominican Republic's ministries (17 of 20 ministries)<sup>3</sup>**



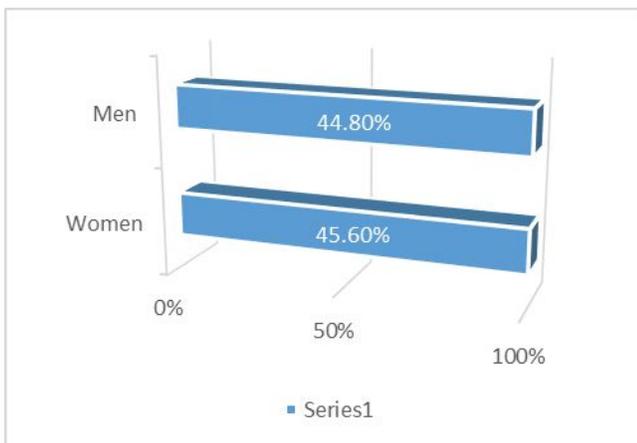
**Fig. 4. Proportion of men and women employed in managerial positions (13 of 20 ministries)<sup>4</sup>**



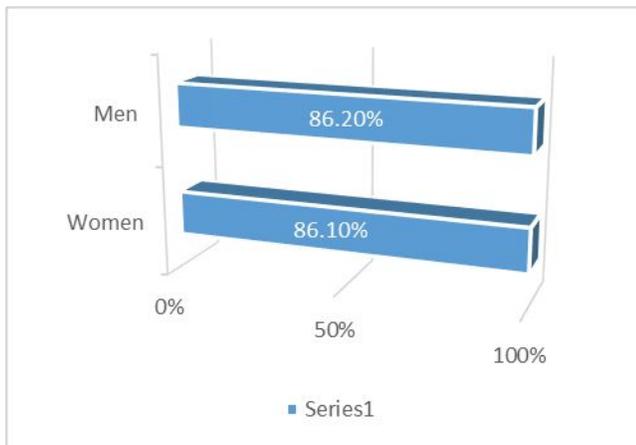
**Fig. 5. Proportion of men and women serviced on September and October 2013 on the government hotline<sup>5</sup>**



**Fig. 6. Proportion of men and women that use internet in Dominican Republic<sup>10</sup>**



**Fig. 7. Proportion of men and women that use computers in Dominican Republic<sup>10</sup>**



**Fig.8. Proportion of men and women that use mobile phones in Dominican Republic<sup>10</sup>**

#### **4. CONCLUSION**

The Internet is a social phenomenon therefore social conditions of access are important. Among them, the most important is the ability to use technology by regular citizens of a country, what is called digital literacy and digital fluency, which are cutting edges of the second digital divide.

In past research, Dom Rep.'s digital divide was found to be too wide<sup>12</sup> It seems that today there are reasons to be optimistic since in this country the number of internet female users increases being more than their male counterparts. New technologies can help improve the position of women in the job market. These improvements may increase the recruitment of women. Teleworking, teleoperation, seem appropriate alternatives of entrepreneurship for women who need to combine employment with family responsibilities.

The first digital divide, which concerns computing—who has access and who doesn't- in the Dominican Republic, regarding to gender, this divide have been reduced. This study does not address the problem of academic presences on technology related fields of study as this topic was addressed in a recent Research Center for Feminine Action – CIPAF<sup>12</sup> study. However, this research team was able to collect enough data to conclude that Second level digital divide -differences in people's online skills- (Skill, in this context, is defined as the ability to efficiently and effectively find information on the Web) and work related opportunities is still present in the Dominican Republic.

Internet speed is not bad but access is still limited to urban centers. Because of relevant-important role played in promoting the use of ICTs; broad band speed and dissemination of access to internet, needs improvement. The Dominican Rep.'s Telecommunication Institute INDOTEL is in the works of an agenda and work plan to address this problem.

CIPAF<sup>12</sup>, a feminist NGO, has in the past, and continues in the present, to include in its agenda the reduction of Gender Digital Divide. A major research paper and publications was prepared with funds from UN's Gender Equality Fund, addressing 2<sup>nd</sup> level digital divide<sup>1</sup>. This NGO efforts as well as government institutions such as the Telecommunication Institute INDOTEL and the Presidential Office for ICTs OPTIC are indeed making a positive impact in reducing Dominican Republic's digital gender divide.

## 5. ACKNOWLEDGMENTS

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