A Study on Impact of Digitalization Rural Development in Khambhat Taluka

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ABSTRACT

In recent years, information and communication technology (ICT) has rapidly spread across the globe, along with increased market penetration and easy availability of economical smartphones and cell phones with both wired and nonwired connections to access the Internet; this leapfrogging in the Internet access is true even in the rural areas of the world's developing countries. This study explored the interplay between contextual and individual factors related to Internet adoption in isolated rural communities. By investigating 10 remote villages throughout Chile that received Internet access infrastructure in 2010-2011, we identified 3 areas in which contextual and individual factors are intertwined. 1. Geographical isolation, 2. the communities' aging population also represented a strong challenge because they lack young people, a relevant technology socialization agent, 3. Jon and economic. When the Internet has reached the vast majority of the population, isolated communities confront specific challenges that we need to consider in policy-making decisions. As Internet access spreads and the level of penetration reaches high percentages in both developed and developing countries, the urban-rural digital gap remains strong (e.g., LaRose, Strover, Gregg, & Straubhaar, 2011; Rivera, Lima & Castillo 2014). Thus, many policy-making efforts have promoted online connection in rural areas. For example, in the United States, the Department of Agriculture has promoted broadband access programs such as the Sustainable Broadband Adoption Program (LaRose et al., 2012).

Keywords: Digital India, Rural, Policy, Isolation, Technologies, Digital Divide

I. INTRODUCTION

Information and communication technology (ICT) has rapidly advanced, bringing about drastic changes to communication and information dissemination all over the world. Widespread diffusion of small portable devices, such as smartphones and cellphones, and both wired and non-wired connections, has brought Internet access to many countries, including developing countries (International Telecommunication Union, 2014). It is expected that ICT will play an important role in achieving UN Millennium Development Goals that were delineated in 2001, and the goals outlined by the 2030 Agenda for Sustainable Development (European Parliament, 2015; United Nations, 2016). However, full global realization of the benefits of ICT remains limited, largely because of inaccessibility. In poorer countries or rural areas, for instance, ICT is still out of reach in many regions, creating great life. Impacting differences between the population of those areas and the rest of the world that has ICT access. This gap in access to digital information, knowledge, and networks is recognized as the digital divide (Organisation for Economic Cooperation and Development, 2001). Furthermore, penetration of the Internet is not the goal as negative impacts of the Internet such as the Internet paradox—defined as the
situation when social technology that was developed with the expectation of encouraging social involvement actually reduces social involvement and psychological well-being—have been reported (Kraut et al., 1998). All over the world, rural areas are in transition. They are crucial for food production for a steadily growing global population. Rural areas often also have multiple important resources with natural, cultural, or traditional significance and value, and their communities play important roles in the conservation of those resources (Costanza et al., 1997; Takeuchi, Brown, Washitani, Tsunekawa, & Yokohari, 2012). However, connectivity with more populated areas brought about by the railroad or the Internet has continuously facilitated the transition of rural residents from the agricultural sector to other sectors (Flora, Flora, & Gasteyer, 2015) and even caused their emigration to urban areas. With improved connectivity and a wide variety of jobs other than agriculture, the lifestyle of rural residents has become more varied in recent history. The stereotypical image of people in rural communities living their entire lives in the same place and creating strong community ties among residents is no longer appropriate (Flora et al., 2015). In developing countries, agriculture, though less profitable than other sectors, is still the main source of livelihood for billions of rural people (World Bank, 2010). With a growing number of youth entering the labour market, the lack of profitable job opportunities locally results in their emigration to urban areas or other countries (World Bank, 2010), possibly leading to the future deterioration of rural communities. In rural areas of developing countries, ICT is expected to cope with a variety of disadvantages and potential social issues including the deterioration of the community by connecting people and resources, conquering both geographical and time distance. However, they still lag in the development of ICT infrastructure compared with their urban counterparts, as telecommunication companies tend to preferentially expand their services mainly in urban areas for economic efficiency (Malecki, 2003), compounding the issue of “rural urban digital divide” (Whitacre & Mills, 2007). There are also debates on digital divide between generations, which is commonly seen as the gap between digital natives, who were born in the digital world and quickly adapt to new technology (Khoir & Davison, 2014), and others. In developing countries, the national priority has been to catch up with developed countries in ICT infrastructure building and education; thus, it is not difficult to imagine that the drastic change in Internet access, the so-called leapfrogging in Internet access, has made a big divide between digital natives and others. Furthermore, the rapid catch up has also made digital divide nonnegligible even among the digital native generation, especially in countries such as Indonesia with increasing numbers of young people. A hidden digital divide among digital natives requires increased governmental focus on the Internet usage of the younger generation since the Internet is an essential tool in modern work environments including agriculture. The Internet also has potential future impacts on the community. In the early digital divide studies of the mid-1990s, the concept denoted the differences between the “haves” and the “have nots” (DiMaggio & Hargittai, 2001). This conception was criticized for its oversimplicity and theoretical underdevelopment of the “divide”; thus, many scholars turned to redefining the concept of “beyond access” in the mid-2000s (Barzilai Nahon, 2006; van Dijk, 2006; DiMaggio & Hargittai, 2001; Selwyn, 2004). However, these studies based on theoretical conceptualization focused mostly on developed countries and have rarely been applied to developing countries.

II. LITERATURE REVIEW

Historical debates on the digital divide

Dating back to the mid-1990s, it was believed that by enhancing equality of access to information, ICT
empowered individuals (D’alessandro&Dosa, 2001) and increased levels of social interaction and civic involvement (Katz, Rice, & Aspden, 2001). However, even with such utopian rhetoric, concerns arose about the possibility that the new technology exacerbates inequality rather than ameliorating it (Gunkel, 2003). In the early era of Internet diffusion, access to new technology was restricted to those with higher social status and higher educational background and those who were early users of new technology (Rogers, 2010). Thus, the concept of digital divide became an important issue in scholarly and political agenda (van Dijk, 2006). Studies on the digital divide in the early era focused on the dichotomy between people who use the Internet and people who do not. An increasing number of discussions on the digital divide examined influencing factors such as age (Basu & Chakraborty, 2011; Loges & Jung, 2001), gender (DiMaggio, Hargittai, Celeste, & Shafer, 2004), occupation (Losh, 2004), income (Dutton, Sweet, & Rogers, 1989), level of education (Losh, 2004), residential location (Hindman, 2000), and ethnicity (Hoffman, Novak, & Schlosser, 2000). Internet throughout society, especially in developed countries. Under such circumstances, an increasing number of researchers suggested going “beyond access,” reframing the concept of digital divide (van Dijk, 2006) following criticism that the earlier view of digital divide in research was too simplified, and that the concept was theoretically underdeveloped (Barzilai-Nahon, 2006; DiMaggio & Hargittai, 2001; Selwyn, 2004; van Dijk, 2006). They started redefining and conceptualizing digital divide by reorganizing the various single-issue studies of the past that were local and tied to a specific context (Barzilai-Nahon, 2006). DiMaggio and Hargittai (2001) described 5 dimensions of digital inequality: (1) equipment, (2) autonomy of use, (3) skill, (4) social support, and (5) the purpose for which the technology was used. Selwyn (2004) showed 4 stages in the digital divide: (1) formal/theoretical access to ICTs and content, (2) effective access to and use of ICTs and content, (3) engagement with ICTs and content, and (4) outcomes or consequences. van Dijk (2006) proposed a model in which a succession of 4 categories of access was shown: (1) motivational access, (2) material access, (3) skills access, and (4) usage access. Barzilai-Nahon (2006) defined a digital divide index consisting of 5 factors: (1) infrastructure access, (2) affordability, (3) use, (4) social and governmental constraints/support, and (5) sociodemographic factors. Such comprehensive and sophisticated conceptualizations of digital divide provide broader perspectives on earlier research, many parts of which overlap and are still referred to and focused on (van Deursen & van Dijk, 2014) or confirmed (Salemink, Strijker, & Bosworth, 2015) in more recent digital divide studies. However, they are still conceptual and developed mainly according to studies based on developed countries. There are few studies applying these perspectives specifically to developing countries. It is assumed that 1 reason for this is that in rural areas, especially in developing countries, ICT usage is still considered to be in the diffusion stage. The rapidly changing status of ICT penetration into rural communities in developing countries, however, presents a new opportunity for study.

**Significance of the Study.**

This study is signified about the concept of digital India which is launched by the prime minister of India Mr. Narendra Modi. Digital India is a programme to prepare India for a knowledge future. This programmer is impact ministry of communication & IT (information technology), ministry of rural development, ministry of human resource development, ministry of health and other. This programmer is also benefit all states and union territories. This programmer vision is to transform the county into a digitally empowered society and knowledge economy. Digital infrastructure is focus on proving high speed secure internet. Digital
empowerment of citizens is pay emphasis on universal digital literacy and availability of digital resources /service in Indian languages. All government document /certifies to be available on the cloud, the programmer is implement in phases from 2014 till 2018.

**Objectives of the Study**
To study the impact of digitalization in Kansari Village.
To access the Social, Economic impact of digitalization in Kansari Village.
To know about the perception of people towards digitalization.
To know about the working pattern of digital village.
To check the Services provided and uses of resources by villagers

**III. RESEARCH METHODOLOGY**
The researcher used descriptive research design as it describes the Impact of Digitalization Rural Development in khambhat taluka. The sample for the study is 70 respondents of 4 villages. Simple random sampling is used for the collection of the data from the Anand taluka of Gujarat state. Primary tool for this research study is interview schedule and the secondary tools include magazines, journals, articles and internet sources.

**IV. RESULTS AND DISCUSSION**

**Discussion :-**

**Table: 1** - Table showing respondents were aware about the word “digital village”

<table>
<thead>
<tr>
<th>Awareness about the word “digital village”</th>
<th>Frequency</th>
<th>Percentages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>22</td>
<td>44%</td>
</tr>
<tr>
<td>No</td>
<td>28</td>
<td>54%</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100%</td>
</tr>
</tbody>
</table>

From the table can be inferred that out of 100 percentage (n=50), most of respondents i.e 54 percentage (n=28) do not know about the word “digital village”, while 44 percentage (n=22) know about the word “digital village”

**Table 2** - Table showing respondents have observed any kind of change in their village through Digitalization

<table>
<thead>
<tr>
<th>Change in their village through digitalization</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20</td>
<td>40%</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>60%</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100%</td>
</tr>
</tbody>
</table>

From the table can be inferred that out of 100 percentage (n=50), most of respondents i.e 60 percentage (n=30) have not observed change in village through the digitalization in their village, while 40 percentage (n=20) have observed change in village through the digitalization in their village.

**Table 3** - Table showing respondents problems can be solved throughNew technology.

<table>
<thead>
<tr>
<th>Problems can be solved through new technology</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20</td>
<td>40%</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>60%</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100%</td>
</tr>
</tbody>
</table>

From the table can be inferred that out of 100 percentage (n=50), most of respondents i.e 60 percentage (n=30) are believed that the problems can be solved through new technology. While 40 percentage (n=20) are believed that the problems can be solved through new technology.
Table 4 - Table showing respondent's opinion about getting the facilities from gram panchayat in their village.

<table>
<thead>
<tr>
<th>Gram panchayat facility in their village</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>22</td>
<td>56%</td>
</tr>
<tr>
<td>No</td>
<td>22</td>
<td>44%</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100%</td>
</tr>
</tbody>
</table>

From the table can be inferred that out of 100 percentage (n=50), most of respondents i.e 56 percentage (n=22) replied that they were getting facilities from the gram panchayat in their village, While 44 percentage (n=22) were replied that they were not getting facilities from gram panchayat of digitalization in their village.

V. CONCLUSION

In this study found that the most of the respondents are not know about the word “digital village” The majority of the respondents observed change in village. The majority of the respondents have think that the status of improved through digitalization. The majority of the respondents think about that problems can be not solved through new technology. The most of the respondents were not getting facilities from gram panchayat of digitalization in their village.

VI. SUGGESTIONS

More comprehensive and detail study can be performed by taking a larger and representative sample so that the result of that study may be used to generalized some useful conclusion. DigitalIndia is impure of citizen’s life and develops to country. Digitalization is most important in 21 century so develop to some people in your need and life style. Their village to impure more banking facility and required to ATM service in their village people information provide to use for ATM service and other banking service. Their village to motivation provide citations through digitalization. Citations more active for other state and country basic communication skill to develop their village. Their village people to Aware about your helpful government project and scheme. Their village to develop for education facility and develop to students for new technology and new education system and more required to computer knowledge their century. Their village to impure for profile and village statue best village for digitalization. Their village also depend for family in agriculture field so to aver about E-KISHAN policy and other benefit for government scheme and programme. Their village people more aver about to online work and benefit for online work and more information about other service in online.

VII. REFERENCES

Book:

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Journal URL : http://ijsrset.com/IJSRSET196419