ALTERNATIVE SEARCHES IN ELIMINATING THE CONCEPT OF DIGITAL DIVIDE AND CONSEQUENT THREATS

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ABSTRACT

As a result of advanced technology and internet came together, various developments occurred compared to prior years. Although changes in information, communication and technology furnished major advantages, it is not possible to say that those advantages allocated evenly for every country in the world. On the contrary, in parallel with the new order caused by those changes, the gulf between the countries became larger day by day. Consequently two separate groups were created as "the ones benefit from technology and internet and the ones who don't" which resulted the introduction of 'digital divide'. It is basically possible to define the concept of 'digital divide' as the major differences in usage of technology and internet between developed and developing countries. In this study; following the explanations on the concept of digital divide, alternative searches in eliminating the threats caused by digital divide will be emphasized.

Keywords: Technology, Digital Divide, Internet

1. INTRODUCTION

Technologic developments and improvements, especially in last 15 years, caused numerous changes world-wide. Both individuals and corporations gained benefits by using entire newness caused by technology. Most importantly, benefits caused by the technology carried major advantages both in social life and business life. Both individuals and corpora-

tions had great convenience through those advantages.
With disappearance of place and time along with ease of access to communication and information, many things, which were regarded as difficult or even impossible in the past years, perceived ordinary in help of technology.
Although technologic developments carry many advantages in corporate and social life, some problems occur at the same time. Particularly, two separate groups were created as "the ones benefit from technology and internet and the ones who don't". Usages of technologic benefits carry a huge disadvantage for underdeveloped countries; in parallel with the level of development in different nations.
As a result of increase in internet usage and becoming widespread from the beginning of 21st century; internet pioneered many new technologies. As the social and corporational importance of internet grew, also many problems came out since internet usage centralized highly in specific regions of the world.
The changes caused by the technology and internet come together; resulted as a bi-polar situation as we just described as "the ones benefit from technology and internet and the ones who don't". This situation designated as "Digital Divide" revealed many discussions world-wide and also located in the center of various critics on the axis of globalisation.
This "Digital Divide" based gulf between the countries grows larger day after day increasingly to the disadvantage of underdeveloped countries and in favor of developed countries. In this study, following the framework of digital divide, searches of solution in eliminating the threats caused by digital divide will be evaluated.

2. THE CONCEPT OF DIGITAL DIVIDE

The year 1989 dawned like any other but, in retrospect; it witnessed two major developments of immense historical significance. One was highly visible and widely celebrated; the symbolic dismantling of the Berlin War sparking the brushfire of electoral democracy spreading throughout the post-Communist World and beyond. The other was less generally recognized at the time, beyond a few scientific and technical cognoscenti: the invention of the World Wide Web (Norris, 2001: 3). As a result of increase in internet usage and becoming widespread especially at the end of 90s beginning of 21st century; internet pioneered many new technologies. Although those new technologies carried many advantages for the most of the world, on the other hand brought many issues and problems for the people who do not have the resources and access to this technology.
As globalisation appeared to be a new embodiment of capitalism and in the frame of new world order created by technologic developments, "digital divide" is regarded as a conceptualized situation between the developed countries -where full benefit of technology is present- and developing countries along with underdeveloped countries. The US government discovered the digital divide in 1995. That year, the National Telecommunications and Information Administration (NTIA) issued the first of four reports under the title "Falling Through the Net." These reports documented the existence and particulars of a digital

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divide in America that separates people with access to information Technology (IT) from those without it (Servon, 2002: 2).
The term 'digital divide' refers to a situation in which people do not have the same degree of access to modern digital information and communication technologies (ICT) and, for this reason, do not have the same opportunities for social and economic development. (http://www.cr-report.telekom.de/site09/en/co/glossar/index.php, 22.04.2010) In an alternative definition, digital divide used to describe the discrepancy between people who have access to and the resources to use new information and communication tools, such as the Internet, and people who do not have the resources and access to the technology. The term also describes the discrepancy between those who have the skills, knowledge and abilities to use the technologies and those who do not. The digital divide can exist between those living in rural areas and those living in urban areas, between the educated and uneducated, between economic classes, and on a global scale between more and less industrially developed nations (http://www.webopedia.com/TERM/D/digital_divide.html, 22.04.2010). As can be seen, common point of the definitions about digital divide is focused where access to technology differ and points that this is caused from the fact of disparity in social, economic and educational life.
In the table below; we can clearly point the existence of unequal order in means of internet and technology usage: (See Table 1)

WORLD INTERNET USAGE AND POPULATION STATISTICS						
World Regions	Population (2009 Est.)	Internet Users Dec. 31, 2000	Internet Users Latest Data	Penetration (% Population)	Growth 2000-2009	Users % of Table
Africa	991,002,342	4,514,400	**86,217,900**	8.7 %	1,809.8 %	4.8 %
Asia	3,808,070,503	114,304,000	**764,435,900**	20.1 %	568.8 %	42.4 %
Europe	803,850,858	105,096,093	**425,773,571**	53.0 %	305.1 %	23.6 %
Middle East	202,687,005	3,284,800	**58,309,546**	28.8 %	1,675.1 %	3.2 %
North America	340,831,831	108,096,800	**259,561,000**	76.2 %	140.1 %	14.4 %
Latin America/Caribbean	586,662,468	18,068,919	**186,922,050**	31.9 %	934.5 %	10.4 %
Oceania / Australia	34,700,201	7,620,480	**21,110,490**	60.8 %	177.0 %	1.2 %
WORLD TOTAL	6,767,805,208	360,985,492	**1,802,330,457**	**26.6 %**	399.3 %	100.0 %

Table. 1. World Internet Usage and Population Statistics
Source: http://www.internetworldstats.com/stats.htm, 15.03.2010.

The table above shows the statistics regarding world-wide internet usage rates in detail. As we analyze the values in the table it would be possible to make numerous evaluations about the facts of digital divide. The values of Africa are substantially noteworthy. Even the growth since 2000 is 1809%, penetration being just 8.7% indicates the most negative value in general evaluation. North America is on the front rank with 76%. Data regarding Asia is pretty much interesting. Continent of Asia, where more than half of the world population is inhabited, is on the front rank with internet user's value however holds the second worst value in penetration following Africa. As we interpret the table in the axis of digital divide the picture clearly shows itself. North America heading the table, along with Oceania/Australia and Europe has values of 50% and more; major part of population in Africa, Asia, Middle East and Latin America/Caribbean do not have the benefits of this usage.
Besides, as we look at the diagram below, computers per 100 people shows parallelism with internet usage statistics: (See Figure 1)

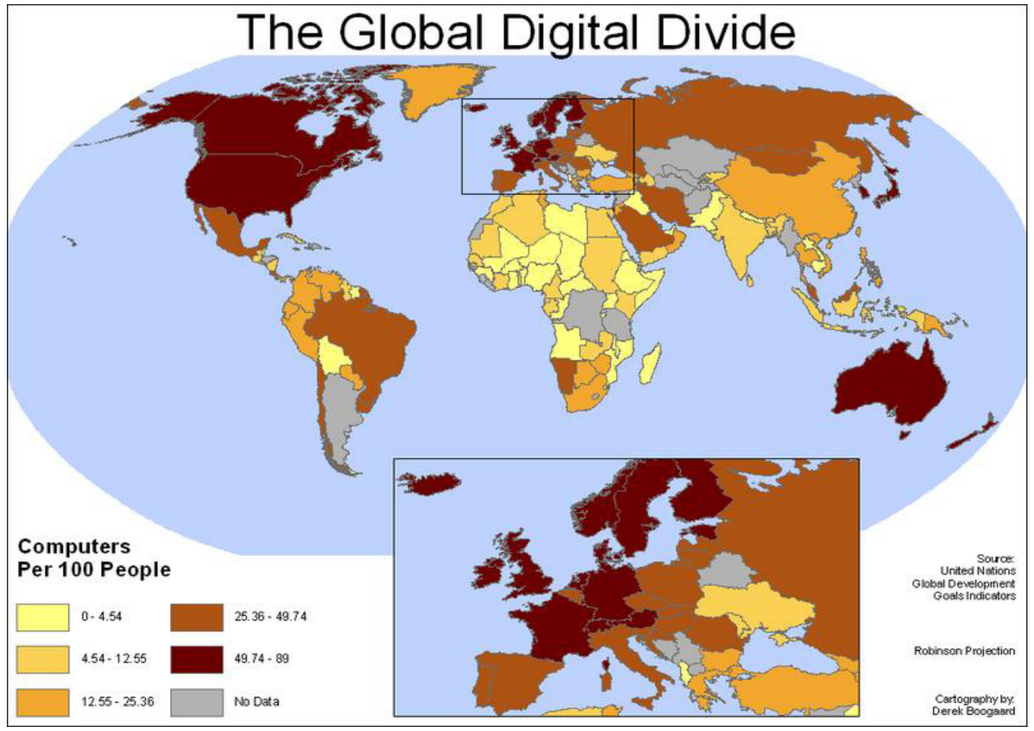

Fig. 1. The Global Digital Divide-Computers Per 100 People
Source: United Nations Global Development Goals Indicators,
http://en.wikipedia.org/wiki/File:Global_Digital_Divide1.png, 15.03.2010.

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As seen in the diagram, in North America, Oceania/Australia and major part of Europe- especially Northern Europe- computers for 100 people ranks at the top where also internet usage penetration is above 50%. On the other hand this value is under 5 in major part of Africa. This can clearly be regarded as the fact of digital divide.

3. ALTERNATIVE SEARCHES

As the term globalisation came on the scene, it was told to bring all countries closer, where sharing in many fields such as economic, social, cultural etc. would increase and principle of equity was the prime target. However, in later years globalisation increased the hegemony and imperialism of developed countries over underdeveloped countries. Globalisation, started from the principle of equity, gradually became one of the most critical factors of unequality.
Below, alternative solutions will be examined to eliminate the threats and the gulf between the countries created by concept of digital divide as a result of technologic developments, internet and other developments caused by the combination of them; which are the main infrastructure of globalisation.

3.1. Technologic Infrastructure

The main task in eliminating the threats caused by digital divide is to revise the technologic infrastructure of underdeveloped and developing countries and in this context to provide adoption of new technologies and ensure the usage of new technologies become functional. Technologic improvements proceed by building over the prior technologies. Therefore every new improvement widens the gulf between countries that do not have the previous technology and the ones that have the technologic infrastructure and follow the technology up-to-date. For this reason, underdeveloped and developing countries must fulfill the requirements for basic technologic infrastructure.
The need for an important economic budget is the primary condition to ensure such an infrastructure. Therefore, the countries that use advanced technology and pioneer in inventing this technology, should provide the necessary facilities for the countries that do not have them, in frame of minimum profitability. Only this would make it possible to ensure conditions that would avoid the gap created by digital divide.

3.2. Equal Sharing

The validity of equal sharing is highly critical in means of decreasing the chaos caused by digital divide. Equal sharing needs the even distribution of new technologic improvements in underdeveloped and developing countries. Unfair distribution of technology and internet usage that are the main factors of digital divide also makes it necessary to show sensitivity in taking steps to overcome the threats created by this situation.
When supporting underdeveloped or developing countries, it would be a more realistic approach to succeed, not only helping into a specific field or region but helping evenly nationwide. Therefore deep nation-wide analysis should be made, related strategies should

be set and should progress step by step to make it possible to intervene in case any potential fault occurs. For instance, when an attempt is planned to increase computer-ownership in a country, urgent measures should be taken for the regions with minimum rates before all; and then should be expanded nation-wide to provide equal sharing. To overcome the threats caused by digital divide, the principle of equal sharing should be emphasized and necessary measures should be taken in avoiding potential serious conditions.

3.3. Training Support

It is drastically important to provide training support and update information for underdeveloped and developing countries, right along with maintaining solid technologic infrastructure and applying practices required for equal sharing. Technology improves day by day and all those improvements require specific skills. Although required investment in technology is made for underdeveloped and developing countries, it would not be possible to succeed and fix the current situation unless necessary training support in proper usage of this technology is provided.

Training activities should be regarded as target-oriented facilities which should be run by professionals and not only cover a specific short term but should periodically be permanent. Especially in fields like technology, where improvements occur rapidly, training activities is one of the main matters that should be discussed seriously. The computer and technology investments in underdeveloped and developing countries along with internet and its functional usage are only possible with related training of required usage skills. Otherwise; all the investment, effort, time and financial source would be in vain. Therefore, training support should absolutely be maintained to overcome the adverse conditions caused by digital divide.

3.4. Continuity

Other than technologic infrastructure, equal sharing and training support; continuity, which indeed covers all those and related with each one of them, is necessary to eliminate threats caused by digital divide. In other words, not only covering a specific period of time but bearing the necessity to be permanent.

To break free from this negative situation embodied in the axis of digital divide; underdeveloped and developing countries should succeed this in a timeless and sustainable structure. Impermanent measures and actions to solve the state of play would result daily solutions, however would not bring success in long term. Besides, may lead to worse conditions in later time. This would create huge disappointment in both individuals and corporations and result as an intense non acceptance of efforts related to change. Therefore, to get clear of the deadlock created by digital divide, continuity should be maintained for all related efforts.

4. CONCLUSION

In the frame of new world order created by globalization, enormous technologic developments, internet and new communication tools derived from internet aimed a world-wide unification; indeed generated even more acute discrimination. Underdeveloped and developing countries have turned more and more desperate in narrowing the gulf between developed countries where they introduce every new improvement, use them and hold the initiative of usage.

In this desperate environment, defined as digital divide, developed countries consequently intensify their dominance and hegemony in an imperialist mind over underdeveloped and developing countries, in respect of technology and internet usage along with related benefits.

As a result, developed countries should apply the mentioned alternative solutions as soon as possible to eliminate the threats created by digital divide, should also take the necessary actions before the problems turn inextricable and show the required efforts to establish a world-wide equality in axis of sharing.

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