## The Digital Divide and Development\*

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**Keywords:** Digital, Divide, ICT, Development, Internet

### A. WHAT IS THE DIGITAL DIVIDE?

Information and Communication Technologies (ICTs) can be both a unifying and a divisive force. Its divisive aspect is known as the "digital divide", which relates to the difference between those who have digital access to knowledge and those who either lack it or don't use it effectively.

The digital divide exists among countries (the global divide) and within countries (the social divide). There is an overall trend of a growing divide on both fronts. Countries around the world and people within these countries are increasing their access to, and use of ICT at an exponential rate. Even when a gap for a particular technology appears to decrease, new technologies are introduced to people or countries that can not afford to acquire it or do not have the skills to properly use it, which leads to deepening the existing divide. Besides, the introduction of ICT into a country usually reflects and exacerbates existing disparities based on location (urban-rural), gender, ethnicity, age, income level and education. The digital divide is a complicated mix of varying levels of ICT access, basic ICT usage, and ICT applications among countries and people.

The digital divide around the world is usually measured through statistical indices such as the number of stationary telephone lines, personal computers, web sites and Internet users and their ratio to the total population. "Of all the Internet users worldwide, 60 per cent reside in North America, where a mere five per cent of the world's population reside "(Bridges.org)". The Arab world ranks low on many but not all of above indicators. Although figures show a trend toward increasing internet penetration, the Arab region as a whole still rates very low in terms of internet users and web sites, the two indices that are more relevant to the level of information development and representative of society's involvement in ICT. The 2002 UNDP, <u>Arab Human Report</u>, reminds that 5% of the world

<sup>\*</sup> The author would like to thank Ms. Rasha Ayoub-Agha and Ms. Rita Aouad for their valuable assistance with the research of this topic.

population is Arab but only 0.5% of Arabs are internet users. The same report states that main reasons for the digital divide between the Arab region and the advanced world are the high cost of building the necessary infrastructure and the growing brain drain which is depriving the Arab world of its top IT specialists, among other reasons.

### B. WHAT IS THE PHENOMENON THAT CREATED THE DIVIDE

The digital divide has come about as the result of first, the major advances in information and communication technologies over the past two decades (the digital revolution), and second, the rapid growth in global telecommunication networks such as the internet. Both factors generated unprecedented information flow and unprecedented developments in the ability to access information. The digital revolution is one of, if not the main, factor making today's globalization. At the same time, the process of globalization itself is accelerating the digital revolution.

# C. WHY ADDRESS DIGITAL DIVIDE: THE THREAT AND THE OPPORTUNITY

The digital divide is more than about access to computers and telephones; it is a divide that affects and reinforces fundamental economic and social divides between and within countries. It is threatening to further exacerbate these inequalities. Those who are "connected" are in for a greater advantage in terms of competing on a global basis, increased share in the market, increased knowledge, increased productivity and higher growth. Those who are not, will be condemned to diminished knowledge, low GDP, increased unemployment and deepening marginalization.

Developing countries and non-privileged groups have difficulty in "connecting" and difficulty in using Information Technology (IT) effectively because of anyone or more of the following: illiteracy, poverty, low level of skills, high cost of access, and even, poor mastering of English language. The divide is actually growing at an exponential rate. Also the deepening of the digital divide is deepening the "development divide" among countries and within countries. This could eventually threaten political peace among countries and societal peace within countries.

Decision-makers in most developing countries are somehow skeptical or unaware of the contribution that ICT can make to development. Priorities are put on other basic development needs, such as water and sanitation, education, food security and income generation, but not on ICT development. The latter is seen by same as a luxury. What is not recognized is that when wisely applied, ICTs offer enormous opportunities to support sustainable development and to narrow social and economic inequalities. Through efficient communication and powerful social and economic networks they can: a) provide new and more efficient methods of production, b) bring previously unattainable markets within the reach of local producers, c) increase productivity and enhance competitiveness, d) enable farmers to learn how to protect their harvest and improve crop yields, e) enhance education and healthcare in remote areas, f) alleviate poverty and create jobs, g) improve the delivery of government service, and numerous other advantages. More specifically, E-commerce, for example, can reduce transaction cost and empower SMEs, E-Government can save time, add transparency and reduce corruption, and increased access to education and healthcare can improve the livelihood of

marginalized groups. On the other hand, it is recognized that a country cannot effectively be connected unless it addresses its basic issues of illiteracy and basic infrastructure, and that those who do not have literacy and electricity, for example, are simply unable to adopt or use information technology effectively, even if they wanted to. Nevertheless, the fact remains that adoption of ICTs by developing countries cannot wait. Neglect of ICTs will lead developing countries to their final marginalization. Therefore, investment in ICT and investment in development objectives should go hand in hand. There should be no trade off between them.

### D. CAN THE DIVIDE BE BRIDGED AND HOW TO ADDRESS IT

It may not be possible to bridge the divide, but it is important to prevent it from deepening, as a minimum, and to attempt to narrow it as much as possible. A collective action approach is required both within countries and among countries to achieve this target. Within countries, collaboration of government, private sector and NGOs is required, while among countries, advanced and developing countries should cooperate, the former advancing financial and technical support. Digital upgrading in developing countries increases advanced countries' market share, and deepening of the "divide" should be seen by all as a global issue that could eventually threaten world political and social peace if not attended to.

Domestic and global action should focus on three frontiers: improving physical communications, enhancing sharing of knowledge and information (through increased global and social networking), and creating digital opportunities. Governments in developing countries should develop national ICT strategies and frameworks. ICT should be seen within countries as a sector by itself, similar to industry, agriculture, tourism, and other traditional sectors in country's GDP, and also there should be identification of specific applications of ICT in traditional economic and social sectors; This should be carried out through the collective effort of government, businessmen and NGOs. All three bodies should also help in providing skills, training, hardware, software and creating digital opportunities. Governments should commit to enhancing the development of the communication infrastructure, to its participation in new international policy and technical issues raised by ICT, and to establishing policies and the physical and regulatory environment within which new technologies can spread to all citizens. Government should encourage participation in global E-commerce, and E-networks and should establish a pro-competitive regulatory environment, one that would improve connectivity, increase access, lower cost and make access to internet relatively cheap. Rural and remote areas should benefit from universal access and must not be marginalized.

E-strategies should be reviewed and updated, as well as benchmarked internationally and where appropriate be reinforced by regional and sub-regional coordination efforts. Training should be provided in schools and in special training centers enhancing human capacity development. Government-supported Community Technology Centers should be established to help small businesses and ordinary businesses in using ICT and using them effectively.

### E. CONCLUSION

The digital divide is deepening notably between advanced and developed countries. The rapid pace of ICT innovation requires rapid response and collective action. If no such action is forthcoming, the "divide" will be deeper, which will deepen the already existing development divide. This will threaten social and political peace. The divide has a snowball effect and the more delay in tackling it the more difficult it is to face the divide in the future. Therefore, action is needed now.

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