

Essay on the digital divide

[Technology](#), [Development](#)



Information Technology

Question one

Introduction

The digital divide like any other social divide brings with it inequalities that are particularly concerned with access to information. This paper delves into the issues brought about by the inequalities in the digital divide drawing from ideas presented in van Dijk's book titled ' The Digital Divide: Inequality in the Information Society.

In his book van Dijk asks five pertinent questions and makes an attempt to answer them in demystifying the relationship between the expanding digital divide and inequalities in the society. First, van Dijk asks whether there exists a problem in the access to information and communication technologies. Secondly, depending on the various access types namely; motivational, material, skill and usage what stimuli and barriers influence these forms of access? Centrally what main resources influence each form of access? Thirdly Van Dijk asks whether the digital divide has consequences that are born by members of society. Fourth, he asks whether the digital divide is a new phenomenon altogether or did these inequalities exist in society but were pronounced by the digital divide? Lastly, van Dijk asks whether the policies in place are appropriate in tackling the challenge of the digital divide or should there be policies structured to tackle issues pertaining to the digital divide.

The digital divide is associated with the knowledge gap between those with knowledge in information technology and those without it or with very little

of it. According to Cullen (2001) the digital divide may be as a result of socio-economic factors, geographical factors, educational factors or attitudinal factors. For instance, the use of the internet has developed a socio-economic divide between those who are internet survey and those who aren't. Hence, the digital divide can be termed as the difference between those with the knowledge of the internet which places them at an advantage over those without knowledge of the internet.

According to Riggins & Dewan (2005) the digital divide threatens to undermine the achievements of ICT that have to with higher standards of living and improved social welfare. This is because the digital divide influences inequalities on two major levels; first, the effects on those with access to technology and secondly, ability of those without access to information technology to make use of the same.

The digital divide is today marred with inequalities brought about by the difference between users and non-users of the internet. Therefore the main contributor to the digital divide can be said to be the unequal access to the internet which has placed some individuals who are techno-survey at an advantage over those who are not familiar with technology particularly with regard to the use of the internet. However, a new wave of digital inequalities stand to prop up after efforts have been made to close the gap of access. Among these new inequalities expected to prop up include; learning-divide and content-divide. Whereas the former has to do with skills and knowledge in the use of computer hardware and software to gain information, the later has everything to do with information sourcing in the internet which may as well become a preserve of a few causing another rift in the digital divide.

In a study conducted by the University of Southern California dubbed “Computer usage and access in low-income Urban Communities” it was found that access to computers was not a solution that would adequately address the digital divide. The study finds that special programs that provide ongoing and progressive training to increase participants’ computer skills were necessary to ensure that the digital divide gap is effectively addressed. Moreover, provision of computers cannot solely serve to bridge the digital disparity gap this is because it requires more than the initial amounts of money in setting up the ICT equipment. There needs to be considerations as to whether financial access with regard to maintenance of the ICT equipment, traffic in the internet, applications, technicians, educators training etc. all of which require ongoing financial support to effectively close in the digital divide.

Yet in another study conducted by the University of Minnesota it was found that the youth especially in college were very savvy with information technologies. Of particular note was that the youth were found to be the greatest number of users of the internet’s social networking sites such as Facebook and Twitter. Notably, the study also found that individuals from poverty stricken background with access to IT had the similar if not the same knowledge in IT as those from wealthy backgrounds. This study answers van Dijk’s question with regard to whether age group influences IT knowledge, to some extent it can be argued that IT savvy individuals are the youth and the teenagers who have been born in a technology driven world as opposed to the older generation who grew up without much of the technologies available today.

According to Charleson (2012) the digital divide can be overcome by first bridging the gap between the marginalized and the wealthy in society by making access to computers and complementary technology possible. More importantly, the creation of content in information technology is the single most crucial element in ensuring that the digital divide is addressed.

However Hood (2011) notes that access is one way of ensuring that the minority in the society get knowledge in ICTs. She adds that through mobile phones the poor in the society have been able to access the internet through affordable prepaid wireless data plans that have enabled them to establish themselves and develop socio-economically. Notwithstanding access alone cannot be conclusively adequate in ensuring that the digital divide is closed. There is need to develop skills in the use of ICTs that can help those with access to make the maximum use of their resources and hence reap the most benefits out of the same.

Whereas phone users may benefit from the access to the internet and ICTs similar studies find that compared to personal computer users individuals who use their phones to access information on the internet do not in actuality utilize this resource as much as their counterparts on a PC would. In the end they become victims of the dis-favorable side of the digital divide Chinn & Fairlie (2004) concur that income differentials are not solely the main drivers of digital disparity. They add that there is need to explore other factors that encompass demographics, telecommunications pricing measures, age dependency and so forth. However, they point out that there is need for public investment in human capital, telecommunications infrastructure, and the regulatory infrastructure to mitigate the gap between

PC and Internet use.

Essentially, much of the literature reviewed suggests that van Dijk's ideas about the digital divide are not farfetched. Moreover, the ideas are reflective of other scholarly literatures detailed in this paper. It is therefore of importance to note that the digital divide is a phenomenon that is very much eminent in society and it presents challenges as well as opportunities alike. More importantly, there should be strategic efforts either at individual, organizational or public service levels to ensure that the digital gap is narrowed or closed completely as this would translate to socio-economic development as discussed.

Question 2

Introduction

The information age is a term used to refer to a society where information is power. Hence, in literal terms this age is one in which informed people are empowered to certain things while those who are not informed are not empowered. This paper presents an analysis of Information theories drawing from the ideas presented by Frank Webster in his book dubbed “ Theories of the Information society”. In his book Frank is particular about a central question which he hopes to answer in his book. He asks whether we live in an information society and what parameters surround this information society is governed by. Fundamentally, the theories discussed by Webster are two fold in focus. First, there are a group of theories that tend to support the fact that the development in Information Technology are revolutionary and hence bringing society into a new information age. Secondly, there are

theories that argue against this notion noting that it is not revolutionary as it is not moving society towards an information age.

Theories of Information Technology

Literature advanced in support of the Information age are developed by ideas of scholars such as Daniel Bell who is of the idea that the information age is here and is transforming the manner in which society relates with one another. Bell categorically declares that the information age would take over from the industrial age replacing industrialization with a Post-industrial society that is dependent on information and services as its main form of business venture. In this approach Bell presents three components of post-industrial society namely; a shift from manufacturing to services, secondly, a centralized science based industry and thirdly, the rise of a new class of technical elite and the advent of new principle of stratification. He describes the information society as one that is focused and dependent on three major aspects i. e. Data, Information and Knowledge. The Data he terms as what describes the empirical world while Information is the organization of data into meaningful systems that bring about impeccable knowledge which epitomizes the conceptualization of information to make judgments.

Webster notes that in the information society there is arguably contention as to whether in deed there is an information society. This he terms as confounded by the myriad of definitions that have been forwarded to interpret information. For instance, technological definitions deal with fancy gadgetry and high-tech wizardry of our modern society while economic definitions are more concerned with the value of information in the economy. More importantly, these definitions cannot effectively quantify the effects

that these information have on people due to the fact that individuals will support and not support the benefits of information age based on already existing world views and thus not evident of a revolutionary cultural impact if IT.

Herbert Schiller developed the theory of neo-Marxism while Anthony Giddens focused on the theory of Reflexive Modernization, they both however have a different view all together from the Bell in that they deny the fact that information is of key importance to the modern world because of the fact that information society is subordinate to long-established principles and practices in society.

Studies developed by Orlikowski et al. (1990) tend to agree with Webster on the premise that the information age has not revolutionized the society as information technology is not a form of socialization. In their study they found that the development and use of technology in the organization is inherently a process and contextual. For this reason it can be generalized that the society is influenced by IT to the extent that it is revolutionized. Further, the study finds that IT is part of the social system rather than an influence on the social system itself.

The use of IT has to a great extent influence the productivity of the individual adopting the technology whereas the choice of the individual or organization adopting IT solutions will affect the virtue of the interaction with the technology it is purely up to the individual or organization to exploit the technology fully to their satisfaction or to reap the most benefits out of such technologies. This goes to say that IT in itself does not socialize individuals or society but reinforces already existing social constructs by strengthening or

weakening them depending on the level of adoptability of the technology. Rahm (1997) postulates that IT presents a challenge for the corporate society such that the systems presented by IT are at times chaotic that makes IT a double edged sword. On the one hand IT solutions present us with a myriad of information available on the internet and the World Wide Web which free us from limits that were there without IT solutions. On the other hand IT solutions present a challenge where the information society is overwhelmed by the vastness of the information available through IT solutions where the main dilemma is decision making on the best form of IT solutions to implement. Moreover, the influence of IT in the organization is not always positive as in some instances it presents challenges in the management of businesses presenting various risks. For instance, internet fraud and security risks, virus infection risks associated with the internet. The success or failure of an organization can be measured by the impact that its ICTs have has on the development of the organization. More so, the organization can pit itself against the competition with regard to the benefits visa vis the disadvantages that ICTs present for the firm. In essence, IT is beneficial and limiting in various ways it is up to the user to identify the best way to implement IT so as to reap maximum benefits from it. Whereas it is arguable that IT is a social driver or a pace setter in social carders it is a fact that IT is beneficial and valuable. Nonetheless, it is important to note that the value of IT is dependent upon internal and external factors including complementary organizational resources of the firm. Thus the value of IT is enhance through appropriate implementation that according to theorists may or may not form an information society.

Therefore, it is necessary that an information society is built around implementation of IT that well suits certain needs of individuals and organizations.

Similar studies advanced by Bresnathan, Brynjofsson and Hitt (2002) propose that information technology is important in the development of organizations today. Thus investments have to be geared towards the realization of IT solutions in organizations. Fundamentally, the organization must make strategic investments in IT solutions that place the firm competitively against rivals.. Likewise, it is essential that the organization recognizes the advantages that can accrue to the firm with an IT enabled platform in comparison to without. It is increasingly becoming apparent that to ensure success in the current economic terrain it is a prerequisite that IT is part of the development agenda of any success oriented organization. Other studies suggest that IT has not revolutionized the society but rather it enforces long existing traditions in the organization. Hence, the use of IT presents both strengths and weaknesses for organizations implementing them but these effects are founded on the principles that either make an organization a powerful institution with a strong organizational culture or otherwise. Therefore, the implementation of IT serves to reinforce these long existing culture rather than transform society altogether.

Generally, this paper has presented a detailed analysis of theory in information technology. Essentially, the overriding fact brought out in the text is that IT solutions presents both opportunities and challenges that require that implementation be adopted in a manner that ensures maximum benefit for either the individual or organization as discussed.

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