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## RESEARCH ARTICLE

### RETHINKING THE ISSUES OF DIGITAL DIVIDE AMONG DISABLED PEOPLE

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#### ABSTRACT

This article aims to clarify the definition of digital divide phenomenon occurred among disabled people. In order to understand this situation, it is need to clarify the level of digital divide, what factor and challenges occurred for disabled people to get access into Information Communication Technology (ICT) and the internet.

##### Key words:

Definition of digital divide, Information Communication Technologies (ICT), disabled people.

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#### INTRODUCTION

The terms “have it or have not”, is the definition for digital divide and it is about accessibility into Information Communication Technology (ICT). Additionally, a situation of inadequate of ICT may also create the absence of ICT or normally knows as the digital divide. Inadequate of ICT is happening when a different segment of people in a country is not receiving the same amount of ICT such as accessibility towards information, for example, people in developing countries normally encounter with the problems of less information even though most of the ICT resources are available worldwide. These phenomena created the situation of the digital divide (Rashid Hussain *et al.*, 2011). Moreover, the evolution of society to used ICT are moving nowadays to the quality and strength of ICT, and these different situations evolving the definition of the digital divide which are focused into the quality of information received by the society and indirectly it is depending on the level of society development. Meanwhile, in 1990 the term digital divide became very popular and started entering the public discourse among countries (Van Dijk, 2000). In 1990, digital divide is defined concerning on the gap which separating people who have access and those who not access.

##### Rethinking the Digital Divide

The disparity between individuals, households, economic level and geography are including the concept of the digital divide. Lacking of opportunities to access ICT with regard to different

ability to use ICT indirectly created digital divide situation. In other words, the digital divide can be explained in three distinct phenomenon aspect which at the first ICT level is different between countries, second digital divide in phenomenon of social divide with regard to disparities between groups of people in a society and lastly is regarding the democratic divide which regarding the people in a nation either they can engage with ICT provided by their government into their daily life activities or the government is not provided ICT resources for their people (Chalita Srinuan, 2012). Therefore, the digital divide phenomenon has made social inequalities among those who have the accessibility of ICT by using tools such as computers, telephone, email and facsimile service. But, there is another group without the services of ICT such as internet, telephone and any others ICT tools. These differences between the two groups are normally known as the digital divide (Marlien Herselman and Britton, 2002). In Malaysia the phenomenon of the digital divide has become crucial nowadays, as well as many other developing countries. This phenomenon has made certain groups of people in a large society didn't get any benefits from the advancements of ICT. For example, certain groups of people are abandonment from the benefits of ICT are those who differ according to income, type of work, location, gender, education, disabled people and rural populations, these kind of people are easily found left behind ICT benefits. Because of the digital divide phenomenon, it has made a barrier for individual ability to use ICT and these have created social inequalities. Moreover, from the economic perspective, the digital divide may hinder the development process of the country because in order to be developed, a country should have educated human resources as a value added because they have a better understanding regarding ICT applications and these advantages make the

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country able to compete in the international arena. Generally, the differences of the individual, such as disabled and non-disabled access of ICT, community different, state and region or global level and accessibility are the multidimensional of inequalities which created the phenomenon of the digital divide. Meanwhile, according to DiMaggio and Hargittai (2001) highlighting, disparity of tools such as location of access, skill or training and lack of moral support may become the inequalities into the accessibility of ICT. In this study, researchers refer digital divide as a gap in accessibility, usage capacity and usage level of ICT for disabled people. Thus, the researcher adopted several definitions regarding the digital divide and disabled people which relevant for this study. The definition is illustrated in Table 1.

**Table 1. Definition of Digital Divide**

Perspective	Concepts	Researchers
Digital divide within countries	Differences in terms of information. Accessibility and usage gaps of Information Communication Technology	Sun (2000), Attwell (2001), Lee(2001) Choi (2002) Van Dijk (1999), Fong et at.(2001), Cullen (2001) Light(2001) Lu (2001) Tipton(2002) First and Hart (2002), Blumenfeld and Thickett (2003) Roach (2003) Hawkins(2003) Hacker &Mason (2003) Chen and Wellman (2003) Wellman and Hogan (2004) Information, Telecommunication Union (2005)
Digital divide between countries	Gaps of populations which create the level of opportunity to access and use of ICT Gaps in terms of using computer and internet Differences between developed and developing countries in terms of level of information. Differences by connecting to Internet among countries. Inequality of accessibility and use of ICT.	Moss (2002) Informational Telecommunication Union (2005) Reynolods and Samuels (2004) Informational Telecommunication Union (2005) Reynolds and Samuels (2004) Chen and Wellman (2003)

Sources: Sungkyunkwan & Roger R. Stough, 2010

In other words the digital divide phenomenon is like an image to describe the situation of the people has accessibility to ICT or not in their daily life. The digital divide phenomenon is a crucial topic nowadays, most countries are discussing regarding this phenomenon. In the following part of this topic will discuss about the contributing factors into the digital divide.

### Factor Contributing Digital Divide Phenomenon

According to Rashid Hussain *et al.* (2011), there are several factors which created the digital divide phenomenon, first of all, the factor that most affected digital divide is insufficient infrastructure. Normally, ICT support project is less equip in rural or remote areas. Rural communities unable to get connected with any ICT tools. In order to bridge the gap between rural and urban communities, mass project needs to be implemented and it is needed the collaboration of public sector and the private sector. One of the initiatives that possible to do in order to attract private sector working together are, the government should give tax deduction to private organization that provide internet connection to any institution such as school, libraries or training center to disabled people. The second factor is, socioeconomic also create a digital divide phenomenon, for example, many disabled people are receiving a low income level and most of them are unemployed. This kind of situation makes them unable to buy any technology tools like computer in order to get access to internet, because if they have money, they will allocate their money to buy necessary needs such as food and cloth to survive in their daily life rather than internet or any technology tools. Moreover, telecommunication or ICT tools are expensive, developed countries which provide fully

adequate ICT are allocated much budget on that and it is one of the major issues to allocate the funds priority to developing countries. Indeed, ICT are not well function without the proper hardware, software and related support facilities. Because of this, much spending on ICT facilities, some of the recommendations are to use the recycle computer, buy cheap installment programs or computer accessories and trying to provide the facilities at public libraries or disabled training center. Indirectly, in order to combat the digital divide phenomenon, however, the government can deliver ICT and internet connectivity at low cost with maximum advantage especially for the needy people like disabled. Besides, awareness among the society towards the issues of accessibility, especially towards the disabled people on ICT is

not really good. Most people overlook the importance and benefits of ICT for disabled people in order to make them be independent with their on foot if they have knowledge or skills of ICT. Instead, society awareness to support disabled people is not very encouraging. In order to remove this situation, the media or any responsible bodies should provide awareness campaign in the livelihood area or provide advertisements by using electronic media on television or radio just to create awareness society towards the importance of ICT for disabled people. The digital divide of disabled people it is also because of the insufficiency of amenities.

The disabled people normally facing a lot of difficulty because of facilities are not provided friendly for them for example, physical access into a building are not provided properly, such as brill's code access for blind people should be provided in the proper way to make them feel convenient and easy to use the facilities in any case especially if they are in an emergency situation. Indeed, physical access for transportation also should be disabled friendly. Last but not least, languages are also one of the biggest factors of the digital divide. However, most of English countries are not facing this kind of barriers. Because of this barrier, it is an affected mode of information access by the disabled people. Normally, the disabled are poorer and less educated. In order to understand the English language is needed good training to help disabled people to learn. On the other hand, lack of good translation software may cause this problem get worse. Meanwhile the lack of attitude towards learning a new language may also cause language as factors contributing to the digital divide. However, to combat this language problem, a possibility the government should provide a translated information resource which appropriate to their own languages (Rashid Hussain *et al.*, 2011)

## Conclusion

Digital divide is an issue of inequality among disabled people. It is need to emphasizing the law and regulations to combat these issues. Without adequate law to protect the disabled people right of accessibility into ICT, this situation becomes worst. By bridging the digital divide it will directly enhancing the quality of life among disabled people. Through ICT exposure they will get benefits such as in education field, able to take part in economic field, to be part of society and mingle around the information every time without any boundaries. On the hand, through ICT literacy, disabled people are able to be worker and contribute to the economic and nation development as well.

## REFERENCES

- Chalita, S. 2012. Understanding the digital divide: Empirical studies of Thailand.
- DiMaggio, P. and E. Hargittai. 2001. *From the 'Digital Divide' to 'Digital Inequality': Studying Internet Use as Penetration Increases*.
- Marlien., H. and K., G., B. 2002. Analyzing the role of ICT in bridging the digital divide amongst learners *South African Journal of Education*, Vol 22(4) 270 – 274.
- Rashid H., Syed. W., A., S., Sheeraz., A. and M., A.S. 2011. Policy guidelines to bridging the digital divide for people with disabilities. *Journal of Basic and Applied Scientific Research*, 1(12), 2711-2716.
- Sungkyunkwan., D. and Roger., R., S. 2010. Analysis of the impact of the perceived usefulness of ICT on the digital divide between disabled and non disabled people in South Korea. *Journal of International Review of Public Administration*, 14(3).
- Van Dijk, J. 2000. Widening information gaps and policies of prevention. In: Hackers, K., van Dijk, J. (Eds.) *Digital Democracy: Issue of Theory and Practice* (pp.166-183), London: Sage Publication.

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