

FRAMING THE DIGITAL DIVIDE

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ABSTRAK

Keberadaan teknologi informasi komunikasi (TIK), seperti internet, menjadi pembahasan diskusi hangat di pelbagai belahan dunia. Salah satunya yakni bagaimana keberadaan TIK telah mengubah masyarakat dunia secara fundamental, mengingat keberadaan teknologi modern dapat menghubungkan beragam relasi di seluruh dunia secara virtual, bebas dari ruang dan waktu. Akan tetapi, ditengah hiruk-pikuknya perkembangan teknologi komunikasi yang mendunia, masih ada daerah terpencil yang memiliki keterbatasan dalam akses teknologi. Keterbatasan inilah yang pada akhirnya menimbulkan suatu gejala sosial yang disebut dengan kesenjangan digital (digital divide). Metode yang digunakan dalam penulisan artikel ini adalah studi dokumentasi. Selanjutnya, pendekatan yang digunakan adalah pendekatan praktis dengan mengambil contoh kasus Association of Progressive Communication (APC), sebuah lembaga dunia yang berkecimpung dalam memerangi kesenjangan digital di dunia sebagai kerangka dalam menerapkan pembahasan secara deskriptif. Hasil dari penelusuran ditemukan bahwa digital divide muncul sebagai akibat dari kurangnya akses kepada TIK. Faktor yang mempengaruhi yakni tidak hanya karena ketiadaan sarana dan fasilitas, akan tetapi juga karena minimnya pengetahuan dan kurangnya motivasi dalam menggunakan TIK. Disisi lain, program-program yang diterapkan APC untuk memerangi digital divide terkadang mengalami kesuksesan dan kegagalan. Di Indonesia pun, keberadaan TIK masih menjadi persoalan utama di daerah terpencil mengingat keberadaan perangkat keras dan piranti lunak telekomunikasi yang belum memadai.

Kata kunci: teknologi informasi komunikasi, kesenjangan digital

INTRODUCTION

The existence of Information and Communication Technology (ICT) as one of key drivers of globalization has become the foremost discussion around the world. One of notable discussions is that ICT, such as desktop computers, mobile phones and internet, has fundamentally changed our society as these modern means of communication can "empower people, benefit business and individual and virtually link people around the world to share their views, ideas and innovations" (Giri, 2002, p. 2). Internet, for example, is often assumed to bring the "death of distance" in a term that it eliminates physical and virtual seclusion

among countries around the world (Aswicahyono, Anas, & Ardiyanto, 2004, p. 145).

At the same time, ICT's usage is also fastly increasing. Internet World Statistic (2011) shows that around 2 billion people in the world are being online with more than 60% of users concentrated in Europe and America and less than 11% in Africa. Thus, the statistic also suggests an idea that some countries, especially developed ones, have got access to ICT while others do not. This condition then reinforces existing differences and creates a form of inequality which often labelled as digital divide. This inequality, at the same time, has insidentally separate countries around the world into two major classes. Countries with abundant access to technology into "the information-haves" and the rest into "the information-have-nots",

Obviously, this separation of classes into information winners and losers should come with influencing factors. What are they and how would they appear become one of the focus in this article. The others are discussing on Association of Progressive Communication (APC) as one of non-governmental organizations that actively involved in diminishing the divide and Indonesia as one of the biggest users of the Internet.

Research Questions

1. What is digital divide and what factors that induced it to be happening?
2. What is APC and are its programs in undertaking the digital divide?
3. How effective are the APC's programs in diminishing the digital divide?

Research Purposes and Approaches

The purpose of this research is to convey the concept of digital divide in global society, The research's first section notes on background of digital divide, followed by discussion on some key notions of digital divide. The second section observes the Association of Progressive Communications (APC) as an international NGO, especially its strategies that have been developed to undertake digital divide in developing countries. The report's second section also analyses these strategies by addressing their success in diminishing the gap along with barriers that the APC failed to concede.

LITERATURE REVIEW

History of Digital Divide

Historically, the term digital divide rose publicly in the mid-1990s as the National Telecommunications and Information Administration (NTIA) survey (1995), as cited in Servon (2002, p. 2), identified the existence of a divide which "separates people with access to information technology from those without it" in America. Castells (2002), as cited in Fuchs & Horak (2008, p.248), identifies digital divide as "inequality to the internet" while Norris (2001, p.4) defines it as "any and every disparities within the online community". Dijk (2005, p. 181) sees digital divide as "the gap between those who do and do not have access to computers and internet". Similarly, Brigde.org (2001, p. 2) concludes it as "the

lost of opportunity for the information have-nots to use ICT to improve their lives”. In short, the digital divide can be understood as disparities in access to information and communication technologies.

As the United Nation General Secretary, Kofi Annan (1999), as cited in Fuchs & Horak (2008, p.2), points out digital divide is “a pressing humanitarian issues”, it is understandable that this condition becomes a salient issue at international scope. Furthermore, many reports are showing that the digital divide exists not only in America but also among countries in the world especially between developed and developing countries. For example, Bridges.org (2001, p. 3) documented that there were only around 14 million phone connections in whole Africa compared with Manhattan and Tokyo which were doubled in number. The International Telecommunications Union (2000), as cited in Wolf & MacKinnon (2002, p. 1) recorded that about 77 million computers in America already have direct access to internet, while in Bangladesh, Angola, Chad and Syria less than ten computers are online. Hence, the developing countries are believed to be the information “have-nots”.

Multifaceted Nature of the Informations Have-Not

Most people believe that there are several factors to explain why the developing countries are trapped in “the information have-nots” (Servon, 2002, p. 8). First factor is the market influence which correlates to high price of computers and internet services in developing countries. Second is unequal investment in infrastructure that suggests inadequate provision of high-end telecommunications facilities, and lastly, discrimination which implies in unbalanced usage of ICT due to ethnic group’s sentiment. Among these, market influence is considered to be the major reinforcement of technology gap. It is understandable since progress of technology assimilation in developing countries is always been faced with “unsurmountable obstacles of high expenses” required to implement the process (Murelli, 2002, p. 2).

For example, computers are still considered to be prohibitive expenses in most of developing countries. In other words, the lack of material access to ICT in developing countries plays a significant role in broadening the digital divide.

However, the digital divide is not only linked to issue of physical access. Clearly, people need basic ICT devices but digital divide is much more a complex problem than inadequate of computers. One of prominent dimensions of digital divide is technological skills. The skills concern training or ICT literacy which covers the knowledge of how and why ICT can be used as a key resource. An experiment carried out by Hargittai (2002), as cited in Epstein, Nisbet & Gillespie (2011, p. 95) presents a conundrum of “operationalizing skills” as essential enablers for internet usage.

In other words, in order to use internet productively, people must acquire cognitive skills such as ability in seeking information and finding different types of information. Without skills, the presence of access will be worthless. Another dimension of digital divide is related to content. Servon (2002, p. 9) recognises the content as “both that meet the needs and demands of disenfranchised groups and content that is created by these groups”. More often than not, when members of disenfranchised groups log on to internet, they find that the content is not suitable for them in a sense that information does not relate to their culture and

communities. Therefore, to be deficient in this term will also deepen the disparities even though the access is provided.

Digital Divide and Information Society: The State of Winner or Loser?

As Giri (2002, p. 4) argues that “a major gap has always existed between affluent people living in developed societies with an access to modern information technology and underprivileged people living in many parts rural communities in underdeveloped countries”, it is understandable if the digital divide reflects broader context of social and economic relations between developed and developing countries.

The ideal explanation is that the digital divide manifests with socio-economic disparities. These disparities as believed will produce what Fuchs and Horak (2008, p. 4) call “classes of winners and losers of the information society”. For example, users who have more experiences with internet are more likely to have a higher socio-economic status and others who have less experience are poor. Likewise, flow of information not only created great opportunity for firms in developing countries to conduct trade and business on global scale. In other words, being disconnected is equivalent to less opportunity. Van Dijk (2005) even reflects that “the disconnected class has less chances on the labour market, less educational opportunities, less chances of participation in politics and society”. Hence, the digital divide will almost likely affect the social and economic progress in developing countries.

RESEARCH METHODOLOGY

Given attention to methodologies that will be used for this topic, the research will incorporate case studies and literature reviews. Case studies are performed to obtain facts related to the topic based on best practise. While literature reviews are necessary to accomplish profound understanding of the research topic’s framework. They will also serve as sources of substantial data and information.

Academic literatures such as books, journals and reports will serve as research materials. These materials will mainly focus Information and Communication Technology (ICT), digital divide, and APT as well as Indonesia’s position in the information society.

DISCUSSION

Bridging the Digital Divide: Study Case of Association of Progressive Communications (APC)

The Association of Progressive Communications (APC) was established in 1990. APC is an international non-governmental organization and a network which 50 members are widespread in five continents around the globe, the majority is based in developing countries. Currently, APC works on two broad levels of digital divide bridging effort; practice and policies. In practical term,

APC is formed to provide people with ICT infrastructures. On policy basis, it is actively involved in assisting governments, especially in developing countries, to produce information and communications policies in order to make “accessing and using the internet easier” (Association for Progressive Communications, 2011a, p. 2).

Related to that, APC vision is "all people have easy and affordable access to a free and open internet to improve their lives and create a more just world" with mission to support organisations, social movements and individuals in and through the use of ICTs (Association for Progressive Communications, 2011a, p.3). In order to support its vision and missions, APC members designated six strategic priorities for the network until 2012:

1. Advocate for affordable internet access for all
 2. Secure and defend internet rights
 3. Use emerging technologies for social change
 4. Make technology work to sustain the environment
 5. Build the information-commons
 6. Improve governance, especially internet governance
- (Association for Progressive Communications, 2011a, p. 16)

These strategies are being embedded into a wide range of projects to bridge the digital divide particularly for developing countries and bring affordable access to millions of people the world. Two leading examples of APC projects are advocacy campaign of progressive broadband and provision of telecentre (Association for Progressive Communications, 2011a, p. 20).

The advocacy campaign of progressive broadband was focused in Africa. It has been concentrating to advocate policy makers, especially in highlighting the challenges that they may have to cope with and its implications related to new policies in ensuring access to a free and open internet. To do so, APC launched ICT access toolkit for policy makers, community activists and business people to resolve the concrete access problems experienced by people. The toolkit consists of three modules, including case studies, recommendation, resources as well as FAQs. The advocacy campaign was quite succeeded in Nigeria and Ghana. APC was able to assist for stakeholders in both countries with vary intensive consultations. The policy makers in those countries also indicated that the toolkit as well as the consultation outcomes will be taken into consideration when finalising policy documents (Association for Progressive Communications, 2011b).

On the contrary, the same success was not found in Southern part of Africa. In this region, even though a broadband policy was approved by the parliament in 2010 under the assistance of APC, but it still failed to address many important issues identified by the South African National Broadband Forum (Association for Progressive Communications, 2011c). One of the important issues is related to social economic priorities. This policy will increase access to the internet, however, the gap in both access to new technologies and in the skills required to access such technologies will remain as long as there are more pressing and urgent socio-economic priorities to face such as literacy and poverty.

Norris (2001) supports this premise by illustrating that low income and education are mainly believed as factors of low level of internet usage. Bill Gates (2000), as cited in Abbott (2004), even addresses poverty as the main concern by

saying that “what’s good is a computer for someone who survives on one dollar per day, whose main concern is the next meal”. Therefore, policies related to information and communication technologies should take social-economic issues into account.

The second program is telecentre project in Colombia. Cooperated with Colnodo, one of partners of the National Network of Telecentres in Colombia, APC succeeded in holding nine regional meetings and one national convention on ICT development and digital culture which followed by approximately 1.500 participants. Through this project, APC also established more than 20 telecentres, including providing training in ICT and communications for 21 indigenous communities.

Aiming to build capacity of people from diverse background, this project, particularly the ICT training, considered to be one among the successful projects since it also worked on the cultural aspects of different regions such as language used in indigenous communities (Association for Progressive Communications, 2011a, p. 49). As Dufresne and Bethke (2005, p. 3) confirms that ignoring cultural differences may influence any education courses for global audiences, this was quite thriving in overcoming the culture barrier.

However, access to ICT must give attention to not only the cultural dimension of how people may get in touch with technology but also psychological dimension of those individuals to make a meaningful use the technology. For example, phenomenon of digital immigrants may also present an array of barrier. These immigrants are usually older people who typically found it harder to adapt new technology (O'Hara & Stevens, 2006).

The older generation, for example in Colombia, who are accustomed to or value the traditional discourse of information gathering may find online experience “anarchic, superficial and/or threatening” (Dufresne & Bethke, 2005). O’Hara and Steven (2006, p. 88) even claims that the digital immigrants require more attention due to their ICT skills which are “second hand, slightly forced and has to be learned”. Consequently, it will also influence their motivation to use the resources. If users feel terrify to use the resources then large amount of infrastructures are worthless. Hence, psychological aspect must also be considered in any digital divide bridging attempts.

Indonesia and the Digital Divide: A Smaller of Bigger Picture

By the 21st century, technology developments have dominated the manner in which people live their life. One of notable discussions is regarding the Information and Communication Technology (ICT) inevitable infiltration to the society’s daily basis activities. Some scholars even support this discussion by purposing that the presence of ICT has had significant implications for societal life (Brodsky, 2010; Singh, 2010; Stutzman, 2009). Moreover, history has proved that the invention of communication tools such as printed media or telephone has facilitated people to extend their ideas or even inspired them to transform the governmental system (Crowley & Heyer, 2011).

Indonesia, in this point, has also experiencing the same condition. As reflected by Nugroho (2010, p. 30) that the country, for some people, is “communication heaven”. In fact, it is categorized as one of developing countries

that alleviating its position from the “information have-nots” to those in “the information haves” due to the country’s progressive ICT development.

Thus, to reach this present condition, Indonesia took its own protracted period. Reflecting back to the country’s history, Indonesia’s progression in ICT adoption was highly related to its political system development. The democratisation period in Indonesia had altered the nature of Indonesia’s information system and also provided society with more opportunities to freely access information sources such as the Internet. The internet itself emerged in Indonesia in the early 1990s and was introduced by the “Habibie kids” which consisted of local and international experts under the office of Habibie, the minister of Research and Technology at that time (Hill & Sen, 2000, p. 195). Reported to be used “extensively by the urban middle-class opposition to get around the regime’s censorship of broadcast media” (Hill & Sen, 2000, p. 194), some scholars such as Basuki (1998) and Marcus (1999) argued that the Internet played a significant role in the downfall of the New Order regime. However, this argument was rejected by others, who pointed out the low percentage of internet users at that time; these users were estimated to be no more than 1% of the total population (Lim, 2003, p. 275).

Internet usage in Indonesia started to increase as platforms to access the net were provided more widely. The growing number of *Warung Internet* /Internet Cafes (Warnet) was one significant factor that had contributed greatly to the ICT adoption among Indonesians. Another crucial element that magnified the ICT adoption among Indonesians, especially youngster, is the distribution of cheap mobile phones equipped with large internet capacity. In fact it was believed to have played a major role in the ICT trend within the country (Wahid, Furuholt, & Kristiansen, 2006). Since then the number continues to grow, and was forecasted to reach 55 million users by the end of 2011 (Internet World Stats, 2012).

However, there is a considerable irony within the country itself. Take a look at Papua, Indonesia’s far west area. Its condition as remote area has made Papua one of non-electricity province not to mention less technological aspect. Heru Sutadi, the BRTI’s Commissioner, seems to support this claim as he said that while mobile phone coverage of Indonesia’s 17,000 islands has reached 90 per cent, providing more of the archipelago’s 234 million people with access to the internet, particularly in remote areas, has proved more challenging.

CONCLUSION

To conclude, disparities always exist in the world. One of those disparities is digital divide which takes information and communication technology into account. This divide presents many hurdles at international sphere since it is not only talking about inequality in ICT access and skills but also suggesting a broader context of international socio-economic gap between developed and developing countries. Thus, a lot of efforts have been taken in diminishing the gap even though certain barriers still remain.

REFERENCE LIST

- Abbott, J. (2004). *The political economy of the Internet in Asia and the Pacific : digital divides, economic competitiveness, and security challenges*. London Praeger.
- Association for Progressive Communications. (2011a). *APC Annual Report 2010*. South Africa: Association for Progressive Communications.
- Association for Progressive Communications. (2011b). *Pro-poor ICT access resource kit* Retrieved 21 August, 2011, from <http://www.apc.org/en/projects/pro-poor-ict-access-resource-kit>
- Association for Progressive Communications. (2011c). *South African National Broadband Forum* Retrieved 18 August 2011, from <http://www.apc.org/en/projects/south-african-national-broadband-forum>
- Aswicahyono, H., Anas, T., & Ardiyanto, D. (2004). *Internet Providers : An Industry Study* In P. Drysdale (Ed.), *The New Economy in East Asia and the Pasific*. London: Preager.
- Bridges.org. (2001). *Spanning the Digital Divide : Understanding and Tackling the Issues* Retrieved 17 August, 2011, from <http://www.bridges.org/publications/85>
- Dijk, J. A. G. M. v. (2005). *The deepening divide : inequality in the information society*. Thousand Oaks, Calif: Sage Pub.
- Dufresne, C., & Bethke, L. (2005). *Bridging The Divide : Distance Learning Options for International Organizations*. Paper presented at the 18th Annual Conference on Distance Teaching and Learning
- Epstein, D., Nisbet, E. C., & Gillespie, T. (2011). *Who's Responsible for the Digital Divide? Public Perceptions and Policy Implications* (Vol. 27, pp. 92-104).
- Fuchs, C., & Horak, E. (2008). *Africa and the digital divide*. [Article]. *Telematics & Informatics*, 25(2), 99-116. doi: 10.1016/j.tele.2006.06.004
- Giri, J. (2002). *Digital Divide: Exploring National and International Approaches to Bridge the Digital Divide and Formulating a Strategic Model That Can Be Implemented in Developing Countries*. Paper presented at the ICT and Development for Computer Association of Nepal
- IT Conference, Kathmandu. policy-icasit.gmu.edu/news/ddnepal.pdf
- Internet World Stats. (2011). *World Internet Users and Population Stats* Retrieved 18 August, 2011, from

<http://www.internetworldstats.com/stats.htm>

- Murelli, E. (2002). *Breaking the digital divide : implications for developing countries*. London: SFI Publishing.
- Norris, P. (2001). *Digital divide : civic engagement, information poverty, and the Internet worldwide*. Cambridge ; New York Cambridge University Press.
- O'Hara, K., & Stevens, D. (2006). *inequality.com : power, poverty and the digital divide*. Oxford: Oneworld.
- Servon, L. J. (2002). *Bridging the digital divide : technology, community, and public policy*. Oxford :: Blackwell.
- Wikipedia. (2011). *United Nations Information and Communication Technologies Task Force* Retrieved 19 August, 2011, from http://en.wikipedia.org/wiki/United_Nations_Information_and_Communication_Technologies_Task_Force
- Wolff, L., & MacKinnon, S. (2002). *What is The Digital Divide?* TechKnowLogia, July - September 2002.