

Bridging the Digital Divide from a Buddhist Perspective with Implications for Public Policy

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Abstract

This paper presents a Buddhist perspective to the treatment of the problem of digital divide in Thailand. The first part includes the concepts and debates on the impacts of bridging the digital divide, the Buddhist stance towards modern technology and the fundamental Buddhist concepts which will be the basis for further discussion. The Buddhist concepts referred to include the Four Noble Truths, the Noble Eightfold Path or the Middle Path, the Brahma-Vihara and the Four Requisites of Life. The concept of affordance and the situated context of relevance according to different realities or lifeworlds and the social impacts of information systems failure are instrumental in bringing practical arguments to support the relevant application of some Buddhist concepts to the debate on 'digital divide'. The implication for public policy in bridging the digital divide for sustainable development in Thailand is to apply some of the Buddhist concepts in conjunction with the relevant social context or lifeworld, instead of being dictated by the rationality of the digital race.

Bridging the Digital Divide from a Buddhist Perspective with Implications for Public Policy

Information and communications technology (ICT) is regarded as a key to a promising new era. Various governments have encompassed information technology as playing a key role in enabling rapid economic growth, social development, prosperity and universal welfare, including the progress of democratic values. The G-8 Okinawa Charter (23 July 2000) also optimistically states that information technology supports various goals from sustainable economic growth, good governance to promoting human rights including international peace and stability.

On the other hand, many developed and developing countries are facing the problem of an international digital divide. The 'digital divide', which is generally taken to mean the inability to have access to information

and communication networks, has become an urgent problem to be redressed. Those countries who fail to reap the benefits of ICT will be left stagnated and relegated at the bottom league of development. (DSTI/ICCP/2001)

However, the more effort and money spending on bridging the digital gap may worsen the divide due to various barriers prohibiting certain groups of people from joining the digital community (Wresch 1996). The conclusion on the findings of a survey by the Irish Information Society Commission (1999, 91) indicates that:

'It is widely accepted that information and communications technologies can be used to overcome disadvantage in society, yet the results of this survey indicate that the technology itself could be a stimulus to further disadvantage unless issues such as training, education and access are tackled as a matter of urgency.'

This paper looks at the concept of 'digital divide' from a different perspective, namely that of Buddhism. By presenting some fundamental Buddhist concepts in conjunction with the concept of affordance and the failure of information systems in discussing examples in the Thai context, relevant implications to public policy on ICT can be recommended.

1. The concept of 'digital divide'

The term 'digital divide' started to be in circulation in the 1990s (Norris 2000). Various writers defined the term slightly differently, the gist of which refers to the lack of or the inability to access the digital networks or the cyberspace (UNDP 1999). The other names for 'digital divides' include 'info haves' and 'info have-nots'; 'information rich' and 'information poor', and 'cyber-segregation'. Debates over the existence, measurements, repercussions of the 'digital divide' have categorised the debaters in to the cyber-optimists, the cyber-pessimists and the cyber-skeptics. Here are some pertinent meanings of 'digital divide', each of which reflects the underlying concerns on the particular disparity.

The term digital divide 'refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regards to their

opportunities to access information and communication technologies and their use of the Internet.' [http://faculty.washington.edu/krumme/internet/divide.html]

Digital divide – 'a term that refers to the gap that exists in the opportunities to access information and communication technologies between geographic areas or by individuals at different socio-economic levels (DSTI/ICCP 2001).

Norris (2000) classifies 'digital divide' into three dimensions, i.e. the global divide, the social divide and the democratic divide. The global divide, existing between the highly industrialised and developing countries; the social divide reflects the gap between information rich and poor in a country; the democratic divide reflected the distribution of power and influences between those who do and do not make use of ICT to participate in politics.

These definitions denote a sense of inequality and disparity existing within the developed and developing countries, and between them. The 'divide' or this gaping hole causes concern among the cyber-optimists and ICT champions as those not connected to the digital networks will lose the opportunities and potentials of becoming part of the new economy and electronic prosperity. Governments in both the North and South have initiated various programmes and policies to bridge the digital divide, e.g. the e-European Action Plan in Lisbon 1999; governments in Germany, Finland, Canada and Sweden addressed the issues of access inequalities in their public policies, the US Department of Commerce 's studies 'Falling through the Net' (NTIA 1999) and most OECD countries embarked on various electronic projects to bridge the digital gap (DSTI/ICCP/2001).

Unfortunately, some cyber-pessimists have raised the question whether digital technology is a Pandora's box which could unleash new inequalities of wealth and power thereby strengthening the divisions between the information rich and information poor, with the political repercussion of most benefits belonging to the elite (Golding 1998). Katz and Aspden (1998) and Keller (1996) question whether the Internet, instead of reducing inequality, has indeed worsen the existing divisions within society. Moreover, Norris (2000) observes that the development of the Internet coincides with a rise in the structural and basic inequalities of many countries in the North. She argues that the expensive costs of digital products can lead to the exclusion or marginalisation of lower social classes living on minimum wages. Ethnic minorities and those whose mother tongue is not English face another set of barriers in becoming the Netizens (Windrum and de Jong 2000). The market-driven solutions for ICT and the inherent logic of profit-oriented capitalism raise more questions on the direction and control of the shaping of the new economy. Hence, Norris (2000) contends that 'given substantial inequalities in the old mass media, it would be foolishly naïve to expect that the Internet will magically transcend information poverty overnight'.

2. The Buddhist perspective on technology

Phra Dhammapitaka (1995), a highly respected opinion leader on various issues including advance and complex technology has warned against adverse consequences of technology against sustainable development, e.g. environmental pollution, the spread of pornography on the Internet, lower standard of morality and quality of life. Phra Dhammapitaka (1994) points out that Thai society does not have a scientific culture in the same way as a Western society having gone through the transformation processes towards industrial society and information society. Therefore, Thai people are more prone towards the habit of consumerism rather than the pursuit of knowledge including research and development. Instead of producing scientific and technological knowledge, the effect is the habit of technology dependency, both at work and in recreation. Moreover, the indulgence in material comfort and gratification derived from consuming modern technology would make it more difficult for Thai people to be happy or content with what they have. They would feel the need to acquire better or faster technology in order to keep up with newer technology to maintain their satisfaction.

The Venerable sees the importance of technology in affording the extension of humans' physical capabilities, e.g. the use of mobile phone extends the communication capability of people over long distance. As technology can be used for good or evil, it extends people's capabilities in doing good or bad deeds as well. The increasing dependency on ICT produces several negative impacts from decreased human interaction, displacement of workers and centralisation of political decision-making to the threat of human identity (Mowshowitz 1976).

The fundamental contrast underlying the Western technology and Buddhism is their different spiritual foundation of technology in social context. The spiritual foundation of modern technology rests on the peculiar rationalistic beliefs and practice of the medieval period (Mumford 1934). The Western values of 'conquering the frontier' and dominating nature which reflect the materialistic attitudes are in stark contrast to the Buddhist emphasis on spiritual development, respect all beings, living in moderation and harmony with the environment without causing harm. Hence, the question arises whether technology would bring progress or worsen the plight of developing countries instead. Phra Dhammapitaka's approach to modern technology is that technology should be created to enable the development of human potentials and quality of life and not to promote spiritual defilement such as greed, anger, selfishness, and oppression. Phra Dhammapitaka (1997) states that the priority is to develop human beings to be 'above' technology so as to protect and ensure freedom which is the basic condition for the pursuit of knowledge and enlightenment.

2.1 Some fundamental Buddhist concepts

One of the fundamental teachings is that of the Four Noble Truth (Phra Nyanasamvara 2000). The first Noble Truth is Dukkha or suffering which includes decay, death, sorrow, pain, misery, being separated from loved ones, encountering with unpleasant things. Some examples of Dukkha or unpleasant situation: most low income families do not buy PCs for use at home, many provincial schools do not have computers for students, some universities do not provide lecturers with PCs, some local administrators still depends on manual system without computing facilities. The second Noble Truth is Samudaya which means the causes of suffering or the arising of Dukkha, such as the lack of money, certain skills and language capabilities, lack of resources and strategic planning. The third Noble Truth is Nirodha which means the cessation of sufferings, e.g. solutions to resolve the problem situation. The required money could be raised through various methods while complex problems will require more people to be involved in finding appropriate solutions. The fourth Noble Truth is Magga which means the way leading to the cessation of suffering, i.e. by applying the concept of the Noble Eightfold Path during the process of changing the situation for the better.

The Noble Eightfold Path or the Middle Path consists of right understanding, right intention, right speech, right action, right livelihood, right effort, right mindfulness, and right concentration. Therefore, some parents may earn extra money through extra jobs to buy a PC (right livelihood). With right intention, effort and action, the school director can initiate charitable projects to raise money from the private sector for a new computer workshop. With right understanding of the need for efficient public services and being mindful of the limited resources and priority of various public demands, the executives can deliver relevant plans (actions) for improving service quality with ICT. The Middle Path helps in avoiding harmful solutions through fraud, theft, corruption, deception and other criminal activities. In this way, the intended solutions will try to avoid creating further suffering and harmful consequences.

The other often cited Buddhist concept among Thai people is the Brahma-Vihara or the Four Sublime States of Consciousness (Rahula 1978). Firstly, Metta or lovingkindness, means the desire to make others happy; the practice of Metta encourages people to be generous. Secondly, Karuna or compassion, means the desire to help those who are suffering. Thirdly, Mudita which means sympathetic joy or rejoicing with others instead of being envious. Fourthly, Upekkha which means equanimity or composure of the mind, not showing extreme emotions when witnessing other's misfortune.

The other basic concept is the Four Requisites of Life or the four necessities of life, namely food, clothing, lodging and medicine for which monks have permission to 'take' or 'own'. In this way, the materialistic aspect and other hindrances such as the attachment to material possession, is curtailed to a minimum for spiritual development in monastic life. The application of this teaching to

layman's life is more towards the restraint of greed and materialistic gratification.

3. Discussion

According to the Four Noble Truth, the digital divide causes Dukkha or suffering. Wresch (1996) indicates that not everyone will share the benefits of the information age just as when societies transforming from agriculture to the industrial society and then information age, some people are left behind either for reasons of geography or language, etc. In trying to find the way to the cessation of suffering, it is necessary to understand the nature of the suffering in its social context or lifeworld.

The magical power of ICT is reflected in the extension of human capabilities beyond mere physical capabilities. The use of a computer notebook with wireless connection via satellite affords a person a whole range business of activities, e.g. he can electronically transfer money from one bank account to another, send a report to his financial consultant, buy shares over the Internet, buy airplane ticket and reserve a hotel room in Tokyo. On the other hand, these capabilities can be considered as affordances (Gibson 1997) which can be nested and complex depending on the range of action possibilities (Gibson 1979). Therefore, ICT provide a formidable range of potential affordances to a person, groups of people or communities who can access the appropriate level of technology in their particular contexts.

Therefore, the digital divide can be viewed as the gap or difference between various levels of potential affordances enabled by different kinds of information technology or ICT according to particular lifeworld. For Thai villagers in the north of Thailand where the environment consists of intermittent supply of electricity, subsistence income, the widespread of HIV and poor literacy; the donation of computers and wireless equipment to enable them to follow commodity prices and find export market via the Internet is not relevant to their sufferings. A Buddhist investigation suggests that the problem ranges from the lack of basic necessities of life to the lack of resources and other fundamental capabilities such as literacy including the skills required to access technology.

In this context there are other divides begging for filling up besides the digital divide. With the right understanding and mindfulness, the solutions (Nirodha) consist of priorities of actions relevant to different levels of Dukkha. The urgent solutions to the villagers' suffering are the four necessities after which their capabilities and other skills can be extended through education or special training courses so that technological affordances can further their livelihood.

Taking Thailand as an example, the government has instituted public reform with huge budget for ICT and set up a new Ministry of Information and Communications Technology. Efforts in bridging the digital divide are reflected in the campaign to install computers with Internet access at every village level, cheap PCs for

parents and students, subsidised computer notebooks, electronic Government projects which include the e-Society and e-Thailand. The government's ICT policy raises several questions concerning the lack of the application of basic Buddhist concepts to the process of public policy formation.

The large investments in ICT, at the expense of other critical issues, means that the lesson of information systems failure in the North has not been heeded. Willcocks (1994) estimates that twenty per cent of all IT expenditure in the UK is wasted while the costs of IS failure in the US Inland Revenue Service amounts to \$ 50 billion a year (James 1997). The number of information systems failure in the public sector is indicative of the mistaken expectations of the capability of technology as a cure for all administrative problems (Heeks 2000). Various governments' efforts in applying ICT in reforming the public sector have been fraught with difficulties and disappointments at the expense of taxpayers (Margetts 1999). Heidegger's warning of the danger of viewing information technology purely as a means to an end had fallen on deaf ears (Heidegger 1997).

Furthermore, by applying the concepts of Brahma-Vihara together with the Noble Eightfold Path, the pressure to catch up with other countries can be checked. For example, the motivation towards spending taxpayers' money to fill in the digital divide reflects the lack of Upekkha or equanimity when witnessing our neighbours galloping away with high-tech investment and show-cases; coupling this with the lack of Mudita or sympathetic joy for other's achievement. Only with the application of Metta and Karuna, would the relevant analysis and right understanding of the plight of the various sections of Thai society be undertaken with the right intention, effort, mindfulness, concentration and action. For different groups of people encounter different problem situations depending on their social contexts. Some groups may be suffering from malnutrition, disease and drug related problems; the problem of digital divide seems irrelevant. For them the 'survival gap' is more significant than the digital divide. On the other hand, some groups may be seriously at a disadvantage because of the inability to bridge the digital divide e.g. teachers, researchers, high school students, public administrators, etc. These people have the capabilities to extend their technological affordances lest the computing facilities and networking infrastructure are available.

The implication for Thai public policy in bridging the 'digital divide' among the different sections of society is the need for the policy makers to look at the problem situation with a Buddhist perspective. The Buddhist goals of applying technology are based on the Middle Path and enhanced by the application of Brahma-Vihara. Firstly, as people from different lifeworlds encounter various level of sufferings (Dukkha) so a single Macca or public policy for the whole society will not produce universal cessation of Dukkha for all. Secondly, decision-makers should be mindful that in some cases the 'Four Requisites gap' needs to be considered before

narrowing the digital divide. Thirdly, to effectively exploit the myriad of sophisticated affordances offered by ICT, people need to have the requisite capabilities and skills which can be redressed by relevant education policy. So, the 'educational gap' needs to be considered in parallel to process of digital inclusion. Fourthly, in devising public policy on digital projects, right understanding of the different levels of Dukkha can be enhanced by encouraging people's participation, public seminars or hearing. In this way, priorities of the urgency of problems can be gauged with right effort and concentration so that appropriate Macca be reflected in public policy.

The process of bridging the digital divide among all sections in society will involve the consideration of other divides or gaps, such as the 'Four Requisite divide', 'the educational divide' or the 'affordances' divide. By following the Noble Eightfold Path or the Middle Path and Brahma-Vihara, the inadvertent negative impacts of the implementation of various solutions will be relatively less arduous to be redressed by right action. Hence, specific public policy will be devised for the different types of Dukkha so that people from different lifeworlds can develop their potentials and enjoy quality life without unintentionally inflicting suffering on other sentient beings.

Bibliographies

- G-8 Okinawa Charter on Global Information Society. 23 July 2000. [<http://www.g8kyushu-okinawa.go.jp/w/document/it.html>]
- Gibson, J. J. (1977): 'The Theory of Affordance', in R. E. Shaw and J. Bransford (eds.) *Perceiving, Acting and Knowing*. New Jersey, Erlbaum Associates.
- Gibson, J. J. (1979): *The Ecological Approach to Visual Perception*. Boston, Houghton Mifflin.
- Golding, P. (1998): 'Global village or cultural pillage? The unequal inheritance of the communication revolution', in R.W. McChesney et al. (eds.) (2000): *Capitalism and the Information Age: the Political Economy of the Global Communication Revolution*. Monthly Press Review, New York.
- Heeks, R. (2000): *Reinventing Government in the Information Age*. London, Routledge.
- Heidegger, M. (1997): 'The question concerning technology' in W. Lovitt. (ed.) *The Question Concerning Technology and Other Essays*. New York, Harper & Row.
- Irish Information Society Commission. (1999): *Ireland's progress as an information society: research into general public attitudes towards information and communications technology*. www.isc.ie.
- Katz, J. E. and Aspden, P. (1998): 'Internet dropouts in the USA', *Telecommunication Policy*, **22**: 327-39.

Keller, J. (1996): 'Public Access Issues: an Introduction' in B. Kahin and J.Keller (eds.) *Public Access to the Internet*. Cambridge, MIT Press.

Margetts, H. (1999): *Information Technology in Government*. London, Routledge.

Mowshowitz, A. (1976): *The Conquest of Will: Information Processing in Human Affairs*. USA, Addison-Wesley.

Mumford, L. (1934): *Technics and Civilization*. New York, Harcourt Brace Jovanovich.

Norris, P. (2000): *A Virtuous Circle: Political Communication in Post-Industrial Democracies*. New York, Cambridge University Press.

NTIA. (1999): *Falling through the Net*. Department of Commerce, Washington, D.C. [www.ntia.doc.gov.ntiahome/ftn99]

OECD. (2001): *Understanding the Digital Divide*. DSTI/ICCP/2001. Paris.

Phra Dhammapitaka (1994): *IT under the Culture of Wisdom: religion and globalisation*. Bangkok, Buddha-Dhamma Foundation.

Phra Dhammapitaka(1995): *Sustainable Development*. Bangkok, Komol-Keamtong Foundation.

Phra Dhammapitaka(1997): *Life in Technological Society*. Bangkok, Buddha-Dhamma Foundaton.

Phra Nyanasamvara (2000): *A Handbook on Dhamma*. Bangkok, Amarin Printing.

Rahula, W. (1978): *What the Buddha Taught*. , London, Gordon Fraser.

The Lisbon European Council (2000). *An Agenda for Economic and Social Renewal for Europe*, European Council, 23-24 March. [http://europa.eu.int]

UNDP. (1999): *Human Development Report*. New York, UNDP/Oxford.

Van Dijk (1999): *The Network Society: Social Aspects of New Media*. London, Sage.

Willcocks, L. (1994): 'Managing information systems in UH public administration: issues and proposals', *Public Administration*, **72**, (2) 13-32.

Windrum, P. and de Jong, S. (2000): 'Internet Access in the Netherlands: themes and issues. The SEIN –Project Paper no.11. University of Masstricht.

Wresch, W. (1996): *Disconnected: Haves and Have-Nots in the Information Age*. New Jersey, Rutgers University Press.