

Convergence of ICT and Culture

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INTRODUCTION

Participants in development projects and programs that strategically utilize information communication technologies (ICT) are engaged in activities that have culturally-relevant impacts. At local and regional levels, there may be approaches to implementing ICT-based development projects that are appropriately contextualized for different socio-cultural systems. Such approaches need to look beyond short-term outputs and mid-term outcomes and give adequate focus on long-term impacts. It is possible to analyze the long-term impacts of ICT-based development projects through a number of different lenses, one of which is the concept of “convergence.”

The basic idea of “convergence” is the phenomenon of different states of being becoming one. Certainly the concept of culture converging with technology is not new; however, what is new with the convergence of ICT and culture is the accelerating pace of change on regional and international systems. This article describes diverse perspectives of “convergence” that may help provoke thought about and possibly inform the successful application of ICT for regional and international sustainable development.

Leveraging ICT to achieve socio-economic development goals is an approach that warrants reflection on the convergence of technologies and cultures. Awareness of the interactive dynamics between culture and technology can enable leaders, researchers, innovators, practitioners, and stakeholders to be more successful in facilitating sustainable “ICT for development” programs. Three views of convergence provide insight on the possible implications of “ICT for development” programs include: structural, technological, and cultural.

STRUCTURAL CONVERGENCE

From a historical perspective, the concept of structural convergence describes the phenomenon where societies in less-developed countries (LDCs) assimilate the processes and practices of more developed countries through technological transfers (Inkeles, 1998). This is often made possible through aid-funded projects in sectors such as agriculture, education, finance, transportation, and communications. In this perspective, convergence is normally

non-reciprocal, meaning that the transfer of technology is unidirectional and only the recipient is impacted. This type of convergence involves the establishment of social and economic structures that are designed by and for developed nations. As evidenced throughout the 1900s, societal structures in LDCs such as finance, agriculture, education, government, and so forth, have become more similar to those structures found in developed countries (Aghion, Howitt, & Mayer-Foulkes, 2004). This structural convergence has a direct result on cultural content. Also seen during the previous century were numerous development projects in LDC’s as well as developing countries that failed to produce intended results due to an inadequate consideration of the local environment, political reality, and culture (Howe & Dixon, 1993). Informed by lessons learned by others, current and future ICT-based development projects that affect the processes and practices in developing regions may be able to shape the impact of structural convergence to be more appropriate for a given socio-cultural system and perhaps increase its chance for success (Moore, 1998).

TECHNOLOGICAL CONVERGENCE

Distinct from the structural view, the “technological convergence” perspective describes a phenomenon where technological systems come together to create new systems. A widely recognized example of this type of convergence is the Internet where computers are interlinked using new and existing network infrastructures along with packet switching protocols (OECD, 1996). The World Wide Web (WWW), an aspect of the Internet, is a further example of convergence in that the digitally-mediated GUI environment of cyberspace has been merged with activities normally conducted in specific physical locales (i.e., shopping, banking, learning, working, etc.). A narrower example of this type of convergence is Voice over Internet Protocol (VoIP), which has the potential to significantly influence the future structure of global telecommunications.

Driven by the acceleration of diverse technologies being synthesized into new technologies, the phenomenon of “convergence of technologies” is pressuring the privatization and liberalization of laws, policies, markets, and economies (Blackman, 1998). Similar to structural

convergence, the spread of technology is creating cultural impacts that affect the recipient's culture more than the culture in which the technology was developed. Participants in "ICT for development" programs should be cognizant of this dynamic.

CULTURAL CONVERGENCE

Structural and technological convergences explain aspects of globalization and clearly represent a powerful influence on socio-cultural systems. Perhaps both an influence and an impact to technological convergence, "cultural convergence" is a constantly changing dynamic that serves as an engine for the evolution of broad social domains such as language, values, beliefs, behavior, and artifact. The process of cultural convergence reflects how culture changes through intra- and inter-cultural interactions. Some observers note that the quickening pace of convergence in ICT and the digital tsunami of media content may be detrimental to the integrity of the recipient's culture.

CONVERGENCE OF ICT AND CULTURE

Attempting to understand the convergence of ICT and culture is messy but imperative to the effectiveness and sustainability of development activities. As mentioned earlier, neither the convergence of culture and technology nor awareness of the phenomenon is new. What makes the convergence of ICT and culture notable today is the speed at which these technologies have (and will likely continue to) spread and impact ICT can have on all social systems. The diversity in views of convergence clearly pertains to how ICT is used for development and may account for the difference in how "ICT for development" programs are perceived by stakeholders and "donor" and "recipient" populations.

Given the nature of technological convergence, it might appear as if LDCs are bound to be subjected to cultural change determined by external cultural forces (Huntington, 1993). Indeed, this asymmetric phenomenon can be seen in television programming, WWW content, software licensing, and the establishment of technological standards (Foulger, 2002). Because convergence is complex and causes unintended consequences, some perceive that cultural imperialism is a malignant by-product of development efforts based on technological transfer (James, 2003). However, it may be more than a by-product; it may be a direct result of trends set in motion by historical oppression and subjugation compounded

by economic inequities (Senghaas, 2002). It is not exactly a coincidence that most LDCs are former colonies and perhaps understandable why citizens in the post-colonial developing world are much more sensitive to the issue of cultural imperialism than are citizens from more developed countries. Donors, practitioners, and stakeholders in initiatives that leverage ICT for social and economic development are necessarily involved in a process of technological and cultural convergence. This process does not have to include side effects such as hegemony and cultural homogenization. There is some control in the design, organization, degree of inclusion, implementation, and assessments of "ICT for development" programs that can balance the realities of convergence with the imperative of promoting cultural integrity. Due to the converging forces of globalism, there is probably no way to avoid the impact of ICT on culture; as some say, "the genie is out of the bottle." However, through adequate awareness of long-term impacts, a degree of control may be possible. For those involved in the design and implementation of ICT-based development projects that are aimed at either local or regional levels, they should take care to find effective ways in shaping the impact of ICT on the recipient social systems to be appropriate and beneficial. Careful implementation of convergence is not only an important condition to sustainable socio-economic development; it is consistent with the fundamental objective of any development activity to help bring about beneficial change while minimizing harm.

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