

ALIGNING ICT POLICIES AND STRATEGIES WITH INFORMATION COMMUNICATION TECHNOLOGY FOR DEVELOPMENTS

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ABSTRACT

Information and Communication Technology for Development (ICT4D) is an initiative aimed at bridging the digital divide and aiding socio-economic development by ensuring equitable access to up-to-date communications technologies. The United Nations, through its UN Development Programme, actively promotes ICT4D as a powerful tool for economic and social development around the world. Infrastructure initiatives and development strategies incorporating ICT are being increasingly promoted and launched across countries worldwide. While the potential advantages of ICT for Development (ICT4D) are massive, national policies are yet to sufficiently reveal comprehensive and incorporated strategies for harnessing and exploiting this potential. Much mention has been made of a growing digital divide between countries. Therefore based on the literature review, the purpose of this paper is to discuss the need of aligning the ICT policies and strategies with ICT4D. The paper firstly outlines the role of ICTs as enablers of the developments. The paper further highlights examples of ICT4D projects which have been carried out worldwide. The paper concludes by discussing the importance of having clearly set ICT policies and strategies for ICTD4. The significance of this paper is to help those who wish to know about the ICT4D. It could also be helpful to the governments on matters regarding their ICT policies and strategies.

Keywords: ICT4D, ICT policies, strategies, digital divide

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I. INTRODUCTION

Information and Communication Technologies (ICTs) refer to any technologies that enable communication and the electronic capture, processing, and transmission of information. Radio, television and print media are vital in many developing countries. In recent years 'new' ICTs, such as mobile phones and the Internet (and associated applications such as 'VOIP', transmitting telephone calls over the internet) have become available to growing numbers worldwide (ITU, 2006). The most rapid growth is in mobile phone usage. Internet usage has also grown rapidly (POSTNOTE, 2006). However, there are wide disparities between developing countries.

ICTs can help developing countries tackle a wide range of health, social and economic problems. ICTs adoption has been considered a prime factor in the rapid development of countries (Labelle, 2005). By improving access to information and by enabling communication, ICTs can play a role in reaching Millennium Development Goals such as the elimination of extreme poverty, combating serious disease, and achieving universal primary education and gender equality (Marker, McNamara & Wallace, 2002). This is also reflected by Mendoza (2001) who asserts that ICTs diffusion accounts for up to 90 percent of the increase in the Human Development Index.

ICTs can have a dramatic impact on achieving specific social and economic development goals as well as play a key role in broader national development strategies (Digital Opportunity Initiative, 2001). These technological advances have changed business operations and the way people communicate. They have introduced new efficiencies in old services as well as numerous new ones (Kaplan, 2001).

II. ICTS AS ENABLERS OF DEVELOPMENT

Information opens up more possibilities and opportunities for people. Information and knowledge empower people to become more self-sufficient. Some of the advantages of using ICTs include: access to information which in turn can help in increasing participation in economic and human development activities (e.g. markets); ICTs make information acquisition and management easier and more efficient, and open up possibilities for universal access to knowledge and markets (Labelle et. al., 2001). These lead to business-related efficiencies and

faster turnover, increased productivity, especially in the services sector (ARCEA, 2001; Lallana, 2004).

ICTs empower individuals, businesses, local and community groups, women and marginalized or disenfranchised people or groups to work, enhance and speed up their productivity (ECDL, 2011). Labelle et. al. (2001) point out that, ICTs can expand the range of choices and opportunities by facilitating greater access to economic, educational and development-related information and also, aid with reduction of geographic spread and distance as a factor in social and economic participation.

Research is much easier with ICTs, especially through the Internet. For instance, Internet facilitates distance learning. Students can learn online and correspond on-line to any part of the world they want to connect to. ICTs also help with issues concerning the environmental awareness. Information about the weather and the environment is more readily available. ICTs can help to predict and prepare for environmental perturbations and catastrophes. For instance, in Sub Saharan Africa, earth observation is used to predict crop failure and prepare for emergency food relief (FEWS, 2000). Similarly, FAO maintains another such web site with a global purview (GIEWS, 2000). ICTs also play a crucial part in helping individuals with issues pertaining to awareness and decision making. This also extends to organisations and businesses or firms, ICTs are playing a major role in their decision making. They have Decision support systems and Knowledge based systems which are ICT based, which help in the running of their businesses.

III. EXAMPLES OF ICT FOR DEVELOPMENT (ICT4D) PROJECTS

Some examples of ICT for Development (ICT4D) projects are shown in table 1. The projects aim to realise the benefits of ICT in a range of sectors, from health, education, commerce and e-government to scientific capacity building, gender empowerment and human rights. Nevertheless, the benefits of ICT are not fully realised as many countries have inadequate infrastructure and human capacity to support ICT (POSTNOTE, 2006).

EXAMPLES OF ICT FOR DEVELOPMENTS PROJECTS

Health: The Keneya Blown telemedicine project aims to provide an online network for all hospitals and health districts in Mali.

Physicians are the sole users of the pilot site, but other healthcare workers are invited to consult and contribute content. Medical tele-teaching has also been initiated. Examples of consultations include one between an expert in Geneva and a patient in the Bamako, Mali; and a leprosy consultation between an expert in Bamako and patient in Geneva

Economic empowerment: The Grameen Bank NGO, a village-based organisation in Bangladesh, offers women low-cost loans to set up mobile phone exchanges in villages where there are few landlines. The women charge for the use of their Village Pay Phones, and earn close to three times the annual average income. Their earnings allow them to send their children to school and enhance their status in the community. However the scheme is threatened by the increasing availability of cheaper phones for potential purchasers.

Human rights: The Kubatana Trust in Zimbabwe aims to strengthen the use of e-mail and internet strategies in local NGOs and civil society organisations. Kubatana makes human rights and civic education information accessible to the general public from a centralised, electronic source, and has become an important means for disseminating information about the political situation locally and internationally.

Commerce: In Senegal, Manobi (a French private telecommunications company) uses Wireless Application Protocol (WAP)-enabled mobile phones to obtain up-to-date market prices for Senegalese fruit and vegetable farmers. The prices are updated in real time via a central database by data collectors at various markets, and offer transparency of prices inside the market that many producers lack.

Table 1: Examples of ICT4D projects adapted from (POSTNOTE, 2006)

IV. ICT POLICIES AND STRATEGIES ALIGNMENT WITH ICT4D

As countries and jurisdictions position themselves to take better advantage of ICTs, there is need to reflect on their response to the rapid transformations brought about by the information economy. As pointed out by Labelle (2005), the ability to take full advantage of the information economy for the benefit of all in a given country or jurisdiction requires vision, discipline, planning, and method. Therefore, one possible starting point is an exercise to help focus on the long-term implications of the diffusion of ICTs. An outcome of this effort could be a vision statement outlining a short to long-term scenario for ICT development, including measurable outcomes or milestones over a given time frame.

According to Lallana (2004), a vision is a statement of great expectations for the future. It documents outcomes that the country or jurisdiction wishes to arrive at within a given time

frame. The vision sets the stage and the agenda is defined by a strategic plan, followed by an action plan. As pointed by Smith (2003) in his article about public policy development, knowing what a country or jurisdiction wants and what it can achieve, agreeing on this and communicating it as widely as possible to its people are some of the outcomes of visioning. Therefore, a vision statement could be written for a business, association, an organisation, a community or even a household. It could even include personal goals.

Countries worldwide have come up with visions of the future where ICTs are regarded as a mechanism of transformation to attain a desired state. For instance, Botswana has come up with a vision, “Towards Prosperity for All”. This vision, popularly referred to as Vision 2016, articulates Botswana’s long-term development aspirations and provides a broad framework for developments by the year 2016. Malaysia has come up with Vision 2020, which foresees Malaysia becoming an industrialized country by 2020; e-Japan, which is a vision of a society “where everyone can actively utilize information technology (IT) and fully enjoy its benefits” and the national vision for Canada is based on rolling out infrastructure to make the information and knowledge infrastructure accessible to all (Labelle, 2005; Botswana MDGR, 2010).

According to Lanalla (2004), National ICT policies help guide a country or jurisdiction in its use of ICT tools and secure the benefits of the information economy for all. This is also echoed by Labelle (2005) that ICT policies require to be planned in order to match the needs of people with the opportunities and possibilities that are available through the use of ICTs. The planning of the policies should be carried out in discussion with stakeholders to help secure helpful and level-headed outcomes. Therefore, policy-making must be based on the best information and intelligence available (Smith, 2003).

Clearly, ICT policies deal with issues related to information dissemination and use as well as issues related to the spread and use of the technology itself. Therefore, when considering the development needs of a community, jurisdiction or country, it is necessary to think in terms of a strategy. A strategic approach denotes a process involving analysis of priorities and constraints before arriving at a recommendation for the resolution of a given issue (Smith, 2003). One of the main objectives of ICT policies and strategies is to ensure the greatest possible diffusion of ICTs, commensurate with national needs, ambitions, specificities and concerns (Labelle, 2005).

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