Formation of a Knowledge-Based Society through Utilization of Information Networking

Hakikur Rahman

SDNP Bangladesh, Bangladesh

THE CONTEXT OF THE INFORMATION SOCIETY FOR BANGLADESH

"Information society," "knowledge network" and "digital divide" are terms becoming increasingly common in many parts of the world over recent years. The key element in these concepts is that of "information," and its fluidity in the modern world. Information can be viewed as the foundation stone of this new phenomenon and is the collation of raw and un-processed data into meaningful dialogue. Many societies and communities in developed and developing situation have settled on the term "information," to describe the new economy and be the basis of development in the new millennium.

The Information Society is created by information, in a similar way that the industrial society area was created by manufacturing. This new Information Society is therefore a society being produced by a reliance on information as the most significant factor in the means of production. Hence, it relies on the information economy to produce products, services, employment, wealth and life style on which the community depends. It is believed that ultimately the whole community of a country can benefit from the optimum utilization of information in each and every corner of society.

Knowledge, on the other hand, is dynamic and capable of creating dynamism in a similar way to capital and labor. Money, work and information are catalysts, while knowledge, capital and labor are concepts containing stored endurance and cultural interpretation. Given the right incubation, they are capable of creating fruitful outcomes. Building a knowledge network molded by information can accelerate the pace of development.

In Bangladesh, efforts have been allocated to accommodate propositions on developing a nation wide information network using the existing information backbones. As a result, a centrally driven content repository may eventually be established.

INTRODUCTION

The Information Age is challenging the role of the expert in society and, therefore, the relationship between expert and amateur (Handy, 1997). The WWW (World Wide Web) has created new opportunities for self-learning in a wide range of expertise previously dominated by specialists. Specialists and professionals in all aspects of human life are benefiting through this expert support. Thus, knowledge is evolving as the result of information acquisition melded with experience where many amateurs can develop to act as effectively as experts.

Knowledge management incorporates huge data storage facilities, contents in distributed databases and an effective retrieval system. It means planning for research, linking ideas to generate information and conceptualizing the notion of a knowledge society. The knowledge society can bring more ability and options to the stakeholders through methodologies like self-paced learning, forming common communities through mass networking and by maintaining maximum flexibility in learning sequences.

Mass networking is one of the prerequisites to form a homogenous, multidimensional, dynamically developed and research-potent knowledge-based society. Academics, institutes, research organizations, civil society, government and non-governmental agencies, and other partners/stakeholders of the community should be able to interact with each other through a common horizontal platform.

In response to the challenges of globalization and the information society, each country needs to set out its own strategic objective for the coming decade, and to become the most competitive and dynamic knowledge-based economy in the global market, capable of sustainable economic growth with better jobs and greater social cohesion.

Bangladesh is a country of 133.4 million people. With a minimal GDP of 357USD, 33% of the population lives under the national poverty line. More than 80% of the population resides in difficult accessible rural regions, where information infrastructure is very thin and formation of a common information backbone still remains an open challenge to the society.

In order to address the issues faced by much of Bangladesh, detailed programmes and action plans on the future of education and training systems need to be prepared. The policies need to be implemented using "open coordination concept" among all the partner organizations.

Copyright © 2006, Idea Group Inc., distributing in print or electronic forms without written permission of IGI is prohibited.

STRATEGIES

In addressing the obvious needs of Bangladesh in the Information Age, strategic plans need to be initiated at the national level and incorporate flexibility in each stage of the development and action, to deliver optimum resource utilization and to maximize benefits. The new strategy requires an indigenous method, an open coordination concept, a realistic measure:

- identifying and defining common objectives; and
- stimulating the quality and relevance of locally based capacity enhancement programmes.

In discussing information and knowledge, it is useful to start by observing that both are human creations (or social constructs). They are designed to explain and meet some of the challenges that individuals or groups face at a particular time and place. No one fully understands the meaning of knowledge and information without recognizing that they can both be "double-edged swords." They can be used to empower individuals and groups. They can also be used to continue and reinforce relations of power and control. When a ruling group uses information and knowledge to control (dominate) people, those people are led to despair, powerlessness, and unsustainable life styles (Mchombu, 2002).

Several aspects of the emerging framework for the Information Age in Bangladesh that are essential for bringing communities to a common platform by raising their capacity through the utilization of ICT techniques are now discussed.

Policy Initiation

To increase socio-economic development, government must undertake broad-based action plans. The inclusion of the following section in the ICT Policy of Bangladesh, is a positive step in this respect:

Socio-economic development can be accelerated if more people can have access to information. Teledensity is important in this respect and it will be increased to broaden the coverage, which will improve the socioeconomic condition of the people through ICT-related activities in line with experience of developed countries. (ICT Policy, 2002)

Secondly, ICT Policy accommodates steps towards capacity development of the general population:

Widespread introduction of ICT education in public and private educational institutions is a prerequisite for producing skilled ICT manpower. (ICT Policy, 2002) Finally, the ICT Policy needs to recognize that the information infrastructure needs to be upgraded to allow the formulation of a national data bank to assist the development of millennium initiatives:

A central depository for collection and dissemination of ICT information and research findings will be developed. This will be done under a network, connecting all university libraries and research organizations to this central depository, which in turn will be connected to the Internet. (ICT Policy, 2002)

Education

Education is by necessity a primary concern in all countries. Although the structures of education systems differ considerably, both within and amongst different countries, a mass literacy campaign should be given the first preference in a country's education system. Bangladesh, with 38% of the population being illiterate, needs to upgrade its education programmes to raise literacy. The government is keenly interested to make the country 100% literate by 2006.

Predictions about the economic and social impact of Information and Communication Technologies (ICT) abound in the literature and the economic and social behavior of society. The technological trends are extrapolated to illustrate potential benefits and by adopting a visionary perspective, resulting in predictions of "revolutionary changes" in the global knowledge society. Advances in ICT have been particularly striking in the areas of digital computing and communication networks (Carlos et al., 2003). Superimposed on these factors, education systems no longer remain removed from the basic societal aggregations. Scholars, researchers, and educators are striving hard in Bangladesh to produce quality education systems using the benefits of ICT. Educational networks have become a prime urgency in Bangladesh. In this context the interaction between technological development and new approaches to education become increasingly important in previously unserviced situations.

The Semantic Web is expected by many to open new opportunities to manage information while allowing for new Web functionalities with significant storage potential. Artificial intelligence and expert systems are expected by many to gain a novel power and utility as standards for distributed computing and grid systems spread around the world. New technology-based infrastructure developments open new possibilities for regions with lowbandwidth connectivity to leapfrog stages of development by entering the "broadband" phase via wireless solutions. The Wi-Fi phenomenon is a good example of the "law of unintended consequences" in action as a 4 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <u>www.igi-</u> global.com/chapter/formation-knowledge-based-society-through/11396

Related Content

Mobile Phones as a Lens into Slum Dynamics

Amy Wesolowskiand Nathan Eagle (2012). Online Research Methods in Urban and Planning Studies: Design and Outcomes (pp. 334-352).

www.irma-international.org/chapter/mobile-phones-lens-into-slum/62410

Exploring Ways to Use 3D Urban Models to Visualize Multi-Scalar Climate Change Data and Mitigation Change Models for e-Planning

John Danahy, Robert Wright, Jacob Mitchelland Rob Feick (2013). *International Journal of E-Planning Research (pp. 1-17).*

www.irma-international.org/article/exploring-ways-to-use-3d-urban-models-to-visualize-multi-scalar-climate-change-data-andmitigation-change-models-for-e-planning/78888

KBUD as an Alternative Approach for the Development of Cairo's Informal Settlements: Opportunities and Challenges

Ahmed Hassan Abayazeed (2018). *Knowledge-Based Urban Development in the Middle East (pp. 122-138).* www.irma-international.org/chapter/kbud-as-an-alternative-approach-for-the-development-of-cairos-informal-settlements/199361

Semantic Spatial Representation, an Experimental Proposal in the Framework of eParticipation

Angioletta Vogheraand Rossella Crivello (2015). *International Journal of E-Planning Research (pp. 18-35)*. www.irma-international.org/article/semantic-spatial-representation-an-experimental-proposal-in-the-framework-ofeparticipation/139310

Citizen as Sensors' Commitment in Urban Public Action: Case Study on Urban Air Pollution

Gwendoline l'Her, Myriam Servièresand Daniel Siret (2019). *International Journal of E-Planning Research (pp. 42-59).* www.irma-international.org/article/citizen-as-sensors-commitment-in-urban-public-action/239855