International Issues of Information Society

This section attempts to synthesize issues that have come to be seen as constitutive of a hypothetical information society. These issues have been articulated by government, business and civil society through their input into processes in the UN sphere and other selected bodies. These include declarations to which UN member states were signatories; input into the World Summit on the Information Society (WSIS) by the Coordinating Committee of Business Interlocutors (CCBI), which includes the World Economic Forum; and regional and international statements of civil society formations involved in the WSIS process.

The Foundations of an Information Society

Information systems have long been seen as entities that not only embed society, but also as agents that help to define it. From a global perspective, the major task here has been to develop a shared understanding of the concept of an information society. Such a vision might be best articulated in terms of the fundamental basis of an information society and the roles of societal actors - governments, business and civil society - within it.

Two general perspectives on the fundamental basis of information society seemed to have emerged:-

1. Information society as a consumer-oriented environment containing tools, applications and services; or
2. Information society as a global commons enabled by ICTs in which human needs are central.

Many civil society entities have, on the other hand, articulated positions that would place human at the center of a conception of an information society. In this viewpoint, an information society's purposes, development, operation, and governance would take place within established human rights frameworks and would be evaluated on its ability to meet human needs.

Governments have articulated a spectrum of positions on their roles in an information society. These articulations have been made individually and collectively. The Millennium Declaration of the United Nations states that governments should "...ensure that the benefits of new technologies, especially 'information and communication technologies..." are enjoyed by all people. One implication of this declaration is that ICTs are to be seen as major tools for meeting the series of highly ambitious goals it set forth, including the provision of elementary education to all children by 2015. The G8 nations articulated a similar, but less-specific message. One role of government in an information society that is implicit in these efforts is as a catalyst and organizer for business and civil society processes concerning an information society. For example, the G8 initiated the Digital Opportunity Task Force (DOT Force) to address the digital divide and other societal matters. Positions of member states with respect to these declarations vary. The European Union sees, in part, its role as bringing "the Information Society closer to all citizens of Europe, develop the economic wealth, address growing social needs, and focus on cultural identity and diversity".

A significant number of IT-related NGOs and other NGOs that have added IT issues to their agendas have adopted positions on the role of civil society that might be characterized as running counter to positions articulated by some governments and business or, at the very least, as acting as a balance. Many see civil society as providing oversight for governmental and business activities within an information society that has become global and increasingly privatized. To this end, many entities within civil society have called for greater transparency and citizen involvement in the operation of an information society.

Digital Divides in an Information Society

One of the most critical sets of social, ethical and policy issues that must be dealt with in realizing an information society is the phenomenon known as the digital divide. In domestic contexts this is often

defined as a gap between individual citizens having access to Internet technologies and those who lack such access. In a global context, the concept of a digital divide has been expanded to include communities, nations and whole regions. Citizens in many parts of the world still do not have basic access to ICTs. This includes not just Internet, but basic telephony. Democratic access to and use of ICTs, such as digital government services, cannot be truly realized in a society as long as there remain citizens who lack access to both appropriate technologies and technical skills to make use of these services.

It is now being explicitly recognized that a complex of different types of barriers exist, not just the proverbial, monolithic "digital divide". A major focus is on addressing barriers faced by those nations defined by the United Nations Development Program as the least developed countries (LDCs). Given this broader understanding of the digital divide, the other issues that many see as needing to be addressed include: social, economic, and educational barriers; political and social barriers; requirements for achieving universal and equitable access; information as a public good, with due consideration for intellectual property; freedom of expression and of the media; supporting cultural and linguistic diversity in circumventing barriers; and the distinct roles of governments, civil society and the private sector in bridging barriers to an information society.

Access to information (e.g., digital government services) is not only characterized by access to technologies, however. Access to information has been studied on several levels, including the properties and characteristics of access, as well as the means and availability of access. Means and availability of access are not dependent only on the economic status of individuals or their communities, but also on information usage skills and geography. Access to the equipment, software and telecommunication services necessary for Internet access must obviously be accompanied by skills to make use of them.

A digital divide can also be characterized by the information itself: its costs, representations, communication processes used to convey it, and ways it is collected from one's surrounding environment. Of particular concern here are potential cost barriers for information and representations of government information. Certain sources of public information are not free.

Communication researchers have demonstrated that the valuation of information, in general, presents a unique problem for those who are economically disadvantaged. Beyond the basic consideration of whether one can afford to pay for information, the value of information is more uncertain than most other types of goods. Its usefulness cannot be conclusively determined until it is used. Thus, those who are less able to afford information are also less likely to take chances buying it because its usefulness may be highly uncertain to them.

Finally, the cost of technology may present a barrier to information. Policy making to address the digital divide must mandate the leveraging of ICTs to provide access points via more widely available technologies, These include telephony-based applications and low cost Internet appliances such as handled computing devices or Internet appliances. Policies must also encourage innovations that allow electronic government documents to be used in the context of human agent environments, wherein citizens can still communicate directly with government officials.

Developing a Framework for an Information Society

A framework for an information society would define the functional, regulatory and developmental aspects of the society, as well as its relationship to existing human rights and international frameworks. Functional issues would include education, addressing the needs of workers, facilitation of technical literacy, and support for commerce. Regulatory issues are seen as including data protection, privacy and network security, intellectual property rights, public domain and fair use, and the establishment of appropriate policy and market structures. Developmental aspects of an information society would address sustainable and environmentally responsible development of ICTs, appropriate new and traditional ICTs, capacity building in governments, civil society and the private sector, financing and deployment, and examination of social and regulatory impacts of this

framework. In this context, participatory design is recognized by many as an indispensable tool for ICT development. An integral part of the developmental processes of an information society would also include a continuing process of implementation and review of the framework itself.

A Knowledge Society Perspective

This issue considers the special relationship between information and knowledge, where knowledge is derived from processes of organizing data and information to convey domain-specific understanding, experience, expertise, and learning. An information society has often been characterized as a knowledge society. From this perspective, an information society is seen as enabling the creation and management of knowledge as the primary benefit to humankind. Social, ethical and policy considerations in this context relate to: the establishment of general educational goals sought through the use of an information society; enabling distance learning; facilitating both formal and lifelong learning: the development of information literacy, including critical appreciation of information and content development skills: access to knowledge; support for cultural and linguistic diversity; and support for needs of young people. This perspective also recognizes that capacity building in academia is necessary to support a knowledge society.

Defining Rights and Governance

A major area of contention in the development of an information society has been in defining and enforcing the rights of all stakeholders, as well as the particulars of its governance. Critical issues in addressing rights and governance are: democratic management of international bodies dealing with ICTs; information and communication rights of governments, business and citizens: privacy and security policies and rights censorship and regulation of content; the role of the media; defining, identifying and responding to criminal activities within an information society; the application of ICTs for government and decentralization; and media ownership and concentration. A major-emphasis here for civil society and some governments has been to establish support for the empowerment of citizens. In addition, many see an information society as enabling the reform and strengthening of democracy.

Infrastructure Development

Infrastructure is a nexus for many of the major technical, social and policy issues in the realization of an information society. The goal here is the evolution from the present technical state to one in which all of the benefits envisioned from an information society can be realized. Key issues here are: the extension of Internet connectivity to areas that are under-served or not served at all: the application of wireless technologies, particularly to realize the economic benefits that technological “leap frogging” affords developing nations; the development of new advanced ICTs to meet outstanding human needs in all societies; the building of bridges between different types of media, including radio, television, print, and the Internet, addressing the needs of rural communities; and the availability of ICTs needed to address emergency situations around the world. Perhaps the most contentious set of social, ethical and policy issues in this category has been in defining the balance of roles between private sector investment, government subsidy and civil society efforts in creating information society infrastructure.

Development and Employment

An information society is seen as having the potential to greatly affect development and create employment. This can be seen, as discussed above, beginning with the communication for development movement among members of the ITU. The key issues here are: the creation of economic opportunities; the role of ICTs in health, agriculture, labor. culture, and other life-critical sectors; the role of ICT-based communications for development; the training of workers for an information society; a consideration of the realities and dangers of labor exploitation in ICT-based sectors; an examination of the roles and impacts of investment and speculation in ICT-based development; and the role and limits of e-commerce in development and employment.

Tools, Services, and Applications

Being enabled mainly by scientific and technological achievements, the dominant focus of conceptions of an information society through the early 1990s was techno-centric, viewing an information society merely in terms of the technical feasibility of classes of tools, services and applications. The increasing influence of social and community informatics perspectives has, however, changed the focus to one of considering which tools, services and applications should be used or developed with regard to their social impacts and human needs that must be addressed. The broad technical issues in this category are: the development of technologies that facilitate active citizenship and improved government; technological support for universal access to knowledge and global communication and cooperation; and the improvement of the standard of living adequate to the health and well-being of all citizens. Specific issues include: the building of bridges between the communication modalities of radio, television, press, and Internet: the development of ICTs for e-government, including citizen input into political processes: support for disaster mitigation and relief operations; support for long-term data retention and archiving for cultural preservation; and tools to facilitate cross-sector co-operation.

Citizens and Communities

A number of issues have been contributed mainly by civil society to the conception of an information society that falls outside of commercial and governmental perspectives. The major issues here are: the creation and preservation of an electronic commons, free public spaces and technical resources that can be used to meet human needs; community control of ICT infrastructures; continuing support for open source technologies; capacity building for communities to participate in an information society: and addressing the multiplicity of dimensions of diversity, including linguistic and cultural diversity. Specific issues here are: the empowerment of communities through ICTs; preservation of culture and language: support for oral information and cultures; support for independent, community controlled media; meeting the needs of people with disabilities; meeting the needs of the elderly; providing support for cross-cultural communications; stemming the technological "brain drain" from developing countries; content dumping, which is the subsidization of information production and its delivery far below cost to culturally vulnerable populations; and geographic-specific issues, such as problems of rural access to ICTs.

Gender Perspectives

It is well understood, "technological designs are also social designs". The social designs in information technologies and processes used to achieve them reflect society's gender biases - among others. Design processes that do not take gender issues into account run the risk of producing information technologies and services that do not adequately address the needs of women.

The promotion of gender equality has been recognized by growing numbers of stakeholders as at that is not only important to women, but a necessary condition for improving all societies given the central roles and responsibilities that women have. The broad issues that have been raised in this context are reducing gender discrimination and improving participation of women in an information society, capacity building and training for women, and the use of ICTs to improve the lives and livelihoods of women worldwide. Specific issues include: supporting wide participation by women and gender specialists in policy and decision making at all levels in the ICT sector; supporting women's greater access and control over resources necessary for their empowerment; improving the participation and representation of women and gender equality advocates in all levels of policy making; reform of decision-making processes in the ICT sector; the development of ICT applications for supporting women's reproductive and productive roles, and in education and literacy programs; the development of ICT applications for reducing violence against women; and addressing issues of pornography and other forms of exploitation that are enabled by ICTs.

Source:

- Linda L. Brennan & Victoria E. Johnson, *Social, Ethical and Policy Implications of Information Technology*