

Visions of the Information Society

The nature of the information society: An industrialized country perspective¹



EXECUTIVE SUMMARY

The weaving together of digital networks and information with the social networks of the 21st century has very significant implications for everyone. This is especially so for those who cannot participate easily and effectively. This paper first examines what the ‘information society’ is coming to mean for stakeholders in the industrialised countries where the emphasis is often on fostering ‘knowledge-driven’ economic growth. Second, some of the distinctive diffusion pathways for information and communication technology (ICT) applications are considered together with several forces that are influencing them. Third, policy and regulatory priorities are considered and the need to promote learning and capability building is emphasised. Fourth, the need to mobilise investment to address the ‘digital divide’ through fostering partnerships is considered. Fifth, the need to encourage stakeholder participation in designing information societies and to guard against perpetuating existing asymmetries in the distribution of economic and social resources is discussed. Finally, the need to ensure that development priorities are placed at the top of all efforts to mobilize investment in ICTs is emphasized in the conclusion.

Fostering ‘Knowledge-driven’ Growth

An emphasis on the need to foster ‘knowledge-driven’ economic growth to underpin information societies gained currency in policy circles in the late 1990s. Discussions about the growing importance of knowledge accumulation and absorption were often accompanied by assertions about the impact of rapid innovations in ICTs and of increasing investment in digital networks and their applications. The mobilization of concerned stakeholders around the ‘knowledge-driven’ growth agenda emphasises the technical and economic features of information society developments. While most stakeholders acknowledge that social considerations are very important, at the practical level there is still a tendency to put the analysis of technology diffusion and the dynamics of ICT-related markets first. From this perspective,

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- the main driver of the information societies over the next decade is expected to be investment in electronic networks and services that contribute to economic growth and competitiveness; and
- the emphasis is on how wired and wireless networks and a variety of digital platforms can contribute to productivity gains and stimulate innovation. This fosters a strong focus on technology and a technology ‘push’ vision of information societies.

Given that our economic and social order is becoming intensely mediated by ICTs, much more needs to be understood about the implications of the spread of digital networks. At present the evidence base is rather weak. Three key issues affect the extent of the diffusion of ICTs and the overall development of information societies:

- The ‘systems’ features of ICTs mean that when components of the ICT and the social system are immature, the social and economic developments associated with digital technologies are unlikely to be as extensive as expected.
- The ‘peer-to-peer’ model of digital information exchange is not becoming the major driver of the diffusion of ICTs and the balance between the protection of digital information and opportunities to access digital information is very important.
- Learning is the weakest link in the development of information societies and most empirical evidence on ICT diffusion provides little insight into the processes or effectiveness of learning.

ICT Diffusion Pathways for Business, Government and Citizens

Case study evidence on key developments among ICT user groups shows that a great variety of ICT diffusion pathways exist.

- In the business area, the majority of firms in the industrialised countries are adopting the basic uses of ICTs, but relatively few firms have reached the most sophisticated levels of use. In general, investment in ICTs is likely to yield gains for businesses only if there is parallel investment in learning, organisational change, and measures to enhance the perceived safety of networks and on-line transactions.
- In the public sector, it is becoming clear that there is no direct relationship between ICT investment and the potential for greater transparency of the state or of governance processes more generally. The learning curve to implement e-government services is very long and organisational barriers of many kinds exist.
- In the case of electronic services for citizens, the features of ICTs that are likely to be most attractive are very uncertain and the patterns and motivations for citizen use of digital technologies differ across the industrialised countries. For non-users of ICTs, the biggest barrier to greater use is often the perceived ‘irrelevance’ of the Internet in people’s lives.

The main message from studies of ICT diffusion in the industrialised countries is that use depends on social, economic, political, cultural, organisational factors. This message is very simple, but it is not filtering fast enough into the practices of those who develop the new digital networks and services.

Priorities for Policy and Regulation

To promote the take-up of ICTs, regulation is needed to encourage competitive entry in some market segments. Universal access to public networks and limiting discriminatory and unfair restrictions on network access and usage are important issues for regulators. Regulators may also have to address whether the Internet Service Provider market is becoming too concentrated in some parts of the market.

Many industrialised countries seem to be failing to capture the full range of social and economic benefits of investment in ICTs. A key policy issue is whether there is sufficient investment in the ICT skill and competency base. This should be the highest priority for policies aimed at promoting information societies. Expanding ICT-related learning opportunities may help to alleviate forces that exclude people from participation in information societies.

The need to promote the spread of the digital infrastructure and services in areas where markets are failing to deliver can be based on a policy framework that acknowledges that digital information networks and services are 'public goods' (or at least quasi-public goods) and that some public funding is justified.

ICT Investment through Partnerships

Economic and social pressures on poorer regions and countries are prompting an examination of how "new social partnerships" might contribute to the use of ICTs to support development. These partnerships combine public, private and civil society organizations and they are being promoted as a means of addressing the 'digital divide'.

Partnership initiatives raise a number of key issues: 1) whether there is commitment and buy-in by all participants; 2) whether the specific skills fostered are the most relevant ones; 3) whether the initiatives are making significant contributions towards the long-term transformation of national economies and societies; and 4) whether the long-term sustainability of initiatives can be achieved.

A big challenge for the donor and technical assistance agencies is to alter their practices so that they can effectively mobilize and enter into the new kinds of partnerships. Partners face the problem of how to distribute the risk across the public and private partners, especially in cases where investment is expected to generate a commercial return. Governance structures that do not place restrictive financial or legal risks on public sector partners need to be developed.

Designing Information Societies

Digital technologies cannot – by themselves – address or alter existing asymmetries in the distribution of economic and social resources. In the industrialised countries, ensuring the participation of a broad range of stakeholders in shaping information societies continues to be a problem. There are efforts to include ‘users’ in the design of the new technologies and to include stakeholders in policy forums, but there is a tendency to assume that the issues are too technical for non-specialists.

In the developing countries, there is an enormous need to create ICT policy awareness, to build both technical and policy capacity, to strengthen national policy institutions and processes, and to provide access to information about the international ICT policy agenda. There is also a need to guard against the danger that enthusiasm for investment in ICTs will overtake a clear vision of the social and economic purposes that such investments are intended to address.

Development priorities must come first

The experience of the information societies in the industrialised countries shows that, even with considerable resources, the ‘digital divide’ is persisting. It cannot be reduced purely as a result of reliance on market-led forces. Partnerships to mobilize investment in ICTs, especially in the developing countries, must put development priorities first on the agenda. This message is only partly being heard. Any vision and outcome of the World Summit on the Information Societies must change this, even if it cannot unlock sufficient resources to tackle all the features of the ‘digital divide’.

The fundamental issues that hinder national social and economic development in the developing world and the poorer parts of industrialised societies must be addressed as a first priority. In some instances, ICTs can be an enabler, but they are not the solution to deeper problems.



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