# Financing ICT for Sustainable Development through Public Private Partnerships Ashok Khosla

The recent World Summit on the Information Society (WSIS) reconfirmed what has been widely acknowledged for some time now, that a better and more widespread use of information and communication technologies (ICT) could bring large benefits to the citizens of developing countries. Radio, television and audiocassette devices have already made significant inroads into the lives and livelihoods of all but the remotest communities. The telephone is now spreading gradually, and with the growing investment in new fiber optic and wireless technologies coming on the market, it may in time reach even many of the outlying areas of the Third World that are underserved today.

However, a very large part of the promise of ICT for contributing to the eradication of poverty lies in increasing the use of data processing and data communication technologies, particularly the computer and the Internet. To reach their users, who are widely distributed, these technologies have to be decentralized and made available in a manner that is accessible to all and at costs affordable by all. This requires several changes from current practice, such as the intensified use of local languages, the local generation of local content, the combining of online with offline products and the extensive reliance on shared access facilities. For the impact of ICT to reach its full potential, several preconditions must be met, including particularly:

#### Infrastructure

- for connectivity with sufficient bandwidth
- for power of adequate reliability

# Content, application and services

- of relevance to local needs
- accessible to local skills

## Management and Marketing Systems

- to expand the network
- to service the network

#### Technology

- that is affordable
- that is locally usable and maintainable

To achieve the vast social benefits possible, *all* these preconditions must be met. And all of them involve significant front-end costs, which need to be covered by significant capital investment. Because the finance needed for them is scarce, they will require new kinds of **financing instruments** that:

- promote investments in the production of public goods
- are geared to the needs of private investors

For ICT to bring the benefits of the computer and the Internet successfully into the Third World village economy, its presence must be sufficiently decentralized to have a presence everywhere. Yet, because of its technical, management and financial requirements, it must also have access to mainstream facilities. The approach discussed here, therefore, is based on the assumption that the functions that can best be done on a large scale will be carried

out by a central organization and the others, which can most effectively be carried out at the local level, will be carried out by small decentralized entities.

Functions of central body (National or Provincial level)

- Policy, network design and implementation
- Management systems and methods
- Choice of technology
- Backend software and application engines
- Generic content, applications and services
- Partnerships and strategic alliances
- Mobilizing finance and financing facilities for local nodes
- Providing technical and marketing support to local nodes
- Overall coordination,

Functions of local nodes

- Servicing clients
- Managing local access point and collecting revenues
- Local market development
- Input of locally relevant information
- Paying agreed fees to central facility
- Providing substantive feedback to the central facility

The relationships between the Central business entity and the local ones can be designed to suit the specific context. At one end, it can be the simple vendor-client transaction exemplified in the use of an ISP by an independent cyberkiosk. At the other extreme, the local entities can be wholly owned branches of the company. In between lie the rich possibilities of a franchising arrangement.

The mismatch between the financial requirements needed to set up a system of this level of sophistication and the ability of the end-clients to pay for its services is probably the reason why not many such facilities have been attempted so far. Nevertheless, it has become clear that the social benefits they bring are so large that we must find the means to accelerate their deployment.

While most of these functions require non-trivial resources in the form of skilled professionals, infrastructure and institutional systems, the key missing link in most developing countries is finance. Lack of financing systems is the single most important barrier to the rapid deployment of ICT in the non-metropolitan areas of the Third World.

This paper addresses the particular set of issues relating to how a national ICT facility might be financed, both for the centrally administered functions and for the local enterprises.

The first premise, based on limited but credible experience, is that it is possible to set up an ICT facility that can, over time, become commercially viable even in economies with relatively low incomes and little purchasing power. Such a facility needs:

- Multiple revenue streams, and therefore
- Multiple products and services (click as well as mortar)
- High quality (expensive) support systems
- High quality (expensive) management systems
- Staying power to reach profitability

This means that considerable capital investment is needed at the startup and early stages until the venture has reached breakeven. Such initial capital must be accessed at low cost and on relatively easy terms to enable the business to build up its operations and capacity utilization without going negative on cash flow. Although no actual enterprise on the ground has achieved breakeven, plausible business plans show that with sufficient numbers (of information products and users) profits can gradually build up to a stage where further growth can be financed with commercial investment capital.

## Activities

Benefits	Social	Private
Sources		
Public	Infrastructure	Subsidies
		Corruption
Private	Philanthropy	Business
		Commercial Market
		Mechanisms

Actors

Benefits	Social	Private
Sources		
Public	Government	
	Foundations	
	NGOs	
Private	Foundations	Companies
	"CSR"	Individuals

Corporate Social Responsibility (CSR) is often confused with philanthropy. The two concepts are actually quite distinct, with very little overlap in meaning.

CSR is the set of guiding principles that govern the behaviour of a company that aspires to be a good corporate citizen. In essence, this means that it complies fully with the laws of the land where it operates. Where it considers these to be inadequate for the health and wellbeing of its workers, neighbors and the public at large it may well take action that goes beyond the requirements of the local laws. CSR has often been found to be a beneficial strategy even from a strictly business point of view since responsible management of companies generally leads to better performance on all fronts, including particularly the financial bottom-line. As long as the marketplace gives primacy to capital over the other factors of production, and the shareholder's interests are legally above those of the other stakeholders, the justification for CSR lies in its potential for positive impact on shareholder value.

Philanthropy occurs when a company contributes a portion of its profits to causes that are outside the scope of its business and aimed at creating benefits to society more broadly. Such actions may be undertaken from a sense of moral responsibility on the part of the management but are often also designed to improve the corporate image and expand markets. In many countries, philanthropy has played a fundamental role in bringing about a more fair, just and equitable society and a healthier natural environment. Whatever the motivation, and however great its contribution to society, philanthropy is, however, inherently limited in its ability to help support initiatives that need large investment to scale up and sustain their operations. It can be only a small part of the overall profits of corporations and it is too vulnerable to the exigencies of the business cycle to be a reliable source of investment over a long period.

Given the huge financing needed by the Third World to tackle its immediate problems (hunger, disease, poverty, ....) and make strategic investments (health, education, livelihood enterprises, infrastructure, ....) new sources of finance and innovative instruments of financing must therefore now be found.

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