The World Summit on the Information Society: The Contribution of Civil Society

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The first phase of the World Summit on the Information Society (WSIS) took place in December 2003 in Geneva. The purpose of the summit, which will end in Tunisia in 2005, is to promote a non-exclusionary information society that can promote the incorporation of less-developed countries into this new environment. It has been shown that civil society has a leading role in achieving this because it is the most dynamic collective and, along with local governments, is the most closely grounded in daily reality. Finally, the information society will only become a reality if it includes a dynamic and diverse social fabric. To that end, the Catalonia Broadcasting Council has co-organised an international conference within the framework of the Universal Forum of Cultures to discuss the matter further[1]. The purpose of the meeting is to develop the open participation of civil society and local governments and to determine, expand and quantify the Plan of Action approved in Geneva[2]. The collectives most closely involved in promoting the information society will thus have a major say in the process of the WSIS.

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Connecting to the Information Society: The Infrastructure Barrier

Behind the declarations proclaiming the need for a fair information society, there has always been the barrier of connectivity and lack of infrastructures in countries under development, particularly in Africa and South East Asia. Moreover, this problem links to social and family structures that delegate too much responsibility to particular groups, such as women. Access is thus only part of the problem. The mass incorporation of these countries into the global information society also requires training and local-content production and must generate interest within local communities.

In order to make these projects a reality, we need a combination of factors that are not always easy to achieve: a (minimum) group of people with the ability and knowledge to use information and communication technologies (ITCs), the support or simple goodwill of local institutions, which sometimes see education and the spread of knowledge as a major threat, and international financial aid. From Uganda and Nepal through to the Solomon Islands, there are local initiatives to get historically unconnected areas online so they do not miss out on the opportunities of the new digital era.

In this framework, the case of Uganda is particularly important. Although it is a very young democracy (the first presidential elections were held in 1996), Uganda has a relatively stable economic and political situation and a reasonably high level of literacy (64%). The country is thus favourably positioned to develop pilot tests of ITCs applied to marginalised areas. One example is the case of Uganda Connect (Uconnect)[3].

Uconnect was originally an online literacy project. After a preliminary training phase, the project goals were expanded

and the organisers began to provide Internet connection services. A group of volunteers began to modernise the country with the help of international donors. In the words of Kelly Mitchell, the head of Ukhozi Prod., which made a documentary on the Uconnect project, "the people in this fertile land desperately needed Internet communication ability to be able to rescue the emerging sectors of the country from the pessimism into which they had fallen".

It is obvious that establishing an ITC access programme in Uganda entails serious objective difficulties, such as telecommunications infrastructure, PC terminals and the middle-level education of the population. However, Uconnect found its first "objective" obstacle in the scepticism of the government. The programme's initial move to win the government's support was to set up a local network in the central offices of the Ministry of Education and Sports and a training cycle for ministers and technical staff on how to use the Internet to raise productivity. After that, Uconnect could begin training the population.

The team began with a "teach-the-teachers" programme, with only 25 computers across the country and a single Internet connection. The programme involved training future Ugandan teachers to spread ability and knowledge. The programme was so successful that Uconnect received a commission to manage the Multipurpose Community Centres (MCTs) of the international consortium that had begun the initiative. The consortium included the United Nations Education, Science and Culture Organisation (UNESCO), the International Telecommunication Union (ITU) and the International Development Research Centre (IDRC).

El 1999, this consortium of local and international organisations created the first MCT in Nakaseke, a small city of 30,000 inhabitants, 50 kilometres from the capital, Kampala. The centre offered all the regular services of a conventional cyber cafe (i.e., Internet connection, printers, scanners, television, video and photocopier) as well as training courses for the local population, led by Uconnect. Moreover, the fact that the centre was located in the Nakaseke public library meant the project was based on a concrete reality, thus multiplying its training effects.

Although the use of ITCs is not a panacea for resolving the daily problems of Ugandan society, it is clear that the benefits of such policies have long-term effects. In this framework, it is still too early to make an assessment of the effects that the MCT has had on the local population, although a survey carried out by the organisers showed that the potential public for the centre stood at 44.2% of the people in the region, of which 60% came from nearby rural areas. Other centres have opened since Nakaseke, e.g., in Nabweru and Bunyoro, two towns on the fringes of Uganda.

Having consolidated the training phase thanks to the MCTs, Uconnect went on to raise the possibility of connecting the Ugandan people to ITCs. It drew on the experience of the World Food Program (WFP) to use systems to overcome the infrastructure barrier and get rural areas online. In 1994, the WFP had begun to use high-frequency radio modems to send emails from remote rural areas to coordinate the logistics operations of their campaigns around the world. Uconnect opted for similar technology to overcome the country's serious infrastructure shortfalls. It also established an agreement by which the WFP would collaborate by connecting schools, hospitals and centres that publish agricultural information.

The first email pilot test using high-frequency radio (HF, to give it its technical name) took place in 1997 in Arua, a rural town some 500 kilometres north of Kampala. The test was a success and showed that this type of transmission can be used as a viable connection technology in areas lacking the most basic infrastructures. The design of this test pre-configured a viable telecommunications model in Uganda that was the catalyst for broadband access technologies. Uconnect is now working on connection projects that use a Global System for Mobile Communications (GSM) or microwave-signal transmission network. As well as the direct benefits of the project, Uconnect is helping the Government become aware of the importance of universal access to the information society for all the people of Uganda.

I would also like to mention that a factor in the success of the HF radio transmission network was synergy with other projects and institutions. One example was the transmission centre created in 1999 on the border with the Democratic Republic of Congo. The centre used a solar energy-powered laptop to offer email services through an HF radio connection in Kihihi Hospital, which in turn offered the centre a permanent flow of electricity. This collaboration between the centre and the hospital facilitated the centre's expansion, which, by the end of 2003, had more than a dozen

computers. In exchange, the use of the Internet by hospital staff facilitated the installation of a GMS antenna in the area.

Health and Environment

E-medicine is another basic ITC application for social development. The growing circulation of medical information on the Net has facilitated the diagnosis of illnesses and treatments. As with the education sector, access to a public health system continues to represent an abyss between the more advanced countries and many parts of the world, particularly Africa and South East Asia. The people in these areas on the fringes of the global society have a lack of medical assistance, so e-medicine and digital health services can be an important breakthrough. Indeed, tools such as the Internet, CD-ROMs, digital cameras and electronic databases provide training and information to medical staff in many marginalised areas.

A very significant part of the active population in countries under development have alarming rates of AIDS, malaria and other fatal diseases. These countries are being denied an important part of their production force, as it is affected by health problems. By providing basic medical information to many areas of the world, ITCs can facilitate instruments to alleviate epidemics, which are a cause of suffering amongst many people and a threat to social and economic development.

Aware of the negative effects associated with an unequal distribution of medical information around the world, the UN Secretary-General, Koffi Annan, called on the World Health Organisation (WHO) to alleviate the digital divide in health issues. In response, the WHO launched the Health InterNetwork , a seven-year project with a budget of $150-200 million, the development of which arose from consultations with public and private groups, international organisations and NGOs. The Health InterNetwork[4]has three main work areas:

- Content creation: The WHO will work with academic groups, the private sector and local partners in the creation of an Internet portal that can provide access to high quality and contextualised information for marginalised groups within each country. The portal also aims to offer information in local or regional languages wherever possible.
- Connectivity: The Health InterNetwork wants to establish 10,000 Internet access points around the world over the next seven years, with the support of other agencies, such as the UN Development Programme (UNDP). The WHO will also work with other NGOs and local partners to create, manage and maintain the centres and the information content.
- Training: The programme pursues territorial sustainability, as it is essential to ensure that the people at whom the information is aimed can also be the middle managers of all the resources created.

One noteworthy task in this area is carried out by HealthNet[5], an NGO that provides health content and Internet services in Nepal. The situation of health assistance in this country is particularly poor. 1999 figures from the UNDP put infant death rates at 75 per thousand births compared to, for example, 17 in Sri Lanka. The proportion of doctors in relation to the population also presents vastly differing figures: in Nepal, in 1993 the same source put the number of doctors at five per 100,000 inhabitants, while the figure in Pakistan was 52.

The first task of this NGO, based at Tribhuvan University in the capital Kathmandu, involved overcoming the isolation of medical professionals by creating a network of organisations connected through a technology that had to be suitably simple and cheap. One of the specifications of HealthNet is that, as well as being a window on international medical literature, it has to offer resources for illnesses with a particular incidence among the local population. For example, the leading public health problem in Nepal is water pollution and its effects on people, so HealthNet provides figures, studies and preventive information in relation to this matter.

With regard to cultural diversity, HealthNet has an added peculiarity. The NGO is committed to studying and conserving the traditional medicine of Nepal, something which favours the maintenance of local cultural values both from the point of view of knowledge and also, indirectly, with regard to the concepts of health and wellbeing.

Internet and other ITCs are also being used as information platforms and to spread knowledge about the environment. One example is Ranet[6], a project that combines radio and Internet to disseminate information on the weather and

climatology the length and breadth of Africa. In this way, Ranet helps marginalised communities interpret forecasts and meteorological and environmental information. Given that the weather plays a basic role in human communities across nearly all of Africa, with questions relating to agriculture, health and migration due to natural disasters, Ranet is a fundamental work tool for these areas.

However, Ranet, which is supported by institutions such as the African Centre for Meteorological Applications for Development, also offers other services, e.g., it provides fringe communities with email access, thanks to the satellite network managed by Volunteers in Technical Assistance (VITA).

E-education

Given the limited resources available to countries under development, ITCs offer a unique opportunity as an educational support. In many countries with serious economic difficulties, development initiatives focus on community users of ITCs that aim to innovate the regional education system.

One example is the experiment being carried out by the Adaptative Technology Centre for the Blind (ATCB)[7]. This Ethiopia-based NGO provides assistance to blind people and people with reduced vision to integrate them into the information society. Its work is fundamentally training-oriented and involves transcribing academic material and basic professional information into Braille. The computerisation of the transcription processes means the procedure is much faster than the traditional ones, which had until now been done in an almost craftsman-like fashion.

Two UN agencies contribute the know-how necessary for the ATCB, while UNESCO develops training and the curricular material, and the International Telecommunications Union is responsible for providing the software and equipment. The International Eye Foundation, an organisation headquartered in the US, says there are 45 million blind people in the world, the majority living in Africa. In particular, the last census taken in Ethiopia indicated the country had more than 500,000 blind people. However, the local government's ability to promote initiatives is very poor. There are too many problems facing both the federal and regional authorities to be able to devote resources to integrating these people into society. It is therefore fundamental for these initiatives to be able to depend on work by NGOs and funding from international organisations to carry out their labour.

Popular Initiatives

However, one of the main contributions of the information society is without a doubt the opportunities it brings for citizen participation and a more exacting relationship between citizens and government. This is the area where, if the possibilities of ITCs are duly taken advantage of, work can be done to decentralise power and make a more democratic society.

In the remote Solomon Islands, in the middle of the Pacific Ocean, the People First Network (PFnet)[8], an NGO that depends on the Rural Development Volunteers Association, offers Internet connection through short-wave radio transmission. This technology means the inhabitants of all of the islands in the archipelago, spread over an area of thousands and thousands of square kilometres, can have email access using just a computer and solar energy.

PFnet is, in fact, the only viable connection system with the outside world for the inhabitants of the Solomon Islands. For the more remote populations, the only technically viable solution are radio waves or satellite phones. But while the latter system is too expensive to assume, short-wave radio connections offer solutions at a reasonable cost. Thanks to financial aid from the UNDP, PFNet has not only brought email to the local people but also generated synergies in the fields of education, health, business and the fishing sector.

A particularly interesting example with regard to the mass and democratising use of ITCs is found in the Philippines. The ITU says Filipinos are the world's biggest users of Short Messaging Services (SMS), accounting for 10% of international traffic, as they send 50 million messages per day (figures from December 2000)[9]. The 'txting' habit (i.e., sending messages by mobile phone) now forms part of the country's quotidian culture and has created a new expression, taglish, i.e., a hybrid of English and the local language, Tagalog, which uses Latin characters.

One of the reasons for this explosion in SMS use is price.

The service was originally free. Even after introducing a tax to promote "responsible txting", which also provided significant income to telecommunications operators, SMS messages were still eight times cheaper than a one-minute conventional phone call. Furthermore, from the very beginning text messaging by mobile phone offered value-added services (stock-market information, teaching aid for students, astrological predictions and biblical messages, etc.). The phenomenon also has interesting implications as a precursor to mobile-phone Internet access.

Another implication of the mass use of SMS in the Philippines has a markedly social character. In early 2001, the service played a fundamental role in the revolt known as "People Power 2", in which Filipinos coordinated demonstrations via SMS. This produced a relentless social movement that led to the ousting of the then president Estada. This example shows yet again that the use of ITCs can have positive consequences for citizen participation and the development of democracy.

Call for Public Participation in the WSIS Process

It was within this often unarticulated and even sometimes hodgepodge of concepts, that the Catalonia Broadcasting Council co-organised an international conference entitled "Internet, Cultural Diversity and the Media" within the framework of the Universal Forum of Cultures, 2004. The conference was especially addressed at civil society, the most dynamic sector (particularly in countries under development) in the task of introducing and extending the information society. Very often, a lack of resources and difficulties of all types lead NGOs and similar organisations to invent imaginative and unconventional solutions that are subsequently adopted by official institutions. In this sense, they are therefore test banks for digital policies.

The first phase of the World Summit on the Information Society that took place in Geneva last December showed that civil society, in a strategic alliance with local authorities and multilateral organisations (e.g., UN agencies) is the party most closely involved and most able to achieve an open and universal information society.

That is why the exchange of information, knowledge and experiences - factors that are very often not well connected - is extremely important. To that end, the organisation of the above-mentioned international conference was a call to all the experts and organisations interested in making a contribution to get involved. In this framework, the conference was not interested only in theoretical analyses but also the description of particular cases where strategies appropriate to each local reality could be developed. We are convinced that digital policies cannot be carried out through governmental decrees but must be reached via the dynamism of a society that can act as a driving force in the information society.

Notes

1. www.wsis-cac-bcn2004.org

2. www.itu.int/wsis/documents/doc_single-en-1160.asp

3. www.uconnect.org

4. www.healthinternetwork.org

5. www.healthnet.org.np

6. www.ranetproject.net

7. www3.sympatico.ca/tamru/

8. www.peoplefirst.netsb/General/PFnet.htm

9. www.itu.int/ITU-D/ict/cs/philippines/material/PHL%20CS.pdf

10. Zielenziger, Michael. "Across the Philippines. Fast-Flying Fingers Type Messages on Cell Phones, Fuelling a Middle-Class Revolt Against President who is Charged with Graft Movement to Impeach Estrada Accelerated by New Technology". In: San Jose Mercury News, 12 December 2000.