

# TELECENTRES SHARE THE TOOLS OF THE INFORMATION AGE

► Richard Fuchs

## Telecentres offer a promising route for rural communities of the developing world to break out of their isolation

Christopher Senono used to travel by bicycle 16 kilometres each way to make a telephone call. A 30-year-old businessman from Nakaseke, Uganda, he managed his small lumber and brick retail trade by talking on the phone with suppliers in Kampala. The trip seemed natural in a country where the "teledensity" is roughly three phone lines per 1,000 inhabitants. Not any more! Life in this village 60 km from Kampala has changed since the opening of a multipurpose community telecentre (MCT) in 1999.

First launched in 1985 in the farming community of Velmdalen (Sweden), telecentres aim to introduce new information and communication technologies to isolated areas and provide people with the skills to benefit from them. After spreading throughout rural areas of the North, they are now cropping up in Africa, Latin America and Asia, often with support from international development agencies. It is likely that at least several hundred new centres are being started up each year. In countries where individual ownership of information and communications is out of most people's reach, these telecentres may become the primary way of allowing vast numbers to participate in the information economy, provided a few basic conditions are met.

The first step is often to demonstrate how the equipment and facilities available in a telecentre can be made to work for the communities where they are located. Second, time must be spent helping local farmers, teachers or entrepreneurs understand the value of information and the tools that can be used to access it. Thirdly, staff

must have the training and skills to keep abreast of developments in software, hardware and networking technology. The most efficient way to do this is to ensure that they have a forum within which to meet, both virtually and humanly, so that links are created among them. Finally, once the telecentre is up and running, its staff must court the community at large and introduce its members to basic computer skills and identify ways in which they might benefit from the facilities and services.

Identifying and training local champions who will nurture a telecentre project can

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make or break the success of such a service. It is especially important to have local stakeholders from health clinics, municipalities, elementary schools and teacher training colleges looking over your shoulder. They are the people who are most likely to become the core users who will diffuse the technologies widely. In Uganda, a candidate in a local election in the Nakaseke district turned the telecentre into a local cam-

paign issue, going as far as to promise people who supported him a free trip to visit a European or North American telecentre. Without necessarily going to these ends, generating community interest in the earliest stages of planning is a long-term asset. Often, in developing regions, communities are involved by providing rent-free facilities to accommodate a telecentre or by building new ones.

It takes between \$50,000 and \$75,000 to start a standard telecentre, although the early planning, organizing and mobilization work can significantly increase the price tag (the budgets of several current projects run from \$450,000 to \$850,000). Annual operating costs are much less and generally include two or three staff people. There are different paths to sustainability: telecentres sometimes become an integral part of a hospital service, a school or a municipality after three to five years. Alternatively, they can sustain themselves by offering such profitable services as telephone, fax, photocopying, résumé writing, training in desktop publishing and word-processing. And if they don't manage all of this, telecentres at least have the benefit of leaving behind a new corps of locally trained and skilled people.

As international development agencies increasingly come to recognize the correlation between the adoption of information and communications technologies (ICTs) and economic development, we need to understand that a social investment is required for the services available in a telecentre to take root and offer benefits in the developing world. We should see telecentres as a social investment which can help build a future in the information economy that is interactive, not extractive. At the telecentre in Nakaseke and in many other communities in the developing world, there are increasing numbers of people who are committed to making sure this happens. ■

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► Sociologist, president of Future Works Inc. based in the Canadian rural community of Torbay, Newfoundland ([www.futureworks.ca](http://www.futureworks.ca)).

The author was involved in establishing North America's first rural telecentres and has assisted with telecentre startups in Africa and Indonesia.

# TIMBUKTU ONLINE

► Sophie Boukhari

## A historic city on the edge of the Sahara is banking on an Internet connection to revitalize its economic life

“Internet! Internet!” A street urchin rushes towards a journalist who has just arrived in Timbuktu (Mali). “Look what a French reporter gave me,” he boasts in front of his chums, showing an e-mail address scrawled on a little notepad. “I’m going to the MCT<sup>1</sup> this afternoon to write to him.”

Since its MCT (Multipurpose Community Telecentre) opened in May 1998, Timbuktu (30,000 inhabitants) has felt less of a prisoner of the Sahara desert. Along with traditional local hangouts, where the menfolk gather in the evenings to gossip, the MCT has become the trendiest place in town.

Men in traditional dress, women and inquisitive youngsters regularly crowd in the doorway of the temporary premises in an annex of the town hall. “They all come to look,” says Birama Diallo, the centre’s energetic coordinator, with a laugh.

### Electronic advice

Like most people in Timbuktu, the mayor, Ibrahim Mohamed, sees the MCT first as a source of the kind of knowledge needed to revive the region’s stagnant social and economic life. The most encouraging MCT-based projects are being drawn up in the fields of medicine, teaching, the media, culture, agriculture and tourism.

“A group of doctors has been trained to look for information on the Web,” says Canadian France Henri, a UNESCO consultant. “They’ve already found some terrific pages about gynaecological problems. They printed them out, photocopied them and handed them out at the hospital. They’d also like to be able to get ‘electronic advice’ from their colleagues in Bamako [Mali’s capital] and elsewhere.”

“The most urgent thing for us is to find out about other people’s experiences,” adds a teacher. “Some countries

1. The French term, which is actually used in Timbuktu, is TCP = Télécentre Communautaire Polyvalent.



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Timbuktu’s telecentre has attracted more than 2,000 visitors since it was opened in May 1998.

have the same problems as we do, for example, in getting girls enrolled in school.<sup>2</sup> We’d like to know what solutions they’ve found.” He suggests material from the Internet could be used to produce some good school textbooks, which are few and far between.

The Net could also be useful to the four local radio stations, says Diallo. “For example, they could use it to find out how to make best use of the new varieties of floating rice that were recently introduced into the region and put that information out in their farming programmes.”

The regional director for cultural affairs wants to commission the MCT to create some web pages about the history and heritage of Timbuktu. The tourist sector, still in its infancy, wants to do the same kind of thing to attract visitors. Through its website, not yet complete, the MCT presents an attractive view of “the town of 333 saints.”

2 The proportion of girls attending school in Mali is very low (41 per cent) and particularly low in the Timbuktu area (23.7 per cent).

The townspeople do not want to be just consumers of ideas and pictures, says Diallo. “They’re also very keen to make themselves known.” He recalls that in the Middle Ages, “Holy Timbuktu” was a beacon throughout West Africa and the Islamic world. It had 180 madrasahs (Koranic schools) and the renowned Sankore University, which was attended by up to 25,000 students. The mosques and tens of thousands of ancient manuscripts, preserved by families and by the Ahmed Baba cultural centre, are evidence of this intense intellectual activity.

But beyond this material heritage, Timbuktu is banking on its intangible attraction as a place to escape from the world, on the aura of the unknown and the inaccessible that it conjures up in Western minds. “Our asset is our name,” says Mayor Mohamed. “The word Timbuktu says something to everybody, even people who don’t know where Mali is,” adds Culture and Tourism Minister Aminata Traoré. “These days, people in the West have a great urge to get away

from it all. Timbuktu hasn't got much to sell, but it can sell dreams."

The way the MCT works is simple. To raise money for community development projects, it sells a range of services, such as telecommunications (public phones, fax, e-mail and Internet access), the production of databases and web pages, digitizing text and word-processing. It charges less than a dollar (U.S.) to send an e-mail and \$2.50 to surf the Web for an hour.

The centre also runs courses, including an introduction to the Internet and new technologies, how to find information online, and library science. "Students and other people come to us because universities in Mali don't offer proper computer training," says Diallo. "If they want to get a job in Bamako, they have to know something about computers."

In a country with fewer than 2,000 people connected to the Internet among a population of more than 10 million, the MCT is the only "decentralized" server and the only one that is publicly owned. The five others are private and based in Bamako. For the moment, MCT's capacity only allows 20 subscribers (so far, 17 have signed up, at a monthly fee of \$28).

"The quality of the phone line to the Internet connection node in Bamako is also poor," says Diallo. "If 30 people go online at the same time then the line is saturated," admits Zourkoufli Maïga, the regional director of the state telecommunications company, Sotelma. "And since the telephone arrived in rural areas in 1999, this has often happened."

## WEBSITE OF THE MONTH

<http://www.worldwaterforum.org>

**T**he scarcity of freshwater is one of today's most pressing issues. The equation is alarming—20 per cent more water is needed than is available to feed the additional 3 billion people expected to be living on the earth by 2025! Addressing this problem is the World Water Forum which convenes in The Hague this month, the culmination of a two-year process bringing together thousands of specialists, decision-makers and concerned citizens. They will unveil a World Water Vision—specific actions to achieve a common set of goals ensuring everyone's access to clean water. The forum will serve as the launching pad for a new set of strategies and activities to create mass public awareness and generate political commitment with a view to making that vision a reality. ■



Timbuktu's telecentre sells a range of telecommunications and word processing services.

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Diallo is waiting impatiently for the arrival of a VSAT (Very Small Aperture Terminal), promised by the International Telecommunication Union, to improve the situation. The VSAT, a small satellite antenna, will mean the MCT will no longer need to use terrestrial phone lines.

The centre cost about \$850,000 to set up, half of which was provided by international funding agencies.<sup>3</sup> It employs six people and has 11 computers, but will get several dozen more machines when it moves into permanent premises, which are near completion and being paid for by the townspeople. To raise the \$50,000 start-up costs, the town authorities have staged a number of events, including a gala of the Timbuktu Residents and Friends Association and a cultural week, and also appealed to local people to contribute. In 1999, an airport tax for tourists was introduced, with all the proceeds going to help pay for the building work.

Despite technical problems, the MCT seems to have impressed the townspeople. "Since it opened, people have started buying computers," says Diallo. So far, about 2,000 have visited the centre, and members of professional organizations and NGOs, tourists, guides, librarians, secretaries, students and others have come looking for information or to buy one of the services on offer.

But the future is not yet secure. If the centre is to survive, it will have to be self-financing by 2001, when outside funding

ends. Financial independence is especially important because the main national body behind the project, Sotelma, is being privatized.

"We can make it if we have 200 Internet subscribers," says Diallo. This is a lot for the northern region of the country, which has only 570 telephone subscribers (400 in Timbuktu and 170 in rural areas) and an illiteracy rate of over 80 per cent. But Diallo is counting on better quality service, especially when the VSAT arrives, to win customers outside the region.

## From the Sahara to cyberspace

"The private Internet providers are complaining about unfair competition," he admits, "but what are they doing to develop their own services and to set up cybercafés outside the capital?" He says only a public service can take the first steps to allow people in the countryside access to cyberspace. It costs five to 10 times more to install a phone in a rural area than in a town.

"To safeguard the future of the MCT, it's not enough to ensure its commercial success," says Henri, the UNESCO consultant. "The money earned must keep on funding community development projects."

For these people on the sidelines of the global village, the centre is not just a fancy telecommunications shop. It gives hope of a new world. "The Internet isn't a luxury of the rich," says Mohamed. "On the contrary, it's really for the poor, who have very little access to information." On the edge of the Sahara, books are few and expensive, and half the population has never seen television. ■

<sup>3</sup> Mainly the International Development Research Centre, the International Telecommunication Union, UNESCO, the UN Food and Agriculture Organization and the World Health Organization.