A COMPARISON OF TELECENTRE MODELS IN THAILAND AND SOUTH AFRICA

ABSTRACT

The researchers used personal interviews with stakeholders in Thailand and South Africa to gather information on telecentre models in the respective countries. They found that telecentres in Thailand are predominantly community-funded and champion-driven. Education, directed at the youth as well as adults, seems to be the main focus. Facilitating economic and agriculatural activities also features among the primary successes in the telecentre environment. Telecentres in the rural areas of Thailand are often used for the creation of new markets and the buying of equipment and stock by disadvantaged entrepreneurs.

The researchers identified a mixed model of telecentres in South Africa. Funding comes mostly from government. In these cases government also pays the salaries of supervisors. Although a number of champions have been identified amongst the ranks of the communities, the government telecentres are usually managed by government employees who fulfill their duties during normal working hours. All three spheres of government, as well as two government agencies and a parastatal body are involved in the deployment of telecentres in metropolitan as well as rural areas.

1. INTRODUCTION

The economy of Thailand is earmarked by a huge economic divide between the cities and the rural areas. The cities have experienced spectacular growth, resulting in Thailand meeting most, if not all, of the United Nations' Millennium Development Goals (MDGs) well in advance of 2015 (Intaratat 2008). The rural areas, on the other hand, have not benefited from this wave of economic development and have remained poverty-stricken.

The Thai government has been constantly upgrading its policy documentation to keep up with the digital revolution. Thailand's approach to the application of ICT in social and economic development is laid out in the IT 2010 Policy Framework, which has met with cabinet approval; and the ICT Master Plan 2002-2006, drawn up in response to rapid technological developments. Both these policy documents are in accordance with the 9th National Economic and Social Development Plan. The master plan lays out administrative, monitoring, and assessment mechanisms, setting targets and achievement indicators for the overall plan, as well as for each strategy (Intatarat 2008).

The ICT plan, as incorporated in the National Economic and Social Development Plan, intends to achieve its objectives under three main categories i.e. 1) Knowledge Management, 2) Access to Information and Knowledge and 3) Knowledge Application for Self-sufficiency and Sustainable Development. This is sought to be achieved by five main national strategies on: e-Government, e-Commerce, e-Industry, e-Education, and e-Society (Intaratat 2008).

In South Africa, the government has reacted positively to the commercialization of the Internet that occurred in 1995. In 1997, Chapter 5 of the Communications 2000 report (ComTask 1996) was de-voted to

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improving community access to information, particularly through Multipurpose community centres (MPCCs) and community ICT centres (Snyman 2007:124). An initiative by the Universal Services Agency, a government agency established to promote Internet access to disadvantaged communities, that was started in 1997 failed dismally. Its objective was to establish 100 telecentres per year until a target of 3000 was reached. Their start-up model with sustainability objectives made provision for the donation of seeding money and equipment to would be-entrepreneurs. By 2003, only 9 of these telecentres were online. Despite clear evidence of this agency underperforming, it was restructured in 2006 by an Act of Parliament. Their latest project aimed at the rehabilitation of dysfunctional telecentres has yielded mixed success.

The government's drive to establish multi-purpose community centres has rendered mix success. This effort as well as the initiatives of a number of public-private partnerships will be addressed in the second half of the paper.

2. DEFINING TELECENTRES

There is no shortage of definitions for the telecentre concept; however, these definitions vary a great deal. Some of the definitions do not set Internet access as a precondition for a telecentre. In one such definition the author postulates that "telecentres basically represent community access points where people can have access to conventional ICT tools like, a telephone, computer and Internet (if adequate bandwidth can be provided)" (Ariyabandu, 2009:10). In another, a telecentre is defined as "a physical

space that provides public access to ICTs for educational, personal, social and economic development" (Gomez, Hunt & Lamoureaux 1999).

The important dimension of the ability of the user to make use of the technology is addressed in the following definition: "(t)elecentres are characterized by shared facilities for people who can not individually afford them because they are too expensive and/or too complicated to use" (Ariyabandu 2009:10).

The majority of the definitions, however, do make provision for Internet access. "Typically, telecentres contain computers connected to the Internet, along with a variety of other technologies, and they are located in communities where domestic ownership of such equipment is not affordable" (Harris 2007).

Although hands-on supervision feature in some of the definitions, such a service can by no means be taken for granted. The following definition depicts the ideal situation. "A telecentre is a place where people can get help to access computers, the Internet and other digital technologies that enable them to gather information, create, learn, and communicate with others. In doing so they develop essential 21st-century digital skills to enable them to find better employment (Telecentre Europe, 2008). This definition telegraphs a developmental focus that is embedded in many other definitions. Two examples are cited. According to Harris (2007) "(a) telecentre is a community centre that offers shared access to Information and

Communication Technologies (ICTs) for the purpose of community level development and poverty reduction. Telecentres are being promoted as an answer to the problems of the digital divide, whereby large sections of society do not enjoy access to ICTs and are therefore at risk of being excluded from the socio-economic benefits that such access brings." Toyama and Keniston (2008) "share the belief that technology alone is rarely the solution to major development problems and that many of the challenges of ICT-for-development projects lie in both unrealistic expectations of technology and insufficient attention paid to the social, physical, psychological, and business infrastructure required to support ICT in impoverished areas.

Toyama and Keniston (2008) warned that the debate around telecentres is earmarked by rhetoric, hype and misconceptions.

3. METHODOLOGY

The researchers engaged in a limited ethnographic research exercise. Wimmer and Dominick (1994:158) described ethnographic research as a "specific type of participant-observer research, because the researcher's aim is here to describe a particular group's way of life, from the group's point of view in its own cultural setting." The focus is on the characteristics of a particular setting.

It is expected of researchers in all fields of scientific research to explain their instruments. Lindlof and Taylor (2002:95) pointed out that with participative observation the researcher is the instrument.

In this study the researchers paid joint as well as individual visits to telecentres in both countries to acquaint themselves with the way these telecentres are managed. The information they gathered were used to construct contexts for their analysis of the literature that dealt with these centres in their respective countries.

- 4. TELECENTRES IN THAILAND
- 4.1 Background

Even though the Telecentre initiative was introduced to Thailand in 2002, the implementation thereof only started in earnest in 2007. Disseminating the concept was a brain child of Thailand's Ministry of Information and Communication Technology (MICT). Their objective was firstly to reduce the digital divide, and secondly to capitalise on the opportunity to establish ICT infrastructures all over the country. According to Intaratat (2008), the MICT sponsored telecentre programmes in Thailand started small with 20 telecentres in 2007 as a pilot project. Forty more were added in 2008 and 140 more in 2009, bringing the total to 200 telecentres in all 79 provinces of Thailand.

The grand plan of the MICT is to create 1,000 telecentres by end of 2010. The telecentres were clustered into 5 regions for operational purposes: North East region has the highest number 82, followed by North 62 telecentres, South 46 telecentres, Central 44 telecentres and East 23 telecentres. (MICT 2009). Besides the above mentioned telecentres, there are more than 50 other telecentres run by public, private and non-government organizations (most of them supported by Microsoft Unlimited Potential).

4.2 The Evolution of Telecentres in Thailand

4.2.1 Community Learning Centres

The idea of the telecentres in Thailand was founded on the basis of the Community Learning Centres (CLCs). These centres were established during the 2002 initiative that was pioneered by the Office of the Non-Formal Education Commission who implemented a "literacy development through computer software" project which targeted two villages: Ban Samkha of Lampang Province and Ban Bomagrood of Ratchaburi Province. The aim was to develop a prototype software package for literacy and postliteracy education, that could be used in the Community Learning Centres (UNESCO 2005).

4.2.2 Early Telecentre Projects in Thailand

The Community Learning Centres initiative generated a growing awareness amongst a wide variety of potential stakeholders. Government organization (GOs), academic institutions, business organizations and Non-Government Organizations (NGOs) got interested in the concept and started contributing to the initiative. As a result, the National Electronic and Computer Technology Centre (NECTEC) of Thailand started the first 4 centres in 2002, followed by Loxley Company which established 6 centres with the support of the Canadian International Development Agency (CIDA) under the title "The Thailand Canada Telecentre Project". Then the Community Organization Development Institute (CODI), a local NGO, set up 4 centres. Chulalongkorn University with some local and business agencies launched 4 centres. Thammasart University with the support of the World Bank, created 4 centres under the banner of ThaiRuralNet telecentres. Furthermore, the Office of the Non-Formal Education Commission, the Ministry of Education and Educational Development Foundation set up one telecentre each.

The Telephone Organization of Thailand (TOT) set up a pilot project with 4 centres that took the form of public internet booths. A large Buddhist temple supported one mobile telecentre mounted on a bus.

The Ministry of Interior, with the aim to boost the e-government, established 6,745 Internet Tambons in all Local Administrative Bureaus (Intaratat & Lomchavakarn 2009). A tambon is a local government unit in Thailand. Below district (amphoe) and province (changwat), they form the third administrative subdivision level every district contains 8-10 tambons. A tambon is usually translated as "township" or "subdistrict" The launch of the Thai telecentres proved to be feasible, because of the adoption of a favourable government ICT Policy. This step was necessitated by the economic crisis that hit Asia in 2000. According to Saga (2007) Thailand's aim of the integrating the National Economic Development Plan with National IT Strategy (IT-2010) focuses on the facilitation of local products and industries as a business incubation policy for Small and Medium Enterprises – SMEs. Furthermore, the "Internet Tambon Initiative" for the promotion of e-Commerce in rural areas. The initiative, branded 'One Tambon, One Product' (OTOP), provided for selling of value added products produced by 700,000 communities on the basis of the utilising of the community's local wisdom. Under the project, there was provision for both off-line and online selling of the products both locally and globally via the

website www.thaitambon.com. This initiative helped Thailand in achieving the hitherto unsuccessful objective of connecting the rural poor with Information and Communication Technology facilitating among the rural communities more awareness, more accessibility and more adoption. The project was carried out with the help of the telecentres which acted as the link between the rural populace and the market. This way, telecentres could be termed as the golden opportunity for the rural communities, especially the rural women, who were previously left behind in accessing ICT.

4.2.3 Present Telecentre Drive in Thailand

In 2007 the MICT formally launched a national telecentre project, and part of its projects to create IT infrastructures and software developments. The mass media was used (i.e. television spot, newspaper) to inform the public. As the same time, the MICT distributed circular letters to provincial and districts administrators as well as academic communities in Thailand, as to advocate the idea to relevant authorities and other stakeholders. Interested parties where invited to come up with proposals. As a result, over 300 applications were received within few months of starting the communication of the telecentre drive. The MICT screened all the applications, and conducted field visits to double check the commitments of the community in managing their own autonomous telecentres. According to Siributr (2010) the purpose of the field visits was to make sure that all the selected communities understand and commit to all requirements, which were: 1) to manage the telecentre for their community's development; 2) to prohibit all kinds of violent and inappropriate behavior such as games and the viewing of immoral websites; 3) to report their monthly performances to MICT at the

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end of every month. Once the conditions were agreed upon, a Memorandum of Understanding (MOU) was signed between the MICT's policy makers and the governor of the province where the selected telecentre was located. The MICT donated the IT equipment to the telecentre and provided support for one year mainly on IT training, technical back up, public relations support and other activities required by the telecentre so as to move to a sustainable level. The MICT started small, 20 telecentres, so as to learn from the established telecentres and to improve the development process. The MICT philosophy is based on the development concepts of H.R.H Princess Sirindhorn (2010) "Start small, Succeed well, and then Expand".

According to Siributr (2010) the telecentres in Thailand have 3 different sizes; small (S), medium (M) and extra large (XL) The decision on the size of the telecentre is mainly based on the population density, the readiness of electricity supply, telecommunication networks, the availability of a partner, and a local committee fulfills the commitment, manages the telecentre and provides leadership.

Furthermore, the most important criteria that determines the size is the availability of local products of the community to be promoted through the telecentre, in order to generate income for the local community. As part of MICTs efforts to support the telecentres, they recruited an academic institution, Walailak University, as consultant for IT knowledge development. The purpose of this appointment was to disseminate the IT knowledge required by the operators and the users. Walailak University conducted a lot of IT training for these telecentre operators and users, mainly focusing on IT fundamentals and software applications (Siributr, 2010). According to Siributr (2010), the MICT support comes to a halt after one year. This also applies to the Internet fee. The payment thereof should be shouldered by the respective telecentres, as stipulated in the MOU. The ideal is that the telecentres will become financially independent through the payment of the user fees and that by the end of the subsidised year they would have saved enough funds to cover their expenses in the short term. This includes the electricity bills, the internet fee, and the operators' salaries until these telecentres have progressed to full financial independence.

4.2.4 The Role of the Community

The key to the success of the telecentres in Thailand is the community participation, commitment and management of the telecentre services. According to Lomchavakarn and Intaratat (2009), the successes of the telecentres are based on strong participation and commitment from all levels of the communities. The list of participating stakeholders include the Local Administrative Bureau, schools, temples, local industries, NGOs and other stakeholders. The leadership of the telecentre operator and the committee played a key role. In addition to that, volunteerism, participatory partnership and networking were the key strategies that strengthened the role of the communities and their relations with local and international stakeholders.

4.2.5 Technology with Humanism

According to Intaratat (2010) the MICT realized that the telecentres were only dealing with technology (IT) training and lacked the development touch and human interaction. The Ministry became aware of a communication gap

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between the telecentre and community. As one user commented "Yes, I know how computer is important, but I believe it is not important for me and I don't know how it can give benefit to me." For this reason, in 2008, the MICT engaged the Research Centre for Communication, Development and Knowledge Management (CCDKM), an academic institution under Sukhothai Thammathirat University, to create and incorporate meaningful human development activities in the training programs for trainers and users. The Ministry hopes that the extended training program will empower the users by providing the missing link between the telecentre and the community.

Intaratat (2008) stated that a set of selection criteria for the monitoring and evaluation (M&E) of telecentres were launched. These criteria were announced by using participatory networking and the setting up of a national website (thaitelecentre.org). The primary aim was to increase community participation and involvement. Training in the fields of leadership, creativity, and communication skills was provided in order to strengthen the telecentres and to convert its operators into social entrepreneurs. It was decided by MICT that its budget would be utilised for the training of users and other stakeholders of telecentres. This training were provided by academic institutions to empower the human resources side of the telecentres. In 2008 the CCDKM received 10,000,000 Baht, (about 300,000 US\$) to cover all empowerment activities and publications of manuals and booklets.

4.2.6 Telecentre Committees

The establishment of at least one telecentre committee for each centre was one of the main requirements of the MICT before granting financial support to any telecentre. It is a prerequisite that at least one committee should be established for each telecentre, so as to secure community participation aimed at sustaining the telecentre in the near future. Initially, there were two levels of committees. Consultative committees consisting of government representatives and donors and were responsible to determine policy and operating committees who were made up of other relevant stakeholders including users and volunteers.

Once policy had been determined, the consultative committees disappeared off the scene. The operating committees then end up with taking full responsibility for fundraising, promoting and managing the centre.

4.2.7 Telecentre Operators and Volunteers

According to Siributr (2010), at least two operators are required for each telecentre. They are appointed by the operating committee. The main selection criteria are that they have to be a community member, ICT literate and service-minded. Futhermore, they must have managerial qualities and lastly, they have to work on a voluntary basis or for a low remuneration package.

Organisations, institutions and other partners hosting telecentres are usually obliged to make members of their personnel available to work for the telecentre as volunteers. The employment contracts of these volunteer workers may consist any of the following: work full time for the telecentre and get their salary from the host organization; work for the host organization as well as the telecentre (mostly full time for the host organization and part-time for the telecentre); work voluntarily for the telecentre and earn an income through ICT training, the online promotion of home-based products, or consultation. Most of the telecentre operators work as volunteers.

Apart from the salaried employees and the volunteers, there is a fourth group of operators, commonly known as social-entrepreneurs. Although there are not may of them, they run telecentres for their own account in areas where there are high concentrations of tourists. They offer home-stay accommodation services, photocopying, internet services tour guiding, and maps.

- 4.2.8 Success Factors that Make the Telecentres Work
- 4.2.8.1 The Champions

The success of the telecentres in Thailand rests heavily on the efforts of local champions. These champions are usually community leaders that dedicate their personal time and efforts to make the telecentres work. These champions can potentially come from any segment of society. Although teachers comfortably fit the bill, cases have been reported where local lawyers and welfare workers have taken up the role of the champion. During a visit to Bangpreng Telecentre, Bangpreng Sub-district in Samutprakarn province the researchers met the three operators who ran the telecentre at this school. Two of them were part time teachers and one a qualified attorney. All of them were alumni of the schools and residents of the town.

The local Administrative Bureau subsidized two full time and one part time salary.

These champions co-ordinate fundraising as well as the promotion of telecentres amongst the local community and the media. They are also heavily involved in the day-to-day activities at the centre. This includes the supervision of the users.

4.2.8.2 Networking Strategy

Networking amongst telecentre operators plays an important role in sustaining the telecentres. These operators engage in various types of networking, i.e. online networking (mostly evening networking) as well as personal networking (normally during weekends or holidays). This integrated activities include problem solving and technical trouble shooting. The also compare ideas and statistics in order to improve their own performance.

According to Thanathip (2010) who is an ICT technical expert who coordinates all the networking activities amongst th etelecentre operators on behalf of MICT and CCDKM, this regular communication and cooperation meetings between telecentre operators play a major role in making the telecentres sustainable. The operators help each other to remain operational when technical problems arise.

4.2.9 Types of Telecentres

Currently there are eight major types of telecentres in Thailand. They are: (1) School-based telecentres, (2) Temple-based telecentres, (3) Local Administrative Bureau-based telecentres, (4) University-based telecentres, (5) Public library-based telecentres, (6) Military camp based telecentres, (7) Radio Broadcasting Station-based telecentres, (8) NGO-based telecentres.

There are also sub-types for instance the school-based telecentres may take the form of Military school-based centres, Temple school-based centres, or Government school based centres. The public library-based telecentre are mainly set up in Non-Formal Education Centres. The Military schools-based telecentres are set up along the borders of the country in order to give Internet access to populations that reside in remote areas thus, the military camps support a lot of low income staff and families residing in the camp. The Temple schools provide ICT training to large numbers of young monks. Some of these telecentre types are initiated and supported by the H.R.H., Princess Sirindhorn, a member of the Thai Royal family.

2.2.10 Examples of telecentres in Thailand

The following examples illustrate the telecentre models found in the north east areas of Thailand:

a. Youth-based telecentre: Wat Sakate telecentre

Wat Sakate telecentre, a youth-based telecentre was established inside a temple, located at a strategic location in Kaset Wisai district, near the fresh food market.

The idea of this telecentre was based on the personal initiative of the temple

Abbot (Phra Athikain Wchience Phasuko). He started it with his personal funds in July 2004, to open and support an ICT centre inside the temple. The Abbot's vision was to divert the youth and the children from playing games at cyber cafés, create a learning environment through ICTs and attract more people to join the temple, as in his view, once people enroll in the telecentre, they will also find time to observe the temple and learn the way of life, instead of just going out to people for preaching.

Initially, the teenagers avoided the ICT centre in the temple, but two years later, in 2006, they started coming regularly to the telecentre and today they are the managers of the centre. They educate people from all age groups to use these ICT tools and encourage others to join the centre. When the MICT started the telecentre project in 2007, the Abbot became interested in it. He invited an MICT delegation to visit the temple to observe and decide whether and how to support the ICT centre. The MICT was impressed with their findings and approved the project and the Wat Sakate telecentre was opened on August 2007.

The Wat Sakate telecentre is considered as an extra large (XL) centre because it accommodates 21 computers. The centre is open every day from 7 am to 9 pm; the average users per day are 30 people during the week day and about 100 people during the week-ends.

Users buy a coupon for 10 Baht (US\$0.3) and use the hour as they wish. The majority of the users are below 21.

b. Wat Potikaram: Community-based cum home worker-based telecentre Wat Potikaram is a community-based cum home worker based telecentre. The centre serves a variety of small scale enterprises dealing in local products, such as silk. The centre promotes business development and hosts a local cooperative bank managed by the community. Wat Potikaram started its development activities in 1995, with secretarial skills training. In 1999, they started using computers, and added dress making skills, bee farming, fish farming, rice farming, cooperative bank and a shop to their repertoire of services offered. The centre has also a kindergarten and a sauna. Like Wat Sakate, the Wat Potikaram is a temple-based telecentre, but with a business development objective. The centre was opened in August 2008.

Though the main customers of the centre are the local enterprises, they also provide access to scholars as well as adults from all walks of life. They provide weekly training on the use of a computer and Internet. They also make their facilities available for external trainers to train users and staff on website development. The Wat Potikaram telecentre is considered an extralarge (XL) centre, because it accommodates 21 computers.

The centre operates seven days a week from 7:00 am to 7:00 pm. The average number of users using the centre amounts to about 30 during the weekdays and over 100 during weekends. The centre charges 10 Baht (US\$0.3) per hour as service charge. Students working on their assignments using the centre as a computer laboratory do not have to pay.

c. Khonsawan telecentre: School based telecentre

Khonsaw telecentre is a school-based telecentre with a mission 'to expose the school children to ICT knowledge and skills'. When the MICT started the telecentre initiative, the school submitted a request to them. On approval, they started the centre in August 2008. The telecentre makes use of the infrastructure of the school and does not intend to introduce a user fee. The management believes that the telecentre should serve the people since the centre is situated in an institution that offers free education. The telecentre management believes they are getting positive results for their efforts to build social capital and raise the level of ICT knowledge and skills of their community through basic and advanced training. The telecentre conducts free basic training for the local communities, and charges a fee of 100 Baht to cover the training material and refreshment costs of participants from outside the community .To date, the centre has awarded certificates to 50 participants who attended three days of advanced ICT training. The centre also provided training in in basic ICT skills to more than 200 community members.

Khonsawan telecentre is considered a small (S) centre on the MICT scale and is open seven days a week and operates for nine hours a week – Monday through Friday (4 pm to 5 pm), and Saturday and Sunday (8 am to 12 noon). The average number of users amount to 15 per day on weekdays and 60 on weekends. On weekdays, the centre is used by scholars at the primary school who go there after school. During weekends its the secondary school students, government employees and other community members who visit the centre. The Khonsawan telecentre is based at the Khonsawan school, which was established 86 years ago. The school has over 250 students (ranging from grade one to nine). The management of the telecentre aims to bring more parents on board to make them ICT literate. The centre employs a variety of strategies to promote its services among the community including community radio broadcasts, interpersonal communication and peer pressure. The management encourages students to bring their parents and the parents to bring their neighbours.

d. Ta-ong telecentre: Local administrative office-based telecentre The Ta-ong community telecentre is situated in the local administrative office, thus, qualifies as a local administration based telecentre. The centre was opened on July 2008 and has trained over 100 people. Of late, the management has noticed that users are learning from each other, a phenomenon that has reduced the number of people attending the centre's training course. Taking cognisance of this development, the management is thinking about introducing advanced courses in ICT for the community. The management stated that scholars from primary and secondary schools constituted about 60% of the user population whilst the other 40% consists of community members, government staff, handicapped and illiterate children. The Ta-ong telecentre is an extra large centre with 21 computers. An average of 40 users per day makes use of the services of the centre. Each user receives two hours access per day, free of charge. The centre is open 56 hours a week, 7 days a week from 8:30 am to 4:30 pm. To promote the telecentre, the management contacted non-formal schools to promote it among the students. They also used community radio and the community

announcement centres for generating awareness within the community.

The main strength of the centre lies in its strong leadership. They believe that they are able to be self sustainable since they have allocated budget for telecentre operation and it is situated in a central location. Its main weaknesses are there are no permanent staff assigned to the centre and no land line telecommunications connection in the area, the nearest connection being about 10 km away. This means the telecentre relies on expensive wireless connection with antenna, costing them 6,000 Baht (US\$ 180 a month), thereby diverting more funds from the telecentre towards meeting these expenses. In case of a breakdown of the wireless system, the management has to call the company and wait for a technician for about 24 -48 hours, without service.

3. TELECENTRES IN SOUTH AFRICA

3.1 Universal Access in South Africa

The South African government reacted promptly to the commercialisation of the Internet in 1995 by issuing a discussion document on universal access in the form of a White Paper in 1996. The Telecommunications Act, Act 103 of 1996 as amended, made provision for the establishment of a Universal Service Agency. This agency was set up to explore and promote innovative ways to promote universal service. According to Parkinson (2005:17) this agency was "a uniquely South African invention" that proved national commitment to the issue. The 1996 definition of universal access in the White Paper on Telecommunications stipulated that every person should be within a 30 minute walk of a public telephone." This concept was redefined in 2003 by the CEO of the Universal Access Agency to "a 10 to 15 minute walk where a person can access a telephone or the Internet" (Parkinson 2005:18).

The Agency committed itself to setting up hundreds of telecentres throughout the country. For this purpose seeding money of R200 000 was made available to each telecentre entrepreneur. This enabled the owner to purchase four computers, four telephone lines, one copier, one printer and one TV. Income would be generated by offering computer courses and Internet access where possible. This strategy failed dismally. "By 2001, one third was not functioning, half did not have phones, and only a few had Internet. By 2003, the situation had deteriorated (Parkinson 2005:22 with reference to Benjamin 2001).

An evaluation of the results of the Universal Services Agency's initiatives produced a negative report. "A survey conducted in South Africa suggests that personal computers and Internet was severely underutilized (Khumalo 1998). Causes for this was attributed to poor computer illiteracy, language problems, lack of computer culture, high cost of Internet and poor telecom connectivity. These findings indicated that mere provision of technology, infrastructure and Internet, were not sufficient to make telecentres networks work for the poor, enhance development and bridge the digital divide" (Ariyabandu 2009:24).

USAASA was restructured in the 2006-7 financial year.

The rehabilitation of 31 existing centres and deployment of 1 Telecentre where a total of 350 computers as part of our 1580 networked computer foot-print in local communities enabling access to ICT-based services and applications. An amount of about R13 million was utilised in this regard."

The rehabilitation of 65 existing and deployment of 7 cyberlabs where a total of 2 600 computers as part of about 9 800 networked computers rolled out in public schools enabling the integration of ICT's in our leaning environment. An amount of about R28 million was spent in this regard. Theledi (2009:10)

Furthermore, three Community Digital Hubs were also created. These Hubs were deployed in Inanda, KwaMashu, Ntuzuma (INK) (KwaZulu-Natal), Maluti-a-Phofung (Free State) and Cradock (Eastern Cape). Community Digital Hubs are advanced ICT centres aimed at creating awareness of ICT services in the under-serviced areas by exposing communities to various technologies that include e-education, e-health, e-business development, and on-line access to government services (USAASA Fund report 2007/8).

4.2 Multi-purpose Community Centres

In South Africa, the provision of telecommunication services has been combined with the rendering of other governmental services. These centres have initially been branded as Multi-purpose community centres (MPCCs). The rolling out of these MPCCs started in 1999. By 2003 a total of 54 centres had been established. "Government services have moved closer to South Africans in remote or disadvantaged communities with the introduction of multi-purpose community centres, one-stop shops that offer a range of government products and services under one roof, and simplify the processing of applications for passports, identity documents, pensions and other social grants" (GCIS 2003). In 2010 the number of operational telecentres stands at 139. These centres have been renamed as Thusong centres (Mfazwe 2010). They can be positioned in any of the three spheres of government, i.e. national, provincial or local government level and are run by salaried civil servants.

4.3 Community Technology Centres

Microsoft has set up and equipped 188 community technology centres. These centres are spread over all nine provinces covering remote as well as metropolitan areas. "They provide low-cost access for people of all ages and abilities to learn about computers, use the Internet, explore new careers, further their education, participate in community activities, and develop jobrelated technology skills. CTCs offer an informal, welcoming environment in community centres, schools, libraries, housing facilities, or other convenient locations (Microsoft Community Affairs 2010).

4.4 Information Resource Centres

In South Africa the concept of Information Resource Centres (IRCs) was developed to provide information and Internet access to the victims of the digital divide. Snyman (2007:121) argued that "Although libraries can also be regarded as IRCs, it appears that connectivity to the Internet as the primary focus of information resource centres distinguishes them from traditional libraries." The IRCs specializes in one or a limited number of focus areas. In that respect they therefore also differ from libraries. All the IRCs are not totally web-based. Some of them provide literature as well as consultation to disadvantaged communities in order to accommodate those who are illiterate or computer-illiterate. "This type of IRC is a combination of a physical structure and a virtual presence. These IRCs usually function as designated "libraries" for selected interest groups and provide printed, and/or audiovisual, and/or audio as well as electronic information" (Snyman 2007:122). The IRCs differ from the MPCCs in that they have a single or limited focus. They specialise in providing information on one or two issues that are of vital importance to disadvantaged communities.

The Fire Protection Association of South Africa (FPASA) is an example of an organization that hosts such an IRC. "The IRC material includes reference books, journals, indexed journal articles, a pamphlet collection, technical reports, newspaper clippings, codes of practices and standards, relevant legislation, conference and seminar reports, product and buyer's guides and statistical reports. As a member of the Confederation of Fire Protection Associations International, FPASA also provides links to related sites (Snyman, 2007: 122).

The FPASA provides information to a wide array of publics ranging from academics to citizens on grassroots level. Teachers are also provided with information packs for usage in schools. Fires regularly cause havoc and destruction in informal settlements throughout the country. Since these fires are often caused by negligence, it is of paramount importance that the

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inhabitants of these informal settlements are educated how to avoid causing it.

4.5 Digital doorways

The latest addition to public access facilities is the digital doorway. The "hole in the wall" concept that was designed and piloted in 1999 by Dr. Sugata Mitra served as a basis for the digital doorway initiative. Dr. Mitra who was the head of the Centre for Research in Cognitive Systems (CRCS) at NIIT (National Institute for Information Technology) in New Delhi, India arranged that a highspeed computer with Internet access be installed in a wall in the slum area of Kalkaji that was next to her office. At the end of the day the children were surfing the Internet. No supervision of tuition were given (Fürstenburg 2005:29).

The digital doorway initiative was launched in South Africa in 2002. "The primary aim is to allow users within walking distance of the device to teach themselves basic computer literacy skills through experimentation and peer learning, without the intervention of an official teacher or instructor. "The Digital Doorway project set out to confirm that children and adults could teach themselves how to master basic computer skills, merely by having free access to a computer and being allowed to explore and try out things on their own, without formal training" (Gush, Cambridge & Smith 2004:2). Content include: Science Software, Geography, Mathematics, Encyclopaedia, Office Suite, Music Programs, Paint Programs, Educational Games and Storymaker ((Gush, Cambridge & Smith 2004:3-4).

4.6 Cybercafe's

Cybercafe's flourish in South Africa in disadvantaged communities as well as areas that are frequented by refugees and backpacker tourists. Costs as well as bandwidth availability vary from facility to facility. Cybercafe's are mostly used to retain contact with relatives in other countries via Skype or email. Users sue the facility to do job hunting or identify learnerships. A COMPARATIVE TYPOLOGY OF TELECENTRES IN THAILAND AND SOUTH AFRICA

ТҮРЕ	COUNTRY	CHARACTERISTICS	FUNDING
School-based	Thailand	Full access to	Funded by
		scholars.	community. A
		Limited access to	small user-fee.
		public	
Temple-based	Thailand	Full access to church	Funded by
		members.	Church. A small
		Limited access at	user-fee.
		some centres to public	
Local	Thailand	Access to general	Funded by
Administrative		public.	Administrative
Bureau-based			Bureau.
			Free/ a small
			user-fee.
University-	Thailand	Access to students.	Funded by
based		Access to public	University.
		during prescribed	Free for
		hours.	students.

			Otherwise a
			small user-fee.
Public library-	Thailand	Access to general	Funded by
based		public. Preference	government.
		given to library	Free access for
		members.	library
			members.
Military camp	Thailand	Access to military	Funded by
based		personnel and their	Ministry of
		families.	Defence.
			Free access.
Radio	Thailand	Access to general	Funded by radio
Broadcasting		public.	station.
Station-based			Free
			access/small fee.
NGO-based	Thailand &	Access to general	Donor-funded.
	South Africa	public. Preference	Free access/
		given to members of	small fee.
		interest group.	
Multi-purpose	Thailand &	Access to general	Co-funded by
community	South Africa	public.	government
centres			agencies.
			Free access.
Government	Thailand &	Access to general	Funded by
based	South Africa	public.	government.
			Free access.
Information	South Africa	Preferential access to	Funded by

Resource		members of interest	interest group.
Centres		group. Access to	Free access to
		general public.	members of the
			interest group.
Community	Thailand	Access to community	Funded by
based-		members. Preferential	community &
homeworker		access to	chamber of
telecentres		homeworkers.	small industries.
			A small fee.
Community	South Africa	Access to members of	Donor-funded.
Technology		specific communities.	Free access
Centres			
Cybercafe's	Thailand &	Access to general	Fees vary from
	South Africa	public.	very high (some
			SA & Thai
			facilities) to
			very low (some
			Thai facilities)

5. CONCLUSION

It is clear from the discussion that the Thai definition of communities is much broader than the South African definition and that community involvement in the Thai context offers much more to ICT development than in South Africa. The explanation for this dichotomy lies undoubtedly in the approaches that the two governments harbour regarding the running of the telecentres. In Thailand the approach of the government body that has accepted responsibility for the telecentre, whether it is on national, regional or local level, is to encourage theses centre to become self-sustaining. Financial aid is normally restricted to seeding money that covers the operational costs of the centre for the first year and a limited number of subsidised salaries thereafter. Each centre usually forms part of another social structure, i.e. a school, temple or military establishment. It is by this piggy-backing model that the infrastructure and subsequent sustainability is secured.

In South Africa the centres are mostly managed and funded by the government body that opens the centre. Those centres are subsidised by the tax payer and are run like subsections of government departments which mean that they are only open from Mondays to Fridays during normal government working hours. Users who want to conduct after hours business are dependent on Internet café's and privatised telecentres.

Since these centres are used as platforms for government liaison, and in particular e-government, their existence is guaranteed, courtesy the South African tax payer.

REFERENCES

1. Ariyabandu, R. 2009. Role of Telecentres as Knowledge Networks: Successes and Challenges. Bangkok: ESCAP, UN. 2. Fürstenburg, E.A. 2005.Bridging the Digital Divide: A South African Perspective on Minimally Invasive Education. Pretoria: UP.

3. Gush, K., Cambridge, G., & Smith, R. 2004.

http://www.digitaldoorway.org.za/publications/ICT%20in%20Education %20conferen ce%20paper-%20The%20Digital

%20Doorway March 2004.pdf. Accessed 23 June 2010.

 Intaratat, K. & P. Lomchavakarn. 2009. New Media for Equal & Sustained Development in Thailand. Paper presented at the Inter-Conference Communication and Sustainable Development in the Next Decade, 11-13 Feb, 2009. Bangkok: CCDKM.

5. Intaratat, K. 2008. Telecentres in Thailand: The Way Thus Far. (Online) http://www.telecentremagazine.net/articles/article-details.asp?

Title=Telecentres-in Thailand:- The-Way-Thus-

Far&articleid=211&typ=Country%20Focus. June 17, 2009.

6. Intaratat, K. & Alasow, M. 2010. Thai Telecentre Movement: A Case

Study of North. http://www.telecentremagazine.net/articles/article-

details.asp?articleid=294&typ=Country%20Focus. Accessed 11 June 2010.

7. Lindlof, T.R. & Taylor, B.C. 2002. Qualitative Communication Research Methods. 2nd ed. Thousand Oaks, Calif.: Sage.

7. Mfazwe, M. mxolisi.mfazwe@otp.ecp.gov.za. (16/02/2010). Thusong centres. E-mail. Accessed 10 June 2010.

 Microsoft Community Affairs. 2010. Community Technology Centres. http://www.microsoft.com/southafrica/communityaffairs/default.mspx. Accessed on 23 June 2010. 9. MICT 2009. Thai Telecentre List. June, 2009 in www.thaitelecentre.org Accessed May 13, 2010.

10. Ministry of ICT, Thailand, 2010. MICT Master Plan 2009- 2013. www.mict.go.th,

11. Parkinson, S. 2005. Telecentres, Access and Development. International Development Research Centre. http://www.idrc.ca/en/ev-88201-201-1-

DO_TOPIC.html. Accessed 8 May 2008.

 Saga, K. 2007. Telecentre: History and Future. National Institute of ICT (NICT), Japan. (Online)

http://wiki.pido.tipg.net/images/8/84/Telecentre_History_and_ Future .pdf. July 25, 2009.

13. Saiyud, K. 2009. The Social Entreprise Model of ThaiTelecentre. interviewed by Intaratat, K, June 13, 2009.

14. Siributr, P. 2010. Head of the Thai Telecentre National Project, Ministry of ICT, Thailand. Role of the MICT : Telecentre Initiative in Thailand.

15. Sirindhorn, Princess. 2010. Connect the World : Empowering PeopleUsing ICT,NECTEC (www.nectec.or.th/srii)

 Snyman, M. 2007, Information Resource Centres in South Africa, in Libraries for the future: progress and development of South African libraries Bothma, TJD, Underwood, P and Ngulube, P (Eds.). Pretoria: LIASA. Pp. 121-131.

17. Thanathip D. 2010. ThaiTelecentre Operators and Volunteers.(www.ccdkm.org). Accessed 20 June, 2010.

18. Theledi, J. 2009. USAASA Annual Report. Midrand : USAASA.

19. Toyama, K. & Keniston, K. 2008. Telecentre Debates in Telecentre Magazine, March. http://telecentremagazine.net/articles/article-details.asp?
Title=Telecentre-debates&articleid=72&typ=Telecentre%20Debates.
Accessed 1 September 2010.

19. UNESCO. 2005. Information and Communication Technologies (ICTs) for Community Empowerment through Non-Formal Education;

Experiences from Lao PDR, Srilanka, Thailand and Uzbekistan. Bangkok: UNESCO.

20. USAASA Fund Report. 2007.

http://www.pmg.org.za/docs/2007/071109usaasarep.pdf . Accessed 21 June 2010.

21. Wat Potikaram Abbot. 2009. The Multipurpose Community Model of ThaiTelecentre. Interviewed by Intaratat, K.,2009.