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Analysis of the Success of ICT at the Ikageng MPCC in support of the Itsoseng Community: A Case Study

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Abstract

Information and communication technology is changing every facet of our lives, and thus changing how we live. This in turn impacts on the way we utilise information and communication technology in multi-purpose community centres, which provide support services to the communities in which they are located. A case study was conducted at the information and communication technology-equipped Ikageng Multi-purpose Community Centre in Itsoseng, situated in the North West Province of South Africa, to investigate the services delivered; the Centre utilises information and communication technology infrastructure to deliver needed services to the community. The lack of ongoing and sustained training for Centre staff, as well as the challenge of maintaining the Centre's equipment, were some of the shortcomings identified by the study in terms of service delivery.

Introduction

Development of local economies in rural South Africa, and Africa in general, is severely compromised by lack of infrastructure, services and know-how. This is especially the case with enabling technologies in the information and communication technology (ICT) arena.

We are living through a development revolution, which brings together people from different environments. In such circumstances, people may learn from one another, but they also need basic access to, and understanding of, ICT. Not only do people need to understand the evolution of new ICTs, they also need to keep pace with the rapid changes imposed by ICTs on the social structure at work, at home, in the classroom and in the entertainment field.

If South Africa does not become a major player in ICT, the country will struggle to compete globally. It is necessary to shape the South African information society by harnessing the key information, communication technologies and skills required for the country's socio-economic development. This need should be contextualised within an acknowledgement of the realities of the country in terms of information literacy; it is argued that interfaces between technology and society will need to be different from those in other parts of the world, as levels of understanding may be very different from what is found elsewhere.

ICT can be regarded as both a driver and an enabler. In many of the National Research Foundation (NRF) focus areas, ICT is treated as an enabler – influencing how things are done. In this paper, ICT is considered the driving force for current or future change.

South Africans need to be part of the information society to be globally competitive, play their rightful role in the region and benefit as individuals. Part of this initiative is access to information and awareness of the possibilities created by the effective use of ICT. Broader online literacy is required, since ICT is becoming a popular service delivery channel, used increasingly by Government and business and financial sectors. Through the elimination of people's fear of ICT, it is important to address the growing functional illiteracy that disempowers people from living effectively in a modern society (NRF, 2002).

Defining multi-purpose community centres

A great deal of research has already been done on evaluation of the true state of multi-purpose community centres (MPCCs) in South Africa and abroad (National Information Technology Forum, 1998). The emphasis has, it seems, always been on community needs, financial aspects, services provided, management structures and operational aspects.

It is therefore important, before any evaluation of case studies takes place, to determine exactly what the *best practice framework* for evaluating an MPCC will be. (This issue is addressed in the following section.) In addition to the best practice framework is the importance of understanding which *definitions* various parties are using to describe the operations or existence of a tele-centre or MPCC or any form of community service centre. Community service centres are widely seen as a key measure for offering a wide range of ICT services required by communities, and for helping empower communities to bring about their own development. There are various types of community service centres, better known as tele-centres. Tele-centres may be initiated by independent individual agencies (such as the Universal Service Agency), or as part of government initiatives (such as the tele-centre or MPCC programme of the Government Communications and Information Service, or GCIS) or as part of a project or national agency. Tele-centres can also be known as "community service centres", "community information centres", "community resource centres" or "community computer centres" (National Information Technology Forum, 1998: 4).

Tele-centres or MPCCs aim to stimulate, and respond to, the demand for ICT services in communities. An indicator of the success of any tele-centre or MPCC is the degree to which it becomes an integral part of the community it serves.

According to the South African MPCC Programme (GCIS, 2001b), MPCCs have been identified as the primary vehicle for the implementation of development communications and information programmes, since they are capable of offering a wide range of services that communities can use towards their own empowerment.

There are many different types of centres termed "MPCC" in South Africa. For the purposes of the government initiative, MPCCs are defined as those centres that have at least six government departments offering services. Government services add value to other services that are offered by the non-governmental organisation (NGO) and business sectors. An MPCC should also have access to technology in the form of an information technology centre (ITC) such as a tele-centre or other form of technology.

The *MPCC Research Report* (National Information Technology Forum, 1998: 5) points out that there have been discussions at many conferences and meetings around the definition of an MPCC. An initial definition could be: "An MPCC is an organisation offering a range of developmental services (including information services) to a specific community and with a large degree of community involvement".

According to *Telecenters for Socio-economic and Rural Development in Latin America and the Caribbean* (Proenza *et al*, 2001: iii), a tele-centre may be defined as: "A shared site that provides public access to information and communications technologies".

The GCIS report on the establishment of MPCCs (2001a) provides the following brief description of an MPCC: "An MPCC is a place where a number of services are provided by local, provincial and national government, as well as parastatals, NGOs, CBOs[1] and the private sector. The services offered at an MPCC are those that have been identified by communities".

Analysing the definitions of a MPCC as explained by various parties in South Africa and abroad (as indicated in the examples provided above), it is clear that community service centres are playing a major role in *integrated service delivery* to the various communities across the globe. The following section outlines best practices applied in the study of the Ikageng MPCC in Itsoseng.

Framework for analysis of community centres

The key characteristics or best practices in an MPCC needs to be identified prior to conducting a case study in a community. Best practices assisted with the identification and development of the questionnaires for the survey at the Ikageng MPCC. The Acacia Research Framework for MPCCs (Whyte, 1998) was adopted in this study. The framework comprises:

- background;
- financial issues;
- infrastructure;
- services provided;
- management structure;
- operational aspects;
- linkages; and
- issues.

The *MPCC Research Report* (National Information Technology Forum, 1998: 24) defines various characteristics that were used in the case study. Table 5.1 (below) lists the most common characteristics of MPCCs that were identified by the research report.

1 Community-based organisations.

Table 5.1: Characteristics of MPCCs

Best practice characteristics	Description
Sustainability	Sustainability involves all the facets of the project from financial to political issues. Sustainability of a project or an organisation means being able to maintain or prolong the services with the means available. This depends largely on the type of services provided, income generation and future plans.
Ownership	Management structure is important in determining the success of the project. Depending on the services provided and resources available, a small and efficient managerial staff is important for an MPCC.
Linkages	"Linkages" in this instance refers to the relationship that MPCCs have with other related and unrelated organisations. It also means that centres communicate with one another on matters of common interest, which could result in many far-reaching spinoffs. The extent of centre's connection or link with other centres largely determines its success or failure.
Services	Services provided by the centres vary from area to area. One of the best practices – in terms of services – is demand-driven services, i.e. that the services provided are those defined as being needed by the clients, who are thus convinced to exchange their resources for these services.
Finances	Financial issues are very important to the success or failure of MPCCs. It is important to have clear strategy on fundraising and raising income for centres. A clear business plan is generally accepted as a good practice for MPCCs.

Identification of the key components and applications of a community centre is important, since every MPCC is unique in its provision of appropriate information, facilities, resources, training and services to the community. The South African GCIS (2001a) identified the following as critical when setting up MPCCs:

Political neutrality: An MPCC must be a non-political community institution that brings services closer to the people.

Physical infrastructure: The community needs to use an existing, accessible infrastructure as a site for providing services. Where potential for growth is available, the community should look at the possibility of using an under-utilised existing building as an MPCC site. In some areas, there are no appropriate buildings to be used as MPCCs, in which case other options of providing prefabs, containers or mobile units need to be explored.

ICT infrastructure: In order to provide fast, efficient and effective services, there is a need to have appropriate ICT infrastructure at MPCCs. This will assist people in rural areas to gain access to technologies, thus enabling them to participate meaningfully in the global economy.

Integrated service delivery: An MPCC is a place where people have access to information and services from various service providers. This may include Government (e.g. Labour, Home Affairs, Welfare, Education and Agriculture), parastatals (e.g. Eskom, Telkom, the Development Bank of South Africa), NGOs, CBOs, and business and the private sector.

Information: Information from all sectors is critical in MPCCs. Government information, policies and plans should be communicated through this institution to communities.

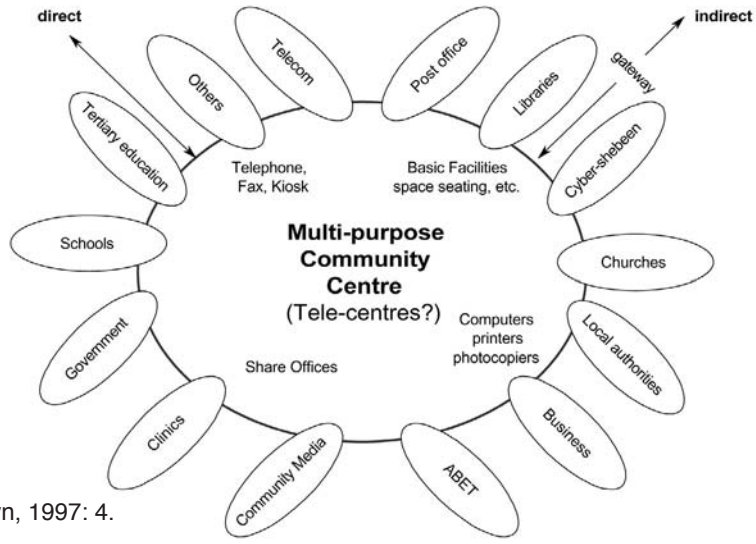
In addition to such key aspects, Berlyn (1997: 4) argues that MPCCs should be directed towards content. This argument is supported by Mncube (2003: 12-16), who states that an MPCC should focus its information dissemination efforts on providing current news sources, bibliographic and other reference sources, full text articles and reports of various matters of interest, and information gleaned from discussions with experts and consultants in the various relevant fields, in printed and electronic format.

An MPCC can be made up of a mix of the list of collective contributory components, as depicted in Figure 5.1 (below). This would include:

- the direct contact services, which the individual community members can access in an MPCC without intervention of a third party – including telephone, fax and e-mail;
- the indirect contact services that might have to be rendered by or through a third party or "gateway" at an MPCC – including electronic library, tele-education, tele-medicine, the Internet and Government online (Berlyn, 1997: 4).

However, the actual mix depends on what the community wants and what it is possible and/or feasible to supply with the limited resources at hand.

Figure 5.1: MPCC collective contributory components



Source: Berlyn, 1997: 4.

A survey was conducted and information was collected and analysed at the community centre in Itsoseng using the above framework.

Background to the Ikageng MPCC

According to the community leader, a retired human resources (HR) manager and resident in Itsoseng since 1970, the idea of establishing an ITC in Itsoseng originated in February 1999. The idea was developed by a consortium led by the Council for Scientific and Industrial Research (CSIR), and a proposal was born out of the discussions. The Ikageng MPCC initiative was started in June 2001 by a consortium of parastatals and private sector companies in conjunction with the Itsoseng community. The consortium consisted of the CSIR, Human Sciences Research Council (HSRC), Agricultural Research Council (ARC), Renewable Energy Africa (REA) and, later, the Technikon Pretoria[2] funded by the former Department of Arts, Culture, Science and Technology (DACST).

Operations began on 1 July 2001 from Itsoseng Butchery building in Zone 2 extension, with the two managers from Itsoseng Mpepu Community Project (IMCOP), and six selected youths whom the consortium provided with prior training in Microsoft Office, Microsoft Publisher and business skills.

The consortium provided the Ikageng MPCC with ICTs, various peripheral hardware, and stationery to start the centre. Members of IMCOP, who raised funds to the value of R2 150 to support the project, also organised initial office furniture. In support of this new initiative in the Itsoseng community a large cement company donated R2 000.

Feedback obtained from the Ikageng MPCC Co-ordinator

The community leader is also the Co-ordinator/Centre Manager of the Ikageng MPCC. A set of questionnaires, addressing the issues of services provided, finances, management structures, linkages and sustainability of the Centre, were researched, developed and constructed to assist in the process of information gathering. Figure 5.2 is a map of questions to the Co-ordinator based on the Acacia Research Framework cited above.

Figure 5.2: Mind map - MPCC Co-ordinator questionnaire summary



2 Now Tshwane University of Technology.

The aim, with this set of questionnaires, was to address five of the identified best practice characteristics, namely: services provided by the Centre, financial issues, management structure/ ownership, linkages to other centres and sustainability.

Services provided: Questions were posed to the Ikageng MPCC Co-ordinators regarding the services of the Centre, in order to establish the profile of clients using the services (rather than to focus on details of specific services). Feedback from the questionnaires indicates that the Ikageng MPCC provides affordable, good quality service within the reach of the residents served in the Itsoseng community. The Centre either provides for, or facilitates in providing for, the needs of the local community in which it is located. The clients who use the services of the Centre have an average education level of standard six and an average income of R300 per month.

Financial issues: Answers to questions concerning the financial issues of the Ikageng MPCC indicated that most of the funding is currently generated from internal funds (organisations within the community of Itsoseng) and not raised from donations or other funding sources outside the community. Feedback in this regard is that fundraising will continue in this way for as long as the Centre exists. At the time of the survey, the Ikageng MPCC's bank balance was R1 700. The Ikageng MPCC future plans regarding fundraising include raising donations, and financial support of companies in the area as well as from Government. The Ikageng MPCC has a business plan, which was available at the time of the survey. In order to improve its current income the Centre needs to expand and grow its existing services.

Management structure/ownership: The management structure and ownership are important in determining the success of a centre or initiative. The Centre Co-ordinator plays a vital role in day-to-day management of the Ikageng MPCC. In terms of management and financial decisions in the Ikageng MPCC, the reporting structure comprises two persons: one person from among the Ikageng MPCC staff members and one from the Ikageng Management Board.

According to the Ikageng Centre Manager, community perceptions of the Centre are very good and supportive. The Centre has support from various leaders and institutions in the area. Table 5.2 below provides information on some of the institutions and the type of support provided; it also reflects the sense of ownership towards the Centre on the part of members of the community.

Table 5.2: Institution and the type of support for Ikageng MPCC

Institution	Type of support
Minister of religion	• Typing in general • Tele-centre services
Post office	• They have stopped with their faxing services
Police station	• They have stopped with their photocopying services
Department of Welfare	• Using the photocopying services

Currently the Ikageng MPCC has six staff members running the Centre on a daily basis, with skills ranging from managerial to computer related, in order to provide for the needs of the community. The Centre management has identified specific skills gaps or shortages as areas of improvement that will assist the Centre considerably with the expansion of the range of current services to the community and to grow its revenue stream.

Linkages: Earlier in this paper, in the section on literature study, it was indicated that linkages with other MPCCs in the area are an indication that centres communicate with one another on matters of common interest, which could bring numerous far-reaching spinoffs for the participating centres.

At the time of the survey the Ikageng MPCC had no relationship with other MPCCs in the area, as the Ikageng MPCC was the only true MPCC in the Itsoseng area.

Table 5.3 (below) indicates frequency of communications of the Ikageng MPCC with other centres regarding the registration with ISSET (Information Systems Electronic and Telecom Technologies) Sector Education and Training Authority (SETA). Such registration will allow the Centre to become a training provider in the Itsoseng community, as well as with the CSIR – Icomtek regarding the training of Centre incumbents as part of Centre capacity building. The Centre uses a range of communication media.

Table 5.3: Frequency of communication with other centres

Status selection criteria	Weekly	Monthly	Yearly	Specify
Formal (letters)		✓		Trainer
Informal (meetings)		✓		Registration
Phone		✓		Registration
Workshops			✓	Visits

Sustainability: One of the most important best practices identified with regard to any centre or initiative is sustainability, particularly financial sustainability. The estimated monthly and annual budget of the Ikageng MPCC is illustrated in the following table. These income figures have to be generated internally from the Centre's own earnings through services provided to the community. The figures include no donor funding.

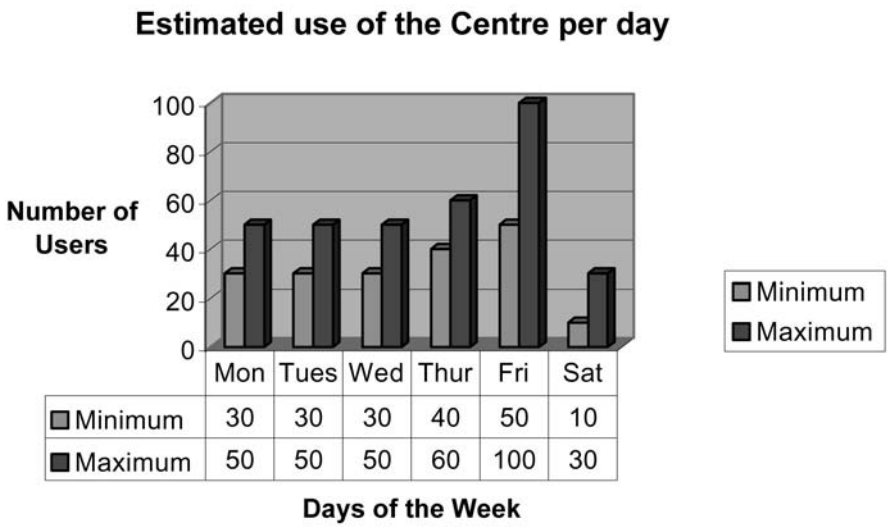
Table 5.4: Estimated monthly/annual budget

	Monthly	Annual
Staff	R 2 000	R 2 4000
Operations	R 4 642	R 55 704
Promotions	R 200	R 2 400

Centre usage is increasing. The Ikageng MPCC services are used not by a specific group of people but by all age groups and occupations and both genders in the Itsoseng community.

The following figure is a graphical representation of the estimated users visiting the Centre on a weekly basis. (The visits were monitored over a period of one year.)

Figure 5.3: Estimated weekly use of the Centre



Services provided to users include use of computer equipment, information, advice and referral services. Table 5.5 shows services used by the community and the frequency of their use.

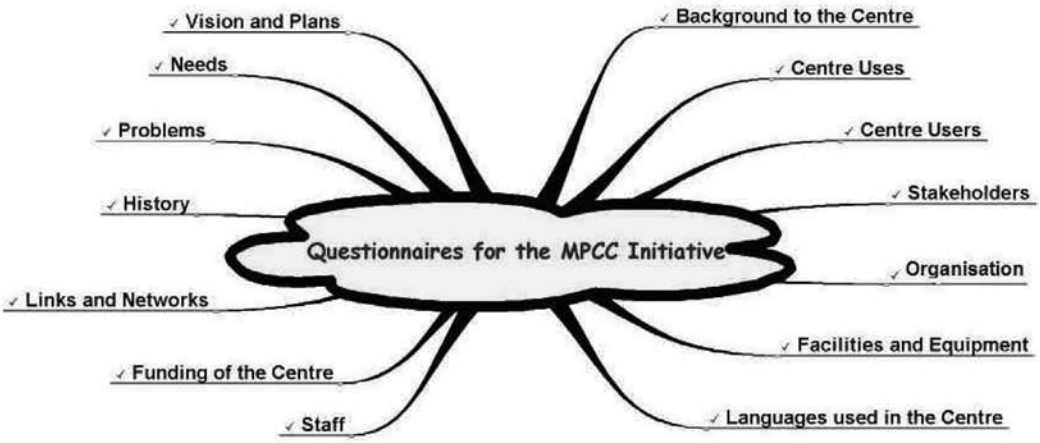
Table 5.5: Status of Centre usage

Status selection criteria	Very often	Often	Seldom	Never
Equipment in the Centre	✓			
Information at the Centre	✓			
Advice from the Centre	✓			
Referral to other centres		✓		

Results from the Ikageng MPCC staff research questionnaire

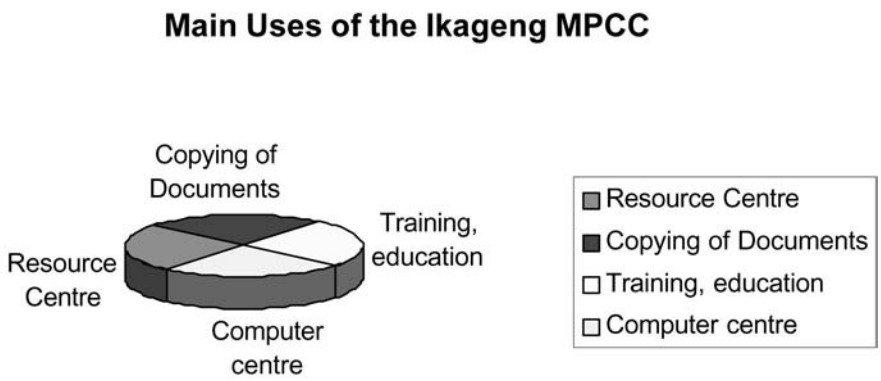
Three of the six staff members of the Ikageng MPCC completed their questionnaires; these were the technical support person, the trainer/tutor and the desktop publisher. The questionnaires were researched and developed to provide information regarding the operational issues of the Ikageng MPCC from the point of view of staff. Some of the questions posed in this section were also posed in the previous section. (This section focuses on the view of the staff members, while the previous section focused on the view of Centre management). These questionnaires were constructed to comply with the research framework in terms of defining the best practice characteristics regarding community centre case studies. Figure 5.4 (below) shows a map of the issues covered in the questionnaire to MPCC staff members. The following section describes the questionnaire findings.

Figure 5.4: Mind map - MPCC staff member questionnaire summary



Centre uses: Two of the three staff members indicated that one of the main uses of the MPCC is as a resource centre; and all three indicated that the other main uses for the centre are copying documents, computer applications, and training and education. Figure 5.5 (below) shows the breakdown of weekly use of the MPCC.

Figure 5.5: Estimated weekly use of the Centre



Centre users: The questionnaire findings highlighted the importance of identifying the potential target groups in the area and matching them to the services required. The feedback from the three respondents indicated that the Ikageng MPCC is servicing four target groups in the Itsoseng community, including individuals, students, government officials, civil society organisations and business. Table 5.6 (below) captures the number of different user groups.

Table 5.6: Ikageng MPCC user groups and numbers

Number	User group	Number	User group
800	Individuals		Local/provincial Government
1 500	Learners and students	8	Business
50	CBOs and NGOs		Other (specify)

Local stakeholders: The survey asked for potential stakeholders or initiatives that contribute to the Ikageng MPCC in Itsoseng. Of the three respondents, two indicated churches/religious bodies and educational groups as the important local stakeholders of the Ikageng MPCC. The third respondent did not indicate any stakeholders.

Organisation: As mentioned earlier, the management structure/ownership is an important aspect in determining the success of a centre or initiative and is also one of the identified best practice characteristics of a community centre. In recognition of this fact, the decision taken by the stakeholders had been to establish a Close Corporation for the Ikageng MPCC. This allows the Centre to operate as a legal entity and open new business opportunities. All three respondents indicated that the Ikageng MPCC has a constitution and is a Close Corporation with a management committee and directors.

Facilities and equipment: The study indicated that the Ikageng MPCC has access to telephone lines at the Centre, in order to provide users with tele-centre component services such as email, phoning and faxing. Table 5.7 (below) summarises the facilities and equipment available at the Ikageng MPCC. An additional Unix FreeBSD[3] intranet server is installed on the Ikageng MPCC network, providing services such as web, mail, FTP[4] and DHCP[5] servers. A more detailed description – including serial numbers, quantity, specifications and delivery dates of the various infrastructures such as office equipment, ICTs, stationery kits, application software, books and training networks – was collected during the survey.

Table 5.7: Ikageng MPCC facilities and equipment

Number	Item	Number	Item
8	Computers	14	Chairs
1	Printer	-	Typewriter
1	Photocopier	2	Rooms
None	Fax machine	Yes	Security
1	Modem	1	Scanner
10	Desk	1	Digital camera
1	Laminator	Yes	Computer network
1	Binding machine	-	Other (specify)

3 Berkeley Software Distribution.
4 File Transfer Protocol.
5 Dynamic Host Configuration Protocol.

Languages used in the Centre: Communication is a very important success factor in any business or operation; thus, it is important that the six paid staff members of the Centre understand the languages their customers use. The results from the survey indicated that four languages are used in the Centre, namely: Sepedi, Sesotho, Setswana and English. The two most commonly used languages in the Centre are Setswana (first) and English (second). In the case of all staff members except one (whose first language is English), the first language is Setswana.

Location of the Centre: The location of a community centre is another important contributing factor to the success of such an initiative; thus, passing traffic is very important for the viability of a community centre such as the Ikageng MPCC.

The survey indicated, through questionnaires and observations, that the Ikageng MPCC is located next to a taxi rank, a three minute walk from a clinic and a four minute walk from the nearest school. Furthermore, the Centre is located in a large residential area with a number of working camps located within four minutes' walk from the Centre, according to feedback received from staff members. This has a considerable impact on Centre usage.

Funding of the Centre: Only two of the Ikageng MPCC staff members responded to the section of the questionnaire on the financial sustainability of the Centre. Responding to the question regarding how much money had been required to set up the Centre and how such money was raised, both respondents estimated that setting up a centre such as the Ikageng MPCC cost R10 000 of donor funds. This would indicate both that the MPCC relied on donor funds to equip and kick-start the centre and that the respondents are not really familiar with the costs involved in establishing the infrastructure of this Centre.

The two respondents respectively indicated that the Centre needs R10 000 and R11 000 per month to sustain it. One respondent estimated that the Centre currently generates R10 000 and the other respondent indicated that the centre generates R4 500 per month through training, typing and production services. These figures were compared with the financial performance figures from April 2002-January 2003 in the report from the MPCC Co-ordinator, as shown in Table 5.8 (below), which excludes donor funds.

Table 5.8: Ikageng MPCC financial report

Month	Tele-centre	Desktop publishing	Training	Total
April 2002	45-00	2 999-00	1 685-00	4 729-00
May 2002	331-00	3 644-00	880-00	4 825-00
June 2002	374-00	2 329-00	950-00	3 653-00
July 2002	448-00	3 459-00	650-00	4 557-00
August 2002	383-00	3 043-00	2 685-00	6 111-00
September 2002	468-00	3 442-00	2 120-00	6 030-00
October 2002	1 192-00	3 759-00	1 720-00	6 671-00
November 2002	730-00	5 362-00	985-00	7 077-00
December 2002	740-00	6 006-00	773-00	7 519-00
January 2003	1 744-00	3 696-00	1 100-00	6 540-00
Totals:	**6 455-00**	**37 739-00**	**13 548-00**	**57 712-00**

During the interview process with the management of the Ikageng MPCC, it was indicated that the Centre is not generating sufficient funds on its own and is partially reliant on external donors. Nevertheless, despite the fact that the Ikageng MPCC has not yet found a way of guaranteeing its own financial sustainability, it can be regarded as successful.

Linkages and support: The MPCC has support from a range of organisations (identified earlier in the section on the background to this study). Organisations and networks that have assisted the Ikageng MPCC initiative include:

- CSIR – Icomtek;
- IMCOMP;
- Department of Social Welfare;
- Town Council of Ditsobotla; and
- a youth organisation.

Problems the Centre has experienced: The feedback from the questionnaires indicated that the Ikageng MPCC has experienced two main problems, namely suitable premises and funding.

Needs: The survey identified the current needs of the Centre with regard to training and advice as being continuous improvement of qualified training officers, and the need to start sales of stationery in the area. Furthermore, there is a need for equipment such as a digital duplicator, and a request for funds and permanent facilities for the Centre.

Vision and plans: It was very clear from the survey that the Ikageng MPCC has a vision and definite future plans for the Centre, and that these have been communicated to all the relevant individuals and stakeholders. Therefore, all the questionnaire respondents knew exactly what the vision and plans were.

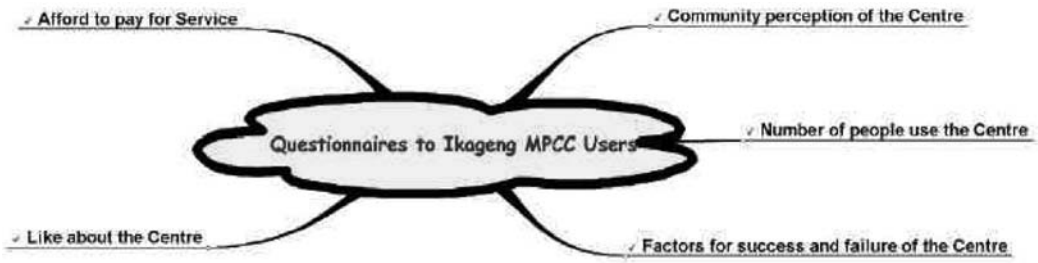
The vision for the Centre is: "To establish and facilitate the information and communications systems and technologies with Internet café, desktop publishing, computer training and business support in Itsoseng". However, future plans for the Centre depend heavily on the accreditation of the centre with the ISETT SETA. The Centre's future plans include conducting training workshops and establishing links with other training providers, in a bid to enhance the quality and sustainability of the Centre.

Other information: Respondents were asked if they had additional information, and they indicated that in future they would like to see the Ikageng MPCC as a reference point for everybody in Itsoseng, for example, for job creation, skilled labour development and wealth creation targetting the youth. Respondents said they would like to expand the facilities and services throughout the region.

Results from the Ikageng MPCC users research questionnaire

In all, 30 users of the Ikageng MPCC completed their questionnaires to provide feedback on their perceptions of the services and support that the Centre provides to them and the community at large. Figure 5.6 (below) is a map of the key questions asked.

Figure 5.6: Mind map - MPCC user questionnaire summary



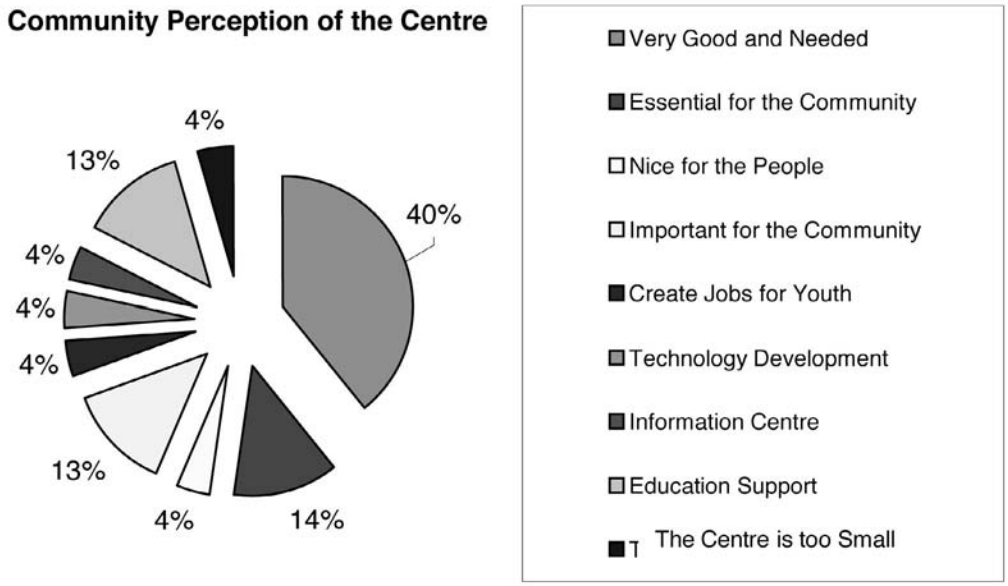
This questionnaire was aimed at probing whether the users of the Ikageng MPCC could afford the services, the perception of the community regarding the Centre and the estimated number of people who use the Centre. From a total of 50 questionnaires placed at the Centre, 30 completed questionnaires were returned. The following section provides details of the results of the user survey.

Community perception of the Centre: The first question posed to community members visiting the Centre was related to community perceptions of the Centre.

Figure 5.7 (below) summarises the various perceptions captured during the survey. A large percentage of the respondents (approximately 40%) indicated that the Ikageng MPCC is "very good and needed by the Itsoseng community", with reasons for saying so including:

- "People are happy about all the services they receive from the centre".
- "Because many people or children can learn what to do at the centre".
- "Because people learn about computers".
- "Because many people find work because of this centre".
- "Some youth from the community are working as volunteers".
- "It offers variety of services and is the only one around".

Figure 5.7: Community perception of the Centre



The second largest percentage of respondents (approximately 14%) replied that the Ikageng MPCC is "essential and needed by the Itsoseng community", and all respondents' reasons were that a "wide range of services is rendered by the Centre".

In addition, 13% of the respondents indicated that the Centre is "important for the Itsoseng Community", with the motivating response, "they don't have to go far for such services provided by the Centre".

Another 13% of the respondents have the perception that the Centre is very important for "education support" and the reasons are mostly that, "they educate and give us computer related training and information".

The rest of the responses were reasons such as, "technology development, create jobs for the youth and information centre". These statements were motivated with reasons such as, "information centre and different services available."

Number of people using the Centre: The community members using the Ikageng MPCC were asked a second question related to the number of people using the Centre and the reasons for doing so. The following two graphs indicate that the perception of the community users of the Centre is that between 20 and 1 000 people use the Centre on a weekly basis and between 52 and 4 500 people per month. The actual figure provided by the MPCC Co-ordinator (see Figure 5.3, above) indicates that between 190 and 340 people use the Centre on a weekly basis.

Figure 5.8: Community perception of number of people visiting weekly

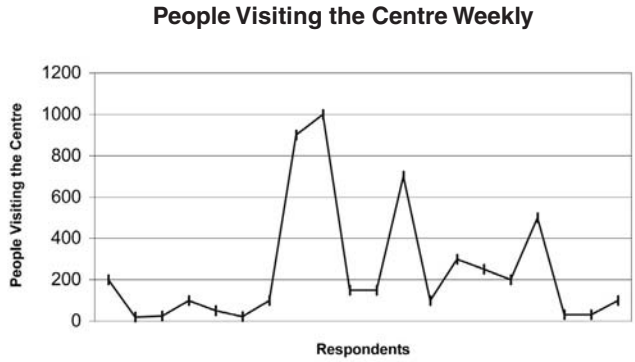
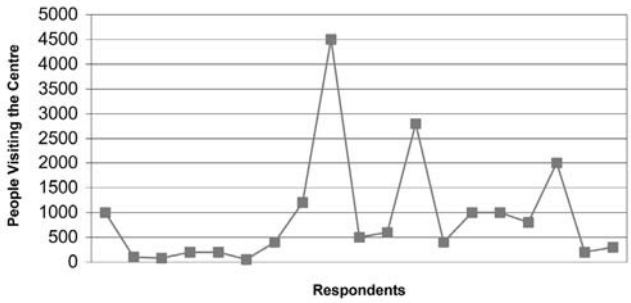


Figure 5.9: Community perception of number of people visiting monthly



Feedback from the survey revealed that the community uses the following services: photocopying; typing of CVs and assignments; computer lessons; Internet services; and funeral programmes.

Factors for success and failure: All the respondents think that the Ikageng MPCC is a success. None have indicated that the Centre is a failure. Reasons provided for the success of the Centre are:

- The MPCC staff is always positive and the Centre is growing.
- Teaching the community about Computer Technology.
- Various types of services are provided.
- Most respondents said the services rendered by the Centre are needed in the community.
- One respondent said: "If it wasn't successful it could have been closed long time ago".
- Resource to the community in terms of the current services it provides.

Furthermore, Centre users realise that the equipment housed in the Centre is expensive and that the Centre fulfils their current information and communication needs.

What users like about the Centre: An important aspect of any business or intervention is to understand what the users of the services being offered like and do not like, in order to fulfil user needs. The following responses were received from users regarding what the community likes about the Centre:

- friendliness towards the customers;
- fulfils a need in the community;
- improving computer literacy and knowledge in the community;
- services not too expensive;
- it is central in Itsoseng;
- creates employment opportunities;
- provides Internet access in the community; and
- the staff members are good in fulfilling their job.

The following responses were received regarding what the community members do not like about the Centre:

- limited resources, e.g. one telephone line for Internet, faxes and communication;
- it should be extended and have more computers; and
- it is too small and has no toilets.

Affordability of services: The feedback received indicated that Centre users can afford to pay for the services. Most said that the prices are very reasonable, with only one respondent saying that the business cards are too expensive.

Methodology

The case study on the MPCC at Itsoseng was undertaken in a series of steps. The first step was to generate interest and to let the relevant organisations and stakeholders of the Ikageng MPCC know of this case study and, even more importantly, to gain buy-in from the community leadership and MPCC staff members.

The organisations and relevant stakeholders that were contacted regarding the case study include the following:

- Tshwane University of Technology;[6]
- CSIR;
- Ikageng MPCC Co-ordinator;
- Ikageng Community Management Board; and
- Ikageng MPCC staff members.

Methodology

A single-case case study was used to analyse the Ikageng MPCC. Creswell states (1998: 8) that the real business of case study is to take a particular case and come to know it well, not particularly as to how it is different from others, but for what it is and what it does.

According to Jacques:

> The case study is in a sense a kind of simulation of a real-life situation in which the experience is second-hand and probably condensed. The important merit of the case study is that it allows a problem to be studied in a complex form, including elements of real-life events, which it might be impossible to reproduce in the classroom. The main virtue of case studies is the way in which they can efficiently integrate a wide diversity of subject matter (1994: 94).

6 Formerly Technikon Pretoria.

The case study researcher typically observes the characteristics of an individual unit – a child, a clique, a class, a school or a community. The purpose of such observation is to probe deeply and to analyse intensively the multifarious phenomena that constitute the life cycle of the unit with a view to establishing generalisations about the wider population to which that unit belongs (Cohen & Manion, 1994: 106). Whatever the problem or the approach, at the heart of every case study lies a method of observation. A case study can be intrinsic because of its uniqueness or instrumental because of the stating of issues.

Furthermore, case study is a qualitative approach, where the main objective is to understand people's experiences in context. The qualitative approach is designed to discover what can be learned about some phenomena of interest, especially social phenomena where people are the participants (Maykut & Morehouse, 1994: 44). Cresswell (1998: 14) argues that one undertakes qualitative research in a natural setting, where the researcher is an instrument of data collection who gathers words or pictures, studies them inductively, focuses on the meaning of participants, and describes in language a process that is affectionate and meaningful.

Participants in the research

Creswell (1998) states that a purposeful selection of participants represents a key decision point in a qualitative study. This could be regarded as important because it "permits logical generalisation and maximum application of information to other cases" (1998: 118).

The participants in the case study consisted of the Centre Co-ordinator, staff members and users of the Ikageng centre. Table 5.9 (below) provides further detail.

Table 5.9: Participants in the research

The research team	
Name	**Position**
Mr SJ Motsuenyane	Community leader/Centre Manager
Ms BM Bodigelo	Tutor
Ms BM Thabeng	Content creator (Desktop publishing)
Mr MI Phetoso	Technical support (Desktop publishing)
Ms Maribe	Department of Social Welfare
Ms MM Rampou	Town Council of Ditsobotla

Data collection process

Techniques employed in data collection were those typical in case studies. They included observation, semi-structured interviews, literature studies, open-ended questionnaire and personal experience.

Observations

Observation is one of the most basic forms of research. Adler & Adler (1998: 80) state that we make observations of the everyday world, which guide us in forging paths and interpreting actions and reactions of others. The nature of this observation is systematic and purposive.

The Ikageng MPCC (Figure 5.10, below) is located close to the taxi rank in Itsoseng. The MPCC is not visible from the taxi rank, but signboards (Figure 5.11, below) display the details of the MPCC and the services offered. The local post office is within walking distance of the Centre and on the opposite side of the street from the MPCC is a retailer.

The MPCC is a brick building consisting of three rooms and a toilet, and is hosted next to a medical doctor's practice. The Centre has a reception area, office and training room. A computer network with network points and ducting is installed at the Centre. The services offered are displayed on the information board (Figure 5.12, below), with some examples provided. In addition, the MPCC mission and vision statements are displayed on the notice board. During the visit, community members used the photocopying and training facility.

Figure 5.10: Ikageng MPCC



Figure 5.11: Signboard at taxi rank



The observations and interviews were conducted at the Ikageng MPCC through a number of visits over a period of 18 months. Table 5.10 (below) shows the schedule of the visits.

Table 5.10: Visits to Itsoseng community

Schedule of visits to Itsoseng community		
Year	**Month**	**Description**
2001	January	Social facilitation with the leaders of the Itsoseng community.
	May	Finalisation of the Ikageng MPCC project with relevant stakeholders in Itsoseng.
	June	Start of orientation, training, infrastructure development, monitoring and evaluation of Ikageng MPCC.
	July	HR capacity building and infrastructure development, monitoring and evaluation of Ikageng MPCC (continued).
	August	HR capacity building and infrastructure development, monitoring and evaluation of Ikageng MPCC (continued).
	September	HR capacity building and infrastructure development, monitoring and evaluation of Ikageng MPCC (continued).
	October	HR capacity building and infrastructure development, monitoring and evaluation of Ikageng MPCC (continued).
	November	HR capacity building and infrastructure development, monitoring and evaluation of Ikageng MPCC (continued).
2002	February	Support visit and infrastructure development.
	March	Support visit, infrastructure development, monitoring and evaluation.
	May	Support visit and infrastructure development.
	June	Support visit and infrastructure development.
	September	Support visit.
2003	February	Conducting survey at the Ikageng MPCC.
	March	Graduation ceremony (N+ and A+ certificates).
	August	Supporting, monitoring and evaluation visit.

The above schedule includes the Ikageng MPCC staff members' training visits and career path development over a period of 18 months. A detailed, dated training session, stating the minimum training and support requirements that were applied to the participants in the case study, is presented in Table 5.11.

Table 5.11: Ikageng MPCC staff training sessions

Ikageng MPCC staff training sessions	
Period	**Description**
02 July 2001 to 06 July 2001 (Week 1)	1. MPCC Orientation 2. Introduction to Windows 3. MS Word Tutor Training: *CBT CD-ROM* 4. MS Excel Tutor Training: *CBT CD-ROM*
30 July 2001 to 03 August 2001 (Week 2)	1. MS Word Tutor Training (continued) 2. MS Excel Tutor Training (continued) 3. MS Publisher Tutorial
25 September 2001 to 28 September 2001 (Week 3)	1. Business Skills Training: *Your Approach to Business* 2. Business Skills Training: *Costing and Pricing* 3. Business Skills Training: *Your Business Plan* 4. Content Creation: *Front Page Tutorial* 5. PC Components: *Technical CBT CD-ROMs*
22 October 2001 to 26 October 2001 (Week 4)	1. Business Skills Training: *Costing and Pricing* (continued) 2. Business Skills Training: Y*our Business Plan* (continued) 3. Business Skills Training: *Marketing* 4. Content Creation: *HTML Tutorial* 5. PC Components: *Technical CBT CD-ROMs* (continued)
12 November 2001 to 16 November 2001 (Week 5)	1. Business Skills Training: *Your Business Plan* (continued) 2. A+ Tutorial Material and Orientation 3. Content Creation (continued)
13 May 2002 to 17 May 2002 (Week 6)	1. Business Skills Training (Support) 2. N+ Tutorial Material and Orientation 3. Content Creation (Support)

Semi-structured interviews

Mason (1996: 38) refers to semi-structured interviews as qualitative interviewing, which are characterised by the following:

- a relatively informal style, for example with the appearance of a conversation rather than a formal question and answer format;
- a thematic; topic-centred, biographical or narrative approach, which covers the issues or themes the researcher wishes to cover; and
- the assumption that data are generated via interaction.

Semi-structured interviews have the advantage of allowing the interviewer to introduce new material into the discussion – material not thought of beforehand but, rather, developed during the course of the interview (Hitchcock & Hughes, 1989: 79). The semi-structured interview approach was very beneficial, as the element of flexibility allowed the interviewees to freely express their views. The purpose of the interview process was not to get simple “yes” or “no” answers, but rather to gather descriptions of episodes, linkages and explanations (Stake, 1995: 65).

Information and viewpoints from the Centre Manager and his management team were needed, as well as feedback from the Ikageng MPCC staff members. Their inputs were required in order to obtain – as far as possible – detail about and insight into the impact of the MPCC on the broader community. The data in this study were collected through semi-structured interviews and questionnaires.

Three different sets of questionnaires were prepared for the purpose of the case study in Itsoseng:

- a set for the Ikageng MPCC centre Co-ordinator;
- a set for the Ikageng MPCC staff members; and
- a set for the Ikageng MPCC users.

Although different sets of questions were posed to the Ikageng MPCC management, staff members and users, the questionnaires focused on the issues of background, sustainability, ownership, linkages, services, finances and uses of the Centre.

Questions to the Ikageng MPCC Co-ordinator and staff members focused on sustainability, ownership, linkages, services and finances.

Questions to the Ikageng MPCC users focused on user opinions of the Centre (for example: Do you think the centre is useful to the community?).

Open-ended questionnaires

Open-ended questions were chosen as they permit free response from the subject and allow greater freedom of expression and a wider range of responses (Ary, Jacobs & Razavieh, 1990: 411). As the researchers were interested in whether the management and staff of the Ikageng MPCC initiative have motivation, stability and direction in terms of the operations, the open-ended questions were preferred.

The open-ended questions were put to the Ikageng MPCC management to obtain more information on the needs and perspectives of the members of the community in Itsoseng.

Questionnaires were given to the Ikageng MPCC management to complete as part of the case study. They felt that they would fill in the questionnaires in their own time and post the questionnaires back to the researcher.

Table 5.12 (below) provides information about the completed questionnaires received from the three sets of respondents.

Table 5.12: Questionnaire sets received during the survey

Questionnaire sets	Quantity distributed	Quantity received	Percentage received
Ikageng MPCC centre Co-ordinator	1	1	100%
Ikageng MPCC staff members	3	3	100%
Ikageng MPCC users	50	30	60%
Interview with IMCOP management	3	3	100%

Other important data collection instruments used in the study include personal experience with regard to ICT-equipped rural community centres (Conradie & Jacobs, 2003: 30-33) and a literature study review.

Data entry and analysis

The case study research method was complemented by qualitative analysis. According to Babbie (1992: 6) data analysis is "the non-numerical examination and interpretation of observations, for the purpose of discovering underlying meanings and patterns of relationships". According to Ary, Jacobs & Razavieh (1990: 449) data collection and data analysis take place simultaneously. From the outset (the first interview or observation), the qualitative researcher is reflecting on the meaning of what has been heard and seen. This process of data analysis is inductive as it proceeds from data to hypotheses to theory (Ary, Jacobs & Razavieh, 1990: 450). They further state (1990: 451) that data analysis involves working with data, organising them, breaking them into manageable units, synthesising them, searching for patterns, discovering what is important and what is to be learned, and deciding what to tell others. This study involved all the abovementioned processes, in order to make a qualitative analysis of the findings. The research data were obtained through the interview process, site visits and questionnaires used in conducting the survey in the Itsoseng Community but, more specifically, at the Ikageng MPCC itself.

During the visit by the research team on 27 February 2003, the Ikageng MPCC management was interviewed on general issues concerning the current and future existence of the Centre. During the discussion session the leadership pointed out a number of existing stumbling blocks for the continued existence of the Centre.

Results obtained from the questionnaires indicated that Itsoseng is categorised by all respondents as a Township and that they see the Centre as a true MPCC.

Conclusion and recommendations

After the involvement of, and feedback from, the Centre Manager, users and staff members, this paper reflected on the best practices implemented by Itsoseng's Ikageng MPCC. The greatest issues of concern for the Centre are funding and suitable premises. The Centre provides for the needs of the community, as was found from positive user feedback.

The motivation behind this study was to develop and investigate a mechanism to successfully implement ICTs in a new or existing community centre of South Africa to contribute towards integrated service delivery mechanisms for rural and peri-urban communities.

The framework for the analysis of community centres allowed the researchers to gain insight into the Ikageng MPCC's financials and infrastructure, as well as the services provided with the available infrastructure. The researchers also focused on the management/operational structure of the Centre. However, the analytical framework could be improved by adding *continuous support* as a criterion for analysing technology-equipped community centres.

Key findings from the case study that can be replicated elsewhere are that once the technology is provided to a community centre, training is of the utmost importance, in order to assist the centre to grow towards sustainability. Sustainability will depend on whether the services that are provided are addressing the needs of customers in that particular community. It is important for a technology-equipped community centre to stay visible within the community and to remain at the same site; lack of proper maintenance of technology and moving the centre around in a community

create disillusionment among customers and inconsistency in service provision. The tendency for certified trainers and senior staff to leave such centres for better prospects in urban areas creates problems for consistency in provision of services.

It would appear from the study that more research needs to be done regarding governance of these community centres, in order to develop processes of centres as enablers – able to improve the business results of an ICT-hub and thus create sustainability.

Such successful ICT-hub model implementations (such as the example evident at Itsoseng) need to be communicated/marketed by research teams, community leaders and staff members and through various media and channels (e.g. websites, networking with investors and seminars) – in a bid to increase visibility and awareness of such initiatives and to build on the newly created platforms with further research, development and testing projects.

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