

**Users' criterion of relevance of the support given by librarians on the use of Information and Communication Technologies: The case of Gaborone Public Library, Botswana**

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**Abstract:**

*The purpose of this study was to understand user's perspective of the relevance of the ICTs support service provided by librarians at Gaborone Public Library. The study adopted an interpretive approach and used semi-structured interviews and focus groups to gather qualitative data. Data was analysed in accordance with the Grounded Theory techniques of theoretical comparisons and theoretical coding involving open coding, selective coding and axial coding to build a deeper understanding of the users' perspective of user support relevance. Overall, the findings show that Gaborone Public Library (GPL) users have a complex conception of the relevance of the ICT support they get or expect to get from the public library. Users view the support as a process which should ultimately lead to a change in their life situations. Users have indicated both the integration of ICTs in everyday life situations and free access to the internet as the key motivating factors for them to use the ICTs support services provided by GPL. Despite the fact that users see the importance of the support, they indicated challenges such as inadequate resources, as a hindrance to this wonderful initiative. Arising from the findings, the study has therefore recommended that the GPL should increase its resources.*

**Keywords:** ICT support, relevance and Public libraries

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## 1. Introduction

How do users perceive the ICT support or help they receive from the library? What ICT support or help do users expect (or request) to get from the library? How do users judge the relevance and usefulness of the ICT support or help they receive from the library? These are some of the key questions that we set out to answer by interacting and analysing conversations and observations that we had with users of computers and the Internet at Gaborone Public Library in Botswana

Incidents of user dissatisfaction with services are not uncommon in public libraries, particularly in situations where librarians have to provide support or help users with ICTs, an area that they have limited skills (Black & Melvyn, 2002; Gould & Ricardo, 2010; Parasuraman, 2004; Aegard, 2010). Scholars and professionals have acknowledged librarians' deficiencies to provide user support or help with the use of ICTs. Users also rate public libraries lowly when compared to other public access venues, as they do not perceive them as important or useful places to get help, or access to current information and communication technologies (Gould & Ricardo, 2010). In addition, as Gould and Ricardo further notes, users attach low value to the librarian's ability to provide training and support for ICT. The American Library Association digital literacy Task Force identified similar challenges facing libraries to include lack of recognition, insufficient resources, lack of capacity and skill to implement adequate programs (American Library Association, 2013). Gould & Ricardo, (2010) reported in a case study done in Mongolia that library staff often lack the technical skills required to properly assist users in utilizing technology-based services, or to maintain the equipment. In the same paper the need for increased training for both users and operators came up as the dominant factor to enhancing the use of ICT in libraries.

Notwithstanding the many challenges, the deployment of ICTs in public libraries is on the rise, as is the demand for instructions and technical support or help. Available literature acknowledges this development as an essential part of both the international and national agenda to reduce the digital divide and increase the digitally literacy amongst the citizens (Gibson, Bertot, & McClure, 2009; Nygren, 2014) and Spacey, Goulding, & Murray, 2003). Increasingly national governments, civil society and other development agencies are diversifying means to provide public access and public libraries across the world are expanding their services to include provision of access to information and communication technology such as computers and the Internet (Quick, Prior, Toombs, Taylor, & Currenti, 2013). However, just providing access alone to users is not adequate; users need some basic computer skills, as well as the competence to use those skills to find, evaluate, use, create and share information. Therefore, public libraries have a responsibility to ensure that they not only provide access but also give assistance to those users who need assistance to use the technology (Beyond Access, 2012). In this regard, the library would be contributing to the Digital Literacy of the community or nation.

To address the deficiencies on the part of the librarians, several initiatives have been put in place to prepare them for the additional role to help users with the ICTs in the libraries, (Gannon-Leary, Banwell, & Parker, 2003). For instance, in-service training programs have been mounted, with some countries developing and delivering national curricula for serving librarians (Big Lottery Fund, 2004). Library schools have been challenged to ensure that they

produce graduates with the requisite skills needed to support users of ICTs in libraries by aligning their curricula with these new roles.

## **2. The need for evaluation**

In any service provision, evaluation is an essential component for effective design and delivery. Most of the research on evaluation of the user support service provided by public libraries has applied criteria for the librarians and researchers themselves (Gibson, Bertot, & McClure, 2009). Specifically, the studies focused on the perceptions of the librarians, benefits of the programs, barriers and challenges that the libraries encounter in their provision of service as perceived by the librarians (Spacey, Goulding, & Murray, 2003). In addition, the evaluation looked at the measures libraries put in place to assist users to productively use computers and the Internet. Another body of literature shows emphasis on impact surveys (Fairbairn & Lipeikaite, 2014). Other studies focused on users' perceptions of the benefit of ICTs in the public libraries and/ or the level of distribution of ICTs in libraries across a country (Quick, Prior, Toombs, Taylor, & Currenti, 2013). Research on user support evaluation criteria from users' perspectives is scarce. Little has been done to evaluate user support services for public access venues, particularly in public libraries applying criteria developed by users themselves. Libraries should make sure that they give appropriate ICT support to users and that it should be relevant and useful. Therefore, our study had the goal of ensuring that the voices of users take an upper hand in the articulation of a criteria or development of indicators that measure the relevance and usefulness of the ICT support or help given to users in the public library. The study was guided by the following broad objectives:

3. To interact with users in order to get an understanding of how they perceive the ICT support or help they receive from the library;
4. To find out the kind of ICT support or help users expect (or request) to get from the library;
5. To understand the criteria that users employ to judge the relevance and usefulness of the ICT support or help they receive from the library.

The study addressed the above objectives through interactions with users and non-users of public access ICTs at Gaborone Public Library to get an understanding of their expectations, needs, and preferences for ICT support or help services provided by the library, and how it can improve its ability to respond to increased demand of public access to ICTs.

## **6. User support**

In our study, user support refers to any help that a user receives, or expects to receive, from the library to effectively use computers and the Internet to accomplish his or her tasks. The support qualifies as ICT support if strategies to assist requires the librarian to possess a level of technical skill and is able to design and deliver an instructional program to help users, (Arnason, 2012). Libraries have been for some time alive to the instructional needs of users and have proactively developed training programs to teach users how to use ICTs and other electronic resources in the library (Wilson, 1998).

The need for ICT user support or help in public libraries can never be overemphasised. As Arnason, (2012) concluded in a study that explored the types and nature of assistance library customers ask library staff for in a large Canadian urban public library system, "Technology help is a core customer need" (p.23) . Requests received vary in complexity and sometimes

they get resolved with instruction. The study also found that the library's Internet, workstations and printing system present critical usability challenges for users and therefore constitute the highest requests for help received by the library. When writing specifically about support in the use of technology in a public library, Smith(2011) mentioned the following: Teaching people to use the internet; helping people set up email accounts; showing people how to use online job boards; showing people how to use online council & government services; teaching people to use online resources e.g. e-books and e-journals; giving people login details for library computers and helping them when they have problems or have forgotten their passwords etc.; providing technical support on systems and tools (i.e. loading eBooks from something like Overdrive on to an e-reader); helping people use the photocopier/printer/fax machine; showing people how to integrate emerging technologies into their daily lives; helping people with online council housing lists; explaining how Wi-Fi works; helping people structure and write CVs using word processing software and online forms and providing information technology classes.

## **7. Users' criterion of relevance**

Governments, policy makers and others are challenging libraries to demonstrate why they should continue receiving funding from them. Hence the relevance of the services they provide is increasingly becoming a part of public discussions. Relevance is one of the key terms in the evaluation of the quality of a library service (Edwards & Browne, 1995). However, the term is difficult to define. A search for literature reveals that the term is a subject of interest in many disciplines (e.g. education, information science, psychology, research, accounting, information systems, language etc.) However, there is no common definition, sometimes even within a discipline. The definition is context or situation dependent. Another interesting observation is that studies that analyse the term relevance are scarce. Relevance is never explicitly defined, hence its meaning is implied and there is an implicit assumption that the reader understands the meaning as used. A cursory search of literature reveals several attributes of the term relevance. For instance Roberson (2013) taking an education (teaching and learning) perspective, sees relevance as something that is perceived to be interesting and worth knowing. In this study relevance means the degree to which the help or support that the library gives users on ICTs meets their real needs. It is concerned with whether the help or support provided assisted the user to deal with an important issue of life. The user should see it as interesting and worth receiving. The users' requirement for ICT support or help emanate from their everyday live activities. Hence the purpose of analysing the relevance of the ICT support given by the library is to ensure that the service is useful in their lives. Therefore, it is important that we identify the user groups and their needs and keep abreast of current and potential users.

## **8. Context of the study**

The context of this study is the computers and Internet provision by public libraries in Botswana to users for free. The project was implemented as part of the government initiatives to implement the National ICT policy imperatives.

The public library system in Botswana is under the parenthood of the Botswana National Library Service (BNLS). BNLS was enacted by an Act of Parliament (CAP 58:02) in 1967 with the sole mandate of the provision of information and library services to the nation for educational, recreational and capacity building purposes in all formats. The Act has established a network of public libraries, (37) including Gaborone Public Library. Amongst

these are twelve (12) community libraries, with the latter being a product of a tripartite partnership between the Government of Botswana, the communities at whose villages these libraries are located, and the Sara and Robert Rothschild Family Foundation. There are also sixty-seven (67) Village Reading Rooms (VRRs). These are small libraries (usually a one-roomed library) at villages where there is no public/community library. In fact, community libraries are a product of upgraded VRRs. These are run by the BNLS in conjunction with the Village Development Committees (VDC) of their respective villages. Out of these, twenty-five (25) public libraries, eight (8) community libraries and forty-two (42) VRRs have internet connection.

Gaborone Public Library (GPL) was officially opened on 8<sup>th</sup> April 1968, following the establishment of the Botswana National Library Service. The library has since been accommodated at the Gaborone City Council premises in the main mall at Independence Avenue, Plot No: 330. The library has a membership of about 10000 registered users. On average, the library receives about 170 customers on a daily basis and amongst these; about 50 come for ICT support services, (Library statistics, and April 2015 monthly report). The library currently has five (5) PCs which are connected to the internet. There is also a wireless connection for users to access either through internet ports or their personal laptops. Additionally, the library is subscribing to EbscoHost and ProQuest.

## **9. Methodology**

In designing our study we aimed to place user involvement at the centre of the data collection and analysis. Therefore, we adopted an interpretive approach. We collected qualitative data through focus group and semi-structured interviews. The key questions that guided the data collection process are provided in appendix 1.

The focus groups were done in such a manner that each group member had a chance to share his/her perception of support service received from the library. As for the semi-structured interviews, users were picked as they came in to the library for the provided services. Ten people formed the focus groups, with seven (7) people in the first group and three (3) in the second group. Fifty (50) individual users were interviewed. The data was analysed in accordance with the Grounded Theory techniques of *theoretical comparisons* and *theoretical coding* involving open coding, selective coding and axial coding to build a deeper understanding of the users' perspectives of the support service. The focus of the analysis was on the criteria users apply when judging the relevance of the support the library provides when they use ICTs in the public library.

We experienced some challenges during the study. Originally, our focus groups had ten people per group but only seven people turned for the first group and three for the second one. For the semi-structured interviews, the fifty users who were interviewed were mostly youth and young adults. Some users were reluctant to be interviewed, citing lack of trust in the system as they felt that their input was never recognised by way of implementing their suggestions. Time was also a hindrance in this study as some of the users felt that the interview would be eating up on their budgeted time, hence, they turned us down.

## **10. Findings**

This section presents the findings of the study. The presentation is organised according to the themes that were discovered from the data using the Grounded Theory analysis techniques of

open coding, selective coding and axial coding. Overall, the findings show that GPL users have a complex conception of the relevance of the ICT support they get or expect to get from the public library. They view the support as a process which should ultimately lead to a change in their life situations.

The ICT support process starts with the provision of access, which they also view as a support in itself. Further, the process requires resources, including the computers, Internet, and library space and is accomplished through various functions and activities e.g. (scheduling times and slots to use computers, training the users and providing supporting materials). The users receive ICT support because they see it as having the potential to change their life situations; hence they judge its relevance by looking at the extent to which it is aligned to the changes they expect in their life situation.

For instance, one user during the focus group discussion stated that “I can now operate a computer and am able to assist my children with their school assignments”. ICT support service delivery takes two forms: a) users may ask for help when they encounter difficulties in the use of computers; b) the library may provide scheduled trainings and also manage use to ensure equity and fairness in terms of the times that users have access to ICT facilities in the library.

Table 1 presents the categories discovered from the data grouped into (five) broad themes. These themes constitute the elements of the ICT support process as conceptualised by the respondents.

**Table 1: Discovered Elements of the ICT Support process**

<ul style="list-style-type: none"> <li>• The ICT service provision</li> </ul>
<ul style="list-style-type: none"> <li>• Resources               <ul style="list-style-type: none"> <li>○ Computers and printing facilities</li> <li>○ The Internet</li> <li>○ WI-FI</li> <li>○ Library space</li> <li>○ Library personnel</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Function, activities and policies of the library related to the use of ICTs               <ul style="list-style-type: none"> <li>○ Training</li> <li>○ Policies on the use of library computers</li> <li>○ Time slots allowed to use computers</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• User Friendliness Environmental               <ul style="list-style-type: none"> <li>○ Welcoming environment,</li> <li>○ Cooperation from fellow users</li> </ul> </li> </ul>

- Expected outcomes
  - The need to align support to life situations of the users
  - Benefits derived from the ICT support process
  - Alignment of resources, functions and activities to the daily life activities
  - Continuous support beyond the library
  - Exit plan

The next section provides a description of the themes, highlighting key sentiments expressed by the users.

### **11. ICT access in the library**

Data from both the focus group discussions and interviews shows that users have welcomed the introduction of ICTs in the library with much excitement and hope. To the users, this development has come at the relevant time because ICTs have become part of everyday life. This was evidenced by one user saying “the support is helping me to progress in life, more especially in my financial and academic needs”. Users cited several situations where they need computers in their lives including banking, health, education etc. Hence they come to the library to use computers for whatever work that they want to perform, including typing and editing of documents such as school work. Regarding the Internet, users reported that they come to the library to do online research, read and send email, use social networks like Facebook, send and receive school and work assignments, make online flight and hotel bookings etc. Those who cannot get access to the library PCs are at liberty to bring in their laptops and access wireless network. The study has indicated that one could either access wireless network through ordinary logon or can use available network ports provided by the library through the use of network cables available on loan. As they use these facilities, users are free from time to time to ask for assistance from the library staff when they encounter problems. Furthermore, the library provides basic computer training on first come first serve basis. Here the user has to book his/her turn. The programme is offered for three (3) months and it takes the user through an introductory course of Microsoft Office suite. Besides these, it is also evident from the study that users are always getting guidance and assistance on the use of the computers, such as log on and email account creation.

### **12. Resources**

The analysed data showed that users have a very high expectation from the ICT services provided by the library. Consequently, in their judgement, the library is only providing the bare minimum. Users reported that they are constrained by the inadequacy of the resources. They expected more in terms of the resources. Of particular interest to users are computers, printing facilities, the internet and space. Concerning the computers, the users indicated that the computers are not enough for the number of users who come to the library. One of them lamented that “sometimes we fail to access the internet because the computers are few and the place is crowded”. There are currently five (5) PCs which are connected to the internet. Two are at the main computer section of the library while three of these are at the children’s

section of the library, where usage is limited to computer training and use by children only. The two PCs at the computer section are the ones for all users to use for research, social media, checking email and/or word-processing. Users have identified this as a hindrance to their learning, especially those who are undergoing basic computer training as they do not have computers to use for practice at their own convenience. Users also expressed a desire to have printing facilities installed for them in the library.

There was also a general observation that users felt that the library does not have adequate number of staff to render the support needed, especially regarding basic computer training. The respondents reported that they needed to have more time with the staff to help them learn and acquire the skills they needed.

The internet access was also reported as a problem as observed by the users. The study has revealed that the internet is not only slow but it is also unreliable as it is very often unavailable. Access to the wireless network is also giving the users a problem, as none of the seven ports were working. Ordinary logon to their laptops sometimes give them a problem as very often it fails. All these problems dominated the discussion and users always sought the intervention of the library staff whenever they experience them. Another constraining resource that the users reported is working space. For instance, during the focus group discussion, all the trainees indicated that the children's library where the training is conducted is congested and as thus limits their ability to learn.

The study revealed that users do appreciate the ICT support service. However, they think more should be done. The library should make an effort to increase its resources. These include an increase in computers; an increase in network access by way of ensuring that the internet is always available and fast (increasing the bandwidth); and ensuring that the wireless network ports are working.

### **13. Function, activities and policies for ICTs support process in the library**

In order to enhance the experiences of the users, the library performs certain activities. The analysis of data showed that these activities and policies are part of the ICTs support service that the library renders to users. The library manages the use of computers through allocation of time slots to users. For basic computer training, users are allowed only one (1) hour per day which translates into five (5) hours per a week. The training is conducted in the children's section of the library while the children are still at school in the mornings until 1300 hours, when schools are out and children comes in to use their library. Users have also indicated that the five hours per a week are not enough as they do not have spare time after lessons to continue with the exercises by themselves. They also cannot come in the afternoons to use the computers as they are then used by the children. Also, this shortage of computers is crippling the support in that the users are saying sharing a computer by three people does not give them enough time for hands on practice during lessons. It was evident from the analysed data that both the basic computer training and computer access slots needed to be increased from one hour and 30 minutes respectively. However, there was no suggestion of how much time should be regarded as adequate.

For internet and other computer usage, the time slot is only 30 minutes per user on first come first serve booking system. The usage is monitored by Handy café software which automatically logs one off when the time expires. It is also evident from the data that the thirty (30) minutes time slot is too short, and that it is especially exacerbated by the slow



internet so that by the time one has managed to open the website, time is already up. “I cannot send an attachment because by the time the page is loaded, my thirty (30) minutes is already up”, lamented one of the users during the interview. The same applies to word-processing.

#### **14. User-Friendly Environment**

One of the key issues that emerged from the data relates to the friendliness of the environment in which the ICT support was given. Users tended to link relevance with whether the ICT support offered by the library is welcoming. Most users indicated that they valued the assistance if the gadgets are user friendly, and the staff who are assisting them are attentive, concerned, courteous, ready and willing to assist if approached for assistance. They indicated the desire to work in a quiet and comfortable environment to be welcoming. With regards to what currently occurs in the library, the users generally rate the support they get from the library staff as very friendly and courteous. As one of the respondents noted “The GPL staff is very friendly, always available when assistance is needed and always willing to help”.

In terms of user expectations to maintaining a conducive environment, the analysed data showed that users expect cooperation from fellow users. This cooperation should prevail amongst the users themselves as well as accorded to the library staff in order for the smooth and equitable service provision.

#### **15. Expected outcomes**

The analysed data shows that users did not conceptualise the support they get from the library as just an activity to make them use the technology, nor is it viewed as a once off thing. Users expect to get continuous support beyond the library programs. For instance, some users wished to be assisted to get basic computer literacy certificates, as well as acquire advanced ICT skills. Users referred to this as an “exit plan” for the service that the library provides. Further, the respondents reported that they were motivated to use the library services because ICTs are integrated in all aspects of life, and if they do not take advantage of the library service they would be left behind in the globalised world. They cited e-banking, social media, e-business (buying and selling), career advancement, education, information sharing through email, and job opportunities as some of the reasons which have compelled them to undertake the ICT training provided by the library. One user summed this up by saying “everything nowadays is computerised, even the switching on of some vehicles, (no more keys)”. The general ICT users on the other hand indicated the free access to internet and computers as their motivation for getting the support offered by the library, especially for those who cannot afford Internet cafes’. Users have also aligned motivation for getting the support with its relevance with their daily life activities and needs. The users expressed a desire that the ICT support the library provides should be linked to survival in the technology era. For instance, students link the help they get to being able to do their researches and assignments. However, it emerged during the interviews that some of the interviewees did not know or have not heard anything about the ICT support services offered by the GPL.

#### **16. Discussion and conclusion**

The findings of the study show that the help that users ask for is more than trouble shooting of technology related problems or merely acquiring a skill. The focus on changing individual

life situation and the needed support is expected to enable users to participate in the live activities requiring ICT skill. However, the general picture that emerges from the findings is that the relevance of ICT support as required by users at the GPL could be guided by the following questions which form the core of the support process and they are:

Have I put in place resources? And, are they adequate?

Have I put in place the appropriate function and activities for the users?

Is the environment conducive?

Is the support given aligned to the life situation of the users (daily life activities), including both the short and long term life goals of the users?

By answering these questions, the library could be able to make a judgement on whether the ICT support service they are providing is relevant or not. And arising from the findings, it is evident that GPL has brought about a wonderful initiative in ICTs support services, and that the users have welcomed this initiative with both hands, despite the fact that most of the users do not have full knowledge of this service. However, the limited resources are a hindrance to this noble initiative. The study has also indicated that user involvement in making decisions that affect service delivery is key. This has been derived from the users' perception that the time slots they (the users) are accorded for access are not sufficient for them to accomplish their business. This is therefore an eye-opener to the GPL staff to do a self-audit and go back to the users and consult them in future decision making that relates to service delivery through user needs surveys. The study revealed that users generally perceive the GPL environment as conducive, which is an encouraging factor for the staff. They have used the friendly, ever courteous and readily available and willing to assist attitude of the staff as their basis for this conclusion. Be this as it is, limited space in the library could be seen as a thorny issue regarding the conduciveness of the environment.

Lastly, the users have indicated that regardless of the already encountered challenges like inadequate resources, in accessing the ICTs support service provided by the GPL could not have come at a more opportune time than now where the integration of ICTs in everyday life has become a global phenomenon. Thus, the initiative is bridging the digital divide amongst the haves and those who could not otherwise afford these essential services.

## **17. Recommendations**

Arising from the findings of the study, it is recommended that:

- The library should increase its resources, namely, computers, library space and library staff to enable smooth and adequate service delivery.
- The library should provide printing facilities to enable basic computer trainees to have adequate lesson material.
- Proper maintenance plans of wireless network and its accessories be developed and adhered to in order to ensure availability and reliability of the service.
- The library should increase the network bandwidth to curb the slow and unreliable internet.
- The library should increase the time slots for both basic computer training and general access to the computers from one hour and thirty (30) minutes respectively to the yet to be decided duration.
- Lastly, the library should embark on a rigorous marketing exercise of the library services and activities, as well as an exit plan for the trainees upon completion of their training.

Appendix 1 presents key things that the data was focused on through open ended questions generated through discussions.

### **18. Appendix 1: Focus group and interviews guiding questions**

1. Tell us about the ICTs at the Gaborone Public Library.
2. Tell us about the support that the Gaborone Public Library provides to use the ICTs.
3. What are your reasons for getting or not getting the support from Gaborone Public Library to use the ICTs provided?
4. Tell us about the adequacy of the support.
5. Tell us about the relevance of the support.
6. Does the ICT support provided by Gaborone Public Library address your individual needs?
7. How welcoming is the ICT support service provided in the Gaborone Public Library?
8. Would you recommend that other users come to get the ICTs support service provided by the Gaborone Public Library?
9. Does the Gaborone Public Library ICTs support provide opportunities for getting further support beyond what is available in the library, e. g., referral or organising advanced training opportunities referral?
10. Tell us about the respect for users when they are assisted to use ICTs in the Gaborone Public Library.
11. What are your expectations in the ICTs support that you receive from Gaborone Public Library?
12. What should be the role of other library users in ensuring that the ICT support is more useful?

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