

## Internet use behaviour of cybercafé users in Morogoro Municipality, Tanzania

Alfred S. Sife

Senior Librarian, Sokoine University of Agriculture, P.O.Box 3022, Morogoro, Tanzania,  
Email: sifesas@yahoo.com

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Data on internet use behavior was obtained from 137 users in 10 cybercafés through questionnaires and the data thus obtained was analyzed using SPSS. The findings indicate that most cybercafé users in the study were young, male, better educated and mostly students. Many cybercafé users were computer literate but most had limited web using skills. The Internet was primarily used for searching academic information, communication as well as obtaining news and current affairs. There were weak correlations between demographic characteristics of respondents and the purposes of using the Internet. While many cybercafé users preferred search engines particularly Google and Yahoo, only a few were using web subject directories. The use of tools such as search engines, browsers, and social media in the study area correspond to many other world ratings. No adverse Internet addictive behaviours were exhibited by cybercafé users in the study area. Problems encountered in using the Internet are similar to those cited frequently in Africa. Increasing bandwidth and availability of electricity would improve connectivity and reduce Internet costs. It is also recommended that computer training programmes should include information literacy and ICT use for purposes such as e-business. Possible future research is also suggested.

**Keywords:** Cybercafés, Search behaviour, Internet use, Tanzania

### Introduction

For many people around the world, Internet is increasingly used for multitude of purposes, including communication, accessing information, and entertainment activities. The Internet has become an important means of maintaining and expanding interactions among families, friends, organizations, groups with common interests, and even those who have never met physically. Often, there is a relational continuum between online and offline social interactions<sup>1</sup>. The Internet amplifies the speed and ease with which information is shared regardless of space, volume or time. Since people tend to have complex mixes and patterns of communication systems, the Internet can replace, complement or add new dimensions to the existing systems. Consequently, improved sharing of information, in the interplay with other factors, may increase productivity; enhance access to services; increase market efficiency; simplify transactions; substitute for costly transport; improve governance, and create new economic opportunities, among many other benefits<sup>2, 3</sup>. There are also many online services related to entertainment and leisure such as music and video games. Generally, the Internet has become an essential component of people's lives.

Worldwide, more than 2.2 billion people were using the Internet by the end of 2011. However, the

penetration of the Internet is still uneven around the globe. While Africa remains the least developed continent in terms of information and communication technologies (ICTs), the continent is currently experiencing the fastest rate in the growth of Internet. As of December 2011, there were about 140 million Internet users in Africa, which is an increase of 2998.4% since December 2000 as compared to the world increase of 528.1% in the same period. Tanzania is among the top 10 African countries that experience a fast growth of Internet usage. The country had about 4.93 million Internet users in 2011 which is 11.5% of the total population. This is an increase of 4189.2% since December 2000<sup>4</sup>.

Like in many other African countries, Internet penetration and usage in Tanzania is hindered by many factors including poor telecom infrastructure, low functional and computer literacy rates, high costs of hardware and software, low income, insufficient English language proficiency, and inadequate power supply, among many other factors<sup>5</sup>. Available Internet services in many public places such as libraries, schools, colleges and universities are still characterized by slow connectivity, frequent breakdown of systems, inadequate computers and unreliable power supply. Consequently, many users rely on other modes of access such as cybercafés<sup>6</sup>. These are privately owned

public places that provide Internet and other ICT services at a fee. Although Internet availability in Tanzania is improving through the use of mobile phones and modems, such technologies still have some technical and cost limitations. For example, many people still possess mobile handsets that support limited computer applications. For that reason, cybercafés are still regarded as important modes of public Internet access in Tanzania, particularly in the urban areas.

While the original purpose of cybercafés has been to bridge the digital divide by serving those who do not have access to the Internet, a number of studies have shown that cybercafés do not really fulfill this purpose as they mostly serve people who already have access elsewhere. In Southeast England, Lee<sup>7</sup> reported that most cybercafé users were the habitual Internet users who were temporarily away from their usual access. Similarly, Lachmayr<sup>8</sup> reported that cybercafé users in Vienna were mostly people who in most cases had access elsewhere. In Uganda, Mwesige<sup>9</sup> established that the typical Internet users were the young educated males who could pay for Internet use. Besides inequalities in access to the Internet, there are also differences among individuals in using the Internet optimally. That is to say, individuals differ in their abilities to effectively and efficiently use the Web.

Cybercafés have been used for different purposes by various segments of users. In Norway, Laegran<sup>10</sup> reported that young people used cybercafé for e-mails, chatting and searching for music and films. A multi-national survey of Internet use found that recreational use is more common among younger users<sup>11</sup>. Another study<sup>12</sup> reported that students use cybercafés mostly for educational purposes while business people used cybercafés for business information and money transfer. Shiu and Dawson<sup>13</sup> found that teenagers used the Internet for activities such as communication and gaming, while older people to a larger extent used it for instrumental purposes such as purchasing goods and services. Similarly, a study conducted in Indonesia reported that cybercafés were mainly used for communication, instrumental and recreational purposes<sup>14</sup>. In Nigeria, cybercafé users used the Internet mainly for academic, business, and social purposes<sup>15</sup>. Shang *et al.*<sup>16</sup> reported that chatting and gaming were the major activities in cybercafés in China. The use of cybercafés has also been associated with anti-social behaviours such as playing violence-oriented electronic

games and viewing pornographic sites<sup>17</sup> as well as behavioural addictions to the Web.

In Tanzania, some empirical studies have attempted to assess cybercafé usage. A study on the knowledge and skills of cybercafé users reported that most users in Dar es Salaam were males who used the Internet primarily for communication and recreation<sup>18</sup>. Nnafie's<sup>19</sup> study on problems and opportunities of cybercafés found that most users in Dar es Salaam were young males who visited the cafés at least once a week mainly for communication purposes. A study on the rural-urban digital divide reported that most Internet café users were males, younger, better educated, and were willing to spend relatively more money for Internet<sup>20</sup>. In comparing the use of Internet cafes in Indonesia and Tanzania, Furuholt *et al.*<sup>21</sup> reported that the Web was mostly used for socially gainful activities. Recently, Sedoyeka<sup>22</sup> reported that many users are turning to Internet cafés because they could not afford to purchase computers or subscribing to the Internet. Most respondents in the Sedoyeka's study were urban students and professionals, and most were males in their mid-twenties.

This study was set out to understand the Internet use behaviour of cybercafé users in Morogoro municipality, Tanzania.

### Objectives of the study

- To understand the profile of cybercafé users in Morogoro municipality;
- To examine the purposes of Internet usage among cybercafé users;
- To assess the usage of various web search tools among cybercafé users;
- To examine the Internet addictive behaviours among cybercafé users; and
- To identify problems encountered in using cybercafés.

### Study context

Tanzania has an area of 9,45,000 square km with a population of about 43 million and a male/female sex ratio of 0.98. Almost three quarter of the population lives in rural areas. Tanzania's economy relies heavily on agriculture, which accounts for nearly half of the Gross Domestic Product (GDP). The country's literacy rate is 78.2% and the official languages are Kiswahili and English. Kiswahili is the most widely spoken language and English is used as a medium of instruction for secondary and higher education. Only

13% of the households are connected to electricity. Telecommunication is one of the most liberalized and fast growing sectors in the country (Table 1).

Morogoro municipality where this study was carried out is located on the eastern side of Tanzania Mainland, about 200 km west of Dar es Salaam city. The municipality is the headquarters of Morogoro region, which is one of the 30 administrative regions in Tanzania. The population of Morogoro municipality is estimated to be 264, 216 people<sup>23</sup>.

### Methodology

This study was carried out in August 2012 in the Morogoro Municipality in Tanzania. A survey technique was employed to obtain data from 10 out of 11 cybercafés available in the municipality. The eleventh cybercafé was used for pre-testing the study questionnaire. All cybercafés available in the municipality were included in the study because the target population of users was relatively small. The target population comprised of individual Internet users in these cybercafés. Initially, letters were sent to each cybercafé to request for permission and explain the purpose of the study. Following the acceptance

by the cybercafé management, self-administered questionnaire were distributed randomly to users whom the researcher met personally at each cybercafé. Since it was difficult to get the number and list of users for each café (sampling frame), it was decided that 15 individuals from each cybercafé should be given the questionnaire to fill. At each cybercafé, every other user who left the café was asked to participate in the survey. Where the individual was not willing to participate, the next willing person was given the questionnaire, and the counting continued from there. In order to increase the response rate, respondents were encouraged to fill in the questionnaire on the spot. However, many took the questionnaire with them and would return them to the cybercafé after filling. A total of 150 questionnaires were distributed, and of these, 137 (91.3%) completed questionnaires were returned. Issues measured through the questionnaire include demographic characteristics of respondents, reasons for using the web, usage of web tools and services, addictive situations and problems encountered. Data were statistically analyzed using SPSS for Windows 16.0 and the findings presented mainly using frequencies and percentages.

Table 1—Country statistics

Area (sq. km.)	945,087
Population (mil.)	43.18
Urban population (mil.)	11.38
Rural population (mil.)	31.80
Sex ratio (male/female)	0.98
Age structure (%)	
0-14 years:	41.4
15-64 years:	55.6
65 -> years	2.9
Life expectancy at birth (years)	53.14
Literacy (%) ( <i>Age over 15 year who can read and write</i> )	
Total	78.2
Male	85.9
Female	70.7
GDP (PPP) per capita (\$)	1,500
Official language	Kiswahili, English
Households with electricity (%)	13
Mobile Operators	7
Fixed Line Operators	2
Internet Service Providers/Data Operators	38
Fixed telephone subscribers	173,075
Mobile telephone subscribers	26.8 mil
Internet users	4.9 mil

Source: Internet World Stats<sup>4</sup>; TCRA<sup>6</sup>; CIA<sup>24</sup>; NBS<sup>25</sup>.

### Analysis

#### Characteristics of cybercafé users

The study findings indicate that more than half (54.7%) of the respondents were younger than 25 years of age and the vast majority (86.8%) were below 35 years. There were more males (54.7%) than females (45.3%) and most (71.8%) were single. In terms of education, almost all (97.1%) respondents had a minimum of secondary level education with 40.2% having bachelor degrees and above. The occupational distribution indicate that 40% of the respondents were students followed by private sector employees (22%) (Table 2). In sum, majority of cybercafé users in the study area were young, male, better educated and mostly students. Many of these demographic characteristics are consistent with previous studies conducted in Tanzania<sup>18,20</sup> and in other countries<sup>9,26,27</sup>. Nevertheless, the proportion of females using the Internet in this study was slightly higher compared to the previous studies<sup>9,20</sup> suggesting that existing gender digital divides are narrowing.

These demographic characteristics suggest a number of issues. First, the findings in this study

confirm what others<sup>9,28</sup> have reported about the way cybercafés contribute to widening the digital divide because most users are those already having access to the Internet elsewhere. In other words, the findings in this study contradict the discourse that cybercafés in poor countries provide shared and relatively cheaper Internet access to people who lack access. Second, the high proportion of users with better education reinforces the fact that good level of education and English language proficiency in particular are prerequisites to the use of Internet and other ICTs. As alluded to earlier, in Tanzania English is mainly used in the secondary level education and above. Third, the higher proportion of students as cybercafé users is mainly because there are many education institutions in the municipality. Besides secondary schools, colleges and some religious institutions, there are four universities namely Jordan University College, Mzumbe University, Muslimu University of Morogoro, and Sokoine University of Agriculture. It is possible that because of limited Internet services in these institutions, students visit cybercafés to search

for academic related information. Fourth, the fact that Internet use is higher among young people supports earlier observations that ICT adoption tend to decrease with age<sup>22</sup>. Nonetheless, these findings suggest that it is possible for the current Internet users to continue being active users even when they grow older.

The study findings in Table 3 indicate that many (64.2%) respondents had undergone some form of

Table 2—Demographic characteristics of respondents

Variable	Frequency	Percent	
Age	15 – 20	25	18.2
	21 – 25	50	36.5
	26 – 30	24	17.5
	31 – 35	20	14.6
	36 – 40	11	8
	41 and above	7	5.1
Sex	Male	75	54.7
	Female	52	45.3
Marital status	Single	98	71.8
	Married	39	28.5
Level of Education	Primary	3	2.2
	Secondary	37	27
	Certificate	17	12.4
	Diploma	24	17.5
	First degree	42	30.7
	Postgraduate	13	9.5
Occupation	Others	1	0.7
	Student	55	40
	Government employee	19	14
	Private sector employee	30	22
	Business	14	10.2
	Retired	4	2.9
	Unemployed	15	10.9

Table 3—Internet usage characteristics

Variable	Frequency	Percent	
Duration of formal computer training	1 – 3 months	54	39.4
	4 – 6 months	34	24.8
	6 – 9 months	5	3.6
	1 year	9	6.6
	More than 1 year	14	10.2
	No formal training	21	15.3
How computer skills obtained	Through formal education	62	45.3
	Through short courses	60	43.8
	Through some informal training	7	5.1
	Others	8	5.8
Training on internet use skills	Yes	56	40.9
	No	81	59.1
Internet use experience	Less than 1 year	25	18.2
	1 – 3 years	45	32.8
	4 – 5 years	26	19
	More than 5 years	41	29.9
Frequency of visiting cybercafés per week	1 – 2 days	73	53.3
	3 – 4 days	37	27
	5 – 6 days	7	5.1
	Everyday	20	14.6
Amount of time spent at the cybercafés per day	Less than 1	36	26.3
	1 – 3 hours	87	63.5
	4 – 6 hours	5	3.6
Visiting hours to cybercafés	More than 6 hours	9	6.6
	Morning	36	26.3
	Afternoon	23	16.8
Reasons for visiting cybercafés	Evening	74	54
	Late night	4	2.9
	Lack of computers elsewhere	52	38
Reasons for visiting cybercafés	Lack of internet elsewhere	34	24.8
	Meeting friends	16	11.7
	Get help in the café	5	3.6
	Get better internet speed	26	19.0
	Other reasons	4	2.9

computer training of one to six months mostly through formal education (45.3%) and short courses (43.8%). Despite the fact that Internet use skills are necessary for one to effectively use web services, most (59.1%) respondents had not received specific training on Internet use. Close to one third (29.9%) of the respondents had used the Internet for five years or more whereas 18% were relatively new users having experience of less than a year. Many (54%) respondents visited cybercafés mostly in the evenings followed by those who were visiting in the mornings (26.3%). The findings revealed further that most (63.5%) respondents spent between one and three hours at the cybercafés. More than half (53.3%) visited cybercafés for one and two days in a week and only a few (14.6%) visited cybercafés everyday. The major reasons for visiting cybercafés were either because the respondents lacked access to computers (38%) or Internet connectivity (24.8%) elsewhere.

The findings in this study imply that many cybercafé users were not using web services optimally because they lacked skills on Internet use. Given the large volume, variability and uneven quality of information available on the Web, it is necessary for users to possess skills that will enable them to reap the benefits of the web. The study findings on Internet use experience were consistent with those reported in Nigeria<sup>29</sup>. These findings also support those in Table 1 which indicate that most cybercafé users were relatively young; hence they had less experience. Most respondents preferred visiting cybercafés during the evenings perhaps when they are through with their normal chores. However, these findings are contrary to those reported in Nigeria<sup>30</sup> in which many users did not have specific period of visiting the cybercafés. The proportion of users visiting cybercafés on daily basis in this study was low compared to that reported in Uganda<sup>9</sup>. It is possible that the frequency of visiting

cybercafés and amount of time spent was limited by the costs of Internet access. During this study, average charges for Internet access in the study area were about US \$0.8 for one hour. Considering that many users were students, it is possible that they could not afford to visit the cafes regularly because of these costs.

#### Purposes of cybercafé usage

The findings in Table 4 indicate that cybercafés were frequently used for academic/research purposes (59%), communication (50.4%) as well as searching news and current affairs (50%). About one third of respondents visited cybercafés frequently for job search/application (30.7%), college/scholarship application (34.4%) and leisure/entertainment (27%) purposes. Several studies<sup>7,26,29, 30</sup> have documented similar purposes for cybercafé use elsewhere. The proportion of those using the Internet for business purposes (22.7%) has improved as compared to previous studies in Tanzania<sup>22</sup> although it is still generally low. Surprisingly, the least frequently cited reason for using the Web was visiting pornographic sites. The overwhelming majority (85.6%) of respondents claimed that they had never visited pornographic sites.

The fact that many respondents used Internet for academic/research purposes concurs with the findings in Table 2 that many cybercafé users were students and their major purpose could be to obtain information for their assignments and research activities. The findings also confirm that the Internet is an important means of communication and a key source of news. The use of Internet for business purposes is not widely adopted in the study area mainly because of the cash nature of business transactions which are still dominant in the country. On one hand, the low proportion of those visiting

Table 4—Purposes of cybercafé usage

Purposes	Often	Occasionally	Never	Total
Academic/research purposes	79 (59%)	49 (36%)	6 (4.5%)	134 (100%)
Entertainment/recreation	34 (27%)	80 (63.5%)	12 (9.5%)	126 (100%)
Job search/application	39 (30.7%)	59 (46.5%)	28 (22%)	126 (100%)
College/scholarship application	44 (34.4%)	58 (45.3%)	26 (20.3%)	128 (100%)
Downloading software	27 (21.3%)	55 (43.3%)	45 (35.4%)	127 (100%)
Communication	65 (50.4%)	56 (43.4%)	8 (6.2%)	129 (100%)
Accessing news and current affairs	66 (50%)	54 (40.9%)	12 (9.1%)	132 (100%)
Downloading music/movie	15 (11.9%)	34 (27%)	77 (61.1%)	126 (100%)
Visiting pornographic sites	3 (2.4%)	15 (12%)	107 (85.6%)	125 (100%)
Business	29 (22.7%)	44 (34.4%)	55 (43%)	128 (100%)

pornographic sites nullifies the accusations that cybercafés are used for anti-social behaviours. However, for cultural reasons, the respondents could be shy to admit even if they had been visiting websites with pornographic content. Observations made during the study revealed that there were restrictions for viewing pornographic sites from cafe owners.

#### Relationship between purposes of cybercafé usage and demographics of respondents

The findings in Table 5 present the relationships between demographic characteristics of respondents and selected purposes of using cybercafés showing correlation coefficients ( $r$ ) for each item and their  $p$ -values in brackets. At  $p = 0.05$ , relationships ( $r = -0.47$  to  $0.30$ ) between these variables were generally weak. Specifically, the use of Internet for academic purposes indicated positive and significant relationship with age ( $r = 0.179$ ); suggesting that Internet use for academic purposes increased among mature users. Similarly, the use of Internet for communications exhibited positive and significant relationship with age ( $r = 0.27$ ). On the other hand, Internet use for college and scholarship applications exhibited negative and significant relationship with level of education ( $r = -0.282$ ) meaning that the lower the level of education, the lower the use of Internet for college and scholarship applications. The use of Internet for news and business purposes also exhibited significant relationships with some demographic characteristics.

#### Usage of various web search tools

In order to effectively search information, one can use tools such as search engines and web directories. The engines enable web users to input keywords related to the desired information whereas web directories organize websites into subject categories.

Often, web users start with search engines when looking for specific information. In this study, Google (88.3%) and Yahoo (75.7%) were the most frequently used search engines (Table 6). These findings somewhat correspond to other ratings of search engines<sup>30,31,32</sup> in which Google is frequently rated as first search engine of choice by many users. In contrast, only a handful of respondents preferred Web subject directories. Malik and Mahamod<sup>33</sup> also reported a low trend of browsing Web subject directories. This might be because of low awareness of the Web features and inadequate Internet use skills. The findings also show that cybercafé users preferred Mozilla Firefox (66.4%), Google Chrome (52.3%) and Internet Explorer (48.1%). Often, most users tend to stick with a particular browser because the more one uses a given browser, the more familiar one becomes with it.

#### Using social web services

In recent years, social media tools have become popular particularly with the young generation, helping them to build connections based on related interests, work, interactions and personal relationships. It is evident from the results (Table 7) that the respondents were frequently using Facebook (77.3%), Twitter (41.1%), YouTube (32.5%) and Blogs (27%). Studies conducted elsewhere have also reported more or less similar trends<sup>34,35,36</sup>. Since Facebook and Twitter are largely used for communication, these findings tally with those in Table 4 in which communication is among the major purposes of visiting cybercafés.

#### Internet addictive behaviours

Internet addictive behaviours are often associated with the amount of time users spent online, obsessive thoughts about the Internet, and loss of control over

Table 5—Relationship between purposes of cybercafé usage and demographic characteristics of respondents

Demographics	Purposes of using Internet						
	Academic	Entertainment	Job Search	College/ Scholarship	Communication	News	Business
Age	0.179* (0.038)	0.130 (0.148)	0.05 (0.577)	0.048 (0.593)	0.270* (0.002)	-0.200* (0.021)	-0.473* (0.000)
Sex	0.058 (0.509)	-0.079 (0.379)	-0.050 (0.574)	0.117 (0.187)	-0.126 (0.155)	0.200* (0.022)	0.305* (0.000)
Education	-0.129 (0.136)	-0.085 (0.343)	0.005 (0.958)	-0.282* (0.001)	-0.005 (0.952)	-0.418* (0.000)	-0.378* (0.000)
Occupation	0.083 (0.338)	-0.026 (0.777)	-0.025 (0.784)	0.102 (0.253)	0.140 (0.113)	0.035 (0.688)	-0.282* (0.001)

\* Correlation is significant at the 0.05 level

Table 6—Frequency of using various search tools

Search engine	Often	Occasionally	Never used	Total
Google	121(88.3%)	14 (10.2%)	2 (1.5%)	137 (100%)
Yahoo	103 (75.7%)	28 (20.6%)	5 (3.7%)	136 (100%)
MSN Search	23 (18.7%)	48 (39%)	52(42.3%)	123 (100%)
Infoseek	2 (1.6%)	29 (23.6%)	92 (74.8%)	123 (100%)
Altavista	2 (1.6%)	24 (19.2%)	99 (79.2%)	125 (100%)
Google scholar	17 (13.6%)	51 (40.8%)	57 (45.6%)	125 (100%)
Ask.com	9 (7.1%)	42 (33.3%)	75 (59.5%)	126 (100%)
Gigablast	0 (0.0%)	17 (13.9%)	105 (86.1%)	122 (100%)
<b>Directory</b>				
Open Directory	47 (37.3%)	48 (38.1%)	31 (24.6%)	126 (100%)
PINAKES	13 (10.4%)	52 (41.6%)	60 (48%)	125 (100%)
Complete planet	17.9 (17.9%)	49 (39.8%)	52 (42.3%)	123 (100%)
Librarians' Internet Index	20 (15.9%)	64 (50.8%)	42 (33.3%)	126 (100%)
Yahoo! Directory	39 (30.7%)	60 (47.2%)	28 (22%)	127 (100%)
Virtual Library	7 (5.7%)	63 (51.2%)	53 (43.1%)	123 (100%)
<b>Browser</b>				
Mozilla	89 (66.4%)	36 (26.9%)	9 (6.7%)	134 (100%)
Internet explorer	63 (48.1%)	53 (40.5%)	15 (11.5%)	131 (100%)
Google chrome	67(52.3%)	38 (29.7%)	23 (18%)	128 (100%)
Opera	20 (15.9%)	47 (37.3%)	59 (46.8%)	126 (100%)

Table 7—Frequency of using various social web services

Social web services	Often	Occasionally	Never used	Total
Facebook	102 (77.3%)	26 (19.7%)	4 (3%)	132 (100%)
Twitter	53 (41.1%)	50 (38.8%)	26 (20.2%)	129 (100%)
LinkedIn	12 (9.7%)	31 (25%)	81 (65.3%)	124 (100%)
YouTube	41 (32.5%)	46 (36.5%)	39 (31%)	126 (100%)
Blogs	34 (27%)	53 (42.1%)	39 (31%)	126 (100%)
Wikis	22 (17.2%)	35 (27.3%)	71 (55.5%)	128 (100%)
Podcast	1 (0.8%)	15 (12.2%)	107 (87%)	123 (100%)
Flickr	2 (1.6%)	9 (7.3%)	113 (91.1%)	124 (100%)

Internet usage<sup>37</sup>. To measure the Internet addictive behaviours of cybercafé users, eight statements were provided for the respondents to indicate how often certain situations happened to them. The findings in Table 8 indicate that majority cybercafé users dismissed the statements related to the addictive Internet behaviours although many agreed that some such situations do happen occasionally. Only one third (36.8%) of the respondents indicated that they always use the Internet for longer time than planned. However, this might also be attributed to other factors such as slow Internet speed and lack of search skills. Generally, cybercafé users in the study area did not exhibit adverse addictive behaviours associated with Internet usage.

#### Problems encountered in using cybercafés

Respondents were asked to indicate (using a four-point scale: 1 = not a problem to 4 = major problem) the magnitude of problems encountered in using cybercafés. The findings show that all listed problems were of much concern as more than a third of the respondents singled them either as 'problems' or 'major problems'. Specifically, the slow speed of Internet (71.4%), high costs (62.3%), unreliable Internet connectivity (51.2%), inadequate Internet use skills (42.1%), power problems (41.2%), and inadequate computers (39.5%) were rated either as problems or major problems (Table 9). Generally, these are the same problems that have been reported repeatedly in studied emanating from many African

Table 8—Internet addictive behaviors

Statement	Always	Sometimes	Never	Total
Use the Internet longer than planned	49 (36.8%)	63 (47.4%)	21 (15.8%)	133 (100%)
Would rather use the Internet than meet with friends	18 (14%)	67 (51.9%)	44 (34.1%)	129 (100%)
People complain that I spend too much time online	19 (14.5%)	21 (16%)	91 (69.5%)	131 (100%)
Spend so much time online that it disturbs my things	8 (6.1%)	31 (23.7%)	92 (70.2%)	131 (100%)
Feel lost if not online	15 (11.5%)	62 (47.7%)	53 (40.8%)	130 (100%)
Feel annoyed if disturbed while using the Internet	14 (10.7%)	34 (26%)	83 (63.4%)	131 (100%)
When not online, I often think about the Internet	14 (10.6%)	46 (34.8%)	72 (54.5%)	132 (100%)
I tend to ignore/forget other things because of internet	10 (7.7%)	29 (22.3%)	91 (70%)	130 (100%)

Table 9—Problems encountered in using cybercafés

Problems	not a problem	somewhat a problem	Problem	major problem	Total
High costs	25 (19.2%)	24 (18.5%)	46 (35.4%)	35 (26.9%)	137 (100%)
Slow speed of internet	11 (8.5%)	26 (20.2%)	38 (29.5%)	54 (41.9%)	129 (100%)
Unreliable internet connectivity	17 (13.6%)	44 (35.2%)	49 (39.2%)	15 (12%)	125 (100%)
Power problems	26 (20.6%)	48 (38.1%)	44 (34.9%)	8 (6.3%)	126 (100%)
Inadequate computers	24 (19.4%)	51 (41.1%)	43 (34.7%)	6 (4.8%)	124 (100%)
Inadequate internet usage skills	38 (30.2%)	35 (27.8%)	47 (37.3%)	6 (4.8%)	126 (100%)

countries<sup>5,6,38</sup>. In Tanzania, slow and unreliable Internet connectivity is a result of low bandwidth. Although a fibre optic system that was launched in the country in 2009 is expected to provide faster connectivity, the system has yet to reach many communities. It seems a lot of work is still needed to lay the cables across the country. Power outages are a problem militating against Internet use in many African countries<sup>39</sup>. In Tanzania, frequent power failures and power rationing are a common phenomenon in many regions including Morogoro. As a result, cybercafé operators tend to use standby electricity generators when power outages occur and they compensate these costs by increasing cybercafé use charges. Lack of Internet use skills results from the fact that information literacy is often not included in computer training programmes. Although there are overlaps between computer literacy and information literacy, the former deals with skills related to using computer hardware and software whereas the latter focuses on the skills required for locating and evaluating information from a range of sources. That is to say, a person who knows all computer programmes may be information illiterate.

### Conclusion and Recommendations

The findings in this study paint a general picture which corresponds to that of the world in many cases. Most cybercafé users in Morogoro municipality are

those who already have Internet access elsewhere and many are young, male and better educated. The Internet is primarily used for searching academic information, communication and searching news. There were generally weak correlations between demographic characteristics of respondents and the purposes of using cybercafés. Many cybercafé users prefer using search engines mostly Google and Yahoo to Web subject directories. Other frequently used tools include web browsers such as Mozilla Firefox, Google Chrome and Internet Explorer; and a few social media tools mostly Facebook, Twitter, YouTube and Blogs. There were no adverse addictive behaviours associated with Internet usage in the study area. Problems encountered in using cybercafés in the study area are those repeatedly reported to hinder Internet penetration in Africa.

Based on these findings, strategies by the government and other stakeholders are still required to reduce the disparity between Internet users and non-users. Efforts are particularly needed to sensitize non-users to recognize the importance of the Internet in their lives. Government strategies to improve bandwidth and power stability will not only ensure availability of fast connectivity but also reduce associated costs. It is also recommended that formal and informal computer training programmes offered by training institutions such as universities should include information literacy in order to optimize the

use of Web services. Training institutions should also improve their curricula by integrating ICTs into thematic areas such as the use of Internet for business purposes (e-commerce). Future research may focus on the impact of cybercafé usage on the lives of various user categories. Research may also focus on the impact of newer technologies such mobile phones, modems, tablets and iPads on cybercafé usage.

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