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BOCRA CUSTOMER SATISFACTION SURVEY

DRAFT FINAL REPORT

PREPARED BY THE BOTSWANA INSTITUTE FOR DEVELOPMENT POLICY ANALYSIS (BIDPA)

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LIST OF ACRONYMS

ADSL	Asymmetric Digital Subscriber Line
BAS	Broadcasting Audience Survey
BBi	Broadband Botswana Internet
BGCSE	Botswana General Certificate for Secondary Education
BIDPA	Botswana Institute for Development Policy Analysis
BOCRA	Botswana Communications Regulations Authority
BTA	Botswana Telecommunications Authority
BTC	Botswana Telecommunications Corporation
BTv	Botswana Television
CEDA	Citizen Entrepreneurial Development Agency
COSC	Cambridge Overseas School Certificate
DSP	Department of Social Protection
DSTV	Digital Satellite Television
EASSy	East African Submarine Cable System
EMS	Express Mail Service
GB:	Gigabyte
GoB	Government of Botswana
ICT	Information and Communication Technology
ISP	Internet Service Provider
MLG&RD	Ministry of Local Government and Rural Development
MTC	Ministry of Transport and Communications
OAP	Old Age Pension
PSU	Primary Sampling Units
RB	Radio Botswana
RIA	Research ICT Africa
SABC	South African Broadcasting Corporation
SIM Card	Subscriber Identity Module Card
SPSS	Statistical Package for Social Sciences
WACS	West Africa Cable System
WWV	World War Veterans

FOREWORD

This is the first customer satisfaction survey report by the Botswana Communications Regulatory Authority, (BOCRA) since BOCRA's inception as the converged regulator for the communications sector in Botswana. Convergence of the regulatory mandate by BOCRA has brought together a number of disparate, often complex sectors under one regulatory authority. These are the telecommunications, postal, Internet, and broadcasting services.

The need to measure the satisfaction levels of customers about the services they receive from the sectors regulated by BOCRA cannot be overstated. Besides the fact that communications is central to economic growth, technology transfer, and employment creation, it also brings its own special types of challenges which might negate the gains made. Indeed, whereas it is easy to measure the economic aspect of our mandate through the profits made by various private and public sector providers, it is more difficult to understand the effects of the sector on end users, particularly individuals.

From challenges of efficiency of the technologies or over-priced services, to those of misuse of the technologies for negative ends such as transmission of obscenities, and vandalising infrastructure, it is always important to look out to satisfy our customers. BOCRA therefore undertook this study in order to learn of ways to better improve our regulatory capacity for the improvement of outcomes of both the service providers and consumers.

At this moment I would like to take this opportunity to acknowledge the efforts of BOCRA staff who worked tirelessly to bring this report to fruition. Special mention goes to Dr. G. O. Radijeng, and Ms. T. R. Mangadi who worked on designing the research instrument, setting the timetable for the study and managing the relationship with the Consultant. The Consultant, in this case, the Botswana Institute for Development Policy Analysis, or BIDPA is also thanked for their role in bringing this exercise about in a timely fashion.

Thank You,

Mr. Thari Pheko

Chief Executive Officer,
Botswana Communications Regulatory Authority

EXECUTIVE SUMMARY

This customer satisfaction study of users of communications services regulated by the Botswana Communications Regulatory Authority, BOCRA was carried out amongst 1000 respondents. A total of 2641 responses were gained, signifying that many of the respondents actually use more than one type of communication service. A lack of a sampling frame was a notable challenge. The study thus used the national population census statistics, rather than a communications user population as a sampling frame.

While reflecting the usual pattern of women being more than men in Botswana, the gender profile of the respondents however over represents women. A number of sociological reasons explain this, including that women are likely to be sent by their older relatives to service points, and are equally more likely to be running small businesses, which were targeted for the study. Geographical effects on customer satisfaction were less than clear-suggesting that a more in-depth review of the individual sectors could be in order. Equally unclear is the effect of education and employment on customer satisfaction.

The study comes in the backdrop of legal and policy changes in the sectors which have led to BOCRA being set up to regulate the communications sector. In this view, the Communications Regulatory Authority Act sets the minimum legal standards without setting out the implementation standards, governance arrangements and performance targets. It would appear that a policy document is needed for the sector to clarify these issues.

The summaries per sector of the communications industry follow below.

FIXED LINES

The fixed lines sector is currently being provided by the Botswana Telecommunications Corporation Limited (BTCL). A total of 154 respondents indicated that they have a fixed-line installed at home or their place of work. 84% of these were individual users. 90% of these have had their fixed-lines for more than a one 1 year, while 10 % have had their lines for less than one year period. The implication of this is that less people are obtaining the use of mobile phone lines. More than half of fixed line respondents said that their billing type was post paid. The following is the summary of levels of satisfaction about various services by respondents using mobile phones:

i. 67 % of respondents were satisfied with call centre services while 20% said they were not satisfied, 13% were not sure;

ii. 70% were satisfied with the provider's (BTCL)'s current service payment processes, while only 6% said they were dissatisfied;

iii. 52% of fixed-line expressed satisfaction with pricing information, while 15 % said they were dissatisfied;

iv. 78 % were satisfied with network quality (voice quality/crossed line/no static). On the other hand, 79 % were satisfied with network reliability (availability and efficiency);

v. 78% were satisfied with general customer care, which encompass courtesy, friendliness, helpful, and knowledge;

vi. 71% of the respondents indicated awareness of the complaints handling procedure(s);

vii. 87% were aware that it is an offence to wilfully interfere with the erection, alteration, maintenance or inspection of any communication equipment; and

viii. 94 % of respondents indicated that they were aware that 'it is an offence to damage, destroy or steal any communication equipment'.

MOBILE SECTOR

The mobile phone sector has three providers, Mascom Wireless, Orange Botswana and beMobile. A total of 933 respondents, signifying 93% of the study population use mobile phone telephony. Other findings about the mobile phone sector are as follows:

i. Mascom has the widest market share, followed by Orange and beMobile respectively. However, beMobile is the main service provider in some parts of the country such as Good Hope, Gantsi, D'Kar and Tsabong;

ii. Even though 61% of mobile users had one handset, 57% had more than one SIM card mainly because they want to have additional line for business or personal use and to obtain benefits from different promotions and freebies;

iii. At 84%, most mobile phone users would not change their mobile network service providers because their current mobile service providers offer best prices and they do not want to lose their current numbers. Those willing to change their service provider said they would do so mainly to go for effective (coverage network) and to go for cheaper prices;

iv. Mobile networks are mainly used for making voice calls and sending text messages rather than for Internet browsing, mail and downloading games, ringtones and music;

v. Most mobile users are fairly satisfied by the quality of voice calls, prices charged by service providers for making local voice calls and sending text messages;

vi. Aspects of quality that customers are satisfied with include; the quality of customer service, choice or variety of services, availability of helpful information about services and confidentiality of customer information; and

vii. Most consumers of mobile telephony are aware of general issues pertaining to the pricing of mobile services, complaints handling procedures and acts that are considered to be offences in the mobile industry.

INTERNET SECTOR

Internet service is a relatively new form of communication in Botswana. It is accessible through the use of electronic communication gadgets like laptops, personal computers (PC's), tablets and mobile phones. There are three mobile phone networks in Botswana that provide Internet services to their subscribers along with other Internet service providers like BTCL, Microteck, Broadband Botswana Internet (BBi), and others. Recently, Mascom and Orange

upgraded their Internet connectivity launching the 4G (Generation) network. The 4G network has been designed to increase Internet speed.

i. 48% of the respondents indicated that they used Internet services;

ii. Internet usage declines with age. Among the age group 18-25, about 65% indicated using Internet, followed by the age group 26-35 with 52%. The shares decline as we move to the elderly (those aged 65 and above) with only 5% indicated that they used Internet;

iii. Internet usage increases with educational attainment. The majority of the Internet users were those with higher educational attainments, especially those with tertiary education;

iv. The most used type of Internet is the mobile phone and Mascom accounted for the larger share of mobile Internet users;

v. 79% were satisfied with service quality. 15% were not satisfied;

vi. 65% of respondents expressed satisfaction with Internet pricing;

vii. At 74% the majority of Internet users indicated that they were not considering moving from their current service provider;

viii. 79% of the respondents were aware of complaints handling procedure(s);

ix. 92% of the respondents were aware that it is an offence to send offensive, indecent, obscene or menacing messages;

x. 91% of the respondents were aware that it is an offence to relay pornographic material by communication;

xi. 98 % of the residents were aware that it is an offence to willingly interfere with erection, alteration, maintenance or inspection of the equipments; and

In general it can be concluded that a lot of people are informed about Internet ethics and this can be linked to educational status as the majority of the Internet users had higher educational attainments.

POSTAL SERVICES

The postal service subsector comprises post offices, mobile post, postal agencies and courier services. Postal services transact a number of business activities including facilitating mail, courier services, old age pensions, philately, and money orders amongst others. Findings on the postal services sector are as follows:

i. Almost 50% of the 1000 respondents interviewed indicated that they use the postal services;

ii. The post office is used by the majority, followed by postal agencies and lastly the mobile post;
iii. A significant number of the respondents travel more than 15 km to the nearest post office especially in rural areas.

iv. 37% of the respondents who used postal services reported that they queue for more than 30 minutes to receive the services at the post office;

v. Most of the respondents who access postal services indicated that they were satisfied with the price for stamps and courier services but dissatisfied with the pricing of money orders; and

vi. A high number of respondents were satisfied with the customer service, confidentiality and safety they receive at the post offices.

BROADCASTING SERVICES

The broadcasting services sub sector includes radio, and television services. Radio Botswana (RB 1) and Radio Botswana 2 (RB 2)as well as Botswana Television(BTv) are the public broadcasters, and are not subject to regulatory discipline by BOCRA. As this study was aimed at measuring customer satisfaction of BOCRA regulated services, when it came to RB 1 and RB 2 as well as BTv, the study only measured the level of access of these to the study population. In terms of radio, Duma F.M, Gabz F.M, and YaRona F.M are the private radio stations operating in Botswana and subject to BOCRA regulatory authority while e-Tv Botswana is the private television station which operates in the sector. Multi-Choice Botswana and Multi-Choice South Africa, though not regulated by BOCRA are the other television stations operating in Botswana.

Major findings for the broadcasting services sector include the following:

i. 58% of the respondents used at least one type of broadcasting media;

RB1 (52%) and RB2 (57%) are the dominant radio stations within the radio sector;

ii. Amongst the private radio stations, Duma FM (31%) is the most listened to followed by Yarona FM (22%) and Gabz FM (20%) in that order;

iii. In terms of television viewership, BTv (69%) is the most viewed television station followed by Multi-Choice Botswana (24%). e Botswana (12%) is the least watched amongst the local television stations though this may be largely influenced by its limited accessibility of 60 km^2 radius around Gaborone;

iv. The majority of the respondents are satisfied with the signal quality, programmes, news and current affairs and code of practice in the broadcasting media.

v. The majority of the respondents were not aware of the complaint handling procedure in the broadcasting media;

vi. Satellite was found to be the main mode of transmission countrywide amongst the DSTv users (93%) while terrestrial (aerial) transmission emerged as the dominant mode of transmission for radio listeners (81%);

vii. The majority of the respondents expressed satisfaction with the broadcasting content in Botswana;

viii. For those with some form of disability, most had a challenge watching television than listening to radio;

ix. The majority of the respondents were aware that it is an offence to interfere (92%), and damage, destroy or steal (95%) any communication equipment.

BOTSWANA IN THE WORLD

How does Botswana compare globally? Available data shows that by and large, matters of access to services in the communications sector of Botswana reflect positively in terms of international indicators. However while data on *access to services* is largely available for Internet, fixed lines and mobile phones, that for access to radio and television as well as postal services is largely unavailable. Comparative data for international sector performance is also lacking, save for a few indicators such as pricing. A number of explanatory factors for this include that different countries prioritise and measure different indicators; monitoring data is undertaken during different years, making comparison largely ineffectual; while often the results of these undertakings are not made public.

The foregoing challenges notwithstanding, data from the International Telecommunications Union on access to services reflects the following:

i. In reflection of global trends, Botswana's usage of landlines continues to decline. Such declines are also notable globally. At present, Botswana's average usage of landlines (11% according to official statistics) is slightly above that of the developing countries, by a 1.6% margin.

ii. In contrast to the fixed line usage, though still in reflective of global trends, Botswana's mobile phone usage continues to increase. Whereas official statistics show Botswana's mobile phone penetration at 90% which is 1.8 below the global developing country average, more recent data as reflected by the study sample suggests that Botswana, at 93.3%is slightly above the developing country average.

In terms of the results of this study, Botswana's average for Internet usage stands at 48%. Official statistics however place the figure at 30.8%. The ITU on the other hand shows that the developing world population using the Internet stands at 35.3%. However, since the figure for official statistics was derived from the 2009 Population Census, it is possible Botswana's average has improved, due, among others to the Nteletsa Project as well as the

completion of the East African Submarine Cable System, and the WACS West Africa Cable System, both which have made Internet access cheaper and easier.

1 INTRODUCTION: THE RATIONALE FOR THE CUSTOMER SATISFACTION SURVEY

This report presents the findings of the 2015 Customer Satisfaction Survey of services regulated by the Botswana Communications Regulatory Authority (BOCRA). Established in 2012 through Section 3 of the Communications Regulatory Authority Act, BOCRA regulates the communications sector which, among others comprises a number of service sectors such as postal services, telecommunications, Internet services, and broadcasting (radio and television).

While its regulatory mandate challenges BOCRA to leverage Botswana's communications sector for economic growth, the regulator also has social policy obligations. Amongst these is that BOCRA must ensure customer satisfaction imperatives such as equity, universal service obligations, the stimulation of local content, stimulation of local communications industry, and protection of public morals in the communications services (for example assuring that obscenity is reduced from technological platforms). Regulation thus needs to balance economic growth imperatives with social policy concerns.

1.1 JUSTIFICATION FOR THE SURVEY

Unlike its closer variant, the opinion survey this study is an experiential undertaking. It measures the *actual experiences* of consumers of services regulated by BOCRA. For the purposes of this study, such consumers are members of the public who use the services regulated by BOCRA. Their experiences while using these services, unlike mere perceptions are what are measured in this study. Indeed Section 80 (1), a, enjoins BOCRA to:

> *Carry out such research as it may determine from time to time to establish and to update itself on the state of public opinion and consumer experiences with respect to services provided by the regulated suppliers*

Similarly section 6 (a) of the same Act implores BOCRA to:

> *Protect, and promote the interests of consumers, purchasers and other users of the services in the regulated sectors, particularly in respect of the prices charged for and the availability, quality, and variety of services and products offered throughout Botswana, such as will satisfy all reasonable demands for those services and products.*

Besides reasons of *mere* compliance with the founding statute of BOCRA, the need for a customer satisfaction survey is attributable to a number of reasons, including the following:

1. Whereas the predecessor to BOCRA, the Botswana Telecommunications Authority (BTA) has undertaken studies of this nature in the past, this is the first survey to be carried out by BOCRA since its inception in 2012. The study is thus important for the purposes of evidence based decision making by BOCRA. a baseline survey is needed to fully comprehend the extent to which BOCRA's regulatory mandate is being met, as a point of departure for future performance measurement undertakings;

2. Customers carry rights. They expect public law and public bodies to facilitate their participation in public affairs. The users of BOCRA services are thus entitled to a minimum level of service from the public sector. Such rights to be of use thus need to

be enforceable, and BOCRA needs to understand the extent to which its mandate is being enforced.

3. The reverse to point number 2 above is that the users of BOCRA services are 'clients' of service providers, third parties who exist to make a profit. In this view, while such clients are willing buyers obtaining services from willing sellers, BOCRA, as the designated sector regulator must also ensure that growth in the sector does not come at the expense of the clients. . Crucial to this view is that paying clients must obtain value for money for their services-while the sector grows.

4. This study is important to promoting evidence based policy making. BOCRA's role in the economy includes improving economic efficiency of what is a fast-changing sector. Feedback from users is thus fundamental to understanding the basis for changes in sector performance. To that extent, customer perspectives on the capacity of the service providers to serve them efficiently may assist the regular to bring in requisite changes.

1.1.1 THE LACK OF A COMMUNICATIONS POLICY

Whereas the Communications Regulatory Authority Act of 2012 is the law that details the minimum legal expectations of the sector, including the setting up of the regulator, protection of infrastructure, technology transfer and related matters, in Botswana's jurisprudence, law is limited in terms of performance measurement or targets. Furthermore, law seldom delineates governance arrangements and performance targets, or how such targets are to be met see:

Botswana Building Society vs. Rapula Jimson Court of Appeal, No 37 of 2003 (unreported); as per Justice J.P Tebutt and *Kealotswe & Others vs. The Attorney- General* 2003 BLR (1) 509 (HC): per Justice Chatikobo at p.511).

Thus in the execution of this study, there is a consistent question that crops up; *even though all the sectors being measured show satisfaction levels beyond the 50% threshold*, one needs to know what the growth and other performance targets for the sector are. They need to be set and understood and accepted by all to be enforceable. Thus the non existence of a communications sector policy is noted as a constraint.

1.2 OBJECTIVES OF THE SURVEY

The survey objectives are as follows:

i. Probe consumers' experience of the services provided by the operators: i.e. quality of service by regulated sectors, variety of services, access to call centers, general services usage, operator coverage and tariffs.

ii. Probe consumers' experience on contract terms and conditions.

iii. Identify negative experiences during the survey and identify pointers for future developments to address them.

iv. Assess the extent of consumer participation in regulation and policy development.

1.3 SURVEY SCOPE

While BOCRA regulates many complex sectors, the study surveys customer satisfaction of BOCRA regulated services. These services, according to the Communications Regulatory Act are as follows:

1.3.1 SERVICE SECTORS

i) Telecommunications (both mobile and fixed lines);

ii) Postal services (including courier services);

iii) Electronic media(both radio, television); and

iv) Internet Services

1.3.2 VARIABLES BEING MEASURED

The variables being measured against are the following:

i) Awareness of the existence of a service;

ii) Price/affordability of the services being provided;

iii) Service quality, reliability and relevance to customer needs;

iv) Consumer protection principles, practices and their applications;

v) Overall service quality and satisfaction; and

vi) Satisfaction with after-sales support

1.3.3 HOW THE STUDY IS SEQUENCED

The rest of the report is sequenced as follows. Section 2 details the Methodology. It gives a basic description of the approaches used for gathering data, and the justifications for the instruments used. It also details the data analysis methods, and data security considerations. Thereafter section 3 gives a profile of respondents, including demographics and employment status. . It also includes a profile of respondents by BOCRA regulated services. Section 4 gives a basic analysis of the results; it relies on contrasting the levels of satisfaction with existing and past studies. While it would have been ideal to gauge the satisfaction level against the internationally recognised thresholds, availability of information restricted that. As only the levels of access to these services are given by the International Telecommunications Union these are used for comparative purposes. The conclusions and recommendations of the study are detailed in sections 5 and 6 respectively.

2 PROJECT MANAGEMENT APPROACH AND RESEARCH METHODOLOGY

In order to achieve the above objectives as enumerated at section 1.2 above, the study used a mixed methods approach consisting of qualitative and quantitative techniques; survey, review of literature, and an online questionnaire. The following section describes the methods of the study in detail.

2.1 THE SURVEY AND SAMPLE DISTRIBUTION

To collect the quantitative data needed for the study, a survey was employed. The survey was implemented through a *face-to-face* interview method. A number of interviewers were employed to meet with respondents and pose to them questions as worded in the questionnaire.

The advantage of a face-to-face interview method is that it allows the interviewers to clarify issues as they arise during the interview process, and guarantees a high response rate. While this method may be criticized for sampling errors that it may introduce through research assistants especially if not thoroughly trained, this challenge was addressed adequately during training of interviewers.

Whereas BOCRA had developed the primary data collection instrument for the study, the research team, in consultation with BOCRA added value to the data collection instrument by developing codes to be used for the collection of primary data and editing the entire instrument. The revised instrument was then presented to BOCRA for finalization.

2.2 DETERMINING THE SAMPLE SIZE

There are different methods used to calculate the sample size depending on the nature of the study, time frame and budgetary situation. One such method of determining the sample size is to specify the margins of error for the items that are regarded as vital to the study, and the *alpha* level of significance; *that is the level of acceptable risk the researcher is willing to accept that the true margin of error exceeds the acceptable margin of error, known as Type I error*. The *alpha* level used in most surveys is either .05 or .01 (Ary, Jacobs and Razavieh, 1996). Since our population is large, continuous data, we used the margin of error of 0.03 (3%) and *alpha* level of 0.05 which yields Z-value of 1.96 (Krejcie and Morgan, 1970).

As this is the first customer satisfaction survey for BOCRA, there was no baseline indicator, hence we used the recommended $\rho = 0.5$ (United Nations, 2005). Moreover, the survey sample was adjusted for the expected non-response. As it is required that the non-response should be from country`s experience, we assessed a number of previous surveys conducted by Statistics Botswana. We observed that the rate of non-response varied across surveys. For instance it was 7, 6 and 6 for the 2006 Demographic Survey, 2003 National Literacy Survey and 2013 AIDS Impact Assessment Survey respectively. On the other hand, the 2007 Informal Sector Survey had 11% and a 5% non response rates for households and businesses respectively.

With this knowledge, we proceeded to use the average non-response rate of 6% (translating to an expected response rate of 94 %).

Due to the non-availability of information (sampling frame) on the number and geographical distribution of users of various services considered for the study, we based the size distribution on 586,440 individuals from the selected localities as per the 2011 Population and Housing Census data, although the study includes other users such as non-profit organizations and providers of certain services. Therefore, using the Cochran's (1977) correction formula to calculate the sample size, we get

$$n = \frac{n_0}{1 + \frac{n_0}{N}} \quad (1)$$

where N= population size (in our case N is the number of individuals across the selected localities) = 586,440.

$$\text{and } n_0 = \frac{Z^2_{\alpha/2}(\rho)(1-\rho)}{\delta^2} = \frac{1.96^2(0.5)(1-0.5)}{(0.03)^2} = 1{,}067.111 \quad (2)$$

Where:

n = the sample size
Z = the statistic that defines level of confidence
ρ = baseline indicator
δ = margin of error of survey results

Therefore, substituting equation 2 into equation 1 we get

$$n = \frac{1{,}067.111}{1 + \frac{1{,}067.111}{586{,}440}} = 1{,}065.17$$

Adjusting for a non response rate of 6 %, we get a total sample of 1,001.26 which we rounded to 1,000 users, which is what the study targeted and this included households` individuals, to domestic, not for profit organisations or business consumers, and providers of certain services. The sample size of 1,000 is large enough to make inference about the whole population. The sample distribution of the targeted localities is presented in Table 1. In line with statistical best practice, all the samples below 30 were adjusted to 30 to allow for statistical inference and this resulted in adjustments of other samples.

Table 1: Sample Distribution

Locality	*Population*	*Proportion*	*Sample*	*Adjusted sample*	*New Proportions*
Gaborone	231626	0.395	395	280	0.280
Francistown	98963	0.169	169	150	0.150
Jwaneng	18016	0.031	31	35	0.035
Ghanzi	14809	0.025	25	40	0.040
Tsabong	8945	0.015	15	30	0.030
Letlhakane	22948	0.039	39	45	0.045
Maun	60273	0.103	103	90	0.090
D'Kar	1668	0.003	3	30	0.030
Kasane	9084	0.015	15	30	0.030
Lesoma	613	0.001	1	30	0.030
Bobonong	19389	0.033	33	40	0.040
Serowe	50820	0.087	87	80	0.080
Palapye	37258	0.064	64	60	0.060
Good Hope	6362	0.011	11	30	0.030
Masunga	5666	0.010	10	30	0.030
Total	**586440**	1.00	**1000**	1000	1.000

Source: Author Computed from Statistics Botswana (2011)

A stratified random sampling technique was employed for the selection of the localities and users within the selected areas. The selection of localities ensured that there was representation of the strata of localities in Botswana as follows; cities, towns, urban villages, rural areas and remote areas.

The stratified two-stage probability sample design was used for the selection of the sample. The first stage was the selection of enumeration areas (localities) as primary sampling units (PSUs).One criterion to inform the choice of localities was the availability of service sectors that are regulated by BOCRA and considered for this study. Moreover, the choice ensured that the five levels of area classification are represented in the sample to avoid bias. The second stage of sampling was the selection of actual number of users systematically selected within each selected enumeration area (locality).

The selection of users was made using the probability proportional to measure of size (PPS); with the measure of size being the total estimated number of individuals enumerated during the 2011 Population and Housing Census.

2.3 RECRUITMENT/HIRING OF DATA COLLECTION AND ENTRY STAFF

After the completion and finalization of the questionnaire and training manual, recruitment and hiring of enumerators commenced. BIDPA has a database of experienced interviewers from which the interviewers for this study were drawn. These interviewers are highly experienced and have previously worked for BIDPA and Statistics Botswana. The interviewers are fluent in both English and Setswana and have tertiary educational qualifications (Certificate or Diploma and some are Degree holders). The interviewers were accordingly trained. In addition, there was preparation of protocols, training curriculum and materials for the interviewers. Some of the interviewers are conversant with the use of Statistical Package for Social Sciences (SPSS) and were engaged before by BIDPA for data entry.

2.4 TRAINING OF THE ENUMERATORS/INTERVIEWERS

All BIDPA researchers in this study participated in interviewer training. A training manual was prepared by the researchers. The manual covered basic items needed to prepare

interviewers for the survey. The training manual included among others; how to prepare for an interview, how to conduct an interview, opening the interview and on how to ask questions, receiving and recording answers and closing the interview. The interviewers were firstly introduced to the survey objectives so that they have a thorough understanding of what the survey entails. They were also taken through the survey questionnaire.

2.5 PRE-TESTING OF THE INSTRUMENT

Pre-testing is one of the most important components of the survey procedure. The pre-test allows the research team and the interviewers to both increase the proficiency of interviewing and capacity of the instrument to generate usable responses. Respondents were randomly selected around Gaborone for questionnaire pre-testing. The survey coordinator facilitated the pre-testing with the help of the supervisors (BIDPA researchers). The purpose of the pre-test was to establish if the designed questions were well understood by the respondents and if the respondents were willing to answer questions the way they have been asked. The pre-testing also helped to check if the coding of the questionnaire was sufficiently clear, and whether it was necessary to create new codes or improve existing ones. It also helped in establishing how long an interview takes. After the pre-test the team discussed the results of the pre-test and made necessary changes to the questionnaire.

2.6 DATA COLLECTION

Primary data was collected through the use of a detailed questionnaire administered to a total of 1,000 users across the selected localities. This method allowed the interviewer to clarify issues as they arose during the interview process. Data collection process took period of 21 days and a total of 6 research assistants and 2 supervisors (BIDPA researchers) and the survey coordinator participated in data collection exercise.

2.7 DATA PROCESSING

Data processing included data entry and cleaning. After the field survey, questionnaires were checked for consistency and completeness and errors. Data was then entered into a data file using Statistical Package for Social Scientists (SPSS) version 22. Coding was deemed unnecessary as the questionnaire was pre-coded. The data was then cleaned by running preliminary analysis and checking for outliers in the results. Data analysis involved the use of descriptive statistics such as frequency tables and cross tabulations. These are presented in section 3 (Profile of the Respondents)

2.8 LIMITATION OF THE STUDY

The study faced a number of limitations in its execution. The notable one is that prior to the survey, the team did not have information on the number and geographical distribution of users of various services considered for the study. Absence of such information affects representation of service sectors. As a result, the sample size distribution was based on the number of individuals as per the 2011 population and housing census data, although the study included other users such not for profit organisations and providers of certain services.

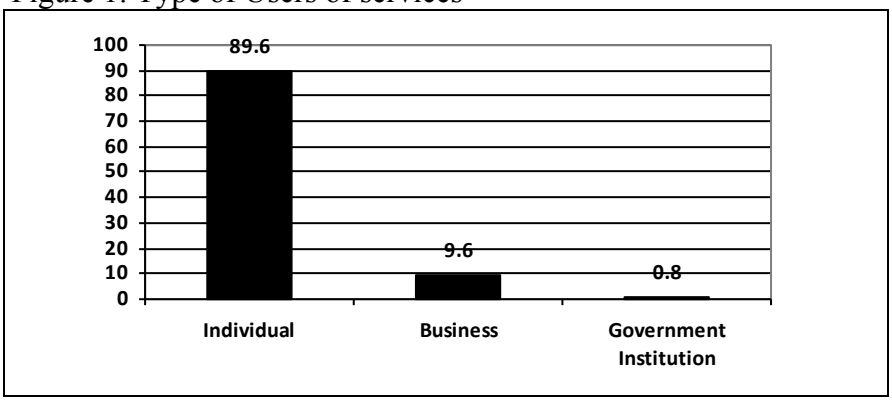
3 PROFILE OF THE RESPONDENTS

This section gives a brief overview of the respondents, including by type of users; gender profile; marital status; and education levels of the respondents.

3.1 TYPE OF USERS AND GENDER PROFILE

As indicated in the preceding chapter, the study targeted a sample of 1000 users of services regulated by BOCRA. A major share (90%) of users was individuals followed by businesses and government institutions (Figure 1).

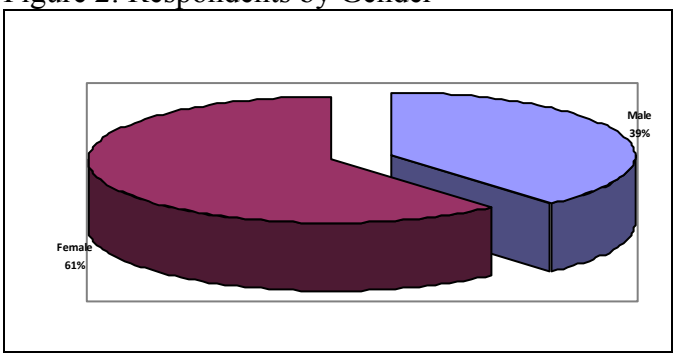
Figure 1: Type of Users of services



Source: Author computed from survey

Of the individual users, 61% were females compared to the 39% for males (Figure 2). These results are consistent with the 2011 Population and Housing Census results where females accounted for the larger population share than males (Statistics Botswana, 2014). However, what is inconsistent about the results, the majority of females in the population notwithstanding, is the gap in the female-male ration (a 22% difference).

Figure 2: Respondents by Gender



Source: Author computed from survey

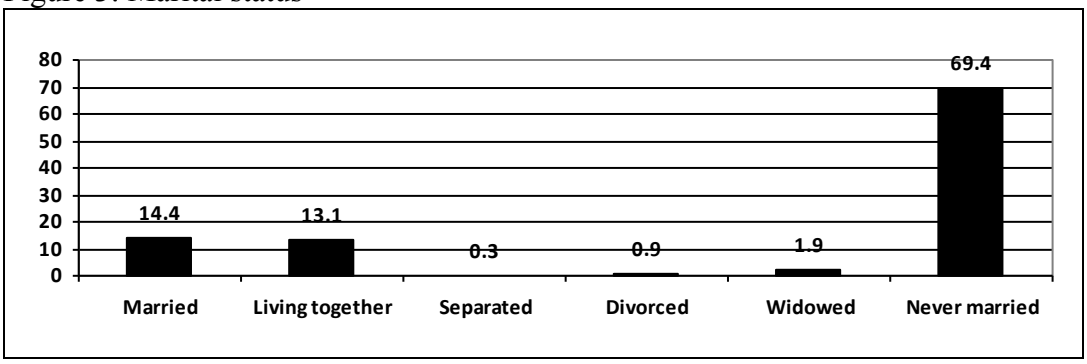
Whereas 51% of the national population is female, and 49% male, during the study, the female population at places of contact was increased for a number of reasons. Such reasons include that it was mostly females who were sent to service centres by older relatives, and, also females who were found running small, micro, and medium enterprises, which were similarly targeted by study as were shopping centres, post offices and other public service centres.

3.2 AGE AND MARITAL STATUS

In terms of age, the majority of the individual respondents were the youth, accounting for about 70% of the total respondents (30% aged between 18 and 25 and about 40% aged between 26 and 35). The youth were followed by the middle aged (36-44), accounting for about 17% whilst the adults (45-64) accounted for about 12%. The elderly accounted for about 2% of the respondents. The same distribution was revealed by the 2011 Population and Housing Census where the majority of the population is the youth. About 73% of the 2011 population was accounted for by the youth and children (0-35 years) (Statistics Botswana, 2014).

Figure 3 below shows and marital status of the respondents.

Figure 3: Marital status



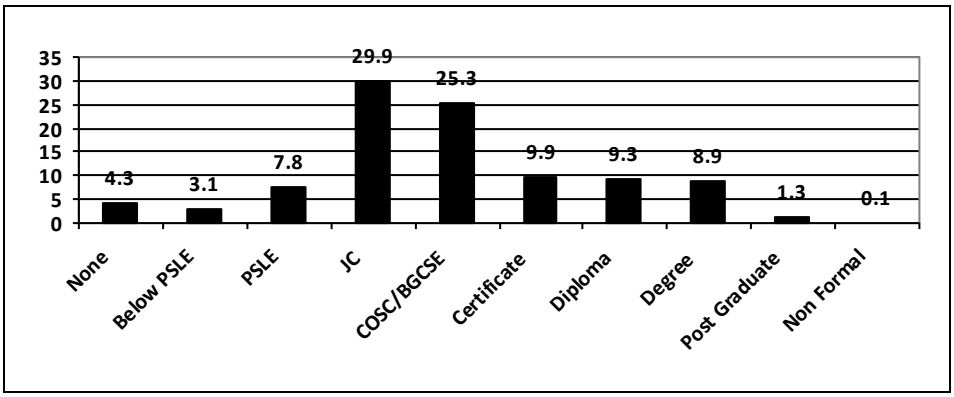
Source: Author computed from survey

Figure 3 above shows the sample distribution in terms of marital status. At 69%, the majority of respondents reported that they were never married. Those married and living together made the next largest proportion of 14% and 13%, respectively. The separated and divorced had a share of less than 1%.

3.3 EDUCATIONAL LEVEL AND EMPLOYMENT STATUS

Figure 4 below shows the educational attainment of the respondents.

Figure 4: Educational Levels



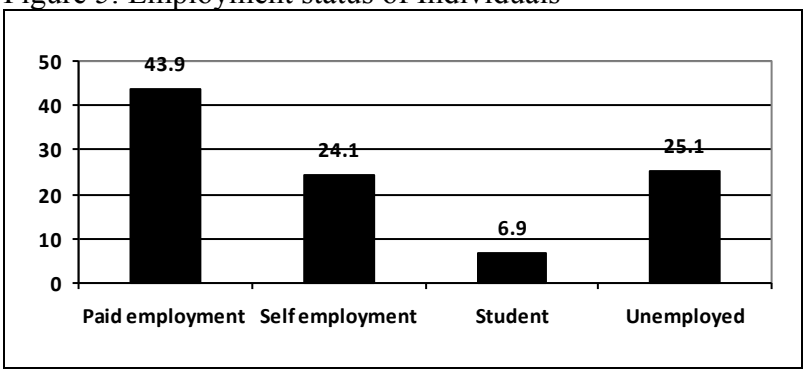
Source: Author computed from survey

In terms of educational attainment of the study respondents, about 55% had secondary education (30% with junior certificate and 25% with Cambridge Overseas Certificate (COSC)/Botswana General Certificate in Secondary Education (BGCSE). Those with tertiary education accounted for about 29% of the sample. The remaining 4.3% was accounted for by those who indicated that they never attended school. Clearly, the majority of the respondents were literate (95.7%)

3.3.1 EMPLOYMENT STATUS OF THE RESPONDENTS

Figure 5 below shows the employment status of the respondents. The distribution of users by employment status shows that 44% of users reported as being in paid employment followed by those who reported that they were unemployed. About 7% of the respondents were students. When asked to state their main income sources, 43% cited paid employment, 21% stated petty trade while 12 % indicated that they mainly sourced income through remittances. About 12% mentioned 'piece-jobs' (which means casual employment), while 5% cited allowances. The remaining share was distributed among, agricultural produce sales and rental income.

Figure 5: Employment status of Individuals



Source: Author computed from survey

3.4 SERVICE SECTORS

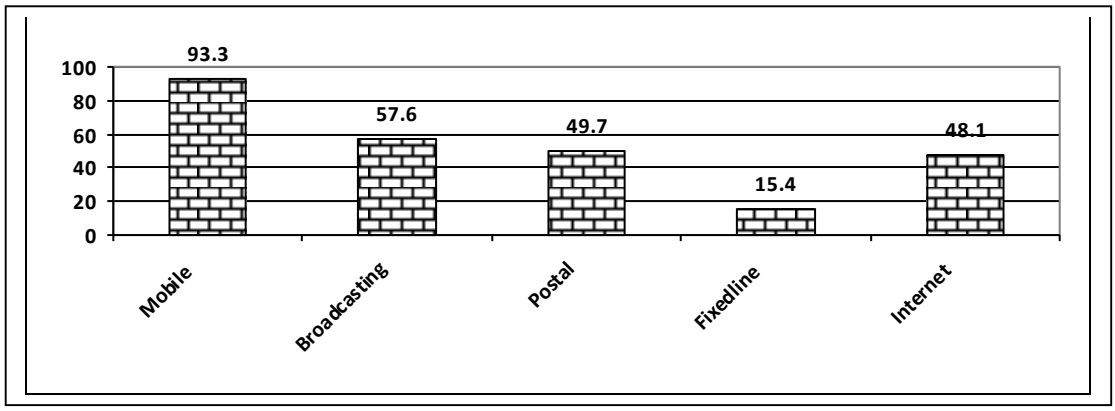
Figure 6 shows the distribution of service users by sectors. The majority of them are mobile phone users (93.3%). These results are as expected since according to 2011 Population Census; about 90% of the population had access to mobile phones (Statistics Botswana, 2014).

About 58, 50 and 48% of the respondents were users of the broadcasting, postal and Internet services, respectively. These results are also consistent with those of Statistics Botswana (2014) where with regard to broadcasting, access to radio and television stood at 61% and 54%, respectively. Fixed line services were used by 15% of respondents, a slight increase from 11% reported by Statistics Botswana (2014).

In comparison to the international standards of access to communications services, Botswana seems to be faring well. For instance, according to the International Telecommunications Union, or ITU the mobile subscription rates for developing countries stood at 91% in 2014 (ITU, 2015).

In the same ITU statistics for 2014, the rate of access for fixed line subscription for the developing countries was 10%, while it stood at 32% for individual Internet access during the same period. As noted in chapter 2 that we used 2011 population housing census as sampling frame, the pattern as depicted in Figure 6 was not predetermined. The approach adopted was to interview the respondent about all the sectors that were applicable to him/her.

Figure 6: Distribution of respondents by sector



Source: Author computed from survey

3.5 CONCLUSIONS

In conclusion, it can be stated that the results of the study are broadly consistent with those of the International Telecommunications Union and Statistics Botswana in terms of access to communications services in the country. One major exception can be noted however-that while the proportion of females is higher than that of males in the national population, for sociological reasons, women were over represented in the study.

4 BOTSWANA COMPARED GLOBALLY

How do these results reported in the previous chapter compare with international trends? This chapter makes use of some of the global indicators of the communications sector to show Botswana's performance in the global context. However the comparison suffers from lack of comprehensive indicators globally due to a number of reasons include the *different priority given to different indicators in a number of jurisdictions*; *different time frames in which the studies are undertaken (making comparisons difficult due to the fast changing nature of the sectors)*; and the fact that where such studies are undertaken, *they are often not shared publicly*.

However studies in access to services are undertaken by the International Telecommunications Union, while the OECD undertook a Regulatory Impact Study across a number of African countries, and the results were availed publicly. Studies on the postal services and radio and television subsectors were unavailable.

4.1 FIXED LINES SUBSCRIPTIONS

In terms of fixed telephones subscription, Botswana's usage of landlines continues to decline. This decline in usage is in line with global trends, particularly when compared to developing countries. Globally, the usage of fixed line phones declined by 1.4 percent between the years 2013 and 2015. On the other hand, the developing country average declined by 1.2 percent between the years 2013 and 2015. At present, Botswana's average is slightly above that of the developing countries, by a 0.6 margin.

Table 2: Fixed Telephone Subscriptions

	2013	2014	2015
Developed	40.8	39.9	39
Developing	10.6	10	9.4
World	15.9	15.2	14.5

Source: ITU, 2015

4.2 MOBILE PHONE SUBSRIPTIONS

Botswana's mobile phone subscription rate stands at 90% according to official statistics and 93% according to the survey results. Comparisons with global and developing country averages are presented in table 4 below.

Table 3: Mobile Cellular Phone Subscriptions

	2013	2014	2015
Developed	118.4	119.9	120.6
Developing	87.8	91.1	91.8
World	93.1	96.1	96.8

Source: ITU, 2015

According to table 4, Botswana is, in terms of the study results close to the developing country average, but decidedly lower than the global average. In terms of the ITU statistics, the global mobile penetration average in 2015 was nearly 97% while the developing country average was almost 92%. At 93 percent (in terms of the study results), and 91 percent in terms of official statistics, though different, Botswana's average reflects that of major comparator.

4.3 COSTS OF PREPAID DATA

Prepaid phones tend to be in the majority, of users. The cost of services to this segment has implications in the access of the services. Table 4 demonstrates Botswana in comparison to other African nations in data usage by prepaid users.

Table 4: Cost of Prepaid Data Bundles-2014 Countries

Country	Africa Rank	Cost of 1 GB in US $
Ghana	1	3.72
Kenya	2	8.52
Tanzania	3	10.17
South Africa	4	11.23
Rwanda	5	13.92
Mozambique	6	23.68
Namibia	7	31.89
Uganda	8	40.12
Cameroon	9	40.67
Nigeria	10	50.99
Botswana	11	73.48

Source: RIA, 2013

Amongst others, Botswana appears to be amongst the most expensive in the provision of mobile phone broadband in Africa. However as data from this table came before the launching of the East Africa Submarine cable, it is possible Botswana's position has improved costly, particularly since government followed up with a price reduction for wholesale prices of mobile broadband.

Table 4 below shows the extent to which mobile phones are used as a means of accessing social networks. The table compares Botswana to the rest of the sub Saharan Africa nations participating in the regulatory impact assessment of the OECD.

Table 5: Use of Social Networks in Mobile Phone Handsets-Botswana in Africa

COUNTRY	USE OF SOCIAL NETWORKS IN %
South Africa	25
Kenya	25
Botswana	18
Namibia	17
Nigeria	16
Rwanda	14
Mozambique	12
Ghana	11
Cameroon	8
Uganda	7
Tanzania	5
Ethiopia	2

Source: RIA, 2013

In terms of use of mobile phones for accessing social networks, Botswana is amongst Africa's highest. An implication of this is that if social networks are taken as a communication mode on their own, then their reliance on mobile phone handsets presents an opportunity for policy makers-they can increase access to this mode of communication through improving investments in mobile phone networks. Again Botswana's usage of mobile phones to access social networks could have risen significantly due to the completion of the East African Submarine Cable System WACS West Africa Cable System, after which government slashed the rates for Internet access, including rates for wholesale of Internet services.

4.4 CONCLUSIONS

The communications sector in Botswana compares reasonably closely with those in other developing countries in terms of access to services. However lack of data in performance issues makes it difficult to compare Botswana and other countries. The problems with data include lack of publicising of data if it is captured; lack of comparability of data due to different time frames of data collection as well as the fact that different regulators and users would likely emphasise different types of indicators when capturing data.

Overall however, data on access to mobile and landlines; and Internet is more accessible than data on use and access to post office and courier services.

Policy developments in the communications sector make it highly susceptible to change. As a result it makes measurement of performance an important imperative.

5 SURVEY RESULTS: LEVELS OF SATISFACTION WITH BOCRA REGULATED SERVICE

This section reports on the levels of satisfaction with the services regulated by BOCRA. As shown earlier, various service providers in the public, private, and parastatal sectors deliver these services. BOCRA is the designated sector regulator.

The sequence of the section is as follows; Fixed Lines; Mobile Telephony, Internet; Postal; and Broadcasting Services in that order.

5.1 FIXED-LINE SECTOR

The fixed line or landline as it is commonly known is one of the traditional modes of residential and commercial communication. The fixed line refers to a telephonic device that "uses a metal wire telephone line for transmission as distinguished from a mobile cellular line, which uses radio waves for transmission". The advancement of mobile technology and Internet-based alternatives has resulted in a decrease in the number of fixed-line subscribers globally, Botswana included.

However, this mode of communication remains popular in both the residential and commercial sectors. The Botswana Telecommunications Corporation Limited (BTCL) is Botswana's solitary fixed-line service provider with a customer base of approximately over 200 000 users (Matumo, 2014). This subsection has a number of objectives as follows:

i) Establish the levels of satisfaction amongst customers regarding fixed-line service provision;

ii) Identify areas for improvement with regards to fixed-line telecommunication in order to meet customers' expectations; and

iii) Inform BOCRA of the important issues affecting customers, which will inform its working relationship with BTCL

5.1.1 OWNERSHIP OF FIXED LINE

Respondents were asked to state whether or not they had a fixed-line installed at home/ business (for business respondents). Of the 1000 respondents, 154 indicated that a fixed line was installed in their residence, which represents a share of approximately 15% of the total sample size. Of the 154 respondents, 84 (about 55%) were individual users, while the remaining 45% was accounted for by businesses.

The sample population shows that Botswana's access to fixed lines is comparable, though slightly higher than the global average. According to the ITU, in 2014, 10% of the population in developing countries had access to fixed lines declining somewhat to 9.4% in 2015.

5.1.2 PERIOD OWNING FIXED LINE

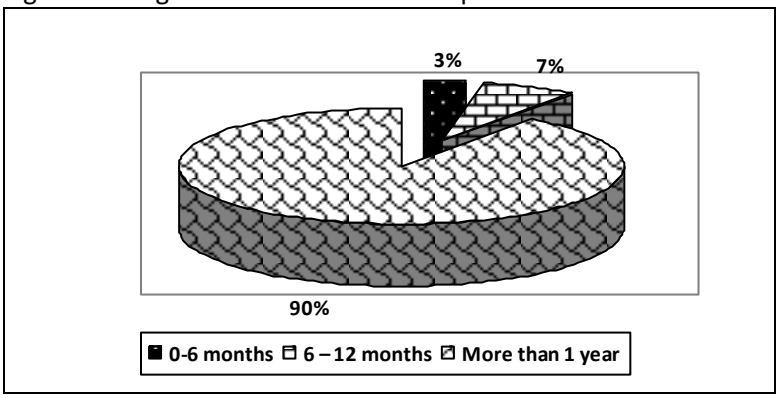
Respondents were requested to indicate the length of time they had a fixed-line installed at their residential or business premises. Figure 7 below illustrates that a majority (90%) of the respondents have had their fixed-lines for more than a one (1) year period, while only 3%

have had their fixed lines for a period not exceeding six (6) months. It can be concluded that the majority of fixed line users are longer term users.

In terms of gender differences, more females (65%) indicated that they have owned their fixed-lines for over a period of a year, compared to 35% for males for the same period.

The ownership period of 6-12 months had equal share (50%) of both individual male and female users.

Figure 7: Length of fixed-line ownership



Source: Author computed from survey

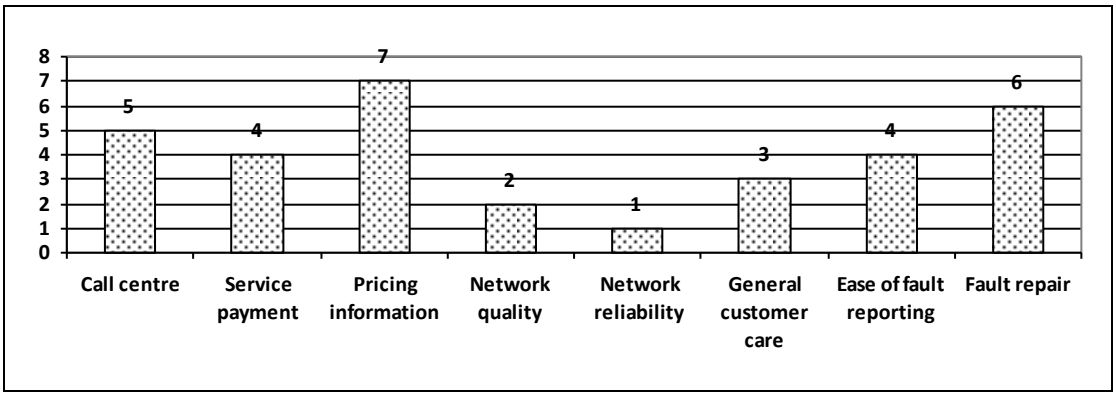
5.1.3 SATISFACTION WITH REGARD TO VARIOUS FIXED LINE SERVICES

Respondents were asked to state their levels of satisfaction of various services provided in the fixed-lines sub-sector. A scale of very satisfied, satisfied, not sure, dissatisfied or very dissatisfied was used for this purpose. An assessment of the levels of satisfaction (both very satisfied and satisfied) shows that overall, fixed line users are satisfied about the services they get.

Figure 8 ranks the shares of satisfaction (satisfied and very satisfied) for the fixed line respondents. The score of 1 denotes the service with the highest satisfaction while 7 denotes the least satisfaction. Network *quality* and *reliability* occupied the first and second position respectively, suggesting that respondents were satisfied with network quality indicators. *General customer care* is the third ranked service in terms of satisfaction. *Service payment* and *ease of fault reporting* both occupy the fourth position. Those in the top four positions scored shares of at least 70%. The last position, whose share is however, more than 50%, was occupied by *pricing information*.

It can be conclusively stated therefore that overall, customers are satisfied with the quality of various fixed line services, including even pricing information, which, though ranked last, still has a satisfaction level of 50%.

Figure 8: Rank of levels of satisfaction by respondents



Source: Author computed from survey

On the other hand, the 'within dissatisfaction' level analysis revealed that the issue of *fault repair* dominates with 23%, followed by *ease of fault reporting* with about 21%. By implication, *a fault is* an area that would need intervention. *Service payment* had the least share of dissatisfaction, partly as it was characterised by a relatively high proportion of those who could not state their satisfaction level.

Table 6 shows the disaggregated shares of respondents by levels of satisfaction. The discussion on each issue follows below table 2.

Table 6: Level of satisfaction with different services

Service	**Level of Satisfaction (Percentage shares)**				
	Very satisfied	Satisfied	Not Sure	Dissatisfied	Very Dissatisfied
Call centre	17.5	49.4	13.0	13.0	7.1
Service Payment Process	17.5	52.6	24.0	3.9	1.9
Pricing Information	9.7	42.2	33.1	10.4	4.5
Network quality	25.3	52.6	9.1	8.4	4.5
Network reliability	27.9	51.3	7.8	8.4	4.5
General customer care	25.3	51.3	9.1	7.1	7.1
Ease of fault reporting	24.0	46.1	9.1	14.3	6.5
Fault repair	20.1	46.1	11.0	12.3	10.4

Source: Author computed from survey

5.1.4 CALL CENTRE SERVICES

A cumulative proportion of 67% of the respondents (of whom 20% indicated they were 'very satisfied), indicated satisfaction with the level of call centre services they receive from the service provider. Table 2 further reveals that a cumulative of 20% of the respondents indicated dissatisfaction with the level of call centre service of which 13% indicated 'Dissatisfied' and 7% indicated being 'Very Dissatisfied'. It is therefore concluded that majority of the respondents were satisfied with the level of call centre services.

A comparison by localities shows that 32% of the fixed line service respondents in Gaborone were not satisfied with the call centre service, and this represent the second (after Kasane) highest share within these localities.

5.1.5 SERVICE PAYMENT

Fixed-line subscribers were further asked to rate their level of satisfaction in relation to the service provider's service payment processes. Table 2 shows that in total, about 70% of the

respondents stated that they were satisfied with the service provider's current service payment processes, while only 6% said they were dissatisfied. About 24% of respondents said they were "not sure". A possible explanation could be that respondents are not always directly responsible for the payment of services they receive from the service provider, i.e. payments are made by another individual within the residence or place of work. Another possibility could be that respondents simply felt indifferent towards service payment processes.

5.1.6 PRICING INFORMATION

Respondents were requested to indicate their level of satisfaction in relation to the service provider's pricing information. The majority (52%) of fixed-line users were satisfied, while 15% were dissatisfied. The remaining 33% were not sure about the service provider's pricing information.

5.1.7 NETWORK QUALITY (VOICE QUALITY/ CROSSED LINE/ NO STATIC)

When asked to state their satisfaction level with the service providers` network quality, 78% of the respondents indicated being satisfied, in comparison to 13% who indicated dissatisfaction.

5.1.8 NETWORK RELIABILITY (NETWORK AVAILABILITY AND EFFICIENCY)

In relation to satisfaction about network reliability, 79% of the respondents stated that they were satisfied with the reliability and efficiency of the network. Of this figure, 28% indicated being "very satisfied" with the reliability of the network.

5.1.9 GENERAL CUSTOMER SERVICE

A majority (77.6%) of the respondents indicated satisfaction with the service provider's customer service standards. Of these, 25% of respondents were "very satisfied" with the courtesy, friendliness, and helpfulness they receive from the service provider. About 14 % said that they were not satisfied with the general customer service, while 9% could not say.

5.1.10 EASE OF FAULT REPORTING (KNOWING WHERE TO CALL, GETTING THROUGH TO THE OPERATOR)

When asked about the ease of reporting faults to the service provider, 70% of the respondents indicated that they were satisfied with the process of reporting faults to the service provider. However, 20% were dissatisfied with the process. It is not clear what the possible source of dissatisfaction with this aspect could be. The assumption is that all users of fixed line services are issued a BTC phone book, which provides numbers for the call centres. Perhaps, it could be about getting through to the operator. According to BTC (2012) there are some "irate customers who need further investigation such as abuse of phones, vandalism etc", which could partly be a source of dissatisfaction.

5.1.11 FAULT REPAIR (ABILITY TO RESTORE A DISRUPTED SERVICE ON TIME AS PROMISED)

Asked to indicate their level of satisfaction of the service provider's ability to restore a disrupted service on the time promised, a total of 66% (of whom 20% stated that they were 'very satisfied')indicated that they were satisfied with the service provider's ability to repair faults. On the other hand, about 23% said they were 'dissatisified' with the amount of time it

takes for the service provider to repair faults, suggesting that possibly, the provider took a bit longer.

5.1.12 SATISFACTION LEVEL WITH BILLING SYSTEM

A number of questions were posed in relation to satisfaction levels regarding the billing system. Respondents were asked to rate their level of satisfaction with the billing system and the results are presented in Table 7 below.

Table 7: Level of satisfaction with telephone bills` services

Service	**Level of Satisfaction (Percentage shares)**				
	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
My bills are easy to read and understand	22	56	11	7.3	3.7
My bill is always accurate	18.3	41.5	26.8	8.5	4.9
I always receive my bill on time	13.8	41.3	17.5	21.3	6.3

Source: Author computed from survey

About 78% of respondents who reported receiving bills (post paid) agreed that their bills were easy to read and understand while 10% did not agree with the statement. As expected, there were generally a higher proportion of those who agreed to the ease of reading the bills among those who had higher level of education.

Regarding the issue of accuracy of bills, 60% agreed that their bills were always accurate, of whom 18% agreed ‘very strongly’. About 13% did not agree with this statement.

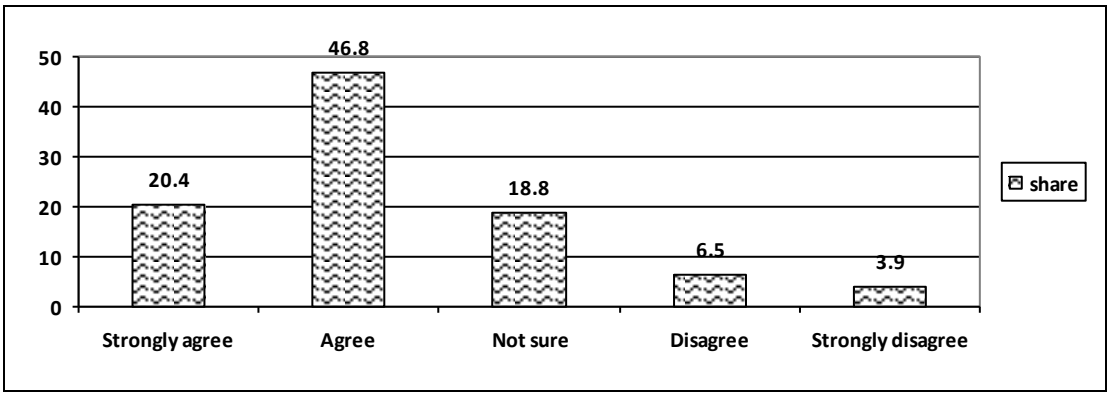
A total share of 55% of post paid respondents agreed that they always received their bills on time. While this is the case, about 28% of them did not agree that they always received their bills on time. However, the study did not ask about the reasons for the delay. Overall, it emerges from Table 3 that the proportion of respondents who agreed with the statements is higher than those who did not agree. However, that there are still those who disagreed, calls for reflection on the issues to ensure that the levels of satisfactions are maximised.

5.1.13 RECOMMENDATION OF SERVICE PROVIDER TO FRIENDS AND RELATIVES

Essentially the question whether one would recommend their service provider to their friends or relatives gauges whether one’s satisfaction levels are such that they are confident a service provider could capably service those close to them or those they care about.

A majority (67%) of the respondents “agreed” that they would recommend the service provider to friends and relatives. Of the 67% who agreed they would recommend the service provider to their relatives, 20% ‘strongly’ agreed while 47% ‘agreed’. However, 19% of the respondents indicated that they were “not sure” as to whether or not they would recommend their service provider to friends and relatives. Only 10 % did not agree that they would recommend the service provider to friends and relatives (Figure 9).

Figure 9: Recommendation of the provider to the next user



Source: Author computed from survey

5.1.14 THE BILLING TYPE

Respondents were asked to indicate whether their billing type is pre-paid or post-paid. A majority (53%) of respondents indicated having a post-paid billing system, while the remaining 47% expressed their billing type as pre-paid (Table 8). According to BTC (Online), "BTC prepaid is an exciting home phone service". With this service, "a customer does not receive monthly bill and the total monthly costs can be controlled while enjoying the convenience of a phone service". Since one can migrate from post to pre-paid, the pattern might be suggesting that there could be a promising trend towards the latter.

Table 8: Billing Type

Billing Type	Frequency	Share (%)
Post-paid	82	53.2
Pre-paid	72	46.8

Source: Author Computed from Survey

The geographical breakdown of billing types is presented in table 9 below. It presents a mixed picture of preference of billing types. For example, Gaborone and Francistown differ in terms of the prevalent type of billing system. Both are cities, and thus would ordinarily be expected to reflect similarities in preference. However, while Gaborone shows a preference for post paid billing, Francistown is clearly in preference of pre-paid.

The other large type of dissimilarity is demonstrated by the urban villages. Masunga residents seem to prefer post paid type of payment for their landlines, in stark contrast to those in Serowe who are in preference of pre paid. These differences notwithstanding, pre-paid methods of payment seem to be preferred in most localities as all of Francistown, Jwaneng, Palapye, Serowe, Gantsi, D'Kar, Tsabong and Good Hope residents have a proportion of over half their respondents preferring pre paid (Table 5). Table 5 also shows that post-paid billing users are in the majority. The influence of Botswana's largest single locality, Gaborone is responsible for the majority of these respondents.

Table 9: Billing Type by Locality

Locality	Post-Paid	Pre-Paid	Total
Gaborone	67.7	32.2	100
Francistown	38.1	61.9	100
Jwaneng	46.7	53.3	100
Palapye	40.0	60.0	100
Serowe	9.1	90.9	100
Letlhakane	50.0	50.0	100
Bobonong	100	0.0	100
Kasane	100	0.0	100
Maun	60.0	40.0	100
Gantsi	40.0	60.0	100
D'Kar	0.0	100	100
Tsabong	25.0	75.0	100
Good Hope	0.0	100	100
Masunga	75.0	25.0	100
Total	53.2	46.8	100

Source: Author computed from survey

5.1.15 RESPONDENTS` AWARENESS

Respondents were asked about their awareness of complaints handling procedures of the service providers, wilful interference with the erection, alteration, maintenance or inspection of any communication equipment as well as damage of communication equipment. Table 6 shows that 70% of the 154 fixed-line respondents indicated awareness of the complaints handling procedure, while 29% were not aware of the procedure.

As this procedure is outlined in the BTC phone book, a number of factors, may explain this, including lack of prior usage of the service; awareness raising efforts not reaching their targets; or lack of initiative by customers to find the information.

A cross tabulation of analysis by age revealed that the lack of awareness was dominated by those aged between 26 and 35 years (32%), followed by those below the age of 25. Perhaps these should be the target groups for information sharing.

Table 10: Status of respondent`s Awareness

	Complaints handling procedure		Interference of communication equipment		Damage of Communication equipment	
Awareness	**Frequency**	**Share (%)**	**Frequency**	**Share (%)**	**Frequency**	**Share (%)**
Yes	110	71.4	134	87	145	94.2
No	44	28.6	20	13	9	5.8

Source: Author computed from survey

As to whether respondents were aware that it is an offence to wilfully interfere with the erection, alteration, maintenance or inspection of any communication equipment, approximately 87% of the fixed-line respondents stated that they were aware. Furthermore, 94% of respondents indicated being aware that 'it is an offence to damage, destroy or steal any communication equipment'.

5.2 MOBILE SERVICE SECTOR

This section presents a report on customer satisfaction of users of Botswana's mobile service sector, which consists of three operators: Mascom Wireless Botswana (Pty), Orange

Botswana (Pty) and beMobile, a subsidiary of Botswana Telecommunications Corporation Limited (BTCL).

The sample population shows that Botswana's access to mobile telephony is comparable to the global average. Figures from the International Telecommunications Union show that in 2014, access to mobile phones stood at 91%, rising slightly to 92 % in 2015. Meanwhile, official statistics in Botswana show that mobile phones 90% of the population had access to mobile phones in Botswana. As the population census was conducted in the years 2010/11, it highly likely that these figures have risen in the four intervening years.

5.2.1 MOBILE NETWORK USERS AND MARKET STRUCTURE

From the survey, 933 out of 1000 people interviewed (93.3%) were users of the mobile sector services. Respondents were asked to state all their mobile service providers, and the results are shown in table 11 below. About 76% are Mascom subscribers, 55% for Orange and 42% for beMobile. The results imply that given the multiple use of providers, Mascom Wireless Botswana (Pty) has more subscribers when compared to other mobile service providers in Botswana.

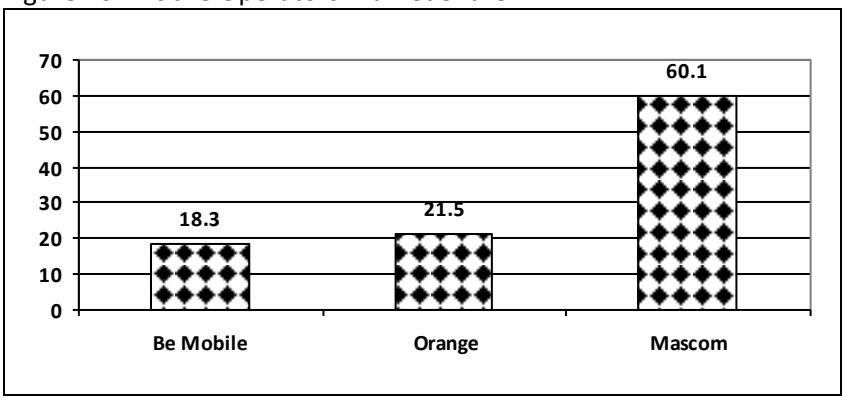
Table 11: Mobile Service Providers

Mobile Provider	Number of Mobile users	Share of mobile users (%)
Mascom	712	76.3
Orange	516	55.3
beMobile	396	42.4

Source: Author computed from survey

Respondents were further asked to indicate their main mobile service provider. Figure 10 below shows that Mascom Wireless Botswana had a largest share at 60%, followed by Orange Botswana and beMobile, with respective shares of 22% and 18%. This pattern has been observed by BOCRA (2014) as well as by one previous study (RIA, 2013).

Figure 10: Mobile Operators Market Share



Source: Author computed from survey

Although beMobile had the least market share, it is said to have experienced an increase of one percentage point in market share during the period from April 2013 to April 2014 (BOCRA, 2014). Further, it also appears that beMobile had more subscriptions in some rural localities compared to other providers (Table 12). For instance, the shares stood at 44, 53, 60, and 72, at Good Hope, Gantsi, D'Kar, and Tsabong, respectively. The Research ICT Africa

(RIA) (2013) survey suggests that Nteletsa II[1] is the primary reason that beMobile remains competitive and has coverage equal to or even greater than the largest operator. As at 2012, BTC through the Nteletsa Project was said to have connected over 250 villages in the country (BTC, 2012).

Table 12: Mobile Service Users by Locality (%)

	Main local mobile network			
Location	**Mascom**	**Orange**	**beMobile**	**Total**
Gaborone	63.6	25.6	10.8	100
Francistown	66.7	25.5	7.8	100
Jwaneng	36.1	25.0	38.9	100
Palapye	78.0	16.9	5.1	100
Serowe	86.1	12.7	1.3	100
Letlhakane	66.7	26.7	6.7	100
Bobonong	52.6	42.1	5.3	100
Kasane	62.1	10.3	27.6	100
Lesoma	58.6	6.9	34.5	100
Maun	59.3	14.8	25.9	100
Gantsi	19.4	27.8	52.8	100
D'kar	23.3	16.7	60.0	100
Tsabong	10.3	17.2	72.4	100
Good Hope	40.0	16.0	44.0	100
Masunga	80.8	11.5	7.7	100
Total	60.1	21.5	18.3	100

Source: Author computed from survey

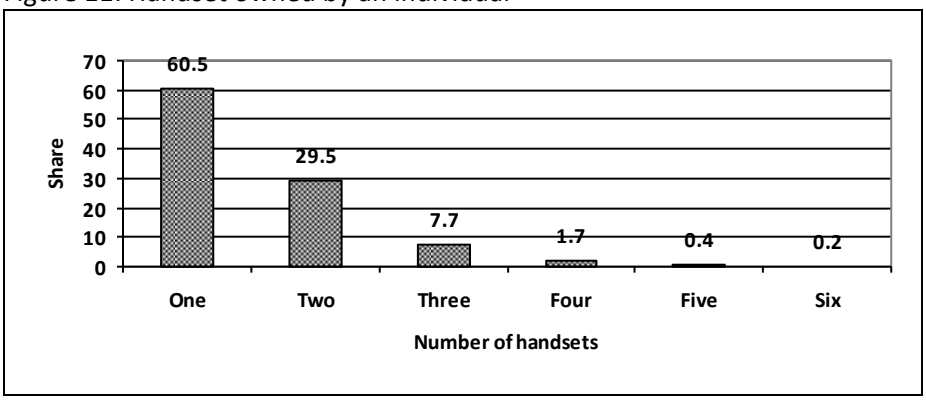
5.2.2 MOBILE PHONE OWNERSHIP AND SWITCHING IN THE MOBILE INDUSTRY

The respondents were asked to indicate the number of mobile phones and the number of mobile SIM cards they own. In cases where the respondents had more than one SIM card, they were asked to give the main reason for this. They were further asked whether they would change their mobile network service provider and to give reasons why they would or would not.

5.2.3 OWNERSHIP OF HANDSETS

A total of 61% of the mobile users interviewed had one mobile phone (handset), 30% had two mobile phones and the remaining 10% is shared by respondents who had 3-6 mobile phones (Figure 11).

Figure 11: Handset owned by an individual



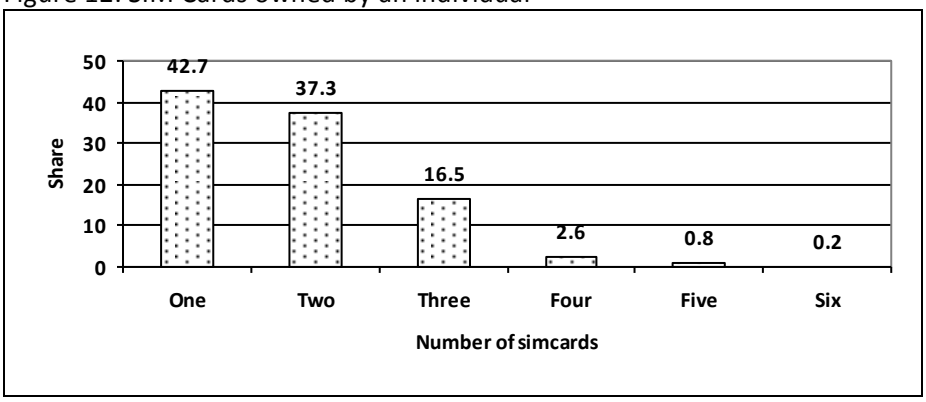
[1] Nteletsa II extended mobile coverage to poor and underserved areas of the population

Source: Author computed from survey

5.2.4 OWNERSHIP OF SIM CARDS

Respondents were asked about the number of subscriber identity module (SIM) cards they owned. The question essentially looked to find out the rate at which respondents were able to subscribe to more than one network provider. Ownership of one SIM card accounted for 43% of the 933 mobile users interviewed; implying that though still below half of the total users, a significant proportion of consumers had one SIM card. On the other hand, the share of respondents using more than one SIM card, that is 2-6 SIM cards, was 57%, which means that the majority of the mobile phone users used more than one SIM card (Figure 12). Figure 12 suggests an inverse relationship between proportion of users and number of SIM cards owned.

Figure 12: SIM Cards owned by an individual



Source: Author computed from survey

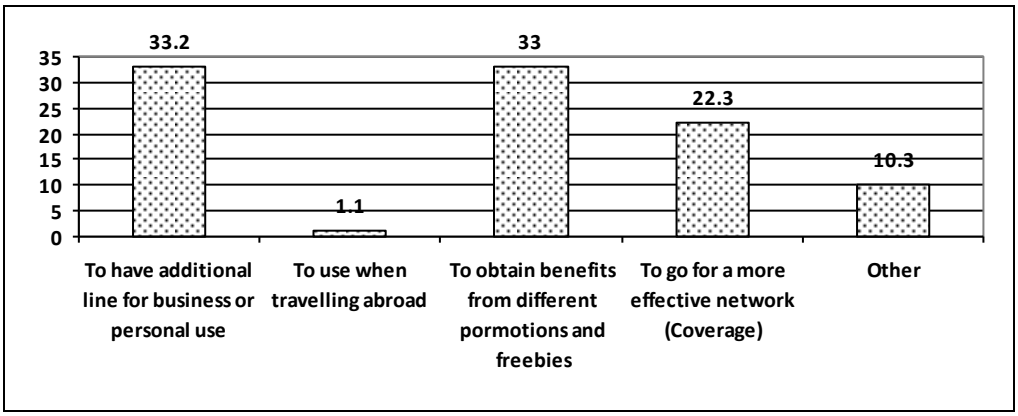
5.2.5 SIMREASONS FOR OWNING MULTIPLE SIM CARDS

Respondents with more than one SIM card were further asked to state why they owned multiple SIM cards. Figure 13 depicts the results. 33% of the respondents indicated that they used more than one SIM card in order to have *an additional line for business or personal use* and *to obtain benefits from different promotions and freebies*.

A further 22% indicated that they held more than one SIM card in order to go *for a more effective network (coverage)*. The remaining 11% indicated that they wanted to use the SIM cards when travelling abroad. The RIA (2013) survey report highlighted that the range of prepaid tariffs in Botswana's mobile industry is what causes the high level of duplicate SIM ownership. The report also highlighted that even in locations where there is only one operator (Nteletsa II areas for example); people routinely have more than one SIM card so that they can take advantage of specials and promotions when they travel to other parts of the country.

Another study by Mburu (2012) highlighted that the intense competition since the arrival of beMobile network in Botswana. The entry of beMobile in the industry appears to have resulted into customers either having additional mobile network or switching from Orange and Mascom to beMobile and vice versa.

Figure 13: Main reasons for using more than one SIM card

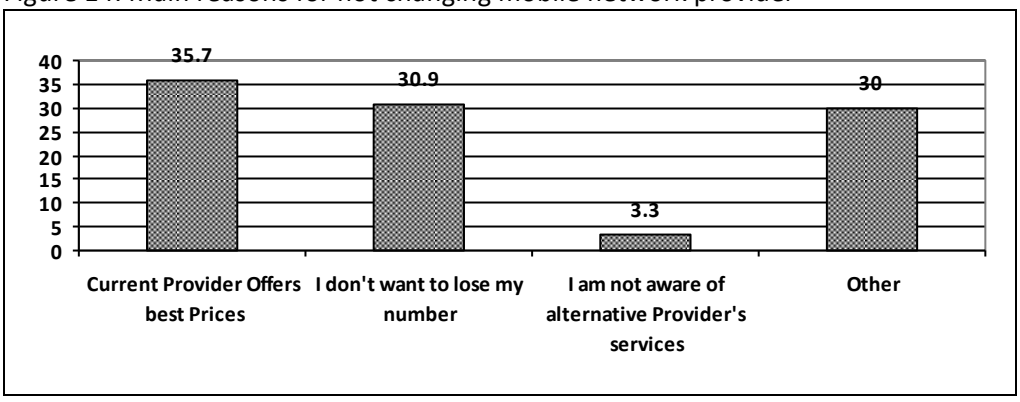


Source: Author computed from survey

5.2.6 CHANGE OF PROVIDER

One way of gauging their satisfaction level with one's provider is to find out if users would like to change providers. When asked the question whether they would like to change providers, 84% of the 933 respondents said they will not do so. The main reasons outlined by the respondents for not switching service providers were that *current mobile service providers offer best prices* and *that they do not want lose their current mobile phone numbers.* Few respondents indicated that they would not change their mobile network since *they are not aware of alternative providers` services* (Figure 14). 'Other' reasons given by respondents for not changing their mobile network provider accounted for 30%.

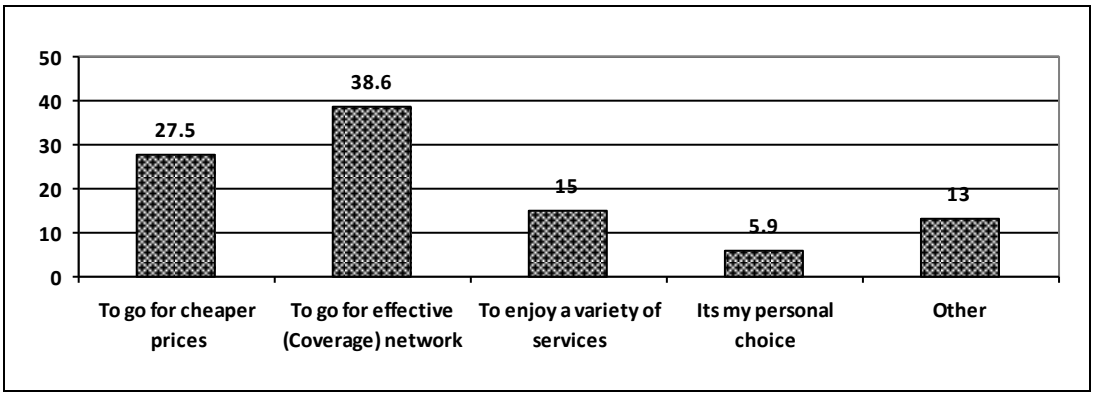
Figure 14: Main reasons for not changing mobile network provider



Source: Author computed from survey

A total of 149 of the 933 or 16% of the mobile service users said they would change their mobile network service provider. The main reasons given by these respondents are shown in Figure 15. As evidenced in Figure 15, about 39% of respondents who indicated that they would change their mobile provider gave effectiveness (coverage) of network as their main reason, followed by 28% who sated that they wanted cheaper prices and 15% who stated that they wanted variety of services. The remaining 13% stated other reasons.

Figure 15: Main reason for changing mobile network provider

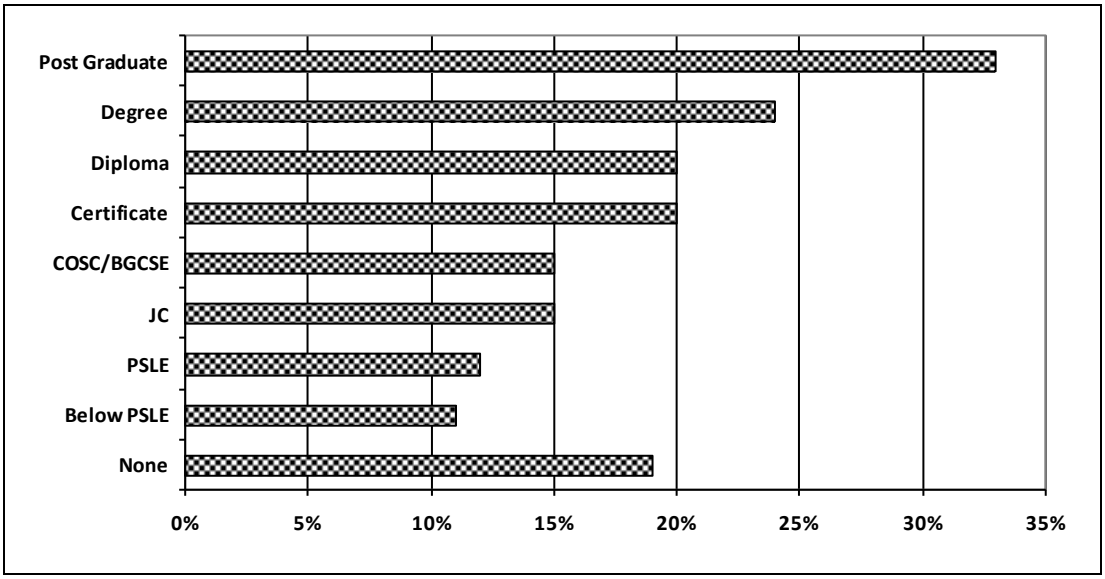


Source: Author computed from survey

5.2.7 EDUCATION STATUS AND CHANGE OF PROVIDER

There is an established pattern with regards to change of service provider and education level of respondents. Figure 16 reveals that generally, the proportion of those who said they would change their mobile service provider increases with increasing level of education, with the exception of those who reported no education level. It might suggest that education could be seen as an input into the utilisation of available services in the mobile service sector.

Figure 16: Respondents who would change their service provider by education status

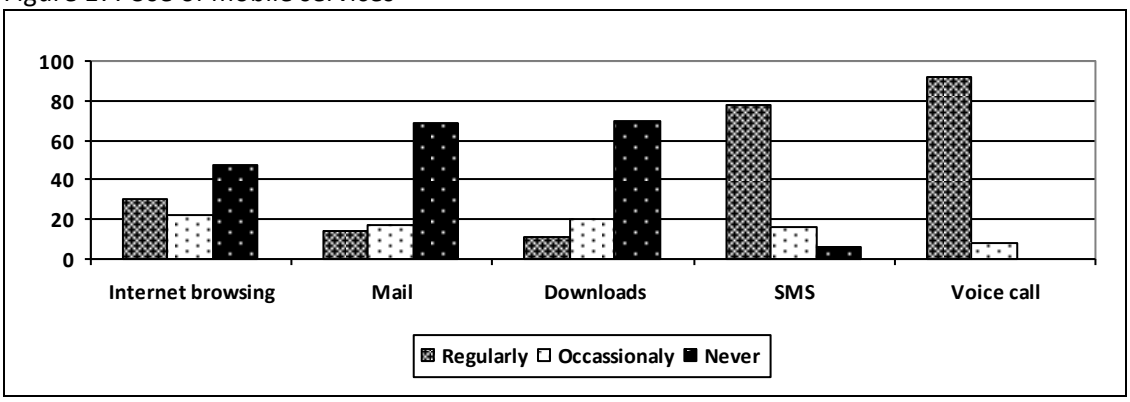


Source: Author computed from survey

5.2.8 MOBILE SERVICES UTILISATION AND CUSTOMER SATISFACTION

Over and above voice calls, mobile phone handsets provide multiple other services. Respondents were asked how often they used mobile services such as Internet browsing (including social media), mail, download (games, ringtones, music etc), short message services or SMS and voice calls. The objective of the question was to find out which services respondents consume more from the mobile network service provider. Figure 17 shows that there were higher proportions of respondents who said they never used networks for Internet browsing (48%), mail (69%) and downloads (69%). For those who said they used the network for such purposes, about 30 and 23 % said they used network for Internet browsing *regularly* and *occasionally*.

Figure 17: Use of mobile services



Source: Author computed from survey

The influence on satisfaction by the age of users of the various services was assessed as well. Table 13 shows that respondents aged below 36 years constituted the majority of regular users of the network for Internet browsing. For instance about 43 and 45% of regular users for Internet browsing were aged between 18 and 25, and 26-44 years respectively. In other words, the younger one is, the more likely they are to use their handsets to access Internet services. A similar pattern is observable in the use of mobile phone handsets for mail and downloads, notwithstanding the higher shares of non use as already indicated.

Table 13: Use of network for Internet browsing by age (Shares)

Age Group	Regularly	Occasionally	Never	Total
18-25	42.9	32.2	24.9	100
26-35	33.4	23.8	42.8	100
35-44	17.5	18.2	64.3	100
45-64	6.8	6.8	86.4	100
65+	0.0	5.9	94.1	100
Total	29.9	23.3	47.1	100

Source: Author computed from survey

As for the mail, overall, the occasional use surpassed regular use (Figure 17). On the other hand, higher shares of respondents said that they regularly used mobile networks for sending text messages (77%) and voice call (92%) and like in the above, these were dominated by the relatively youthful respondents.

5.2.9 SATISFACTION WITH PRICING, QUALITY, AVAILABILITY OF SERVICE AND OTHER VARIABLES

The satisfaction levels of customers was tested in other elements including pricing (of national and international calls, text messages, mobile banking and roaming services) Voice Call Quality (ability of making calls without being cut off and quality of customer service) and Availability of Choice (variety of services, confidentiality of customer information).

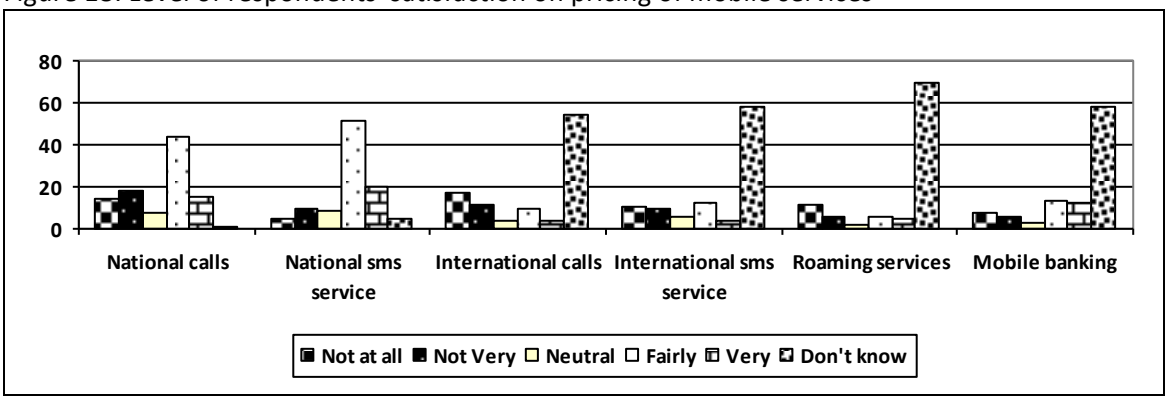
In relation to how respondents were satisfied with the price for making national calls, 59% indicated being satisfied with 44% 'fairly satisfied' and 15% 'very satisfied'. Overall 33% expressed dissatisfaction with 18% 'Not Very Satisfied' and 15% 'Not at all; satisfied.

Overall 72% expressed satisfaction with sending SMSs within Botswana. Of these, 51% of mobile users were 'fairly satisfied' and 20% were 'very satisfied'. Meanwhile 10% were not

very satisfied and 9% were 'neutral', implying that respondents couldn't express the level of their satisfaction.

Most of the respondents could not state their levels of satisfaction in relation to prices of international calls, text messages, roaming services and mobile banking (Figure 18). While the reasons for such a pattern may not be given with certainty, it could partly be due to the possibility that some respondents never utilised services of mobile banking or they never communicated (via text messages or calls) at an international level. This is however not to suggest that these are the main reasons. It could be just that respondents were not aware of the prices even if they utilised such services. In fact, it has been revealed that about 41% of respondents said they were not aware of the prices they are charged when using mobile services (discussed below).

Figure 18: Level of respondents' satisfaction on pricing of mobile services



Source: Author computed from survey

Table 10 below shows satisfaction levels on Quality of Mobile Services. Most of respondents were very satisfied with quality of customer service, variety of services available, availability of helpful information about services and confidentiality of customer information. They were fairly satisfied with the quality of voice call and variety of services available (Table 14).

Table 14: Level of respondents' satisfactory on quality of mobile services

	Not at all	Not Very	Neutral	Fairly	Very	Don't Know
Voice call quality	5	9.4	16.2	36.5	29.8	2
Making calls without being cut off	13.3	24	16.9	24.2	13.1	8.5
Quality of customer service	6.1	6.9	10.8	22.6	45.6	8
Varity of services available	5.3	6.1	16.5	32.6	31.5	8
Availability of helpful information about services	5.4	6.1	7.6	32.2	38.3	10.2
Confidentiality of customer Information	4.3	6	8.6	25	33.5	22.6

Source: Author computed from survey

5.2.10 PRICING AND AWARENESS OF MOBILE SERVICES

The respondents were asked whether they were aware of prices they are charged by their service providers when using mobile services and prices charged by other service providers for services they use. About 59% of the respondents said they were aware of the prices they are charged by their service providers while 41% said they were not.

However, it appears that customers did not engage in comparison of prices by the competing service providers as 63% of the respondents said they were not aware of price charged by other service providers for services they use.

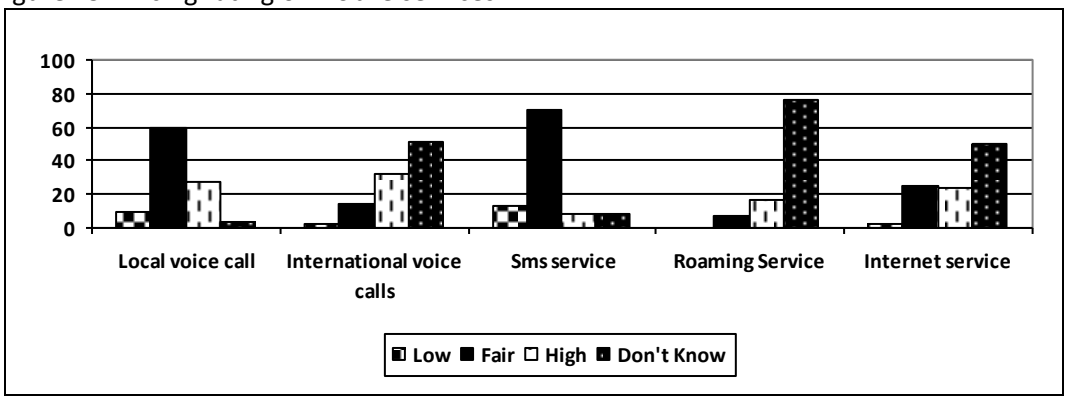
5.2.11 RATING OF PRICES

Respondents were asked to rate services in terms of price by indicating whether its 'low', 'fair', or high'. The services rated included local voice calls, international calls, SMS services, roaming services and Internet services. Of the 933 respondents, 60% indicated that the price for local calls are fair, 27% said the price is high and 9% said the price is low. The international voice calls were rated as follows; 51% of respondent indicated that they 'don't know', implying that they couldn't rate it, 33% said the price is high , 14% indicated that the price was fair while 2% said the price was low.

5.2.12 VIEWS ON SMS AND ROAMING SERVICE PRICES

On the question rating the price for the local SMS service, 70% of the respondents indicated that the price for sending SMS is fair, 13 % said the price was low, while 8% said that the price was high. When asked to rank the price for roaming services, 77% of the respondents indicated 'they don't know' and 16% indicated that the 'price is high' (Figure 19). These imply that prices for local voice calls and sending text messages are viewed as fair while less is known about prices for international voice calls, roaming and Internet services.

Figure 19: Pricing rating of mobile services

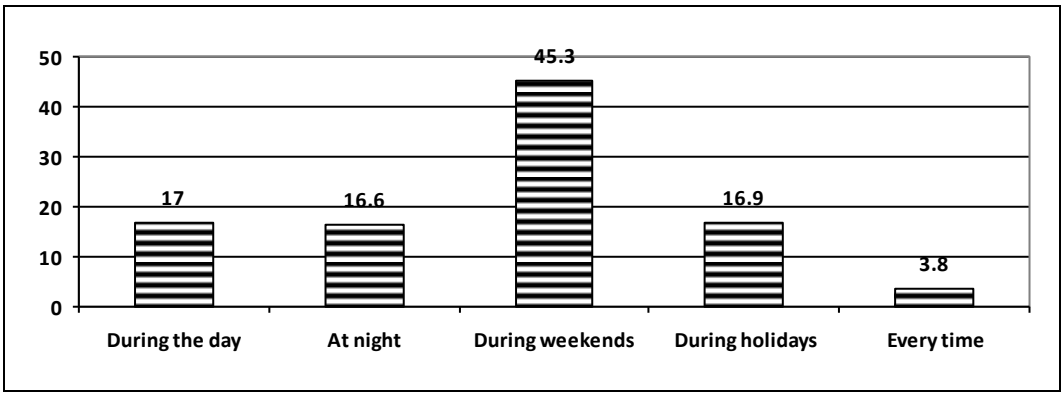


Source: Author computed from survey

5.2.13 MOBILE NETWORK EFFECTIVENESS

Respondents were asked whether they have a problem connecting to the network as well as stating the time(s) during which they experienced such. 71% of the users of mobile services indicated that they have a problem connecting to the network while 29% said they do not. Of those who reported having a network problem, an equal share of about 17% indicated that they have a problem with connecting to the network during the day, on holidays and at night while 45% experienced the problem during the weekends (Figure 20).

Figure 20: Times of having a problem connecting to the network



Source: Author computed from survey

Respondents were further requested to state which providers were most effective in their locations. The respondents indicated that the most effective network provider in their location is Mascom, which accounts for 50% of mobile users who were interviewed. Orange accounts for 27% while beMobile accounts for 23%.

5.2.14 AWARENESS ON GENERAL ISSUES IN THE INDUSTRY

Respondents were asked whether they are aware that their numbers can be recycled or given to another person for non-use. Numbers recycled would have stayed for some months inactive. 64% of the 933 interviewed mobile users were aware while 36% were not. The mobile users were also asked whether they are aware of the complaints handling procedures and 70% indicated that they are aware.

Responding to a question on whether respondents are aware that is an offence to send offensive, indecent, obscene or menacing messages, 88% of respondents indicated that they are aware. However 12% indicated being unaware of this offence. The respondents were also asked whether they are aware that is an offence to relay pornographic material by a communication system. 84% of the respondents indicated that they are aware while 16% said they were not.

On whether the respondents are aware that it is an offence to willingly interfere with erection, alteration, maintenance or inspection of any communication, 90% indicated being aware while 10% indicated being unaware.

About 96% of the respondents also indicated that they are aware that is an offence to damage, destroy or steal any communication equipment while 4% are not.

5.3 INTERNET SERVICE SECTOR

This section discusses the BOCRA customer satisfaction survey results as expressed by Internet service users. Internet service is a relatively new form of communication in Botswana. It can be accessed through the use of electronic communication gadgets like laptops, personal computers (PC's), tablets and mobile phones. There are three mobile networks in Botswana that provide Internet services to their subscribers along with other Internet service providers like BTCL, Microteck, Broadband Botswana Internet (BBi) and many others. Recently, Mascom and Orange upgraded their Internet connectivity launching the 4G (Generation) network. The 4G network has been designed to drastically increase the speed of Internet browsing on mobile phones, tablets and laptops.

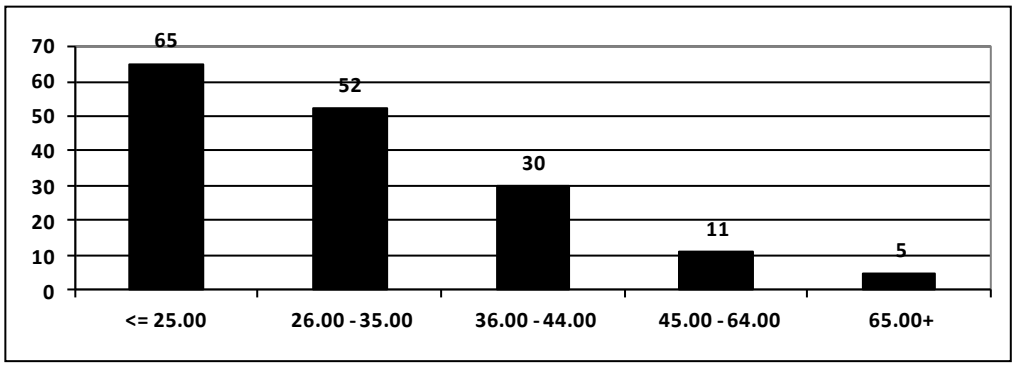
5.3.1 INTERNET USAGE

Respondents were requested to state whether or not they used Internet services. Of the 1000 people who responded 481 (48.1%) indicated that they used Internet services.

Official statistics in Botswana show that in 2010/11, the period of the last population census, 31% of people in Botswana were Internet users, while on the other hand, the sample population shows that 48% of the study population had access to the Internet. The official statistics are thus closer to global comparisons, where data from the International Telecommunications Union shows that 32% of the developing country residents had Internet access in 2014, and 35% had such access by the year 2015. It is conceivable that Botswana's access rates could have grown faster during the intervening period. Amongst others, the growth in mobile phone access due to the Nteletsa project would have served to increase access to Internet particularly in the areas that were not serviced or underserved prior to the project.

At 87% of the users, individual users accounted for the largest share. The majority of the Internet individual users were females accounting for about 53% compared to 47% of their male counterparts. Figure 21 depicts Internet usage by age. Clearly, Internet usage declines with increases in age. For example, among the age group 18-25, about 65% indicated that they used Internet, followed by the age group 26-35 with 52% and the shares declines as we move to the elderly (those aged 65 and above) with only 5% indicating that they used Internet (Figure 21).

Figure 21: Internet usage by Age

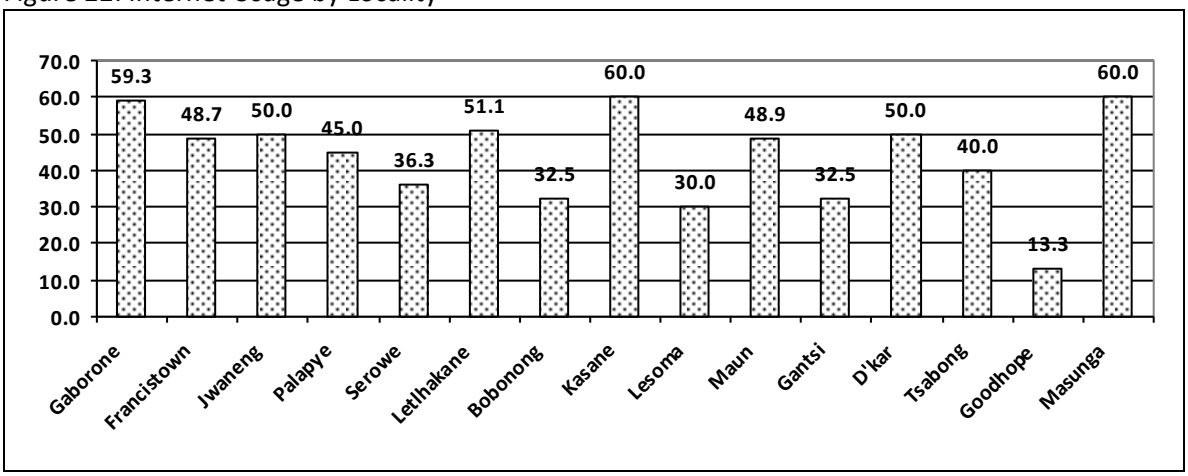


Source: Author computed from survey

5.3.2 INTERNET USAGE BY LOCALITY

Figure 22 below depicts usage Internet by locality. The figure shows high Internet usage in Masunga, Kasane and Gaborone. Localities with the least Internet usage included Good-Hope, Lesoma, Gantsi and Bobonong. These results are inconclusive due to the lack of clarity between the rural-urban/rural village/remote village localities in terms Internet usage.

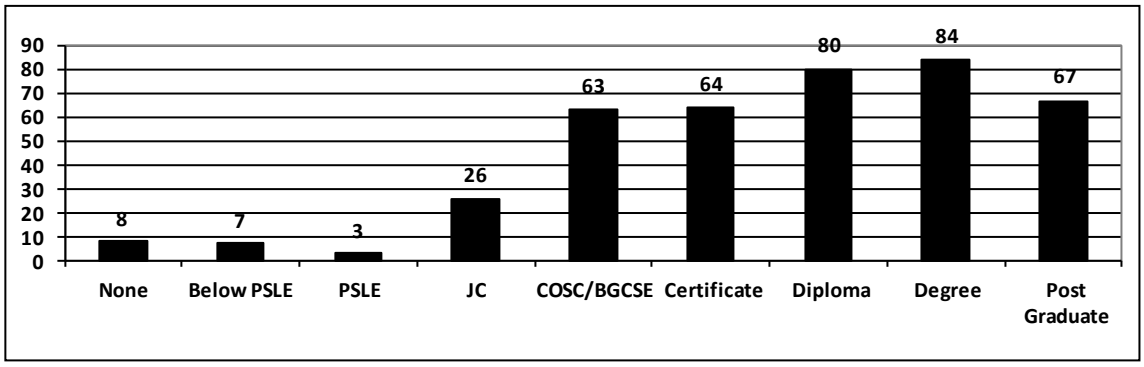
Figure 22: Internet Usage by Locality



Source: Author computed from survey

Figure 23 shows the distribution of Internet users by educational attainment. The figure shows that Internet usage increases with higher educational attainments. As expected, individuals with tertiary education used the Internet more than those with lower educational attainments. It shows that the majority of the Internet users were those with higher educational attainments, especially those with tertiary education. For example, of those with degree qualification, a larger share of 84% indicated that they used Internet whilst for those with PSLE only 3% used Internet.

Figure 23: Internet Usage by Educational Attainment



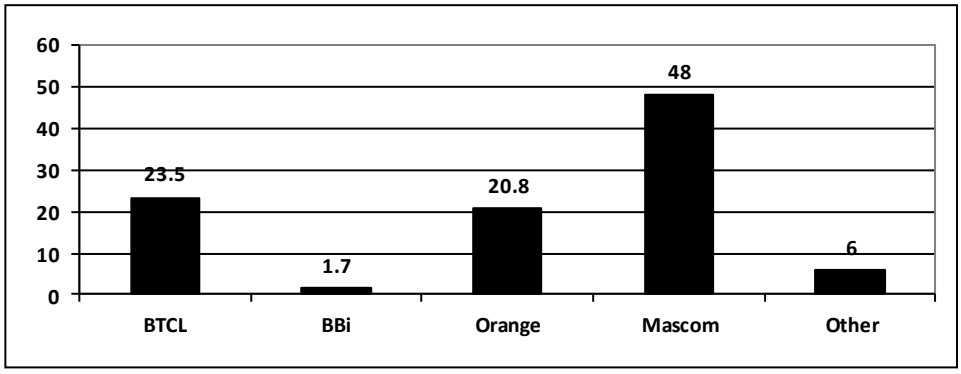
Source: Author computed from survey

5.3.3 INTERNET SERVICE PROVIDER

Respondents were further asked to state who their main Internet provider was. Figure 24 shows that at 48%, Mascom had a largest share of Internet users, followed by Orange and BTC with 24% and 21%, respectively. Broadband Botswana Internet (BBi) accounted for 2 % and the remaining 6% was accounted for by other Internet service providers.

Respondents were further asked to state the reasons why they chose the particular service provider they were using and the majority (about 53.4%) indicated price affordability as the main reason. This was followed by 25% of respondents who indicated that their main reason was reliability and stability of the network. About 5% indicated that they had no choice since there was only one service provider in their area.

Figure 24: Internet Service Providers

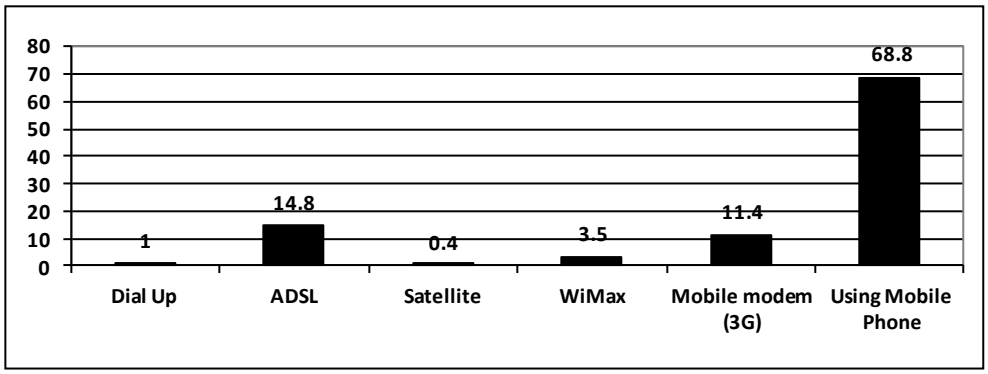


Source: Author computed from survey

5.3.4 TYPES OF INTERNET USED

Respondents were asked to state the types of Internet used. This question was important to understand whether the respondents understood the implications of type of Internet used-as well as whether they were informed about the choices they had. The results, according to Figure 25 show that the most used type of Internet is the mobile phone, with a share of 69% followed by ADSL and mobile modem with 15% and 11%, respectively . WiMax, Dial Up and Satellite accounted for the lowest shares with 4%, 1%, and 0%, respectively. These results buttress the idea that the use of smart phones has led to an increased number of people with access to the Internet (BOCRA, 2014, pp17). The growth in influence of the mobile phone handset as an interface for Internet browsing reduced the uptake of ADSL as it remained low due to low uptake of fixed telephone lines.

Figure 25: Types of Internet Used



Source: Author computed from survey

5.3.5 TYPES OF INTERNET USED BY AGE

Table 11, shows the distribution of Internet users by age and type of Internet. The majority of the users are the youth aged between 18-35 years and most of them use mobile phone Internet. These findings are consistent with those of BOCRA (2014), according to which Internet usage was highest amongst the youth.

Table 15 shows that the younger populations are more likely to use mobile phone as a preferred mode of Internet access. The older ages on the other hand seem to prefer more static forms of Internet access such as ADSL and dial up.

Table 15: Type of Internet Used-By Age

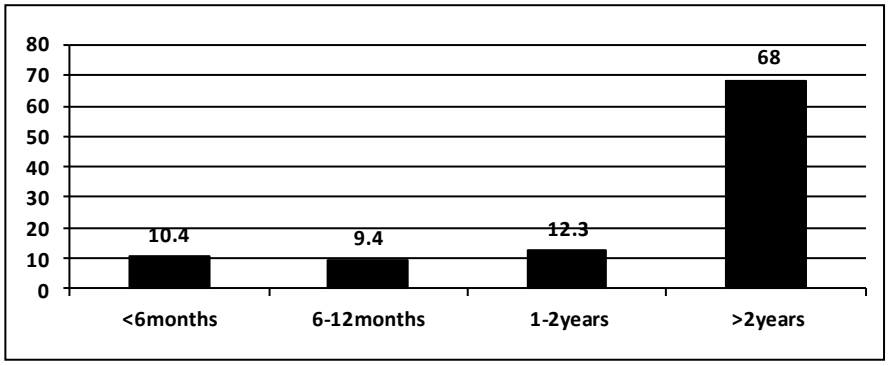
Type of Internet	18-25	26 - 35	36 - 44	45 - 64	65+	Total
Dial Up		33.3%	33.3%	33.3%		100.0%
ADSL	17.1%	48.6%	28.6%	5.7%		100.0%
Satellite	100.0%					100.0%
WiMax	50.0%	50.0%				100.0%
Mobile modem (3G)	50.0%	35.7%	9.5%	2.4%	2.4%	100.0%
Using Mobile Phone	43.9%	45.2%	8.8%	2.1%		100.0%
Total	42.2%	44.4%	10.5%	2.6%	.2%	100.0%

Source: Author computed from survey

5.3.6 PERIOD WITH ISP

In order to gauge the satisfaction levels with their current Internet Service Providers, or ISPS, respondents were asked to indicate the period they have with their Internet service provider (ISP). The majority of the Internet users (68%) had more than two years with their respective service providers. This was followed by those who have between 1 and 2 years with their provider (12.3%), 6 months (10.4%) and lastly, those who have between 6-12 months (Figure 26).

Figure 26: Period with ISP

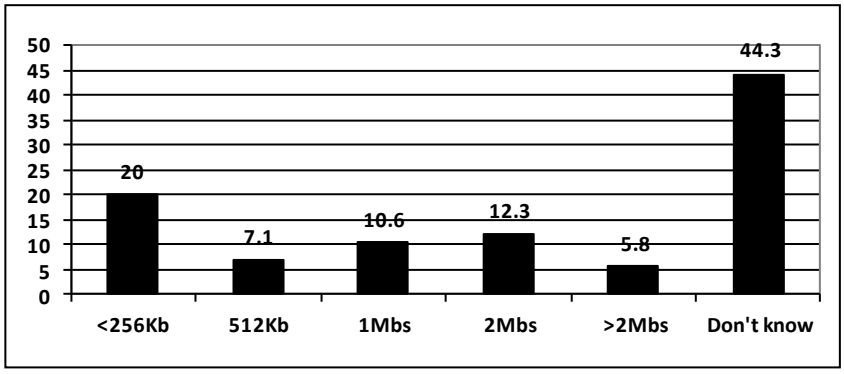


Source: Author computed from survey

5.3.7 SPEED OF THE INTERNET

Respondents were asked to state the speed of their Internet service. This question carries the implications of one understanding that speed has implications for pricing and other quality measures such as efficiency. 44% stated that they don't know the speed of their Internet, while 20% indicated that their Internet speed was less than 256Kb, followed by 12% who stated their Internet speed as 2Mbs. About 11% indicated their Internet speed as 1Mbs and had a proportion of 5.8% (Figure 27). Overall, these results show that the majority of the respondents are not aware of the Internet speed of the service they are using.

Figure 27: Internet Speed

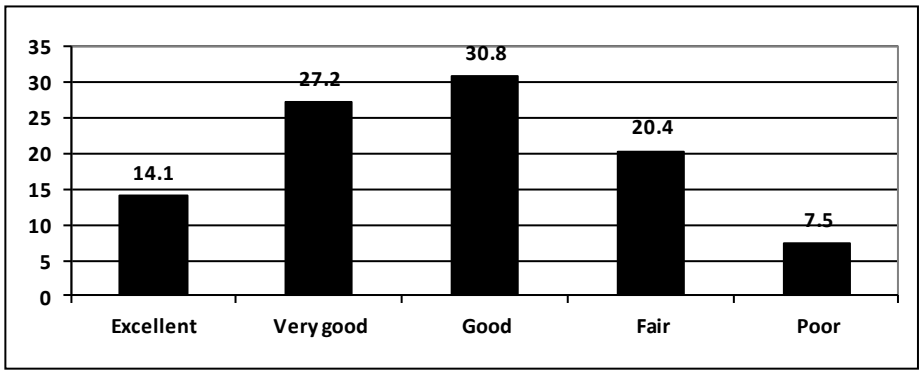


Source: Author computed from survey

5.3.8 QUALITY OF SERVICE

The respondents were asked to rate the quality of service by their service provider. Overall, 72 % were positively disposed in terms of quality of service, as 31% of the respondents rated it "good"; 27% "very good", and 14% indicated it was “excellent”. About 20% of respondents rated it "fair" while 8% were of the view that the service is poor. In general this shows that the respondents appreciate the quality of the service, as the majority, about 62% rated it good to excellent (Figure 28).

Figure 28: Rating of Service Quality

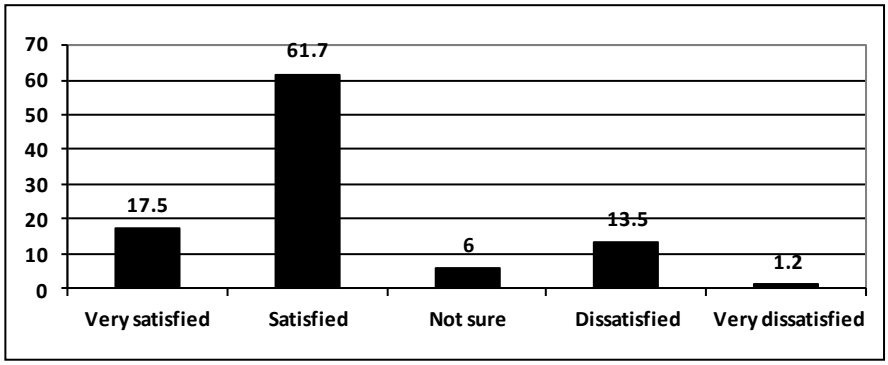


Source: Author computed from survey

5.3.9 SATISFACTION WITH INTERNET SERVICE QUALITY

Respondents were further asked to rate their satisfaction with quality of service. The responses are as shown on the figure below. Overall, 79% were satisfied, with 62% ‘satisfied’ and 17.5% ‘very satisfied’.14% were ‘dissatisfied’. However 1% of the respondents indicated being ‘very dissatisfied’. Only 6% of the respondents were unsure. In general this implies that majority (about 80%) of the respondents are satisfied with quality of service (Figure 29).

Figure 29: Satisfaction with Service Quality

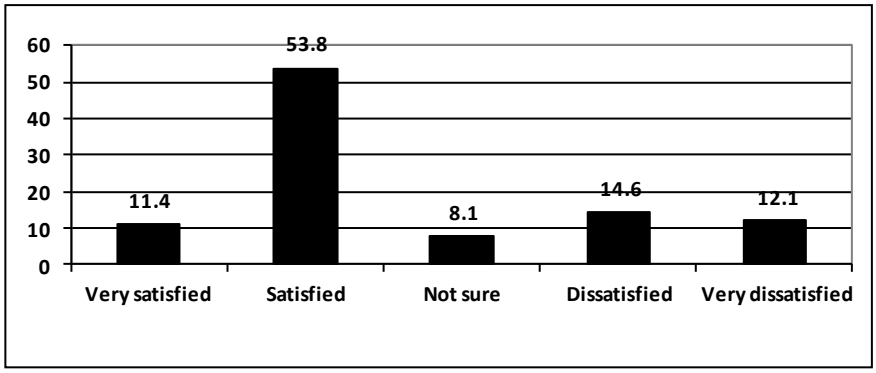


Source: Author computed from survey

5.3.10 SATISFACTION WITH INTERNET PRICING

Respondents were asked about their satisfaction with the prices of Internet services. The objective of this question was to find out how satisfied the respondents with the prices of Internet service are. The response was as follows, 54% were 'satisfied'; 11% 'very satisfied' 15% 'dissatisfied' and 12.1% 'very dissatisfied'. Only 8% of the respondents were unsure (Figure 30). In general this indicates that majority of the respondents are satisfied with the pricing of Internet services.

Figure 30: Satisfaction with Pricing



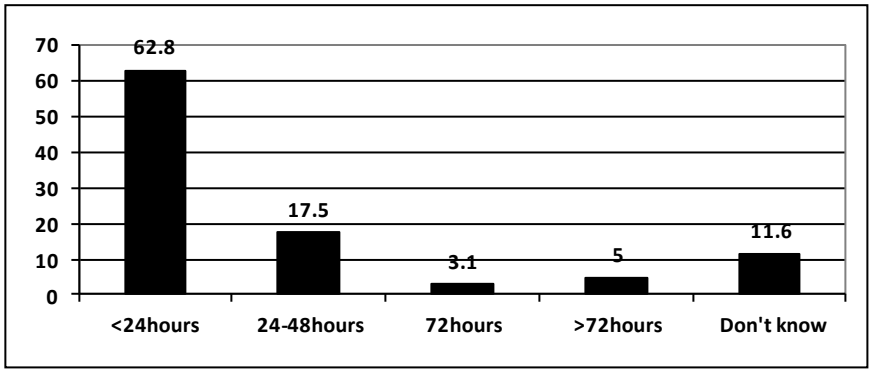
Source: Author computed from survey

5.3.11 TURNAROUND TIME

The objective of the question was to find out how long it took to connect Internet from the date one applied for the connection. The responses were as follows; less than 24 hours 63%; 24-48 hours 18%; and 72 hours 5% and those who did not know constituted 12% of the respondents (Figure 31). These are incredibly fast turnaround times.

It is possible that the fast turnaround times are due to the fact that the majority of Internet users access it on their mobile phone handsets.

Figure 31: Turn Around Time



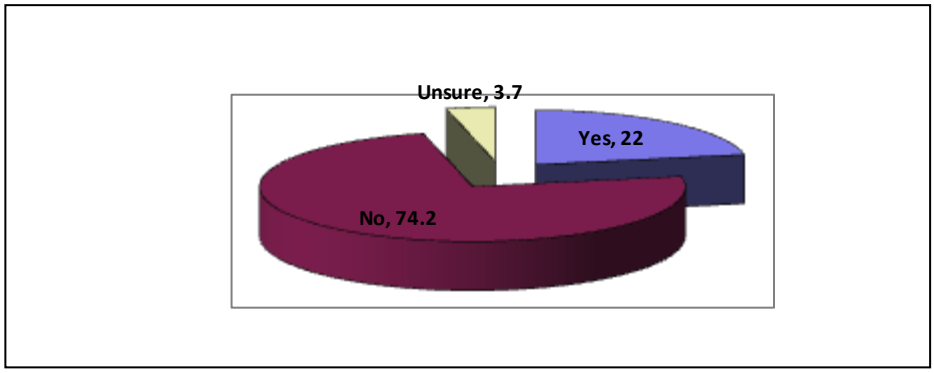
Source: Author computed from survey

5.3.12 CURRENTLY CONSIDERING MOVING TO ANOTHER SERVICE PROVIDER?

Respondents were asked if they are currently considering moving to another service provider. Readiness to move to an alternative ISP would indicate lack of satisfaction with the current one. A large proportion (74 %) said they were not considering moving; while 22% said they were considering moving. 4% were not sure (Figure 32).

The respondents who indicated that they were not considering moving were further asked to state the reasons why they would not move and 39% indicated that the current service was cheap (they were satisfied with pricing); while 27% indicated that the network was reliable. The remaining 20% indicated that they were loyal to their service provider whilst 14% stated good customer service as their reason for not moving to another service provider. Those who indicated that they will move gave network quality as the main reason (40%), followed by 34% who indicated that their current service provider was expensive. The remaining 26% indicated "personal reasons" as a reason why they would leave their current service provider.

Figure 32: Considering Moving to Another Service Provider?



Source: Author computed from survey

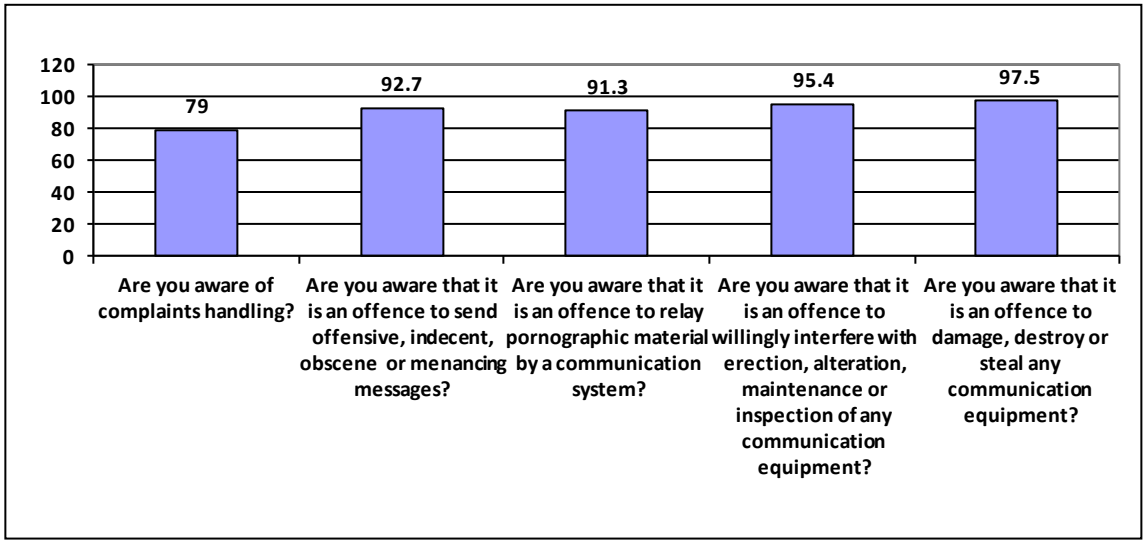
5.3.13 AWARENESS OF COMPLAINTS HANDLING AND SOME OFFENCES

Respondents were asked if they were aware of complaints handling procedure(s) when using Internet. 79% indicated that they were aware and the remaining 21% did not know. The majority of the respondents who 'knew' were from cities (Francistown and Gaborone).

A slightly different question on awareness of the offensiveness of sending indecent material shows that 92% of the respondents were aware that it is an offence to send offensive, indecent, obscene or menacing messages. At 91 %, the majority of the respondents indicated being aware that it is an offence to relay pornographic material by communication.

An even higher proportion of respondents, at 98 % indicated that they were aware that it is an offence to willingly interfere with erection, alteration, maintenance or inspection of the equipments (Figure 33). In general it can be concluded the majority of users are informed about Internet ethics and this can be linked to education as lot of them were people who have received formal education.

Figure 33: Awareness by Internet User



Source: Author computed from survey

5.4 POSTAL SERVICES SUB-SECTOR

This section details the customer service in the postal service subsector of the communications sector. The postal service sector offers a variety of services that include; traditional mail, parcel services, philatelic products, express mail, money transfers, Kitsong Centres, social benefits payments and a variety of services that are offered on behalf of third parties.

The Botswana Post also distributes Daily News newspaper, Mmegi Newspaper and passports on behalf of the Department of Immigration and Media Houses respectively. Further, it also under the postal service collects application forms for Citizen Entrepreneurial Development Agency (CEDA), Mosele Legal Services, and Botswana Life Insurance Company among others. Botswana Post also facilitates the collection of premiums, council rates and service levies.

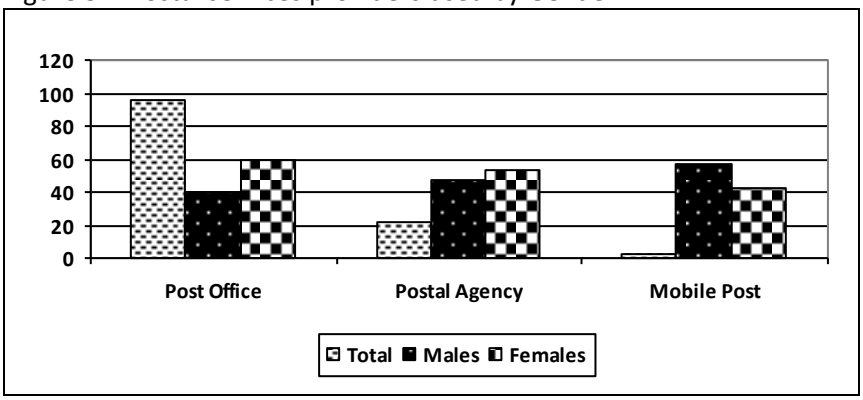
The other service provided by Botswana Post is the payment of Old Age Pension (OAP), World War Veterans (WWV) and registered destitute people on behalf of the Department of Social Protection (DSP) in the Ministry of Local Government and Rural Development (MLG&RD).

5.4.1 RESULTS DISCUSSION

A total of 497 (49.7%), or nearly 50% of the study, which is almost half of the respondents indicated that they used postal services.

The respondents were further asked to indicate which postal services providers they used, and the majority (96%), indicated that they used post office, followed by 22% of those using postal agencies and 2% who used mobile posts. At 60% the majority of the users were females most of whom used post offices and postal agencies whereas males dominated the mobile post (Figure 34).

Figure 34: Postal services providers used by Gender

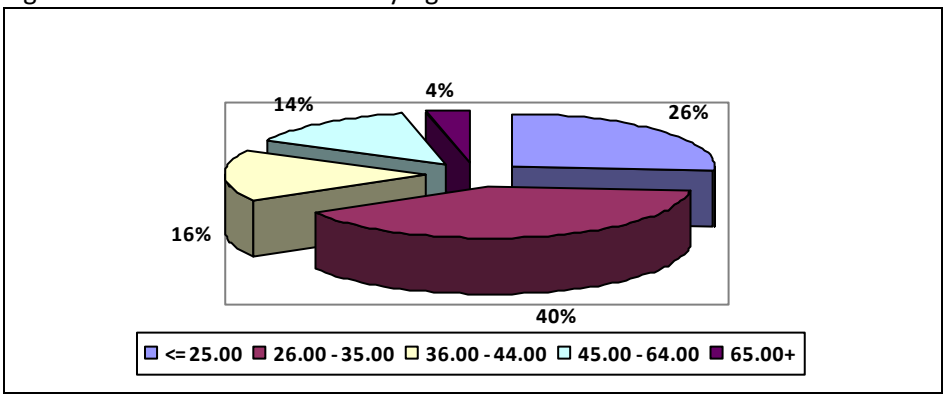


Source: Author computed from survey

5.4.2 DISTRIBUTION OF SERVICES BY AGE

Figure 35, depicts the distribution of postal services users by age. The majority of the users were the youth (18-35) accounting for about 66% of postal services users. They were followed by the middle aged (36-44) with 16% and 45-64 with 14%. The elderly accounted for the remaining 4%, and these were mainly for facilitating the collection of old-age pensions and Second World War veteran allowances.

Figure 35: Postal services used by Age



Source: Author computed from survey

5.4.3 DISTANCE TO SERVICE POINTS-POSTAL SERVICES

Table 16 below depicts the distance travelled to the nearest post office by locality. At 90% the figure indicates that Masunga has the highest proportion of people who travel less than 5 kilometres to get to the nearest post office, followed by Serowe (84%), Letlhakane (83%) and Kasane (82%) respectively. Of those residing in urban centres, the distances to the post office

declines somewhat, with 27% and 15% of Francistown and Gaborone residents respectively reporting that they travel more than 10km in order to get to the nearest post office.

In remote areas like D'kar and Lesoma, 100% of the post office users travel for more than 15 kilometres to the nearest post office. Users who reside in Good-Hope also reported a high percentage (33.3%) of respondents who travel more than 15 kilometres to the nearest post office.

Table 16: Distance travelled to the nearest Post office by locality

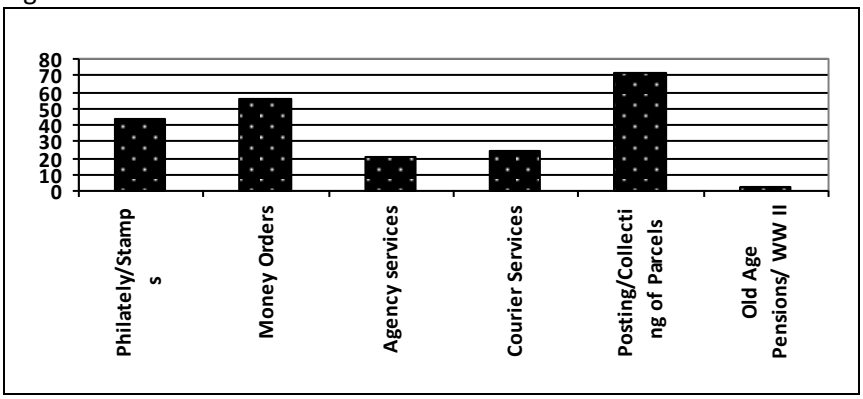
	0-5km	5-10km	10-15km	More than 15km	Total
Gaborone	63.8	21.7	11.2	3.3	100
Francistown	48.5	24.2	12.1	15.2	100
Jwaneng	70.0	20.0	10.0	0.0	100
Palapye	61.9	23.8	4.8	9.5	100
Serowe	83.7	7.0	4.7	4.7	100
Letlhakane	83.3	11.1	5.6	0.0	100
Bobonong	50.0	31.3	0.0	18.8	100
Kasane	81.8	9.1	0.0	9.1	100
Lesoma	0.0	0.0	0.0	100	100
Maun	68.1	17.0	12.8	2.1	100
Gantsi	65.2	17.4	4.3	13.0	100
D'kar	0.0	0.0	0.0	100	100
Tsabong	66.7	13.3	0.0	20.0	100
Good Hope	33.3	20.8	12.5	33.3	100
Masunga	89.5	10.5	0.0	0.0	100
Total	61.8	17.9	8.5	11.9	100

Source: Author computed from survey

5.4.4 SERVICES ACCESSED AT THE POST OFFICE

Figure 36 depicts the distribution of post office users by services they seek at the post office. The results show that of the six services that the respondents seek at the post office; at 71%, posting or collection of parcels/mails is the most accessed service, followed by money orders (56%) and philately/stamps (44%). Services for Old age pension and Second World War veterans accounted for the lowest shares at 3% and courier services stood at 21%.

Figure 36: Postal Services Accessed at the Postal Office

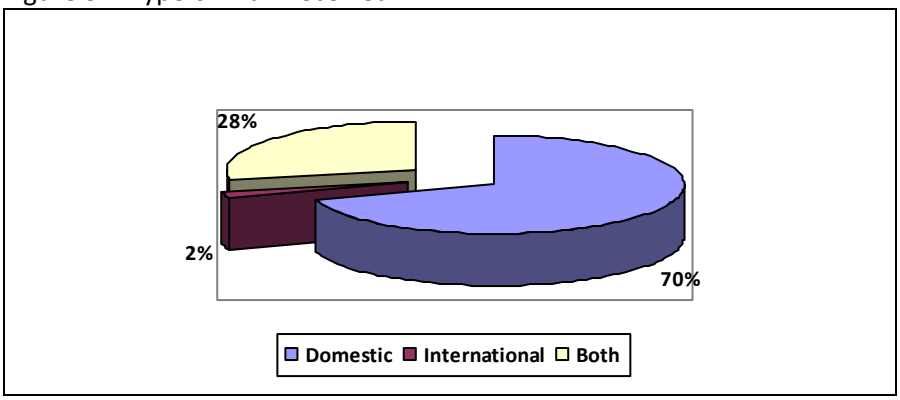


Source: Author computed from survey

5.4.5 ORIGIN OF MAIL RECEIVED

Respondents were asked whether the majority of the mail they received originated from Botswana or other countries. 81% of postal services users indicated that they posted or received mail. Of these, about 70% indicated that they received domestic mail compared to 2% who received international mail. The remaining 28% indicated that they received both domestic and internal mail (Figure 37).

Figure 37: Type of Mail Received



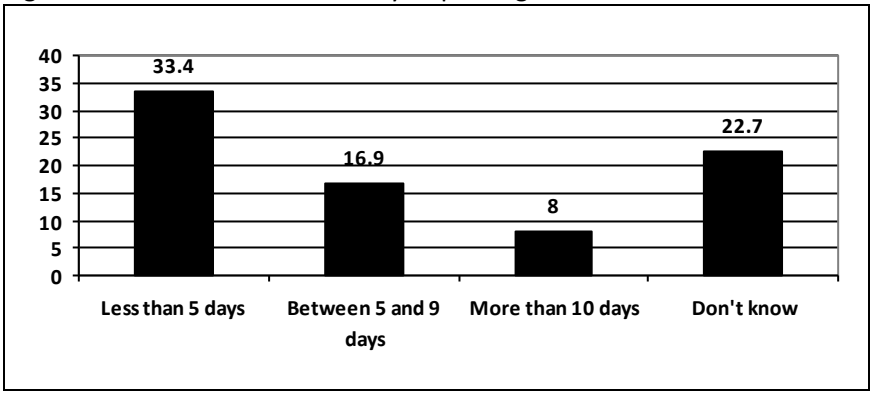
Source: Author computed from survey

5.4.6 LENGTH OF TIME IT TAKES TO RECEIVE MAIL AFTER DATE OF POSTING

When asked how long it takes for the respondents to receive their mail after the date of posting, 33% indicated that it took less than 5 days, followed by 17% of those who indicated that it took between 5 and 9 days and 8% reported that they take more than 10 days to received their mail. The remaining 23% indicated that they did not know (Figure 38).

These need to be interpreted with care since factors influencing the length of time have not been explored in this study. It does not necessarily reflect efficiency/inefficiency on the part of service providers, as some factors are beyond its control. For example, if one collects their mail from a common collection point such as a primary school, their capacity to regularly check their mail is subject to the regularity with which their institution collects mail. Again even if one has their mail box keys in their possession but they stay in a remote area, travelling to collect may occur irregularly, and thus give the appearance of mail received outside of the timeframes stipulated in the questionnaire.

Figure 38: Mail received after day of posting

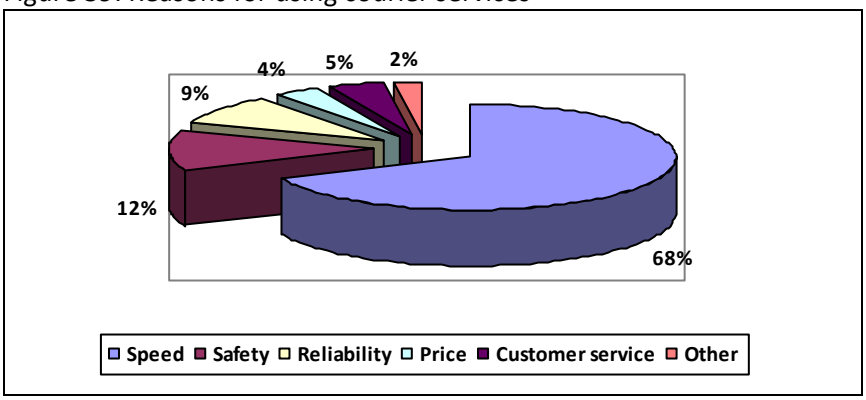


Source: Author computed from survey

5.4.7 REASONS FOR USING COURIER SERVICES

Another postal service available in Botswana is the courier service. The respondents who indicated that they used courier services were further asked to state their reason for using courier services, and their reasons for use of the courier services are illustrated by Figure 39 below. The majority of respondents (68%) indicated that speed is their main reason for using courier services, followed by 12% who stated their reason as safety of their parcels (Figure 39).

Figure 39: Reasons for using courier services



Source: Author computed from survey

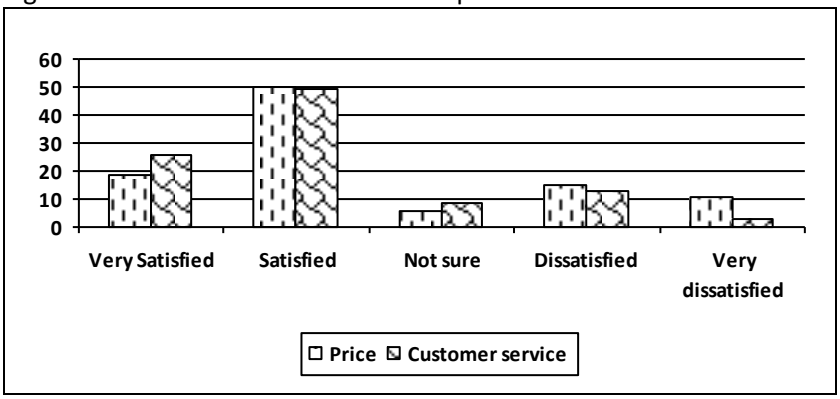
5.4.8 SATISFACTION WITH POSTAL SERVICES

Postal service users were asked to rate their level of satisfaction on the services they received with regard to price, speed, customer service, confidentiality and safety. Figure 40 depicts the results for the philately/stamps users with regard to price and customer service. Clearly, the majority of the users were satisfied with the price of philately/stamps; with 50% of them indicating that they were 'satisfied' and 18% 'very satisfied'.

This translated to 68% of the users who indicated being satisfied with the price of philately/stamps. On the other hand, 26% of the philately/stamps users were dissatisfied/very dissatisfied with the price of philately/stamps, whilst the remaining 6% were unsure.

With regard to customer service, about 75% of the users were happy (satisfied/ very satisfied) with the service they received with regard to philately/stamps. About16% of the users indicated that they were either dissatisfied or very dissatisfied with the service they received with regard to philately/stamps. The remaining 9% were unsure about the customer service.

Figure 40: Satisfaction level with Stamps



Source: Author computed from survey

5.4.9 SATISFACTION WITH MONEY ORDERS

Respondents were further asked to rate their level of satisfaction of money orders with regard to price, customer service, speed, confidentiality and safety. Table 17 presents the results. At 92%, the majority of the users of money orders are satisfied with speed, followed by customer service (83%), confidentiality (79%) and safety (78%).

However, with regard to price of money orders, a considerable number, though less than the majority, of the customers were not satisfied as 46% indicated they were either 'dissatisfied' or 'very dissatisfied'. Overall only 48% of the users indicated that they were either satisfied or very satisfied with the price of money orders while 4% were 'Not Sure'.

Table 17: Satisfaction with Money Orders

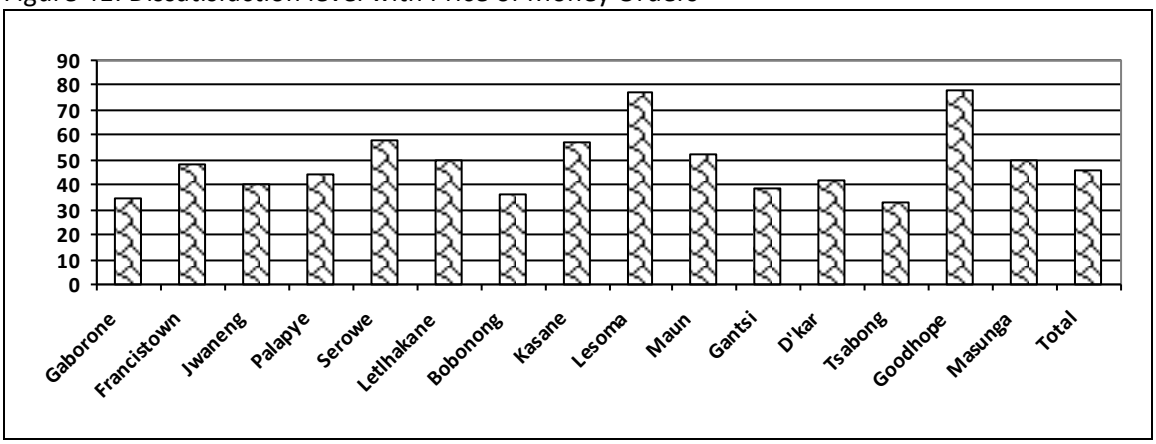
	Very Satisfied	Satisfied	Not sure	Dissatisfied	Very dissatisfied	Total
Price	12.7	35.5	6.2	29	16.7	100
Customer service	25	57.6	3.3	10.5	3.6	100
Speed	45.3	46.4	1.4	5.4	1.4	100
Confidentiality	19.6	59.8	10.5	7.2	2.9	100
Safety	23.6	54.7	9.8	9.1	2.9	100

Source: Author computed from survey

5.4.10 DISSATISFACTION: LEVEL WITH PRICE OF MONEY ORDERS BY LOCALITY

Figure 41, depicts the distribution of customers who were not satisfied by locality. In terms of geographical spread, the majority of the dissatisfied customers with regard to price of money orders were from Good-Hope (78%), followed by Lesoma (77%), Serowe (58%), Kasane (57%) and Maun (53%). Letlhakane and Masunga each recorded 50% of the customers who indicated that they were not satisfied.

Figure 41: Dissatisfaction level with Price of Money Orders



Source: Author computed from survey

5.4.11 SATISFACTION WITH PRICING-COURIER SERVICES

Respondents were also asked to rate their level of satisfaction with courier services in respect to price, customer service, speed, confidentiality and safety and the results were similar to those of money orders (Table 18). The majority of the users of courier services were satisfied with speed (88%), followed by customer service (83%), confidentiality (80%) and safety (79%). However, regarding the price of courier services, the overall satisfaction level was lower with about 66% of the customers indicating that they were either satisfied or very satisfied. However, this figure is still some 16% above the 50% threshold.

Table 18: Satisfaction with Courier Services

	Very Satisfied	Satisfied	Not sure	Dissatisfied	Very dissatisfied	Total
Price	26.4	39.7	14.9	9.9	9.1	100
Customer service	34.7	47.9	11.6	4.1	1.7	100
Speed	45.5	42.1	9.1	0.8	2.5	100
Confidentiality	32.2	47.9	15.7	0.8	3.3	100
Safety	31.4	47.9	15.7	4.1	0.8	100

Source: Author computed from survey

5.4.12 SATISFACTION WITH OLD AGE PENSIONS SERVICES

With regard to Old Age Pensions (OAP), the majority of the users, comprising mostly the elderly were satisfied. About 87% indicated that they were satisfied with the customer service, while 13% were dissatisfied.

93% said they were satisfied with the confidentiality exercised when they access the services. Those who indicated dissatisfaction accounted for a share of 7%.

In terms of safety, about 80% indicated that they were either satisfied or very satisfied and 13% were unsure while the remaining 7% were dissatisfied (Table 19).

Table 19: Satisfaction with Old Age Pensions

	Very Satisfied	Satisfied	Not sure	Dissatisfied	Total
Customer service	33.3	53.3	0	13.3	100
Confidentiality	26.7	66.7	0	6.7	100
Safety	33.3	46.7	13.3	6.7	100

Source: Author computed from survey

5.4.13 COMPLAINTS HANDLING

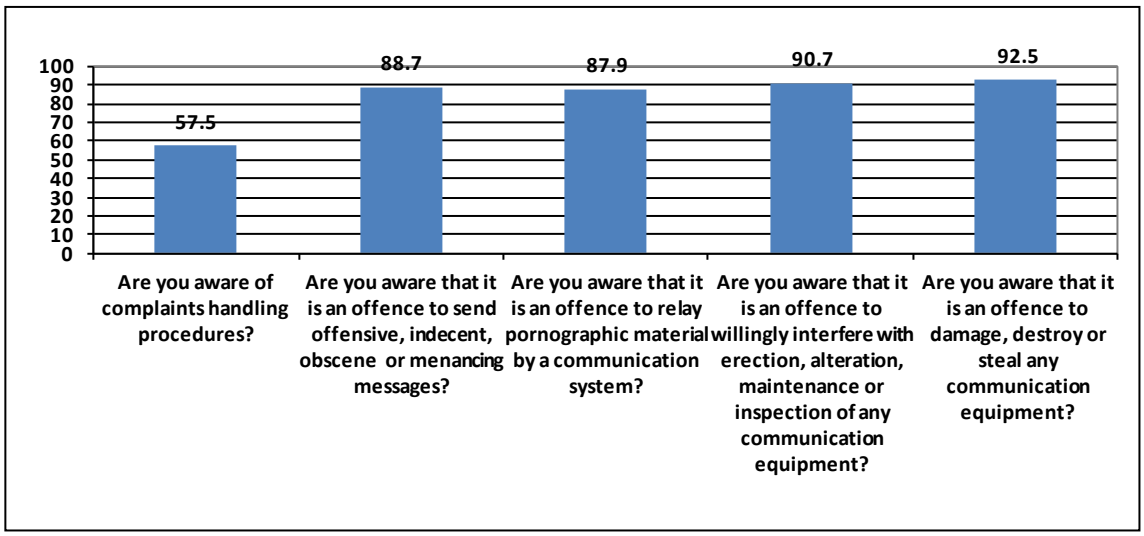
Respondents were asked if they were aware of complaints handling procedure when using the postal services. About 58% indicated that they were aware while the remaining 42% were not aware.

89% of the respondents indicated that they were aware that it is an offence to send offensive, indecent, obscene or menacing messages. At 88%, the majority of the respondents indicated that they are aware that it is an offence to relay pornographic material.

The majority of the respondents (91%) indicated that they were aware that it is an offence to willingly interfere with erection, alteration, maintenance or inspection of the equipments.

Again the majority of the respondents at 93% indicated that they were aware that it is an offence to damage, destroy or steal any communication equipment (Figure 42). In general it can be concluded that a lot of people are informed about postal services ethics and this can be linked to education as lot of them are people who have received formal education.

Figure 42: Awareness by Postal Service Users



Source: Author computed from survey

5.5 BROADCASTING SERVICE SECTOR

This section discusses the results of the survey on the broadcasting sector in Botswana. This subsector of the communications industry consists of radio and television broadcasters in both the public and private sectors.

5.5.1 BROADCASTING MEDIA

Respondents were asked to indicate whether they used any type of broadcasting media. Of the 1000 people who responded, 576, nearly 58% used at least one type of broadcasting media while 424 or 42% did not report using any type of broadcasting media.

5.5.2 CHOICE OF BROADCASTER

Respondents were required to state all the broadcasting media they use. These were divided into 3 broad categories; radio stations, television stations and social media. The radio stations were further categorised into private (Duma FM, Gabz FM, Yarona FM) and public (RB1 and RB2). Television stations under assessment comprised of government-owned Botswana Television station (BTv) and private television stations; e-Botswana, Multichoice Botswana, Multi-Choice South Africa and the South African Broadcasting Corporation.

5.5.3 RADIO LISTENERSHIP

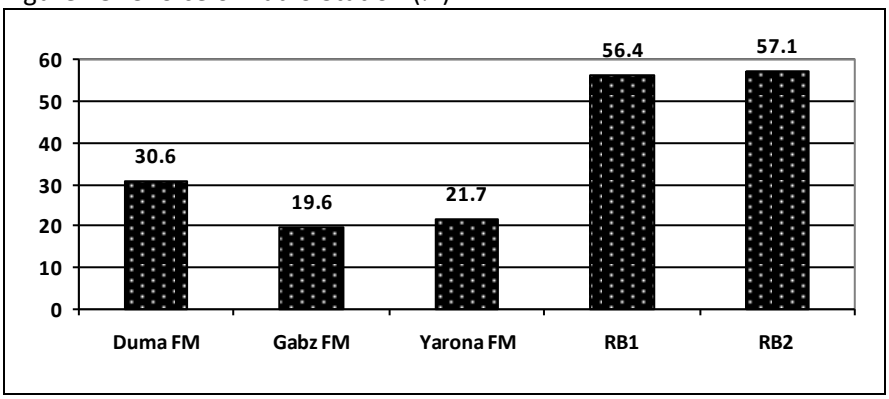
Respondents were asked to indicate the radio stations they listen to. The survey results show that the two government radio stations have a larger share of listenership. Figure 43 show that RB 2 had 57% listeners while RB 1 had 52% listeners.

Furthermore 31% of the respondents indicated that they listen to Duma FM while 22% and 20% listen to Yarona FM and Gabz FM respectively. These results are consistent with the Broadcasting Audience Survey (BAS) which was carried out in 2013 (NBB 2013). The BAS results showed that the two government radio stations were the most listened to while Yarona FM and Duma FM were rated third and fourth respectively. The results show that Duma FM has had its market share improve from fourth to third in terms of listenership as compared to the year 2013.

Comparing the foregoing results with past studies, the most recent of which is the Audience Survey and Review of Code of Practice for the Broadcasting Sector of Botswana (NBB 2013), the market share of the radio stations remains unchanged. The Survey confirmed RB 1 and RB 2 as the most listened to radio stations.

On the other hand, the study showed Ya Rona FM, Duma FM and Gabz F.M as following, in that order, the public radio stations.

Figure 43: Choice of Radio Station (%)

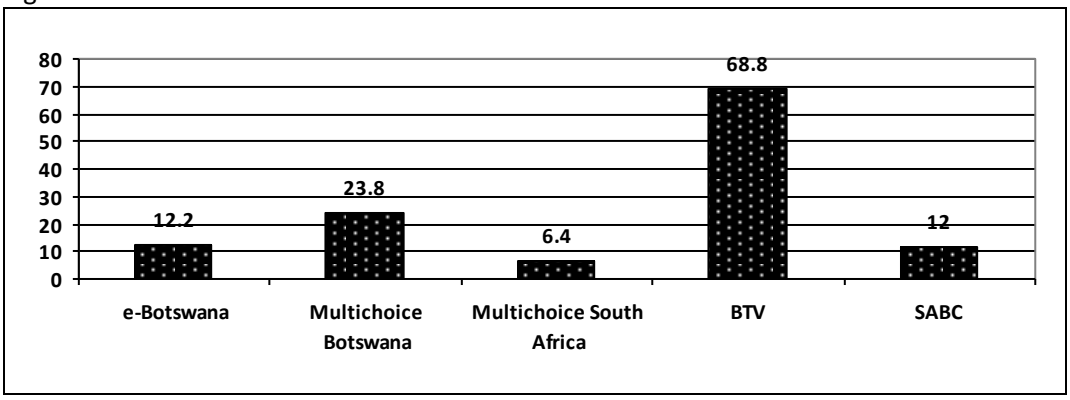


Source: Author computed from survey

5.5.4 TELEVISION VIEWERSHIP

Respondents were further asked to state the television stations they watch. Figure 44 shows that Botswana Television station or BTv is the most watched television station with 69% viewers. On the other hand, Multi-Choice Botswana is the second most viewed with 24% viewers. e-Botswana and SABC shared an equal proportion of viewers (12%) while 6% of respondents indicated that they watch Multi-Choice South Africa. What needs to be noted in relation to e-Botswana is that it covers a radius of 60 km^2 around Gaborone. As a regional broadcaster, its capacity to reach out is thus limited.

Figure 44: Choice of Television Station



Source: Author computed from survey

5.5.5 SOCIAL MEDIA

Social media platforms are a new form of communication in Botswana. 41% of the respondents indicated that they use social media. Social media includes Facebook, Twitter, Whatsapp, Skype and YouTube.

5.5.6 CUSTOMER EXPERIENCES WITH VARIOUS STATIONS

Respondents were asked to rate their experiences with radio and television stations. A number of variables were measured. These include signal quality, programmes, news and current affairs, code of practice (ethics), price and complaint handling.

5.5.7 SIGNAL QUALITY

Table 20 below shows that generally majority of the respondents were satisfied with the signal quality of different radio and television stations. 85%, 82% and 88% of the respondents indicated that they were satisfied with signal quality for Duma FM, Gabz FM and Multi-Choice respectively. 71% of the respondents were happy with Ya Rona FM signal quality, of which 30% were 'satisfied' while 40% were 'very satisfied'.

These findings indicate that signal quality across all stations is relatively good. 55% of the respondents were satisfied with signal quality for e – Botswana with about 12% indicating that they were very satisfied. However, 42% of the respondents were dissatisfied with signal quality for e - Botswana with 11% being very dissatisfied. Compared with other stations, this finding indicates that e-Botswana experiences some signal quality challenges. This might be attributed to the fact already mentioned above that e-Botswana is accessible within a radius of 60 km^2 around Gaborone. Areas beyond this radius are bound to experience signal quality challenges.

Table 20: Signal Quality

	Very Satisfied	Satisfied	Not Sure	Dissatisfied	Very Dissatisfied
Duma FM	35.5	49.1	1.8	10.7	3
Gabz FM	32.1	49.5	1.8	13.8	2.8
Yarona FM	30.4	40.8	12.8	13.6	2.4
e - Botswana	12.1	42.4	3	31.8	10.6
Multi-Choice	51.2	36.6	4.3	5.5	2.4

Source: Author computed from survey

5.5.8 PROGRAMMES

Respondents were requested to rate their satisfaction with programmes aired by different stations. The results indicate that the respondents are satisfied with programmes aired by different stations. 91%, 88% and 85% of the respondents indicated that they were satisfied with programmes aired on Duma FM, Gabz FM and Yarona FM respectively. 77% and 78% of the respondents highlighted that they were satisfied with programmes aired on e - Botswana and Multi-Choice. 20% of the respondents were dissatisfied with Multi-Choice programmes with 5% citing that they were very dissatisfied (Table 21).

Table 21: Satisfaction With Programmes

	Very Satisfied	Satisfied	Not Sure	Dissatisfied	Very Dissatisfied
Duma FM	34.3	56.8	5.9	3	0
Gabz FM	32.1	56	7.3	4.6	0
Yarona FM	24.8	60	9.6	4.8	0.8
e - Botswana	15.2	62.1	7.6	9.1	6.1
Multi-Choice	34.8	43.3	2.4	14.6	4.9

Source: Author computed from survey

5.5.9 NEWS AND CURRENT AFFAIRS

The results in table 22 below show that respondents were generally satisfied with the news and current affairs across the stations. 92%, 88% and 88% of the respondents were satisfied with the news and current affairs on Multi Choice, Duma FM and Gabz FM respectively. 85% and 82% of the respondents indicated that they were satisfied with e - Botswana and Yarona FM programmes.

Table 22: News and Current Affairs

	Very Satisfied	Satisfied	Not Sure	Dissatisfied	Very Dissatisfied
Duma FM	38.5	49.7	10.1	1.8	0
Gabz FM	31.2	56.9	8.3	3.7	0
Yarona FM	24	58.4	12.8	4.8	0
e - Botswana	18.2	66.7	9.1	3	3
Multi Choice	43.9	47.6	6.1	1.8	0.6

Source: Author computed from survey

5.5.10 CODE OF PRACTICE (ETHICS)

Respondents were also asked to rate their experience with different broadcasting media in regard to their code of practice. The results in table 23 show that 83%, 79% and 78% of the respondents were satisfied with the Code of Practice for Multi-Choice, Duma FM and Gabz FM respectively. 72% of the respondents indicated that they were satisfied with Code of Practice for Yarona FM and e - Botswana. However, 45% of the respondents were satisfied with the Code of Conduct for social media with a significant portion (42%) of the respondents citing dissatisfaction and 13% indicating that they were very dissatisfied.

Table 23: Code of Practice

	Very Satisfied	Satisfied	Not Sure	Dissatisfied	Very Dissatisfied
Duma FM	23.8	55.4	14.3	6	0.6
Gabz FM	21.1	56.9	13.8	8.3	0
Yarona FM	15.2	56.8	16.8	11.2	0
e - Botswana	13.6	59.1	19.7	3	4.5
Multi Choice	31.1	51.8	11	2.4	3.7
Social Media	12	33.3	12.8	29.1	12.8

Source: Author computed from survey

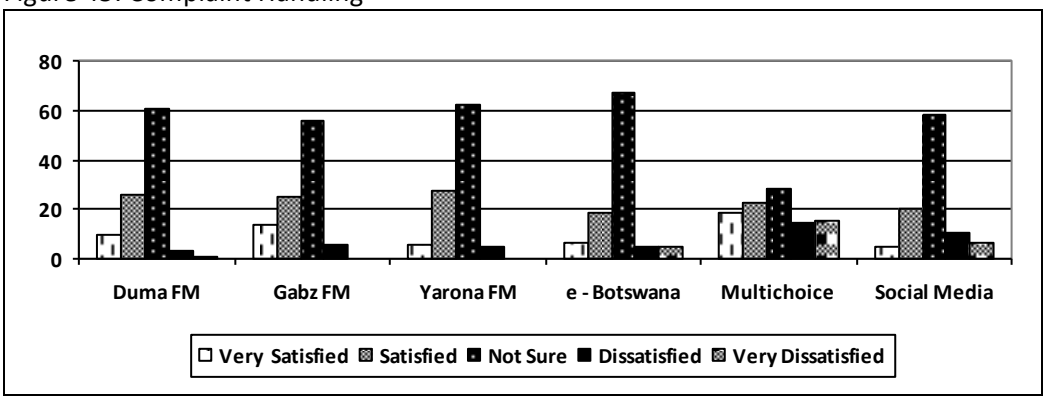
5.5.11 COMPLAINT HANDLING

Respondents were required to rate their satisfaction with different broadcasting media in terms of their complaints handling procedures. Figure 45 below shows that majority of the

respondents indicated that they were not sure. 67%, 61% and 62% of the respondents were not sure about the complaint handing procedure for e - Botswana, Duma FM and Yarona FM respectively.

Added to the foregoing a further 58% and 56% were not sure about complaint handling procedure for social media and Gabz FM respectively. This may be explained by one of the findings on whether respondents were aware of the complaints handling procedures. 50% of the respondents indicated that they were not aware of complaints handling procedures across the broadcasting sector. These respondents would not be in a position to express their satisfaction or dissatisfaction as they are not aware of the complaints handling procedures. However, 42% of the respondents were satisfied to varying degrees with complaints handing procedure for Multi-Choice.

Figure 45: Complaint Handling



Source: Author computed from survey

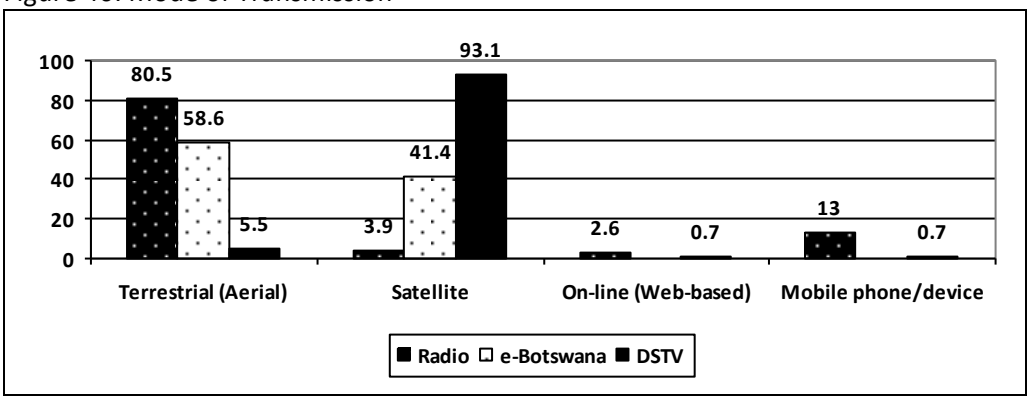
5.5.12 PRICE

Multi-Choice is the only broadcasting media that has a monthly subscription fee. BTv, e - Botswana and all the private and public radio stations are aired free of charge. The only requirement for one to view or listen to these stations is to have a television set or radio/mobile device. Of those respondents who use Multi-Choice, 42% indicated that they were satisfied with the price, 29% were not sure while 30% were dissatisfied with the price for Multi-Choice with 15% indicating that they were 'very dissatisfied' with the price.

5.5.13 MODE OF TRANSMISSION USED FOR BROADCASTING SERVICES

Figure 46 below shows that terrestrial (aerial) transmission is the dominant mode of transmission used by radio listeners. 81% of the respondents who listen to the radio use the aerial transmission while 13%, 4% and 3% use mobile phones, satellite and the web respectively. Viewers of e - Botswana use terrestrial and satellite transmission only. 59% and 41% of the respondents indicated that they use the aerial and satellite to watch e - Botswana. The results also show that 93% viewers of DSTv use satellite as a mode of transmission. These results imply that DSTv uses satellite as the main mode of transmission countrywide.

Figure 46: Mode of Transmission



Source: Author computed from survey

5.5.14 DISABILITY

Disability may have a negative impact on the capacity for customer satisfaction. Respondents were requested to indicate whether they had any form of disability. Of the 570 people who responded, 541 (95%) did not have any form of disability while 29 (5%) cited some form of disability. All these disabilities were associated with their listening and viewing of broadcasting media. Of the 29 respondents with some form of disability, 26 indicated that they have a challenge watching television while 2 have a challenge listening to radio and only 1 had a problem operating both television and radio.

5.5.15 BROADCASTING IN BOTSWANA – TECHNICAL DELIVERY

73% of the respondents agreed to varying degrees that broadcasting media in Botswana has clear broadcasting signal with 24% strongly agreeing to this statement while 19% of the respondents disagreed with the statement that broadcasting media in Botswana has clear broadcasting signal. 63% of the respondents were in agreement that broadcasting media in Botswana has 99% service availability rate while 22.8% disagreed. In terms of the level of audio, 77% agreed that broadcasting media has adequate levels of audio while 14% were not sure and only 9% disagreed with 1% strongly disagreeing. 45% and 50% of the respondents agreed to varying degrees that broadcasting media in Botswana is accessible nation and region wide. 33% of the respondents were not sure whether broadcasting media is accessible nationwide while 37 were not sure whether it is accessible region wide.

5.5.16 BROADCASTING IN BOTSWANA - CONTENT

Table 24 below shows that generally majority of the respondents were satisfied with the content aired on the broadcasting media in Botswana. For example, 89%, 86% and 82% of the respondents agreed that the content that is broadcast is educational, informative and entertaining respectively. Overall, the respondents indicated that they were satisfied with broadcasting media content.

Table 24: Broadcasting Media Content

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
Educational	33.9	54.9	6.9	3.3	1
Entertaining	36.1	46.2	8	7.5	2.3
Informative	33	52.6	9.2	4.5	0.7
Reliable	31.9	42.5	13.2	10.8	1.6
Varied Content	21.4	46.5	16.1	14.4	1.6
Trust worthy	25.9	41.5	21.5	8.9	2.3
Decent	24	51.4	19.4	4.3	0.9
Relevant to the Audience	25.2	53.8	13.9	5.6	1.6
Recent/Up to date	30.9	37.8	18.2	10.9	2.1

Source: Author computed from survey

5.5.17 BROADCASTING IN BOTSWANA - MARKET COMPETITION

50% of the respondents agreed that the broadcasting media has a variety of services; 22% disagreed and 4% strongly disagreed that the broadcasting media has a variety of services. 23% of the respondents agreed to the statement that broadcasting media has fair subscription prices while 55% were not sure and 21% of the respondents disagreed while8% strongly disagreed to the notion that the broadcasting media has fair subscription prices.

5.5.18 BROADCASTING IN BOTSWANA - CODE OF PRACTICE

The Broadcasting Code of Practice enforces good, ethical, and professional conduct on the broadcasters by the regulator. Table 25 below shows that generally, respondents were satisfied with Code of Practice for the Broadcasting Media. For example, 75%, 74% and 7% of the respondents agreed to varying degrees to the statements that the broadcasting media promote protection of children, uphold community standards and respect people privacy respectively. However, an exception was on the display of explicit sex and nudity in video and lyrics. About 39% of the respondents indicated displeasure with regard to explicit sex and nudity in video and lyrics shown on broadcasting media.

Table 25: Broadcasting Media Code of Practice

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
Impartial, Fair and Accurate reporting	15.5	56.8	13.2	13	1.6
Ensure Neutrality	15.3	54	17	12.5	1.2
Promote Protection of Children	25.8	49.1	17.9	6.4	0.7
Uphold Community Standards	17	56.6	18.2	7.1	1
Depiction of Violence and Intimidation	10.1	36.8	22.9	28.8	1.4
Explicit Sex and Nudity in Video or Lyrics	7.1	28.3	25.2	36.6	2.8
Acceptable conduct of interviews	12.3	54.2	26.2	6.8	0.5
Respect people's privacy	20.5	52.8	19.1	6.8	0.9

Source: Author computed from survey

5.5.19 INTERFERENCE WITH BROADCASTING MEDIA EQUIPMENT

Respondents were asked to state whether they knew that it was an offence to willingly interfere with erection, alteration, maintenance or inspection of any communication equipment. 92% of the respondents indicated that they knew that it was indeed an offence to

interfere with any communication equipment while 8% of the respondents did not know. Further, 95% stated that they knew that it was an offence to damage, destroy or steal any communication equipment while 5% respondents did not know that it was an offence.

6 CONCLUSIONS

This section concludes the report, in the main by restating the major findings made throughout the survey. It is in two parts-the first is sector specific conclusions, and the next are a set of cross cutting issues. While these may appear specific to certain sectors, they do hold a cross sector appeal.

6.1 SECTOR SPECIFIC MATTERS

The telecommunications sector has two subsectors-the fixed lined and mobile telephony. The following are the major conclusions from the study:

6.1.1 FIXED LINES

15 % of the respondents revealed that they use fixed lines, either in their homes or at their places of work. The sector seems to be the least subscribed of the five communications sector under review.

Internationally Botswana's performance, particularly in terms of access to fixed lines reflects the global trend. ITU shows that in 2014 only 10% of the global population used a fixed line while in 2015 the figure declined by 1% to 9%. These results confirm the earlier findings by the predecessor to BOCRA, the Botswana Telecommunications Authority or BTA, who had earlier confirmed the decline in use of fixed lines.

The expression of satisfaction by landline users in the study is in line with the 2012 Operator and Customer Perception Survey results which showed 76% of the respondents as satisfied with fixed lines services (BTA 2012).

6.1.2 MOBILE PHONE SECTOR

The mobile phones sector is the most subscribed of the five communications sectors in Botswana. Globally, the International Telecommunications Union shows that in 2014, 91% of the population in the developing world had access to mobile phones. A comparison between the survey data and that by the International Telecommunications Union suggests that Botswana is better off by 2% as 93% of the respondents had access to mobile telephony.

The satisfaction levels with mobile services are not a new occurrence. At 85%, the Operator and Customer Perception Survey of 2012 showed a similar trend of high levels of satisfaction for the mobile phones sector (BTA 2012).

6.1.3 POSTAL SERVICES

Postal services comprise post offices, Kitsong Centres, and courier services.
At 49.7%, almost half of the study population are users of postal services.
68% of their users indicated satisfaction with postal services, with

6.1.4 BROADCASTING

According to the study, broadcasting services are used by 58% of the study population. This figure aggregates both radio and television, which, in comparison to official government statistics are reflected closely in the survey results.

The 58% figure is sufficiently close to the official statistics, as the National Population Census (Statistics Botswana) showed either of the two subsectors of broadcasting (61% for radio), and 58% for television as averaging 60%.

In terms of market share, not too much change has occurred since 2013. The two public radio stations, RB1 and RB2 remain the most accessible radio stations in Botswana.

6.1.5 INTERNET

The Internet is a relatively new communications service sector in Botswana. According to the study, the Internet is used by 48% of the study population. This figure contrasts favourably with figures by the International Telecommunications Union which shows that in 2014; only 35.3% of the developing world had access to the Internet. Official government statistics however, show Internet access in Botswana to be 31%, a lot closer to the ITU estimates.

The Internet services have demonstrated a high amount of change in satisfaction levels between 2012 and 2015. During the 2012 Operator and Customer Perception Survey (BTA 2012), satisfaction levels were shown to be 57% which means that the current 79% is a difference of 22%.

6.2 CROSS CUTTING MATTERS

1. The study shows that overall; respondents are satisfied with communications sector services in Botswana. whereas for this study, overall satisfaction was recorded as any proportion of the respondents over the 50% threshold of respondents stating that they were satisfied (either 'satisfied' or 'very satisfied''), various dimensions were used to cross check satisfaction levels. These dimensions include that of whether one would *recommend their service provider to a loved one*; *the longevity of subscription to a particular service provider*; the *propensity to change service provider*; *satisfaction with pricing*; *satisfaction with programmes*; *distance travelled to service provider*; *responsiveness to service interruption* and others.

2. There is no policy statement/document for the communications sector, which, in turn means no performance targets, implementation arrangements and other implementation measures are set for the sector.

3. The most commonly used mode of communication in Botswana is the cellular phone. According to the study, at least 93% of respondents had a mobile phone set. The least common mode of communication in the country is the fixed line telephony. Only 15% of the respondents indicated owning a fixed line telephone either at work or in their homes a number of factors, such as the improvements in technology, particularly the entrance of mobile telephones ought to explain this development. The growth in use of the mobile phone as the most common mode of communication in Botswana is in consonance with the finding of the Operator and Customer Perception Survey of 2012 (BTA 2012), carried out at the behest of the then regulator of the telecommunications sector, the Botswana Telecommunications Authority or BTA. It is also reflected in global trends, where the ITU shows mobile telephony as the most common communications mode for the developed countries.

4. The study has revealed that the majority of the broadcasting sector remains unregulated, or at least remains outside of the ambit of BOCRA's regulatory authority. The unregulated sector thus includes RB 1 and 2, BTv, all the SABC channels (1, 2, and 3), DSTv Botswana and Multi Choice South Africa. However, in the case of the SABC channels, geographical reach is largely restricted to villages and towns close to South Africa.

5. The most influential radio media, RB1 and RB2 and BTv are unregulated by BOCRA. Being thus unregulated implies a lack of capacity by BOCRA to exert regulatory discipline on the most influential media, possibly leading to lack of uniformity of standards.

6. The influence of age, gender, geography and education on customer satisfaction tends to vary depending on the sector being analysed.

    a. For instance, where mobile telephony is concerned, the youth are clearly the most dominant age group in terms of usage of the technology. Similarly they use many other applications offered by, the Internet, and data usage. However, the youth do not seem particularly keen on fixed lines.
    b. On the other hand, it appears that geographical location has little influence on the choice of billing method for the respondents. This could either be that optimal services are being provided by service providers, in other words, that regulation is effective.

7. Women are overrepresented in the study. Whereas women comprise 51% of the national population, they have turned out to be 69% of the study population, gaining an extra 22 %. A number of reasons are attributable to this, including that older people would rather send their daughters to places like the post office or shopping malls which were places of contact for the study. Added to that, women are also likely to run small, micro and medium enterprises, which is where the study also met many of the respondents.

8. Most people are multiple users of communication modes. Whereas the study set out to interview a 1000 people, it has turned out that the study generated over 2600 responses. Such a pattern signifies the fact that any one user of communications modes uses more than just one. Another notable matter is that these modes of communication offer different solutions. The cellular phone offers voice calls, short messaging, Internet services, social media and others. Similarly the post office offers more than just posting letters-it offers philately, old age pensions, money orders and others. It can be concluded therefore that the development of any of the subsectors of the communications sector will further add to the satisfaction of customers.

9. High rates of knowledge prevail in terms of the correct conduct of using mobile phones. Similarly respondents knew of the need to not disturb infrastructure meant for mobile, radio, television and other communications. For instance, the majority of the respondents understood the importance of NOT sending pornographic and other obscene materials.

10. The study has revealed that generally consumers do not pay much attention to standard technical details that have a bearing on quality, pricing and efficiency. Such issues as the speed of the Internet, the type of the Internet directly impact the quality of service, but generally customers tend to pay little attention to either.

11. The capacity of each sector to perform optimally depends, to varying degrees on that of other sectors. For example, the fact that the majority of *Internet services are accessed through mobile phone sets* means that satisfaction levels in the Internet service provision are, to some extent reliant on the optimality of mobile phone network capacity. Similarly the *Kitsong Centres,* provided through post offices *provide access to Internet*, and similarly *some radio services are provided online*. On the other hand, the post offices, with their wide network of bureaus and agencies *improve mobile phone access by selling air time vouchers*; whereas part of access to the public broadcaster, *BTv is carried by the DSTv signal*. There are probably many other interdependencies in the communications sector which can be improved through targeted developmental and regulatory activities.

    a. The above finding has one implication for any evaluation; it means that assessments of customer satisfaction matters are not without complexity. As stated, for instance, that part of the BTv signal is carried through DSTv, it implies that the capacity of DSTv to deliver, instance clear signal could impact on the customer satisfaction of BTv watchers. Similarly, the satisfaction of Internet users who use mobile phone handsets to access the web may be influenced directly by the capacity of the carriers such as Mascom, Orange and be Mobile to provide a quality service. These are actually the majority of Internet surfers in Botswana.

    b. From an interventionist policy perspective however, it suggests that lags in developments by any of the sector may lead to underperformance by other subsectors.

12. Exempting state broadcasters from regulatory authority is likely to lead to unbalanced development of the sector, and possibly expose some of the users to suboptimal services. In Botswana's case, it has been consistently shown that state broadcasters are actually the most influential broadcasters, which implies that regulatory authority is not applied at the most influential parts of the industry

7 RECOMMENDATIONS

1. In order to improve the capacity of the regulator to further develop the sector, BOCRA must advocate for the development of a policy document for the communications sector. Such a document will set the performance targets of the sector as well as the governance arrangements and implementation setup, and how performance measurement is to be carried out.

2. In order to understand better the effects of various demographic factor such as age, gender, location, educational, and marital status amongst others, on performance, and customer satisfaction, an in-depth review of each of the sectors is required. The effect of these variables appears inconclusive in some instances. In-depth studies of each of the sectors, with higher populations to better comprehend matters.

3. In order to improve customer understanding of the relationship between technical matters and service quality and pricing, BOCRA must increase targeted educational efforts in those particular matters. For example, the relationship of bandwidth, Internet speed and Internet type to their satisfaction with services are less understood by the users of BOCRA regulated service.

4. In order to improve the capacity of the regulator to improve its evidence based decision making processes, BOCRA must pay more focus on generating customer service information. In this regard, the regulator would be aided by section 8 of the Communications Regulatory Act to require information from operators that may also aid the information obtained from undertakings such as this one. The benefit of this intervention will spread beyond just the communications sector as others, including researchers, policy makers, and service providers will also be able to better understand the sector, including its contribution to national development.

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