FINAL REPORT

CUSTOMER SURVEY OF THE DOMESTIC RETAIL FIXED MARKET OF TRINIDAD AND TOBAGO

Submitted to:
Telecommunications Authority of Trinidad and Tobago

Submitted by:
Kairi Consultants Limited

June 2023

Final Report - Customer Survey of the Domestic Retail Fixed Market of Trinidad and Tobago

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LIST OF ABBREVIATIONS

CSO	Central Statistical Office
CSSP	Continuous Sample Survey of Population
ED	Enumeration Districts
MPI	Multidimensional Poverty Index
OTT	Over the Top
PSU	Primary Sampling Units
USU	Ultimate Sampling Units

EXECUTIVE SUMMARY

The Telecommunications Authority of Trinidad and Tobago (the Authority) commissioned in July 2022, the design and conduct of a robust national probability sample survey among existing customers in the domestic retail fixed market in Trinidad and Tobago. The survey was designed to collect data on reported usage patterns, preferences, and choices with respect to the fixed services covered in the study, namely, fixed landline and call services, fixed broadband Internet services and multi-service bundle offer.

The data generated from the survey will be used by the Authority for assessing dominance in the domestic retail fixed market, a mandate encapsulated in the Telecommunications Act, Section 29 (8), which establishes that:

> *"…The Authority may determine that an operator or provider is dominant where, individually or jointly with others, it enjoys a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers …"*

The Authority's review of the relevant boundaries of the domestic retail fixed market of Trinidad and Tobago is premised on the following:

1. Global developments in technology which may likely hold the potential to affect domestic fixed voice and broadband markets in Trinidad and Tobago.
2. The overall significance of the fixed markets to the telecommunications sector's sustainability and the development of the national economy.
3. The core function of the Authority to promote investment in telecommunications and broadcasting services of Trinidad and Tobago.
4. The sustainable competition mandate and monitoring and evaluation function of the Authority.
5. Observed price trends in the domestic retail fixed market.
6. Observed changes in consumer usage patterns.
7. Potential impact of COVID–19 on telecommunication and broadcasting consumers.

Kairi Consultants Limited was contracted by the Authority to design and conduct the survey, and from the data generated, prepare a report that is delimited to the survey findings.

The study aimed to conduct a Consumer Survey in the Domestic Retail Fixed Market of Trinidad and Tobago using a cross-sectional design and probability sample methodology. The study focused on active consumers of fixed telecommunications services in the country. The sample design involved a two-stage stratified random probability methodology, with primary sampling units (enumeration districts) and ultimate sampling units (dwellings) systematically selected. The sample represented 0.073% of the population and covered 585 enumeration districts, 14 municipalities in Trinidad, and seven parishes in Tobago.

The study achieved a response rate of 84.2%, with 1,010 valid interviews completed out of 1,200 households visited. The survey refusal rate was 2.3%. The fieldwork was conducted from October to November 2022, and all analyses presented in the report were based on the 1,003 unweighted responses obtained. Weighting was applied to the survey data, resulting in 1,000 weighted responses.

The questionnaire used for the survey was developed in Survey Solutions and administered through computer-assisted personal interviewing (CAPI), ensuring data quality and eliminating the need for manual data entry. The questionnaire design focused on comprehensibility, logical sequencing, and the use of enabling conditions and validations.

A pilot survey was conducted to test the questionnaire's structure, wording, validity, logical sequencing, and other aspects. The pilot test identified minor adjustments and syntax enhancements to optimize the questionnaire design.

Field personnel underwent two training exercises, including an orientation exercise and comprehensive training covering survey objectives, key concepts, sampling procedures, fieldwork procedures, device management, quality control, workload allocation, and questionnaire review.

The fieldwork was executed by a team of 18 external resources, including a survey coordinator, two field supervisors, and 15 interviewers. The entire fieldwork was managed and monitored in real-time using the Survey Solutions system.

The study successfully implemented a cross-sectional consumer survey in the Domestic Retail Fixed Market of Trinidad and Tobago. The sample design and selection process, questionnaire design, pilot survey, training of field personnel, and fieldwork execution followed established methodologies. The study obtained a high response rate, contributing to the reliability and validity of the collected data.

The findings from this survey provide valuable insights into the domestic retail fixed market of Trinidad and Tobago, facilitating evidence-based decision-making for the telecommunications sector.

Table 1 presents data on the actions to be taken by respondents if fixed landline service price were increased[1].

Table 1. Action to be taken if fixed landline service price were increased

Monthly Expenditure TT$	**Under $50**		**$50 – $99**		**$100 – $199**		**$200 – $299**		**$300 – $399**		**$400 – $599**		**Above $600**		**Don't know**	
Proposed Price Increase TT$	**$3**		**$3-$5**		**$5-$10**		**$10-$15**		**$15-$20**		**$20-$30**		**More than $30**			
Action To Be Taken	***%***	***N***	***%***	***N***	***%***	***N***	***%***	***N***	***%***	***N***	***%***	***N***	***%***	***N***	***%***	***N***
Stop using fixed landline to make calls	31.0	4	20.9	5	12.7	7	19.0	9	22.8	7	23.6	8	26.2	4	0.0	0
Make fewer calls	21.2	3	9.4	2	25.2	14	23.4	11	25.0	8	23.3	8	0.0	0	0.0	0
Make fewer calls, but use mobile calls instead	0.0	0	5.5	1	8.7	5	18.8	9	18.2	6	18.9	7	31.0	5	0.0	0
Make fewer calls, but use OTT calls (such as Viber, Skype, Google Voice, WhatsApp, or FaceTime) instead	0.0	0	7.1	2	7.7	4	6.7	3	6.0	2	0.0	0	9.5	1	0.0	0
Make fewer calls, but use OTT messaging (such as WhatsApp, iMessage or WeChat) instead	0.0	0	0.0	0	1.8	1	0.0	0	0.0	0	2.3	1	9.1	1	0.0	0
Switch to another fixed landline service offering	7.3	1	11.3	3	5.1	3	9.3	4	5.7	2	5.3	2	6.1	1	0.0	0
Switch to a multi-service bundle (incl. fixed call services)	0.0	0	0.0	0	5.7	3	2.3	1	0.0	0	2.5	1	6.0	1	0.0	0
Do nothing (or pay the specific increase and continue as normal)	40.6	5	45.9	11	30.2	17	18.3	9	15.7	5	18.7	7	12.2	2	0.0	0
Don't know	0.0	0	0.0	0	1.6	1	0.0	0	3.1	1	5.4	2	0.0	0	0.0	0
Not stated	0.0	0	0.0	0	1.3	1	2.2	1	3.4	1	0.0	0	0.0	0	100.0	0
Total	**100.0**	**14**	**100.0**	**25**	**100.0**	**56**	**100.0**	**48**	**100.0**	**31**	**100.0**	**35**	**100.0**	**15**	**100.0**	**0**

It was observed that in response to a proposed increase in fixed landline prices, the most common reaction by respondents to increases of between $3 to $10, is to do nothing. For increases of $10-$15 and above, fewer proportions of respondents reported that they would do nothing when compared to respondents reporting on lower proposed price increases.

[1] This service corresponds to the fixed landline service as a standalone service.

Table 2 presents data on the actions to be taken by customers if the price of fixed broadband Internet were to increase.

Table 2. Action to be taken by customer if the price of fixed broadband Internet were to increase

Monthly Expenditure (TT$)	**Under $250**		**$250 – $399**		**$400 – $600**		**Above $600**	
Proposed Price Increase TT$	**$12.50**		**$12.50-$20**		**$20-$30**		**More than $30**	
Action To Be Taken	***%***	***N***	***%***	***N***	***%***	***N***	***%***	***N***
Cancel current fixed broadband plan	11.7	20	18.0	53	10.9	8	37.9	6
Move to another fixed broadband plan	25.8	44	26.9	78	47.9	37	21.4	3
Rely on my mobile data service on my smartphone	1.2	2	3.3	10	5.6	4	4.8	1
Move to MiFi mobile data only services instead	0.0	0	1.2	3	1.3	1	0.0	0
Do nothing (pay the specific increase and continue as normal)	58.7	100	43.8	128	30.6	24	35.9	6
Not stated	2.7	5	6.8	20	3.7	3	0.0	0
Total	**100.0**	**171**	**100.0**	**292**	**100.0**	**78**	**100.0**	**16**

In response to a proposed price increase of $12.50, 58.7% of respondents indicated that they would do nothing, 25.8% reported that they would move to another fixed broadband plan and 11.7% of respondents in the category indicated that they would cancel their current plan.

Based a proposed increase of between $12.50-$20 for fixed broadband Internet, 43.8% of respondents indicated that they would do nothing in response to a $12.50–$20 increase in the subscription price. Another 26.9% of respondents reported that they would move to another fixed broadband plan and 18% indicated that they would cancel their current fixed broadband plan in response to an increase in price.

Approximately 31% of respondents said they would do nothing in response to a price change of $20 to $30, 47.9% of respondents indicated that they would move to another fixed broadband plan while 10.9% indicated that they would cancel their current plan.

Based on a proposed price increase of more than $30 for fixed broadband Internet, 37.9% of respondents indicated that they would cancel their current fixed broadband Internet plan, 35.9% of respondents indicated that they would do nothing in response to a more than $30 increase to their subscription while 21.4% of respondents indicated that they would move to another fixed broadband plan.

Table 3 presents data on the action to be taken by respondents if price of multi-service bundle increased.

Table 3. Action to be taken if price of multi-service bundle increased

Monthly Expenditure TT$	Under $300 monthly		$300 – $499 monthly		$500 – $700 monthly		Above $700 monthly		Not stated	
Proposed Price Increase TT$	**$15**		**$15-$25**		**$25-$35**		**More than $35**			
Action To Be Taken	***%***	***N***	***%***	***N***	***%***	***N***	***%***	***N***	***%***	***N***
Cancel current plan	21.4	12	13.0	26	15.4	22	5.9	2	0.0	0
Cancel current plan and switch to stand alone fixed landline and/or fixed broadband services instead	1.4	1	12.8	26	12.3	18	11.8	5	0.0	0
Move to another multi-service bundle	17.4	9	25.2	51	24.3	35	30.3	12	0.0	0
Rely on my mobile voice and data services instead	1.7	1	2.7	5	4.0	6	2.2	1	0.0	0
Make fewer fixed calls or stop making fixed calls altogether	0.0	0	0.0	0	1.4	2	2.5	1	0.0	0
Do nothing (or pay the specific increase and continue as normal)	58.2	32	41.3	83	41.9	61	41.5	17	0.0	0
Not stated	0.0	0	5.0	10	0.6	1	5.7	2	100.0	0
Total	**100.0**	**54**	**100.0**	**201**	**100.0**	**145**	**100.0**	**40**	**100.0**	**0**

Two hundred and forty-four respondents provided answers to questions as to their course of action in the event of an increase in the price of their multi-service bundle.

Table 3 shows that regardless of the proposed price increase, a significant proportion of respondents indicated that they would do nothing in response to an increase in the price of their multi-service bundle.

In response to a proposed price increase of $15, 58.2% of respondents indicated that they would do nothing, 21.4% indicated that they would cancel their current plan, and 17.4% reported that they would move to another multi-service bundle.

With respect to a proposed price increase of $15-$20, 41.3% of respondents indicated that they would do nothing, 25.2% reported that they would move to another multi-service bundle and 13% indicated that they would cancel their current plan.

A similar pattern was observed among persons responding to a price increase of $25-$35. Some 41.9% of respondents indicated that they would do nothing, 24.3% reported that they would move to another multi-service bundle, and 15.4% indicated that they would cancel their current plan.

Among respondents responding to a price increase of more than $35, 41.5% of respondents indicated that they would do nothing, 30.3% reported that they would move to another multi-service bundle, and 11.8% indicated that they would cancel their current plan and switch to stand alone fixed landline and/or fixed broadband services instead.

Figure 1 presents data on respondents that within the last six months, switched or considered switching multi-service bundle.

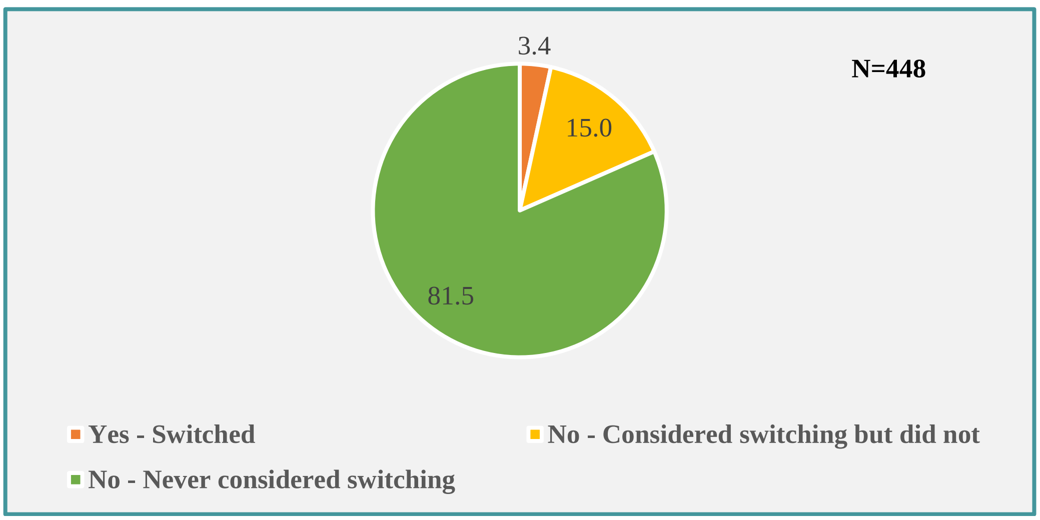


Figure 1. Within the last six months, switched or considered switching multi-service bundle

Of the 448 respondents, 81.5% indicated that they had never considered switching. A further 15% indicated that they had considered switching but did not, while 3.4% of respondents indicated that they had switched their multi-service bundle.

Figure 2 presents data on reasons for considering but not switching from current multi-service bundle in the next six months.

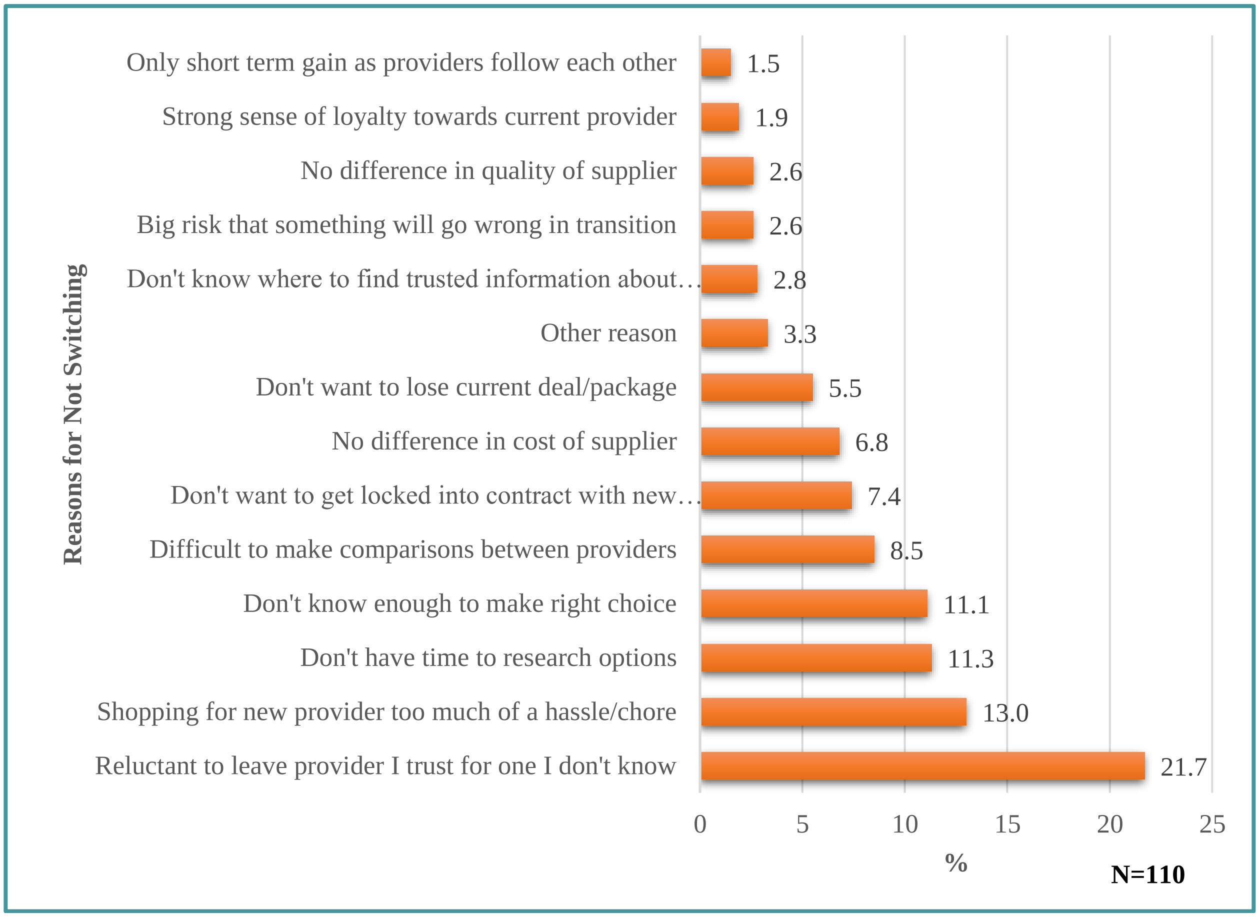


Figure 2. Reasons for considering but not switching from current multi-service bundle in the next six months

Of the 110[2] respondents, 21.7% indicated reluctance to leave a provider they trusted for one that they don't know. Thirteen percent of respondents indicated that shopping for a new provider is too much of a hassle/chore, 11.3% don't have time to research options, and 11.1% don't know enough to make the right choice.

The least common reasons given for not switching, according to 1.5% of respondents, were only short-term gain as providers follow one another, and strong sense of loyalty towards current provider as reported by 1.9% of respondents.

[2] N=110 represents respondents who selected no – considered switching but did not in Figure 1.

Figure 3 presents data on the plan to be chosen if respondent cancelled current multi-service bundle, on account of the increase in the monthly cost of the service and switched to standalone fixed landline and/or fixed broadband services instead.

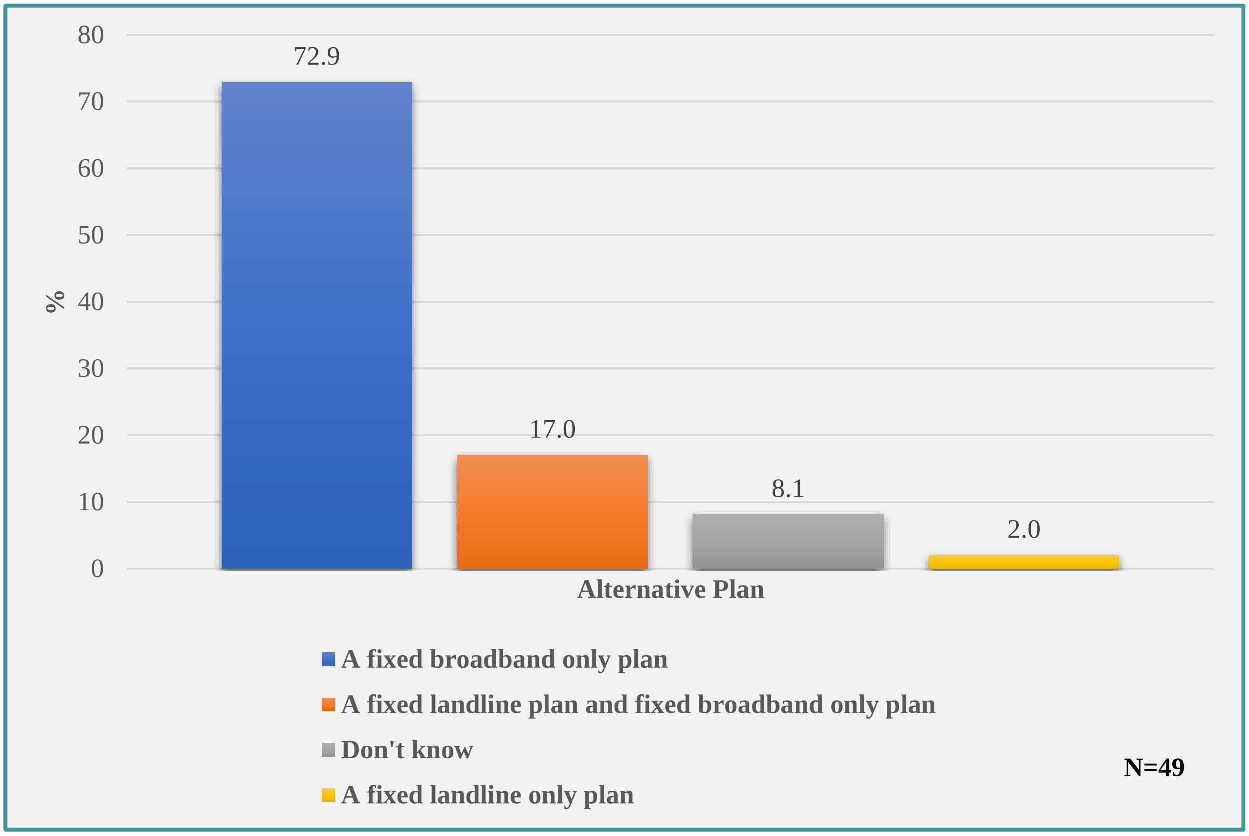


Figure 3. Plan to be chosen if respondent cancelled current multi-service bundle, on account of the increase in the monthly cost of the service and switched to standalone fixed landline and/or fixed broadband services instead

Of the 49[3] respondents who indicated that they would cancel current plan and switch to standalone fixed landline and/or fixed broadband services instead if monthly price of multi-service bundle increased, 72.9% indicated that they would choose a fixed broadband only plan. Another 17% of respondents indicated that would choose a fixed landline plan and a fixed broadband only plan and 2% of respondents indicated the choice of a fixed landline only plan.

[3] N=49 represents respondents who selected cancel current plan and switch to standalone fixed landline and/or fixed broadband services instead in Table 3.

Figure 4 presents data on respondents’ purpose(s) for using OTT application on computer: desktop, laptop, or tablet without a SIM card.

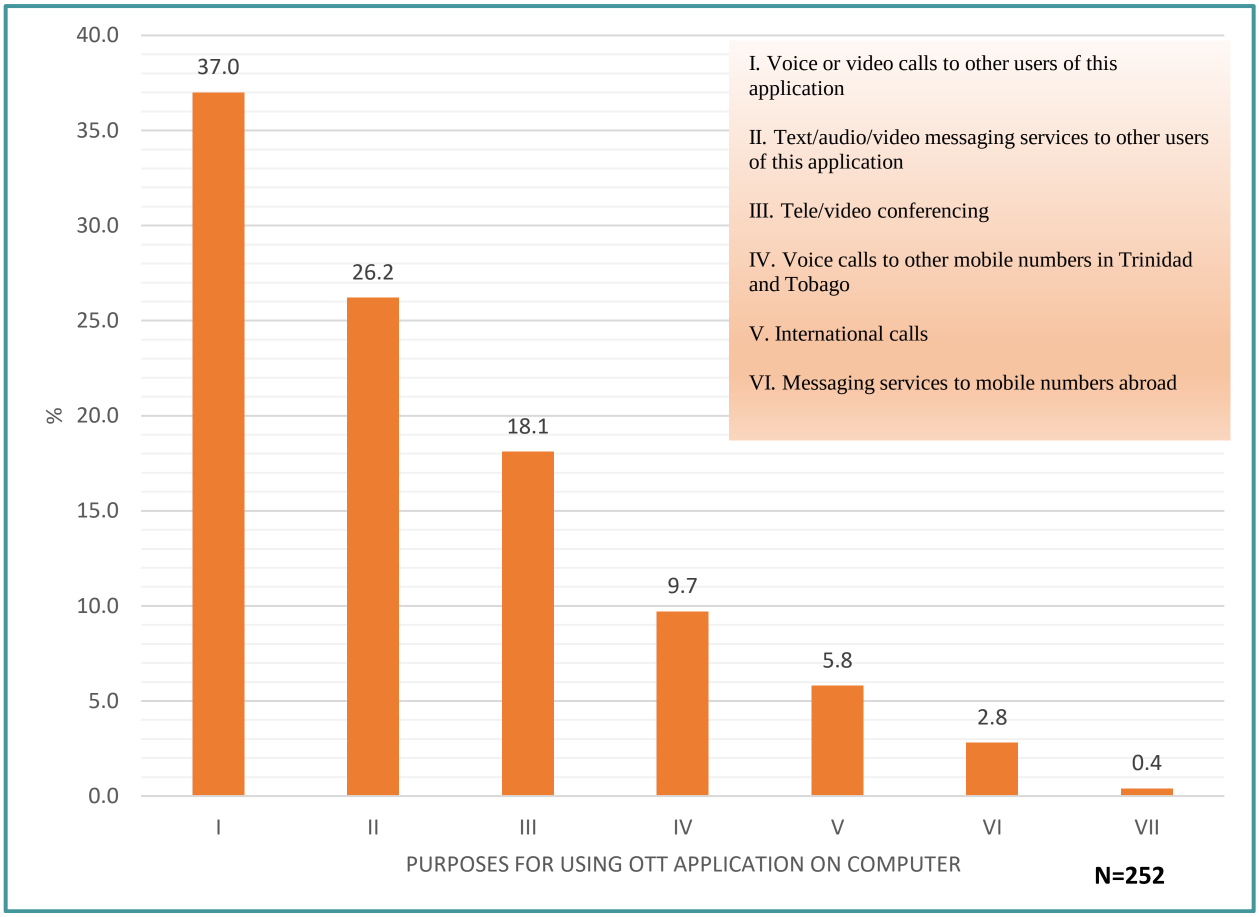


Figure 4. Purpose(s) for using OTT application on computer: desktop, laptop or tablet without a SIM card

Of the 252 responses provided, 37% indicated use for voice or video calls to users of the application, 26.2% of responses text/audio/video messaging to other users of the application and a further 18.1% usage for tele/video conferencing.

Responses related to usage of voice calls to other mobile numbers in Trinidad and Tobago accounted for 9.7% of responses and international calls accounted for 5.8% of all responses.

Figure 5 presents data on the number of minutes per week spent by respondents on local voice calls made using OTT platforms.

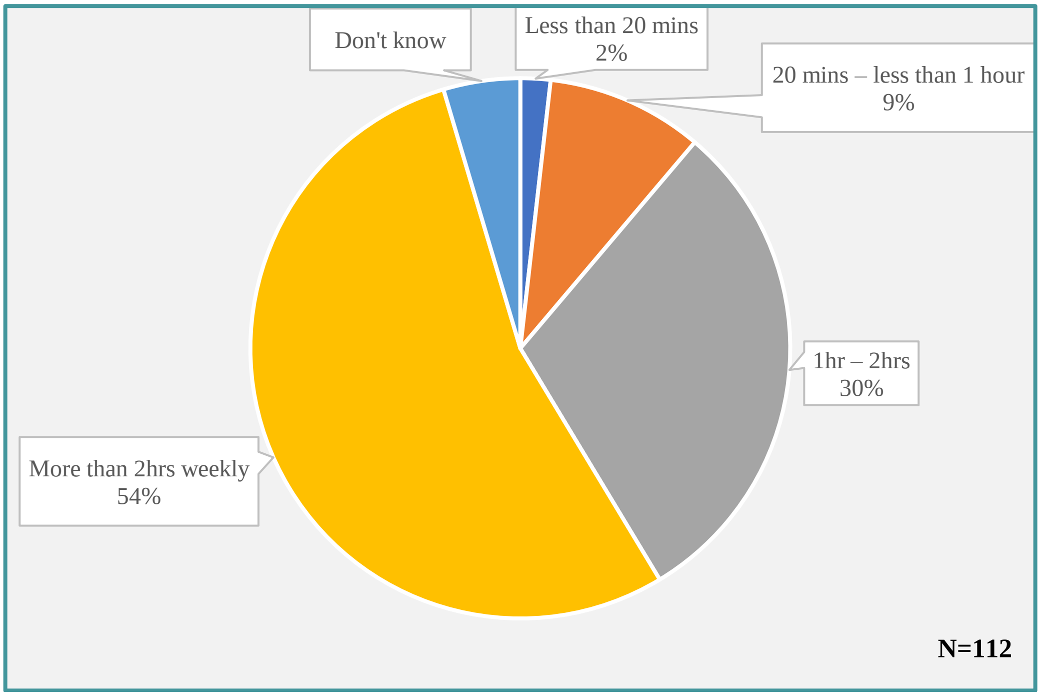


Figure 5. Number of minutes per week spent on local voice calls made using OTT platforms

Of the 112 respondents, 54.1% spent more than two hours weekly on local voice calls using OTT third party applications. A further 30.2% of respondents reported that they spent between one and two hours weekly, and 1.8% of respondents indicated that they spent less than 20 minutes weekly.

1.0 INTRODUCTION

1.1 Rationale

The Telecommunications Authority of Trinidad and Tobago (the Authority) commissioned in July 2022, the design and conduct of a robust national probability sample survey among existing customers in the domestic retail fixed market in Trinidad and Tobago. The survey was designed to collect data on reported usage patterns, preferences, and choices with respect to the fixed services covered in the study, namely, fixed landline and call services, fixed broadband Internet services and multi-service bundle offer.

The data generated from the survey will be used by the Authority for assessing dominance in the domestic retail fixed market, a mandate encapsulated in the Telecommunications Act, Section 29 (8), which establishes that:

> *"…The Authority may determine that an operator or provider is dominant where, individually or jointly with others, it enjoys a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers …"*

The Authority's review of the relevant boundaries of the domestic retail fixed market of Trinidad and Tobago is premised on the following:

1. Global developments in technology which may likely hold the potential to affect domestic fixed voice and broadband markets in Trinidad and Tobago.

2. The overall significance of the fixed markets to the telecommunications sector's sustainability and the development of the national economy.

3. The core function of the Authority to promote investment in telecommunications and broadcasting services of Trinidad and Tobago.

4. The sustainable competition mandate and monitoring and evaluation function of the Authority.

5. Observed price trends in the domestic retail fixed market.

6. Observed changes in consumer usage patterns.

7. Potential impact of COVID–19 on telecommunication and broadcasting consumers.

Kairi Consultants Limited was contracted by the Authority to design and conduct the survey, and from the data generated, prepare a report that is delimited to the survey findings.

Note that since the survey was conducted[4], there have been multiple price increases ranging between 5% and 23%.

1.2 Background

The Authority is the statutory body empowered under the Telecommunications Act, Chap. 47:31 ("the Act") with the mandate to oversee the liberalisation and regulation of the domestic telecommunications and broadcasting sectors.

Amongst other things, the Authority is mandated to establish conditions to meet the following objectives:

1. Creating an open market for telecommunications services, including conditions for fair competition.

2. Facilitating the orderly development of a telecommunications sector which serves to safeguard, enrich, and strengthen the national, social, cultural, and economic well-being of the society.

3. Promoting universal access to telecommunications services.

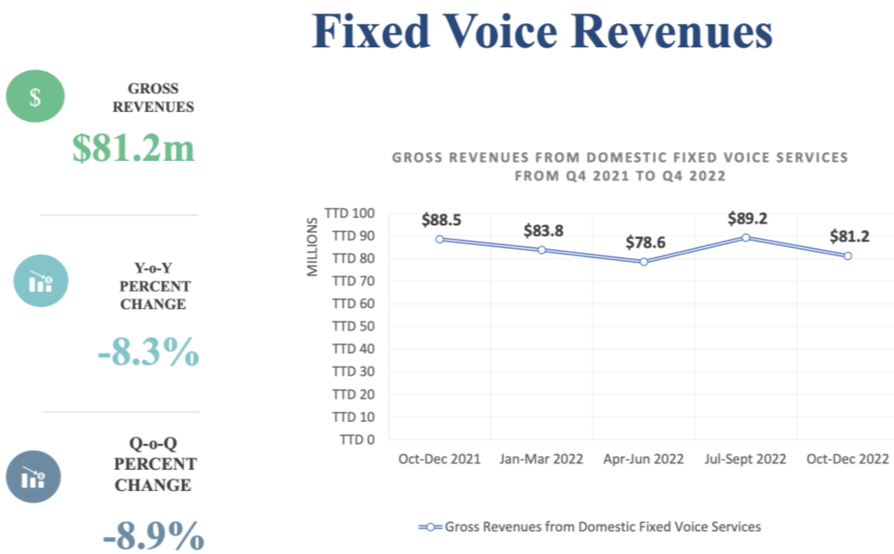
4. Encouraging investment in the sector.

5. Promoting and protecting the interests of consumers.

[4] The data gathering process of the Domestic Retail Fixed Market was concluded in October 2022.

1.3. Domestic Retail Fixed Market

Figure 6 presents information on fixed voice and fixed Internet revenues Q4 2021 To Q4 2022.



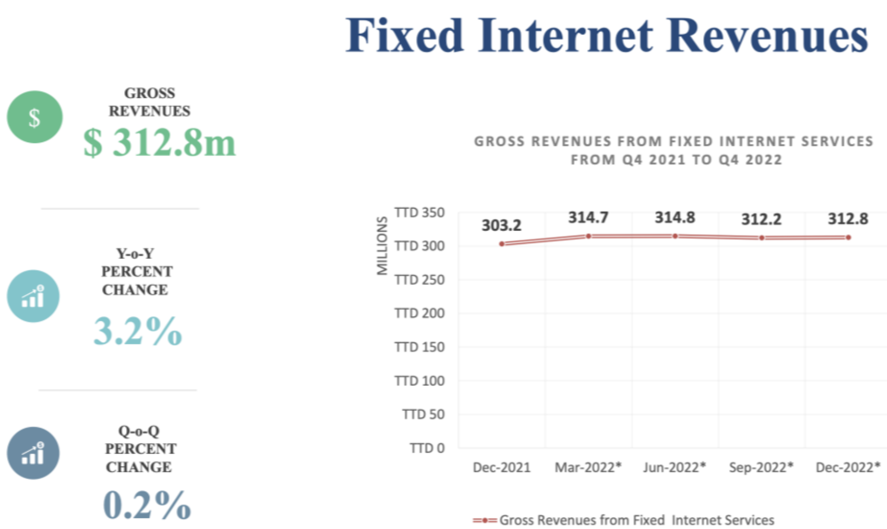


Figure 6. Fixed voice and fixed Internet revenue Q4 2021 To Q4 2022

As at December 2020, 19 telecommunications service providers were authorised to provide fixed services, of which seven provided fixed voice services and 12 provided fixed Internet services.

According to the Authority's Quarterly Market Update, October to December 2022, gross revenue for fixed voice was estimated to be $81.2 million and gross revenue for fixed Internet was estimated to be $312.8 million.

2.0 METHODOLOGY

2.1 Study Design

The Consumer Survey in the Domestic Retail Fixed Market of Trinidad and Tobago (fixed market survey) was developed as a cross-sectional study, that was national in scope utilising a probability sample methodology and the national sample frame utilised by the Central Statistical Office (CSO).

The unit of analysis for the proposed study was *active*[5] consumers of fixed telecommunications services.

2.2 Sample Design and Selection

The fixed market survey was executed using a stratified random probability methodology based on clusters of dwelling units systematically selected in two stages.

The sample frame was stratified by municipalities in Trinidad and by parishes in Tobago. The primary sampling units (PSU), that is, the enumeration districts (EDs), were chosen in the first stage and the ultimate sampling units (USU) of dwellings within the ED clusters, were selected in the second stage.

The PSUs were ranked within each municipality, prior to random selection, using the Multidimensional Poverty Index (MPI)[6] that was developed using the data from the Trinidad and Tobago 2011 Population and Housing Census. Systematic sampling of these ranked PSUs ensured a non-biased representation of PSUs in the sample for each municipality.

The sample for the fixed market survey represents 0.073% of the 1,367,558 population of Trinidad and Tobago (1,000 selections) and was drawn from the 585 EDs and 14 municipalities in Trinidad, and the seven parishes in Tobago.

For the fixed market survey, Trinidad was divided into 14 independent geographic districts (or strata) comprising two cities (Port-of-Spain and San Fernando), three boroughs (Arima, Chaguanas, and Point Fortin), and nine regional corporations. Similarly, Tobago was divided into seven independent strata comprising seven parishes.

[5] Active consumers are customers who reported using the service in the last 30 days.
[6] Multidimensional Poverty Index is an index based on several indicators of deprivation based on the methodology developed by the Oxford Poverty and Human Development Initiative.

Table 4 presents data on the distribution of population and fixed consumers sample distribution by municipality.

Data in columns two and three were obtained from the Housing and Population and Census 2011. The last two columns of Table 4 present data on the total number of unweighted responses obtained from the fixed market survey and the unweighted distribution of the sample responses.

Table 4. Distribution of population and fixed consumers sample distribution by municipality

Municipality	Housing and Population Census 2011		Domestic Retail Fixed Market Sample 2022	
	Population	Percent of Total Population	Unweighted Sample	Percent of Sample
	N	%	N	%
Trinidad	**1,267,163**	**95.4**	**951**	**94.8**
City of Port of Spain	37,074	2.8	31	3.1
Mayaro/Rio Claro	35,650	2.7	24	2.4
Sangre Grande	75,766	5.7	61	6.1
Princes Town	102,375	7.7	57	5.7
Penal/Debe	89,392	6.7	105	10.5
Siparia	86,949	6.5	59	5.9
City of San Fernando	48,838	3.7	30	3.0
Borough of Arima	33,606	2.5	24	2.4
Borough of Chaguanas	83,516	6.3	58	5.8
Borough of Point Fortin	20,253	1.5	35	3.5
Diego Martin	102,957	7.8	78	7.8
San Juan/Laventille	157,258	11.8	113	11.3
Tunapuna/Piarco	215,119	16.2	158	15.8
Couva/Tabaquite/Talparo	178,410	13.4	118	11.8
Tobago	**60,874**	**4.6**	**52**	**5.2**
Trinidad and Tobago	**1,328,037**	**100.0**	**1,003**	**100.0**

Note: The summation of individual percentages in columns may not appear to sum to precisely 100% due to rounding. Column Percentages have been compiled using each figure expressed to the highest level of precision.

Table 5 presents data on the visitation status of households selected by administrative area for the Domestic Retail Fixed Market Survey.

Table 5. Visitation status of households selected by administrative area

Municipality	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
	Completed Interviews	**Partially Completed Interviews**	**Located, Asked to return**	**Household located, nobody present (Closed or Vacant)**	**Household located, contacted, refused to**	**Household can't be located using the identifying information**	**Other**	**Total Interviews Attempted**	**Valid Interviews (1) + (2)**	**Response Rate (%) (9) / (8)**	**Refusal Rate (%) (5) / (8)**
City of Port Of Spain	31	0	0	0	0	0	0	31	31	100.0	0.0
Mayaro/Rio-Claro	24	0	0	0	0	0	0	24	24	100.0	0.0
Sangre Grande	61	0	4	13	2	0	5	85	61	71.8	2.4
Princes Town	57	0	0	0	0	0	5	62	57	91.9	0.0
Penal/Debe	106	0	0	1	0	0	1	108	106	98.1	0.0
Siparia	59	0	0	0	0	0	12	71	59	83.1	0.0
City of San Fernando	30	0	0	0	1	0	0	31	30	96.8	3.2
Borough of Arima	24	0	0	14	2	0	0	40	24	60.0	5.0
Borough of Chaguanas	58	0	0	0	0	0	0	58	58	100.0	0.0
Borough of Point Fortin	36	0	0	0	0	0	3	39	36	92.3	0.0
Diego Martin	79	0	2	9	7	0	3	100	79	79.0	7.0
San-Juan/ Laventille	112	1	13	29	5	0	7	167	113	67.7	3.0
Tunapuna/Piarco	161	1	3	22	10	0	12	209	162	77.5	4.8
Couva/Tabaquite/Talparo	118	0	0	3	0	0	2	123	118	95.9	0.0
Tobago	52	0	0	0	0	0	0	52	52	100.0	0.0
Total	**1,008**	**2**	**22**	**91**	**27**	**0**	**50**	**1,200**	**1,010**[7]	**84.2**	**2.3**

[7] Seven of the 1,010 questionnaires administered had insufficient data to be used in the analysis and were removed from the data set.

Valid interviews, that is, completed and partially completed interviews, totalled 1,010 representing an overall survey response rate of 84.2%, based on the total number of households visited during the survey (1,200). The fixed market survey refusal rate was 2.3%.

The fieldwork conducted from October to November 2022 is the primary source of data for the information presented in this report.

All analyses presented are based on the 1,003 unweighted responses (1,000 when weighted) to the questionnaire that was administered.

2.3 Weighting of Survey Data

Table 6 presents data on the weighted and unweighted distribution of the sample.

When sample weights are applied, the number of responses for the domestic retail fixed market survey sums to 1,000 respondents.

Table 6. Weighted and unweighted distribution of sample

Administrative Area	Percent of Total Population	Unweighted		Weighted	
		N	*%*	*N*	*%*
Trinidad and Tobago	**95**	**951**	**94.8**	**954**	**95**
City of Port of Spain	2.8	31	3.1	28	2.8
Mayaro/Rio Claro	2.7	24	2.4	27	2.7
Sangre Grande	5.7	61	6.1	57	5.7
Princes Town	7.7	57	5.7	77	7.7
Penal/Debe	6.7	105	10.5	67	6.7
Siparia	6.5	59	5.9	65	6.5
City of San Fernando	3.7	30	3	37	3.7
Borough of Arima	2.5	24	2.4	25	2.5
Borough of Chaguanas	6.3	58	5.8	63	6.3
Borough of Point Fortin	1.5	35	3.5	16	1.5
Diego Martin	7.8	78	7.8	78	7.8
San Juan/Laventille	11.8	113	11.3	118	11.8
Tunapuna/Piarco	16.2	158	15.8	162	16.2
Couva/Tabaquite/Talparo	13.4	118	11.8	134	13.4
Tobago	**4.6**	**52**	**5.2**	**46**	**4.6**
Trinidad and Tobago	**100.0**	**1,003**	**100.0**	**1,000**	**100.0**

Note: The summation of individual percentages in columns may not appear to sum to precisely 100% due to rounding. Column Percentages have been compiled using each figure expressed to the highest level of precision.

2.4 Survey Sample Error

Based on the 2011 Population and Housing Census estimate of 1,328,037 persons, total responses of 1,003 for the domestic retail fixed market survey and a 95% confidence level, the computed sample error or confidence interval is 3.09%. Based on the computed confidence interval of 3, if 80% of respondents reported having a fixed Internet subscription, we can be relatively sure that the true estimate for the population lies between 77% (80 - 3) and 83% (80 + 3).

2.5 Questionnaire Design

The questionnaire used for the fixed customer survey was developed from a draft questionnaire produced by the Authority.

The questionnaire was developed in Survey Solutions and administered via computer assisted personal interviewing (CAPI). This approach eliminated the need for manual data entry and contributed significantly to improving the overall quality of the data collected.

The design of the questionnaire incorporated appropriate use of *enabling conditions*[8] and *validations*[9] to ensure that the questionnaire would be administered in a logical manner and produce accurate data. This approach eliminated the need to perform extensive post-enumeration editing of the data because potential errors were identified and corrected during the interviewing process.

During the design process, special emphasis was placed on ensuring that the language used in the questionnaire was easily comprehensible to respondents and that proper examples were provided, where necessary, to assist in demystifying questions that were of a technical nature.

From the onset of the design stage, emphasis was placed on structure and content and in the latter stages on language, consistency of use of phrases and on logical and programming syntax.

A copy of the questionnaire used to conduct the fixed customer survey is presented in Appendix I.

[8] An enabling condition is an expression that defines when a question must be asked, depending on the answers to other questions of the questionnaire. If no expression is specified, the question or section must be administered to all respondents.

[9] A validation rule is an expression that determines whether the answer to the question is valid and may be dependent on the answers to other questions in the questionnaire. If no validation rule is specified, any value that can be entered for this question type will be considered valid.

2.6 Pilot Survey

The pilot testing of the questionnaire formed an integral part of the questionnaire design process and was conducted with the following objectives:

1. to estimate the time taken to complete an interview.
2. to test the structure and wording of questions to ensure validity (accuracy of measure).
3. to determine whether the questions were logically sequenced.
4. to identify any additional/new responses to questions required.
5. to ensure that all interviewer instructions and definitions were clear to interviewers and respondents.
6. to test all enabling conditions (skip logics) and data validation rules as well as identify new validation requirements.
7. to test whether the results of the pilot could be utilised for analysis, (i.e. preparation of the project report).

Overall, the pilot test was executed relatively smoothly and was able to identify some minor adjustments to the questionnaires, in addition to some basic syntax enhancements to optimise the design of the questionnaire.

2.7 Training of Field Personnel

Two training exercises were conducted with field personnel during the project. The first training exercise was an orientation exercise that was designed to introduce the interviewing team and the supervisors to the questionnaire and to explain specific elements of the sample selection process to facilitate them conducting the pilot test exercise. This activity was executed virtually using Microsoft Teams.

Guided by this exercise, team members were able to conduct a series of mock interviews, prior to the conduct of the pilot survey, and sought additional explanations and clarification, from the consultants, where necessary.

The second training activity was conducted prior to the commencement of field interviews using the Draft Final version of the questionnaire. This activity was conducted via Microsoft Teams also and focused on the following areas:

1. Objectives of survey
2. Key concepts and definitions
3. Sampling procedure

4. Procedures for conducting fieldwork.
5. Device (Tablet) management
6. Quality control procedures
7. Workload allocation and time management
8. Detailed review of questionnaire

The Authority assisted with this training activity by providing information on the objectives of the survey and clarification with respect to specific terms and concepts used in the questionnaire, among other issues.

2.8 Conducting Fieldwork

The fieldwork for the fixed market survey commenced on 3 October 2022 and was completed on 11 November 2022. While initially scheduled to be completed in one month, approximately eight days were lost during the period on account of torrential rainfall that resulted in flooding throughout both islands.

2.8.1 Team Organisation

The fieldwork was executed using a team of 18 external resources comprising one survey coordinator, two field supervisors, and 15 interviewers. In addition to these personnel, two in-house supervisors (Headquarters) were responsible for reviewing and accepting/rejecting each questionnaire that was submitted by the supervisors in Survey Solutions.

Each interviewer was assigned a workload of between 133 to 140 interviews and was required to complete their assignments over a duration of 30 days.

The entire fieldwork exercise was managed and monitored in real time in the Survey Solutions system.

2.8.2 Supervision of Fieldwork

Field supervisors were responsible for planning and allocating workloads to their assigned team of interviewers, reviewing, and approving/rejecting submitted interviews and where necessary, contacting reluctant respondents and convincing them to participate in the survey. In some instances, a supervisor may have been required to conduct interviews.

Questionnaires that included comments entered by the interviewer or those that were flagged as containing errors were reviewed and returned to the interviewer for correction.

Supervisors were required to validate one in 20 completed interviews via telephone.

All work assignments accepted by supervisors were subject to further review by Headquarters.

2.9 Data Processing

Data processing activities were performed using both STATA and SPSS. The former was the main program used to restructure the raw data generated from Survey Solutions and to compute the required variables, indices, and sub-indices. SPSS facilitated table generation and execution of basic non-structural edits to individual variables during analysis.

3.0 FIXED MARKET REVIEW

3.1 Demographics

Figure 7 presents data on the distribution of respondents by sex.

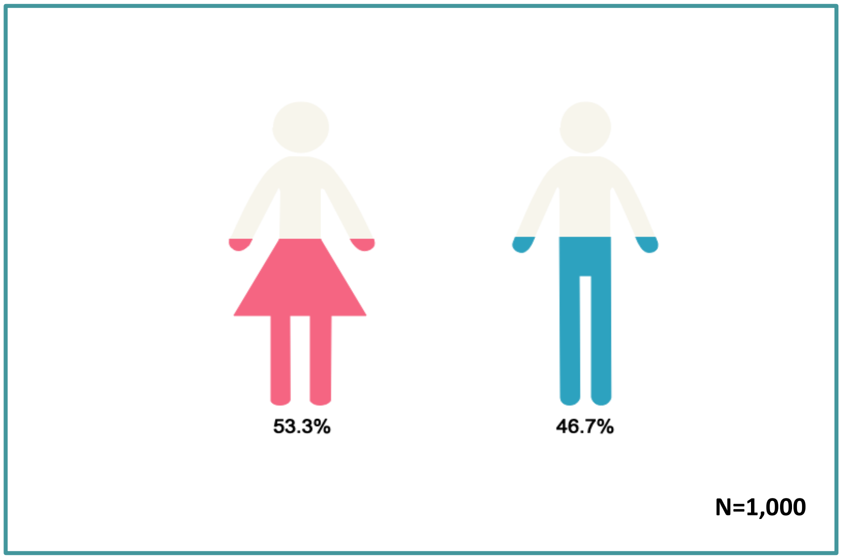


Figure 7. Distribution of respondents by sex

Of the 1,000 respondents to the survey, 53.3% of respondents were female and 46.7% were male.

Table 7 presents data on the distribution of respondents by age and sex.

Table 7. Distribution of respondents by age and sex

Age Cohorts	Males	Females	Both Sexes
	%		
18-24	4.3	2.4	3.3
25-28	5.8	6.9	6.4
30-34	8.4	9.2	8.9
35-39	9.3	10.2	9.8
40-44	11.6	8.5	10.0
45-49	8.5	11.1	9.9
50-54	13.0	10.8	11.9
55-59	7.5	11.3	9.6
60-64	11.3	9.7	10.4
65 and over	20.1	19.8	20.0
N=1,000			

Approximately 20% of male respondents and 19.8% of female respondents in the survey were drawn from the 65 and over age category. In the 18-24 age cohort, 4.3% of respondents were males and 2.4% were females.

Figure 8 presents data on the median and average ages of male and female respondents.

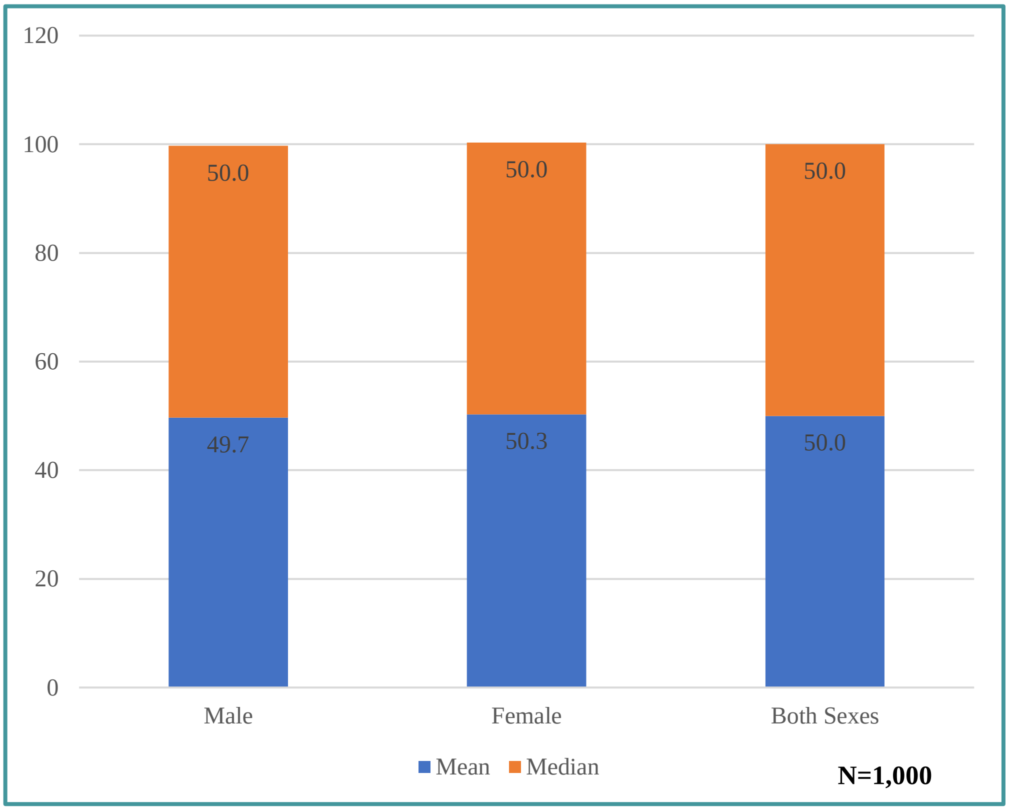


Figure 8. Median and average age of male and female respondents

The median age of a respondent to the survey was 50 years. The average age of both male and female respondents was approximately 50 years.

Figure 9 presents data on the distribution of respondents by relationship to household head.

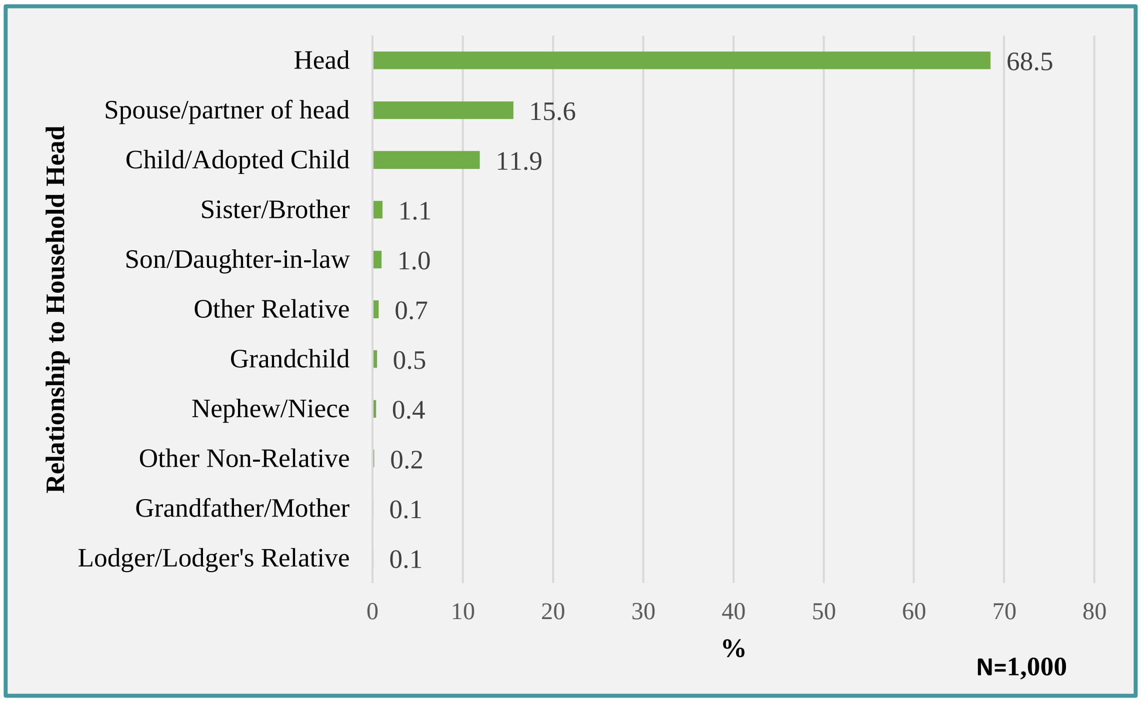


Figure 9. Distribution of respondents by relationship to household head

Of the 1,000 responses, 68.5% were heads of households as illustrated in Figure 9. Spouse/partners of heads represented 15.6% of respondents and child/adopted child of heads represented 11.9%. All other designations accounted for approximately 4%[10] of all respondents.

[10] This is the summed value of 1.1%, 1%, 0.7%, 0.5%, 0.4% 0.2%, 0.1% and 0.1%.

Figure 10 presents data on the distribution of respondents by the highest level of education completed.

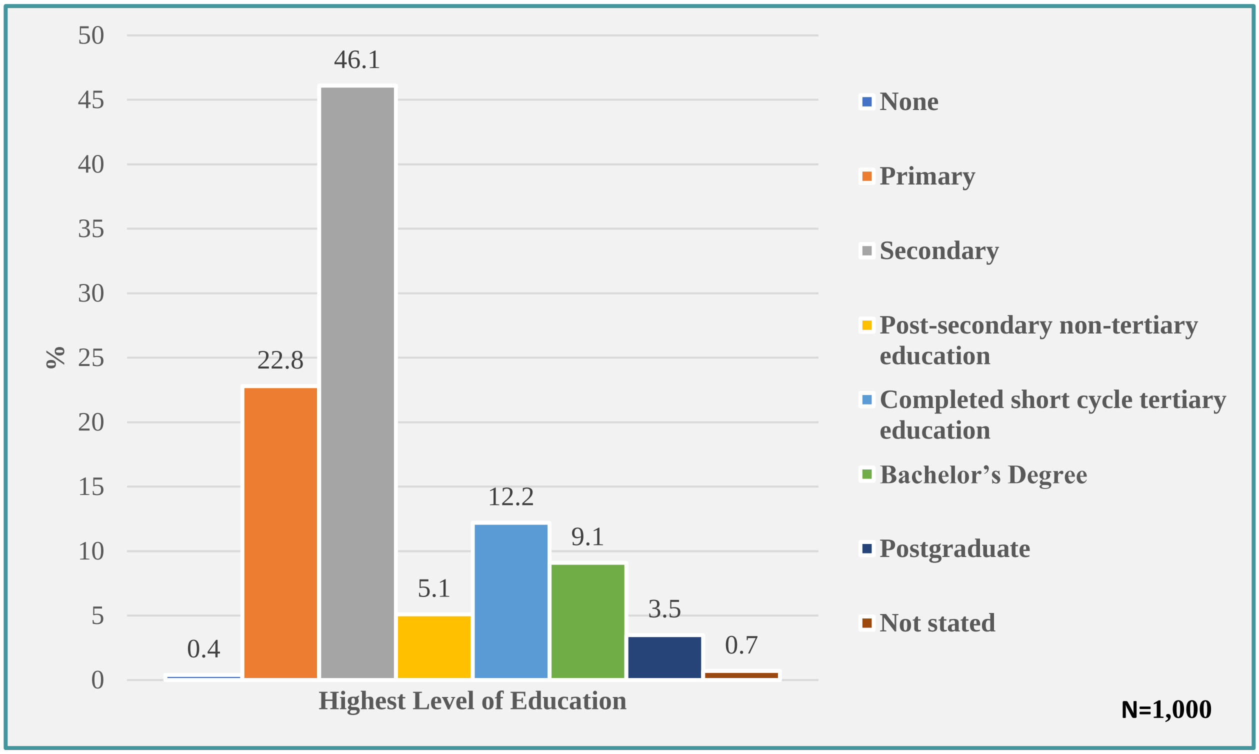


Figure 10. Distribution of respondents by highest level of education completed

Respondents who reported that secondary level education was the highest level of education completed had a representation of 46.1% in the sample. Approximately 23% of respondents reported that their highest level of education completed was primary school, 12.2% short-cycle tertiary education, 9.1% Bachelor's Degree, 5.1% post-secondary non-tertiary education and 3.5% postgraduate level.

Figure 11 presents data on the distribution of respondents by work status last week.

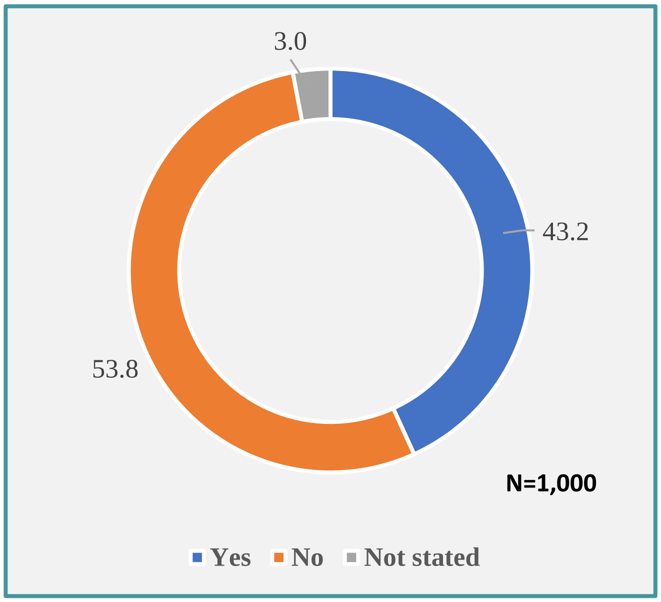


Figure 11. Distribution of respondents by work status last week

The data show that 43.2% of all respondents worked within the week prior to the date of their interview.

Approximately 54% of respondents interviewed indicated that they did not work[11] in the last week while the remainder, 3% of respondents did not provide an answer when the question was asked.

It should be noted that the 53.8% of respondents who did not work in the last reference week used in the survey is not synonymous with the unemployment rate that is computed by the CSO based on the Continuous Sample Survey of Population (CSSP) and its own definition of the unemployed[12]. Both figures should not be compared when conducting analyses.

11 Did not work includes persons who explicitly stated that they did not want work, students (full time), persons engaged in home duties, the retired, the disabled, old age pensioners, other persons, e.g. mentally challenged, inmates of prisons, hospitals, mental institutions etc.

12 The CSO's definition of the unemployed states "The unemployed includes all persons who looked for work at some point in time during the three months' period preceding enumeration and who at the time of enumeration were not working or had a job, but still wanted to work." (n.d.). *Definition of Unemployment*. cso.gov.tt. Retrieved May 12, 2023, from https://cso.gov.tt/faq/what-is-the-definition-of-unemployed/#:~:text=The%20unemployed%20includes%20all%20persons,%E2%86%90%20Previous%20FAQ

Figure 12 presents data on the distribution of respondents by major occupational category.

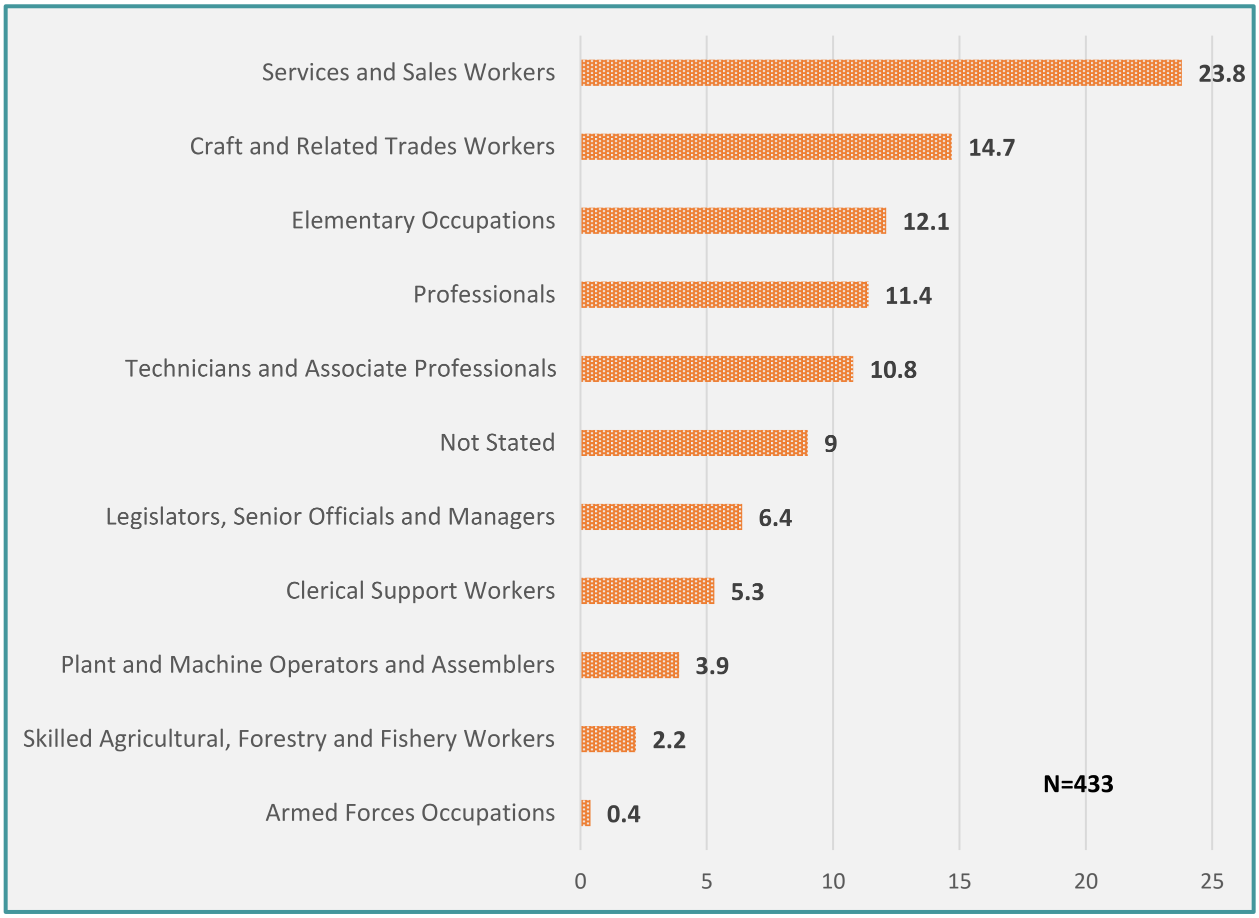


Figure 12. Distribution of respondents by major occupational category

The 433 respondents presented in the figure above are those who reported that they had worked in the last week in Figure 12 above.

Services and sales workers represented 23.8% of respondents, craft and related trades workers represented 14.7% and elementary, professionals, and technical and associate occupations 12.1%, 11.4% and 10.8% respectively.

Respondents employed in armed forces occupations totaled 0.4%, the least represented occupational category in the survey. Other categories with representation consisting of less than 5% of the responses were skilled agricultural, forestry and fishery workers with 2.2% and plant and machine operators and assemblers with 3.9%.

Figure 13 presents data on the distribution of respondents by reported gross monthly income.

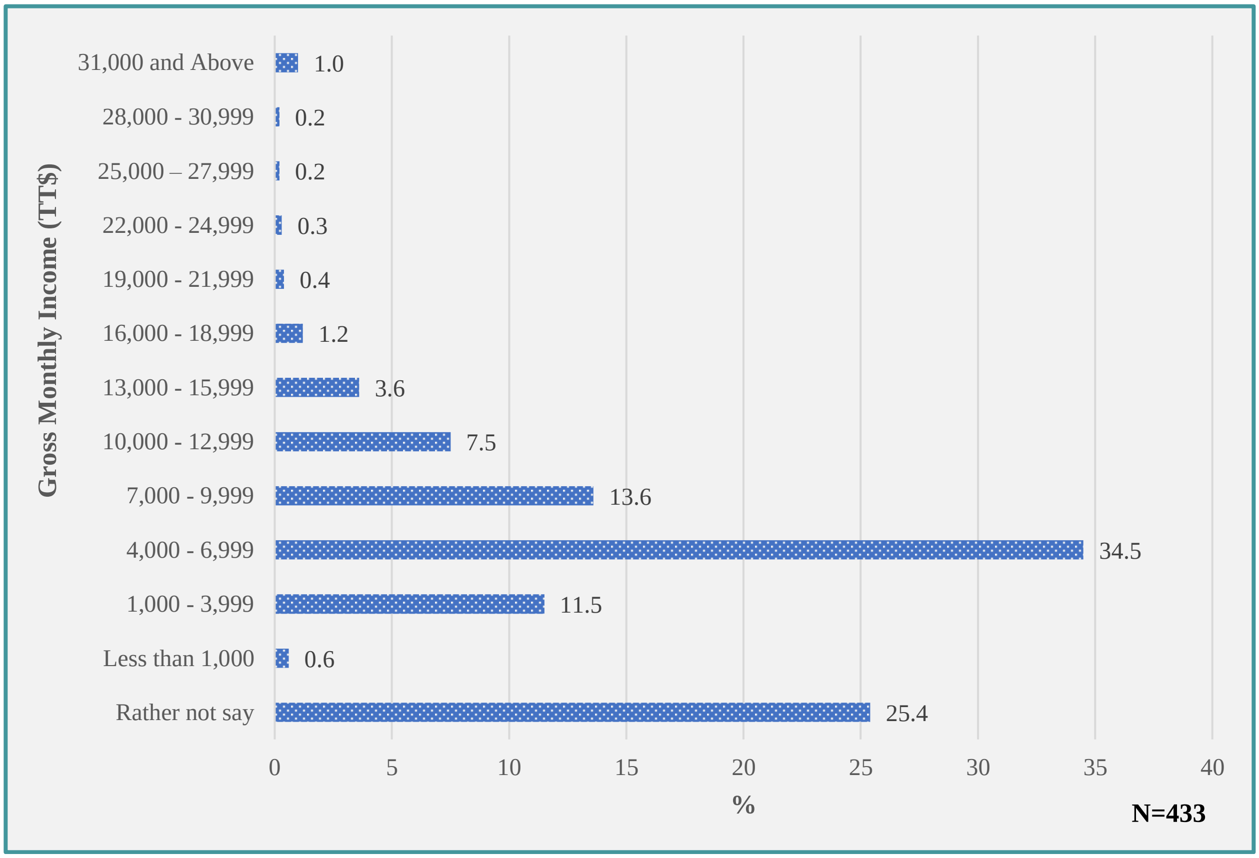


Figure 13. Distribution of respondents by reported gross monthly income

Of the 433 respondents who worked in the last week, 60.2%[13] were found to have a monthly income less than $10,000 per month. Approximately 25% indicated that they would rather not say what was their gross monthly income. A further 12.3%[14] reported incomes between $10,000 but less than $19,000 per month. Only 2.1%[15] reported monthly incomes of $19,000 and above.

[13] This is the summed value of 13.6%, 34.5%, 11.5% and 0.6%.
[14] This is the summed value of 1.2% 3.6% and 7.5%.
[15] This is the summed value of 1%, 0.2%, 0.2%, 0.3% and 0.4%.

Table 8 presents data on the distribution of telecommunication services currently used at home by respondents.

Table 8. Distribution of telecommunication services currently used at home

Services Currently Used	N	%[16]
Fixed landline and call services	226	22.6
Fixed broadband Internet services	563	56.2
Multi-service bundle offer	448	44.8
Mobile call, messaging, and data services	143	14.3
MiFi mobile data only services	38	3.8
OTT call and messaging services accessed on your laptop/computer	33	3.3
OTT call and messaging services accessed on your mobile phone	225	22.5

The number of respondents (N) presented for each type of telecommunications service in the table above, represents the total number of households, out of the base of 1,000 respondents, that reported using that service at home.

Each N value presented will provide the base for discussing the specific fixed telecommunications service in subsequent sections of this report.

Fixed broadband Internet services were used at home by 56.2% of respondents, multi-service bundle offer[17] by 44.8% of respondents, fixed landline, and call services by 22.6% of respondents, and OTT call and messaging services accessed on mobile phone by 22.5% of the 1,000 respondents.

Approximately 4% of respondents used MiFi mobile data only services at home and 14.3% used mobile call, messaging, and data services.

[16] Proportion reported are based on the sample of 1,000 respondents.
[17] Multi-service bundle refers to a service provider offering several products or services for sale as one combined product using a singular tariff and may include any combination of fixed landline, fixed broadband and/or pay TV services. A standalone service refers to a single service offered by an operator.

3.2 Residential Fixed Landline and Call Services

Two hundred and twenty-six or 22.6% of the respondents who participated in the fixed market survey reported that they used fixed landline and call services at home.

3.2.1 Demand For, Usage And Expenditure – Fixed Landline and Call Services

Figure 14 presents data on the current fixed landline service provider.

Figure 14. Current fixed landline service provider

Figure 15 presents data on the fixed landline plan currently subscribed to.

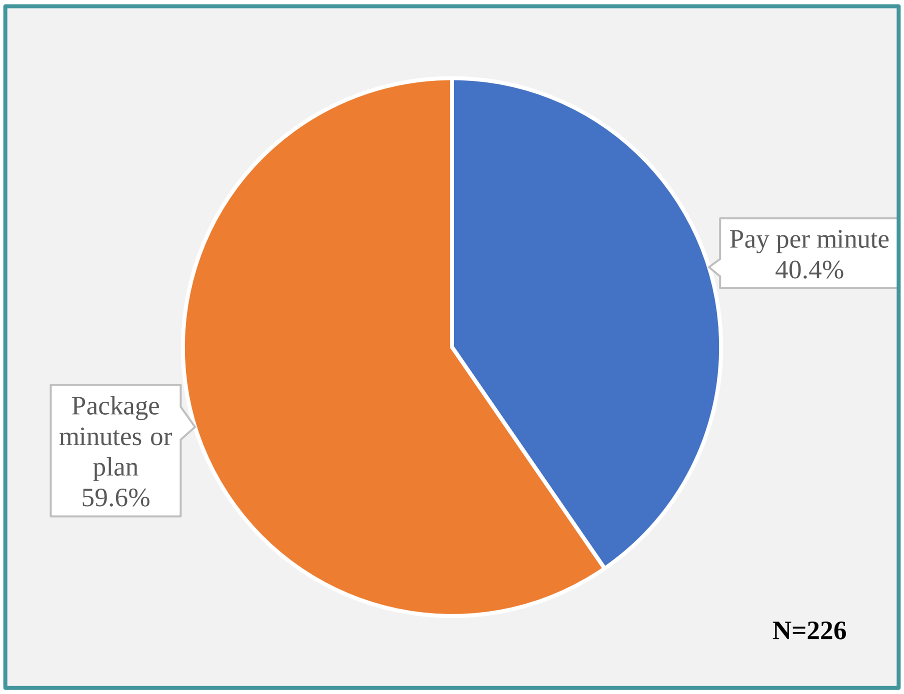


Figure 15. Fixed landline plan currently subscribed to

The data show that of the 226 responses received with respect to their current fixed landline plan subscription, approximately 40% of respondents indicated that they subscribed to a pay per minute plan and 59.6% subscribed to package minutes or plan.

Figure 16 presents data on the average amount spent monthly on fixed landline services by respondents.

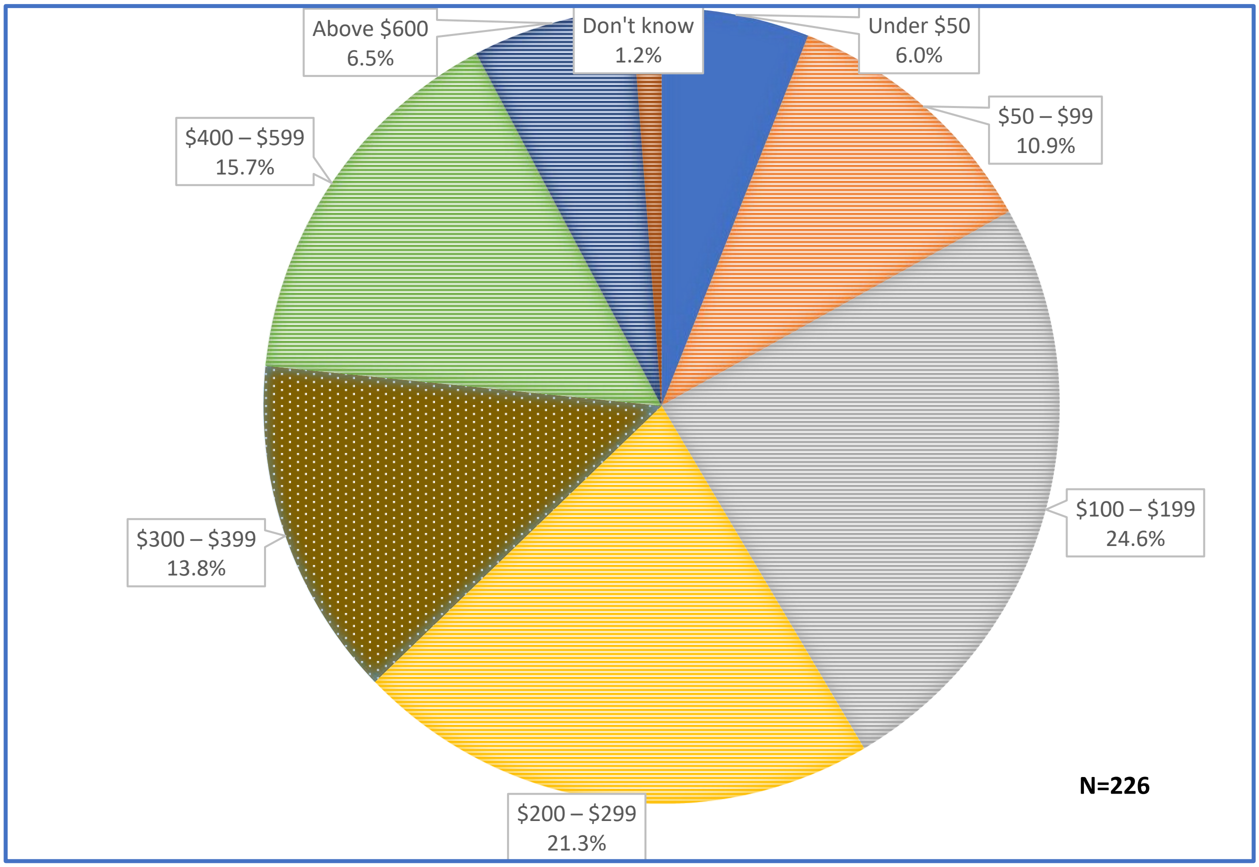


Figure 16. Average amount spent monthly on standalone fixed landline services

Approximately 25% of respondents reported that they spent between $100-$199 monthly on fixed landline services. Respondents who spent $200-$299 monthly represented 21.3% of the sample while respondents spending $400-$599 monthly represented 15.7%.

At the lower and upper ends of the spending spectrum, 6% of respondents reported spending under $50 monthly on fixed landline services and a similar proportion of 6.5% reported spending above $600 monthly.

Approximately 1% of respondents did not know what they spent monthly on fixed landline services.

Figure 17 presents data on the ranking of three uses of fixed landline service by respondents.

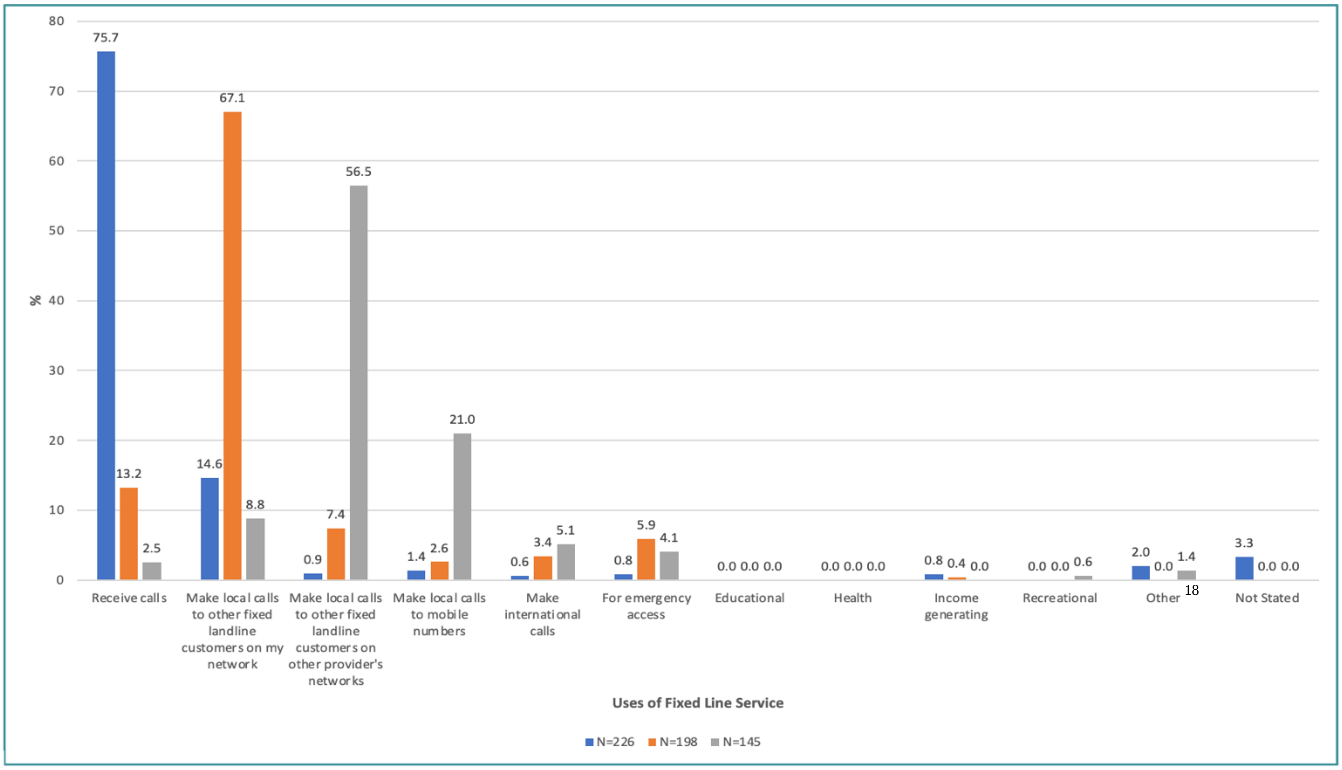


Figure 17. Ranking of three uses of fixed landline service

[18]*Other option responses.*

Respondents were questioned with respect to the three main uses of their fixed landline service and these responses were ranked across all responses received.

In the first ranked tier, 75.7% of respondents reported that they used their fixed landline service to receive calls. Approximately 15% of respondents reported that they used the service to make local calls to other fixed landline customers on my network. The least category of usage in this tier was make international calls which was cited by 0.6% of respondents. Approximately 3% of respondents did not provide responses. Exactly 2% of responses in the first tier, corresponded to miscellaneous other usages.

In the second ranked tier, 67.1% of respondents cited make local calls to other fixed landline customers on my network, 13.2% receive calls and 7.4% make local calls to other fixed landline customers on other provider's networks as the main uses of their fixed landline service. The use in this tier with the lowest proportion reported was income generating which was reported by 0.4% of respondents.

[18] Six respondents provided responses to the other category. Responses provided included not using the fixed landline service at all although having a subscription, sending, and receiving faxes, “entertainment” and to support home security monitoring services.

In the third ranked tier 56.5% of respondents selected make local calls to other fixed landline customers on other provider's network and 21% of respondents selected make local calls to mobile numbers. The least commonly cited category with 0.6% was recreational.

In terms of the second and third ranked uses, not all respondents provided uses for these tiers as requested, resulting in 198 responses at the second tier and 145 at the third tier.

Figure 18 presents data on the average time spent weekly talking on fixed landline by respondents.

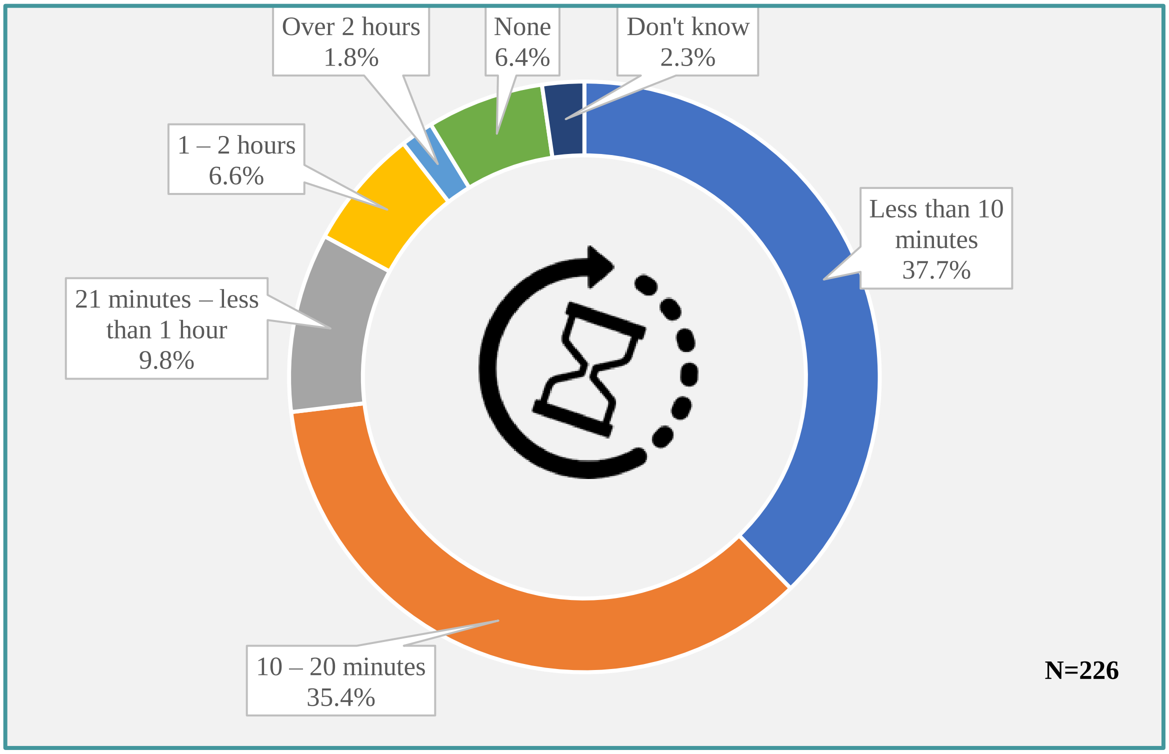


Figure 18. Average time spent weekly talking on fixed landline

Approximately 73%[19] indicated that they spent less than 21 minutes talking on their fixed landline weekly. A further 16.4%[20] of respondents indicated that they spent between 21 minutes to 120 minutes talking on the landline weekly. Approximately 2% of the 226 respondents indicated that they spent more than 120 minutes on their fixed landline weekly.

[19] This is the summed value of 37.7% and 35.4%.
[20] This is the summed value of 9.8% and 6.6%.

3.2.2 Switching Considerations

Table 9. presents data on the actions to be taken by respondents if fixed landline service price were increased[21].

Table 9. Action to be taken if fixed landline service price were increased

Monthly Expenditure TT$	Under $50		$50 – $99		$100 – $199		$200 – $299		$300 – $399		$400 – $599		Above $600		Don't know	
Proposed Price Increase TT$	**$3**		**$3-$5**		**$5-$10**		**$10-$15**		**$15-$20**		**$20-$30**		**More than $30**			
Action To Be Taken	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*
Stop using fixed landline to make calls	31.0	4	20.9	5	12.7	7	19.0	9	22.8	7	23.6	8	26.2	4	0.0	0
Make fewer calls	21.2	3	9.4	2	25.2	14	23.4	11	25.0	8	23.3	8	0.0	0	0.0	0
Make fewer calls, but use mobile calls instead	0.0	0	5.5	1	8.7	5	18.8	9	18.2	6	18.9	7	31.0	5	0.0	0
Make fewer calls, but use OTT calls (such as Viber, Skype, Google Voice, WhatsApp, or FaceTime) instead	0.0	0	7.1	2	7.7	4	6.7	3	6.0	2	0.0	0	9.5	1	0.0	0
Make fewer calls, but use OTT messaging (such as WhatsApp, iMessage or WeChat) instead	0.0	0	0.0	0	1.8	1	0.0	0	0.0	0	2.3	1	9.1	1	0.0	0
Switch to another fixed landline service offering	7.3	1	11.3	3	5.1	3	9.3	4	5.7	2	5.3	2	6.1	1	0.0	0
Switch to a multi-service bundle (incl. fixed call services)	0.0	0	0.0	0	5.7	3	2.3	1	0.0	0	2.5	1	6.0	1	0.0	0
Do nothing (or pay the specific increase and continue as normal)	40.6	5	45.9	11	30.2	17	18.3	9	15.7	5	18.7	7	12.2	2	0.0	0
Don't know	0.0	0	0.0	0	1.6	1	0.0	0	3.1	1	5.4	2	0.0	0	0.0	0
Not stated	0.0	0	0.0	0	1.3	1	2.2	1	3.4	1	0.0	0	0.0	0	100.0	0
Total	**100.0**	**14**	**100.0**	**25**	**100.0**	**56**	**100.0**	**48**	**100.0**	**31**	**100.0**	**35**	**100.0**	**15**	**100.0**	**0**

It was observed that in response to a proposed increase in fixed landline prices, the most common reaction by respondents to increases of between $3 to $10, is to do nothing. For increases of $10-$15 and above, fewer proportions of respondents reported that they would do nothing when compared to respondents reporting on lower proposed price increases.

[21] This service corresponds to the fixed landline service as a standalone service.

Another popular action cited in response to proposed increases in fixed landline prices was to stop using fixed landline to make calls. Respondents citing this action ranged from as low as 12.7% among persons responding to a price increase of \$5-\$10 to as high as 31% among persons responding to a proposed increase of \$5.

The percentage of respondents saying that they would also make fewer calls in response to a price increase was above 20% in 5 of the 7 proposed increment bands, the two exceptions being the \$3-\$5 proposed increase, which reported 9.4% and the more than \$30 proposed increase, where no one indicated that they would make fewer calls.

Thirty-one percent of respondents reported that they would make fewer calls but use mobile calls instead in response to a proposed increase of more than \$30.

Figure 19 presents data on reasons for doing nothing if fixed landline service provider charged more for fixed landline calls.

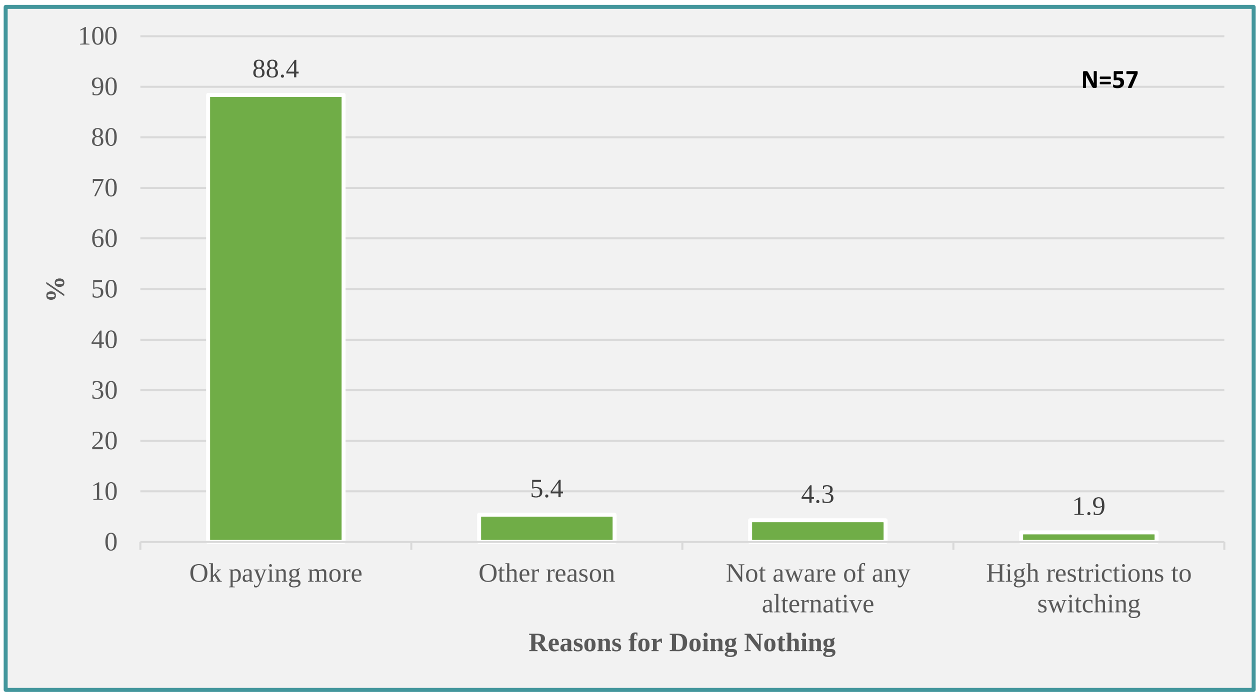


Figure 19. Reasons for doing nothing if fixed landline service provider charged more for fixed landline calls

Of the 57[22] who provided reasons for doing nothing if their fixed landline service provider charged more for fixed landline calls, 88.4% indicated that they were okay paying more for their fixed landline calls.

[22] 57 represents the respondents who selected do nothing (or pay the specific increase and continue as normal) in Table 9 and is 5.6% of the total of 226 respondents.

Figure 20 presents data on the ranking of two key advantages of fixed landline service compared to mobile cellular service by respondents.

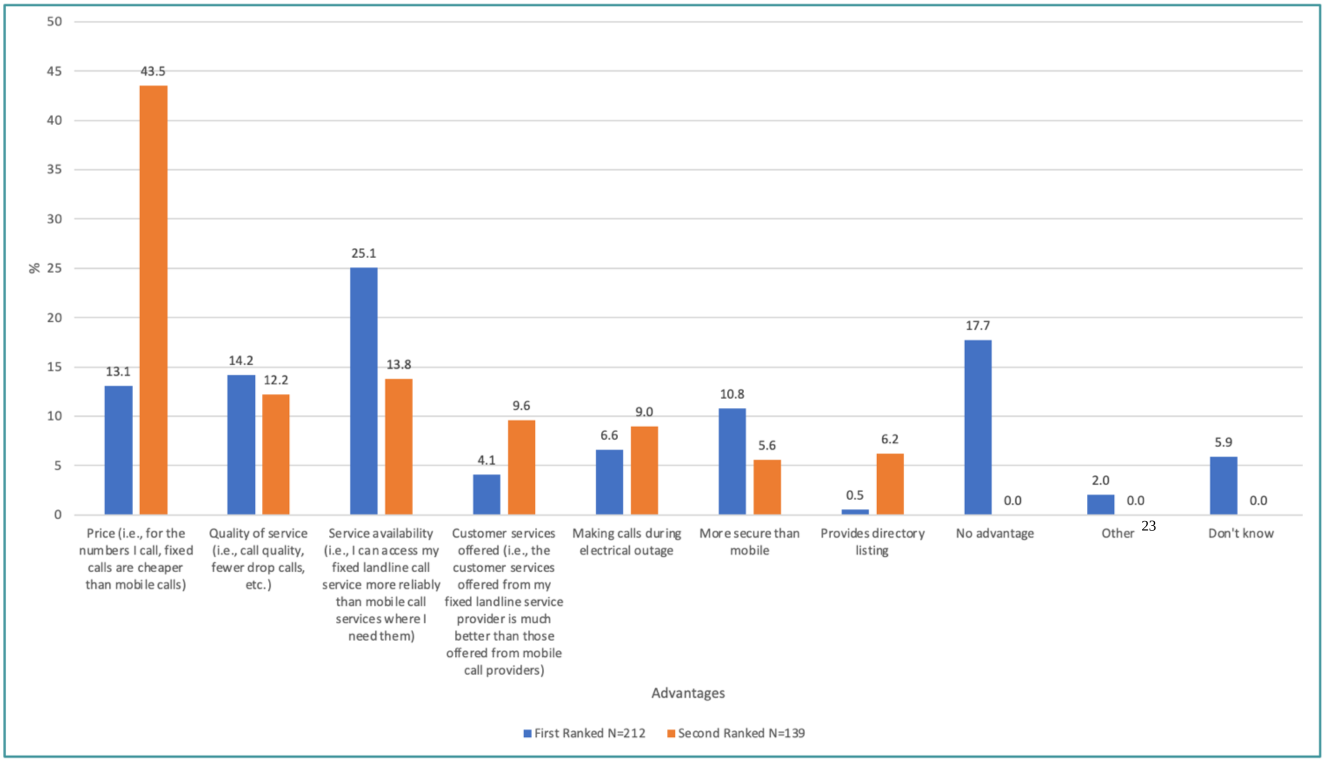


Figure 20. Ranking of two key advantages of fixed landline service compared to mobile cellular service

[23]*Other option responses.*

At the first ranked tier, which corresponds to the most important advantage, 25.1% of respondents cited service availability as an advantage of fixed landline service compared to mobile cellular service. Approximately 18% reported that there was no advantage when both services were compared and 14.2% reported that quality of service was an advantage of fixed landline service compared to mobile cellular service.

In terms of the second ranked advantages, not all respondents provided a second advantage as requested resulting in 139 responses at this tier.

At the second ranked tier, 43.5% of respondents cited price as an advantage of fixed landline service compared to mobile cellular service, 13.8% cited service availability and 12.2% quality of service as advantages of fixed landline service when compared to a mobile cellular service.

[23] Five respondents provided responses to the other category. Responses provided included convenience and "traditional use".

Figure 21 presents data on the ranking of two key disadvantages of fixed landline service when compared to a mobile cellular service by respondents.

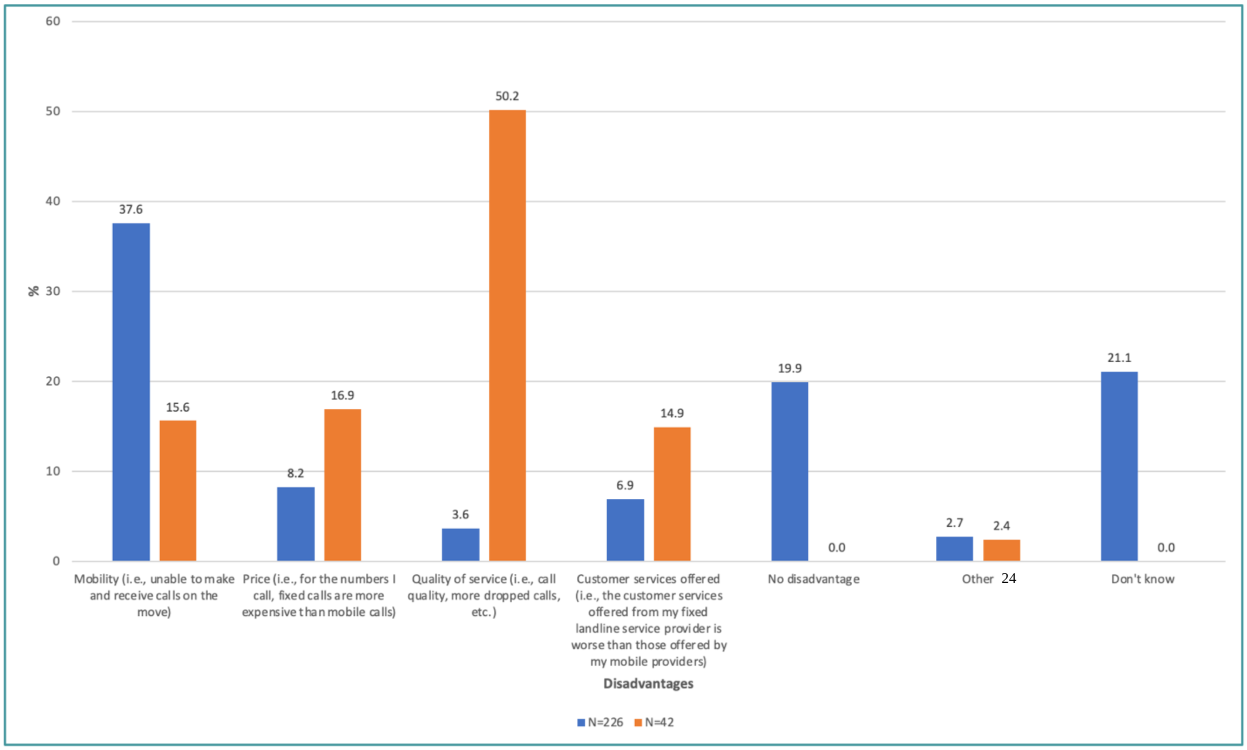


Figure 21. Ranking of two key disadvantages of fixed landline service compared to mobile cellular service

[24]*Other option responses.*

In the first ranked tier of disadvantages, 37.6% of respondents cited mobility as a disadvantage of fixed landline service compared to mobile cellular service. Approximately 21% of respondents reported that they did not know of any disadvantage, while 19.9% of respondents reported that there was no disadvantage between the two services. The non-descript category, other, was cited by 2.7% of respondents choosing first ranked advantages.

In terms of the second ranked disadvantages, not all respondents provided a second disadvantage as requested, resulting in 42 responses at this tier.

At the second ranked tier, 50.2% of respondents reported that quality of service was a disadvantage of fixed landline service compared to mobile cellular service while 16.9% cited price and 15.6% mobility.

[24] Eight respondents provided responses to the other category. All respondents cited the inability to make calls during electrical outages.

Figure 22 presents data on the ranking of two key advantages of fixed landline service compared to OTT call/messaging services by respondents.

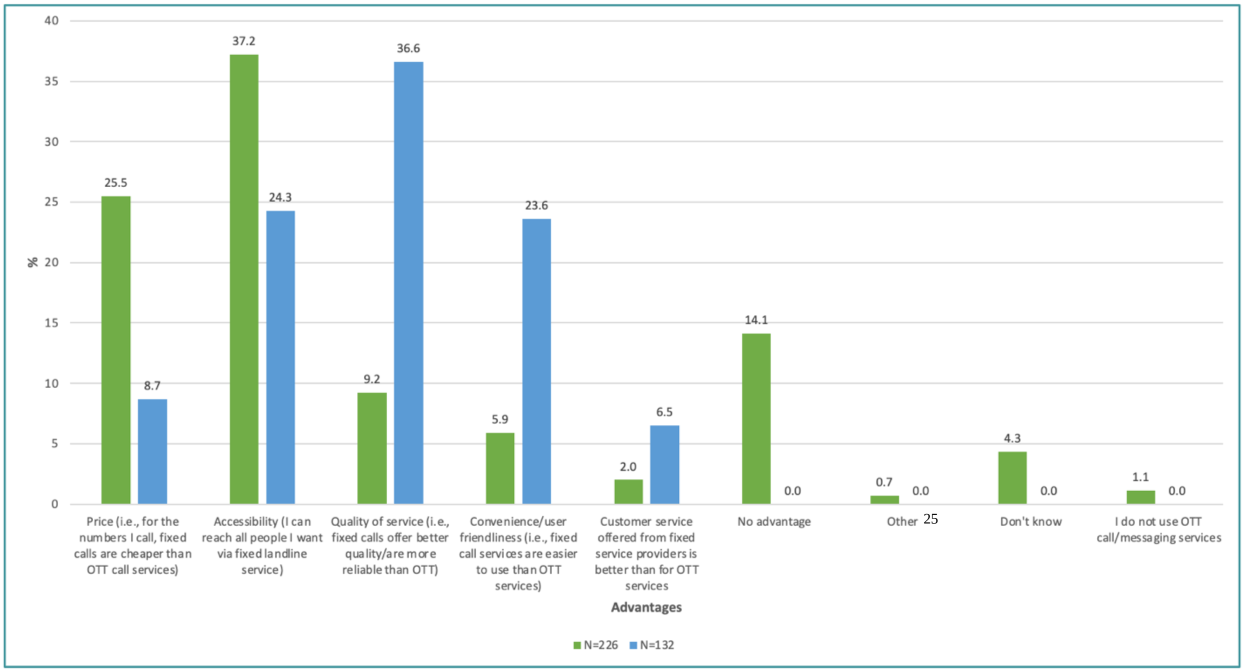


Figure 22. Ranking of two key advantages of fixed landline service compared to OTT call/messaging services

[25]*Other option responses.*

Based on the 226 responses received for the first ranked advantages of fixed landline service compared to OTT call/messaging services, 37.2% of respondents identified accessibility, and 25.5% identified price as top advantages. Approximately 14% of respondents indicated that there was no advantage between the two services.

In terms of the second ranked advantages, not all respondents provided a second advantage as requested resulting in 132 responses at this tier.

Quality of service was reported to be an advantage of fixed landline service compared to OTT call/messaging services by 36.6% of respondents while 24.3% cited accessibility and 23.6% cited convenience as advantages of a fixed landline service when compared to OTT call/messaging services.

[25] Three respondents provided responses to the other category. Responses provided included fed up with services being delivered, cost of landline service too expensive, Internet service poor and don't use landline service.

Figure 23 presents data on the ranking of two key disadvantages of fixed landline service compared to OTT call/messaging services by respondents.

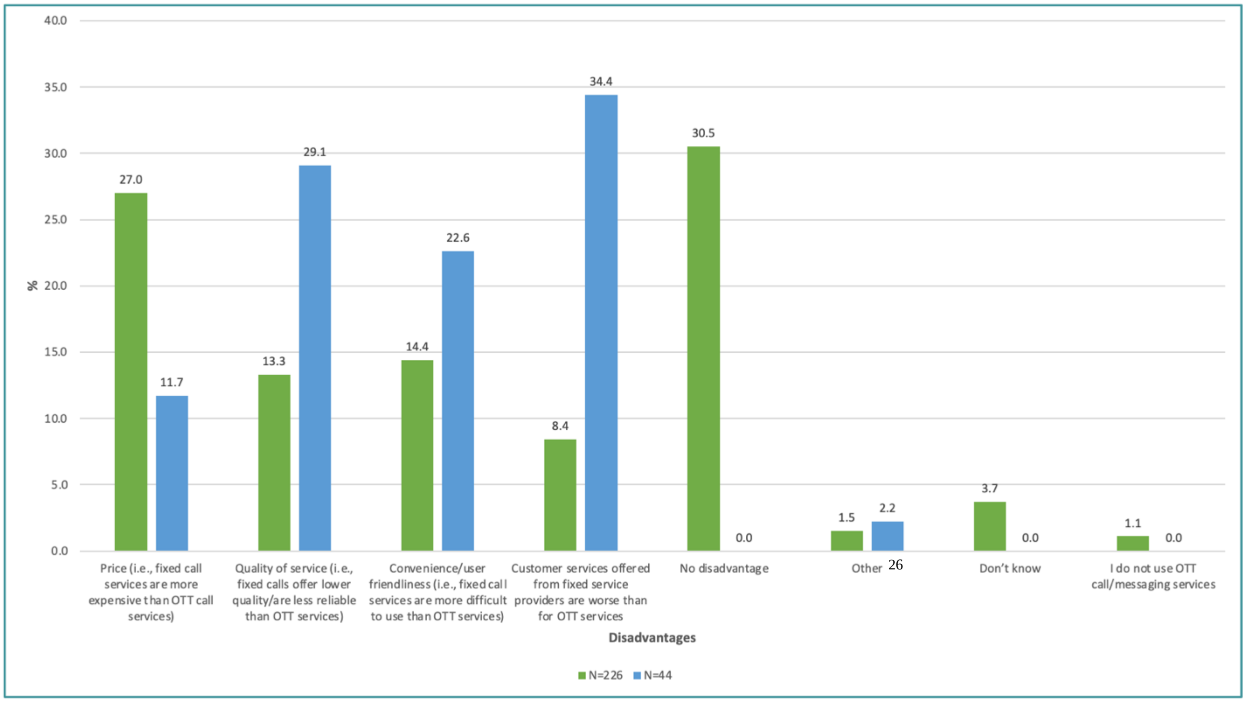


Figure 23. Ranking of two key disadvantages of fixed landline service compared to OTT call/messaging services

[26]*Other option responses.*

With respect to the first ranked disadvantages of fixed landline service compared to OTT call/messaging services 30.5% of respondents indicated that they could discern no disadvantage of a fixed landline service when compared to OTT call/messaging services. A further 27% of all respondents indicated that price was a disadvantage of a fixed landline service when compared to OTT call/messaging services, while another 14.4% of respondents indicated that convenience/user friendliness was a disadvantage.

In terms of the second ranked disadvantages, not all respondents provided a second disadvantage as requested resulting in 44 responses at this tier.

At the second tier, 34.4% of respondents cited customer services, 29.1% cited quality of service and 22.6% cited convenience/user friendliness as disadvantages of fixed landline service compared to OTT call/messaging services.

[26] Five respondents provided responses to the other category. Responses provided included lack of mobility, unreliability of fixed landline service and security.

Figure 24 presents data on respondents that within the last six months considered switching from fixed landline plan to a multi-service bundle.

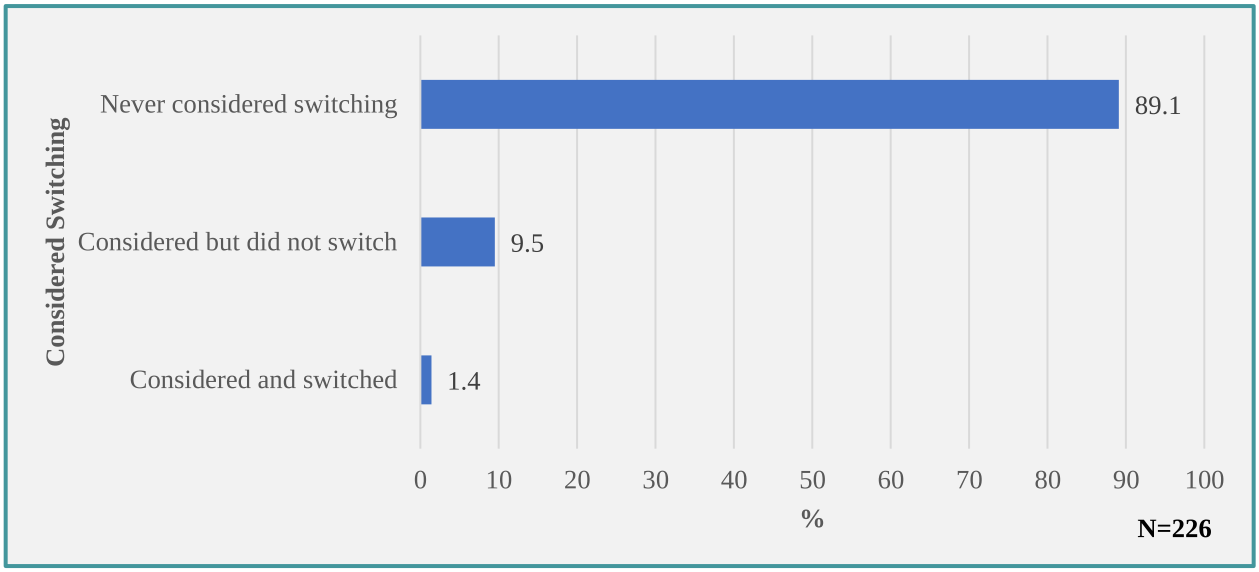


Figure 24. Within the last six months considered switching from fixed landline plan to a multi-service bundle

Of the 226 respondents, 89.1% indicated that they had never considered switching from their fixed landline plan to a multi-service bundle. A further 9.5% indicated that they had considered switching but did not do so, while 1.4% of respondents indicated that they had considered and switched.

Table 10 presents data on the switching pattern of persons who switched from fixed landline service to a multi-service bundle.

Table 10. Switching pattern of persons who switched from fixed landline service to a multi-service bundle

Switching Pattern	N
I switched to a lower priced plan with my current provider	1
I switched to a higher priced plan with a new provider	1
Not stated	1
Total	**3**

With respect to the switching pattern of persons who switched from fixed landline service to a multi-service bundle, the 1.4% of respondents who switched totalled three respondents, one of whom had switched to a lower priced plan with their current provider and another to a higher priced plan with a new provider. The third respondent did not provide a response to the question posed.

Figure 25 presents data on reasons given by respondents for not switching from fixed landline plan to a multi-service bundle in the past six months.

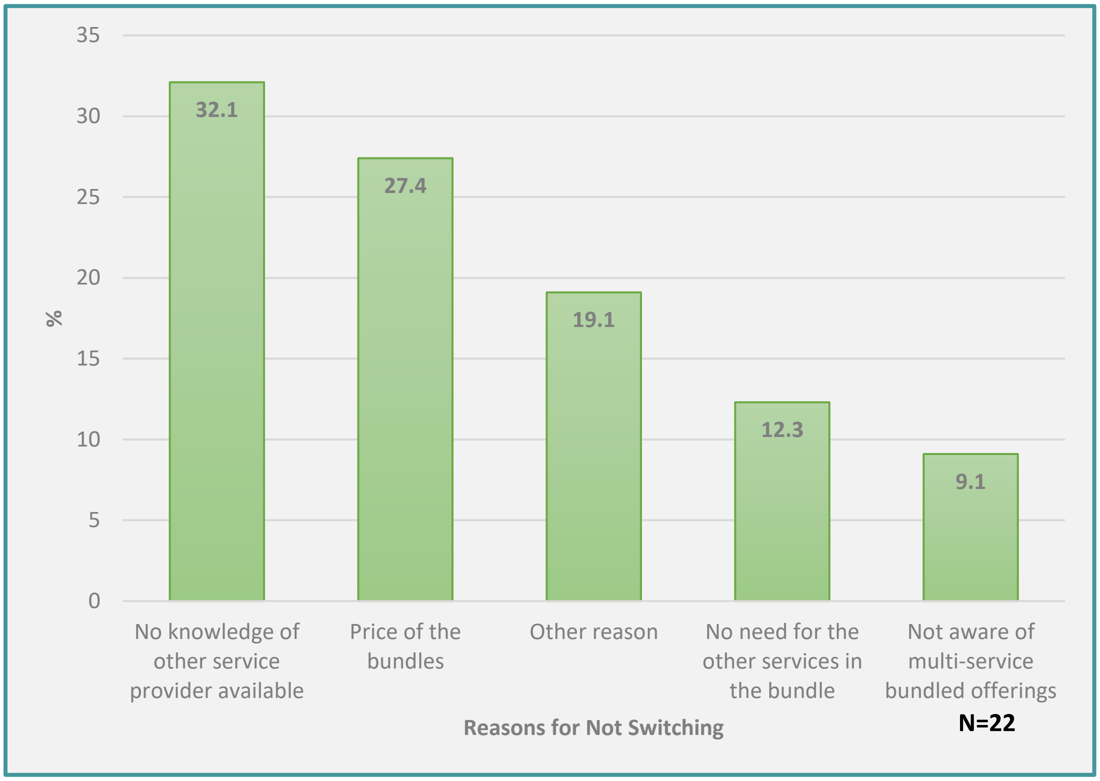


Figure 25. Reasons given for not switching from fixed landline plan to a multi-service bundle in the past six months

Of the 22[27] responses received from respondents for not switching from their fixed landline plan to a multi-service bundle in the past six months, 32.1% cited no knowledge of other service providers available, 27.4% cited price of the bundles, 19.1% of respondents indicated other reasons[28], 12.3% cited no need for the other services in the bundle and 9.1% were not aware of the multi-service bundled offerings.

[27] N=22 represents the respondents who selected "considered but did not switch" in Figure 24.

[28] Five respondents provided responses to the other category. Responses provided included hassle to change, prefer to deal with local company, too lazy to and too many requirements, waiting for family member to change and location services of provider.

Table 11 presents data on the ways OTT calls/messaging will be used by respondents on account of an increase in the price of fixed landline service.

Table 11. Ways OTT calls/messaging will be used on account of an increase in the price of fixed landline service

Monthly Expenditure TT$	$50 – $99	$100 – $199	$200 – $299	$300 – $399	$400 – $599	Above $600
Proposed Price Increase TT$	***$3-$5***	***$5-$10***	***$10-$15***	***$15-$20***	***$20-$30***	***More than $30***
Ways To Be Used	***%***					
Use OTT call/messages made on your fixed Internet service	61.5	62.0	53.9	100.0	100.0	0.0
Use OTT call/ messages made using your mobile data service	38.5	38.0	46.1	0.0	0.0	100.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
N=16[29]						

The data presented in the table above represents the responses of 16 respondents who indicated that they would make fewer calls, but use OTT calls instead or make fewer calls, but use OTT messaging instead.

The table shows overall that a higher proportion of respondents would choose to use OTT calls/messages made on their fixed Internet service rather than their mobile data service in response to an increase in the price of their fixed landline service.

[29] N=16 represents respondents who selected make fewer calls, but use OTT calls instead or make fewer calls, but use OTT messaging instead in Table 9.

3.3 Fixed Broadband Service

The total number of respondents in the sample who reported that they subscribed to fixed broadband Internet was 563. This figure represents 56.2%[30] of the survey samples.

Figure 26 presents data on respondents current fixed broadband Internet service provider.

Figure 26. Current fixed broadband Internet service provider

[30] This figure represents subscribers to fixed broadband Internet service **only** and not multi-service bundle subscribers that accounts for an additional 448 fixed Internet subscriptions.

Figure 27 presents data on the advertised download speed of fixed broadband Internet plan of respondents at home.

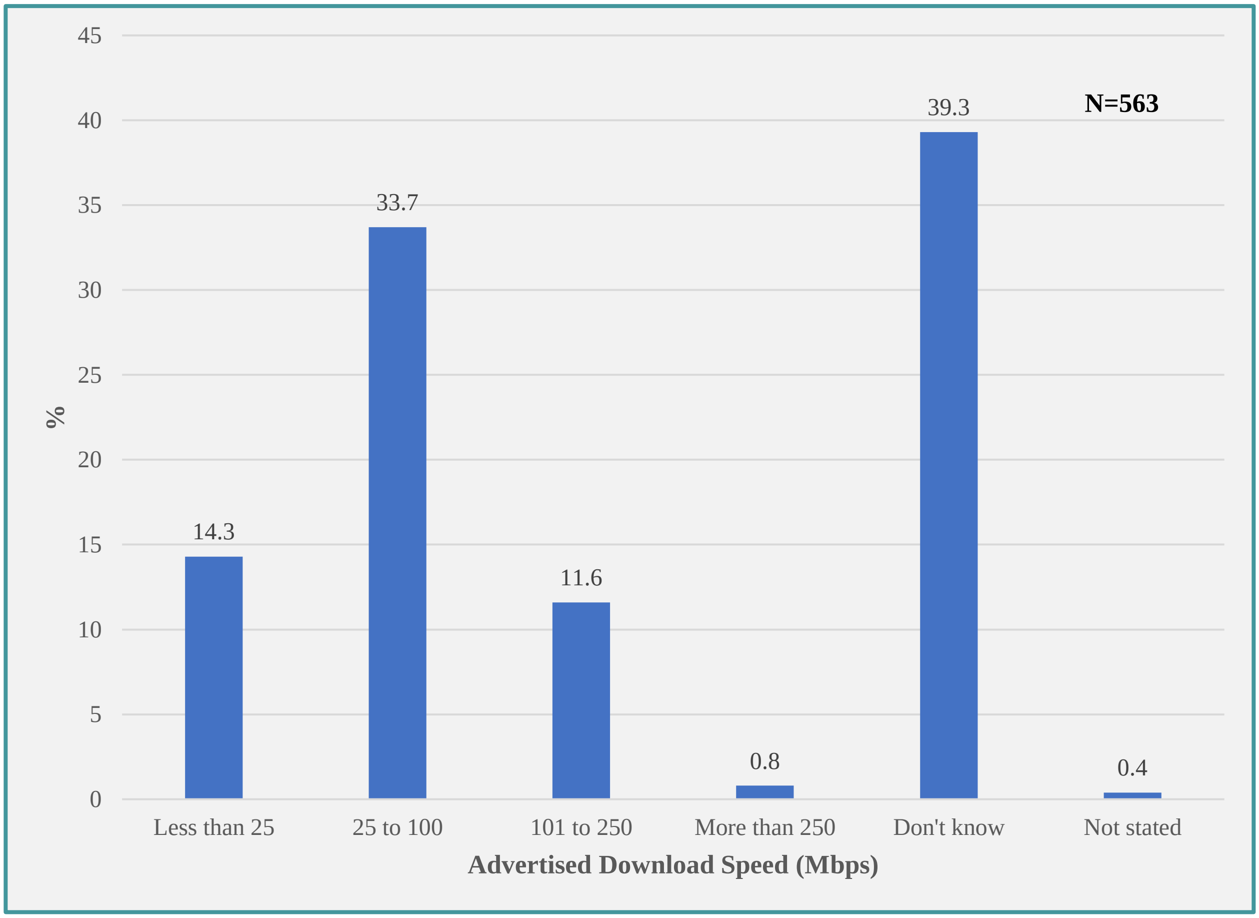


Figure 27. Advertised download speed of fixed broadband Internet plan at home

Respondents who reported a download speed of 25 to 100 Mbps represented 33.7% of the sample. Approximately 14% of respondents reported that the download speed of their fixed broadband Internet plan at home was less than 25 Mbps and 11.6% reported speeds between 101 and 250 Mbps.

Approximately 39% of respondents indicated that they were unable to provide information about the advertised speed of their fixed broadband Internet plan at home.

Figure 28 presents data on the amount spent monthly on fixed broadband Internet services (TT$) by respondents.

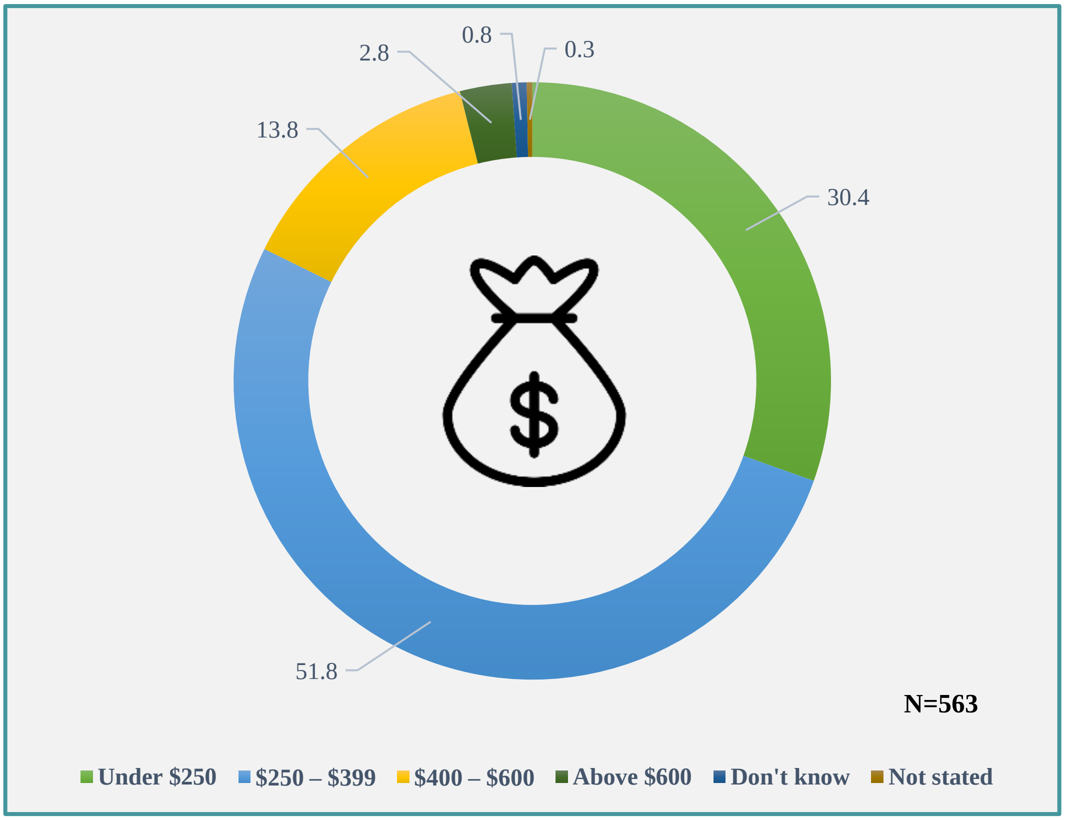


Figure 28. Amount spent monthly on fixed broadband Internet services (TT$)

The figure shows that 51.8% of respondents spent $250-$399 monthly on their fixed broadband Internet services, 30.4% spent under $250, 13.8% spent $400-$600 and 2.8% spent above $600 monthly.

Table 12 presents data on the ranking of uses of fixed broadband Internet service by respondents.

Table 12. Ranking of uses of fixed broadband Internet Service

Uses	**Ranking**				
	First	**Second**	**Third**	**Fourth**	**Fifth**
	%				
Making calls (telephoning over the Internet/VoIP)	62.9*	15.2***	6.2	0.8	0.0
Participating in social networks	14.1**	52.2*	12.8	3.7	0.2
Streaming or downloading images, movies, videos or music; playing or downloading games	10.6***	18.7**	43.4	8.2	5.4
Sending or receiving e-mail	3.0	3.6	11.7	34.7	6.3
Getting information about goods or services	0.6	1.8	3.0	5.1	5.8
Participating in online classes	2.4	2.3	6.1	9.0	24.0
Seeking health information	0.7	0.6	1.8	2.7	2.6
Watching web television	3.7	1.9	6.1	10.5	10.9
Internet banking	0.1	1.4	3.4	6.0	10.0
Using storage space on the Internet to save documents, pictures, music, video or other files	0.2	0.0	1.1	5.2	3.1
Reading or downloading online newspapers or magazines, electronic books	0.0	0.5	0.7	2.6	3.5
Conducting research for formal learning purposes	0.7	1.3	0.8	3.5	10.3
Purchasing or ordering goods and services	0.3	0.3	1.7	4.6	5.6
Getting information from general government organisations	0.0	0.4	0.7	1.4	2.4
Downloading software or applications	0.2	0.0	0.4	1.8	9.9
Other activities	0.0	0.0	0.2	0.2	0.0
None	0.4	0.0	0.0	0.0	0.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	N=563	***N=531***	***N=463***	***N=366***	***N=262***

*Note: *, ** and *** denote first, second and third uses within each ranking.*

At the first tier of ranking of use of fixed broadband Internet service, 62.9% of respondents reported they used the Internet for making VoIP calls, 14.1% for participating in social networks and 10.6% for streaming or downloading images, movies, videos, or music; playing or downloading games.

At the second tier, 52.2% of respondents reported that they used their fixed broadband Internet service to participate in social networks, 18.7% for streaming or downloading images, movies, videos, or music; playing or downloading games and 15.2% for making VoIP calls.

With respect to third ranked uses of fixed broadband Internet service, 43.4% cited streaming or downloading images, movies, videos, or music, playing, or downloading games, 12.8% participating in social networks and 11.7% sending or receiving e-mail.

Among the top reported fourth ranked uses of fixed broadband Internet service were sending or receiving e-mail, reported by 34.7% of respondents, watching web television, reported by 10.5% of respondents and participating in online classes as cited by 9% of respondents.

At the fifth and final tier, 24% of respondents cited using fixed broadband Internet service for participating in online classes, 10.9% for watching web television, 10.3% for conducting research for formal learning purposes and 10% for Internet banking.

In terms of the second, third, fourth and fifth ranked uses, not all respondents provided uses for these tiers as requested resulting in 531 responses at the second tier, 463 at the third tier, 366 at the fourth tier, and 262 at the fifth tier.

Figure 29 presents data on the frequency of use of fixed broadband Internet service.

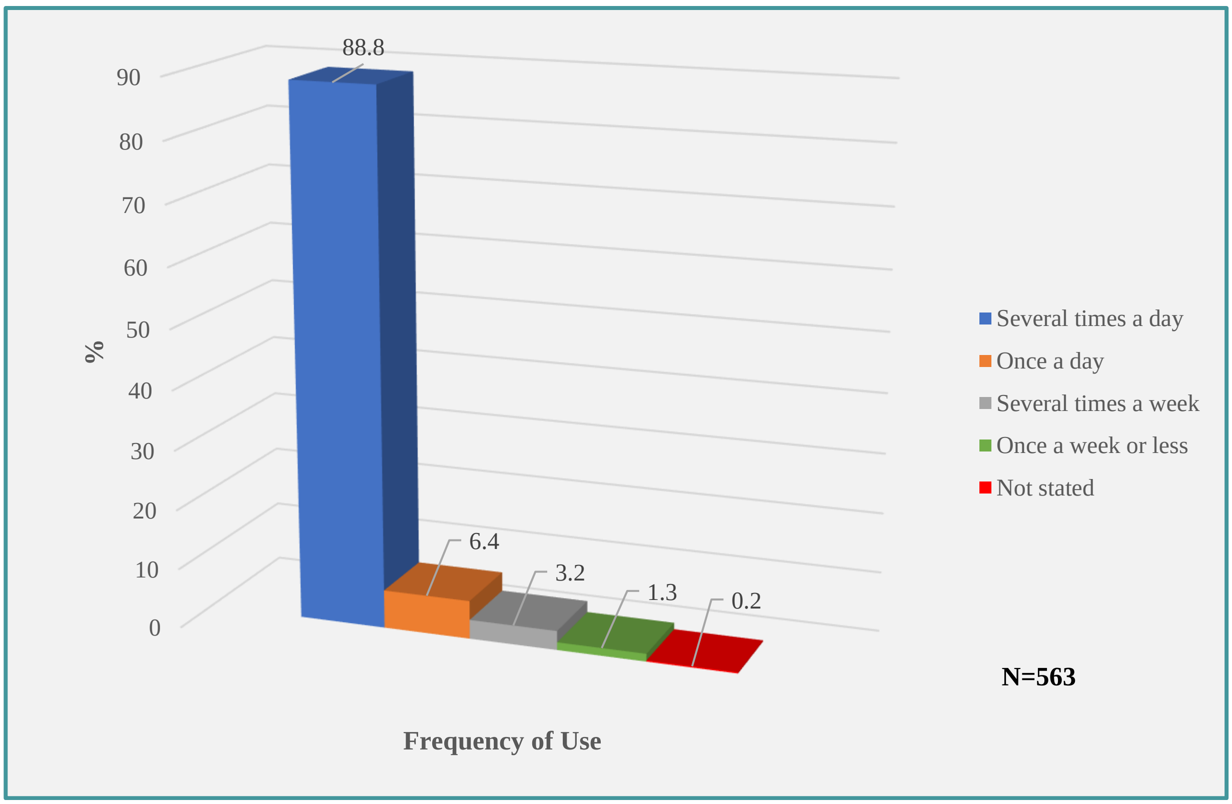


Figure 29. Frequency of use of fixed broadband Internet service

Of the 563 respondents, 88.8% indicated that they utilised the service several times a day while 6.4% of respondents indicated they used the service only once a day.

Approximately 3% of respondents indicated that they utilised the service several times a week and 1.3% indicated use at a frequency of once a week or less.

Figure 30 presents data on the use of fixed broadband Internet service as the only way to access the Internet by respondents.

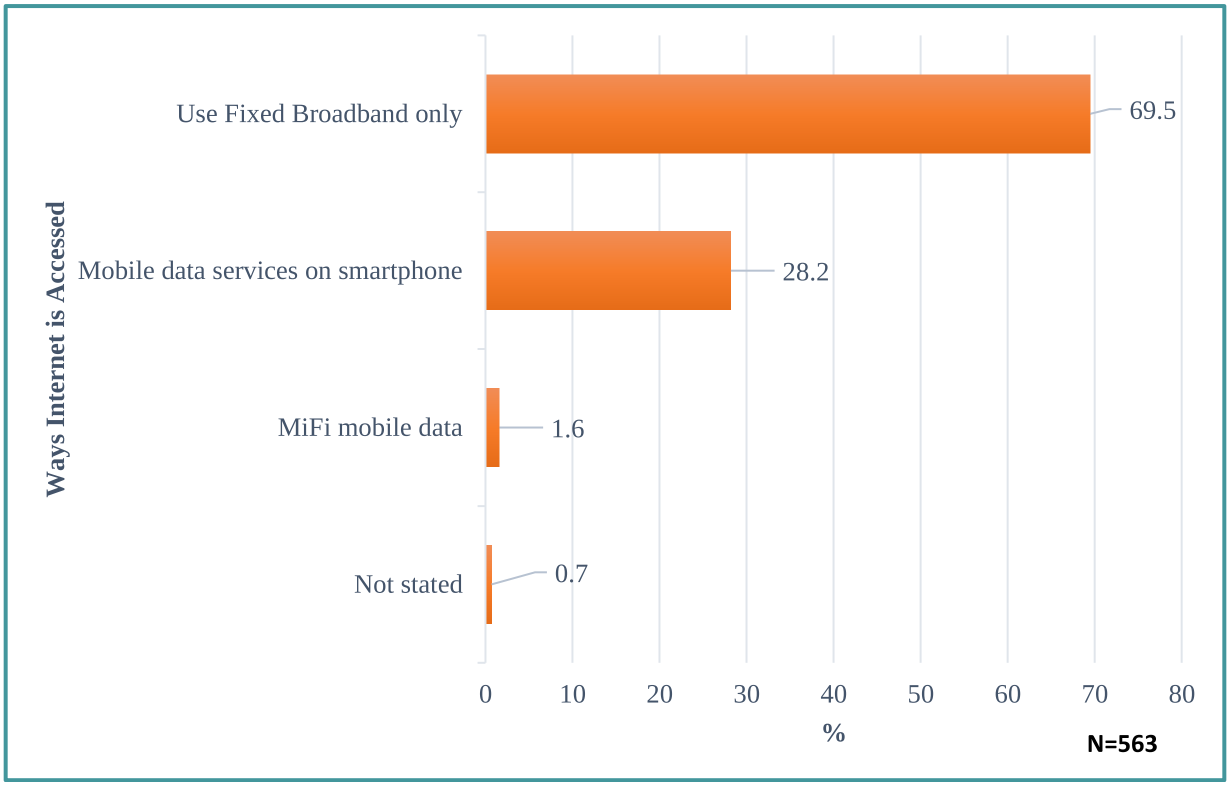


Figure 30. Use of fixed broadband Internet service as only way to access the Internet

Of the 563 respondents to this question, 69.5% indicated that they used their fixed broadband Internet service as the only way to access the Internet. Another 28.2% indicated they accessed the Internet through mobile data services on their mobile smartphone and 1.6% had access through a MiFi mobile data connection.

3.3.1 Switching Considerations

Table 13 presents data on the actions to be taken by customers if the price of fixed broadband Internet were to increase.

Table 13. Action to be taken by customer if the price of fixed broadband Internet were to increase

Monthly Expenditure (TT$)	**Under $250**		**$250 – $399**		**$400 – $600**		**Above $600**	
Proposed Price Increase TT$	**$12.50**		**$12.50-$20**		**$20-$30**		**More than $30**	
Action To Be Taken	***%***	***N***	***%***	***N***	***%***	***N***	***%***	***N***
Cancel current fixed broadband plan	11.7	20	18.0	53	10.9	8	37.9	6
Move to another fixed broadband plan	25.8	44	26.9	78	47.9	37	21.4	3
Rely on my mobile data service on my smartphone	1.2	2	3.3	10	5.6	4	4.8	1
Move to MiFi mobile data only services instead	0.0	0	1.2	3	1.3	1	0.0	0
Do nothing (pay the specific increase and continue as normal)	58.7	100	43.8	128	30.6	24	35.9	6
Not stated	2.7	5	6.8	20	3.7	3	0.0	0
Total	**100.0**	**171**	**100.0**	**292**	**100.0**	**78**	**100.0**	**16**

In response to a proposed price increase of $12.50, 58.7% of respondents indicated that they would do nothing, 25.8% reported that they would move to another fixed broadband plan and 11.7% of respondents in the category indicated that they would cancel their current plan.

Based a proposed increase of between $12.50-$20 for fixed broadband Internet, 43.8% of respondents indicated that they would do nothing in response to a $12.50–$20 increase in the subscription price. Another 26.9% of respondents reported that they would move to another fixed broadband plan and 18% indicated that they would cancel their current fixed broadband plan in response to an increase in price.

Approximately 31% of respondents said they would do nothing in response to a price change of $20 to $30, 47.9% of respondents indicated that they would move to another fixed broadband plan while 10.9% indicated that they would cancel their current plan.

Based on a proposed price increase of more than $30 for fixed broadband Internet, 37.9% of respondents indicated that they would cancel their current fixed broadband Internet plan, 35.9% of respondents indicated that they would do nothing in response to a more than $30 increase to their subscription while 21.4% of respondents indicated that they would move to another fixed broadband plan.

Table 14 presents data on reasons for doing nothing if fixed broadband Internet price increased.

Table 14. Reasons for doing nothing if fixed broadband Internet price increased

Monthly Expenditure TT$	**Under $250**	**$250 – $399**	**$400 – $600**	**Above $600**
Proposed Price Increase TT$	**$12.50**	**$12.50-$20**	**$20-$30**	**More than $30**
Reasons for Doing Nothing	*%*			
I am ok paying more for my fixed broadband service	78.1	77.5	84.5	82.9
I am not aware of any other way to access the Internet	2.2	7.2	1.7	0.0
I do not consider any alternative service offerings to be better than my current fixed broadband services	17.9	12.7	10.4	17.1
I believe there to be high restrictions to switching my fixed broadband service plan/provider	1.0	1.9	3.4	0.0
Other reason[31]	0.9	0.7	0.0	0.0
Total	**100.0**	**100.0**	**100.0**	**100.0**
N=258[32]				

The table shows that 78.1% of respondents were okay with paying more for their fixed broadband Internet service in response to a proposed price increase. Whilst proportions of 77.5%, 84.5% and 82.9% of respondents also indicated that they were ok paying more for my fixed broadband service in response to price increases of $12.50-$20, $20-$30 and more than $30 respectively.

The second most popular reason for doing nothing in response to an increase in the price of fixed broadband Internet, across all proposed price increment bands, was respondents did not consider any alternative service offerings to be better than their current fixed broadband Internet service.

[31] Two respondents provided responses to the other category. Responses provided included have no choice, and until cheaper provider can be found.
[32] N=258 represents respondents who selected do nothing in Table 13.

Table 15 presents data on reasons given by respondents that will prevent switching from fixed broadband Internet service provider.

Table 15. Reasons given that will prevent switching from fixed broadband Internet service provider

Reasons	N
Don't want to get locked into contract with new provider	2
Reluctant to leave provider I trust for one I don't know	1
Strong sense of loyalty towards current provider	1
Shopping for new provider too much of a hassle/chore	3
Don't want to lose current deal/package	1
Big risk that something will go wrong in transition	1
Total	**9**
***N=9*[33]**	

The eight respondents who answered this question were persons who would have answered I believe there to be high restrictions to switching my fixed broadband service plan/provider in Table 14.

[33] N=9 represents respondents who selected I believe there to be high restrictions to switching my fixed broadband service plan/provider in Table 14.

Figure 31 presents data on the ranking of two key advantages by respondents of fixed broadband Internet compared to MiFi and mobile smartphone data service.

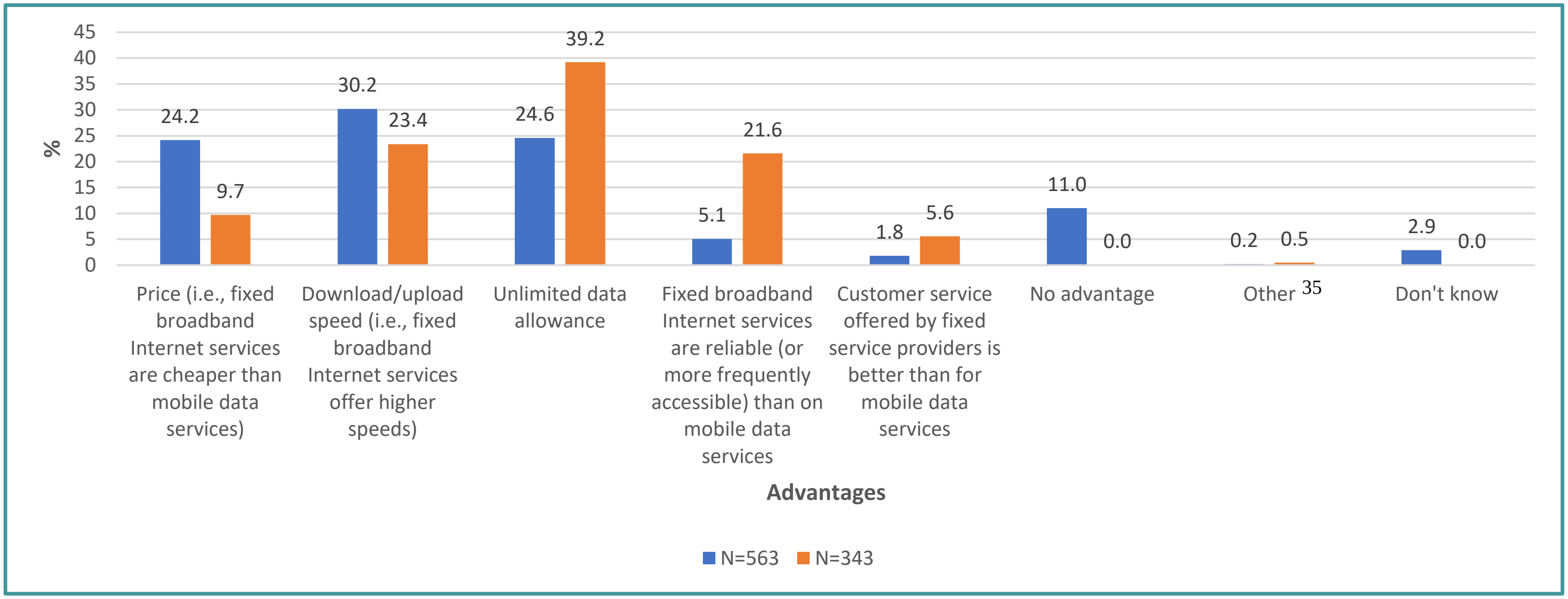


Figure 31. Ranking of two key advantages of fixed broadband Internet compared to MiFi and mobile smartphone data service

[34]*Other option responses.*

[34] Four respondents provided responses to the other category. Responses provided included no need to manage battery usage associated with mobile devices, no need to top-up account, and can support more devices than hotspot device.

Figure 31 shows that 30.2% of respondents identified download/upload speed, 24.6% unlimited data allowance and 24.2% price as advantages of fixed broadband Internet compared to MiFi and mobile smartphone data service.

In terms of the second ranked advantages, not all respondents provided a second advantage as requested resulting in 343 responses at this tier.

At the second tier of the ranking, 39.2% of respondents identified unlimited data allowance, 23.4% identified download/upload speed and 21.6% indicated that fixed broadband Internet services were reliable when asked to identify advantages of fixed broadband Internet compared to MiFi and mobile smartphone data service.

Figure 32 presents data on the ranking of two key disadvantages by respondents of fixed broadband Internet compared to MiFi and mobile smartphone data service.

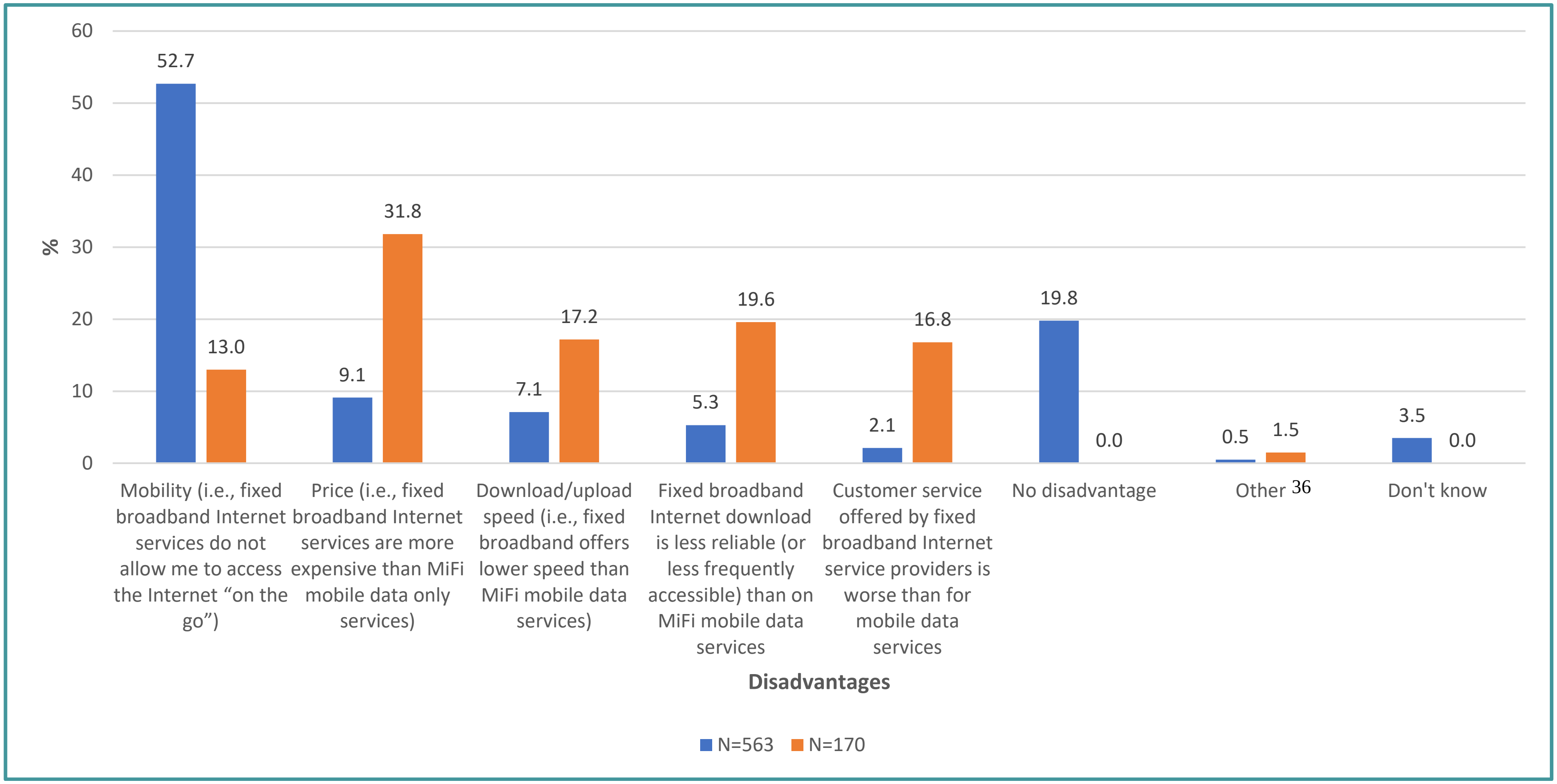


Figure 32. Ranking of two key disadvantages of fixed broadband Internet compared to MiFi and mobile smartphone data service

[35]*Other option responses.*

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[35] Seven respondents provided responses to the other category. Responses provided included inability to access service when electricity goes, quality if service is impacted by weather conditions and support for fixed broadband service must be accessed from resources in Trinidad.

Of the 563 respondents who selected options from the first ranked tier, 52.7% of respondents identified mobility, 19.8% indicated there was no disadvantage between a fixed broadband Internet service compared to a MiFi and mobile smartphone data service, and 9.1% cited price as the first-tier disadvantage.

In terms of the second ranked disadvantages, not all respondents provided a second disadvantage as requested resulting in 170 responses at this tier.

At the second tier, 31.8% of respondents identified price, 19.6% cited that fixed broadband Internet download is less reliable than on MiFi mobile data services and 16.8% indicated that customer service offered by fixed broadband Internet service providers is worse than for mobile data services.

Figure 33 presents data on respondents that within the last six months, switched or considered switching from fixed broadband only plan to a multi-service bundle.

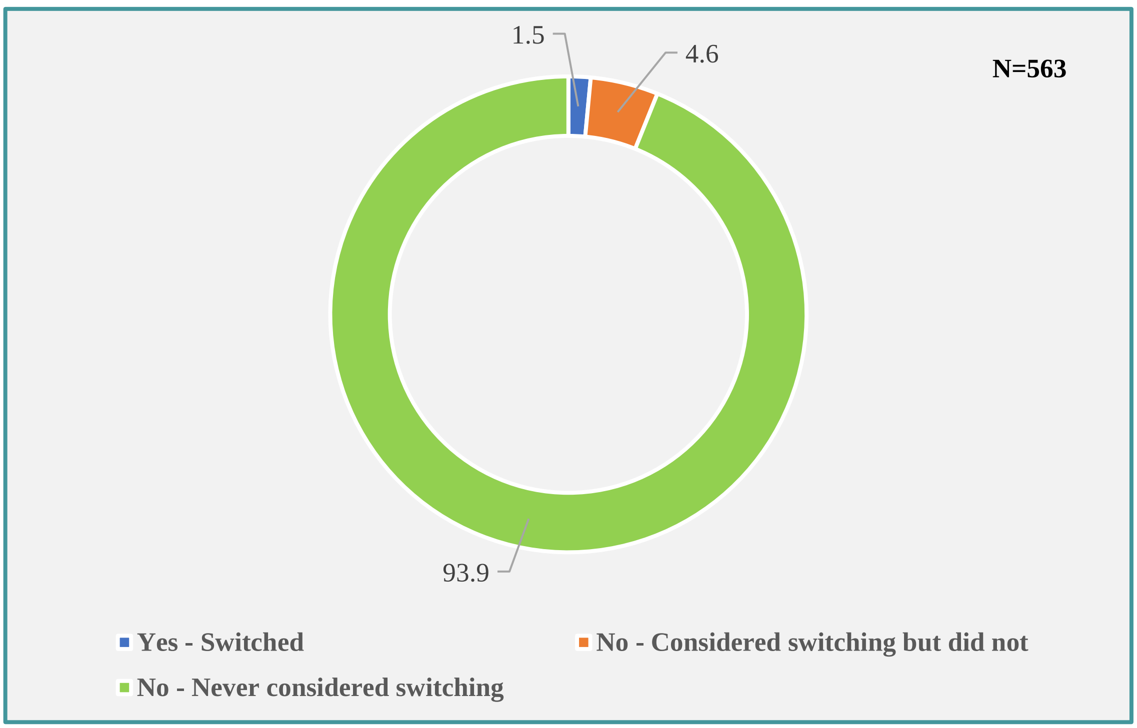

Figure 33. Within the last six months, switched or considered switching from fixed broadband only plan to a multi-service bundle

Approximately 94% of respondents indicated that they had never considered switching from a fixed broadband only plan to a multi-service bundle within the last six months. Some 4.6% of respondents indicated that they considered switching in the last six months but did not do so while 1.5% of respondents indicated that they had switched from a fixed broadband only plan to a multi-service bundle within the last six months.

Table 16 presents data on the switching pattern from fixed broadband only plan to a multi-service bundle.

Table 16. Switching pattern from fixed broadband only plan to a multi-service bundle

Switching Pattern	N
I switched to a lower priced plan with my current provider	2
I switched to a lower priced plan with a new provider	3
I switched to a higher priced plan with my current provider	1
I switched to a higher priced plan with a new provider	2
Not stated	1
Total	**9**
N=9 *– Represents respondents who selected "Yes – Switched" in Figure 33. .*	

The table identifies the four switching options (excluding not stated) that were reported by persons switching from fixed broadband only plan to a multi-service bundle.

Figure 34 presents data on reasons given for not switching from current fixed broadband plan to a multi-service bundle in the past six months.

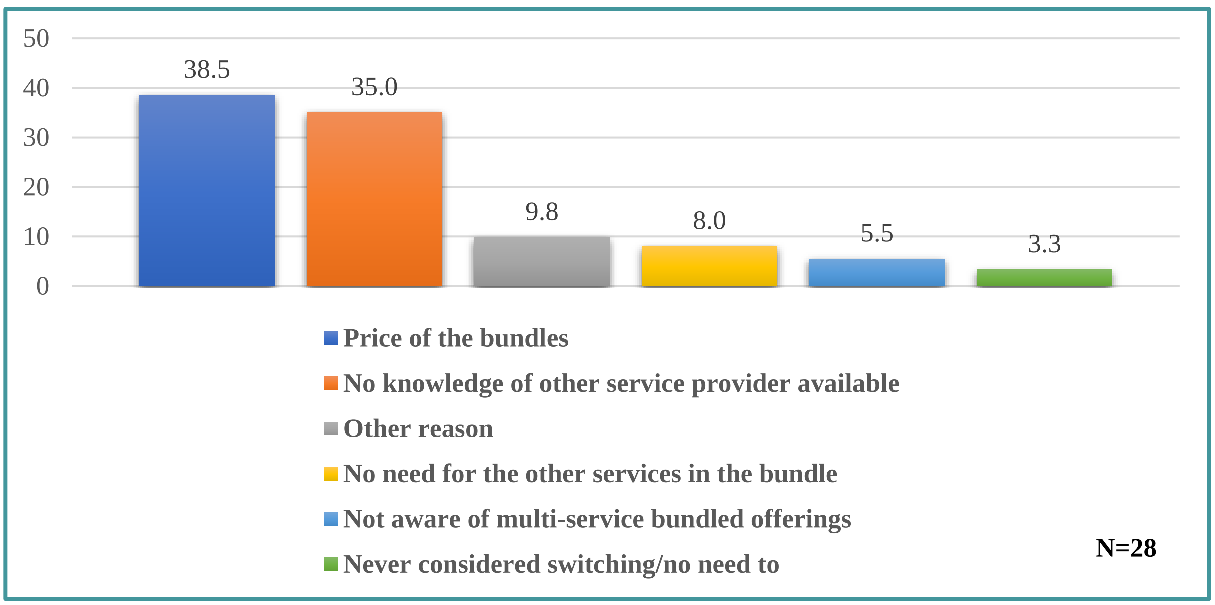

Figure 34. Reasons given for not switching from current fixed broadband plan to a multi-service bundle in the past six months

Of the 28[36] respondents who did not switch, 38.5% selected price of the bundles and 35% selected no knowledge of other service providers available. Approximately 10% of respondents identified other reasons.

[36] N=28 represents respondents who selected no – considered switching but did not switch, and no – never considered switching in Figure 33.

3.4 Multi-Service Bundle

A total of 448 respondents reported that they had subscribed to a multi-service bundle.

Figure 35 presents data on the current multi-service bundle provider of respondents.

Figure 35. Current multi-service bundle provider

Figure 36 presents data on the services included in multi-service bundle subscription.

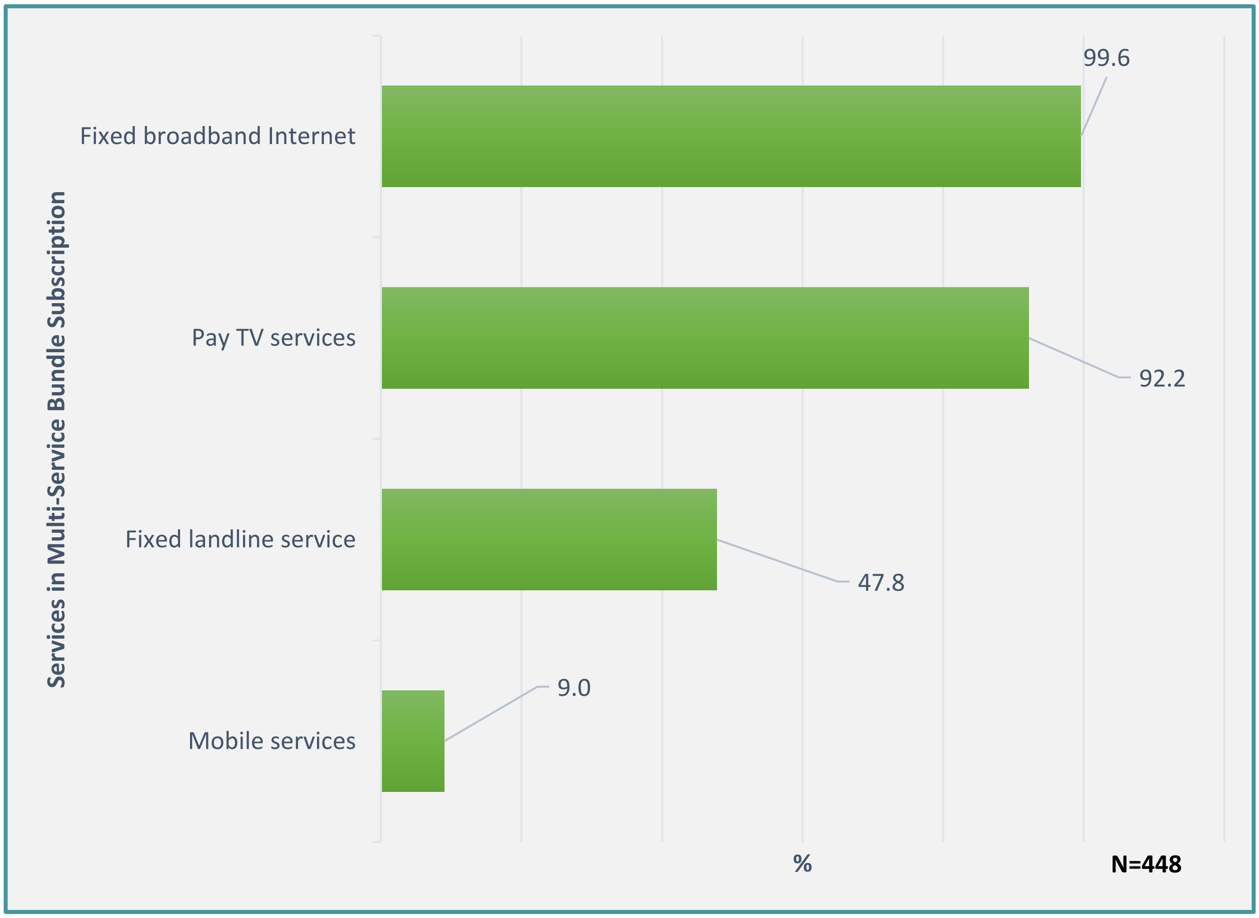

Figure 36. Services included in multi-service bundle subscription

The figure shows that of the 448 respondents who answered this question, 99.6% subscribed to a multi-service bundle that included fixed broadband Internet and 92.2% of subscriptions included Pay TV services.[37] Fixed landline service subscriptions were included in 47.8% of multi-service bundle subscriptions and mobile services in 9% of all multi-service bundle subscriptions.

[37] Note: Respondents were asked to select the appropriate response category in a multiple response format.

Figure 37 presents data on the types of multi-bundle subscription packages.

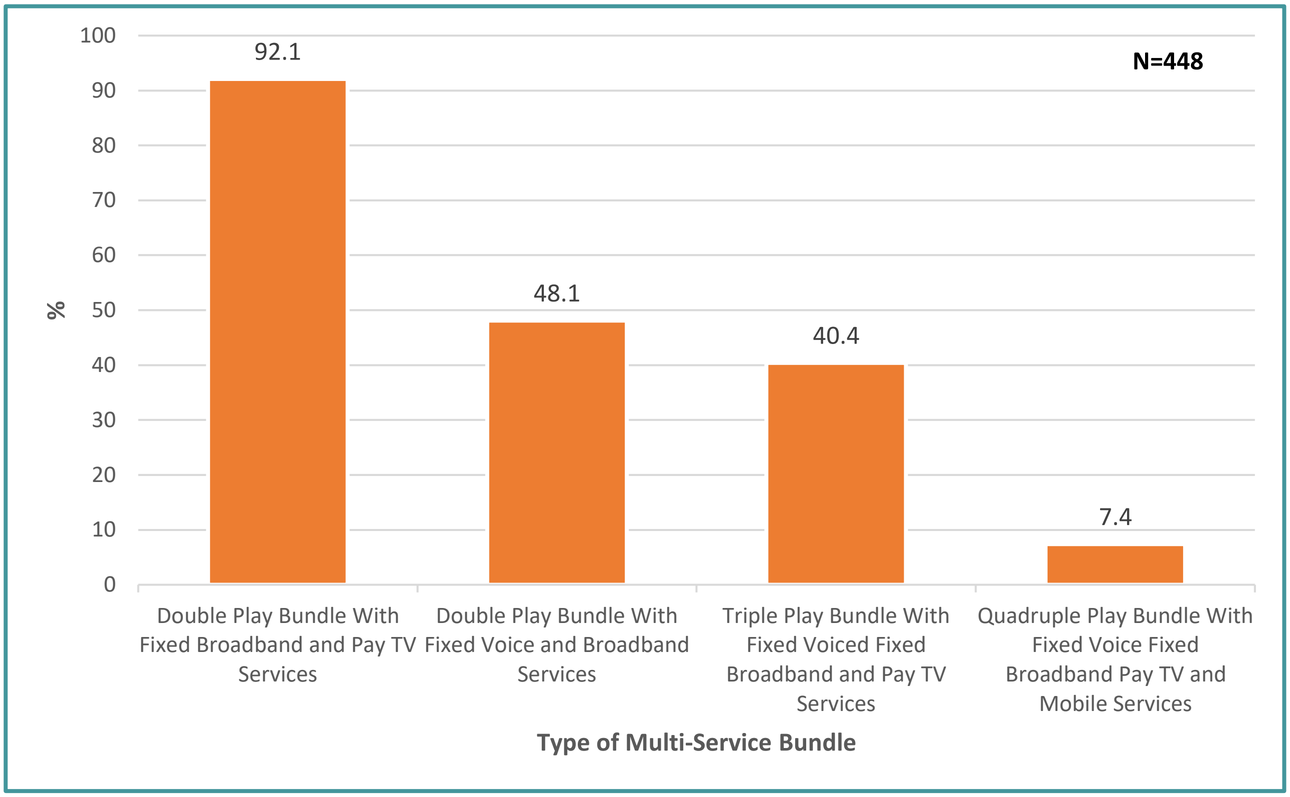

Figure 37. Types of multi-bundle subscription packages

The figure shows that of the 448 respondents, 92.1% subscribed to a double play bundle with fixed broadband and pay TV services. A further 48.1% of respondents indicated that they subscribed to a double play bundle with fixed voice and broadband service.

The triple play bundle was subscribed to by 40.4% of respondents, while the quadruple play bundle with fixed voice, fixed broadband, pay TV, and mobile services was subscribed to by 7.4% of respondents.

Figure 38 presents data on the average amount spent monthly on multi-service bundle.

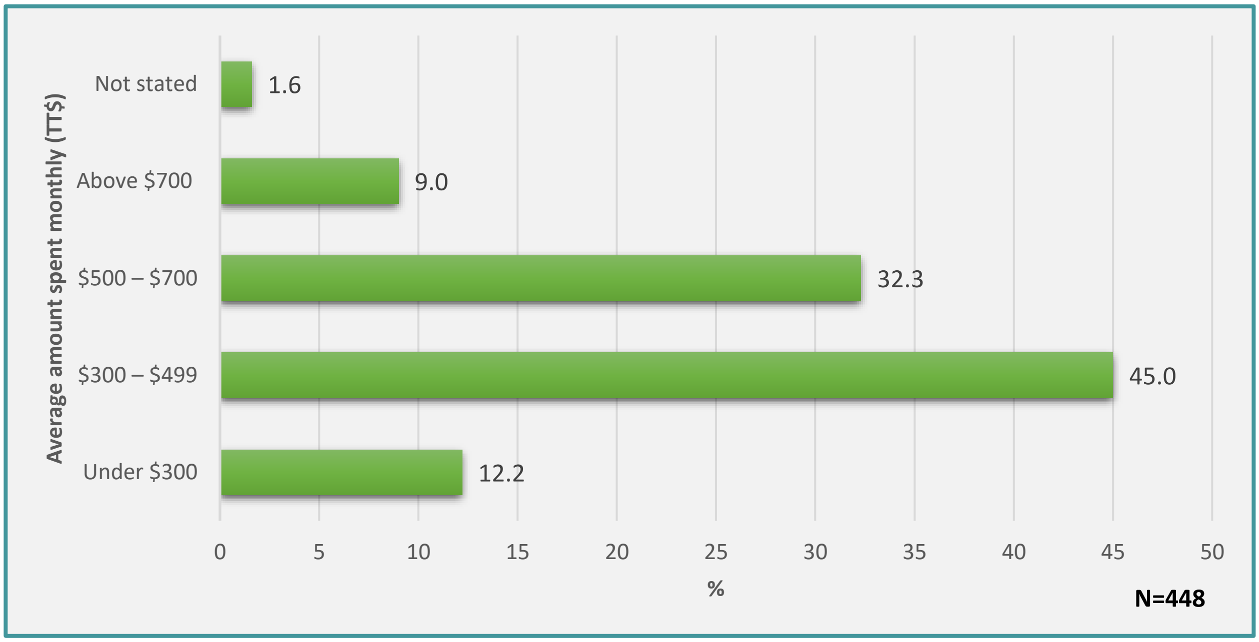

Figure 38. Average amount spent monthly on multi-service bundle

Of the 448 respondents, 45% spent $300-$499 and 32.3% spent $500-$700 monthly. Respondents who spent above $700 monthly were 9% and 12.2% of all respondents indicated that they spent under $300 monthly on their multi-service bundle.

3.4.1 Multi-Service Bundle: Fixed Landline Service Component

Figure 39 presents data on the ranking of three uses of fixed landline service by respondents.

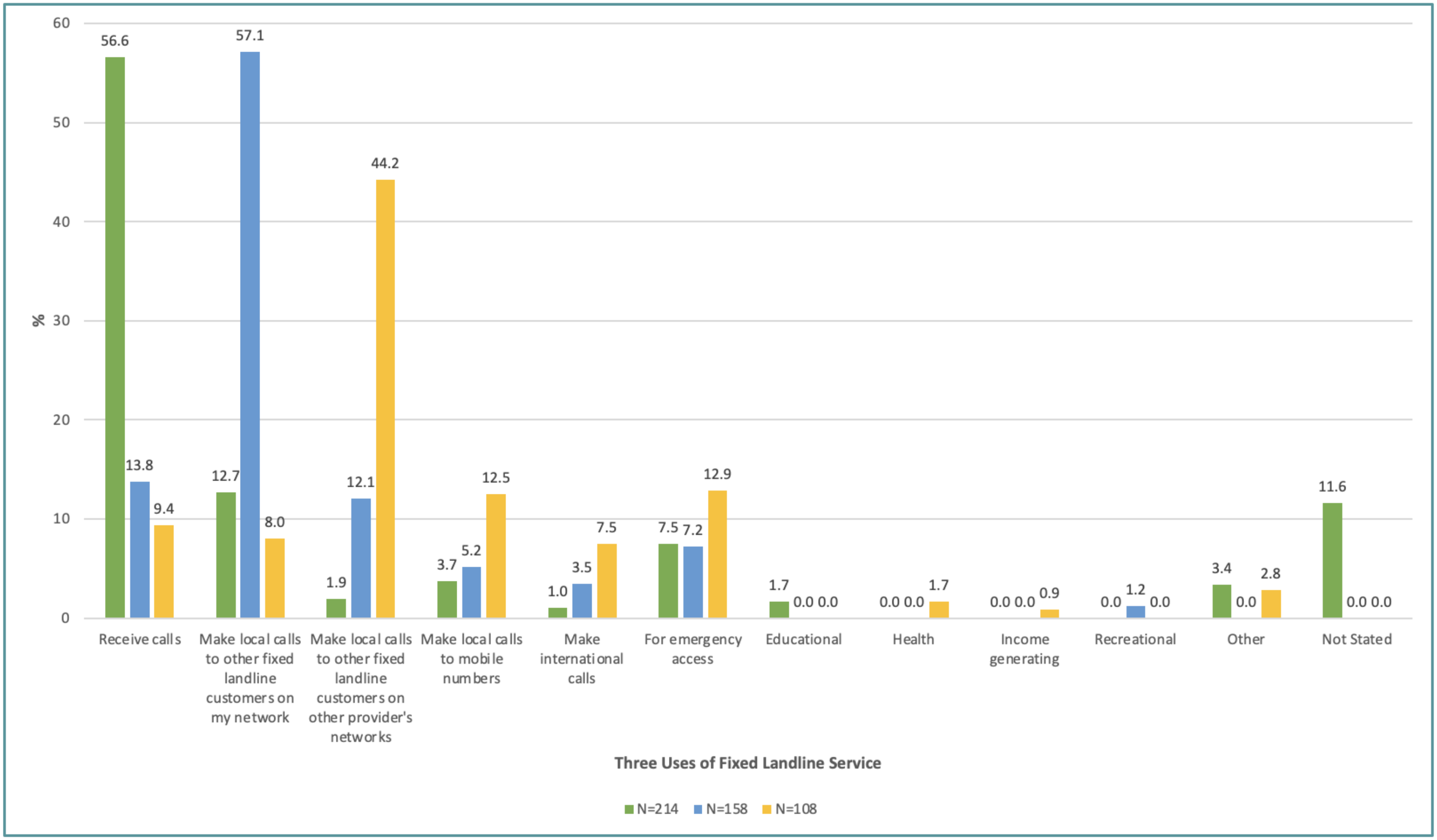

Figure 39. Ranking of three uses of fixed landline service

Based on the responses provided, the top three uses of a fixed landline service were to receive calls, make local calls to other fixed landlines, and make local calls to other fixed landline customers on other provider’s networks.

At the first ranked tier, 55.6% of respondents indicated that they used their fixed landline service to receive calls. A further 12.7% of respondents indicated that they used the service to make local calls to other fixed landline customers on their network. Of the 214 respondents in this first ranked tier, 11.6% did not provide a response to the question to indicate their first-tier choice.

At the second ranked tier of choice, 57.1% respondents selected make local calls to other fixed landline customers on my network, 13.8% selected receive calls, and 12.1% selected make local calls to other fixed landline customers on other provider's networks.

At the third ranked tier, 44.2% of respondents selected make local calls to other fixed landline customers on other provider's networks, 12.9% selected for emergency access, and 12.5% selected and make local calls to mobile numbers as their uses of a fixed landline service.

In terms of the second and third ranked uses, not all respondents provided uses for these tiers as requested resulting in 158 responses at the second tier, 108 at the third tier.

Figure 40 presents data on the number of minutes typically spent talking on fixed landline each week by respondents.

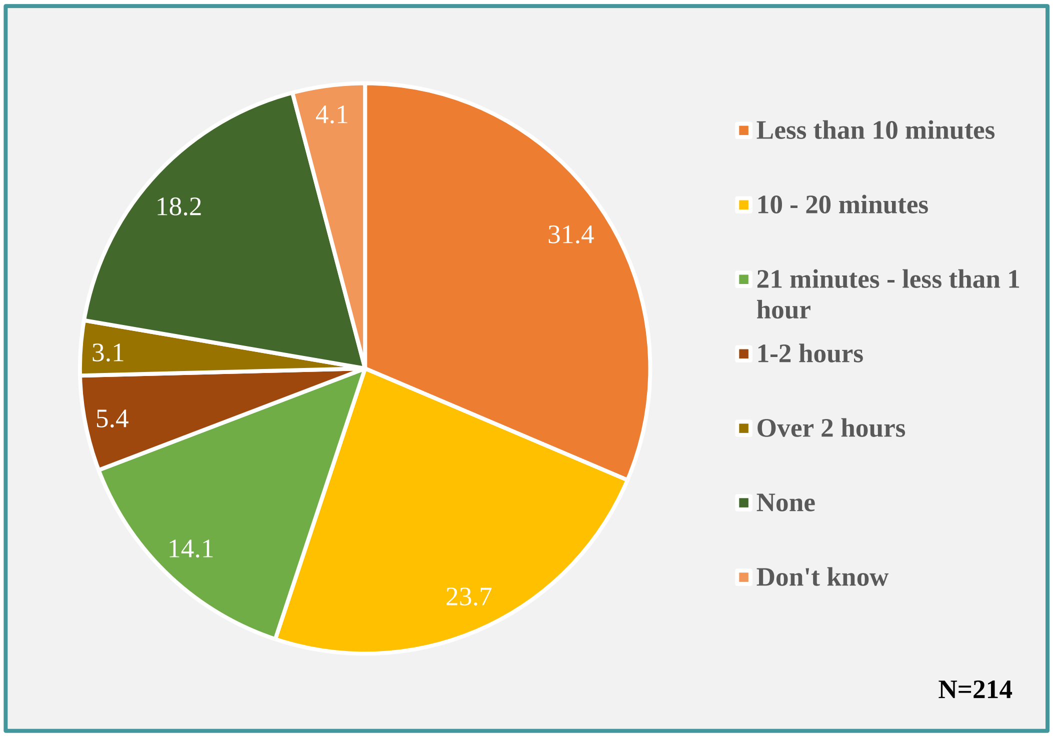

Figure 40. Number of minutes typically spent talking on fixed landline each week

When respondents were asked about the number of minutes, they typically spent talking on their fixed landline each week, 55.1%[38] indicated that they spent less than 21 minutes, 19.5%[39] indicated that they spent between 21 minutes and 120 minutes, 3.1% indicated that they spent more than 120 minutes, and 31.4% of all respondents indicated they spent less than 10 minutes.

[38] This is the summed value of 31.4% and 23.7%.
[39] This is the summed value of 14.1% and 5.4%.

3.4.2 Multi-Service Bundle: Fixed Broadband Component

Figure 41 presents data on use fixed broadband Internet service, within multi-service bundle, as only way to access the Internet by respondents.

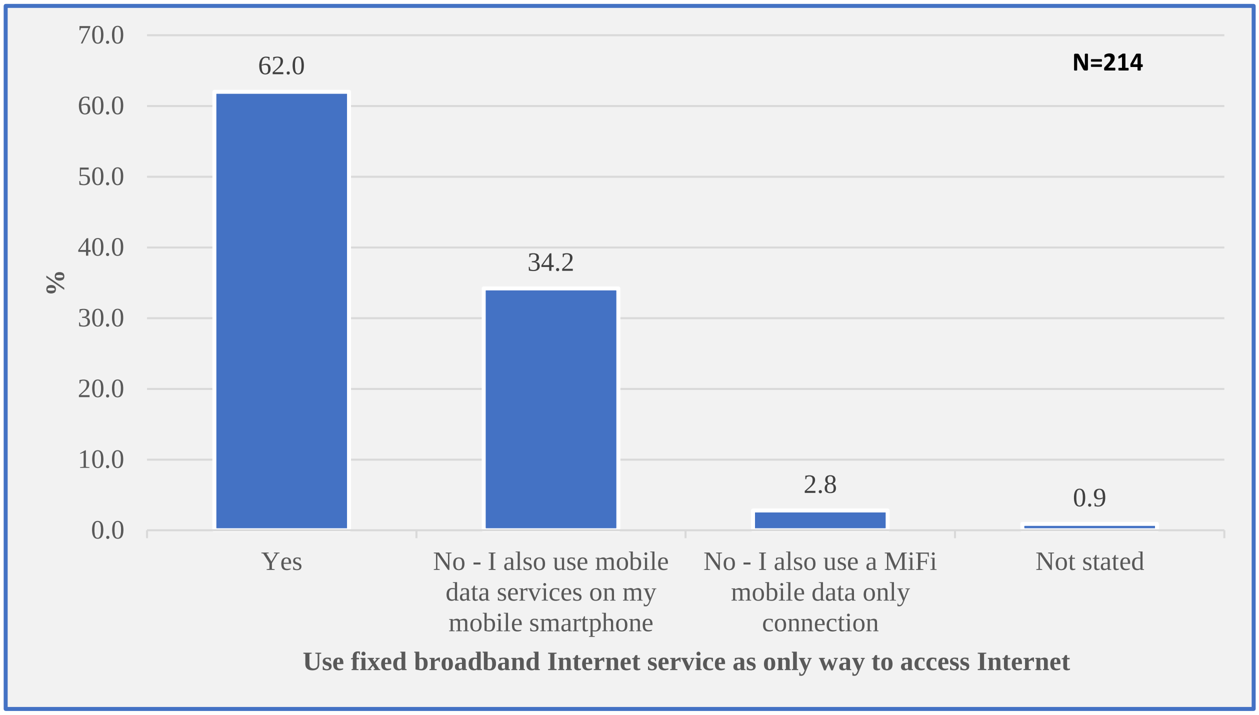

Figure 41. Use fixed broadband Internet service, within multi-service bundle, as only way to access the Internet

Based on the figure above, 62% of respondents confirmed that this was their only way to access the Internet. A further 34.2% of respondents indicated that they also used mobile data services on their mobile smartphone as their only way to access the Internet. Approximately 3% of respondents indicated that they also utilised a Mi-Fi mobile data only connection, and 0.9% of respondents did not respond.

Figure 42 presents data on the advertised download speed of fixed broadband Internet plan at home used by multi-service bundle subscribers.

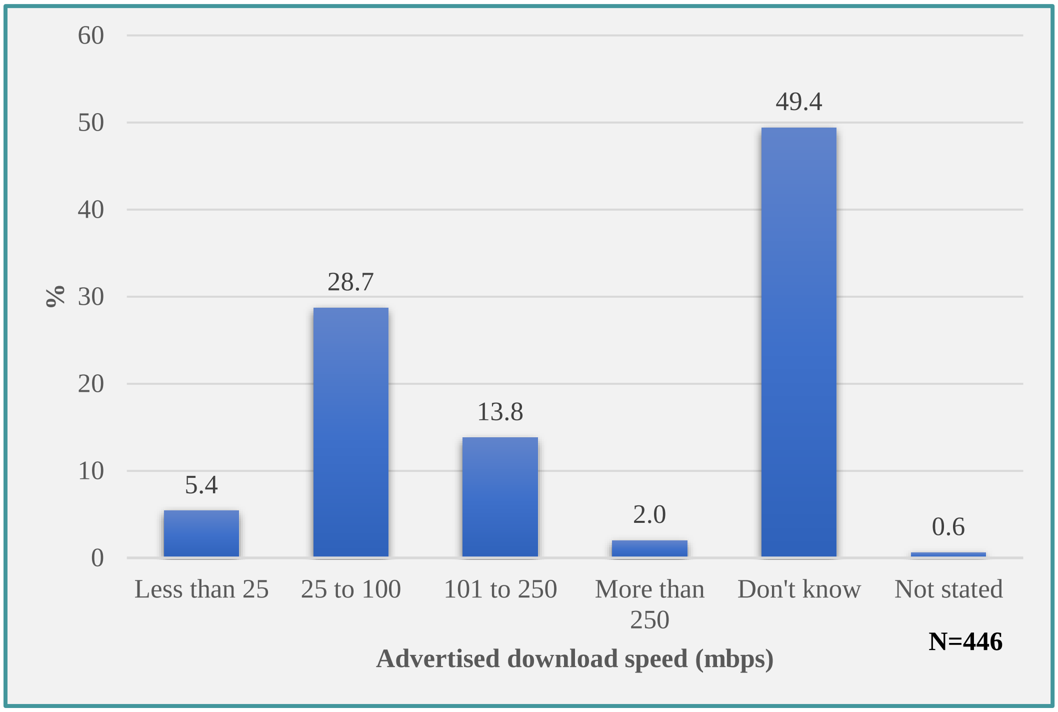

Figure 42. Advertised download speed of fixed broadband Internet plan at home used by multi-service bundle subscribers

The figure above shows that 28.7% of respondents indicated download speeds in the range 25 to 100 Mbps while 2% of respondents subscribed to plans with download speeds of more than 250 Mbps. In the lowest speed tier, 5.4% of respondents subscribed to plans with an advertised speed of less than 25 Mbps.

Approximately 49% of respondents indicated that they did not know the download speed of their fixed broadband Internet plan and 0.6% did not indicate the speed.

Table 17 presents data on five activities for which fixed broadband Internet service is used by respondents.

Table 17. Ranking of five activities for which fixed broadband Internet service is used

Activities	Ranking				
	First	**Second**	**Third**	**Fourth**	**Fifth**
	%				
Making calls (telephoning over the Internet/VoIP)	51.5*	20.6**	8.6	3.1	2.0
Participating in social networks	16.8**	40.4*	13.1***	6.1	1.2
Streaming or downloading images, movies, videos or music; playing or downloading games (either paid or free of charge)	14.5***	18.8***	35.9*	6.4	2.3
Sending or receiving e-mail	4.5	7.1	16.2**	28.0*	8.3
Getting information about goods or services	0.4	2.9	3.5	8.3***	8.8
Participating in online classes	3.8	2.1	3.4	8.7**	22.0*
Seeking health information	0.0	1.2	2.2	2.0	1.9
Watching web television	3.8	2.3	4.5	6.6	7.6
Internet banking	0.6	0.7	4.0	7.2	17.7**
Using storage space on the Internet to save documents, pictures, music, video or other files	0.5	0.2	1.7	3.2	3.6
Reading or downloading online newspapers or magazines, electronic books	1.0	0.0	1.1	3.0	1.8
Conducting research for formal learning purposes	1.1	1.9	2.6	5.6	10.8***
Purchasing or ordering goods and services	0.0	1.5	2.6	4.9	4.9
Getting information from general government organisations	0.5	0.3	0.0	1.5	2.8
Downloading software or applications	0.2	0.0	0.7	5.7	4.2
Other activities	0.0	0.0	0.0	0.0	0.0
None	0.7	0.0	0.0	0.0	0.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	N=446	***N=415***	***N=357***	***N=291***	***N=201***

*Note: *, ** and *** denote first, second and third uses within each ranking.*

At the second ranked tier, in **Error! Reference source not found.**, 40.4% of respondents cited participating in social networks, 20.6% cited making VoIP calls, and 18.8% cited streaming or downloading images, movies, videos, or music, playing, or downloading games as the top activities for which fixed broadband Internet service is used.

At the third ranked tier, 35.9% of respondents cited streaming or downloading images, movies, videos, or music, playing, or downloading games, 16.2% cited sending or receiving e-mail, and 13.1% cited participating in social networks as the top activities for which fixed broadband Internet service is used.

In the fourth ranked tier, 28% of respondents cited sending or receiving e-mail followed by participating in online classes, which was reported by 8.7% of respondents, and getting information about goods or services which was cited by 8.3%.

In the fifth ranked tier, 22% of respondents chose participating in online classes, 17.7% chose Internet banking, and 10.8% cited conducting research for formal learning purposes as the top activities for which fixed broadband Internet service is used.

In terms of the second, third, fourth and fifth ranked uses, not all respondents provided uses for these tiers as requested resulting in 415 responses at the second tier, 357 at the third tier, 291 at the fourth tier, and 201 at the fifth tier.

Figure 43 presents data on the frequency of use of fixed broadband Internet service by respondents.

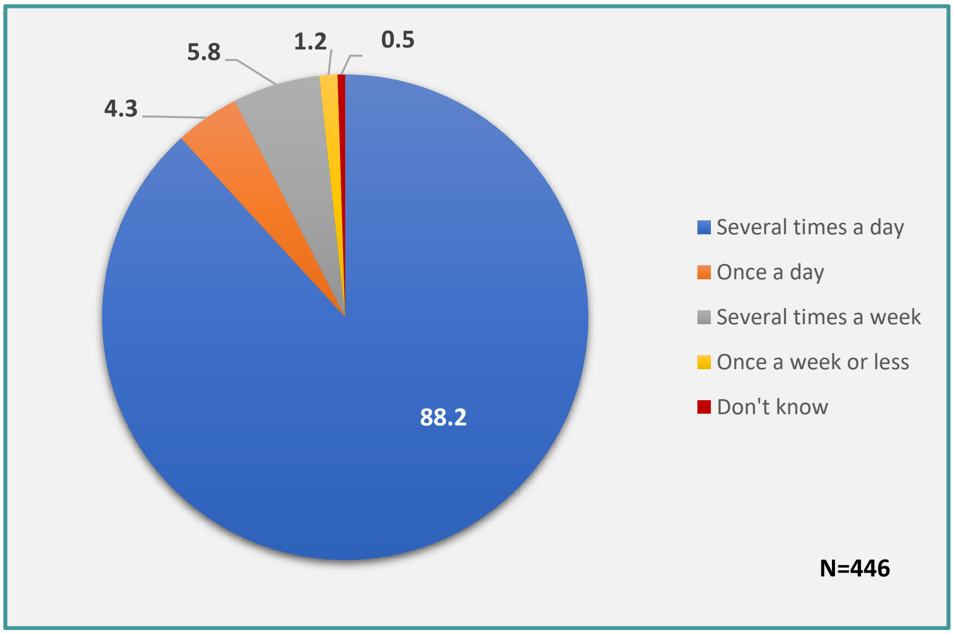

Figure 43. Frequency of use of fixed broadband Internet service

Of the 446 respondents, 88.2% indicated that they utilised the fixed broadband Internet service several times each day. Approximately 4% of respondents indicated they used the service once a day while 5.8% of respondents indicated that they used the fixed broadband Internet service several times a week.

Approximately 1% reported using the service once per week or less, while 0.5% of respondents stated that they did not know their frequency of use.

3.4.3 Multi-Service Bundle: Switching Considerations

Table 18 presents data on the action to be taken by respondents if price of multi-service bundle increased.

Table 18. Action to be taken if price of multi-service bundle increased

Monthly Expenditure TT$	**Under $300 monthly**		**$300 – $499 monthly**		**$500 – $700 monthly**		**Above $700 monthly**		**Not stated**	
Proposed Price Increase TT$	**$15**		**$15-$25**		**$25-$35**		**More than $35**			
Action To Be Taken	***%***	***N***	***%***	***N***	***%***	***N***	***%***	***N***	***%***	***N***
Cancel current plan	21.4	12	13.0	26	15.4	22	5.9	2	0.0	0
Cancel current plan and switch to stand alone fixed landline and/or fixed broadband services instead	1.4	1	12.8	26	12.3	18	11.8	5	0.0	0
Move to another multi-service bundle	17.4	9	25.2	51	24.3	35	30.3	12	0.0	0
Rely on my mobile voice and data services instead	1.7	1	2.7	5	4.0	6	2.2	1	0.0	0
Make fewer fixed calls or stop making fixed calls altogether	0.0	0	0.0	0	1.4	2	2.5	1	0.0	0
Do nothing (or pay the specific increase and continue as normal)	58.2	32	41.3	83	41.9	61	41.5	17	0.0	0
Not stated	0.0	0	5.0	10	0.6	1	5.7	2	100.0	0
Total	**100.0**	**54**	**100.0**	**201**	**100.0**	**145**	**100.0**	**40**	**100.0**	

Two hundred and forty-four respondents provided answers to questions as to their course of action in the event of an increase in the price of their multi-service bundle.

Table 18 shows that regardless of the proposed price increase, a significant proportion of respondents indicated that they would do nothing in response to an increase in the price of their multi-service bundle.

In response to a proposed price increase of $15, 58.2% of respondents indicated that they would do nothing, 21.4% indicated that they would cancel their current plan, and 17.4% reported that they would move to another multi-service bundle.

With respect to a proposed price increase of $15-$20, 41.3% of respondents indicated that they would do nothing, 25.2% reported that they would move to another multi-service bundle and 13% indicated that they would cancel their current plan.

A similar pattern was observed among persons responding to a price increase of $25-$35. Some 41.9% of respondents indicated that they would do nothing, 24.3% reported that they would move to another multi-service bundle, and 15.4% indicated that they would cancel their current plan.

Among respondents responding to a price increase of more than $35, 41.5% of respondents indicated that they would do nothing, 30.3% reported that they would move to another multi-service bundle, and 11.8% indicated that they would cancel their current plan and switch to stand alone fixed landline and/or fixed broadband services instead.

Table 19 presents data on reasons for doing nothing if multi-service bundle provider started charging more for multi-service bundle.

Table 19. Reasons for doing nothing if multi-service bundle provider started charging more for multi-service bundle

Reasons	Under $300 monthly	$300 – $499 monthly	$500 – $700 monthly	Above $700 monthly
	$15	**$15-$25**	**$25-$35**	**More than $35**
	%			
I am ok paying more for my multi-service bundled	85.6	77.5	71.2	68.8
I am not aware of any other alternative service offerings	8.3	7.5	8.7	5.5
I do not consider any alternative service offerings to be better than my current multi-service bundle	6.1	12.8	15.5	16.0
I consider there to be high restrictions to switch my multi-service bundle	0.0	0.0	2.6	0.0
Other	0.0	2.3	1.9	9.7
Total	**100.0**	**100.0**	**100.0**	**100.0**
N=192 [40]				

One hundred and ninety-two respondents who chose to do nothing in response to an increase in the price of their multi-service bundle were questioned as to the reasons for their choices.

Across all proposed price increment bands, respondents reported they were okay paying more for their multi-service bundle. Responses ranged from 68.8% for a price increase of more than $35 to 85.6% for a price increase of $15.

[40] N=192 represents respondents who responded do nothing (or pay the specific increase and continue as normal) in Table 18.Table 18

Figure 44 presents data on respondents that within the last six months, switched or considered switching multi-service bundle.

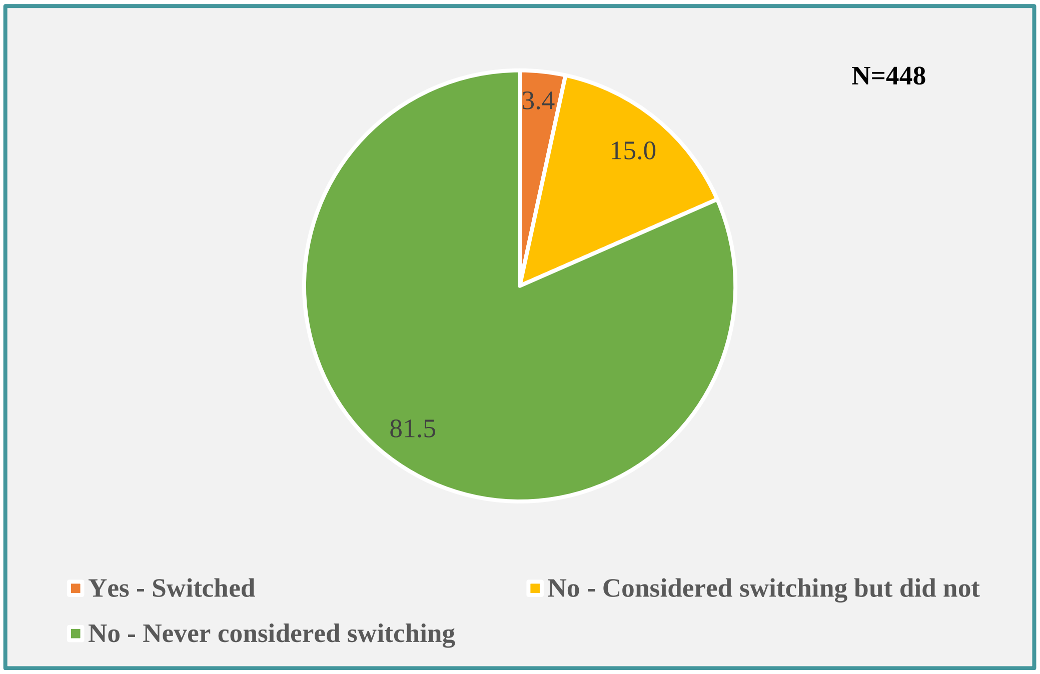

Figure 44. Within the last six months, switched or considered switching multi-service bundle

Of the 448 respondents, 81.5% indicated that they had never considered switching. A further 15% indicated that they had considered switching but did not, while 3.4% of respondents indicated that they had switched their multi-service bundle.

Figure 45 presents data on reasons for considering but not switching from current multi-service bundle in the next six months.

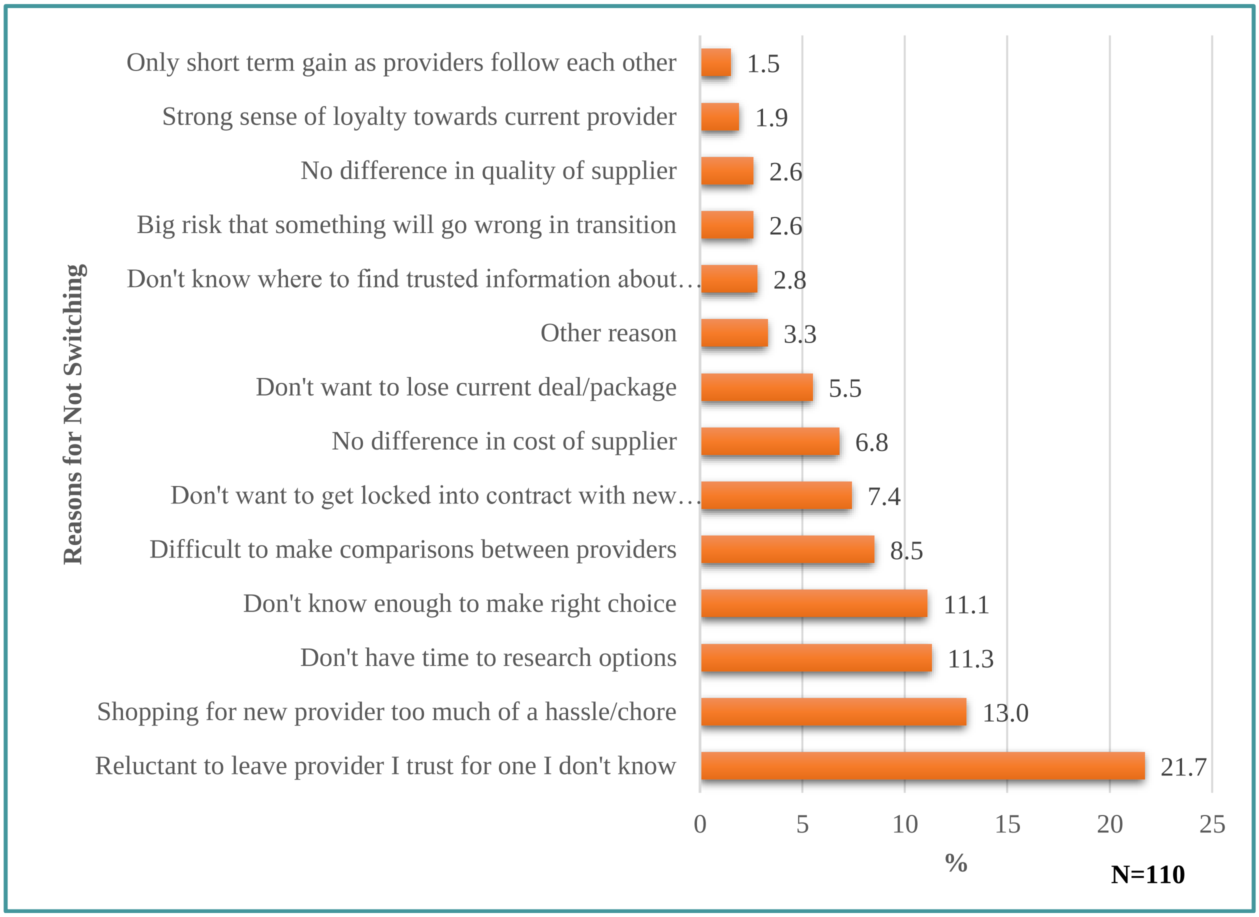

Figure 45. Reasons for considering but not switching from current multi-service bundle in the next six months

Of the 110[41] respondents, 21.7% indicated reluctance to leave a provider they trusted for one that they don't know. Thirteen percent of respondents indicated that shopping for a new provider is too much of a hassle/chore, 11.3% don't have time to research options, and 11.1% don't know enough to make the right choice.

The least common reasons given for not switching, according to 1.5% of respondents, were only short-term gain as providers follow one another, and strong sense of loyalty towards current provider as reported by 1.9% of respondents.

[41] N=110 represents respondents who selected no – considered switching but did not in Figure 44.

Figure 46 presents data on the plan to be chosen if respondent cancelled current multi-service bundle, on account of the increase in the monthly cost of the service and switched to standalone fixed landline and/or fixed broadband services instead.

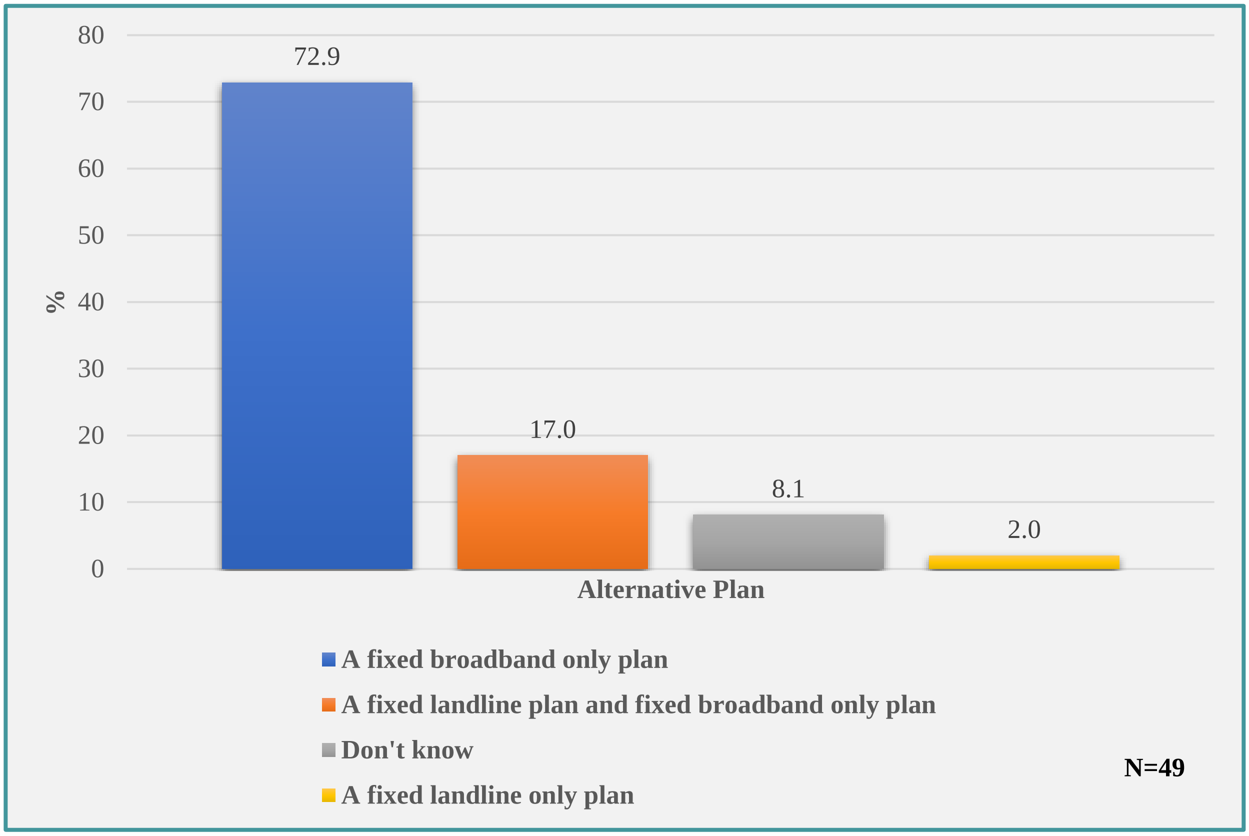

Figure 46. Plan to be chosen if respondent cancelled current multi-service bundle, on account of the increase in the monthly cost of the service and switched to standalone fixed landline and/or fixed broadband services instead

Of the 49[42] respondents who indicated that they would cancel current plan and switch to standalone fixed landline and/or fixed broadband services instead if monthly price of multi-service bundle increased, 72.9% indicated that they would choose a fixed broadband only plan. Another 17% of respondents indicated that would choose a fixed landline plan and a fixed broadband only plan and 2% of respondents indicated the choice of a fixed landline only plan.

[42] N=49 represents respondents who selected cancel current plan and switch to standalone fixed landline and/or fixed broadband services instead in Table 18.

Table 20 presents data on the ways to reduce number of calls made on account of an increase in cost of monthly multi-service subscription.

Table 20. Ways to reduce number of calls made on account of an increase in cost of monthly multi-service subscription.

Usage Pattern	N
Make fewer fixed calls, but use OTT calls (such as Viber, Skype, Google Voice, WhatsApp, or FaceTime)	1
Make fewer fixed calls, but use OTT messaging (such as WhatsApp, iMessage or WeChat) instead	1
Stop making domestic fixed landline calls altogether	1
Total	**3**
N=3 *– Represents respondents who selected "Make fewer fixed calls or stop making fixed calls altogether" in Table 18.*	

Three respondents provided responses with respect to ways to reduce number of calls made on account of an increase in cost of monthly multi-service subscription. These responses are presented in Table 20 above.

Table 21 presents data on the ways respondents will adjust use of mobile voice and data services if monthly cost of multi-service bundle increased.

Table 21. Ways respondent will adjust use of mobile voice and data services if monthly cost of multi-service bundle increased

Ways Will Adjust Use	N
I will increase the use of MiFi mobile data only services for Internet access	1
Total	**1**
N=1 *– Represents respondents who subscribed to both mobile call, messaging, and data services and MiFi (mobile data only) services AND selected "Rely on my mobile voice and data services instead" Table 18.*	

Table 21 presents the single response obtained with respect to ways respondents will adjust use of mobile voice and data services if monthly cost of multi-service bundle increased. The option cited was to increase the use of MiFi mobile data only services for Internet access.

3.4.4. Multi-Service Bundle: Advantages and Disadvantages of Fixed Landline Component

Figure 47 presents data on the ranking of two key advantages of fixed landline service compared to mobile cellular service.

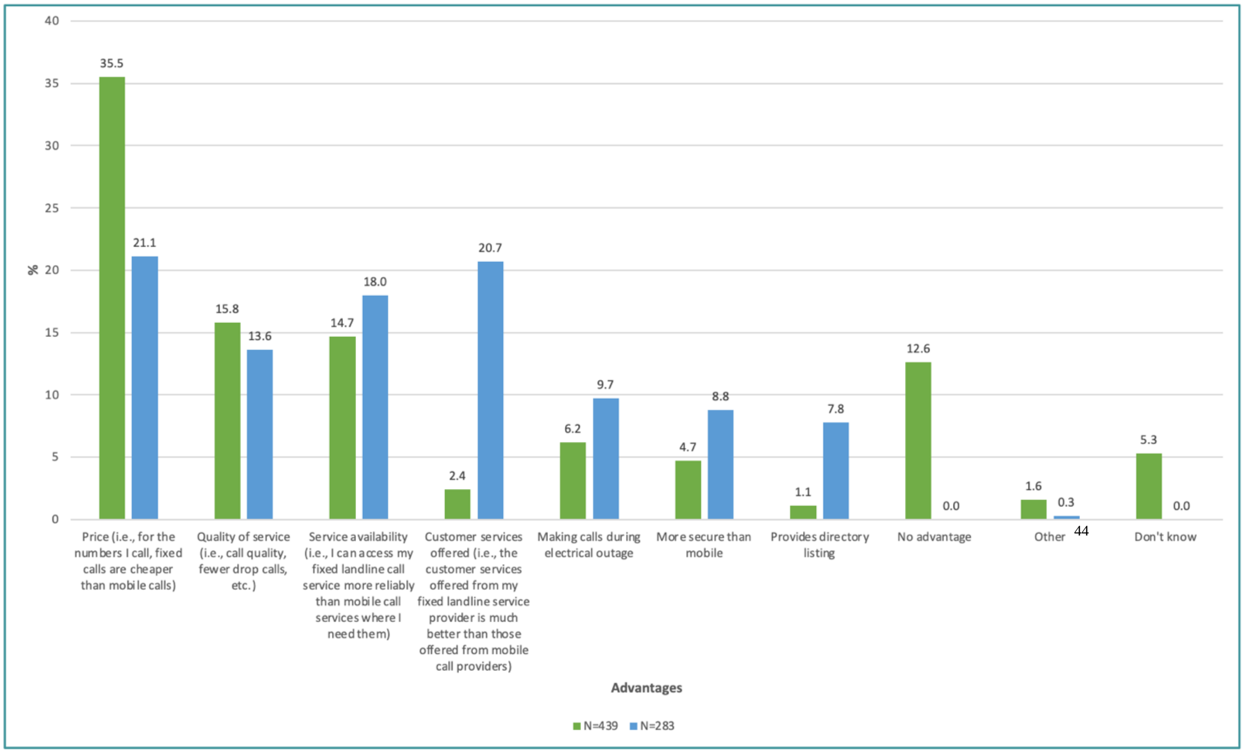

Figure 47. Ranking of two key advantages of fixed landline service compared to mobile cellular service

[43]*Other option responses.*

The figure above shows that among the first ranked advantages of fixed landline service compared to mobile cellular service, 35.5% of respondents identified price, 15.8% chose quality of service, and 14.7% identified service availability.

In terms of the second ranked advantages, not all respondents provided a second advantage as requested resulting in 283 responses at this tier.

Among the second ranked advantages of fixed landline service compared to mobile cellular service price, customer service offered and service availability were selected by 21.1%, 20.7% and 18% respectively.

[43] Three respondents provided responses to the other category. Responses provided included I am not technologically savvy, to make international call to relatives who do not use OTT, and to communicate with children, none of which are advantages.

Figure 48 presents data on the ranking of two key disadvantages of fixed landline service compared to mobile cellular service.

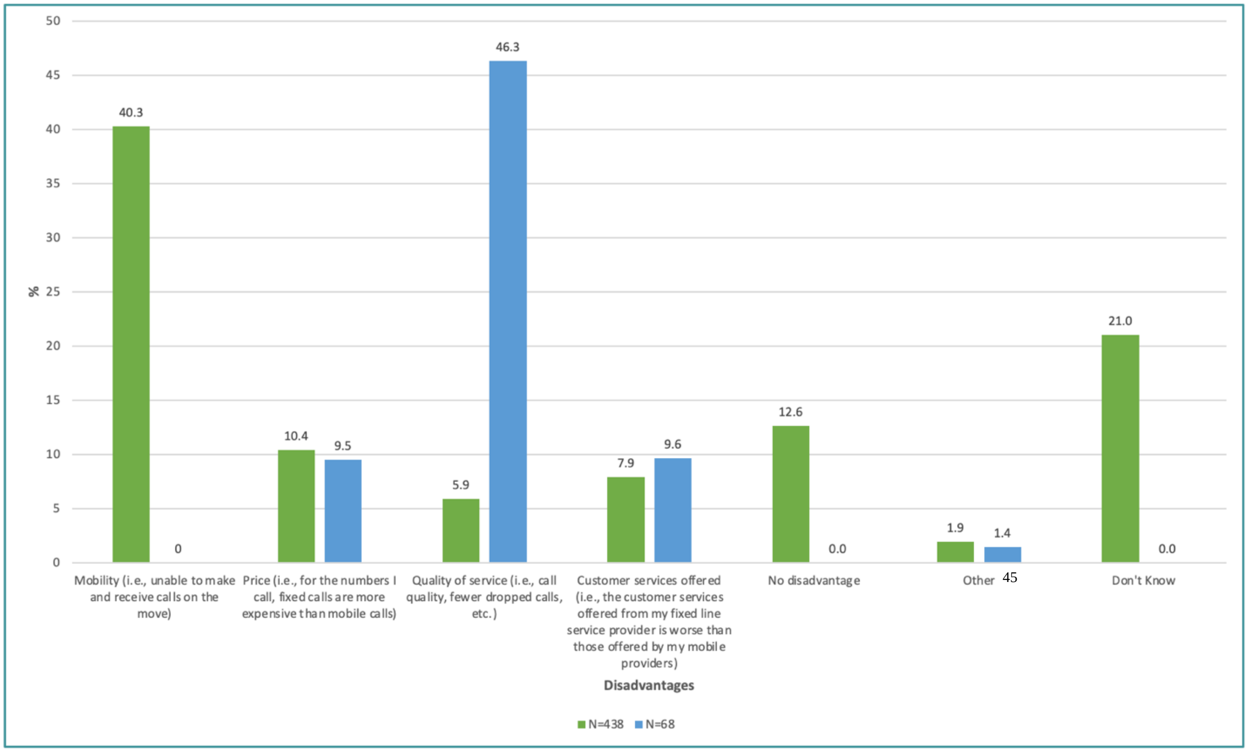

Figure 48. Ranking of two key disadvantages of fixed landline service compared to mobile cellular service

[44]*Other option responses.*

The first ranked tier shows that mobility was identified by 40.3% of respondents as a disadvantage of fixed landline service compared to mobile cellular service. Approximately 13% of respondents reported that there was no advantage between their fixed landline service and mobile cellular service, while 10.4% cited price as a disadvantage of fixed landline service.

In terms of the second ranked disadvantages, not all respondents provided a second disadvantage as requested resulting in 68 responses at this tier.

At the second ranked tier, 46.3% of respondents identified quality of service, 33.2% identified mobility, and 9.6% identified customer service offered as disadvantages of fixed landline service when compared to their mobile cellular service.

[44] Seven respondents provided responses to the other category. Responses provided included the inability to make calls from fixed landlines during power outages, and the lack of phone features such as cameras.

Figure 49 presents data on the ranking of two key advantages of fixed landline service compared to OTT call/messaging services by respondents.

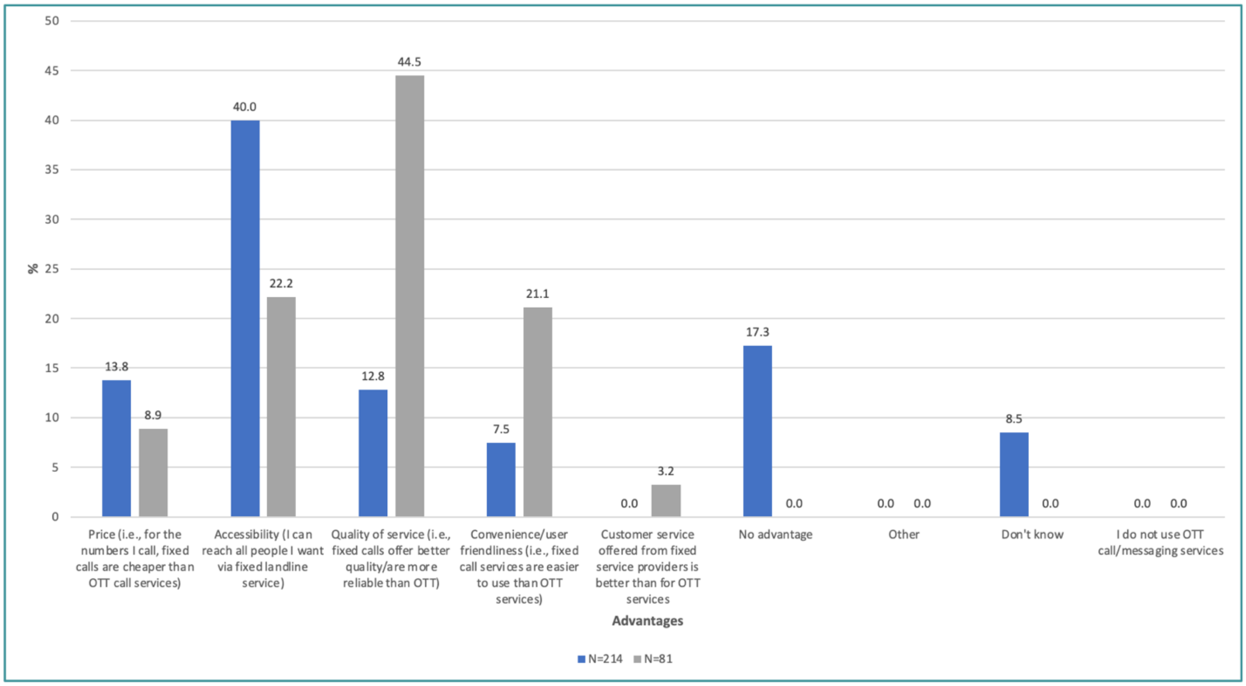

Figure 49. Ranking of two key advantages of fixed landline service compared to OTT call/messaging services

At the first ranked tier, 40% of respondents cited accessibility, 17.3% cited no advantage, and 13.8% cited price as advantages of fixed landline services when compared to OTT call/messaging services.

In terms of the second ranked advantages, not all respondents provided a second advantage as requested resulting in 81 responses at this tier.

With respect to second ranked responses, 44.5% of respondents cited quality of service, 22.2% cited accessibility, and 21.1% cited convenience/user friendliness as advantages of fixed landline service when compared with OTT call/messaging services.

Figure 50 presents data on the ranking of two key disadvantages of a fixed landline service compared to OTT call/messaging services by respondents.

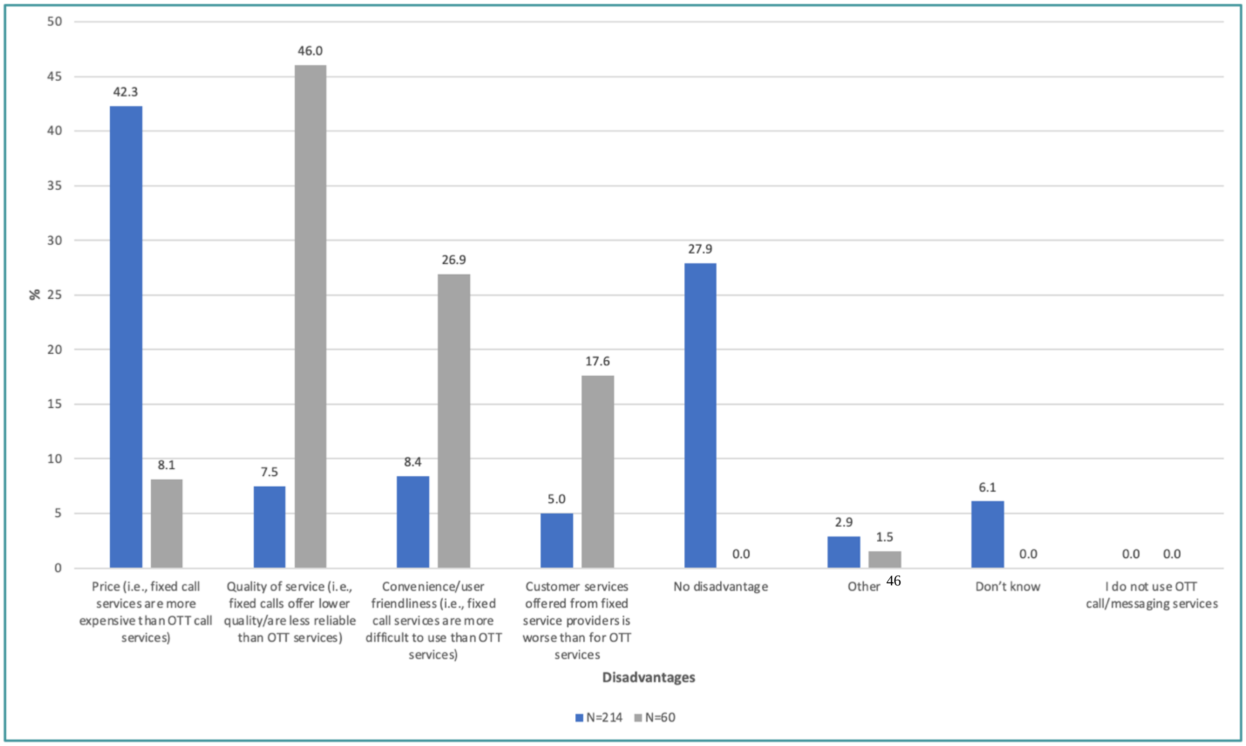

Figure 50. Ranking of two key disadvantages of fixed landline service compared to OTT call/messaging services

[45]*Other option responses.*

The figure above shows that 42.3% of respondents identified price as a disadvantage of fixed landline service compared to OTT call/messaging services in the first ranked tier. Approximately 8% of respondents cited convenience/user friendliness while 27.9% of respondents indicated that there was no disadvantage between fixed broadband Internet and OTT call/messaging services.

In terms of the second ranked disadvantages, not all respondents provided a second disadvantage as requested resulting in 60 responses at this tier.

In the second ranked tier, 46% of respondents identified quality of service, 26.9% identified convenience/user friendliness, and 17.6% identified customer services offered from fixed services provider as disadvantages of fixed landline service compared to OTT call/messaging services.

[45] Eight respondents provided responses to the other category. Responses provided included lack of features such as video calls, inability to access OTT services, lack of mobility, and inability to make calls from fixed landline during power outage.

3.4.5 Multi-Service Bundle: Advantages and Disadvantages of Fixed Broadband Service Component

Figure 51 presents data on the ranking of two key advantages of fixed broadband service compared to MiFi and mobile smartphone data services by respondents.

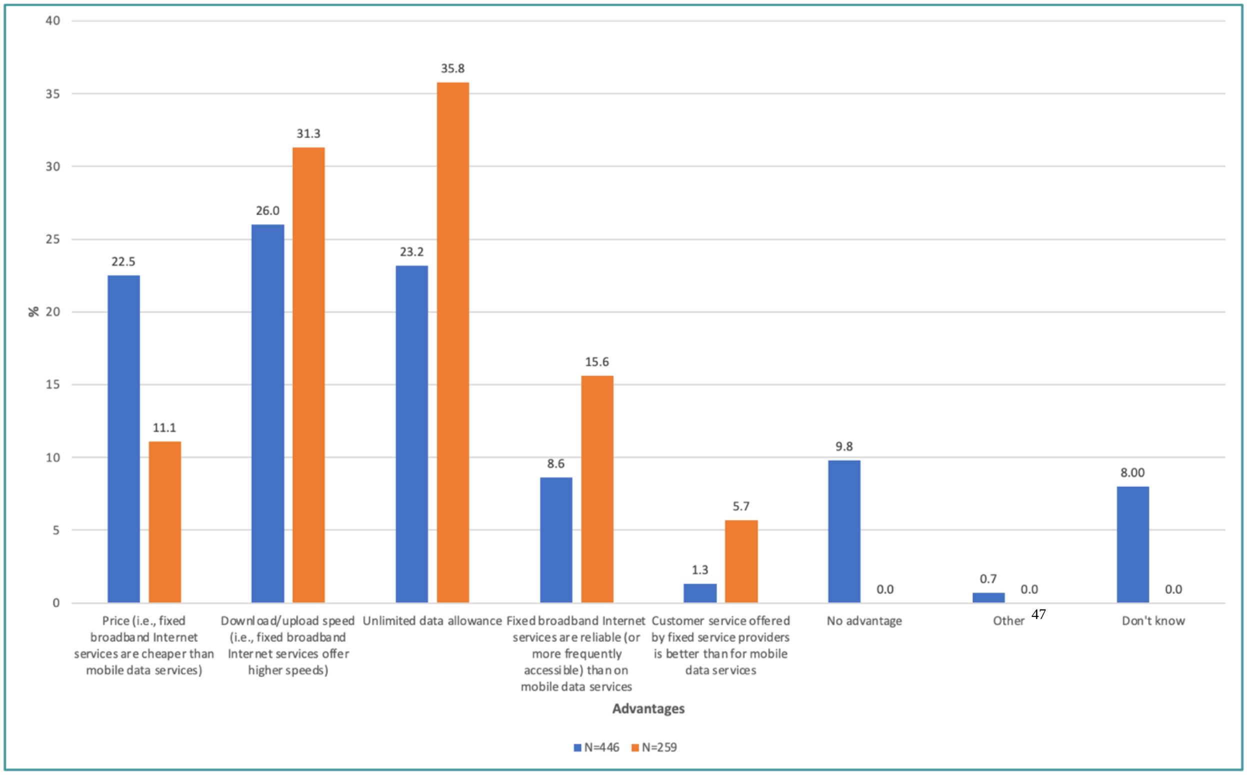

Figure 51. Ranking of two key advantages of fixed broadband compared to MiFi and mobile smartphone data services

[46]*Other option responses.*

The figure above shows that in the first ranked tier of advantages of fixed broadband compared to MiFi[47] and mobile smartphone data services, 26% of respondents chose download/upload speed, 23.2% chose unlimited data allowance, and 22.5% chose price as advantages of fixed broadband Internet when compared to MiFi and mobile smartphone data services.

In terms of the second ranked advantages, not all respondents provided a second advantage as requested resulting in 259 responses at this tier.

At the second ranked tier, unlimited data allowance, download/upload speed, and fixed broadband Internet services are reliable (or more frequently accessible) than on mobile data were selected by 35.8%, 31.3% and 15.6% of respondents, respectively.

[46] Six respondents provided responses to the other category. Responses provided included ability to stay in touch, convenience of sharing data with everyone, and ability to transact online banking.
[47] MiFi refers to Data-only packages which allow end users to access the Internet via a MiFi modem.

Figure 52 presents data on the ranking of two key disadvantages of fixed broadband Internet services compared to MiFi and mobile smartphone data services by respondents.

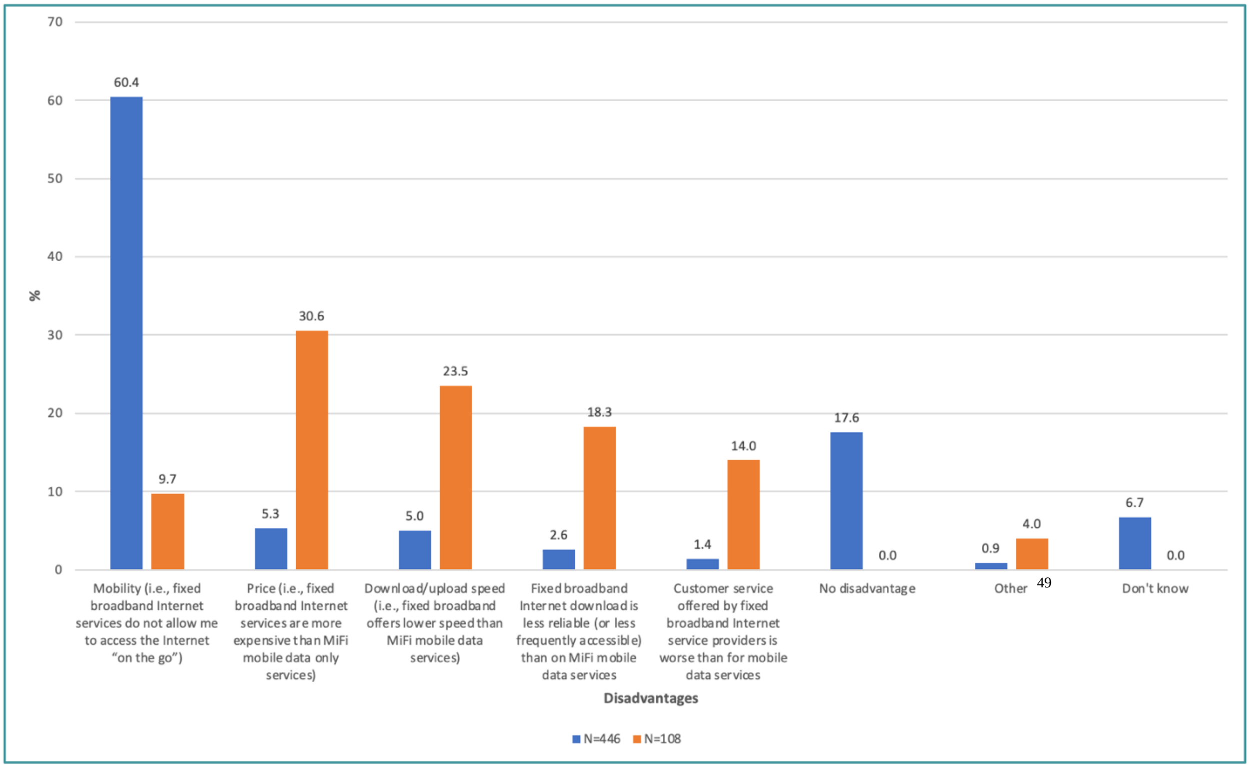

Figure 52. Ranking of two key disadvantages of fixed broadband compared to MiFi and mobile smartphone data services

[48]*Other option responses.*

Some 60.4% of respondents ranked mobility as a disadvantage of fixed broadband Internet, at the first ranked tier, when compared to MiFi/Smartphone data services. A further 17.6% of respondents indicated that there was no disadvantage between their fixed broadband service and a MiFi/Smartphone data service.

In terms of the second ranked disadvantages, not all respondents provided a second disadvantage as requested resulting in 108 responses at this tier.

At the second ranked tier, 30.6% cited price, 23.5% cited download/upload speed, and 18.3% cited fixed broadband Internet download is less reliable (or less frequently accessible) than on MiFi mobile data services as disadvantages of fixed broadband Internet service when compared to their MiFi/Smartphone data services.

[48] Nine respondents provided responses to the other category. Responses provided included inability to use during power outage, and poor reception.

3.4.6 Demand for and Usage of OTT Call and Messaging Services

Figure 53 presents data on third-party OTT application used on computer: desktop, laptop, or tablet without a SIM card.

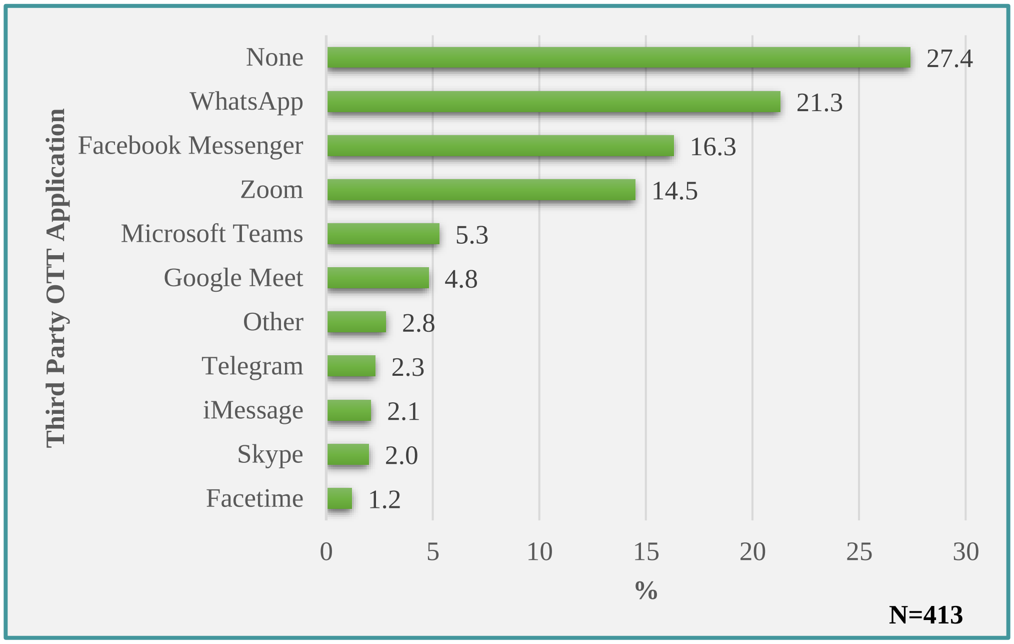

Figure 53. Third party OTT application used on computer: desktop, laptop, or tablet without a SIM card

Although 225 respondents answered the question on OTT application used, a total of 413 responses were received because respondents were allowed to select multiple applications.

Based on the responses received, use of WhatsApp was reported by 21.3% of respondents, Facebook Messenger by 16.3% and Zoom by 14.5%.

Non-use of OTT applications accounted for 27.4% of responses, while Microsoft Teams, Google Meet and other OTT applications accounted for 5.3%, 4.8% and 2.8% of responses, respectively.

Figure 54 presents data on respondents' purpose(s) for using OTT application on computer: desktop, laptop, or tablet without a SIM card.

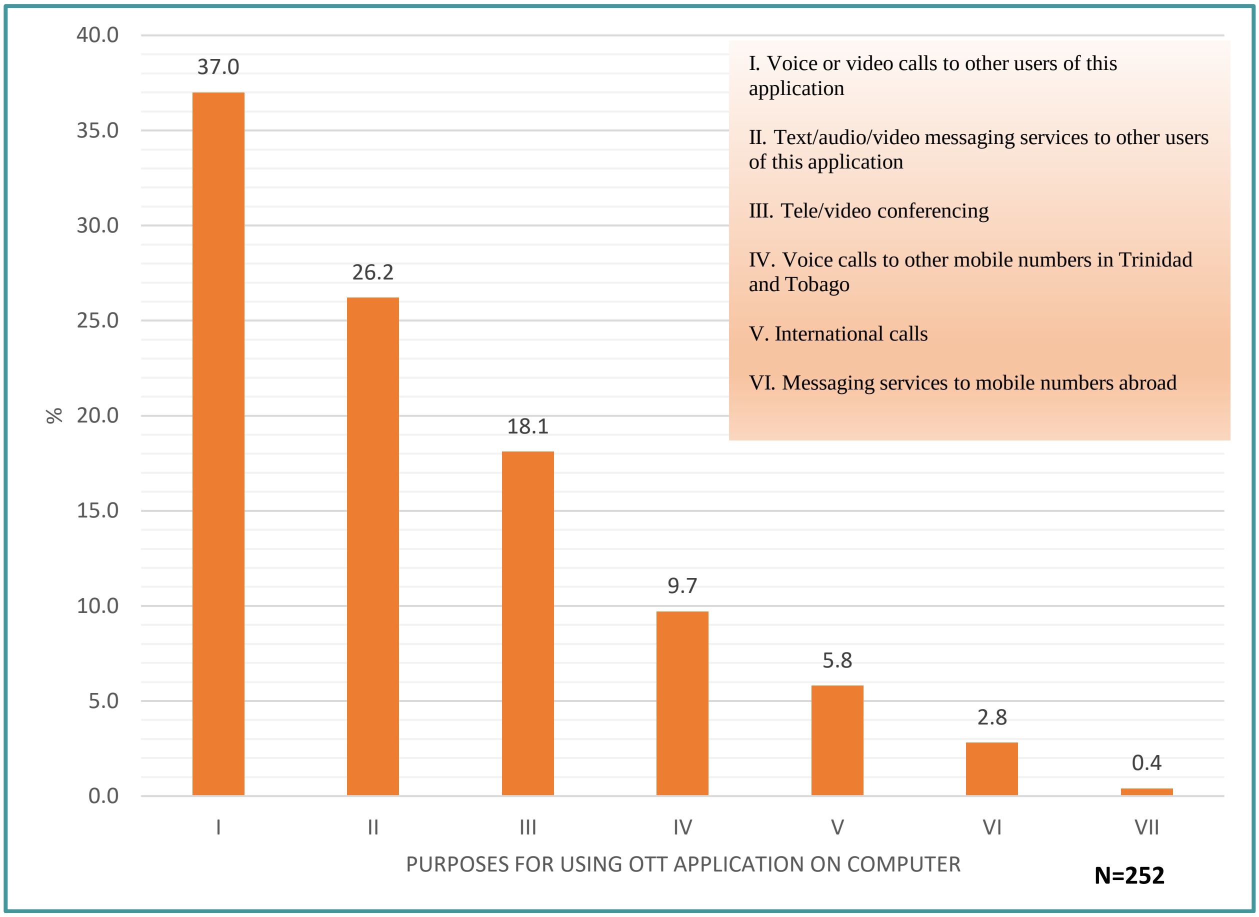

Figure 54. Purpose(s) for using OTT application on computer: desktop, laptop or tablet without a SIM card

Of the 252 responses provided, 37% indicated use for voice or video calls to users of the application, 26.2% of responses text/audio/video messaging to other users of the application and a further 18.1% usage for tele/video conferencing.

Responses related to usage of voice calls to other mobile numbers in Trinidad and Tobago accounted for 9.7% of responses and international calls accounted for 5.8% of all responses.

Figure 55 presents data on the number of minutes per week spent by respondents on local voice calls made using OTT platforms.

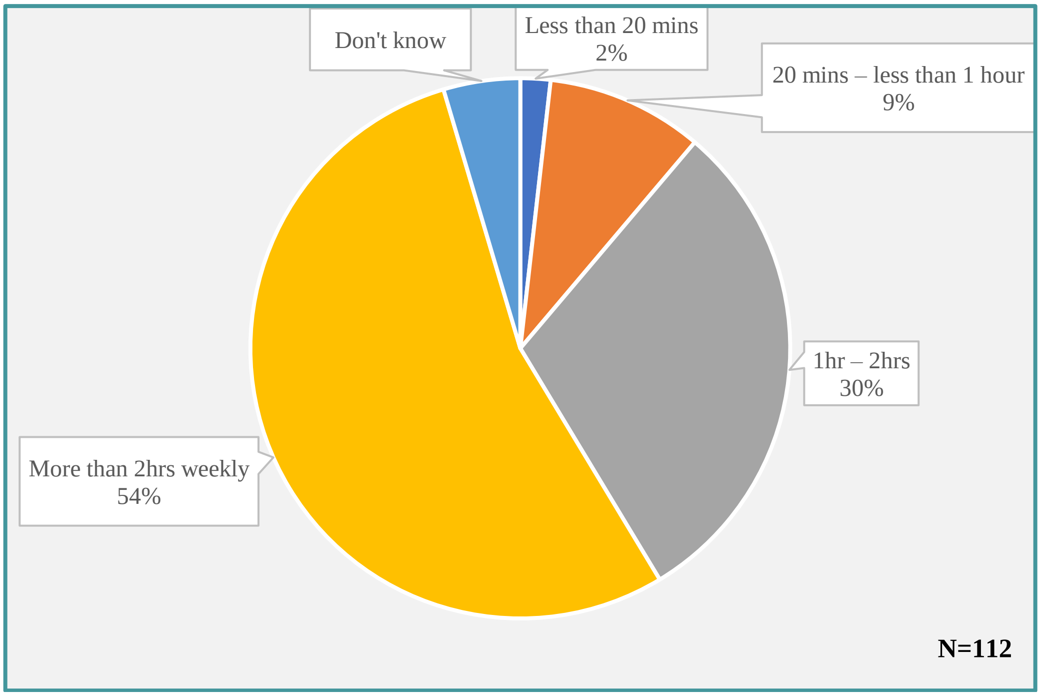

Figure 55. Number of minutes per week spent on local voice calls made using OTT platforms

Of the 112[49] respondents, 54.1% spent more than two hours weekly on local voice calls using OTT third party applications. A further 30.2% of respondents reported that they spent between one and two hours weekly, and 1.8% of respondents indicated that they spent less than 20 minutes weekly.

[49] Of the 225 respondents who answered the question on OTT application used, 113 indicated that they did not use any OTT third-party application.

Figure 56 presents data on the frequency of use of OTT third-party applications by respondents.

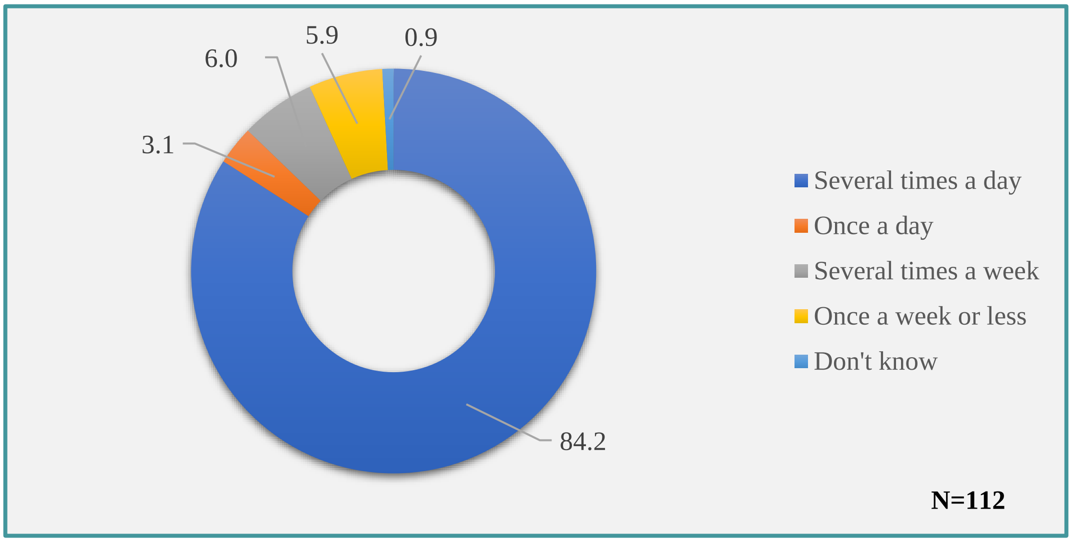

Figure 56. Frequency of use of OTT third-party applications

Approximately 84% of respondents indicated that they used OTT third-party applications several times a day. Six percent of respondents used OTT third-party applications several times a week and 5.9% of respondents once a week or less.

Figure 57 presents data on OTT call/messaging services affected use of fixed call and broadband services.

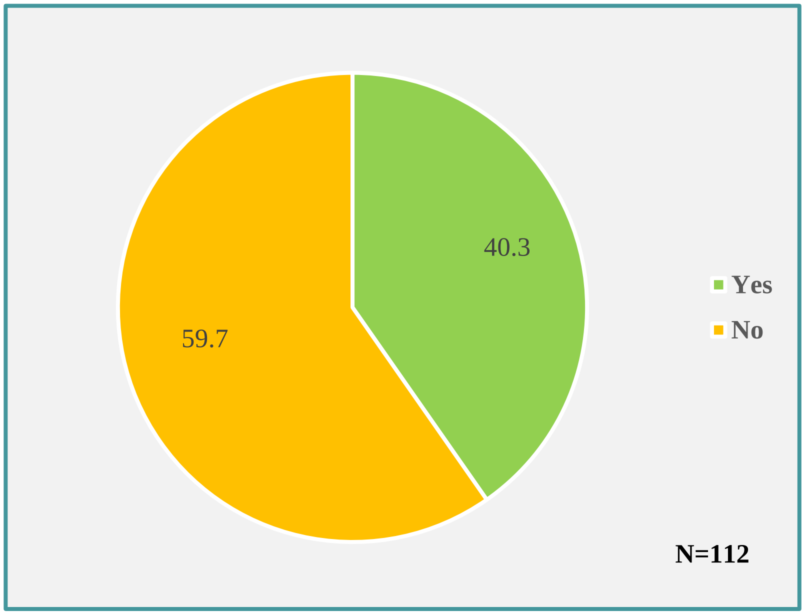

Figure 57. OTT call/messaging services affected use of fixed call and broadband services.

Based on the responses provided by survey participants, 59.7% of respondents indicated that OTT call/messaging services had not affected their use of fixed call and broadband services, while 40.3% indicated that their usage had been affected.

Figure 58 presents data on how adoption of OTT call and/or messaging services by respondents affected usage of fixed call and broadband services.

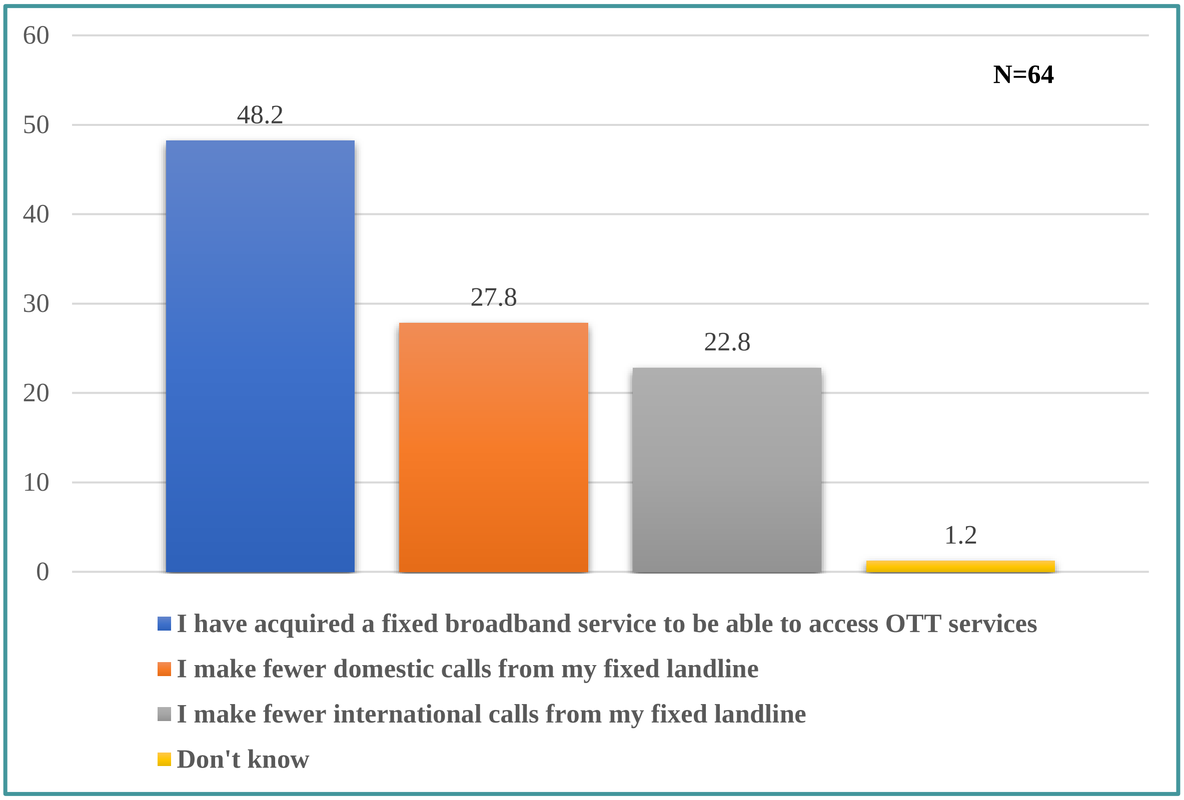

Figure 58. How adoption of OTT call and/or messaging services affected usage of fixed call and broadband services

Of the 64 responses provided by the 45 respondents who selected yes in Figure 57, 48.2% identified acquisition of a fixed broadband service to be able to access OTT services, 27.8% identified making fewer domestic calls from my fixed landline, and 22.8% identified making fewer international calls from my fixed landline.

3.5 Competitive Dynamics in the Fixed Market

Figure 59 presents data on respondents that switched fixed service providers in the last two years.

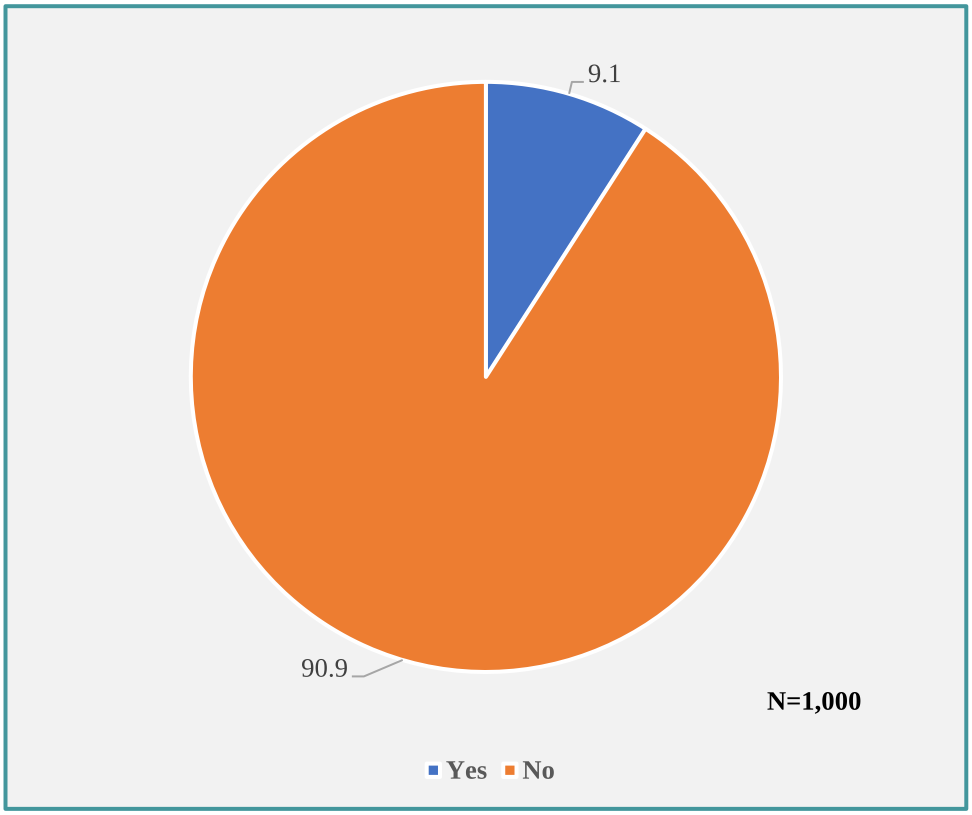

Figure 59. Switched fixed service providers in last two years

Of the 1,000 respondents, 90.9% indicated that they had not switched, while 9.1% of all respondents indicated that they had switched their fixed service provider in the last two years.

Figure 60 presents data on the previous provider subscribed to prior to switching.

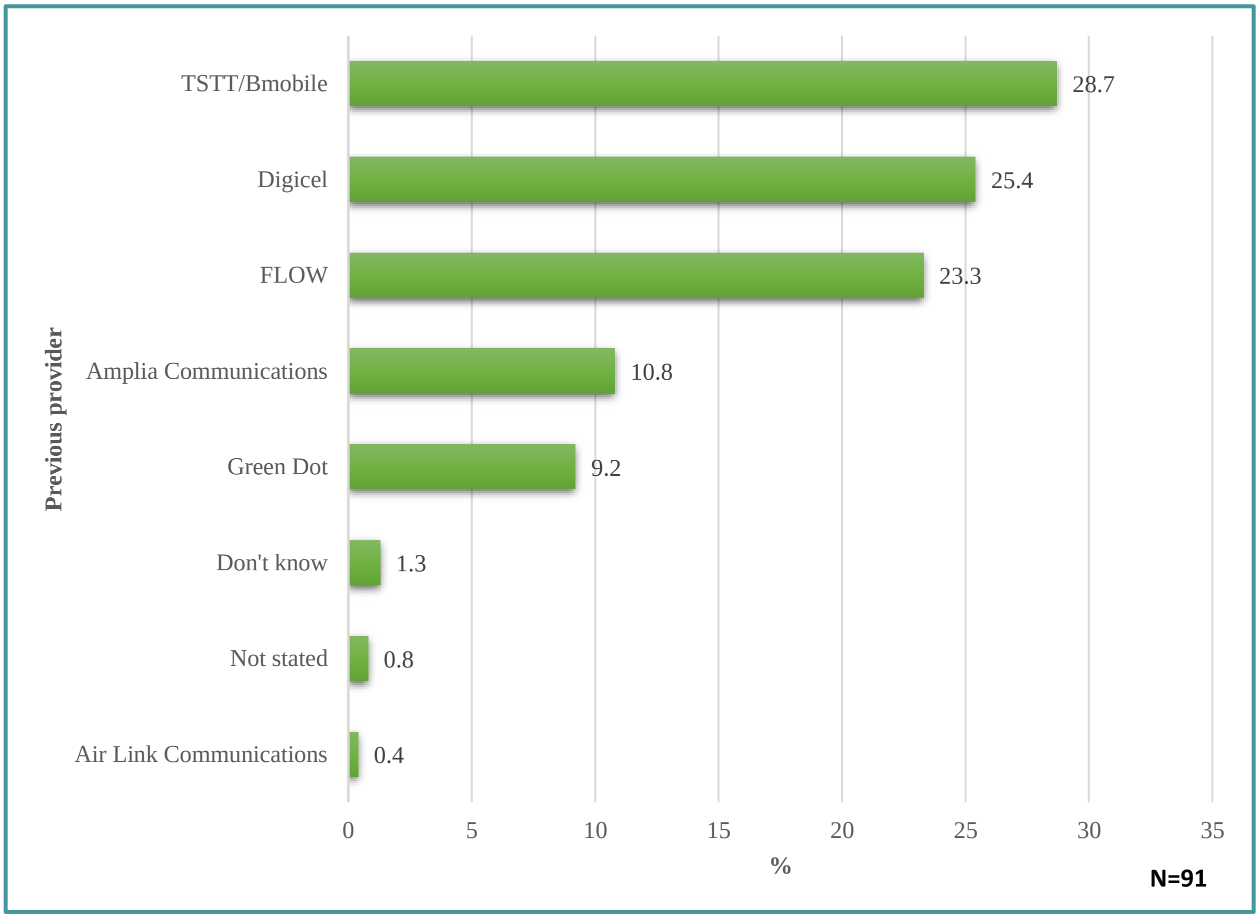

Figure 60. Previous provider subscribed to prior to switching

Based on the 91[50] responses received, 28.7% of respondents indicated that their previous provider was TSTT/Bmobile, 25.4% cited Digicel, 23.3% cited FLOW, 10.8% cited Amplia Communications, and 9.2% cited Green Dot.

Approximately 2%[51] of respondents either did not know who their previous provider was or did not state the name of the provider.

[50] N=91 represents respondents who selected yes in Figure 59.
[51] This is the summed value of 1.3% and 0.8%.

Figure 61[52] presents data on the fixed service plan previously subscribed by respondents to prior to switching.

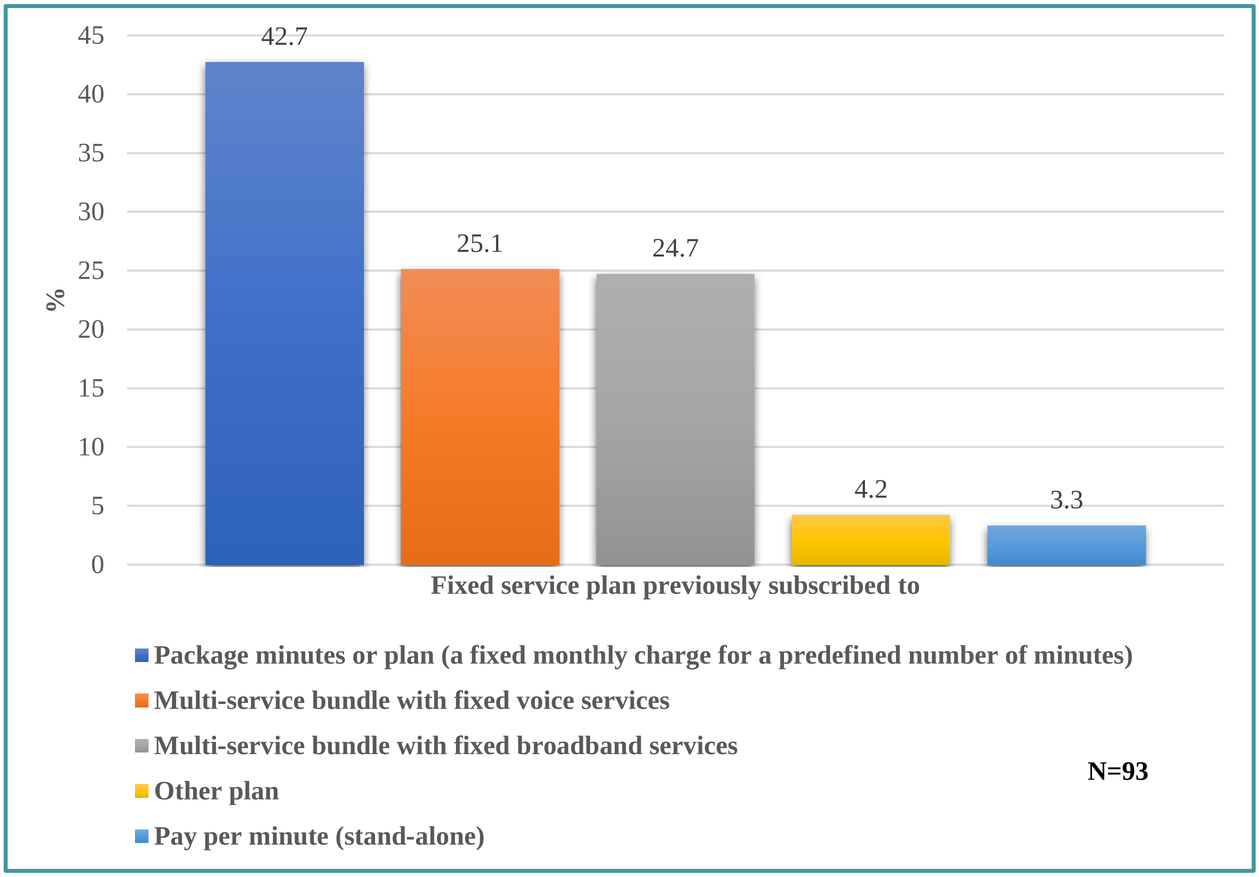

Figure 61. Fixed service plan previously subscribed to prior to switching

Figure 61 shows that 42.7% of all fixed service plans previously subscribed to were package minutes or plan subscriptions. A further 25.1% of subscriptions were multi-service bundle with fixed voice services, and 24.7% of fixed service plan previously subscribed to were multi-service bundle with fixed broadband.

Approximately 3% of respondents indicated that their previous fixed service plan was pay per minute plan, whilst 4.2% of previous fixed service plan subscriptions were for other plans.

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[52] N=93 represents respondents who selected yes in Figure 59.

Figure 62 presents data on the main reason for switching provider.

Figure 62. Main reason for switching provider

The figure above shows that the main reason for switching providers[53]. According to 60.2% of respondents, the quality of service offered by the previous provider was the main reason for switching providers. Approximately 24% of respondents also identified the price offered by the previous provider as the main reason for switching.

Non-price terms offered by previous provider was selected by 6.2% of respondents while 2.9% selected customer challenges as the main reason for switching providers.

All other reasons[54] provided by respondents comprised 6.4% of total responses.

[53] N=91 represents respondents who selected yes in Figure 59. Two respondents did not answer the question.

[54] Seven respondents provided responses to the other category. Responses provided included relocation, switching based on recommendation from friend, copper line theft, and recurring increases in cost of service.

Figure 63[55] presents data on the amount paid monthly by respondents for fixed service plan with last provider.

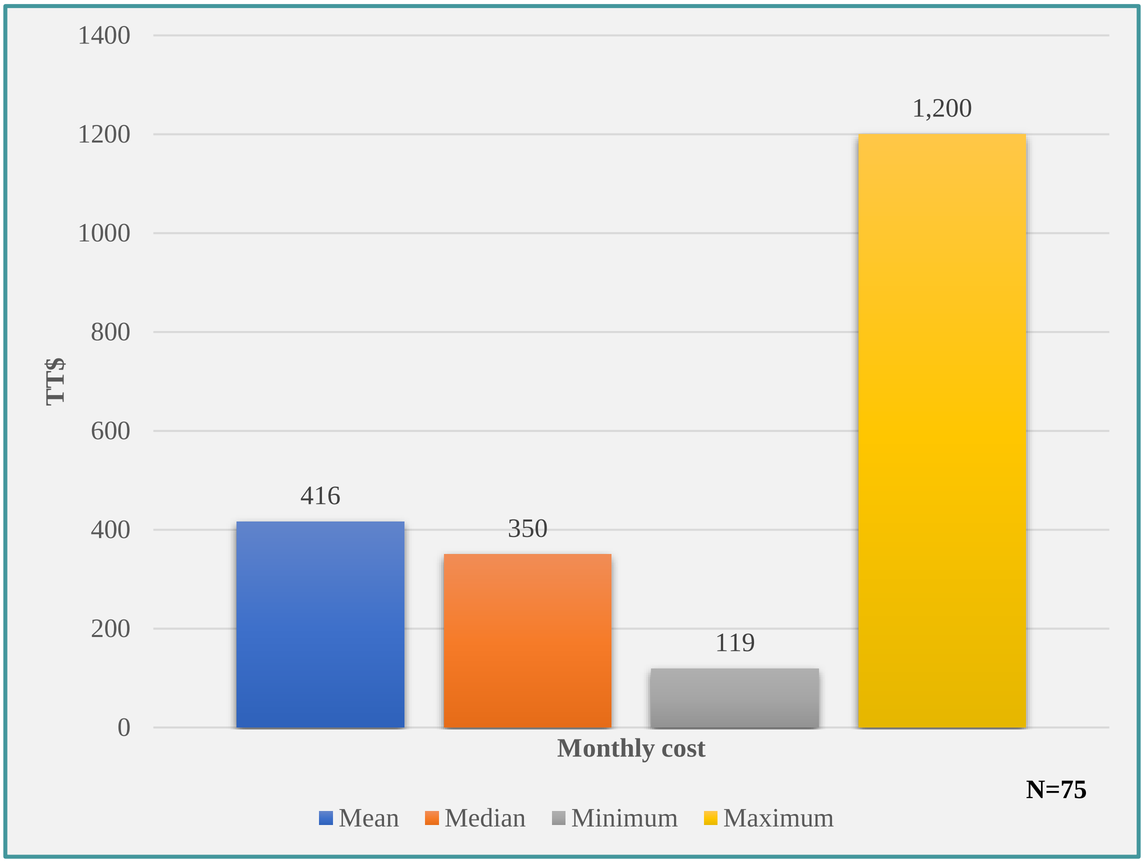

Figure 63. Amount paid monthly for fixed service plan with last provider

Based on the 75 responses received, the average amount paid monthly for fixed service plan with last provider was $416. The monthly amount paid ranged from a minimum of $119 to a maximum of $1,200.

The median amount paid monthly for fixed service plan with last provider was $350.

[55] N=75 represents respondents who selected yes in Figure 59. Eighteen respondents did not answer the question.

Figure 64[56] presents data on the level of satisfaction of respondents with previous fixed service plan.

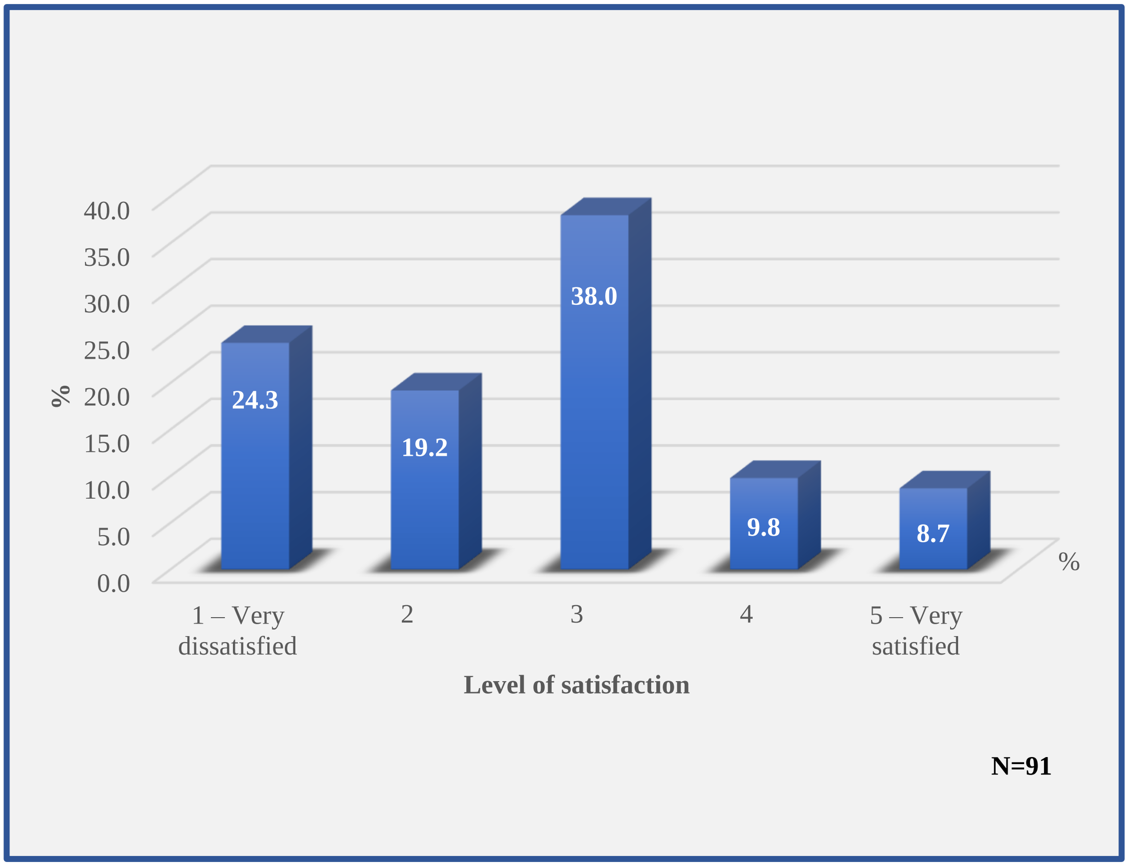

Figure 64. Level of satisfaction with previous fixed service plan

Approximately 44%[57] of respondents who switched providers were dissatisfied with their previous fixed landline service plan. Of this percentage, 24.3% indicated that they were very dissatisfied with their service.

Of the respondents who switched their previous fixed service plan, 18.5%[58] expressed satisfaction with their previous fixed service plan while 38% of respondents rated their satisfaction level at the midpoint of the scale, between satisfaction and dissatisfaction.

Although 18.5 % of persons were very satisfied with their previous plans, reasons for switching may have included: price offered by previous provided (3), Quality of service offered by previous provider (4) and Customer services challenges (1).

[56] N=91 represents respondents who selected yes in Figure 59. Two respondents did not answer the question.
[57] This is the summed value of 24.3% and 19.2%.
[58] This is the summed value of 9.8% and 8.7%.

Figure 65 presents data on the likelihood of switching current fixed service provider in next six months.

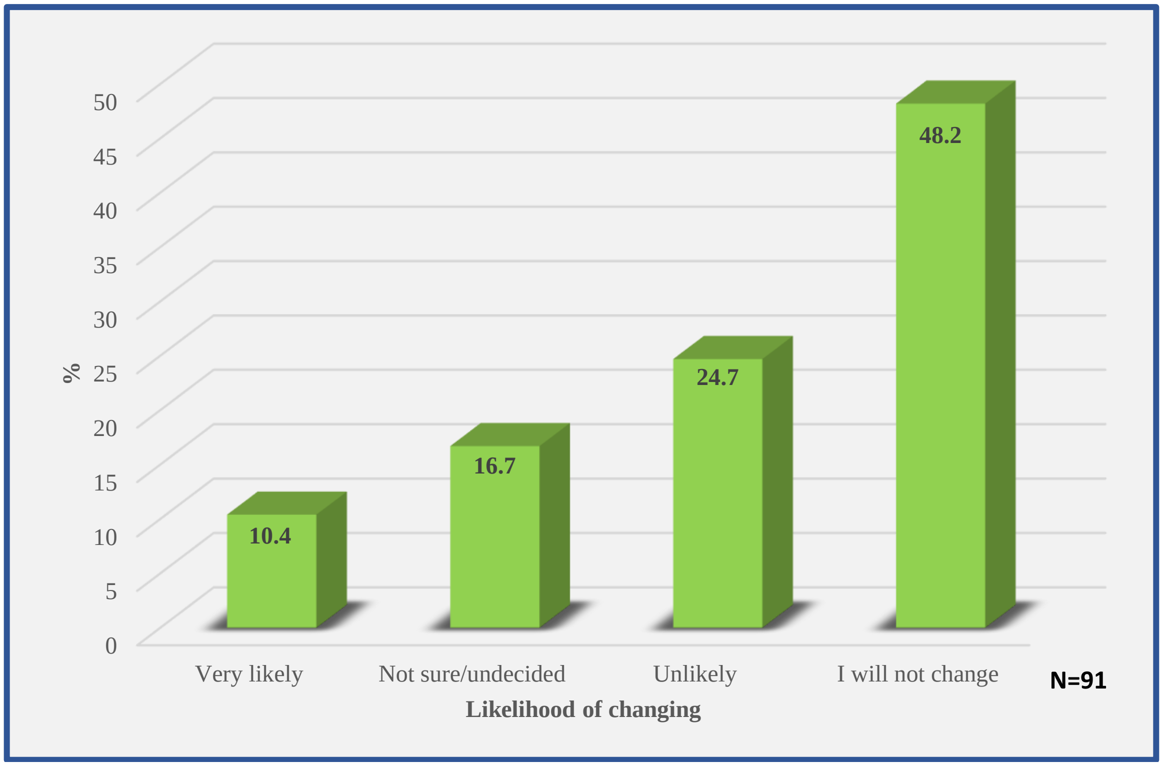

Figure 65. Likelihood of switching current fixed service provider in next six months

When asked about the likelihood of switching current fixed service provider in the next six months, 48.2% of the 91[59] respondents indicated that they will not change provider. A further 24.7% of respondents indicated that they were unlikely to change service providers in the next six months.

Approximately 10.0% of respondents indicated that it was very likely that they would change their current fixed service provider in the next six months whilst a further 16.7% indicated that they were not sure/undecided as to whether they would change providers during the next six months.

59 N=91 represents respondents who selected yes in Figure 59. Two respondents did not answer the question.

Figure 66 presents data on reasons for not changing fixed provider in the next six months.

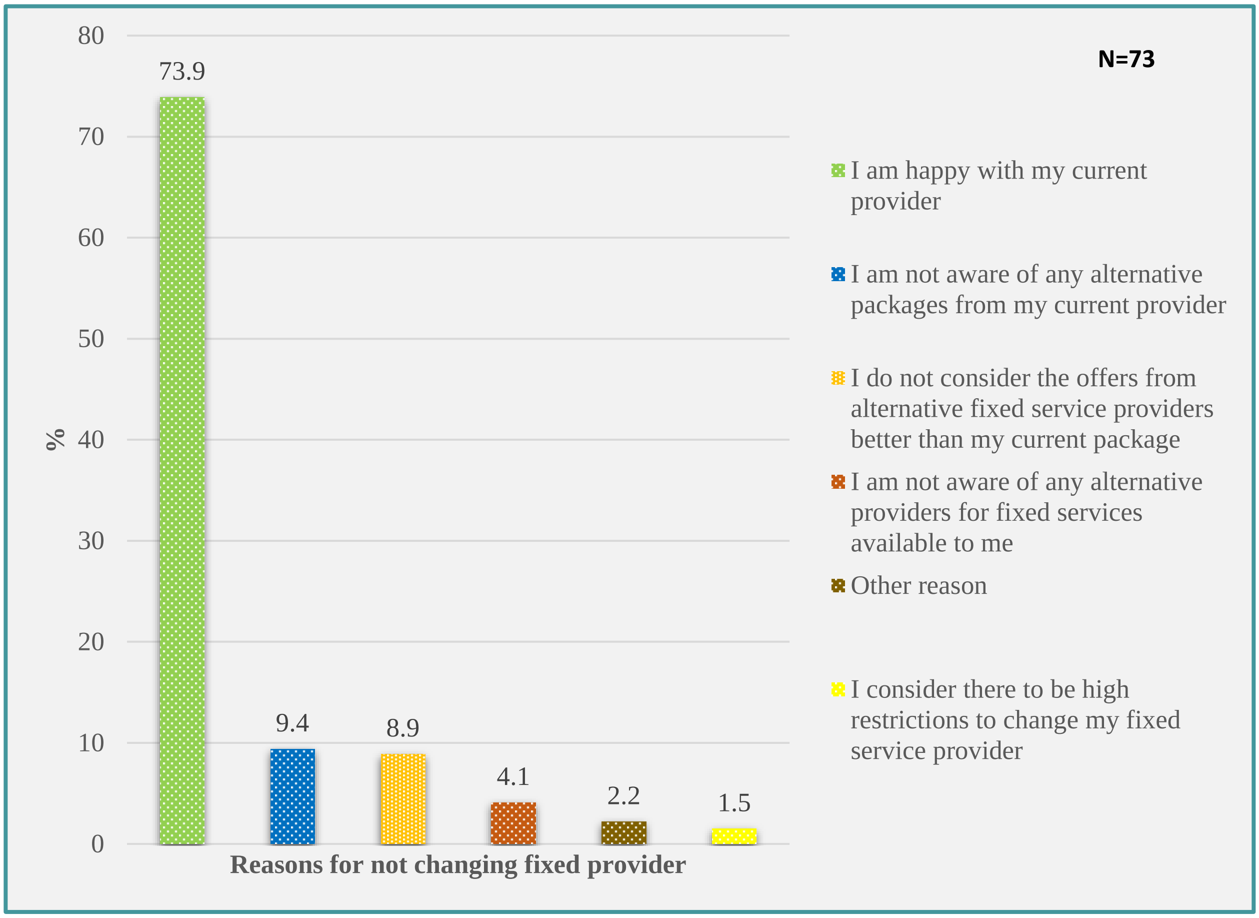

Figure 66. Reasons for not changing fixed provider in the next six months

Respondents who were required to provide reasons for not changing fixed provider in the next six months comprised 73 respondents who responded unlikely and I will not change in Figure 65.

When asked the reason for not changing their provider, 73.9% of respondents indicated that they were happy with their current provider. A further 9.4% of respondents said that they were not aware of any alternative packages from their current provider while a further 8.9% of all respondents indicated that they did not consider offers from alternative fixed service providers better than their current package.

Figure 67 presents data on the ranking of the three most important factors when choosing a fixed service provider.

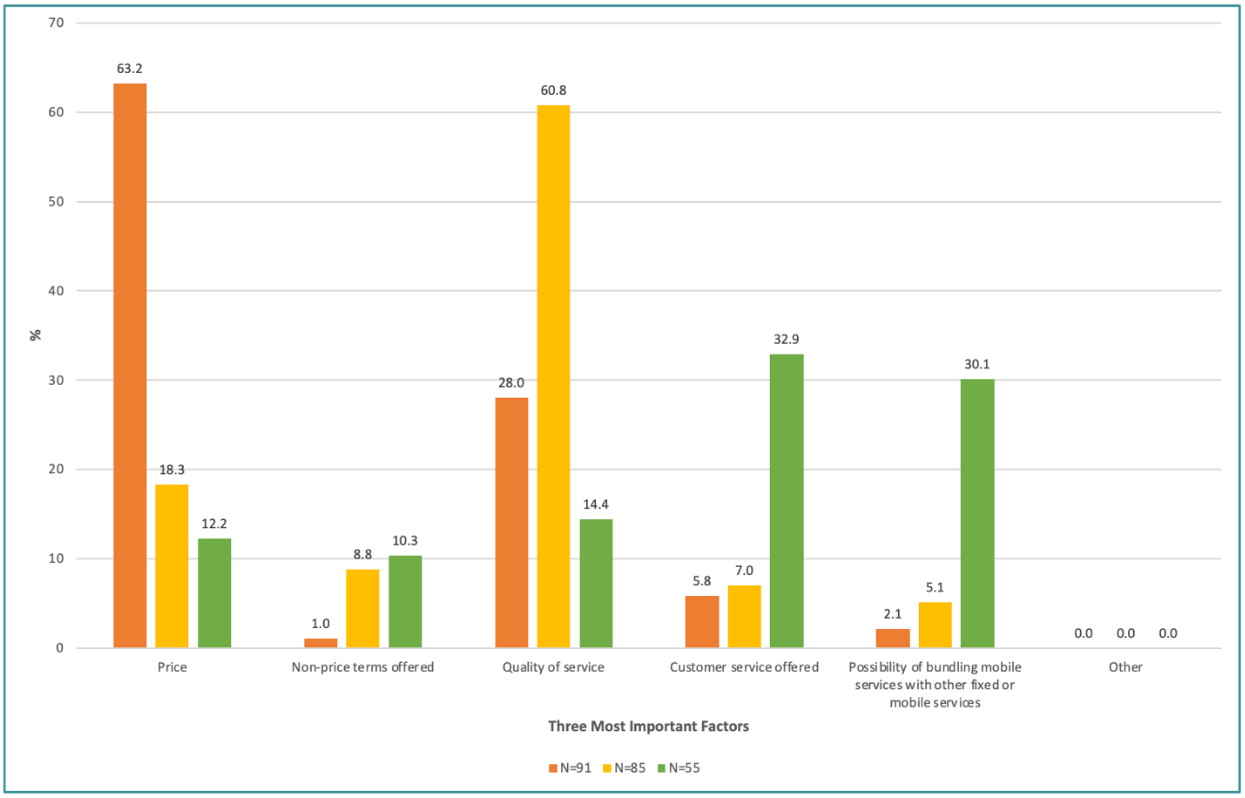

Figure 67. Ranking of the three most important factors when choosing a fixed service provider

In the first ranked tier, 63.2% of respondents cited price and 28% cited quality of service as the most important factors when choosing a fixed service provider.

At the second ranked tier, 60.8% of respondents cited quality of service and 18.3% cited price as the most important factor when choosing a fixed service provider.

In the third ranked tier, 32.9% of respondents cited customer service offered, and 30.1% cited the possibility of bundling mobile services with other fixed or mobile services as the most important factors when choosing a fixed service provider.

In terms of the second and third ranked factors, not all respondents provided factors for these tiers as requested resulting in 85 responses at the second tier, and 55 at the third tier.

Figure 68 presents data on reasons for not changing current fixed service provider in the next six months by respondents.

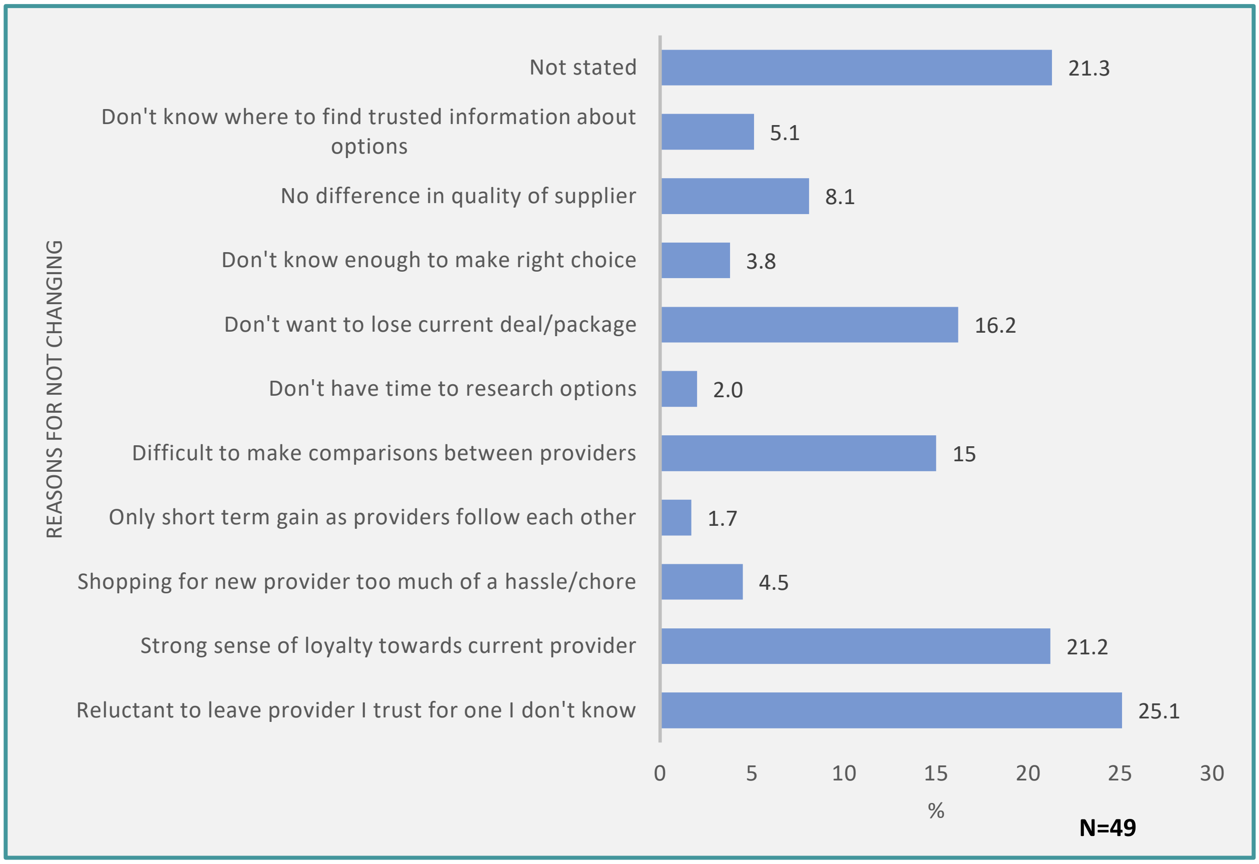

Figure 68. Reasons for not changing current fixed service provider in next six months

A total of 49[60] responses were received for reasons for not changing current fixed service provider in the next six months.

Approximately 25% of respondents indicated a reluctance to leave the current fixed service provider they trusted for one they did not know. Another 21.2% of respondents cited strong sense of loyalty towards current provider as the reason for not changing fixed service provider in the next six months.

The fact that some respondents don't want to lose current deal/package was highlighted by 16.2% of the responses received while a further 21.3% of responses were from the category not stated.

[60] N=44 represents responses from respondents who selected I will not change in Figure 65.

Table 22 presents data on switching behaviour of respondents if provider increased fixed landline price.

Table 22. Switching behaviour if provider increased fixed landline price

Switching Behaviour	N
Your new fixed landline service offering be with your current provider?	0
Your new fixed landline service offering be with another provider?	0
Don't know	0
Total	**0**
N=0 *– No responses provided by respondents indicating their willingness to switch to another fixed landline service offering, if their provider increased fixed landline cost.*	

As illustrated in the table above, no responses were received with respect to switching behaviour if provider increased fixed landline price.

Table 23 presents data on switching behaviour of respondents if provider increased price of fixed broadband plan.

Table 23. Switching behaviour if provider increased price of fixed broadband plan

Switching Behaviour	N
New fixed broadband plan will be with your current provider	2
New fixed broadband plan will be with another provider	5
Don't know	3
Total	**10**
N=10	

The 10 responses obtained with respect to switching behaviour if provider increased price of fixed broadband plan are presented in the table above.

Table 24 presents data on to which multi-service bundle would you switch if multi-service bundle increased.

Table 24. To which multi-service bundle would you switch if multi-service bundle increased

Multi-Service Bundle Provider Switched To	N
New multi-service bundle will be with your current provider	1
New multi-service bundle will be with another provider	7
Total	**8**
N=8 *– Represents respondents who selected "Switch to a multi-service bundle" in Table 9.*	

The 8 responses obtained with respect to which multi-service bundle would you switch to if multi-service bundle increased are presented in the table above.

APPENDIX I

QUESTIONNAIRE

TATT DOMESTIC RETAIL FIXED MARKET CUSTOMER SURVEY

Telecommunications Authority of Trinidad and Tobago

Telecommunications Authority of Trinidad and Tobago:

Head Office:
#5, Eighth Avenue Extension,
off Twelfth Street,
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Tobago Office:
Shop #D 48,
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