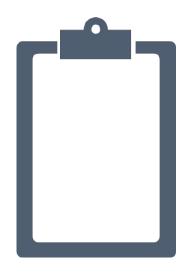


TABLE OF CONTENTS

- 1. Background & Research Design
- 2. Key Findings
- 3. ICT Access in Households
- 4. Fixed Telephony
- 6. Mobile Phone Service
- 7. Internet Service
- 8. International Calls & Roaming Service



DISCLAIMER

- TRA does not make any representations or warranties, either express or implied, that:
 - the information is free from inaccuracies, errors or omissions;
 - the information is exhaustive;
 - the information is of merchantable quality and fitness for a particular purpose.
- TRA, including its officers, board members, employees, agents and contractors, is not liable for:
 - any inaccuracy, error or omission in the information contained in this document; nor
 - any loss, damage, cost or expense whether direct, indirect, consequential or special, incurred by, or arising by reason of, any person using or relying on the information and whether caused by reason of any inaccuracy, error, omission or misrepresentation in the information or otherwise.
- TRA notes that the information contained in this report is based on a survey of a sample of 1674 residential consumers and as such may not necessarily represent the market or the population as a whole.
- This survey fulfills the requirement to undertake research and publish information as set out in Article 54 of the Law. It also fulfills the requirements of Article 25 to provide information to the Regulator as set out in the Individual Licenses granted to the Operators mentioned in this survey.

RESEARCH BACKGROUND

- The Telecommunications Regulatory Authority of Bahrain (TRA) was formed in October 2002.
- It is an independent regulatory body that has a direct responsibility to ensure effective liberalization of the telecommunications market in Bahrain, oversee fair competition, protect consumers, foster investor confidence and allocate telecommunications resources.
- TRA had previously commissioned Nielsen to conduct market research surveys in 2007, 2011, 2014 and 2015 with the objective of understanding the current level of service provided to the consumers, assess associated satisfaction to identify problem areas and look into their future requirements to direct further investments.
- In 2017, TRA commissioned Nielsen to carry out a similar study amongst the residential consumers.
- This report presents the results of the residential survey, which was based on 1674 face-to-face interviews conducted during December 2017.

wright © 2018 The Nielsen Company. Confidential and proprietary

RESEARCH OBJECTIVES

The Key objectives of 2017 survey are to understand the following:



Where appropriate, the results of 2017 survey have been compared with the results of previous surveys to identify the key trends

povright © 2018 The Nielsen Company. Confidential and proprietary.

SURVEY DESIGN









1674 Face to Face Interviews with tablet (Computer assisted personal interviews)

Geographies

- Muharraq:17%
- Capital:40%
- Northern:23%
- Southern:20%

Sample Demographics

Gender

- Male:65%
- Female:35%

Age Group

- 15-24 Yrs: 16%
- 25-34 Yrs: 35%
- 35-44 Yrs: 24%
- 45 Yrs & above: 25%

Nationalities

Resident in Bahrain for at least the past 12 months

- Bahraini:40%
- Non-Bahrainis:60%



opyright © 2018 The Nielsen Company. Confidential and proprietary.

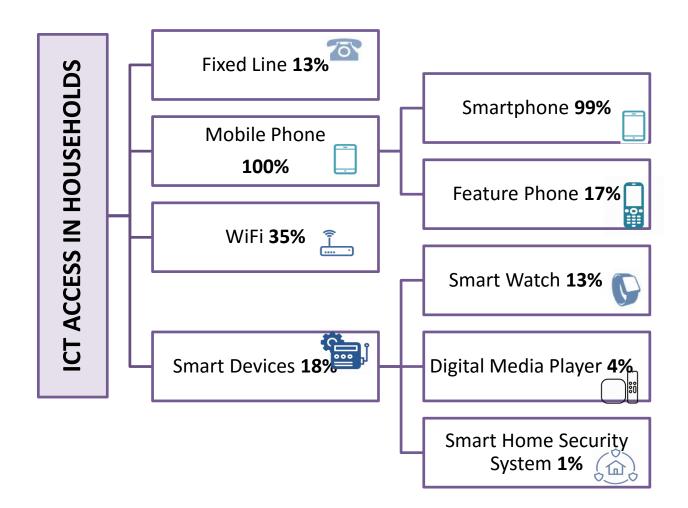
KEY HIGHLIGHTS FROM 2017 RESEARCH

- Trend of reduced reliance on fixed line access since last 10 years
- The average volume of calls made from fixed lines has decreased in 2017
- Average number of fixed-to-fixed calls decreased from 11 calls per week to 6 calls per week from 2016 to 2017
- Average number of fixed-to-mobile calls per week decreased from 16 to 15 over the same period
- Falling call volumes has lead to decline in the Average revenue per fixed line
- Satisfaction levels among fixed telephony users have remained largely flat



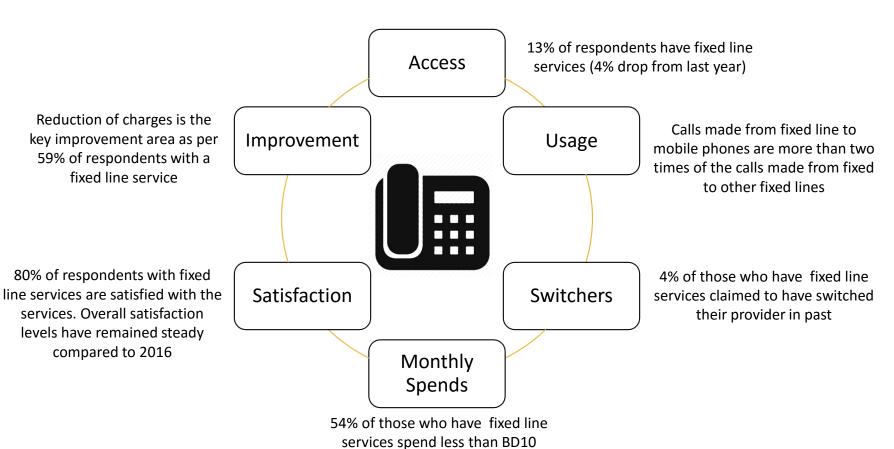
- Almost all respondents have access to mobile phones
- ➤ 38% of respondents have 2 or more SIM cards
- To have separate SIMs for business and personal use- main reason for multi-SIM ownership
- > Postpaid connections continue to rise
- → 43% of respondents claimed to have a postpaid connection on their main line
 - Monthly spends on rise, however there is a 7% drop in the overall customer satisfaction led by declining satisfaction levels on pricing of international calls and value added services, pricing & variety of roaming services and number of operators
- > As per 2017 survey, 99% of respondents have internet access at home. 98% of whom claimed to use internet on a daily basis
- Internet usage has significantly increased at both home and workplace
- Social networking remains the main online activity among internet users (90%)
- ▶ 5% drop in satisfaction with Internet services owing to reliability, value for money and handling customer complaints







FIXED LINE SERVICE

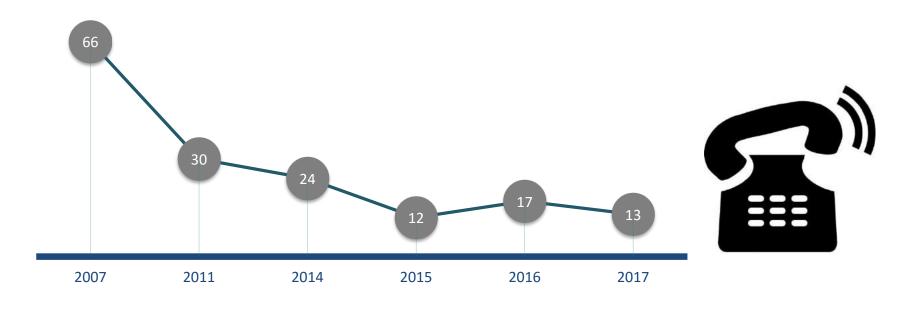


monthly

Variation Day Leitabilian Variation Common variation leitable of the leitabilian

HOUSEHOLDS WITH FIXED LINE

Fixed line access has significantly dropped in the last 10 years. 13% of respondents in 2017 survey claimed to have access to a fixed line service at home compared with 66% in 2007.



Figures in %

Base: all respondents

ht © 2018 The Nielsen Company. Confidential and proprietary.

FIXED LINE CALLS

Overall decline in the volume of calls from last year. Average number of weekly calls from fixed to mobile are more than 2 times of the average weekly calls made from fixed to fixed.

Average number of calls made per week to...

Base: those who have a fixed line



6 Fixed Line

-5 Vs. 2016



15 Mobile

-1 Vs. 2016



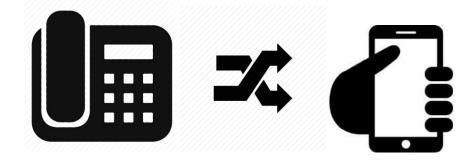
International

-5 Vs. 2016

FIXED LINE CANCELLATION

13% have cancelled their fixed line in the past and moved to mobile only

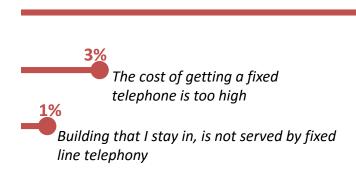
Base: all respondents





Reasons for not having fixed line

Base: those who do not have a fixed line connection



96%

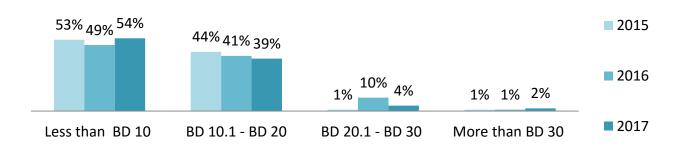
Have a mobile phone, so I don't need a fixed line

yright © 2018 The Nielsen Company. Confidential and proprietary.

SPENDS ON FIXED LINE

54% of respondents who have fixed line claimed to have spent less than BD 10 monthly on their fixed line in 2017.

Average Monthly Spends





right © 2018 The Nielsen Company. Confidential and proprietary.

SWITCHING FIXED LINE

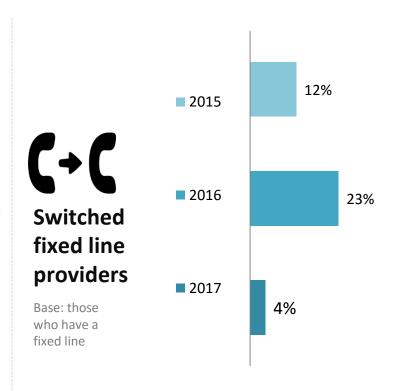
4% of current fixed line users claimed to have switched their fixed line provider in the past.



41% are aware that they can switch between fixed line providers without changing the number

(5% drop vs 2016)

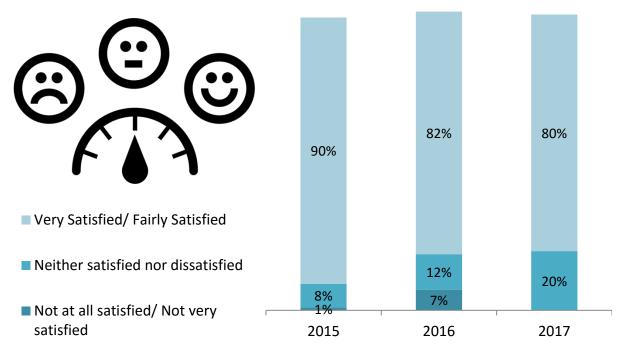
Base: all respondents



right © 2018 The Nielsen Company. Confidential and proprietary.

OVERALL SATISFACTION WITH FIXED LINE

Overall satisfaction with fixed line service has remained almost stable compared to 2016.



Base: those who have a fixed line

povidht @ 2018 The Nielsen Company. Confidential and proprietary.

WHAT DRIVES FIXED LINE SATISFACTION?

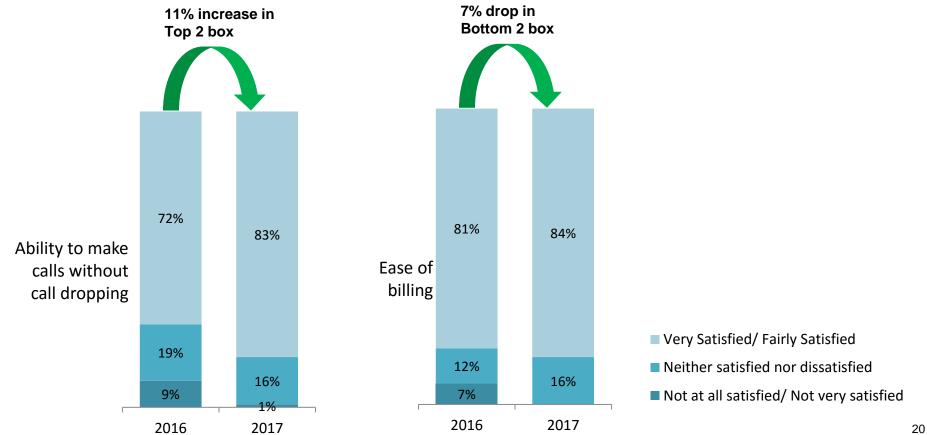
2017 Survey suggests improvement in satisfaction levels on ease of billing and ability to make calls without being cut off.

Attribute Satisfaction	2015	2016	2017	
Quality of voice while making national calls		4.2	4.3	
Quality of voice while making international calls		4.0	4.0	
Ability to make calls without call dropping		4.0	4.3	
Quality of the customer service	3.9	4.0	4.1	
Price of national calls made from fixed line	4.0	3.9	3.9	
Price of international calls made from fixed line	4.1	3.6	3.6	
Ease of billing		4.1	4.3	
Transparency and clarity of offers		4.1	4.2	
Mean scores on a 5 noint scale				

Mean scores on a 5 point scale

Base: those who have a fixed line

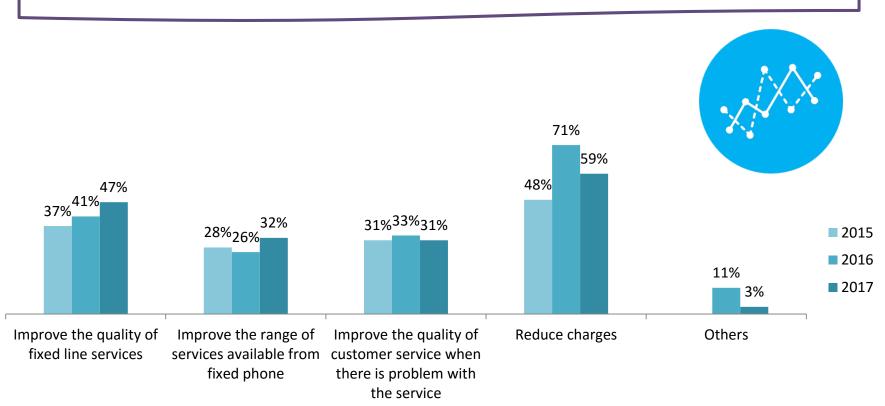
A DEEP DIVE INTO IMPROVING FACTORS



vright © 2018 The Nielsen Company. Confidential and proprietary.

IMPROVEMENT AREAS FOR FIXED LINE

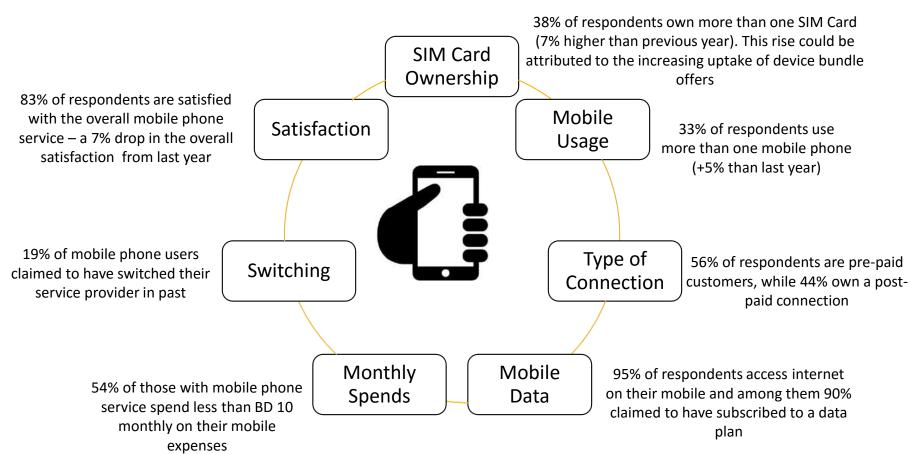
Reduction of charges is still the key to improve fixed line services in 2017.



Base: those who have a fixed line

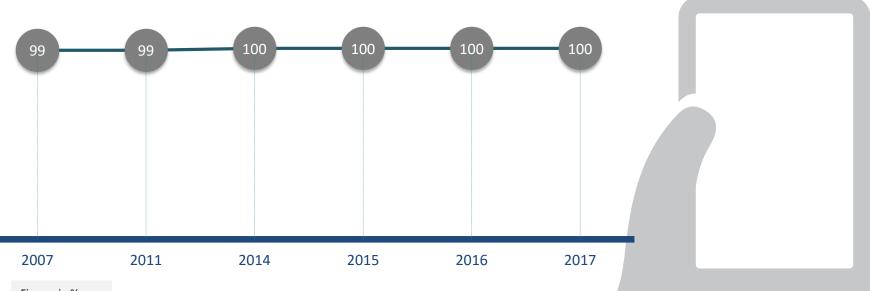


MOBILE PHONE SERVICE



INDIVIDUALS WITH MOBILE PHONE

Mobile phone ownership is maintained at 100%.



Figures in %

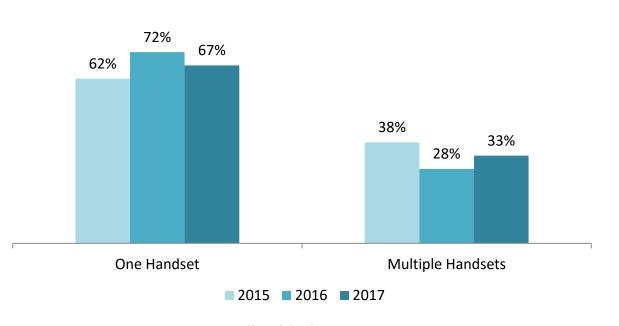
Base: all respondents

right © 2018 The Nielsen Company. Confidential and proprietary.

MOBILE PHONE USAGE

33% of respondents claimed to use more than one mobile phone in 2017 compared to 28% in 2016.

Number of Mobile Phones/Handsets

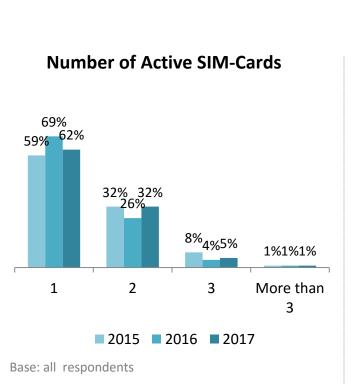


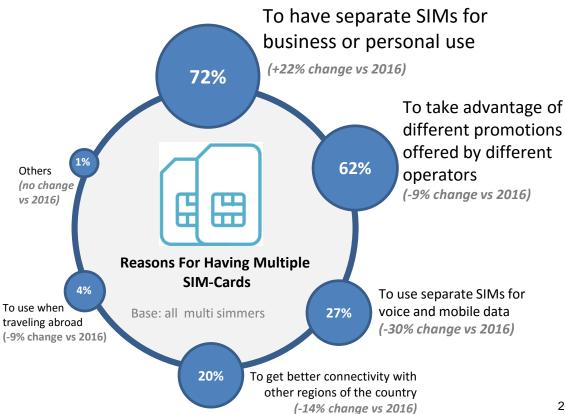


Base: all mobile phone users

SIM-CARD USAGE

Multiple SIM Card usage has increased by 7% from 2016. Separate SIMs for business and personal use is now considered as the primary reason for using multiple SIM cards.

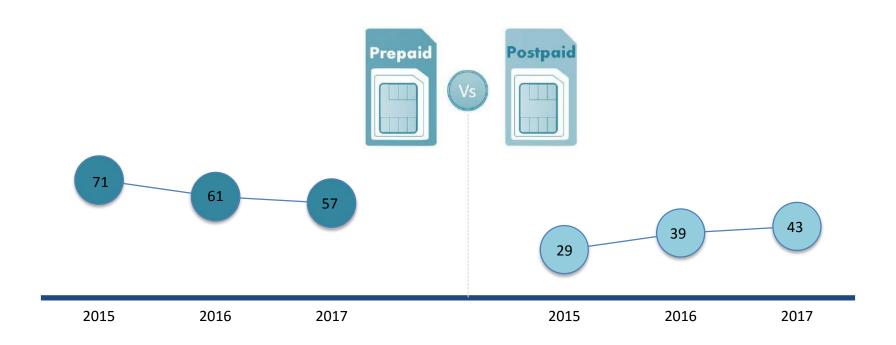




2018 The Nielsen Company. Confidential and proprietary.

TYPES OF MOBILE PHONE CONNECTION (1/2)

43% of respondents claimed to have a postpaid connection as their main mobile connection, while 57% of respondents claimed to have prepaid connection.



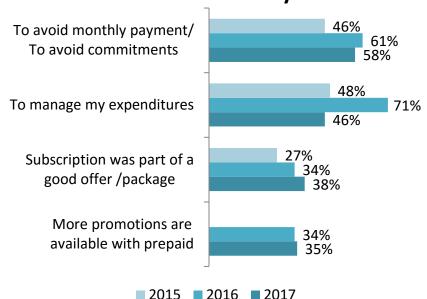
Base: those who have a mobile phone

viright © 2018 The Nielsen Company. Confidential and proprietary.

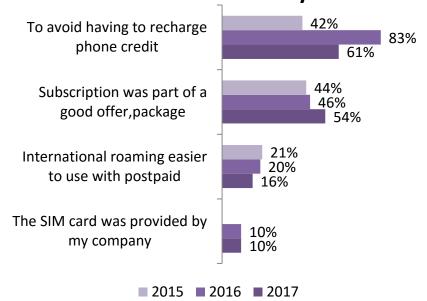
TYPES OF MOBILE PHONE CONNECTION (2/2)

Expenditure control and avoiding monthly payments/commitments are still the main reasons to use a prepaid connection. On the other hand, avoid credit phone recharge was reported as the key reason for using postpaid connection.

Reasons for using prepaid connection only



Reasons for using postpaid connection only



oyright © 2018 The Nielsen Company. Confidential and proprietary.

MOBILE PHONE USAGE

Respondents mainly use their mobile phone to make calls to other mobile phones.

Average number of calls made each week to...

Base: all respondents



Fixed Line

No change Vs. 2016



60 Mobile

+34 Vs. 2016



8 International

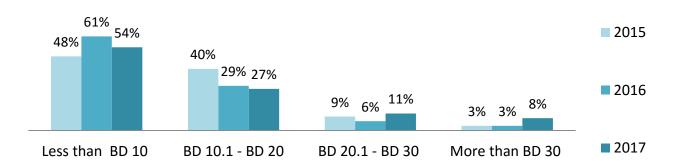
-3 Vs. 2016

right © 2018 The Nielsen Company. Confidential and proprietary.

SPENDS ON MOBILE PHONE SERVICE

54% of respondents spent less than BD10 monthly on their mobile phone services in 2017 compared with 61% in 2016.

Average Monthly Spends





Base: all respondents

n

USING INTERNET ON MOBILE

95% of respondents have internet access through their mobile. Among them, 90% of respondents claimed to have subscribed to a data plan on their mobile – a 10% increase from 2016.

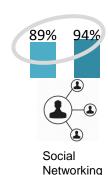
Internet Access through Mobile phones 96 95 2016 2017

Currently subscribe to a Monthly/Weekly/Daily/ Social Pack Data plan/allowance



POPULAR MOBILE INTERNET ACTIVITIES

In 2017 survey, we've registered increase in mobile internet usage on multiple aspects like social networking, sending emails, internet banking, downloading software and reading/downloading newspapers, ebooks and magazines.





Reading or downloading online newspaper /magazines, e books





Sending emails with attached files



Education or learning activities





Sending or receiving e-mail





Playing or downloading video games or computer games





Downloading movies, images, music, watching TV or video, or listening to radio or music





Getting information about goods or services





Downloading software or application





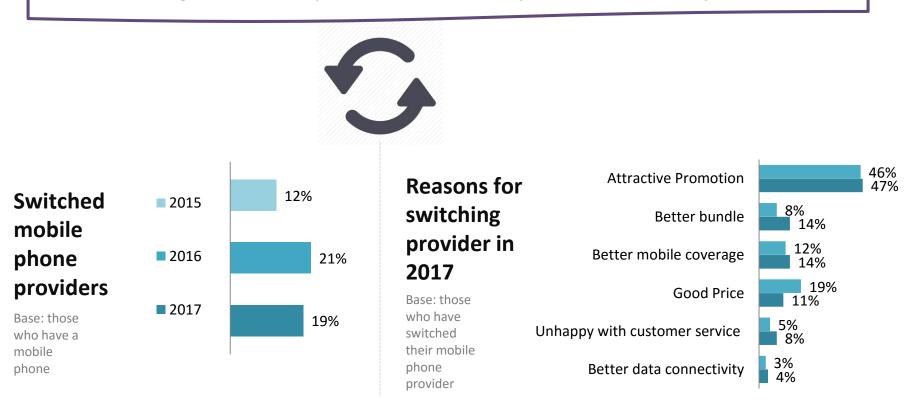
2016

2017

right © 2018 The Nielsen Company. Confidential and proprietary.

MOBILE PHONE SWITCHING BEHAVIOR

Switching behavior mainly attributed to attractive promotion from other providers.



vright © 2018 The Nielsen Company. Confidential and proprietary.

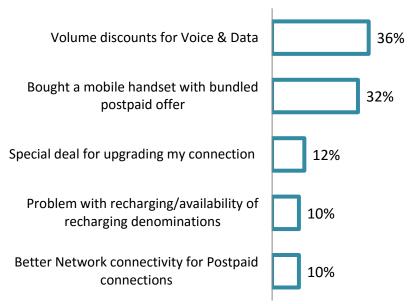
MIGRATION FROM PREPAID TO POSTPAID

Prepaid users mainly switch to postpaid connection to avail volume discounts for Voice & data and when they buy a new mobile handset with bundled postpaid offer.

Switched from prepaid to postpaid connection in past

Base: all respondents

Reasons for switching from prepaid to postpaid connection

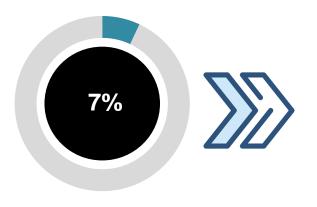


ovright © 2018 The Nielsen Company, Confidential and proprietary.

MIGRATION FROM POSTPAID TO PRETPAID

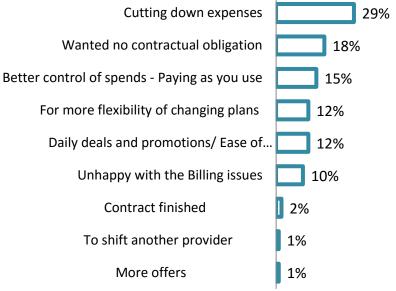
Switching from postpaid to prepaid connection is mostly driven by the need to cut down expenses and to do away with the contractual obligation.

Switched from postpaid to prepaid connection in past



Base: all respondents

Reasons for switching from postpaid to prepaid connection



novright @ 2018 The Nielsen Company Confidential and proprietary

MOBILE NUMBER PORTABILITY



81% of respondents are aware that they can switch between mobile phone providers without changing their number

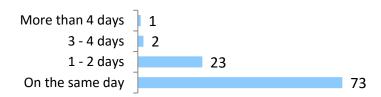
(4% increase vs 2016)

Base: all respondents



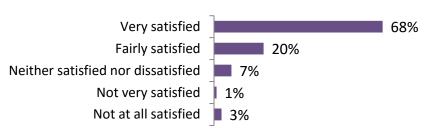
26% of those who have switched their mobile phone providers have kept their numbers (4% drop vs 2016)

Base: those who have switched their mobile phone provider



Time for the new connection to get activated from date of official request

Base: those who have switched their mobile phone provider using number portability



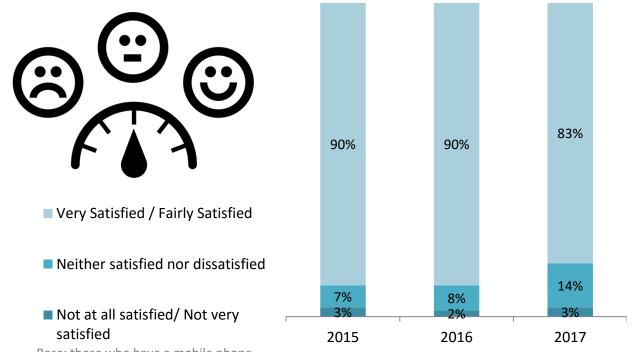
Satisfaction with the overall experience of switching mobile phone without changing the number

Base: those who have switched their mobile phone provider using number portability

wright © 2018 The Nielsen Company. Confidential and proprietar

OVERALL SATISFACTION WITH MOBILE PHONE SERVICE

Overall satisfaction with mobile phone services has dropped by 7% in 2017



Base: those who have a mobile phone

postoji agrapa pro Joistophiao O vacamo O aceleji od Tos O Constitucació

WHAT DRIVES SATISFACTION FOR MOBILE SERVICE?

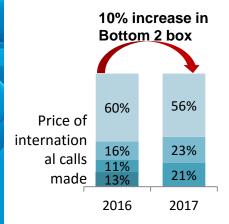
Declining customer satisfaction on price of international calls, price of value added services, price & variety of roaming services and number of operators

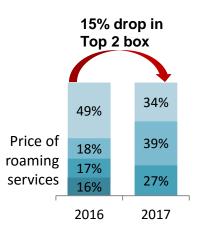
Caraction Attribute Satisfaction	2015	2016	2017
Ability to make calls without call dropping	4.0	4.0	4.2
Voice quality when making local calls		4.3	4.3
Voice quality when making international calls		4.0	4.1
Choice of service made available to you	4.0	4.1	3.9
Variety of mobile voice products		4.1	3.9
Variety of roaming products		3.7	3.4
Price of national calls made	4.0	4.1	3.9
Price of international calls made	3.9	3.8	3.5
Price of roaming services		3.5	3.1
Price of value added services		4.0	3.7
Quality of customer service	4.0	4.1	3.9
Transparency and clarity of offers		4.2	4.0
Ease of recharge		4.3	4.3
Ease of billing	:	4.4	4.3
Number of operators	3.9	4.2	3.9 4.3
Mobile data connectivity		4.1	
Speed of mobile internet		4.1	4.2
Consistency of mobile internet speed		3.9	4.0
Variety of mobile data products		4.1	3.9
res on a 5 point scale Price of mobile data		3.9	3.8

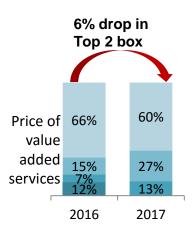
Mean scores on a 5 point scale

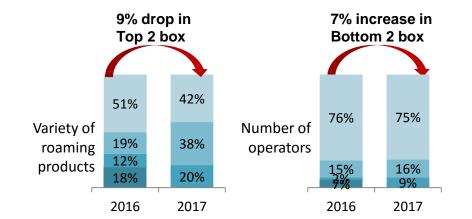
Base: those who have a mobile phone

A DEEP DIVE INTO DECLINING FACTORS







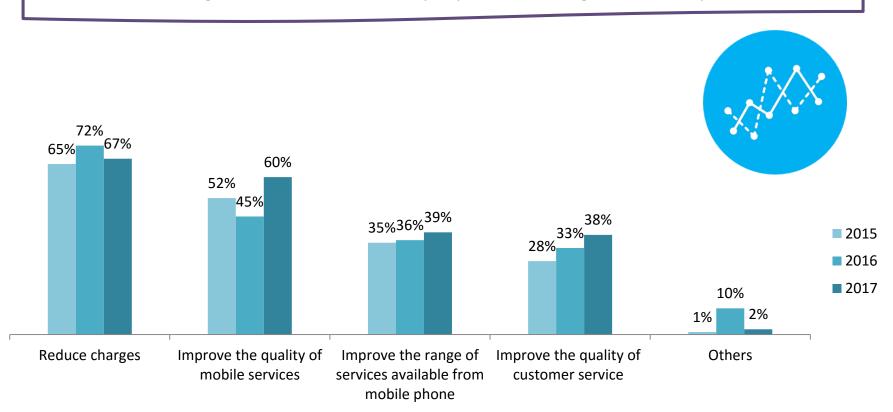


- Very Satisfied/ Fairly Satisfied
- Neither satisfied nor dissatisfied
- Not at all satisfied/ Not very satisfied
- Don't Know/Can't Say

ight © 2018 The Nielsen Company. Confidential and proprietary.

IMPROVEMENT AREAS FOR MOBILE SERVICE

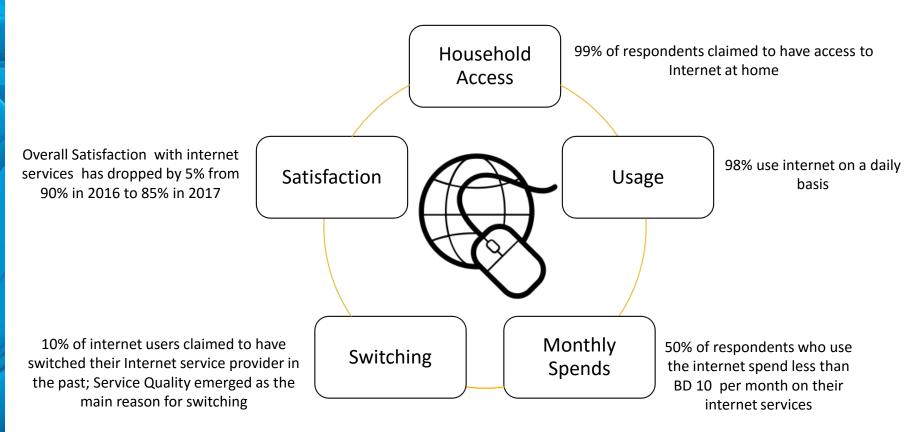
Reduction of charges is maintained as the key improvement sought for mobile phone services.



INTERNET



INTERNET SERVICE



vright @ 2018 The Nielsen Company Confidential and proprietary

HOUSEHOLDS WITH INTERNET ACCESS

Access to the internet continues to increase. 99% of respondents currently have access to internet at home compared with 53% in 2007.



Figures in %

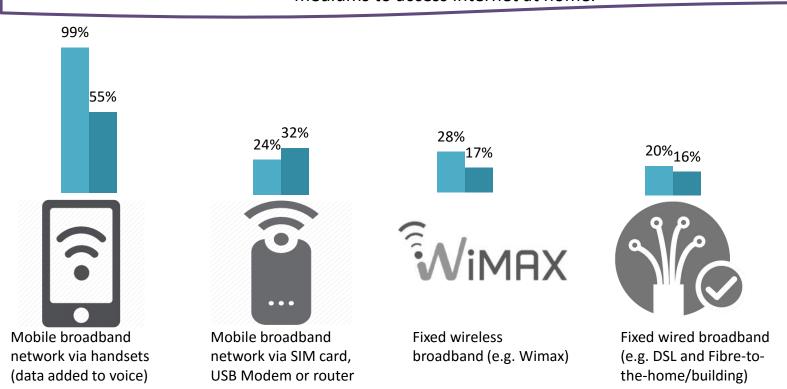
Base: all respondents

povight © 2018 The Nielsen Company. Confidential and proprietary.

TYPES OF INTERNET ACCESS AT HOME

Mobile broadband is maintained as the primary mode of internet access at home. While 90% of mobile users claimed to have data subscription on their mobile, a large proportion of them use alternative mediums to access internet at home.

Base: all with internet access at home



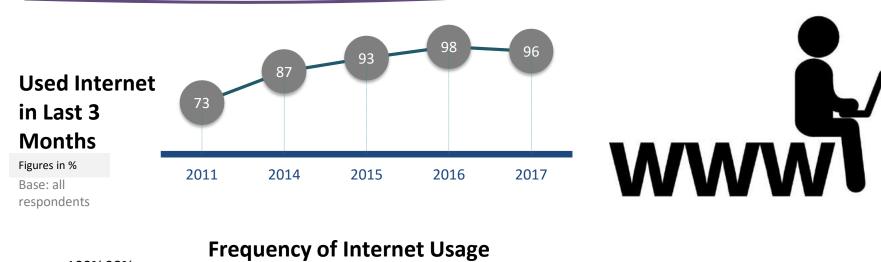
2016

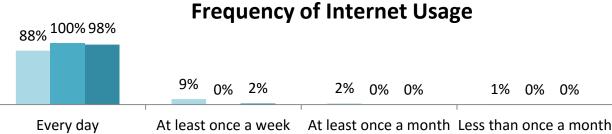
2017

ppyright © 2018 The Nielsen Company. Confidential and proprietary.

INTERNET USAGE IN LAST 3 MONTHS

Internet is being used everyday to a great extent.

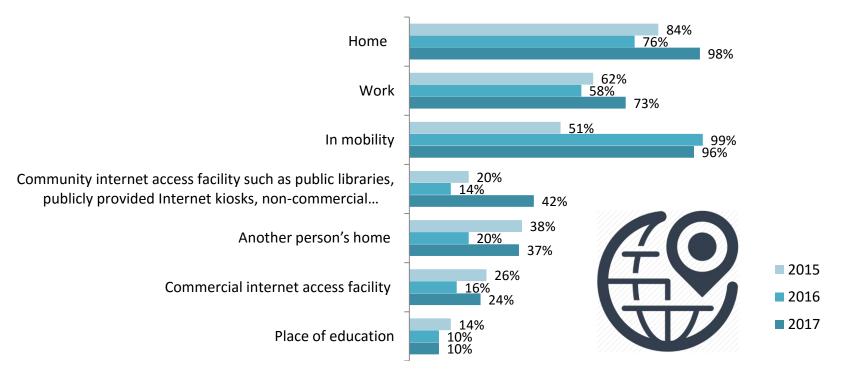




Base: who used internet in last 3 months

LOCATION OF INTERNET USAGE

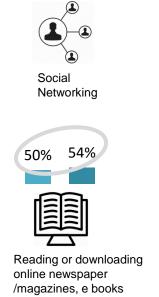
Internet usage has mostly increased from last year across various locations.



pyright © 2018 The Nielsen Company. Confidential and proprietary.

POPULAR ACTIVITIES ON INTERNET

2017 survey suggests social networking as the most popular online activity. Significant increase from last year in using emails, internet banking, downloading software and reading/downloading newspapers, ebooks and magazines.



96%

93%



Playing or downloading

video games or

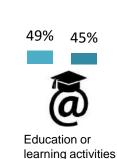
computer games

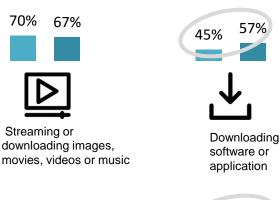


Getting information

about goods or

services







43%



aht © 2018 The Nielsen Company. Confidential and proprietary.

WHAT ARE PEOPLE BUYING ONLINE?



22% of Internet users claimed to have made an online purchase in the last 3 months.

Top 5 Goods Purchased Online

Fashion Fashion 58% Household utility bills 46% Travel tickets 32% Electronics/appliances

■ 2016 ■ 2017

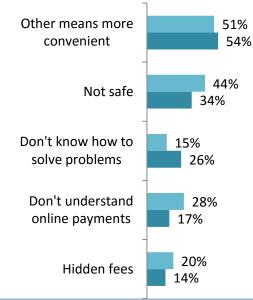
27%

26%

20%

Those shopping online –use it primarily to purchase fashion products, followed by bill payments

Barriers To Online Purchases



The main barriers for online shopping are more convenient alternatives and the fear of transaction being unsafe

Base: those who have not purchased online

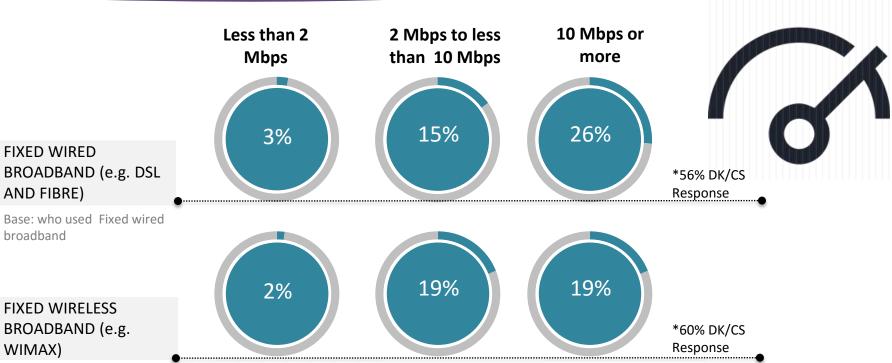
Cinema/Entertainment

tickets

yright © 2018 The Nielsen Company. Confidential and proprietary.

SPEED OF INTERNET SERVICE

Most of the survey respondents claimed to have an internet speed of 10Mbps or more.



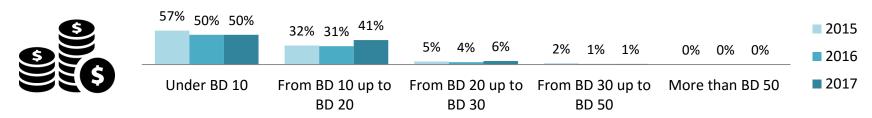
Base: who used Fixed wireless broadband

right © 2018 The Nielsen Company. Confidential and proprietary.

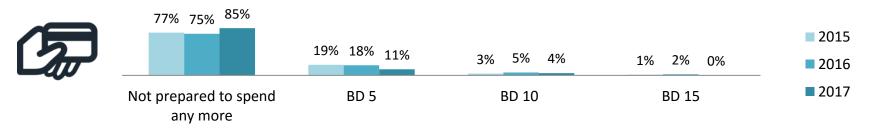
SPENDS ON INTERNET SERVICE

50% of respondents spend less than BD 10 per month on their internet services. Furthermore, most people are not willing to pay extra for 100 Mb connection.

Average Monthly Spends



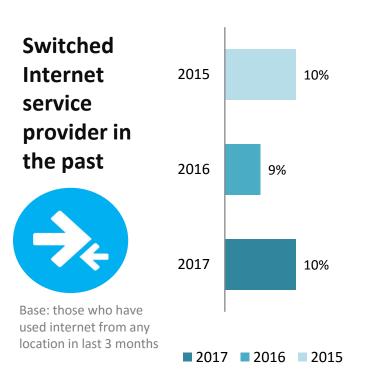
Willingness to pay extra for higher speed



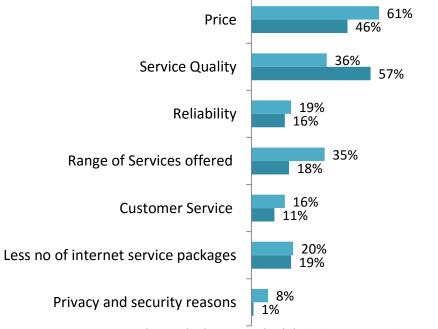
right © 2018 The Nielsen Company. Confidential and proprietary.

SWITCHING INTERNET SERVICE PROVIDER

Proportion of respondents switching their internet providers remains stable. Service quality emerged as the main reason for switching internet service provider.

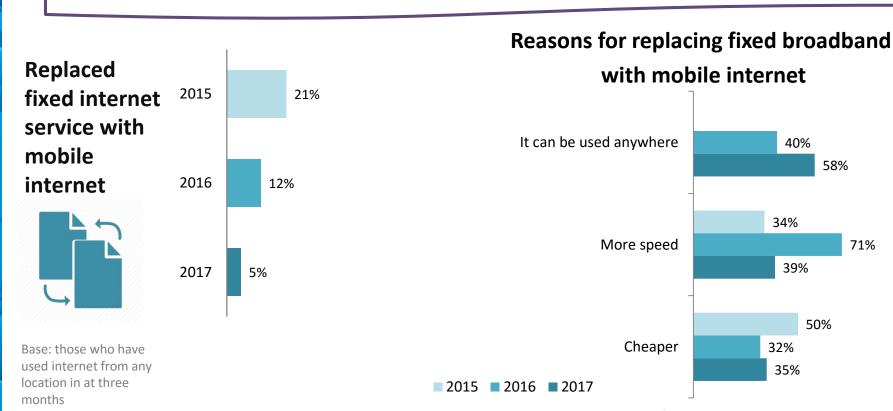


Reasons for Switching Internet Provider



SWITCHING FROM FIXED TO MOBILE INTERNET

5% of respondents who have used internet from any location in the last 3 months have replaced their fixed internet with mobile internet, primarily because of their need to access internet on the go.

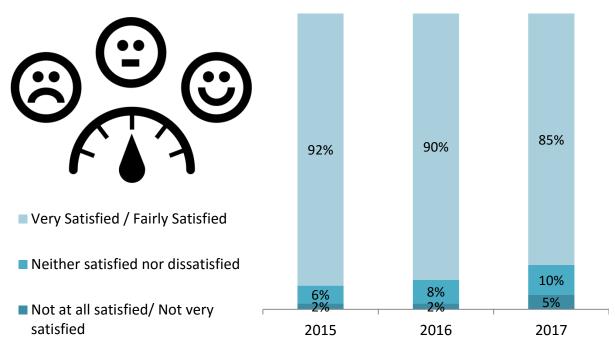


71%

ovright @ 2018 The Nielsen Company. Confidential and proprietary.

OVERALL SATISFACTION WITH INTERNET SERVICE

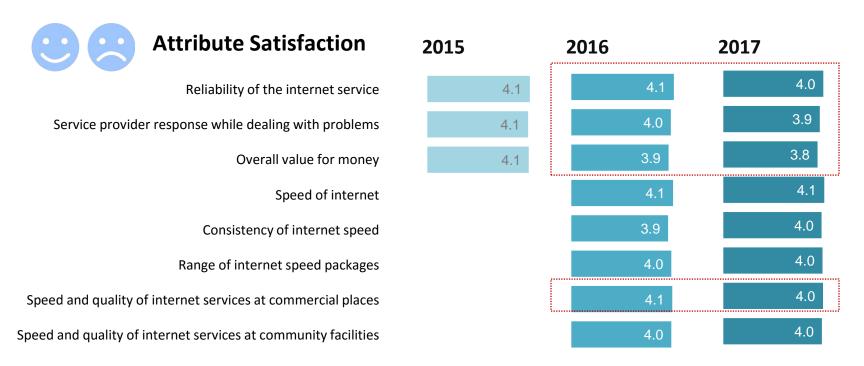
5% decline in overall satisfaction for internet services in 2017.



nvright @ 2018 The Nielsen Company Confidential and proprietary

WHAT DRIVES SATISFACTION FOR INTERNET?

Marginal drop in satisfaction levels for reliability of internet services, value for money and service provider's responsiveness to dealing with problems.

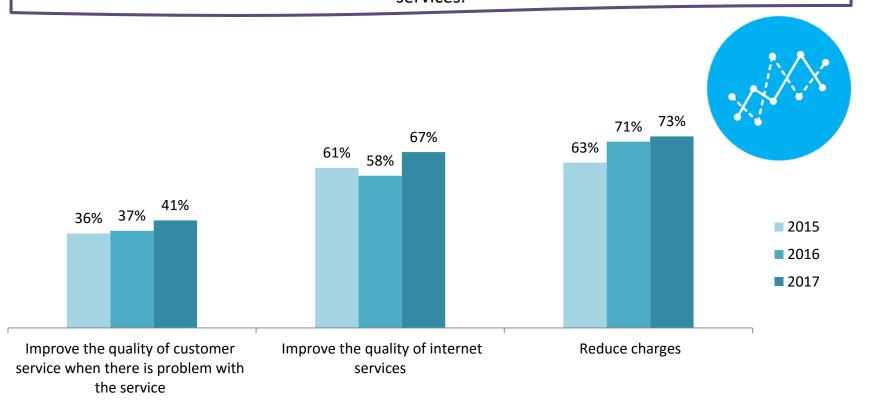


Mean scores on a 5 point scale

povright © 2018 The Nielsen Company. Confidential and proprietary.

IMPROVEMENT AREAS FOR INTERNET SERVICE

9% increase in number of internet users who are seeking improvement in the quality of internet services.

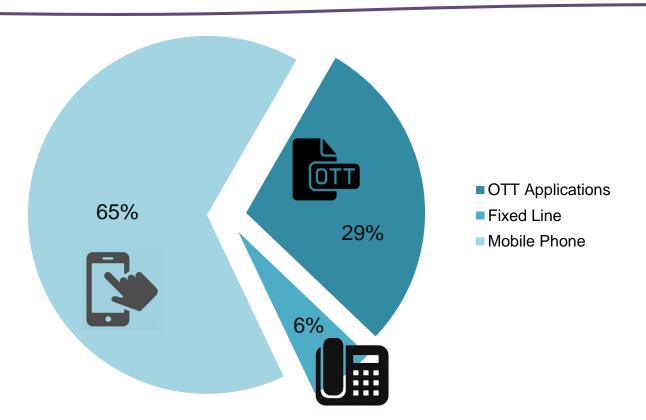




right © 2018 The Nielsen Company. Confidential and proprietary.

CALLS FROM FIXED LINE/ MOBILE / OTT

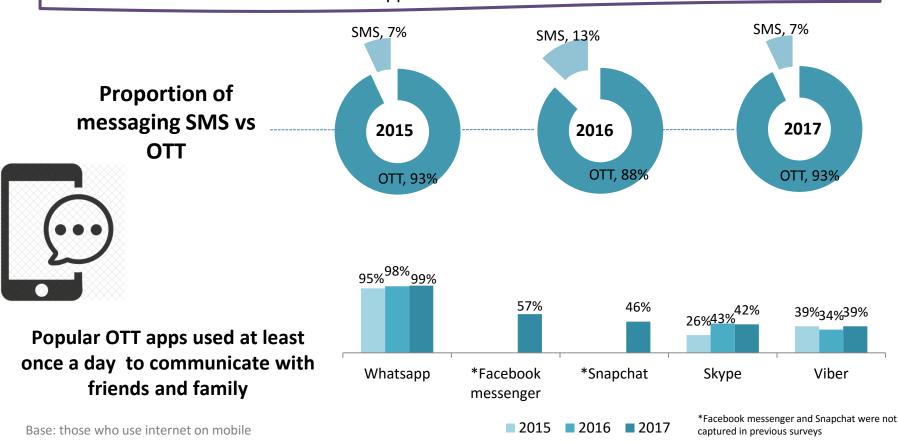
On an average, 29% of local calls are made through the use of OTT applications.



yright © 2018 The Nielsen Company. Confidential and proprietary

USE OF OTT APPLICATION

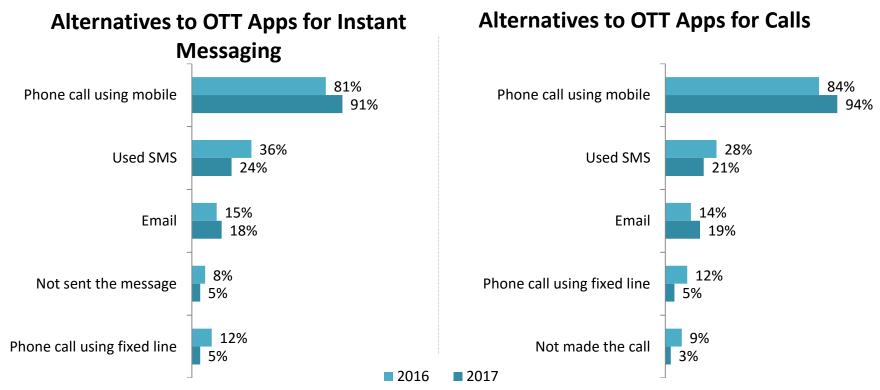
After WhatsApp, Facebook Messenger and Snapchat were acknowledged as the most used OTT applications in 2017.



ight © 2018 The Nielsen Company. Confidential and proprietary.

ALTERNATIVES TO OTT APPLICATION

Calling using mobile continues to be the preferred alternative in case of unavailability of OTT services.

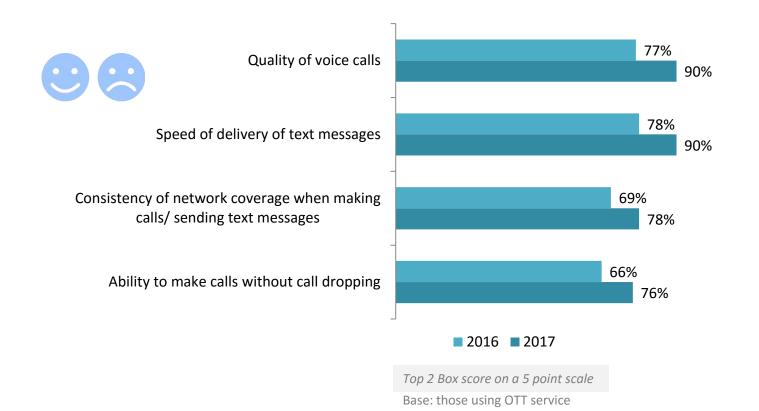


Base: those using OTT service

right © 2018 The Nielsen Company. Confidential and proprietary.

SATISFACTION WITH OTT SERVICES

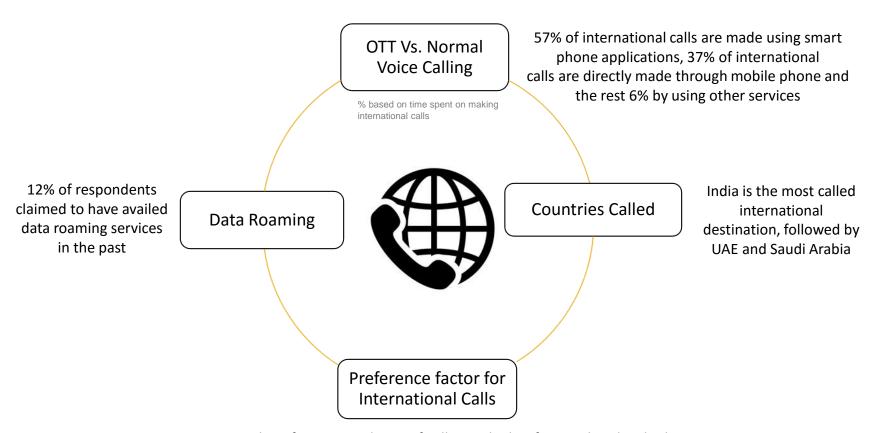
An all around improvement in satisfaction for OTT services from last year. In 2017, OTT users are most satisfied with Quality of voice calls and Speed of text delivery.





vright © 2018 The Nielsen Company. Confidential and proprieta

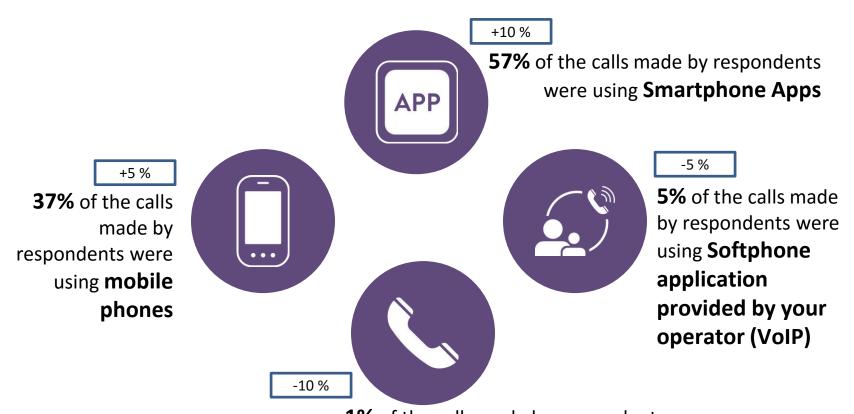
INTERNATIONAL CALLS & ROAMING



Quality of Service and Cost of calls are the key factors that decide the most suitable medium used for making international calls

oyright © 2018 The Nielsen Company. Confidential and proprietary.

PROPORTION OF INTERNATIONAL CALLS



1% of the calls made by respondents were using **fixed line**

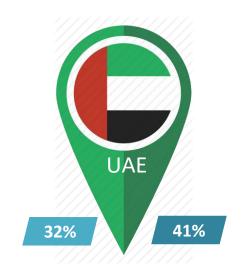
% Change from 2016

ight © 2018 The Nielsen Company. Confidential and proprietary.

MOST CALLED INTERNATIONAL DESTINATIONS

India emerges as the top International calling destination, followed by UAE and KSA.





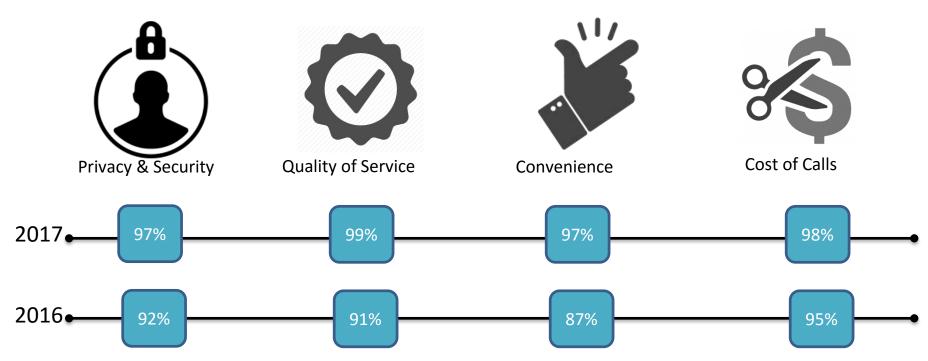


2016

2017

IMPORTANT FACTORS FOR INTERNATIONAL CALLING

Quality of Service and Cost of calls are the most important factors considered when making an international call.



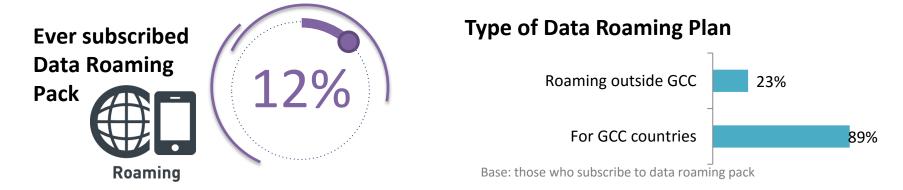
T2B%

Base: all who make international calls

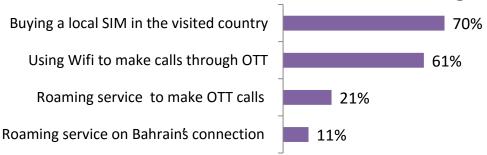
right © 2018 The Nielsen Company. Confidential and proprietary.

ROAMING SERVICE

12% of respondents claimed to have ever used the data roaming services, mostly for GCC countries. Buying local SIM is the most common way of making calls to Bahrain when traveling abroad.



How calls to Bahrain are made when traveling abroad



Base: all respondents

