FOR RELEASE OCTOBER 9, 2018

Internet Connectivity Seen as Having Positive Impact on Life in Sub-Saharan Africa

But digital divides persist

BY Laura Silver and Courtney Johnson

FOR MEDIA OR OTHER INQUIRIES:

Laura Silver, Senior Researcher
Stefan Cornibert, Communications Manager

202.419.4517

www.pewresearch.org

RECOMMENDED CITATION

Pew Research Center, October, 2018, "Internet Connectivity Seen as Having Positive Impact on Life in Sub-Saharan Africa"

About Pew Research Center

Pew Research Center is a nonpartisan fact tank that informs the public about the issues, attitudes and trends shaping America and the world. It does not take policy positions. The Center conducts public opinion polling, demographic research, content analysis and other data-driven social science research. It studies U.S. politics and policy; journalism and media; internet, science and technology; religion and public life; Hispanic trends; global attitudes and trends; and U.S. social and demographic trends. All of the Center's reports are available at www.pewresearch.org. Pew Research Center is a subsidiary of The Pew Charitable Trusts, its primary funder.

© Pew Research Center 2019

Table of Contents

About Pew Research Center	1
Overview: Internet Connectivity Seen as Having Positive Impact on Life in Sub-Saharan Africa	3
Internet use increases across sub-Saharan Africa; share with a smartphone doubles	5
Socializing is the most popular form of internet activity	7
On phones, focus is entertainment, mobile payments	ç
Phone type heavily shapes what people do on their devices	10
Comparing phone ownership and technology use in sub-Saharan Africa with other regions Bookmark not defined.	Error
1. Majorities in sub-Saharan Africa own mobile phones, but smartphone adoption is modest	12
Ownership and usage gaps are particularly pronounced for smartphones	14
Among those with phones, social and entertainment activities are most common	16
2. Internet use is growing across much of sub-Saharan Africa, but most are still offline	19
Younger, more educated, affluent sub-Saharan Africans more likely to get online	20
For internet users, social and entertainment activities most common on the web	22
On social media, sub-Saharan Africans post more about entertainment than other topics	23
3. Sub-Saharan Africans say internet use has positively impacted education, personal relations	_
and economy	25
Acknowledgments	27
Methodology	28
Appendix A: Detailed demographic tables	29
Appendix B: Country-specific examples of smartphones	31
Appendix C: Country-specific examples of social media	32
Topline Questionnaire	33

Internet Connectivity Seen as Having Positive Impact on Life in Sub-Saharan Africa

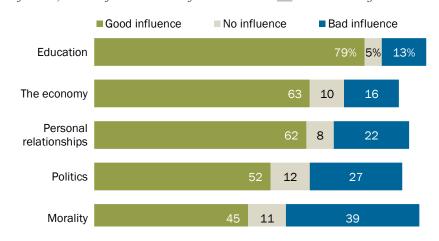
But digital divides persist

Sub-Saharan Africa has experienced dramatic gains in internet use in recent years. With this rapid

growth in connectivity have come a host of potential problems, including fake news, political targeting and manipulation and financial scams, among others. Yet according to a new Pew Research Center analysis, most sub-Saharan Africans feel positively about the role the internet plays in their country. Large majorities say the increasing use of the internet has had a good influence on education in their country, and half or more say the same about the economy, personal relationships and politics.

Sub-Saharan African publics largely see growing internet connectivity as a positive

Generally, do you think the increasing use of the internet has had a good influence, a bad influence or no influence at all on ___ in our country?



Note: Percentages are six-country medians based on total sample in Ghana, Kenya, Nigeria, Senegal, South Africa and Tanzania.

Source: Spring 2017 Global Attitudes Survey. Q74a-e.

PEW RESEARCH CENTER

Only when it comes to the

issue of morality are sub-Saharan Africans somewhat more divided about the role the internet is playing. Across six major nations surveyed in the region, a median of 45% say the internet has had a positive impact on morality, while 39% say it is has been negative. These views vary substantially by country. For example, a majority of Nigerians (57%) believe the internet is having a good influence on morality, while more than half of Senegalese (54%) say the opposite.

Still, in some countries, evaluations of how the internet affects morality have improved since 2014. In Ghana today, 42% think that growing internet use has a positive effect on morality – up from 29% in 2014. Favorable assessments of the internet's impact on economics and politics have risen even more over the same time period. For example, in 2017, around two-thirds of Nigerians (64%)

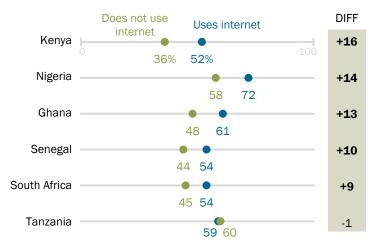
said the increasing use of the internet had a positive influence on their country's politics, compared with just 43% in 2014.

Generally, internet users — meaning people who say they use the internet or own an internet-connected smartphone — are more positive about its influence. For example, in all countries but Tanzania, internet users are more likely to think the internet plays a positive role in the country's politics.

In most countries, these gaps in attitudes between internet haves and have-nots persist whether looking at issues of morality, education, or even the economy. For instance, 72% of Ghanaian internet users see economic benefits stemming from greater

Sub-Saharan internet users more likely to say internet use has good influence on their country's politics

The increasing use of the internet has had a good influence on politics in our country



Note: Percentages based on total sample. Internet users include people who use the internet at least occasionally or who own smartphones. Significant differences shown in **bold**

Source: Spring 2017 Global Attitudes Survey. Q74b.

PEW RESEARCH CENTER

connectivity, compared with 54% of non-users, and the pattern is the same in Kenya, South Africa and Nigeria.

These are among the major findings of a Pew Research Center survey conducted in six sub-Saharan African countries from Feb. 21 to April 28, 2017, among 6,795 respondents.

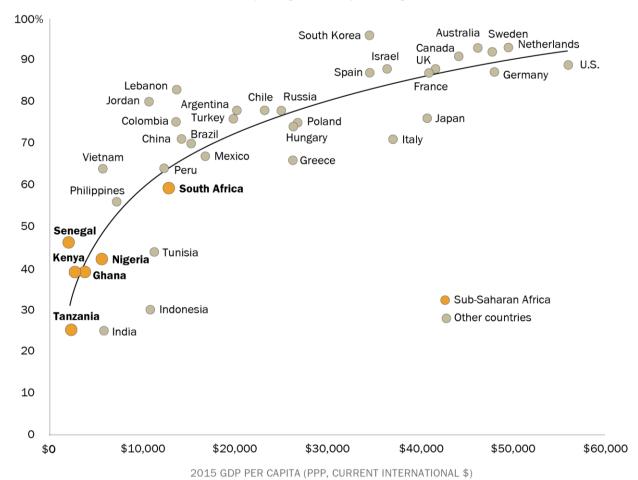
The survey also finds that sub-Saharan Africans primarily use the internet and their mobile phones for social and entertainment purposes, though many also use their mobile devices for sending and receiving payments. Still, people are more likely to engage in nearly all activities – even basic ones like texting – if they have smartphones, suggesting the emergence of a new digital divide based on phone type. The survey also highlights long-standing digital divides along demographic lines: Higher-income, more-educated and younger people are consistently more likely to use the internet, own a smartphone and engage in social networking.

Internet use increases across sub-Saharan Africa; share with a smartphone doubles

Globally, internet use is much more common in wealthier countries. The percentage of people who are online in each country is highly correlated with countries' gross domestic product per capita (PPP). Regionally, internet use is lowest in sub-Saharan Africa, where a median of 41% across six countries use the internet. South Africa (59%) is the only country in the region where at least half the population is online.

Sub-Saharan Africa lags behind wealthier regions in terms of internet use

Adults who use the internet at least occasionally or report owning a smartphone



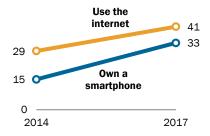
Note: GDP per capita data not available for Venezuela. Percentages based on total sample. Source: Spring 2017 Global Attitudes Survey. Q63 & Q65. U.S. data from a Pew Research Center survey conducted Jan. 3-10, 2018. China data from 2016 Global Attitudes Survey. GDP data from the World Bank accessed June 2, 2017 (China data accessed May 30, 2018).

Still, the gap in internet use between emerging and advanced economies has narrowed. Whereas internet use in many of the world's advanced economies has plateaued in recent years, use in sub-Saharan Africa has notably increased. In 2014, 15% of sub-Saharan Africans owned a smartphone, compared with 33% who own one today. The number of people connected to the internet is likely to continue to rise, too; industry projections suggest that the smartphone adoption rate in sub-Saharan Africa will double by 2025.

Internet use, smartphone ownership increase across sub-Saharan Africa, but mobile phone ownership holds steady

Adults who ...





Note: Percentages are six-country medians based on total sample in Ghana, Kenya, Nigeria, Senegal, South Africa and Tanzania. Internet users include people who use the internet at least occasionally or who own smartphones.

Source: Spring 2017 Global Attitudes Survey. Q63, Q64 & Q65.

Socializing is the most popular form of internet activity

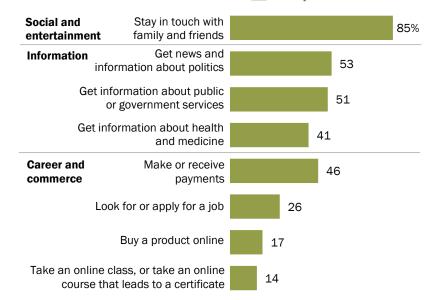
As people across the region get online, new opportunities emerge to use the internet for education, for business or to communicate with their social networks.

Sub-Saharan Africans are farand-away most likely to use the internet for this last purpose: staying in touch with their family and friends. More than eight-in-ten internet users say they have used the internet for this purpose over the past year.

While less common than keeping in touch with the people in their lives, around half of online sub-Saharan Africans use the internet to get news and information about politics (median of 53% of

For internet users in sub-Saharan Africa, staying in touch with family and friends is most common activity

Adult internet users who used the internet to ___ in the past 12 months



Note: Percentages are six-country medians based on internet users in Ghana, Kenya, Nigeria, Senegal, South Africa and Tanzania. Internet users include people who use the internet at least occasionally or who own smartphones.

Source: Spring 2017 Global Attitudes Survey. Q70a-h.

PEW RESEARCH CENTER

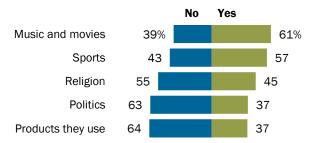
internet users) or public or government services (51%). Another four-in-ten use it to access information about health and medicine (41%).

Comparatively few people have used the internet in the past year to look or apply for a job (26%) or to take an online class (14%). Even online shopping – a <u>very common activity in the U.S.</u> – remains somewhat limited in sub-Saharan Africa (17%).

On social media, too, most people are gravitating toward social activities over political, religious or commercial ones. Among the minority of sub-Saharan Africans who use social media (ranging from 43% in South Africa to 20% in Tanzania), more say they share their views on entertainment-related topics like music, movies and sports than say they post about politics, religion or products they enjoy.

Most social media users in sub-Saharan Africa post about entertainment, not religion or politics

Adult social media users who ever use the sites to share their views about ...



Note: Percentages are six-country medians based on social media users in Ghana, Kenya, Nigeria, Senegal, South Africa and Tanzania. Source: Spring 2017 Global Attitudes Survey. Q73a-e.

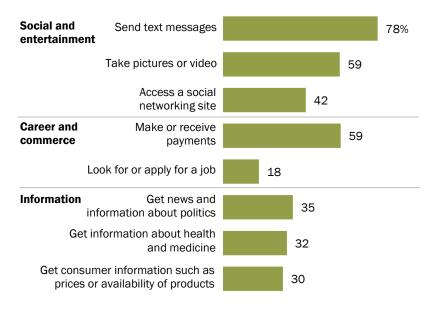
On phones, focus is entertainment, mobile payments

Sub-Saharan Africans are more likely to use their mobile devices – whether smartphones or not – for social and entertainment purposes than for information-seeking or career- and commerce-related activities. Across the region, a majority of phone owners are using their devices to send text messages and to take pictures or video. Around four-in-ten phone owners also use their mobile phones to access social networking sites.

Another very popular phonebased activity is making or receiving payments. Around six-in-ten mobile phone owners have used their devices for this type of online banking over the past year, ranging

Mobile phone owners in sub-Saharan Africa tend toward social activities, mobile banking

Adult mobile phone owners who have used a phone to __ in the past 12 months



Note: Percentages are six-country medians based on mobile phone owners in Ghana, Kenya, Nigeria, Senegal, South Africa and Tanzania.

Source: Spring 2017 Global Attitudes Survey. Q68a-h.

PEW RESEARCH CENTER

from a high of 83% in Kenya (where M-Pesa is a dominant force) to a low of 34% in Nigeria.

Outside of banking, though, relatively few people use their phones for other career and commerce activities, like looking for or applying for jobs. Information-seeking activities are also less popular: Only around a third of mobile phone owners say they have used their mobile device over the past year to get news and information about politics, health or prices and products.

Phone type heavily shapes what people do on their devices

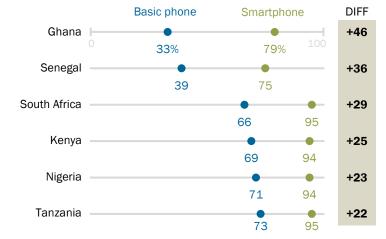
Social activities and sending and receiving money are some of the most common mobile phone-based activities because they can be done both from a basic phone – one that does not connect to the internet – or from a smartphone. But even though they *can* be done at equal rates, people with smartphones are much more likely to use their phones for these types of activities.

Take, for example, sending text messages. Those who have mobile devices that connect to the internet are *much* more likely to text their network than those with a basic phone. In Ghana, the difference is particularly stark: 79% of smartphone users have texted over the past year, compared with only a third of basic phone users.

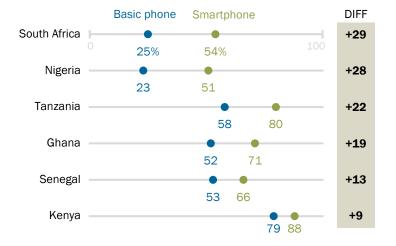
Similarly, while mobile phones are a very important tool for

Sub-Saharan Africans are more likely to send texts, use mobile payment services on smartphones

Adult mobile phone owners who have used a phone to send text messages in the past 12 months



Adult mobile phone owners who have used a phone to make or receive mobile payments in the past 12 months



Note: Percentages based on mobile phone owners. Significant differences shown in **bold**. Source: Spring 2017 Global Attitudes Survey. Q68a & Q68g.

PEW RESEARCH CENTER

helping poorer people gain access to needed <u>financial services</u>, people are much more likely to use their phones to make or receive payments if they are internet-enabled. For example, in South Africa, more than half of those who have smartphones use their phones for mobile payments, whereas only a quarter of those with basic phones do the same.

Smartphone users and basic phone users also differ in other key ways. People who are more educated, more affluent and younger are more likely to use smartphones than others. Smartphone users are also more likely to say the internet is having a positive impact on society.

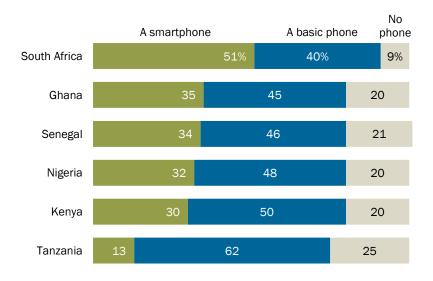
1. Majorities in sub-Saharan Africa own mobile phones, but smartphone adoption is modest

Large majorities in all six sub-Saharan countries surveyed own mobile phones. Ownership is highest in South Africa, where about nine-inten adults own a mobile device, and lowest in Tanzania, where threequarters own a phone.

Basic phones – such as flip phones or feature phones – are generally the most common type of mobile device owned by sub-Saharan Africans. The exception is in South Africa, where 51% own a smartphone that can access the internet and apps, making it the most common device in that country. In Ghana, Senegal, Nigeria and Kenya,

Majorities across sub-Saharan Africa own a mobile phone; basic phones are most common type

Adults who report owning ...



Note: Percentages based on total sample. Source: Spring 2017 Global Attitudes Survey. 064 & 065.

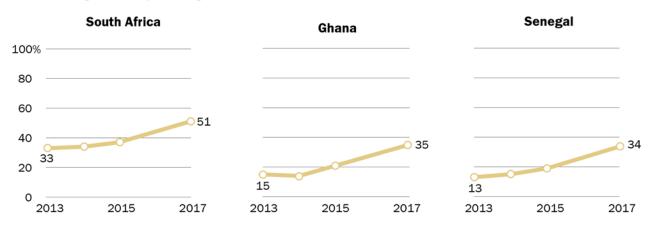
PEW RESEARCH CENTER

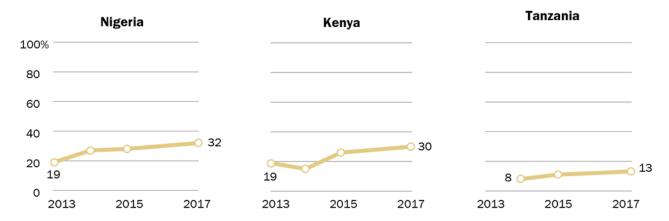
just about one-third of adults own smartphones. Smartphone ownership is again lowest in Tanzania (13%). For comparison, <u>77% of Americans reported owning a smartphone</u> in January 2018. Worldwide, sub-Saharan Africa has the <u>lowest rate of smartphone ownership of any geographic region</u>.

But <u>smartphone ownership is increasing across much of the developing world</u>, including in sub-Saharan Africa. For example, 34% of Senegalese adults now report owning a smartphone, up from just 13% in 2013, the first year the question was asked. From 2013 to 2017, smartphone ownership also increased significantly in Ghana, South Africa, Nigeria and Kenya. Smartphone ownership has remained relatively stable – and low – in Tanzania since 2014, when the question was first posed there.

Smartphone ownership increasing across sub-Saharan Africa

Adults who report owning a smartphone





Note: Percentages based on total sample. Source: Spring 2017 Global Attitudes Survey. Q65.

Ownership and usage gaps are particularly pronounced for smartphones

Even as mobile phones and smartphones have become more ubiquitous across much of sub-Saharan Africa, important educational, financial and generational divides in ownership remain. Gender gaps also persist in some countries.

In all six sub-Saharan African countries surveyed, people with more education are more likely to own any type of mobile phone, including smartphones. For example, in Kenya, 95% of more-educated people – meaning those with a secondary education or more – own mobile phones, compared with 74% of people with less than a secondary education.

Even larger educational gaps appear for smartphone ownership in all countries.

Looking again at Kenya, 62% of more-educated Kenyans own smartphones, compared with just 18% of those with less education. Similarly, wealthier people in most countries are more likely to own mobile phones of all types – but the gap

Large educational divides in both mobile phone and smartphone ownership across sub-Saharan Africa

Adults who report owning a mobile phone or smartphone

	Own n	nobile pho	ne	Own		
	Less education	More education	DIFF	Less education	More education	DIFF
	%	%		%	%	
Nigeria	59	90	+31	8	44	+36
Senegal	75	96	+21	27	66	+39
Kenya	74	95	+21	18	62	+44
Ghana	75	94	+19	25	66	+41
Tanzania	72	90	+18	6	47	+41
South Africa	88	95	+7	34	75	+41

Note: The lower education category is below secondary education and the higher category is secondary or above. Percentages based on total sample. Significant differences shown in **bold**.

Source: Spring 2017 Global Attitudes Survey. Q64 & Q65.

PEW RESEARCH CENTER

Higher-income sub-Saharan Africans more likely to own mobile phones, particularly smartphones

Adults who report owning a mobile phone or smartphone

	Own n	nobile pho	ne	Own smartphone					
	Lower income	Higher income	DIFF	Lower income	Higher income	DIFF			
	%	%		%	%				
Nigeria	74	92	+18	24	47	+23			
Senegal	74	88	+14	23	48	+25			
Ghana	70	82	+12	24	38	+14			
South Africa	87	95	+8	37	67	+30			
Kenya	79	86	+7	24	43	+19			
Tanzania	73	79	+6	6	18	+12			

Note: Respondents with a household income below the approximate country median are considered lower income. Those with an income at or above the approximate country median are considered higher income. Percentages based on total sample. Significant differences shown in **bold**.

Source: Spring 2017 Global Attitudes Survey. Q64 & Q65.

¹ For the purpose of comparing education groups across countries, we standardize education levels based on the United Nations' International Standard Classification of Education. In sub-Saharan Africa, the lower education category is below secondary education and the higher category is secondary or above.

is particularly large when it comes to *smartphone* ownership.² People with higher incomes are much more likely than those with lower incomes to own smartphones. The gap between richer and poorer is highest in South Africa, where 67% of higher-income people own a smartphone, compared with just 37% of lower-income people.

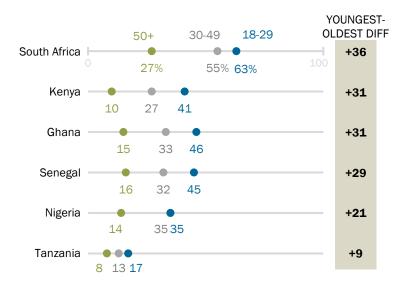
In four of the six countries, adults ages 50 and older are just as likely to own mobile phones as adults younger than 30. The two exceptions are Ghana and South Africa, where older people (71% and 85%, respectively) are less likely than younger people (83% and 93%) to own mobile phones.

But while mobile phone ownership is generally distributed evenly across age groups, the same is not true of smartphone ownership. In all six countries, people ages 18 to 29 are more likely to own smartphones than people ages 50 and older. These differences are often quite substantial; for example, in Kenya, about four-in-ten of those under 30 (41%) have these internetenabled devices, compared with just 10% of people ages 50 and older.

In four of the six sub-Saharan African countries surveyed – Ghana, Nigeria,

Smartphone ownership more common among younger sub-Saharan Africans

Adults who report owning a smartphone



Note: Percentages based on total sample. Significant differences shown in **bold**. Source: Spring 2017 Global Attitudes Survey. Q65.

PEW RESEARCH CENTER

Senegal and Tanzania – men are at least 11 percentage points more likely to own a mobile device. Similar gender divides in smartphone ownership exist in Ghana, Kenya, Nigeria and Tanzania, with men again being more likely to own smart devices. Among countries with significant gender differences, the gaps in smartphone ownership range from 6 points in Tanzania to 15 points in

² Respondents with a household income below the approximate country median are considered lower income. Those with an income at or above the approximate country median are considered higher income.

Ghana. For more on these demographic differences in mobile phone and smartphone ownership, see the detailed tables in <u>Appendix A</u>.

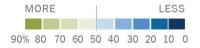
Among those with phones, social and entertainment activities are most common

Among mobile phone owners – both basic and smartphone – social and entertainment activities are much more common than other uses of mobile phones, such as looking up information.

Text messaging stands out as one of the most common mobile activities. In every country surveyed, more than half of mobile phone owners report using their phone to send text messages during the past year. But popularity of texting still varies widely, from 82% of mobile phone owners in South Africa who text to 53% in Ghana. Taking photos and videos is also popular: In five of the six countries, half or more mobile phone owners say they have taken pictures over the past year. In Tanzania, however, only 41% of mobile phone owners say they take photos or videos.

Text messaging, making payments and taking photos are the most popular mobile activities in sub-Saharan Africa

Adult mobile phone owners who have used a phone to ___ in the past 12 months



	SOCIAL	AND ENTERTA	NMENT	CAREER AND	COMMERCE	INFORMATION				
	Tak Send text pictu messages or vic		Access social media	Make or receive payments	Look for or apply for a job	Get news about politics	Get health information	Get information about prices		
Ghana	53%	61	39	60	13	34	25	23		
Kenya	78	56	82	83	34	40	39	43		
Nigeria	80	64	44	34	17	44	32	33		
Senegal	54	51	37	58	19	35	32	23		
South Africa	82	70	51	41	35	35	38	35		
Tanzania	77	41	28	62	14	34	25	27		
MEDIAN	78	59	42	59	18	35	32	30		

Note: Percentages based on mobile phone owners. Source: Spring 2017 Global Attitudes Survey. Q68a-h.

The most popular commerce- or career-related activity among mobile phone owners is mobile payments. In four of the six countries, at least half of mobile phone owners say they have used their phone to send or receive money over the past year. This activity is particularly common among Kenyan mobile owners: 83% report making or receiving mobile payments on their phone. Across the region, far fewer people use their phones to look for or apply for jobs (median of 18% of mobile phone users).

Most sub-Saharan African mobile owners are not using their phones to look up news and information. Only about one-third say they use their phone to look up information about politics (35%), health and medicine (32%) or consumer goods and prices (30%).

Men are significantly more likely than women to engage in two of these three information-seeking behaviors: getting news and information about politics and looking up consumer information. But men and women are equally likely to engage in all other activities, with some variation within countries.

Differences are much starker when it comes to socioeconomics and age. Younger, higher income and more educated mobile phone owners tend to engage more in almost all activities on their phones.

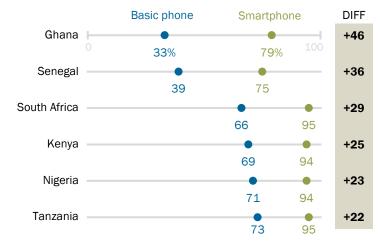
Some of these gaps may be attributable to the different types of mobile devices they own. Many activities, like accessing social media websites, are more readily done via smartphone than basic phone. However, other activities can be accomplished via even the most basic of phones. But smartphone owners tend to engage in even these simple activities more than basic phone owners.

For example, text messaging is easily accomplished on both basic and smart devices. In South Africa, while nearly all smartphone owners (95%) say they have used their phone to send text messages, only 66% of basic phone owners say the same. South Africa's smartphone owners (54%) are also more likely than basic phone owners (25%) to make or receive payments via mobile phone, which is another activity that is readily done on any type of device.

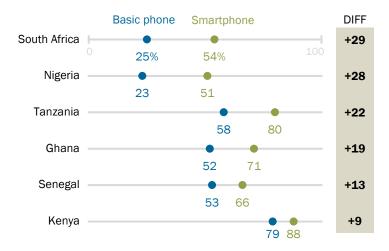
Kenya stands out as a country where even a large majority of basic phone owners (79%) report using their device to send or receive money, along with 88% of smartphone owners. These similarly high rates of mobile moneytransferring could be due to the massive popularity of the M-Pesa service in Kenya. This service allows mobile users whether on a basic phone or smartphone - to use text messages to pay for goods and services or to receive money

Sub-Saharan Africans more likely to send texts, use mobile payment services on smartphones

Adult mobile phone owners who have used a phone to send text messages in the past 12 months



Adult mobile phone owners who have used a phone to make or receive mobile payments in the past 12 months



Note: Percentages based on mobile phone owners. Significant differences shown in **bold**. Source: Spring 2017 Global Attitudes Survey. Q68a & Q68g.

PEW RESEARCH CENTER

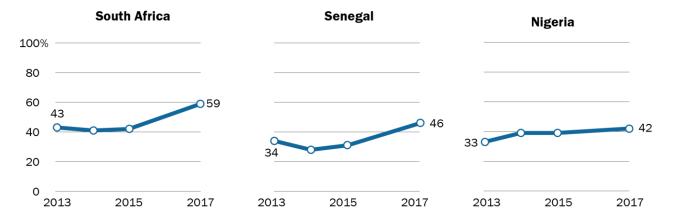
from other users. As of 2017, M-Pesa had about 20 million registered users in Kenya, and its transactions amounted to <u>almost half of the country's gross domestic product</u>.

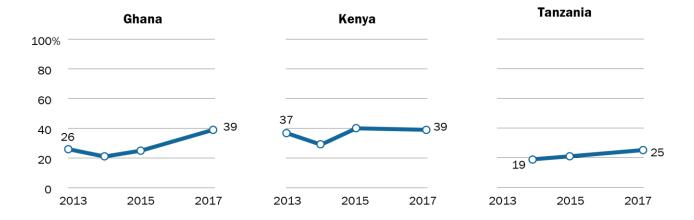
2. Internet use is growing across much of sub-Saharan Africa, but most are still offline

Across the six sub-Saharan African countries surveyed, a median of 41% say they use the internet occasionally or own an internet-capable smartphone. Sub-Saharan Africa has a lower level of internet use than any other geographic region, ranging from a high of 59% in South Africa to a low of 25% in Tanzania. For comparison, 89% of Americans said they use the internet in a January 2018 Pew Research Center survey.

Internet use increasing across sub-Saharan Africa

Adults who use the internet at least occasionally or report owning a smartphone





Notes: Percentages based on total sample. Source: Spring 2017 Global Attitudes Survey. Q63 & Q65.

While internet use among many of the world's advanced economies has <u>plateaued in recent years</u>, internet use has increased in Ghana, Nigeria, Senegal and South Africa since 2013, and in Tanzania since 2014. For example, 26% of Ghanaians reported using the internet in 2013, compared with 39% in 2017. Usage rates in Kenya stayed relatively stable during this time period.

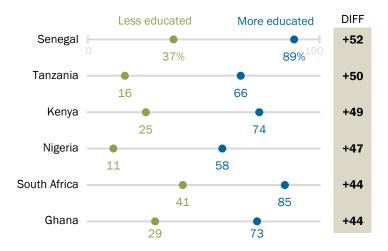
Younger, more educated, affluent sub-Saharan Africans more likely to get online

Divides in internet use are similar to those found for mobile and smartphone ownership, with more educated, younger and higher-income people being more likely to go online. In most countries, men are also more likely than women to use the internet.

In all six countries, more-educated people are *substantially* more likely to go online; the gaps in internet use between more and less educated people range from 44 percentage points in Ghana and South Africa to 52 percentage points in Senegal.³

Substantial education gaps in internet use across sub-Saharan Africa

Adults who use the internet at least occasionally or report owning a smartphone



Note: The lower education category is below secondary education and the higher category is secondary or above. Percentages based on total sample. Significant differences shown in **hold**.

Source: Spring 2017 Global Attitudes Survey. Q63 & Q65.

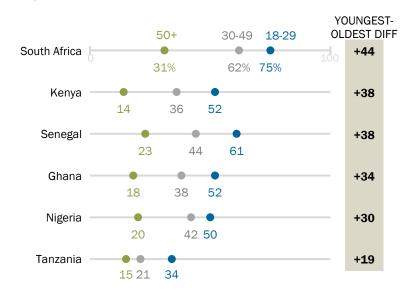
³ For the purpose of comparing education groups across countries, we standardize education levels based on the United Nations' International Standard Classification of Education. In sub-Saharan Africa, the lower education category is below secondary education and the higher category is secondary or above.

As with smartphone ownership, adults younger than 30 are more likely than those ages 50 and older to go online. In South Africa, for example, 75% of people ages 18 to 29 report using the internet, compared with only 31% of people 50 and older.

Significant income gaps in internet use also persist across sub-Saharan Africa, although these gaps are generally smaller than those for education or age. These gaps between richer and poorer people range from 12 points in Tanzania to 29 points in Senegal.⁴

Younger sub-Saharan Africans more likely than older generations to use the internet

Adults who use the internet at least occasionally or report owning a smartphone



Note: Percentages based on total sample. Significant differences shown in **bold**. Source: Spring 2017 Global Attitudes Survey. Q63 & Q65.

PEW RESEARCH CENTER

For more on these

demographic differences in internet use, see the detailed tables in Appendix A.

⁴ Respondents with a household income below the approximate country median are considered lower income. Those with an income at or above the approximate country median are considered higher income.

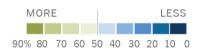
For internet users, social and entertainment activities most common on the web

Among those who go online, the most commonly reported activity is staying in touch with friends and family. A median of 85% of sub-Saharan internet users say they have used the internet to stay in touch during the past 12 months, making it by far the most popular online activity.

Information-gathering activities are somewhat less common than social activities, though some countries stand out. About half of internet users go online to access news and information about politics (a median of 53%) or to look up information about government services (51%). Only about four-in-ten (41%) report using the internet to find information about health or medicine. Kenya and Nigeria are notable as two countries in which more internet users are going online to get information: In both countries, around six-in-ten internet users say they go online to get political or government services information.

Keeping in touch with friends and families is most common online activity in sub-Saharan Africa

Adult internet users who have used the internet to __ in the past 12 months



FNT	SOCIAL AND		CAREER AND	COMMERCE	INFORMATION				
LIVI	Stay in touch with family & receive payme		Look for or apply for a job	Buy a product	Take a class	Get news and information about politics	Get information about govt. services	Get health information	
Ghana	83%	50	18	11	12	46	44	36	
Kenya	87	64	38	23	22	59	60	43	
Nigeria	84	45	31	19	13	62	60	41	
Senegal	82	35	21	14	23	49	43	38	
South Africa	86	47	43	19	15	44	44	44	
Tanzania	89	40	21	13	11	56	58	41	
MEDIAN	85	46	26	17	14	53	51	41	

Note: Percentages based on internet users. Internet users include people who use the internet at least occasionally or who own smartphones. Source: Spring 2017 Global Attitudes Survey. Q70a-h.

The least-reported online activities relate to career and commerce. While a majority of mobile phone owners are using their devices to make or receive payments, a median of just 46% of internet users are going online to do the same. Even fewer internet users are using the medium to look for work (median of 26%), buy products (17%) or take online courses (14%).

Unlike with mobile activities, older and poorer internet users are just as likely as their younger and richer counterparts to engage in all online activities asked about. However, in most countries, more-educated people are more likely use the internet to stay in touch with friends and family and to gather information, including looking up news about politics and getting health and medical information. People with more education are also more likely to use the internet to look for or apply for a job.

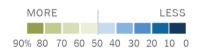
Men and women tend to engage in online activities at similar rates; however, in all countries, male internet users are also more likely than female users to look for news and information about politics online.

On social media, sub-Saharan Africans post more about entertainment than other topics

More than three-quarters of sub-Saharan Africans who go online also use social media sites. As with internet use, social media use is much more common among younger people, higher earners and those with more education. In every country but South Africa, male internet users are at least 13 percentage points more likely than female internet users to use social networking sites.

Entertainment and sports are most popular topics of discussion on social media in sub-Saharan Africa

Adult social media users who ever use the sites to share their views about ...



	Music and movies	Sports	Religion	Politics	Products they use
Ghana	67%	52	55	37	29
Kenya	61	61	43	49	43
Nigeria	60	57	47	47	38
Senegal	49	61	50	37	35
South Africa	72	56	40	34	41
Tanzania	52	55	30	30	28
MEDIAN	61	57	45	37	37

Note: Percentages based on social media users. Source: Spring 2017 Global Attitudes Survey. Q73a-e.

Social media users are much more likely to use these sites to share their views about entertainment topics than about other issues. For example, majorities of social media users say they use social media to share their views about music and movies (a median of 61%) and sports (57%). Far fewer post about religion (45%), politics (37%) or products they use (37%).

3. Sub-Saharan Africans say internet use has positively impacted education, personal relationships and economy

Sub-Saharan Africans generally feel that the internet has had a positive impact on many aspects of society, including education, the economy and personal relationships. They are less certain of the internet's impact on politics and morality.

In all six countries surveyed, majorities say that internet use has positively impacted education in their country. Nigerians are particularly optimistic about the internet's influence: Nearly nine-inten (88%) say it has had a good influence on education. In four of the countries, the number of people saying the internet has positively impacted education has risen since 2014, when the question was last asked. For example, while 81% of South Africans now say internet use has had a positive effect on education, just 68% said the same back in 2014. The number of people saying increasing internet use has had a good influence on education also rose by 7 percentage points or more in Ghana, Senegal and Tanzania since 2014.

Most sub-Saharan Africans say the internet has positively impacted education, the economy and personal relationships

The increasing use of the internet has had a good influence on ___ in our country

	Education	The economy	Personal relationships	Politics	Morality
Ghana	80%	61	70	53	42
Kenya	68	54	61	42	43
Nigeria	88	76	80	64	57
Senegal	61	60	62	48	27
South Africa	81	64	56	50	48
Tanzania	78	71	61	60	47
MEDIAN	79	63	62	52	45

Note: Percentages based on total sample. Source: Spring 2017 Global Attitudes Survey. Q74a-e.

Half or more in every sub-Saharan African country surveyed also view the internet's economic impact in a good light. Nigerians are again the most positive, with about three-quarters (76%) saying the internet has had a good influence on their nation's economy. Kenyans are less certain: 54% say the impact has been positive, and 26% say it has been negative. In four of the six countries surveyed, the percentage of people saying the internet has provided economic benefits has risen by 8 points or more since 2014. For example, while a majority of Ghanaians (61%) now say the internet has helped their country's economy, that number was just 43% in 2014.

In every country but Kenya, about half or more say the internet has had a good influence on their country's politics. The percentage of people saying the internet has affected politics in a positive way ranges from 64% in Nigeria to just 42% in Kenya. But people's opinions on how the internet impacts politics have improved since 2014, when the question was last posed in four of the countries. For example, in 2014 just 33% of Ghanaians said the increasing use of the internet positively influences politics, compared with 53% in 2017. Opinion has also improved substantially in Nigeria (up 21 points), South Africa (14 points) and Senegal (11 points).

However, Africans are more divided about how internet use has impacted morality: A median of 45% say it has had a good influence, while a 39% median say it has had a bad influence. Nigerians (57%) are most likely to say the internet has positively affected morality in their country. The Senegalese are the most downbeat about its impact; more than half (54%) view

More sub-Saharan Africans say internet use positively influences politics

The increasing use of the internet has had a good influence on politics in our country

	2014	2017	DIFF
	%	%	
Nigeria	43	64	+21
Ghana	33	53	+20
South Africa	36	50	+14
Senegal	37	48	+11

Note: Question not asked in Kenya and Tanzania in 2014. Percentages based on total sample. Significant differences shown in **bold**.

Source: Spring 2017 Global Attitudes Survey. Q74b.

PEW RESEARCH CENTER

the internet as a bad influence on morality in their country. This question was last posed to four of the six countries in 2014; since then, Ghanaians' and Nigerians' opinions of the internet's impact on morality have improved by 13 points and 7 points, respectively.

Across the countries surveyed, internet users are generally more likely than non-users to say that the internet has positively impacted society. For example, 53% of South African internet users say the internet has had a good influence on morality in their country, compared with just 42% of non-users.

Older and younger people express similar views about how internet use has influenced their country. Gender, income and education are also not important factors in determining how someone feels about the impact of the internet.

Acknowledgments

This report is a collaborative effort based on the input and analysis of the following individuals.

Laura Silver, Senior Researcher Courtney Johnson, Research Associate

James Bell, Vice President, Global Strategy

Alexandra Castillo, Research Associate

Stefan Cornibert, Communications Manager

Claudia Deane, Vice President, Research

Kat Devlin, Research Associate

Moira Fagan, Research Assistant

Janell Fetterolf, Research Associate

Christine Huang, Research Assistant

Michael Keegan, Information Graphics Designer

David Kent, Copy Editor

Clark Letterman, Senior Researcher

Martha McRoy, Research Methodologist

Patrick Moynihan, Associate Director, International Research Methods

Jacob Poushter, Senior Researcher

Audrey Powers, Senior Operations Associate

Ariana Rodriguez-Gitler, Digital Producer

Bruce Stokes, Director, Global Economic Attitudes

Christine Tamir, Research Assistant

Kyle Taylor, Research Analyst

Richard Wike, Director, Global Attitudes Research

Methodology

About Pew Research Center's Spring 2017 Global Attitudes Survey

Results for the survey are based on face-to-face interviews conducted under the direction of ORB International. The results are based on national samples unless otherwise noted. More details about our international survey methodology and country-specific sample designs are <u>available</u> <u>here</u>.

Detailed information on survey methods for this report

General information on international survey research

Appendix A: Detailed demographic tables

Mobile phone ownership more common among men and people with more education, higher income

Adults who report owning a mobile phone

		(Gender		Age					ducation	*	Income * *		
	TOTAL	Women	Men	DIFF	18-29	30-49	50+	YOUNGEST -OLDEST DIFF	Less	More	DIFF	Lower	Higher	DIFF
	%	%	%		%	%	%		%	%		%	%	
Ghana	80	74	86	+12	83	80	71	+12	75	94	+19	70	82	+12
Kenya	80	78	82	+4	80	83	75	+5	74	95	+21	79	86	+7
Nigeria	80	71	88	+17	80	81	75	+5	59	90	+31	74	92	+18
Senegal	79	74	85	+11	80	81	74	+6	75	96	+21	74	88	+14
South Africa	91	91	91	+0	93	93	85	+8	88	95	+7	87	95	+8
Tanzania	75	70	82	+12	72	81	71	+1	72	90	+18	73	79	+6

^{*}For the purpose of comparing education groups across countries, we standardize education levels based on the United Nations' International Standard Classification of Education. In sub-Saharan Africa, the lower education category is below secondary education and the higher category is secondary or above.

Note: Percentages based on total sample. Significant differences shown in **bold**.

Source: Spring 2017 Global Attitudes Survey. Q64.

PEW RESEARCH CENTER

Younger, more educated and higher income Africans more likely to own smartphones

Adults who report owning a smartphone

		G	ender			Education*			Income**					
	TOTAL	Women	Men	DIFF	18-29	30-49	50+	YOUNGEST -OLDEST DIFF	Less	More	DIFF	Lower	Higher	DIFF
	%	%	%		%	%	%		%	%		%	%	
Ghana	35	28	43	+15	46	33	15	+31	25	66	+41	24	38	+14
Kenya	30	24	37	+13	41	27	10	+31	18	62	+44	24	43	+19
Nigeria	32	27	36	+9	35	35	14	+21	8	44	+36	24	47	+23
Senegal	34	31	36	+5	45	32	16	+29	27	66	+39	23	48	+25
South Africa	51	48	54	+6	63	55	27	+36	34	75	+41	37	67	+30
Tanzania	13	10	16	+6	17	13	8	+9	6	47	+41	6	18	+12

^{*} For the purpose of comparing education groups across countries, we standardize education levels based on the United Nations' International Standard Classification of Education. In sub-Saharan Africa, the lower education category is below secondary education and the higher category is secondary or above.

Note: Percentages based on total sample. Significant differences shown in **bold**.

Source: Spring 2017 Global Attitudes Survey. Q65.

^{**}Respondents with a household income below the approximate country median are considered lower income. Those with an income at or above the approximate country median are considered higher income.

^{**}Respondents with a household income below the approximate country median are considered lower income. Those with an income at or above the approximate country median are considered higher income.

Across countries, young people and those with more education, higher income more likely to go online

Adults who use the internet or own a smartphone

		(Gender			Age				Education*			Income**		
		Women		DIFF	18-29	30-49	50+	YOUNGEST -OLDEST DIFF	Less	More	DIFF		Higher	DIFF	
	%	%	%		%	%	%		%	%		%	%		
Ghana	39	32	48	+16	52	38	18	+34	29	73	+44	29	43	+14	
Kenya	39	31	48	+17	52	36	14	+38	25	74	+49	34	51	+17	
Nigeria	42	34	50	+16	50	42	20	+30	11	58	+47	34	59	+25	
Senegal	46	41	52	+11	61	44	23	+38	37	89	+52	34	63	+29	
South Africa	59	57	61	+4	75	62	31	+44	41	85	+44	47	73	+26	
Tanzania	25	19	31	+12	34	21	15	+19	16	66	+50	19	31	+12	

^{*}For the purpose of comparing education groups across countries, we standardize education levels based on the United Nations' International Standard Classification of Education. In sub-Saharan Africa, the lower education category is below secondary education and the higher category is secondary or above.

Note: Percentages based on total sample. Significant differences shown in **bold**..

Source: Spring 2017 Global Attitudes Survey. Q63 & Q65.

PEW RESEARCH CENTER

Men, younger people, and those with more education and income more likely to use social media websites

Adults who use social media

		G	ender		Age				Education*			Income**		
	TOTAL	Women %	Men %	DIFF	18-29 %	30-49 %	50+	YOUNGEST -OLDEST DIFF	Less %	More %	DIFF	Lower	Higher %	DIFF
Ghana	32	23	42	+19	48	26	11	+37	21	66	+45	21	34	+13
Kenya	30	23	38	+15	44	24	6	+38	15	67	+52	24	42	+18
Nigeria	35	28	41	+13	43	33	16	+27	5	50	+45	27	51	+24
Senegal	35	28	43	+15	50	32	13	+37	25	83	+58	24	48	+24
South Africa	43	41	45	+4	61	43	15	+46	27	65	+38	31	56	+25
Tanzania	20	14	27	+13	29	16	10	+19	11	62	+51	13	27	+14

^{*} For the purpose of comparing education groups across countries, we standardize education levels based on the United Nations' International Standard Classification of Education. In sub-Saharan Africa, the lower education category is below secondary education and the higher category is secondary or above.

Note: Percentages based on total sample. Significant differences shown in bold.

Source: Spring 2017 Global Attitudes Survey. Q71.

^{**}Respondents with a household income below the approximate country median are considered lower income. Those with an income at or above the approximate country median are considered higher income.

^{**}Respondents with a household income below the approximate country median are considered lower income. Those with an income at or above the approximate country median are considered higher income.

Appendix B: Country-specific examples of smartphones

Country-specific examples of smartphones

Some cellphones are called "smartphones" because they can access the internet and apps. Is your cellphone a smartphone, such as an ___?

Ghana iPhone, Android, Blackberry, Windows phone
Kenya iPhone, Android, Blackberry, Windows phone
Nigeria iPhone, Android, Blackberry, Windows phone
Senegal iPhone, Android, Blackberry, Windows phone
South Africa iPhone, Android, Blackberry, Windows phone
Tanzania iPhone, Android, Blackberry, Windows phone

Source: Spring 2017 Global Attitudes Survey. Q65.

Appendix C: Country-specific examples of social media

Country-specific examples of social media

Do you ever use online social networking sites like ...?

Ghana Facebook, Twitter, Instagram, LinkedIn, Hi5, Badoo, WhatsApp, YouTube, SnapChat or Skype

Kenya Facebook, Twitter or WhatsApp

Nigeria Facebook, Twitter, Instagram, Linda Ikeji Social or LinkedIn

Senegal Facebook or Twitter

South Africa Facebook, Twitter, Instagram or Pinterest Tanzania Facebook, Twitter, Instagram or Pinterest

Source: Spring 2017 Global Attitudes Survey. Q71.

Topline Questionnaire

Pew Research Center Spring 2017 Survey October 9, 2018 Release

Methodological notes:

- Survey results are based on national samples. For further details on sample designs, see Methodology section and our <u>international survey methods database</u>.
- Due to rounding, percentages may not total 100%. The topline "total" columns show 100%, because they are based on unrounded numbers.
- For some countries, trends for certain years are omitted due to differences in sample design or population coverage. Omitted trends often reflect less representative samples than more recent surveys in the same countries. Trends that are omitted include:
 - Senegal prior to 2013
 - Nigeria prior to 2010
 - South Africa in 2007
- Not all questions included in the Spring 2017 survey are presented in this topline. All other questions from this survey can be found in our <u>Spring 2017 dataset</u>.

		Q63. Do you use the internet, at least occasionally?					
		Yes	No	DK/Refused	Total		
Ghana	Spring, 2017	30	69	1	100		
	Spring, 2015	22	78	0	100		
	Spring, 2014	19	81	0	100		
	Spring, 2013	23	77	0	100		
	Spring, 2007	20	74	5	100		
Kenya	Spring, 2017	32	67	2	100		
	Spring, 2016	37	62	1	100		
	Spring, 2015	36	64	0	100		
	Spring, 2014	29	71	0	100		
	Spring, 2013	33	67	0	100		
	Spring, 2011	27	72	1	100		
	Spring, 2010	24	76	0	100		
	Spring, 2007	11	88	1	100		
Nigeria	Spring, 2017	37	63	0	100		
	Spring, 2016	45	55	0	100		
	Spring, 2015	36	64	0	100		
	Spring, 2014	35	64	1	100		
	Spring, 2013	31	68	1	100		
	Spring, 2010	22	78	0	100		
Senegal	Spring, 2017	39	59	2	100		
	Spring, 2015	27	73	0	100		
	Spring, 2014	28	72	0	100		
	Spring, 2013	31	67	2	100		
South Africa	Spring, 2017	48	52	0	100		
	Spring, 2016	51	48	1	100		
	Spring, 2015	35	64	1	100		
	Spring, 2014	33	66	1	100		
	Spring, 2013	34	64	2	100		
Tanzania	Spring, 2017	23	75	1	100		
	Spring, 2015	20	80	0	100		
	Spring, 2014	18	81	1	100		
	Spring, 2007	5	90	4	100		

		Q64. Do you own a cell phone?				
		Yes	No	DK/Refused	Total	
Ghana	Spring, 2017	80	20	0	100	
	Spring, 2015	75	25	0	100	
	Spring, 2014	83	17	0	100	
	Spring, 2013	79	21	1	100	
	Spring, 2007	34	66	0	100	
	Summer, 2002	8	91	1	100	
Kenya	Spring, 2017	80	20	0	100	
	Spring, 2016	80	20	0	100	
	Spring, 2015	82	18	0	100	
	Spring, 2014	82	18	0	100	
	Spring, 2013	82	18	0	100	
	Spring, 2011	74	25	0	100	
	Spring, 2010	65	35	0	100	
	Spring, 2007	33	66	1	100	
	Summer, 2002	9	91	0	100	
Nigeria	Spring, 2017	80	20	0	100	
	Spring, 2016	87	13	0	100	
	Spring, 2015	89	11	0	100	
	Spring, 2014	89	11	0	100	
	Spring, 2013	78	21	0	100	
	Spring, 2010	74	26	0	100	
Senegal	Spring, 2017	79	21	0	100	
	Spring, 2015	83	17	0	100	
	Spring, 2014	83	17	0	100	
	Spring, 2013	81	19	0	100	
South Africa	Spring, 2017	91	9	0	100	
	Spring, 2016	92	8	0	100	
	Spring, 2015	89	10	1	100	
	Spring, 2014	89	10	0	100	
	Spring, 2013	91	9	0	100	
	Summer, 2002	33	67	0	100	
Tanzania	Spring, 2017	75	25	0	100	
	Spring, 2015	73	27	0	100	
	Spring, 2014	73	27	0	100	
	Spring, 2007	42	58	0	100	
	Summer, 2002	10	90	0	100	

		Q65. ASK ALL MOBILE PHONE OWNERS ONLY: Some mobile phones are called "smartphones" because they can access the internet and apps. Is your mobile phone a smartphone, such as an iPhone, Android, (INSERT COUNTRY SPECIFIC EXAMPLES)?					
		Yes, smartphone	No, not a smartphone	DK/Refused	Total	N=	
Ghana	Spring, 2017	44	55	1	100	952	
	Spring, 2015	28	71	1	100	747	
	Spring, 2014	17	81	2	100	844	
	Spring, 2013	19	79	2	100	663	
Kenya	Spring, 2017	38	62	1	100	957	
	Spring, 2016	41	58	1	100	977	
	Spring, 2015	32	68	0	100	874	
	Spring, 2014	19	81	0	100	869	
	Spring, 2013	23	76	1	100	675	
Nigeria	Spring, 2017	40	60	0	100	894	
	Spring, 2016	48	52	0	100	957	
	Spring, 2015	31	69	0	100	943	
	Spring, 2014	30	69	1	100	912	
	Spring, 2013	24	75	1	100	829	
Senegal	Spring, 2017	43	57	1	100	843	
	Spring, 2015	23	76	0	100	827	
	Spring, 2014	18	81	1	100	833	
	Spring, 2013	16	82	3	100	649	
South Africa	Spring, 2017	56	44	0	100	1194	
	Spring, 2016	60	40	0	100	1043	
	Spring, 2015	42	57	1	100	904	
	Spring, 2014	38	60	2	100	909	
	Spring, 2013	36	63	1	100	741	
Tanzania	Spring, 2017	18	82	0	100	826	
	Spring, 2015	15	85	1	100	729	
	Spring, 2014	10	89	1	100	762	

In previous years, question asked '...Is your cell phone a smartphone, such as an iPhone, a Blackberry, (INSERT COUNTRY SPECIFIC EXAMPLES; PLEASE INCLUDE AN ANDROID EXAMPLE IN ALL COUNTRIES)?'

				WNERS ONLY: In		
		Yes	No	DK/Refused	Total	N=
Ghana	Spring, 2017	53	47	0	100	952
	Spring, 2014	51	49	0	100	844
Kenya	Spring, 2017	78	22	0	100	957
	Spring, 2014	88	12	0	100	869
Nigeria	Spring, 2017	80	20	0	100	894
	Spring, 2014	80	20	0	100	912
Senegal	Spring, 2017	54	46	0	100	843
	Spring, 2014	70	30	0	100	833
South Africa	Spring, 2017	82	18	0	100	1194
	Spring, 2014	95	5	0	100	909
Tanzania	Spring, 2017	77	23	0	100	826
	Spring, 2014	92	8	0	100	762

		Q68b. ASK ALL CELL PHONE OWNERS ONLY: In the past 12 months, have you used your cell phone to do any of the following things? b. take pictures or video					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	61	39	0	100	952	
	Spring, 2014	48	51	1	100	844	
Kenya	Spring, 2017	56	43	1	100	957	
	Spring, 2014	54	46	0	100	869	
Nigeria	Spring, 2017	64	36	0	100	894	
	Spring, 2014	57	43	0	100	912	
Senegal	Spring, 2017	51	48	0	100	843	
	Spring, 2014	50	50	0	100	833	
South Africa	Spring, 2017	70	30	0	100	1194	
	Spring, 2014	60	40	0	100	909	
Tanzania	Spring, 2017	41	59	0	100	826	
	Spring, 2014	53	47	0	100	762	

		Q68c. ASK ALL CELL PHONE OWNERS ONLY: In the past 12 months, have you used your cell phone to do any of the following things? c. gets news and information about politics					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	34	65	1	100	952	
	Spring, 2014	18	81	1	100	844	
Kenya	Spring, 2017	40	60	0	100	957	
	Spring, 2014	28	72	0	100	869	
Nigeria	Spring, 2017	44	56	0	100	894	
	Spring, 2014	28	71	1	100	912	
Senegal	Spring, 2017	35	65	0	100	843	
	Spring, 2014	19	81	0	100	833	
South Africa	Spring, 2017	35	64	1	100	1194	
	Spring, 2014	18	81	1	100	909	
Tanzania	Spring, 2017	34	65	1	100	826	
	Spring, 2014	21	78	0	100	762	

		Q68d. ASK ALL CELL PHONE OWNERS ONLY: In the past 12 months, have you used your cell phone to do any of the following things? d. access a social networking site					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	39	60	1	100	952	
	Spring, 2014	15	84	1	100	844	
Kenya	Spring, 2017	82	18	1	100	957	
	Spring, 2014	28	72	0	100	869	
Nigeria	Spring, 2017	44	56	1	100	894	
	Spring, 2014	35	65	1	100	912	
Senegal	Spring, 2017	37	61	2	100	843	
	Spring, 2014	19	80	1	100	833	
South Africa	Spring, 2017	51	48	0	100	1194	
	Spring, 2014	31	68	1	100	909	
Tanzania	Spring, 2017	28	71	1	100	826	
	Spring, 2014	19	81	0	100	762	

		Q68e. ASK ALL CELL PHONE OWNERS ONLY: In the past 12 months, have you used your cell phone to do any of the following things? e. get consumer information such as prices or availability of products					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	23	76	1	100	952	
	Spring, 2014	8	91	1	100	844	
Kenya	Spring, 2017	43	57	0	100	957	
	Spring, 2014	14	86	0	100	869	
Nigeria	Spring, 2017	33	66	1	100	894	
	Spring, 2014	14	85	1	100	912	
Senegal	Spring, 2017	23	76	1	100	843	
	Spring, 2014	14	84	1	100	833	
South Africa	Spring, 2017	35	64	1	100	1194	
	Spring, 2014	14	85	1	100	909	
Tanzania	Spring, 2017	27	72	1	100	826	
	Spring, 2014	12	88	1	100	762	

		Q68f. ASK ALL CELL PHONE OWNERS ONLY: In the past 12 months, have you used your cell phone to do any of the following things? f. get information about health and medicine for you or your family					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	25	74	1	100	952	
	Spring, 2014	11	88	1	100	844	
Kenya	Spring, 2017	39	61	0	100	957	
	Spring, 2014	19	81	0	100	869	
Nigeria	Spring, 2017	32	67	1	100	894	
	Spring, 2014	23	76	0	100	912	
Senegal	Spring, 2017	32	67	1	100	843	
	Spring, 2014	17	82	2	100	833	
South Africa	Spring, 2017	38	62	1	100	1194	
	Spring, 2014	15	84	1	100	909	
Tanzania	Spring, 2017	25	74	0	100	826	
	Spring, 2014	11	88	0	100	762	

		Q68g. ASK ALL CELL PHONE OWNERS ONLY: In the past 12 months, have you used your cell phone to do any of the following things? g. make or receive payments					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	60	39	1	100	952	
	Spring, 2014	15	84	1	100	844	
Kenya	Spring, 2017	83	17	0	100	957	
	Spring, 2014	61	39	0	100	869	
Nigeria	Spring, 2017	34	66	0	100	894	
	Spring, 2014	15	85	0	100	912	
Senegal	Spring, 2017	58	41	0	100	843	
	Spring, 2014	30	69	1	100	833	
South Africa	Spring, 2017	41	58	1	100	1194	
	Spring, 2014	15	84	0	100	909	
Tanzania	Spring, 2017	62	38	1	100	826	
	Spring, 2014	39	61	0	100	762	

		Q68h. ASK ALL CELL PHONE OWNERS ONLY: In the past 12 months, have you used your cell phone to do any of the following things? h. look for or apply for a job					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	13	86	1	100	952	
	Spring, 2014	9	89	1	100	844	
Kenya	Spring, 2017	34	66	0	100	957	
	Spring, 2014	26	74	0	100	869	
Nigeria	Spring, 2017	17	83	0	100	894	
	Spring, 2014	15	85	0	100	912	
Senegal	Spring, 2017	19	81	0	100	843	
	Spring, 2014	12	87	1	100	833	
South Africa	Spring, 2017	35	65	0	100	1194	
	Spring, 2014	19	80	1	100	909	
Tanzania	Spring, 2017	14	85	0	100	826	
	Spring, 2014	14	86	0	100	762	

		Q70a. ASK ALL INTERNET AND SMARTPHONE USERS ONLY: In the past 12 months, have you used the internet to do any of the following things? a. buy a product online					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	11	88	2	100	561	
	Spring, 2014	6	93	1	100	238	
Kenya	Spring, 2017	23	77	1	100	548	
	Spring, 2014	16	84	0	100	360	
Nigeria	Spring, 2017	19	80	1	100	496	
	Spring, 2014	11	89	0	100	463	
Senegal	Spring, 2017	14	84	2	100	492	
	Spring, 2014	12	88	0	100	277	
South Africa	Spring, 2017	19	80	1	100	869	
	Spring, 2014	14	86	0	100	452	
Tanzania	Spring, 2017	13	87	0	100	300	
	Spring, 2014	15	85	0	100	216	

		Q70b. ASK ALL INTERNET AND SMARTPHONE USERS ONLY: In the past 12 months, have you used the internet to do any of the following things? b. get news and information about politics					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	46	53	1	100	561	
	Spring, 2014	48	52	1	100	238	
Kenya	Spring, 2017	59	40	1	100	548	
	Spring, 2014	62	38	0	100	360	
Nigeria	Spring, 2017	62	38	0	100	496	
	Spring, 2014	55	45	0	100	463	
Senegal	Spring, 2017	49	50	1	100	492	
	Spring, 2014	54	46	0	100	277	
South Africa	Spring, 2017	44	55	1	100	869	
	Spring, 2014	30	70	0	100	452	
Tanzania	Spring, 2017	56	44	0	100	300	
	Spring, 2014	57	43	0	100	216	

		Q70c. ASK ALL INTERNET AND SMARTPHONE USERS ONLY: In the past 12 months, have you used the internet to do any of the following things? c. make or receive payments					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	50	49	1	100	561	
	Spring, 2014	24	75	1	100	238	
Kenya	Spring, 2017	64	35	1	100	548	
	Spring, 2014	39	61	0	100	360	
Nigeria	Spring, 2017	45	54	1	100	496	
	Spring, 2014	19	81	0	100	463	
Senegal	Spring, 2017	35	64	1	100	492	
	Spring, 2014	22	78	0	100	277	
South Africa	Spring, 2017	47	53	1	100	869	
	Spring, 2014	26	74	0	100	452	
Tanzania	Spring, 2017	40	59	1	100	300	
	Spring, 2014	42	58	0	100	216	

		Q70d. ASK ALL INTERNET AND SMARTPHONE USERS ONLY: In the past 12 months, have you used the internet to do any of the following things? d. get information about health and medicine for you or your family					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	36	62	1	100	561	
	Spring, 2014	33	66	1	100	238	
Kenya	Spring, 2017	43	56	1	100	548	
	Spring, 2014	40	60	0	100	360	
Nigeria	Spring, 2017	41	56	3	100	496	
	Spring, 2014	44	56	0	100	463	
Senegal	Spring, 2017	38	61	2	100	492	
	Spring, 2014	39	61	0	100	277	
South Africa	Spring, 2017	44	55	1	100	869	
	Spring, 2014	29	70	1	100	452	
Tanzania	Spring, 2017	41	58	1	100	300	
	Spring, 2014	32	68	0	100	216	

		Q70e. ASK ALL INTERNET AND SMARTPHONE USERS ONLY: In the past 12 months, have you used the internet to do any of the following things? e. look for or apply for a job					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	18	82	0	100	561	
	Spring, 2014	26	73	1	100	238	
Kenya	Spring, 2017	38	61	1	100	548	
	Spring, 2014	53	47	0	100	360	
Nigeria	Spring, 2017	31	68	1	100	496	
	Spring, 2014	29	71	0	100	463	
Senegal	Spring, 2017	21	78	1	100	492	
	Spring, 2014	36	64	0	100	277	
South Africa	Spring, 2017	43	57	0	100	869	
	Spring, 2014	40	59	0	100	452	
Tanzania	Spring, 2017	21	78	1	100	300	
	Spring, 2014	35	65	0	100	216	

		Q70f. ASK ALL INTERNET AND SMARTPHONE USERS ONLY: In the past 12 months, have you used the internet to do any of the following things? f. stay in touch with family and friends					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	83	17	0	100	561	
	Spring, 2014	76	23	1	100	238	
Kenya	Spring, 2017	87	13	0	100	548	
	Spring, 2014	80	19	0	100	360	
Nigeria	Spring, 2017	84	16	1	100	496	
	Spring, 2014	76	24	0	100	463	
Senegal	Spring, 2017	82	17	1	100	492	
	Spring, 2014	100	0	0	100	277	
South Africa	Spring, 2017	86	13	0	100	869	
	Spring, 2014	73	27	0	100	452	
Tanzania	Spring, 2017	89	10	1	100	300	
	Spring, 2014	87	13	0	100	216	

		Q70g. ASK ALL INTERNET AND SMARTPHONE USERS ONLY: In the past 12 months, have you used the internet to do any of the following things? g. get information about government or public services					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	44	55	1	100	561	
	Spring, 2014	30	69	1	100	238	
Kenya	Spring, 2017	60	40	0	100	548	
	Spring, 2014	49	51	0	100	360	
Nigeria	Spring, 2017	60	39	1	100	496	
	Spring, 2014	52	48	0	100	463	
Senegal	Spring, 2017	43	55	1	100	492	
	Spring, 2014	52	48	0	100	277	
South Africa	Spring, 2017	44	55	0	100	869	
	Spring, 2014	29	71	0	100	452	
Tanzania	Spring, 2017	58	41	1	100	300	
	Spring, 2014	53	47	0	100	216	

		Q70h. ASK ALL INTERNET AND SMARTPHONE USERS ONLY: In the past 12 months, have you used the internet to do any of the following things? h. take an online class or take an online course that leads to a certificate					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	12	88	0	100	561	
	Spring, 2014	11	88	1	100	238	
Kenya	Spring, 2017	22	78	0	100	548	
	Spring, 2014	11	89	0	100	360	
Nigeria	Spring, 2017	13	87	0	100	496	
	Spring, 2014	12	88	0	100	463	
Senegal	Spring, 2017	23	76	1	100	492	
	Spring, 2014	17	83	0	100	277	
South Africa	Spring, 2017	15	84	1	100	869	
	Spring, 2014	13	87	0	100	452	
Tanzania	Spring, 2017	11	89	0	100	300	
	Spring, 2014	13	87	0	100	216	

		Q71. ASK ALL INTERNET AND SMARTPHONE USERS ONLY: Do you ever use online social networking sites like Facebook, Twitter, (INSERT COUNTRY SPECIFIC EXAMPLES)?					
		Yes	No	DK/Refused	Total	N =	
Ghana	Spring, 2017	81	19	0	100	561	
	Spring, 2015	77	19	4	100	276	
	Spring, 2014	72	27	1	100	238	
	Spring, 2013	77	22	1	100	270	
Kenya	Spring, 2017	76	24	0	100	548	
	Spring, 2016	73	27	0	100	622	
	Spring, 2015	82	17	1	100	506	
	Spring, 2014	88	12	0	100	360	
	Spring, 2013	76	24	0	100	326	
	Spring, 2011	70	25	5	100	277	
	Spring, 2010	78	20	2	100	241	
Nigeria	Spring, 2017	82	18	0	100	496	
	Spring, 2016	81	19	0	100	623	
	Spring, 2015	85	14	1	100	434	
	Spring, 2014	82	18	0	100	463	
	Spring, 2013	83	17	0	100	382	
	Spring, 2010	73	25	2	100	205	
Senegal	Spring, 2017	76	24	0	100	492	
	Spring, 2015	75	25	0	100	299	
	Spring, 2014	87	13	0	100	277	
	Spring, 2013	75	25	0	100	269	
South Africa	Spring, 2017	72	28	0	100	869	
	Spring, 2016	78	22	0	100	770	
	Spring, 2015	73	26	0	100	439	
	Spring, 2014	74	25	1	100	452	
	Spring, 2013	62	37	1	100	379	
Tanzania	Spring, 2017	81	19	0	100	300	
	Spring, 2015	78	22	0	100	212	
	Spring, 2014	79	20	0	100	216	

		Q73a. ASK IF USES SOCIAL NETWORKING SITES ONLY: Do you ever use social networking sites like Facebook, Twitter (INSERT COUNTRY SPECIFIC EXAMPLES) to share your views about or not? a. religion					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	55	45	0	100	478	
	Spring, 2014	53	47	0	100	180	
	Spring, 2013	55	44	1	100	215	
Kenya	Spring, 2017	43	57	0	100	452	
	Spring, 2014	53	47	0	100	320	
	Spring, 2013	60	37	2	100	246	
Nigeria	Spring, 2017	47	53	0	100	409	
	Spring, 2014	58	40	2	100	384	
	Spring, 2013	69	31	1	100	323	
Senegal	Spring, 2017	50	49	1	100	369	
	Spring, 2014	42	58	0	100	241	
	Spring, 2013	51	49	0	100	203	
South Africa	Spring, 2017	40	60	1	100	626	
	Spring, 2014	32	67	1	100	344	
	Spring, 2013	43	57	0	100	240	
Tanzania	Spring, 2017	30	69	1	100	251	
	Spring, 2014	36	64	0	100	175	

		Q73b. ASK IF USES SOCIAL NETWORKING SITES ONLY: Do you ever use social networking sites like Facebook, Twitter (INSERT COUNTRY SPECIFIC EXAMPLES) to share your views about or not? b. politics					
		Yes	No	DK/Refused	Total	N =	
Ghana	Spring, 2017	37	63	0	100	478	
	Spring, 2014	38	61	1	100	180	
	Spring, 2013	50	50	1	100	215	
Kenya	Spring, 2017	49	51	0	100	452	
	Spring, 2014	61	39	0	100	320	
	Spring, 2013	68	31	1	100	246	
Nigeria	Spring, 2017	47	52	0	100	409	
	Spring, 2014	49	50	1	100	384	
	Spring, 2013	62	38	0	100	323	
Senegal	Spring, 2017	37	63	0	100	369	
	Spring, 2014	41	59	0	100	241	
	Spring, 2013	49	49	2	100	203	
South Africa	Spring, 2017	34	65	1	100	626	
	Spring, 2014	29	71	0	100	344	
	Spring, 2013	37	63	1	100	240	
Tanzania	Spring, 2017	30	69	1	100	251	
	Spring, 2014	34	66	0	100	175	

		Q73c. ASK IF USES SOCIAL NETWORKING SITES ONLY: Do you ever use social networking sites like Facebook, Twitter (INSERT COUNTRY SPECIFIC EXAMPLES) to share your views about or not? c. music and movies					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	67	32	0	100	478	
	Spring, 2014	68	32	0	100	180	
	Spring, 2013	71	29	1	100	215	
Kenya	Spring, 2017	61	39	0	100	452	
	Spring, 2014	78	22	0	100	320	
	Spring, 2013	82	16	2	100	246	
Nigeria	Spring, 2017	60	39	1	100	409	
	Spring, 2014	63	36	0	100	384	
	Spring, 2013	72	27	1	100	323	
Senegal	Spring, 2017	49	51	0	100	369	
	Spring, 2014	68	32	0	100	241	
	Spring, 2013	72	28	0	100	203	
South Africa	Spring, 2017	72	28	0	100	626	
	Spring, 2014	68	32	0	100	344	
	Spring, 2013	75	25	0	100	240	
Tanzania	Spring, 2017	52	47	1	100	251	
	Spring, 2014	55	45	0	100	175	

		Q73d. ASK IF USES SOCIAL NETWORKING SITES ONLY: Do you ever use social networking sites like Facebook, Twitter (INSERT COUNTRY SPECIFIC EXAMPLES) to share your views about or not? d. sports					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	52	48	0	100	478	
	Spring, 2014	71	29	0	100	180	
Kenya	Spring, 2017	61	39	0	100	452	
	Spring, 2014	73	27	0	100	320	
Nigeria	Spring, 2017	57	42	1	100	409	
	Spring, 2014	60	40	0	100	384	
Senegal	Spring, 2017	61	39	0	100	369	
	Spring, 2014	67	32	0	100	241	
South Africa	Spring, 2017	56	44	0	100	626	
	Spring, 2014	43	56	1	100	344	
Tanzania	Spring, 2017	55	43	2	100	251	
	Spring, 2014	62	38	0	100	175	

		Q73e. ASK IF USES SOCIAL NETWORKING SITES ONLY: Do you ever use social networking sites like Facebook, Twitter (INSERT COUNTRY SPECIFIC EXAMPLES) to share your views about or not? e. products you use					
		Yes	No	DK/Refused	Total	N=	
Ghana	Spring, 2017	29	71	0	100	478	
	Spring, 2014	30	69	1	100	180	
Kenya	Spring, 2017	43	57	0	100	452	
	Spring, 2014	34	66	0	100	320	
Nigeria	Spring, 2017	38	62	0	100	409	
	Spring, 2014	36	63	1	100	384	
Senegal	Spring, 2017	35	65	0	100	369	
	Spring, 2014	25	75	0	100	241	
South Africa	Spring, 2017	41	59	0	100	626	
	Spring, 2014	37	62	1	100	344	
Tanzania	Spring, 2017	28	71	1	100	251	
	Spring, 2014	29	71	0	100	175	

		Q74a. Generally, do you think the increasing use of the internet has had a good influence, a bad influence or no influence at all on in our country? a. morality					
		Good influence	Bad influence	No influence at all	DK/Refused	Total	
Ghana	Spring, 2017	42	44	5	8	100	
	Spring, 2014	29	42	10	19	100	
Kenya	Spring, 2017	43	37	14	7	100	
Nigeria	Spring, 2017	57	27	11	5	100	
	Spring, 2014	50	29	6	15	100	
Senegal	Spring, 2017	27	54	11	8	100	
	Spring, 2014	31	41	9	19	100	
South Africa	Spring, 2017	48	30	12	9	100	
	Spring, 2014	44	24	18	14	100	
Tanzania	Spring, 2017	47	41	6	6	100	

		Q74b. Generally, do you think the increasing use of the internet has had a good influence, a bad influence or no influence at all on in our country? b. politics					
		Good influence	Bad influence	No influence at all	DK/Refused	Total	
Ghana	Spring, 2017	53	29	5	12	100	
	Spring, 2014	33	27	15	25	100	
Kenya	Spring, 2017	42	39	11	9	100	
Nigeria	Spring, 2017	64	16	13	7	100	
	Spring, 2014	43	27	11	19	100	
Senegal	Spring, 2017	48	23	16	12	100	
	Spring, 2014	37	24	14	25	100	
South Africa	Spring, 2017	50	26	12	11	100	
	Spring, 2014	36	32	19	13	100	
Tanzania	Spring, 2017	60	28	6	6	100	

		Q74c. Generally, do you think the increasing use of the internet has had a good influence, a bad influence or no influence at all on in our country? c. the economy					
		Good influence	Bad influence	No influence at all	DK/Refused	Total	
Ghana	Spring, 2017	61	23	5	11	100	
	Spring, 2014	43	21	12	24	100	
Kenya	Spring, 2017	54	26	13	7	100	
	Spring, 2014	56	21	13	10	100	
Nigeria	Spring, 2017	76	11	9	4	100	
	Spring, 2014	60	13	11	16	100	
Senegal	Spring, 2017	60	16	15	9	100	
	Spring, 2014	55	11	11	24	100	
South Africa	Spring, 2017	64	15	11	10	100	
	Spring, 2014	52	21	17	11	100	
Tanzania	Spring, 2017	71	16	6	6	100	
	Spring, 2014	60	16	13	11	100	

		Q74d. Generally, do you think the increasing use of the internet has had a good influence, a bad influence or no influence at all on in our country? d. education					
		Good influence	Bad influence	No influence at all	DK/Refused	Total	
Ghana	Spring, 2017	80	12	1	7	100	
	Spring, 2014	71	9	5	15	100	
Kenya	Spring, 2017	68	19	9	4	100	
	Spring, 2014	64	20	6	9	100	
Nigeria	Spring, 2017	88	7	3	2	100	
	Spring, 2014	83	7	2	8	100	
Senegal	Spring, 2017	61	26	6	7	100	
	Spring, 2014	52	29	4	15	100	
South Africa	Spring, 2017	81	9	5	4	100	
	Spring, 2014	68	13	10	9	100	
Tanzania	Spring, 2017	78	14	4	4	100	
	Spring, 2014	71	11	9	9	100	

		Q74e. Generally, do you think the increasing use of the internet has had a good influence, a bad influence or no influence at all on in our country? e. personal relationships					
		Good influence	Bad influence	No influence at all	DK/Refused	Total	
Ghana	Spring, 2017	70	17	4	9	100	
	Spring, 2014	55	15	11	20	100	
Kenya	Spring, 2017	61	21	13	5	100	
	Spring, 2014	43	38	9	10	100	
Nigeria	Spring, 2017	80	10	7	3	100	
	Spring, 2014	74	7	7	12	100	
Senegal	Spring, 2017	62	22	9	7	100	
	Spring, 2014	53	17	10	21	100	
South Africa	Spring, 2017	56	27	9	7	100	
	Spring, 2014	55	21	14	11	100	
Tanzania	Spring, 2017	61	27	6	6	100	
	Spring, 2014	58	15	17	10	100	