Tuned In



Television and civic engagement in off-grid society

Table of contents

Introduction	3
Who did we talk to?	4
Why do off-grid homes get television?	4
Improving quality of life	6
Reflections on television in Kenya from Roger Steadman	7
Television and civic engagement	
Television and the 2017 elections	
About M-KOPA	11

2

Introduction

Welcome to this third edition of our Light Bulb publication series. This is where we share information and research that is relevant to the entire off-grid economy and value chain.

We are particularly excited about the information that we've uncovered about television. In my customer conversations, I am always hearing that in off-grid homes, television is playing an overwhelmingly positive role. Customers tell me they feel more connected, informed and engaged.

This is in contrast with the narrative of some countries in Asia, Europe and America, where television is alleged to have a detrimental effect on civic engagement, family life and childhood development.

Crucially for me, this research endorses what I hear in conversations in off-grid homes across East Africa. People want television to help them get ahead in their profession, business or education.

At M-KOPA we are determined to understand how television can play a persistently positive role in off-grid society. We want to know how it empowers people economically, socially and financially.

We believe that television can work differently in off-grid homes – particularly when paired with the Internet via a smartphone platform. Interactivity and personalisation will undoubtedly be important elements of the off-grid television offer of the future. The research indicates that television is being acquired, in the majority of cases, to help people keep up to date with news and current affairs. This is particularly important during important national events like elections.

New television owners look differently at elections and feel differently about their level of civic engagement. In fact, this survey is telling us that new television owners in off-grid homes experience a lift in their perceptions of politics and politicians.

Thank you to those who have given their time to research and develop this publication. I would particularly like to thank Roger Steadman for his contribution charting the changes in television in Kenya over the last 40 plus years.

I hope that we continue to focus on off-grid society and the critical role it plays in the broader economic and social narrative.

Maendeleo!

Jesse Moore, CEO and Co-Founder, M-KOPA

Who did we talk to?

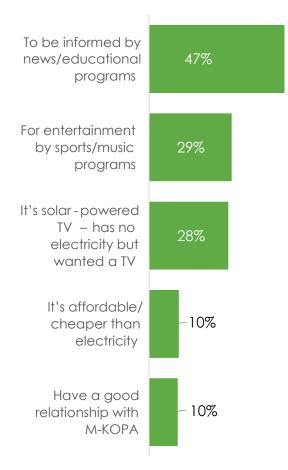
Why do off-grid homes get television?

For this report we spoke to over 250 customers in off-grid homes in Kenya, who had acquired a solar television (for the first time) in the past 6 months. The data collected does not cover the entire audience spectrum.

However, this research isolates the views of new viewers and gives us a fresh perspective from off-grid society. We expect this to be different to the general audience figures released by the Kenya Audience Research Foundation (KARF).

For more details on research methodology, please see the relevant section on page 11.

Figure 1: The top 5 reasons for buying a solar television. (Multiple options were offered).



News, news and more news. Our research shows that off-grid homes are mostly driven to acquire solar television because it helps them keep up to date with news and current affairs.

Those of you who have ever been in a Kenyan home or hotel, will know that the seven and nine o'clock news are major moments in the day. Other entertainment is turned off, conversations are adjourned and the news takes over.

The question is whether this can continue as content evolves and social media and smartphones find their way into more off-grid homes. Will television still be an essential source of news, or will it evolve into a 'nice to have' entertainment platform?

Content is key to this. As long as it continues to have a strong focus on news and education, it will continue to be viewed as a productive service and build its audience share.

The research also shows that the purchasing decision is equally informed by the fact that technology and pricing has made solar television more affordable than ever.

It is obvious that a lack of power has been a brake on television penetration into millions of homes in Kenya – and Eastern Africa as a whole. It is equally obvious that affordable solar television is going to fundamentally change the television category over the next five years.

Millions more off-grid homes now have the chance to get television. And they will be attracted by news and current affairs content that talks to their issues and aspirations.

Figure 2: How often do you watch television?

How many days a week do you watch television?

91% of new TV viewers watch every day

Who watches and how much?

Figure 2 reveals that first time television owners' usage is already fairly heavy. However, this is still well behind other countries, where television has a wider penetration across the geographic and economic spectrum.

Nielsen: data from 2016 on US viewing habits found that adults are watching nearly five hours of television every day.

As smartphones penetrate into more off-grid homes, it could be anticipated that the young – in particular – will move away from live television.

The young and smartphones

In the US, 'live' television watching by the under 24's is falling dramatically. In 2016 that age group was watching two fewer hours of live TV and digital video recordings per week, compared to the year before.

That trend is set to continue and most of these viewers are migrating to streamed content on tablets and smartphones.

Research firm, Ovum₂, has predicted that smartphone penetration rate will grow at 53% year-on-year in Africa. Most of this growth will come from off-grid homes and the young. This will mean that there is a growing opportunity for off-grid homes to combine smartphone and solar television assets in order to access on-demand and streamed content.

Information access

Nick Hughes, Chief Product Officer and Co-Founder, M-KOPA, says, "As the costs of smartphones and tablets continue to fall, we will see traditional television screens displaced by more mobile and interactive devices.

Other factors will need to change as well, such as network costs and connectivity quality – to allow more streaming and interactive content.

On the network front there are already changes underway with more affordable local wifi hotspots. These will multiply as new enabling technologies enter the market. We are very interested in technologies exploiting unused radio frequency spectrum bands, like television whitespace and also satellite backhaul."

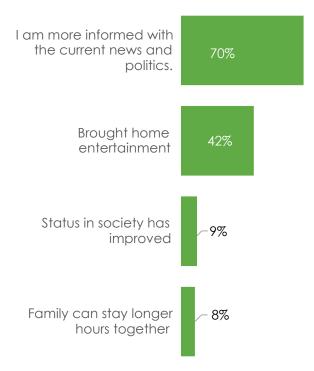
1. How Much Do We Love television? Let Us Count the Ways, by JOHN KOBLIN, NY Times, JUNE 30, 2016 2. http://www.idgconnect.com/blog-abstract/23175/africa-2017-smartphone-penetration-open-data-online-freedom



91% Water IV Day On average, how many hours a day does 'the person above' watch television?

3 hours per day is the average time spent watching a new solar TV

Figure 3: How has television improved your quality of life? (Multiple options were offered.)



Improving quality of life

First time television owners in off-grid homes, widely report an improvement in their lifestyle because they feel more informed.

This is good news for rural economies and societies. A country like Kenya is trying to build on its agricultural base with more information-intensive markets and opportunities outside of the major cities.

Arguably, these efforts will enjoy limited traction as long as off-grid homes are excluded from the same level of information as the rest of the country.

Information society

At the turn of the century, the UN's World Information Report maintained that information societies had to have three main characteristics:

- 1. Information had to be used as an economic resource.
- 2. It had to be possible to identify a greater use of information among the general public.
- 3. There had to be an information sector within the economy.

Unfortunately, the majority of the population of Kenya are still off-grid and unable to access our dominant visual information platform – television.

As affordable solar televisions proliferate, alongside smartphones, Kenya's information-intensive social and economic systems will be strengthened.

Information access

Jesse Moore says, "Kenya is one of the world leaders in implementing affordable internet access. But information access has traditionally been a problem in off-grid society. Power and affordability have restricted many of the information channels that affluent on-grid homes take for granted information.

I think there's a shift happening in off-grid society.

By the end of this year, M-KOPA alone will be providing information access to over a million people through our smartphone and television upgrades.''

Television in Kenya By Roger Steadman

In 1973, when I first came to Kenya, there was only one Kenyan TV station which Voice of Kenya (VoK) broadcast in black and white using Kiswahili early evening and English later.

I remember that Norbert Okare read the news and there was a problem of lines rolling through the screen. It was only years later that I found out it was nothing to do with the set, but a broadcasting error at VoK. The quality and programming meant that TV only generated a limited audience. Zanzibar had the first colour TV station in Africa, which could be picked up in Dar es Salaam by very high aerials – a distinctive landscape feature of the city at the time.

It was not until the launch of KTN in 1990 that VoK upgraded to colour and the competition spurred further improvements in programming and quality. TV ownership in Nairobi and urban areas increased rapidly. By the time VoK was relaunched as KBC in 1989, in preparation for the airwave liberalisation, TV viewership had increased to about 56% of homes in urban areas.

The stated objective for VoK broadcasting was to inform, educate and entertain, but advertising also fostered the development of a cash economy. I think that TV can always achieve these objectives more effectively than radio, but the downside in Kenya is low electrification in rural areas.

The importance of colour pictures, movement and sound, in communicating to rural audiences - as well as urban – has long been recognised. Mobile cinemas have been in operation since the mid 1970s. Regional Reach also had a programme to put generator-powered sets in rural villages. Today, we estimate off-grid TV use to stand at 300,000 households, powered by generators, solar and batteries. Solar-powered television will boost the access of information to rural audiences and this will have a positive knock-on effect of disseminating more knowledge and skills.

Total household penetration of TV in Kenya is now at 36%, with the average viewer watching 3 hours per day. The appeal of TV has grown significantly since Royal Media adopted audience research indicators, and invested in making local programs. Other media houses have followed.

The digitisation of TV has, over the last few years, brought a similar proliferation of stations, to what we saw in radio between 2002 and 2005. We now have 66 local TV stations in Kenya and the number is still growing. Content drives audiences, and for stations to survive they have to target more and more carefully. Kenyan audiences, are demanding even greater quality and choice.

TV is still the most powerful communications medium the world has ever known. And it will remain so...until the Internet catches up. What we are seeing today, is a convergence of media with screens – large or small – becoming the vehicle with which to listen, read, watch and interact. Whilst print is in decline, 'video' – which includes TV, podcasts and streaming applications like Netflix – is growing.

Non-integrated TV stations will decline, as people increasingly choose what and when they want to read, listen or watch. Applications like Flipboard will become the norm - where video and print are integrated.

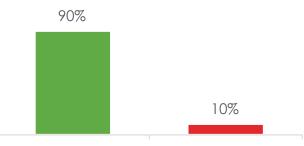
Nation Media Group's recent invitation to Augmented Reality with Layar, is just one indication of the speed with which things are moving in Kenya. The research shows that the majority of new television owners in Kenya feel that they are more engaged in civic and political life since getting their systems.

Pauline Githugu, Director for External Affairs, M-KOPA says, "I think new TV owners feel a new level of confidence and social inclusion, and this is driving civic engagement. Off-grid homes with radio, smartphones and television, will now have access to almost all of the information channels that their civic leaders have."

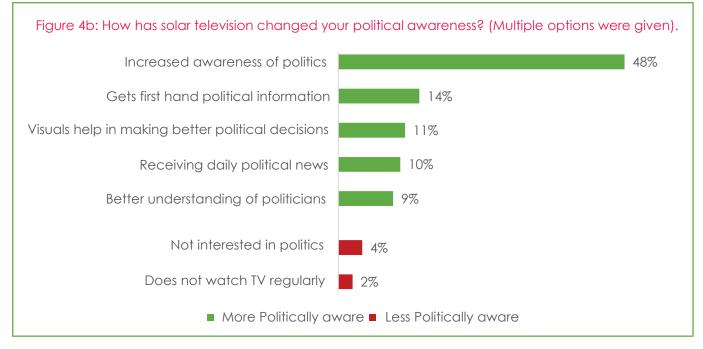
It is still unknown whether television can, in the long term, maintain and improve civic engagement. In the USA, where civic engagement has consistently dropped since the advent of television, there is an ongoing debate. Some in the USA₃ maintain that political engagement is noticeably higher among audiences that still watch regular news and education programming. Others argue that news and current affairs do not necessarily have a strong impact on core values, but that they can strengthen civic mobilisation and engagement.

Githugu says, "In Kenya, we're at an interesting moment in the evolution of off-grid society. Political power is being devolved and, at the same time, television and smartphones are helping off-grid citizens feel greater empowerment. It means geography and distance need no longer be an obstacle to civic duty."



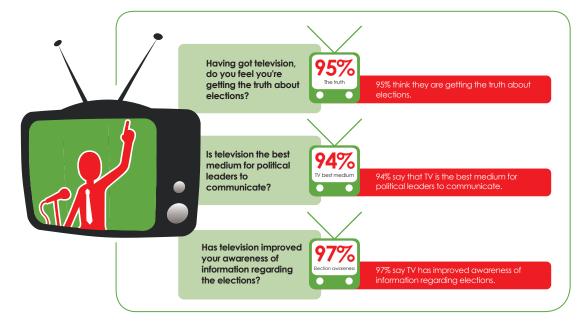


More politically aware Less politically aware.



3. "Tuned out Voters? Media impact on Campaign Learning" Pippa Norris, John F. Kennedy School of Government, Harvard University 2004.

Figure 5: Percentage of new solar television owners who think the following. (Multiple options were given).



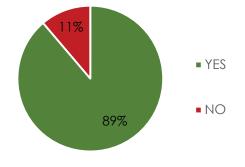
Views on politics and the 2017 elections

New television viewers overwhelmingly feel they are more informed about the 2017 elections in Kenya.

Overall opinions of politics have changed too, and the majority of this shift is in a positive direction. New television owners also gave more positive perceptions of individual politicians.

The ability to get first hand information, as opposed to relying on the opinions of others, is a factor in this.

Figure 6: Would you say your opinion of politics changed since you got TV?



Top five reasons for opinion change:		% of people
1.	Receiving first hand information, as opposed to relying on others	25%
2.	Pictures assist in judging politicians better	20%
3.	Feel more politically informed	20%
4.	Have been able to makemore informed political decisions	17%
5.	Able to judge government and political developments better	8%

Pauline Githugu says, "I think this can be explained by human nature insofar as people have been proven to pay more attention to negative or bad news. And, unfortunately, it follows that this is the information they are likely to pass on to a third party." This survey also shows that people are forming better impressions of politicians from seeing them on television. They are saying that the ability to see the individual, helps them form a more positive opinion. What the survey doesn't tell us is whether the positive effect is created by people analysing a politician's message and mannerisms.

It could equally be that, simply by appearing on television, an individual's reputation is enhanced. If so, that would give truth to the old maxim 'that any news is good news.' Figure 7: How has your opinion of politicians changed since you got television, where 1 means worse and 5 means much better?







"I am able to receive political news daily."





"If it comes to questions about politics I am able to answer them.""

Methodology	Telephone interviews from M-KOPA Call Centre
Target customers	Feb - Mar 2017 M-KOPA 400 and M-KOPA +400 customers spread across regions
Interviewers	Internal Market Research Assistants
Data collection instruments	Structured questionnaire
Sample size	250 customers
Data collection	March, 2017

About M-KOPA

M-KOPA is the world's leading 'pay-as-you-go' energy provider to off grid homes. The company has developed a better way to provide affordable, safe and clean energy to millions of people living off the grid.

Thanks to the sun's rays and mobile technology, customers can light up their homes, charge their phones and tune in to the radio and television.

To date, M-KOPA has connected over 500,000 homes in East Africa to affordable, safe and clean energy.

Its predominantly low-income customer base is accessing lighting, phone charging, radio and television on daily mobile money payment plans that are less than the typical cost of kerosene.

M-KOPA customers now enjoy over 62.5 million hours of kerosene-free lighting per month and they will save over 600,000 tonnes of CO₂ over 4 years.

Customers who complete their payment plans are upgrading with M-KOPA for more lights, televisions, energy-efficient cooking stoves, smartphones, fertilisers and water tanks. The company has sold well over 170,000 upgrade products to date – including 70,000 Solar televisions. M-KOPA Labs is the Research and Development arm of the company. We are looking at products and services that are 12-18 months from the market. We are defining and testing a range of new, commercially scalable, products and services for low income, off-grid households. This includes leveraging the credit relationship that we have with our customers, to enable further purchases of productive assets.

M-KOPA's 'pay-as-you-go' solar model has helped open up exciting new consumer markets. As offgrid energy connections increase, we are seeing millions of new consumers with greater financial stability and – for the first time – access to power.

M-KOPA Labs is building partnerships to explore new ways for these consumers to save, earn, learn and invest. We also share knowledge on our model and off-grid consumer behavior, to help grow our industry and improve the lives of low income, off grid households all over the world. Our projects cover a range of household and small business appliances and services. And we explore how machine-to-machine technology, remote sensor management, mobile payments and energy storage enable their deployment into low income, off-grid environments.

Contributor profile

Roger H. Steadman FMSK,FCIM.

Chairman Ipsos Pan Africa.

Roger was the founder of the Steadman Group which is now part of Ipsos - the third largest market research company worldwide. Roger has had a lifelong interest in media and was awarded the Piet Smit achiever of the year award in 2011 by PAMRO for his contribution to the development of audience research in Africa.

Contributions from across the M-KOPA Family :

Pauline Githugu, Jesse Moore, Wangari Murugu, Yesse Oenga, Jon Ridley, Matthew Ward and Rehema Ogana **For editorial enquiries, please contact :** press@m-kopa.com. **For all other enquiries, please contact :** info@m-kopa.com or +254 (0)707 333 222.



www.m-kopa.com

Disclaimer

This report is provided for general dissemination and information purposes only. M-KOPA LLC disclaims all liability to any third party who may place reliance on its contents.