

# Paying for access or content? Blurred understandings of mobile internet data in Ghana, Kenya and Uganda

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## ABSTRACT

The paper addresses the blurred understandings of what developing country mobile internet users feel they are paying for. The move towards increasing online news and music consumption around the world has resulted in low growth in paid content consumption and a digital advertising market that is not highly favourable for news or entertainment providers. From a major study conducted on mobile phone based internet behaviours in Ghana, Kenya and Uganda in 2015, we find consumption in these countries reflects the trends observed in more mature markets where the decline in news purchase revenues and advertising rates raises fundamental questions about the business models of independent media. While users enjoy the personalized content benefits of the mobile web, they feel that paying for data (i.e. Mobile connection and data bytes) is sufficient and conflate it with paying for content (i.e. Content in an online newspaper or online music). We argue that deconstructing misunderstandings of paying for mobile internet access and paying for content (including ascertaining whether they are genuine misunderstandings) is important for understanding how to achieve a free and fair internet, where content is accessible but generates enough profit to be sustainable.

**Keywords:** *mobile internet, mobile payment, mobile use, Kenya, Ghana, Uganda*

## 1. INTRODUCTION

In 2015, we conducted a major research study on mobile phone based internet behaviours in developing countries, with thirty focus groups in peri-urban areas of Ghana, Kenya and Uganda. Focus group participants were aged 18-25 and with a family income of under \$2 a day. This paper shares one key finding from the larger study, specifically on misunderstandings of paying for online content and data. We share these findings in this short paper and argue that these misunderstandings are important for design, for theory and for development practice.

According to the World Development Report 2016, more than 40% of the world's population is online and the poorest households are more likely to have access to a mobile phone than to clean water or sanitation (World Bank, 2016). Mobile phones are also favoured over desktops to access internet content (Donner, 2015; Ericsson, 2014; Stork et al, 2013; TRAI, 2013)<sup>1</sup>. Africa in particular is seen as “the ‘mobile’ continent” (Hersman, 2013). In turn, this mobile internet traffic is largely entertainment-based – music, videos, gaming and so on (Gunelius, 2014; NextBigWhat, 2015) – users enjoy the benefits of seeking out and consuming personalized content – personalized in the sense of accessible to them immediately, seeking out what they like, sharing, finding out similar channels and so on. Yet, business models and revenues of online entertainment still need analysis, particularly in emerging markets where piracy is prevalent. Studies equate more online users to an increase in GDP (GSMA, 2014; World Bank, 2016). However, piracy, side-loading – using WhatsApp or USB sticks to transfer content - and other non-profit generating practices (at least to the original artist or content provider) circulate

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<sup>1</sup> According to one report, 70% of users in sub-Saharan Africa browse the web on mobile device compared with 6% who use desktop computers - <http://www.ericsson.com/res/docs/2014/emr-june2014-regional-appendices-ssa.pdf> - the report does not specify the countries or method

<sup>2</sup> The broader study can be found here - <http://cariboudigital.net/digital-lives-ghana-kenya-and-uganda/>. The overall aim was to understand the existing state of digital technology usage practices, content consumption and user

in many countries. What then are the implications of this for a sustainable internet based economy? What are the ethics of this? This paper shares user understandings (and misunderstandings) of news and music consumption, from our exploratory research<sup>2</sup>. After a brief survey of the literature, we introduce the research methods of the study, followed by findings, and discuss the broader indications of these, particularly for digital economies in emerging markets.

## 1. Literature review

Changing patterns of online news and music consumption present a number of implications. The Reuters Institute Digital News Report (2014; 2015) highlighted both the way news is accessed (increasingly through social media) and the challenges of who gets paid. They present a picture of low growth in paid content consumption and a digital advertising market that is not highly favourable for news providers. As with other forms of digital content, the shift from physical material to digital data heralds changes in advertising as well as consumer purchase in which content is both understood (perhaps conflated) and financially assessed in terms of the cost of *data* rather than the cost of *content*. These hold implications both for news providers and artists as well as for media organisations, and a knock-on effect on the sustainability of independent and/or local media. In developing countries, where there are particular calls for “local, relevant online content” (GSMA, 2014), and further, to boost creators and not just consumers (Schoemaker, 2014; Surman et al, 2014), this is particularly problematic as it is not clear who will pay for this local content. As noted in the Reuters 2015 report, “the outlook for local digital news remains uncertain. It is proving difficult for local news providers in many countries to gain large numbers of paid digital users”. While the global mobile operators association, the GSMA,

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<sup>2</sup> The broader study can be found here - <http://cariboudigital.net/digital-lives-ghana-kenya-and-uganda/>. The overall aim was to understand the existing state of digital technology usage practices, content consumption and user innovation (both for “non-instrumental” – i.e. entertainment - and “instrumental” i.e. development use) of the above-mentioned demographics in these three countries and reflect on how they might differ from more affluent and established digital economies.

frames the barriers to local content in emerging markets in terms of lack of access, lack of devices or device compatibility, payment limitations, and questions of relevant content, language and digital literacy skills, it does not acknowledge confusion between paying for data and paying for content, which we explore below.

## **2. Research methods**

For the overall study, we carried out a total of thirty focus groups, ten each in Ghana, Kenya and Uganda. We worked with local partners who had experience of working with youth in Ghana and Uganda (Yes Ghana and Restless Development, respectively) and with iHub, an ICT consultancy with experience in ICTs and “development” in Kenya. In each country, five groups were conducted with female respondents and five with male respondents (with female and male facilitators respectively). In collaboration with these partners, we recruited interviewees for these focus groups in low-income areas of Accra, Limuru and Thikka (on the outskirts of Nairobi) and Jinja. We selected focus groups as a method specifically because of the interaction between respondents and discussion they generate. However, we also kept in mind the restrictions of the group environment – that some may feel shy in front of others or conversely, a few may lead the conversation (Bryman, 2014), and to mitigate at least in terms of gender, we kept the male and female focus groups separate, although it would be interesting to execute again with mixed focus groups to see if this results in a different outcome of discussions.

In total, these focus groups resulted in a sample of 198 young men and women - 105 men and 93 women. All focus group interactions were transcribed by the facilitator and coded and analysed in Dedoose (a coding software) in an iterative and incremental process between authors and in discussions with facilitators. As this was a larger study, only the findings relevant to entertainment consumption rather than all 198 voices are captured here. We should also note the shortcomings of focus group responses as mentioned above as the group environment might curtail and shape these. Although the focus group facilitators were in each case Kenyan, Ghanaian and Uganda, they were from urban areas and more educated and there may have been some social shaping of answers (amplified by the group environment) which we did not have enough time to explore further.

### 3. Findings and analysis

The majority of mobile internet consumption in our sample was of news, music and other entertainment such as movies and gaming. Here we focus specifically on news and music. First, we see the attraction of *tailored* content in online mobile access (Wei, 2013). While we enter the implications of this in more detail in another paper (in terms of filter bubbles, echo chambers and potential for polarization), what is relevant here is that local news is valued – complementing the attractive personalization aspect of mobile internet. In Uganda, Mulungi, a 24 year old student describes accessing specific newspapers: *“On top of entertainment, I also use my phone to get news. Like for example, I am basically interested in the local news because there is no need to know the international minus knowing what is happening in my own country. Like I can read New Vision online, I can read Daily Monitor”*. Byansi, a 25 year old NGO volunteer, described how *“if I want an article in New Vision, I will not buy the whole newspaper anymore. I will just go and read my article. If I am looking for jobs, I will just go to that article having jobs and I will just see what job I want. I am contented with what New Vision delivers.”*

These personalized patterns (searching out what one is interested in and being able to control it) were also reflected in music consumption on mobile devices. 23 year old Daniel says:

*“Listening to music has become more regular than before. Like at home I have a lot of siblings, there is a TV set and a radio which is kept by an auntie. Whenever she is leaving she says, ‘this radio is for Bujingo’ [pastor] so you will misuse my battery and the girls at home will say ‘I won’t share’ so I wouldn’t get time to listen to music because of the fights at home but now whenever I feel like listening to music, I control it”*.

Yet, the financial implications of this online mobile access is more challenging. For example in Kenya, when asked if anyone had paid for the news they accessed via the internet, one male respondent replied: *“No ... I would pay for the newspaper but when it’s on the net, no.”*

Similarly, two others describe how paying for news has changed:

*Mukungu: "Newspapers are now more accessible because a newspaper would go up to 3000/= shs [\$0.80] whereby if you have your phone, you can just upload it using 500/= [\$0.15]"*.

*Kitamirike: "Media houses like newspapers and so forth, they can be easily be accessed without going into buying them. Unlike in the past, you do not need to go to the media house for a newspaper that was for yesterday day or the other day. You can easily get the news"*.

Both comments raise issues of how then news providers online could make a profit, if not through users, but Mukungu's addition that "*whereby if you have your phone, you can just upload it using 500/= [\$0.15]*" implies conflation of paying for content with paying for data upload. This is echoed by a focus group discussion in Uganda:

*"Facilitator: So have you paid for the news you access?"*

*Chorus: Probably.*

*Facilitator: Can you tell us?*

*Mulungi: Of course we pay by buying MBs.*

*Facilitator: You pay through buying MBs?*

*Mulungi: Yes. That is already a cost.*

*Facilitator: That is already a cost. Do you agree with him?*

*Byansi: Yes"*

Two issues arise here – that users conflate paying for data with paying for content, and secondly the statement “that is already a cost” implies that this might impact on their willingness to pay further as they have already paid for something.

Similarly, Mbabazi, a 21 year old female receptionist explains her understanding of how YouTube works, confusing the cost of data packages with a subscription service: *“I went to an outlet and asked them to download for me YouTube. They did it for me and so I had to register. They wanted my email to YouTube. I have to pay every month because if I don’t, I will be disconnected. So I write in any songs that I want and then they give them to me right away ... You have to be active on YouTube so that they don’t disconnect you.”*

This confusion on what the user is paying for – whether it is for data or for online content therefore creates huge misunderstandings and implications for revenue generation, particularly for local artists and news providers. Prevalent piracy adds to the challenges. For example, a Ghanaian male respondent says: *“most Ghanaians don’t download, they wait till somebody downloads and then you go and copy with a pen drive and then transfer onto your phone and laptop. So it’s like costless, like they don’t even pay a penny”*. In Kenya, 21-year Beth, a part-time accountant, speculated about the impact of this shift for artists, noting, *“I even wonder, I feel for the artists whether they make their money or their profit. Because once the music is released, you can get it online and stuff”*.

#### **4. Conclusion**

While this research is at an early stage, we found the confusion between paying for mobile internet *access* and paying for *content* on the web an noteworthy emergent finding. This could be genuine, in the sense of not understanding how YouTube access might work (for example, Mbabazi above) or in some cases understood but users may not see the need to pay more for content (Beth muses on the implications of this). The move towards increasingly mobile consumption patterns has financial implications in these three countries that reflect the trends observed in more mature markets, where the decline in news purchase revenues and advertising

rates raises fundamental questions about the business models of independent media. In addition, the high cost of data, low levels of digital literacy, operators demanding a large share of revenues and underdeveloped regulatory environments around licensing present the biggest challenges to local content creation and sale.

Deconstructing misunderstandings of paying for mobile internet access and paying for content is important to anticipate any potential “design-reality gap” between design and deployment – how mobile internets are currently designed, and how they are used in the field (Donner and Gitau, 2009; Wyche and Murphy, 2012). Internet access through mobile is growing exponentially, but revenue generation is problematic globally.

In practical terms, circumventing payment may be skill-generating for users as it drives innovation through practices such as side-loading to overcome constraints. In this sense, it is ironically part of capacity-building discussed in ICTs and development. However, it also means that content providers in music and news must devise innovative ways to lure developing market consumers away from the easy availability of pirated material. In Nigeria, Solo is rolling out a new handset with a music data bundle (Balancing Act, 2013) in conjunction with Iroko (a music streaming company) and mobile network operators to address piracy and copying in the first instance. We need to research such business models further but we also need more research to understand the confusion between paying for data and paying for content by users. Third, we also need more on ethical interpretations of payment for online content by users. In what circumstances may users be prepared to pay for content? If not the user, who else absorbs the costs? If users were content providers themselves, how would they work with the situation? Our exploratory research provided an emerging (at least for us) insight into the mobile internet usage of a key demographic of 18-25 year olds in low income, peri-urban contexts – the soon to be most prevalent consumers and creators of a more global web – but how do they also create and diversify this web?

## References

- Balancing Act Africa (2013). *A nice mobile music and video service with a handset attached – Solo launches in Nigeria and turns the business model on its head*. 683, 29<sup>th</sup> November 2013. <http://www.balancingact-africa.com/news/en/issue-no-683/top-story/a-nice-mobile-music/en>.
- Bryman, A. (2015). *Social research methods*. Oxford University Press, Oxford.
- Donner, J. (2015). *After Access: Inclusion, Development, and a More Mobile Internet*. MIT Press, Cambridge, 2015.
- Donner, Jonathan, and Shikoh Gitau (2009). “New Paths: Exploring Mobile-Centric Internet Use in South Africa.” “Mobile 2.0: Beyond Voice?” *Pre-Conference Workshop at the International Communication Association (ICA)*. Chicago. April. <http://irneasia.net/wp-content/uploads/2009/05/final-paper-donner-et-al.pdf>.
- GSMA (2014). [http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/11/GSMA\\_Digital-Inclusion-Report\\_Web\\_Singles\\_2.pdf](http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/11/GSMA_Digital-Inclusion-Report_Web_Singles_2.pdf)
- Gunelius, S. (2014). More than Half of Digital Content Now Consumed on Mobile Devices, ACI, May 14<sup>th</sup> 2014. <http://aci.info/2014/05/14/more-than-half-of-digital-content-now-consumed-on-mobile-devices/>
- Hersman, E. (2013). The Mobile Continent, *Stanford Social Innovation Review*, Spring 2013, [http://ssir.org/articles/entry/the\\_mobile\\_continent](http://ssir.org/articles/entry/the_mobile_continent).
- NextBigWhat (2015). 90% of Total Music Streaming is Happening Through Mobile Phones. <http://www.nextbigwhat.com/online-music-consumption-india-data-hungama-297/>
- Reuters Institute Digital News Report (2015), 93, accessed February 25, 2016 <http://www.digitalnewsreport.org/>.
- Sey, A. and Ortoleva, P. (2014). “All Work and No Play? Judging the Uses of Mobile Phones in Developing Countries,” *Information Technologies & International Development* 10, no. 3 (2014): pp – 1.
- Wei, R. (2013). Mobile media: Coming of age with a big splash. *Mobile Media & Communication*, 1(1), 50-56.
- Schoemaker, E. (2014). The Mobile Web: Amplifying, but Not Creating, Changemakers. *Innovations: Technology, Governance, Globalization*, 9(3-4), 75-85.
- Stork C, Calandro, E., Gillwald, A. (2013). "Internet going mobile: internet access and use in 11 African countries", *info*, Vol. 15 Iss: 5, pp.34 – 51.
- Surman, M., Gardner, C., & Ascher, D. (2014). Local Content, Smartphones, and Digital Inclusion. *Innovations: Technology, Governance, Globalization*, 9 (3-4), 63-74.

TRAI (Telecom Regulatory Authority of India). *The Indian Telecom Services Performance Indicators* (New Delhi: TRAI, 2013), [http://www.trai.gov.in/WriteReadData/PIRReport/Documents/Indicator Reports -01082013.pdf](http://www.trai.gov.in/WriteReadData/PIRReport/Documents/IndicatorReports-01082013.pdf).

World Bank (2016). *Digital Dividends: World Development Report*, World Bank, Washington DC.

Wyche, S. and Murphy, L. (2012). “‘Dead China-Make’ Phones off the Grid: Investigating and Designing for Mobile Phone Use in Rural Africa.” In *Proceedings of the Designing Interactive Systems Conference on - DIS '12*, 186–95. New York, New York, USA: ACM Press.