A note on the availability and importance of pre-paid mobile data in Africa

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Convergence is coming. Will M4D influence it?

1 billion mobile broadband users by 2011 (ITU)

ITU Estimates: Broadband subscriptions per 100 people (2010)

	Developing	Developed
Fixed Broadband	4.4	24.5
Mobile Broadband	5.4	51.1

"Emerging markets have material potential for mobile Internet user growth. Low penetration of fixed-line telephone and already vibrant mobile value-added services mean that for many EM users and SMEs, the Internet will be mobile" (Morgan Stanley)

The trajectory of convergence will affect how resource-constrained communities will participate in the informational society. M4D theory has to move fast to stay current

Source: http://is.gd/88XzN ITU: http://is.gd/8Jd9l, http://bit.ly/a5DDQX

SMS is ubiquitous, but constrained and high cost. M4D theory and practice *needs* mobile internet

Example: MXit

- 1 South African cent (.001 USD) per message, vs. 15 cents per SMS
- 13m+ registered users in South Africa
- Free to download

Development impacts (each difficult with SMS)

- Maths on MXit
- Remote social counseling
- Civic engagement
- New path/draw to internet use

Prepay minutes enabled ubiquitous telephony access. Will prepay data drive widespread internet access?

96% of all active GSM lines in India are pre-paid (TRAI 2010)

GSMA (2008) report on universal access: **pre-pay mobile services remove barriers to use for low-income users (p3)**

- Removal of bureaucratic formalities and non-monetary entry barriers
- Reducing initial access costs through low SIM card prices
- Reducing ongoing connection costs with calling Party Pay (CPP) approaches, requiring little outbound calling
- Allowing budget control through small denomination top ups;
- Enabling airtime credit transfers between peers
- Enabling reverse-charge calling through free “call-me sms” messages and “beeping”

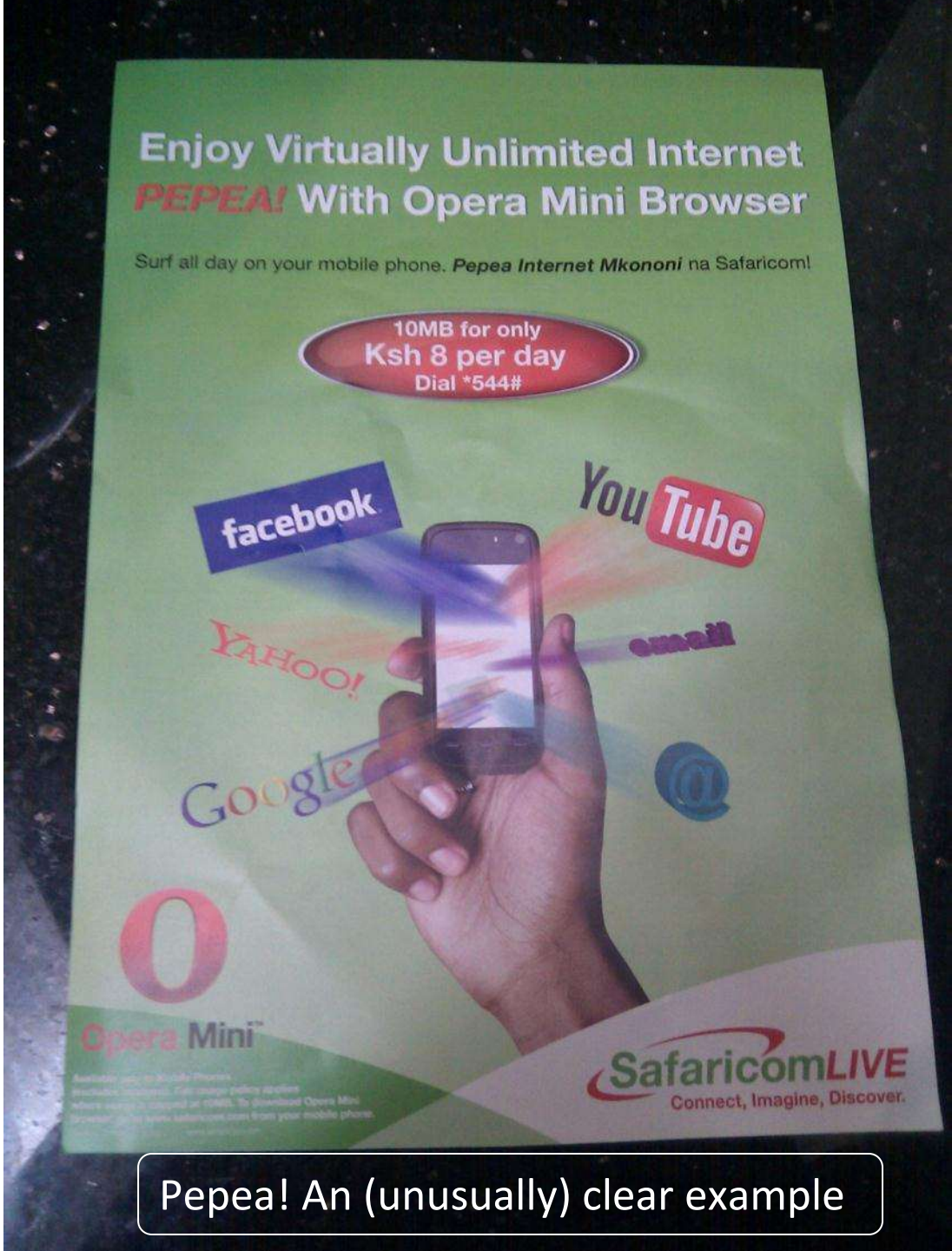
GSM Association. (2008). Universal Access: How Mobile can Bring Communications to All. London. http://bit.ly/bsNpCN
http://www.itu.int/ITU-D/partners/GILF/2008/contributions/gsma.pdf
http://www.trai.gov.in/WriteReadData/trai/upload/Reports/52/5octoblerindicatorreporton13oct.pdf

Methods

- Inspired by Neto, Best Gillett (2005) on Wi-Fi regulations
- Desk research, calls, and emails to operators, drawing from online GSMA lists
- Attempted to ascertain if at least one carrier in each African country offered prepay data

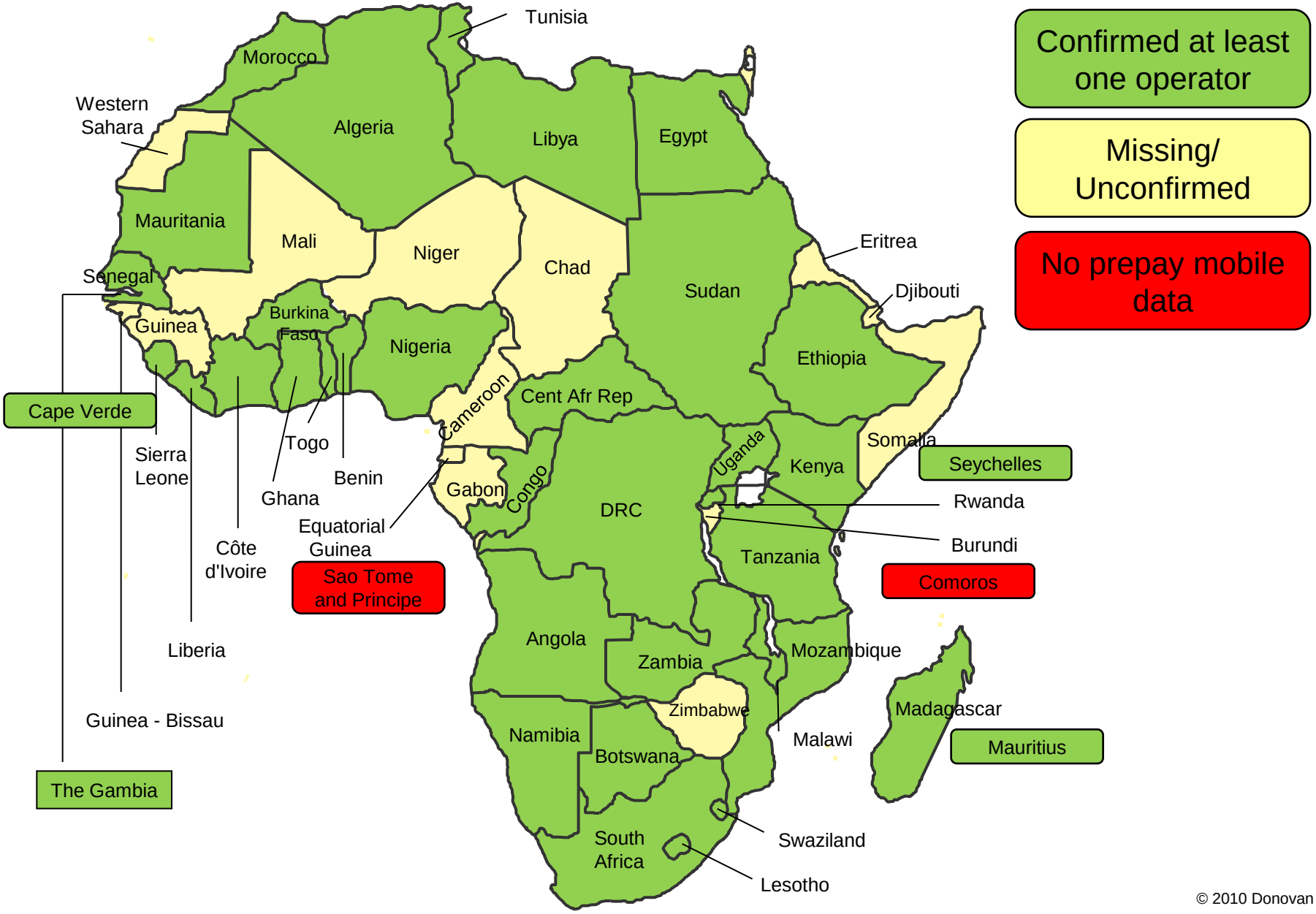
Neto, Isabel, Best, Michael L., & Gillett, Sharon E. (2005). License-exempt wireless policy: Results of an African survey. *Information Technologies & International Development, 2(3), 73-91.*

Photo: Hersman, Erik (Producer). (2010, 22 June). Nairobi. [Photograph] Retrieved from http://twitpic.com/1xrmg7



Pepea! An (unusually) clear example

Our deskwork confirmed 38 countries with at least one operator offering prepay mobile data



Prepay mobile data access, while technically feasible, may be obscured in practice

Findings

- We encountered
  - Unclear websites
  - Poor technical support
  - No common terminology
- And heard about
  - high per-mb tariffs
  - higher minimum balances for data than for voice
  - default opt-in (vs. opt out)

Recommendations

1. Stop talking about “data plans”, unless you mean *subscriptions*
2. Track prepay mobile data users as proportion of total users
3. Explore speed and commitment for operators to offer easy access to prepay data in addition of voice and SMS
4. Work with operators and infomediaries to clarify, promote, and advertise mobile internet offerings
5. Consider impact of metered use on M4D interventions. What happens to surfing and browsing?

Visit bit.ly/9crDfF for a discussion of our wave-2 crowdsourcing trial– it's not a surefire method

Thank You!

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Project details at
http://bit.ly/9crDfF