

From airtime to banking and back again

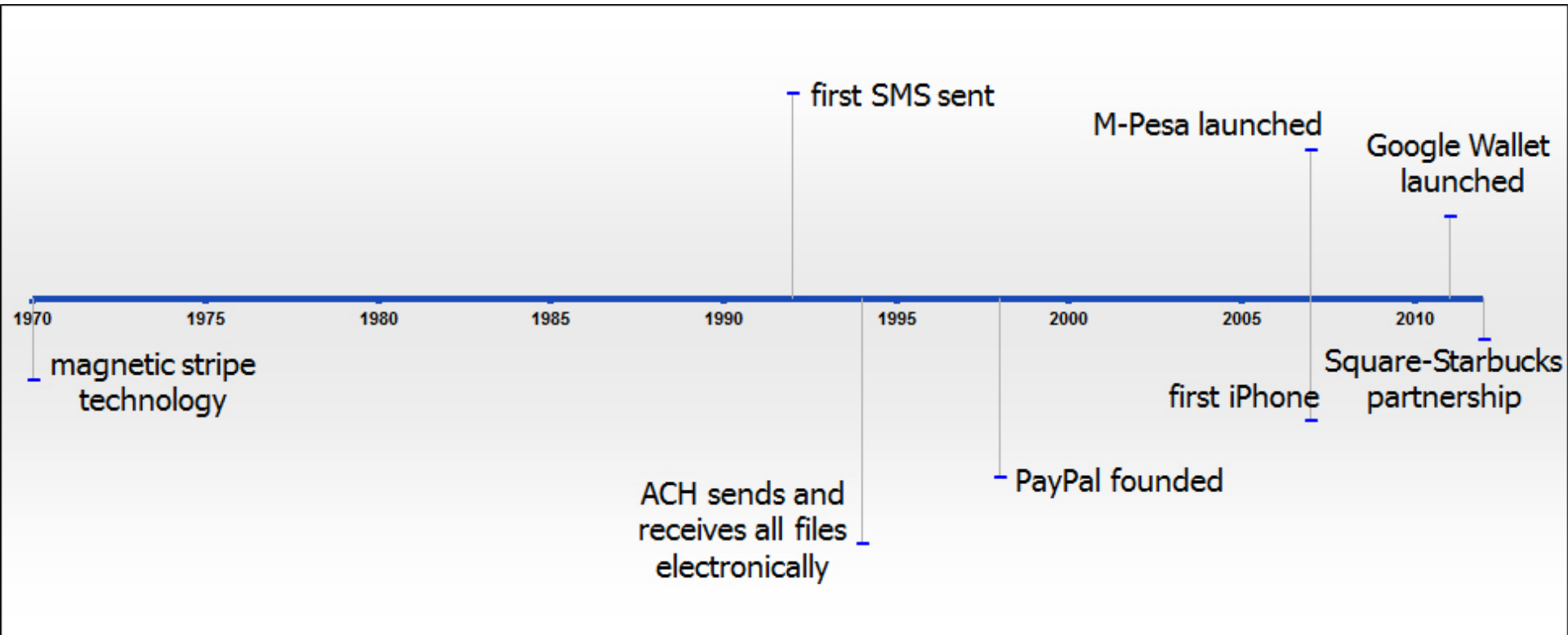
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Director, Institute for Money,
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University of California, Irvine

- 1981 EFTPOS
- 1992 First SMS message (“Merry Christmas”)
- 2007 M-Pesa and the iPhone both launched



From banking to payment

“Where most financial inclusion models have employed either ‘credit-led’ or ‘savings-led’ approaches, the M-PESA experience suggests that there may be a third approach—focusing on building the payment ‘rails’ on which a broader set of financial services can ride” (Mas and Radcliffe 2010).

The inspiration



The initial use-case



m-PESA Send pesa by phone

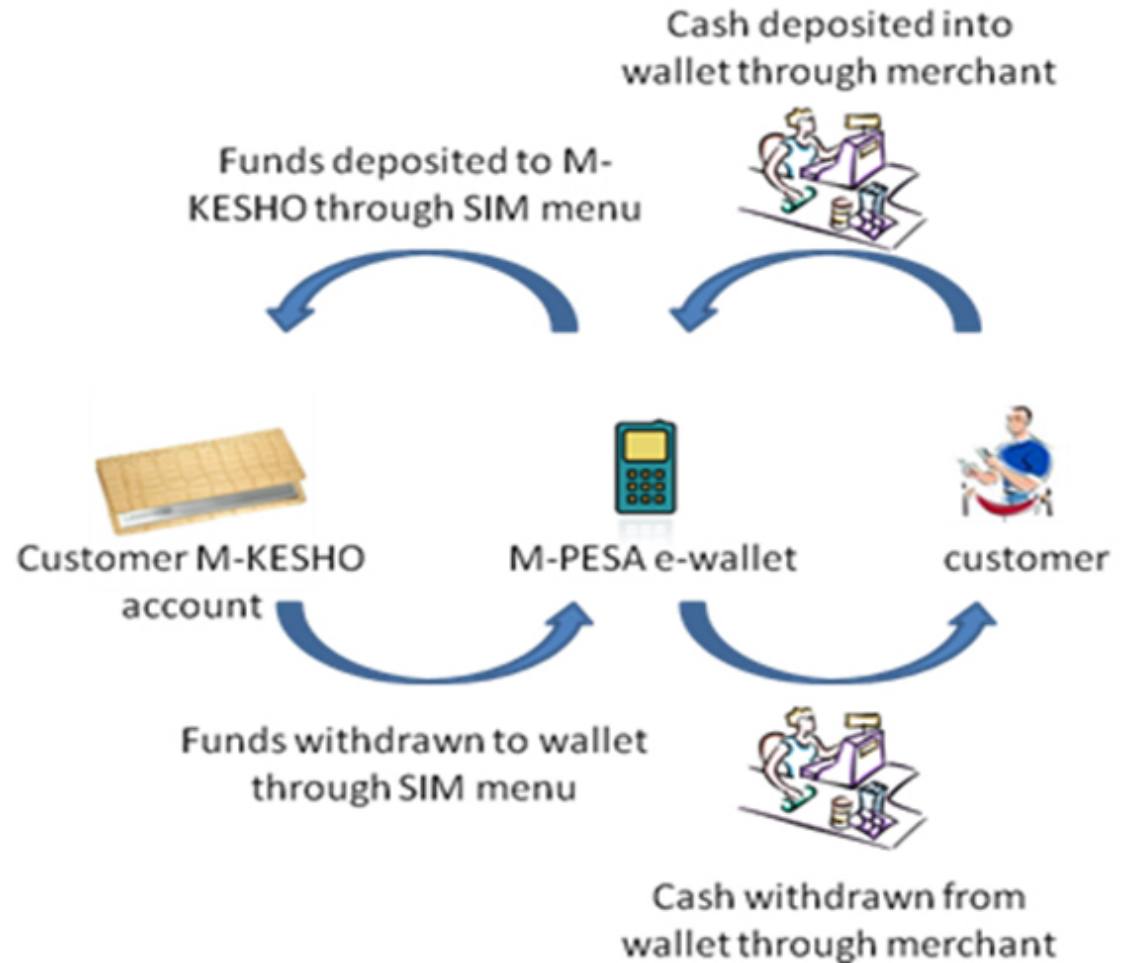
M-PESA is the easy, safe and affordable way to send money today.
* Please see following advertisement for a list of Authorized M-PESA Agents

Register FREE
at any Authorized M-PESA Agent*

Kenya's Financial Inclusion Agency

The financial inclusion dream

Diagram of sample M-PESA / M-KESHO transaction



What happened?

“The study found that ‘cash is king.’ ...

Respondents did **not** appear to use M-PESA as de facto savings accounts, but the service was an important part of their coping strategies for unusual large expenses, particularly hospital bills.” (Stuart and Cohen, Cash-in, Cash-Out Kenya 2011)

To get people banking, start with
existing behaviors?



भारतीय स्टेट बैंक मिनी बचत खाता चलाने के 2 नये प्लान.



Premium Transaction Plan (मिनिमम साइट टाइम)

सक्रियिफिकेशन का विकल्प	शुरूआत
खाता खोलने का शुल्क	₹. 100
सालाना व्यवहारिक शुल्क	₹. 100
व्यवहार - जमा/निकासी	नि:शुल्क
कुछरी ओकेसी सुविधा	₹. 20

Basic Transaction Plan (मिनिमम साइट टाइम)

सक्रियिफिकेशन का विकल्प	शुरूआत
खाता खोलने का शुल्क	₹. 100
कुछरी ओकेसी सुविधा	₹. 20
व्यवहार - जमा/निकासी	₹. 2 हज़र व्यवहार 100



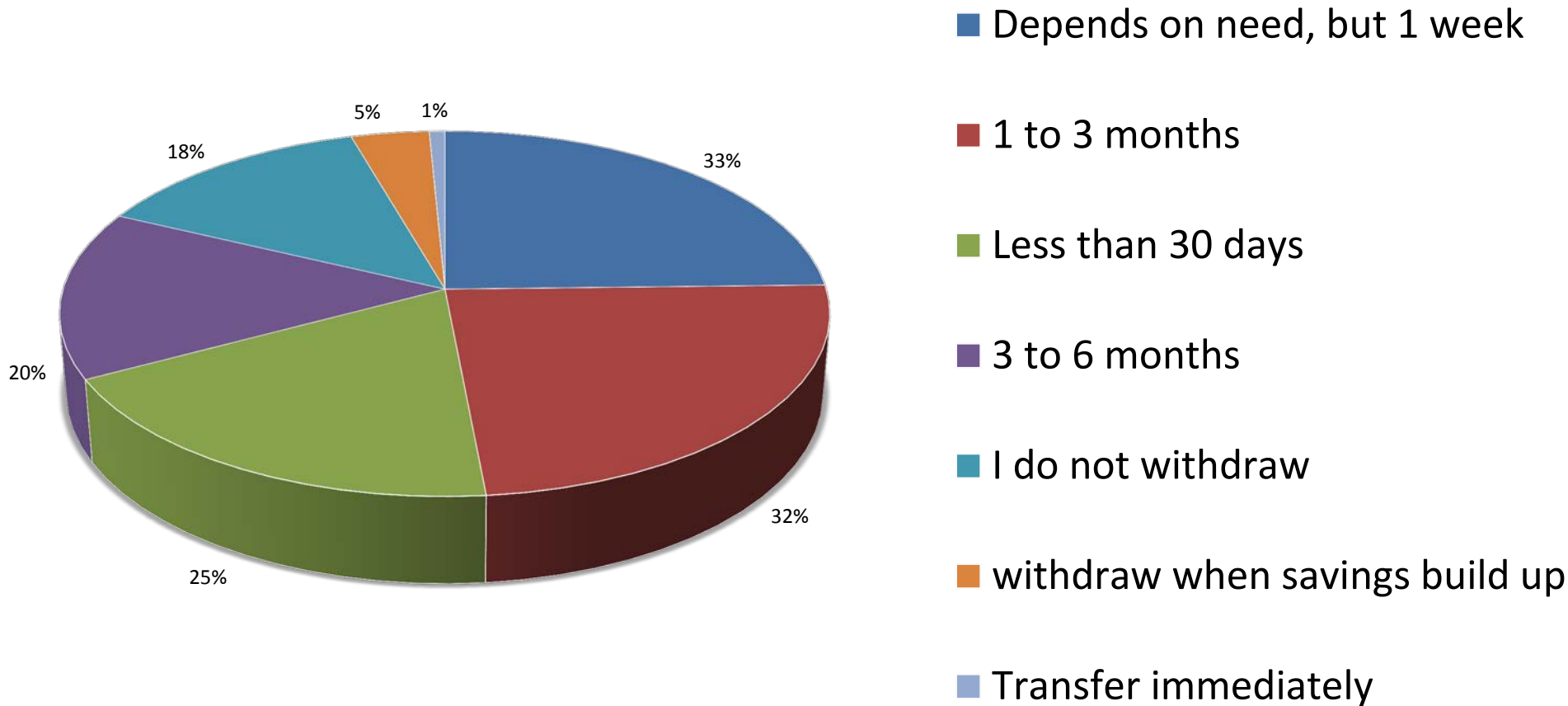
भारतीय स्टेट बैंक ब्रांच मिण्डल

- यह आप अपनी सुविधा अनुसार अपना प्लान चुन सकते हैं.
- इससे आप अपने सभी व्यवहार का शुल्क काफी कम कर सकते हैं.
 - इससे आपकी सभी व्यवहार का शुल्क काफी कम कर सकते हैं.
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 - इससे आपकी सभी व्यवहार का शुल्क काफी कम कर सकते हैं.

एको/-

खाता खोलो, हर दरवाजा खोलो.

Case study: EKO, length of savings



Kinda saving a little, but also using it as
a payment platform for...

“Only one kind of mobile to mobile transaction
was found to be prevalent - for recharging their
mobile airtime accounts” (Nandhi 2012).

AIRTIME

From banking to payment; “platformization”

M-Pesa and health expenses



Who's the acquirer? Who's the processor?



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[Sign in](#)



Start accepting M-PESA payments today

Complete the form below to upgrade your business with an M-PESA Buy Goods account

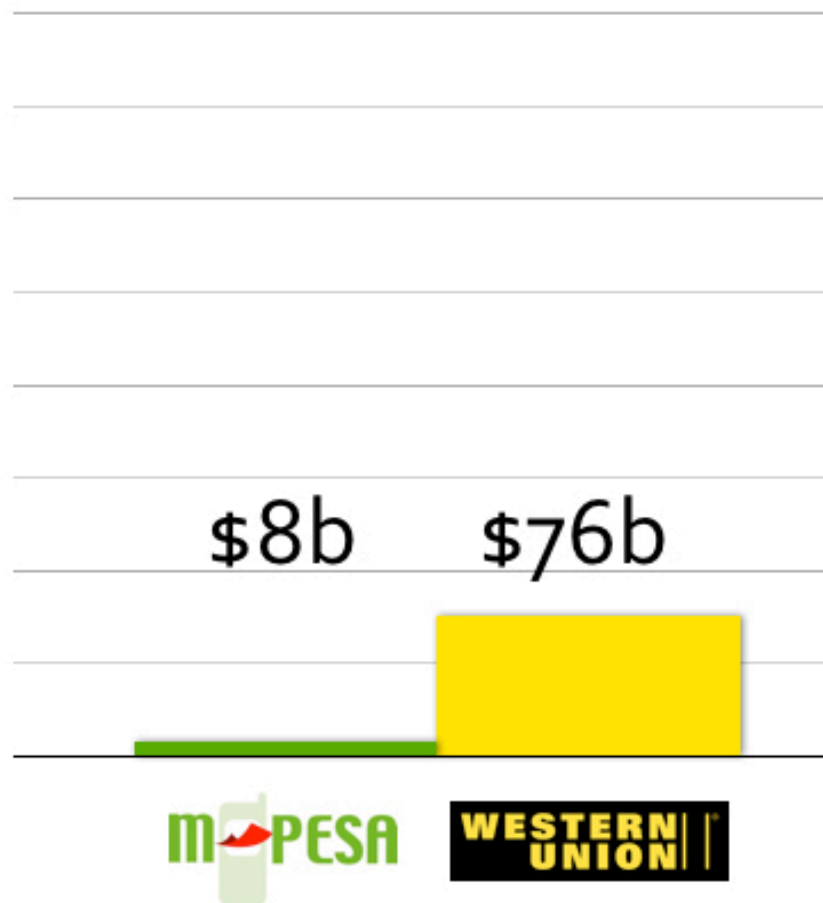
[Learn more](#)

[Apply now for free](#)

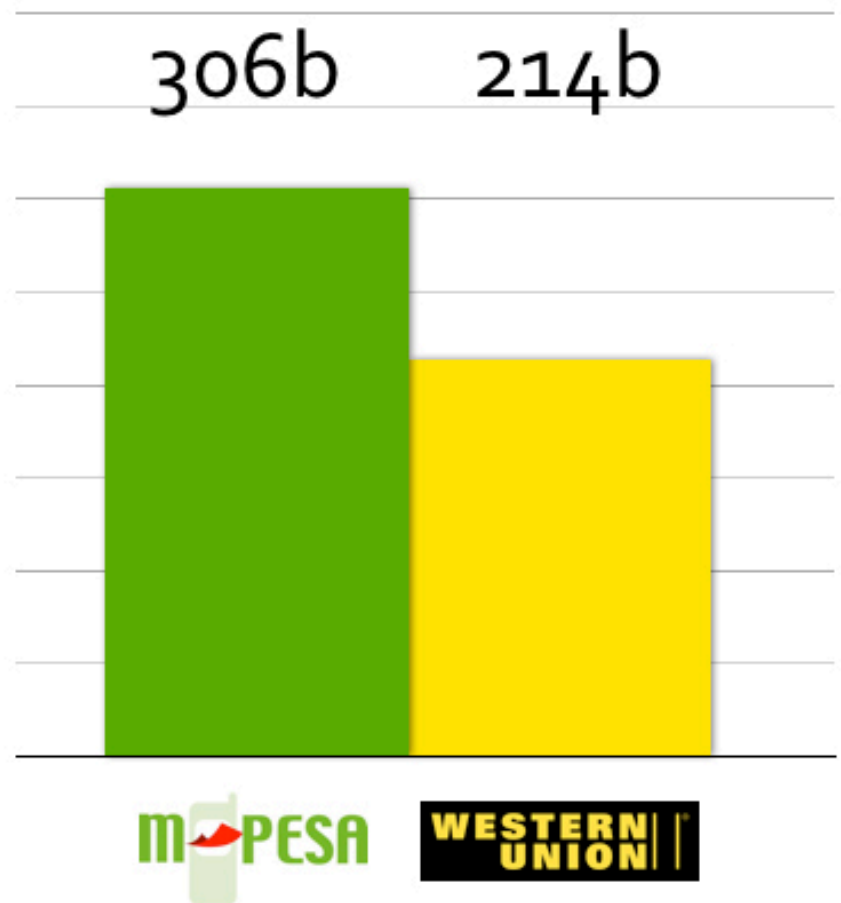
Some changes brought on by “mobile money” in the developing world

- 1) Changes in the relationships between and definitions of acquirer, issuer, processor?
- 2) A new rail?
- 3) Concerns over interoperability

In 2011, the **value** of all transactions processed through M-PESA in Kenya was 10% of Western Union **worldwide**.



And the **number of transactions** via M-PESA in Kenya was **35% greater** than Western Union worldwide.



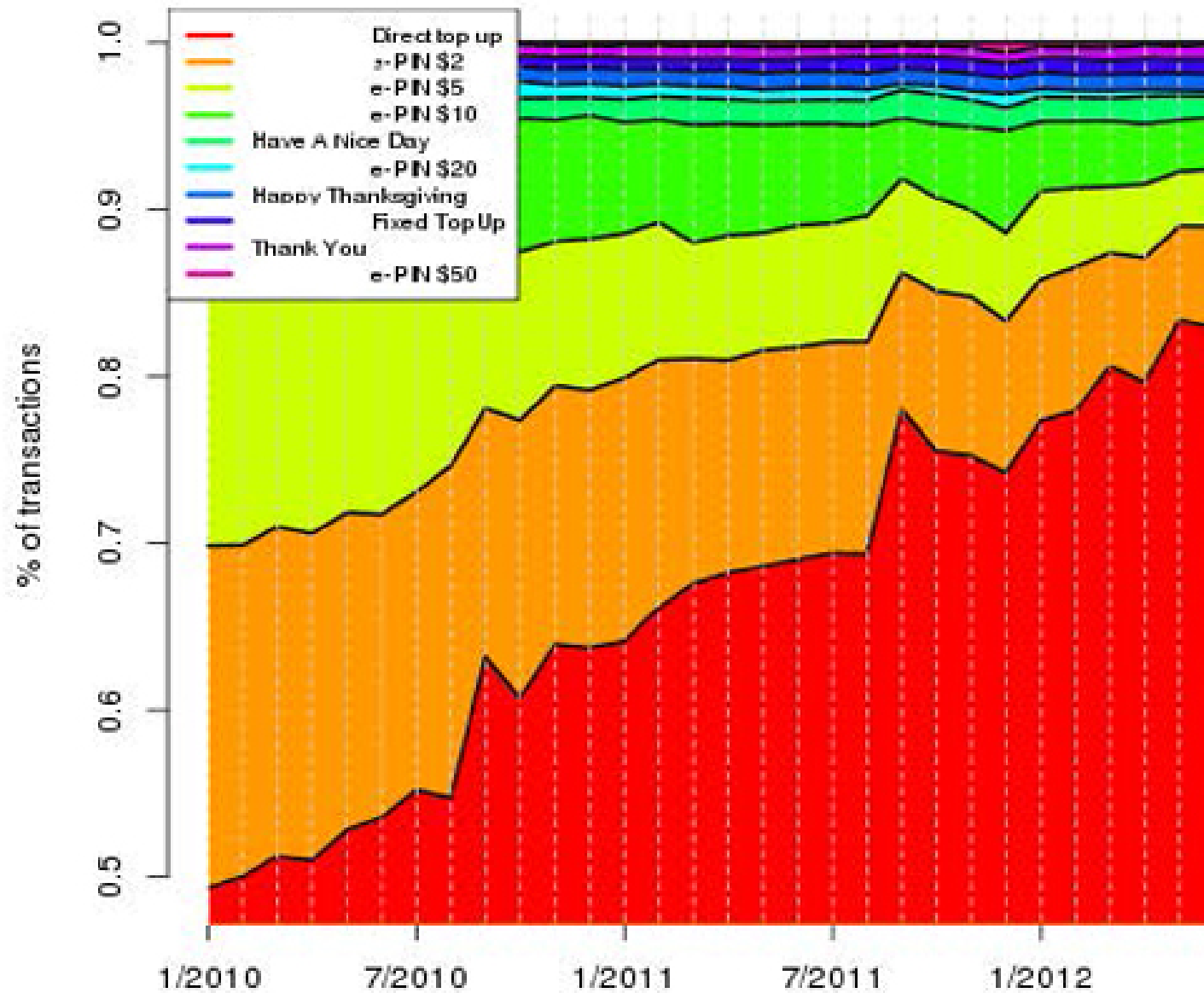
Meanwhile: back in the airtime business...

“Operators can design their top-up strategy using a combination of three different approaches: Retail top-up, bank top-up and direct operator top-up.

Comparing these approaches confirms that direct operator topup is best suited to satisfy operator objectives of cost reduction, revenue growth and customer loyalty management.

Focusing on operator-controlled top-up channels provides advantages in three key areas: Subscriber reach and availability, ease of use and CRM potential. This gives direct operator top-up a clear lead compared to bank top-up.” (Northstream 2009).

Product share over time



From airtime, to banking, to payments, to airtime again

Direct airtime top-up as a new payments rail, for what?

more airtime?

[definitely]

cash out?

[not really]

“I love you”?

[remember that first
SMS?]

remote purchase

as remittance?

[coming/already here]

Historical analogies

Airtime top-up \approx EFTPOS?



Cash in



Cash out

Profit, or cost savings? As with the ATM networks, the initial impetus for direct topup is cost savings, not profit (though that's changing fast)

Regionalism: ATM networks came about through regional associations of banks. Topup services came about through mobile network operators but increasingly third-party platform providers serving multiple (regional) carriers.



iTop-Up

International Mobile Top-Up

It's as easy as 1-2-3

RELIANCE
Communications
an Omnicore Telecom Group

tigo



tekel



SMART

Corbina
telecom

LIME



MOTUS



中国移动通信
CHINA MOBILE



indosat
the future is here

БАЙКАЛТЕЛКОМ



vodafone

BSNL

TELE2
PERCENT PAYMENT BY POST

Utel

vivo
VIVO.COM.BR



jangkauan luas



avea
telecom

ALCANTARA

CMAPTC

VOEGATELECOM

AKOC



HCC
Haus Communication Center

TELKOMSEL



Dialog
TELEKOM

vinaphone
không ngừng vươn xa

TATA
indicom

MEGAFON

Suntel

AIRCEL

Digicel

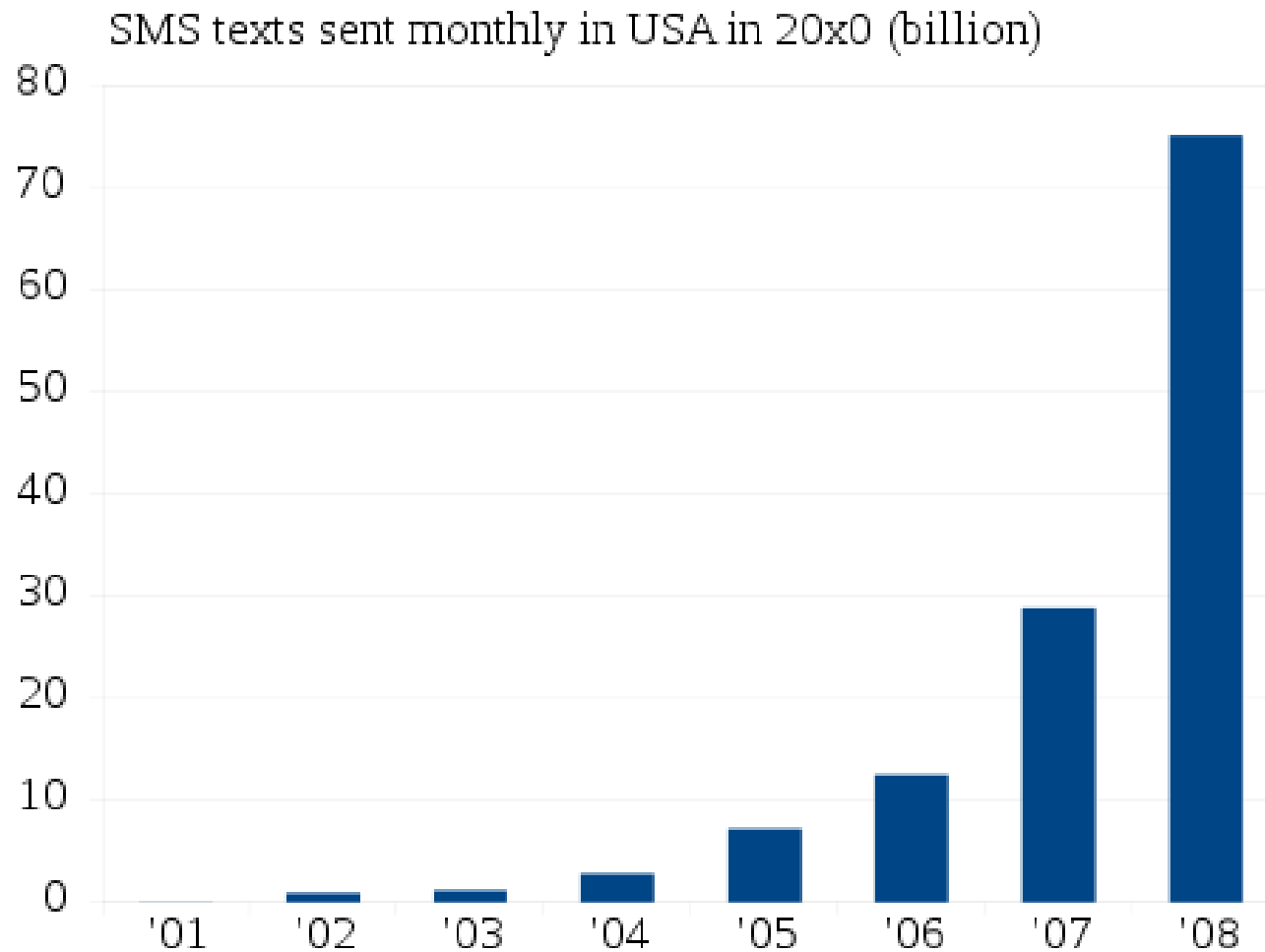
VimpelCom

Ufone
It's all about U

idea



Remember SMS?



What is Airtime?

Airtime, also called top-up or recharge, are prepaid mobile credits that can be purchased either at point of sales in the form of scratch cards or printed vouchers featuring a PIN number or via direct real time reload to the prepaid phone. Prepaid mobile credits can also be purchased at ATM, or online.

On receipt of payment, prepaid credits are stored electronically in a data repository. The stored value can be consumed as per the terms and conditions of the mobile operator as voice messaging or data. Some operators offer their prepaid customers the possibility to share the airtime with another prepaid customer of the same mobile operator.



Airtime Remittance

- There are 200 million people working and living in a country other than their own. Combined, these people send \$300 billion back home every year.
- Out of the 3.4 billion mobile users worldwide, the vast majority are prepaid. These subscribers conduct 50 billion top-ups per year.
- According to the World Bank, communication expenses in developing economies represent 4 to 6% of household income.
- Money Transfer Costs make micro remittances (under \$20) impossible
- Airtime remittances are the ideal solution for sending small amounts of 'value'

Airtime remittances, a \$20 Billion market

Thanks!

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