

African Mobile in a Global Context

CONFERENCE ON MOBILE PHONES IN AFRICA
13 NOVEMBER 2009, 09.00-16.30, Ingeniørforeningen i Danmark

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Outline

- Intro
- Drivers
 - From 1G to B3G: 4G...The technology trajectory
 - The Socio-economics
 - The 'Meta Icons'
- African Mobile
 - Ghana
- 'Conclusions'



The Mobile Story

Mobile cellular has been the most rapidly adopted technology in history.

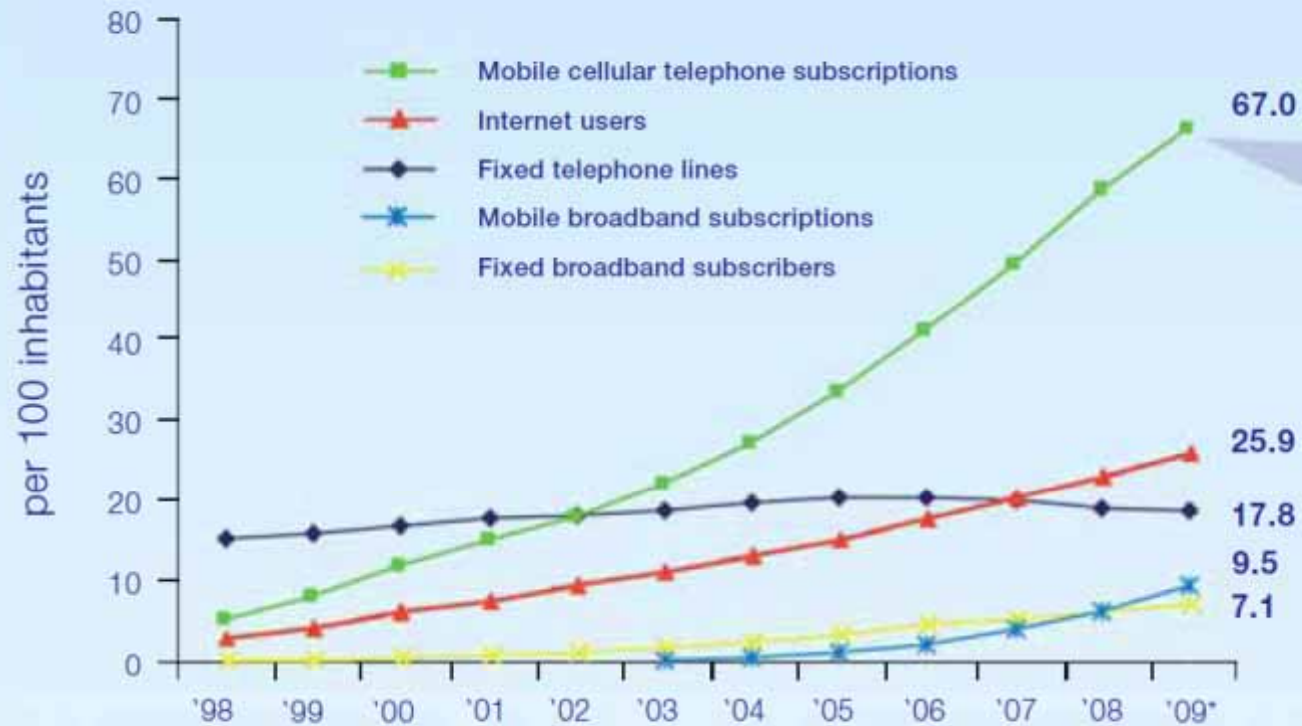
Today it is the most popular and widespread personal technology on the planet, with an estimated 4.6 billion subscriptions globally by the end of 2009

WHY?

Mobile broadband subscriptions overtook fixed broadband subscribers in 2008, highlighting the huge potential for the mobile Internet



A decade of ICT growth driven by mobile technologies



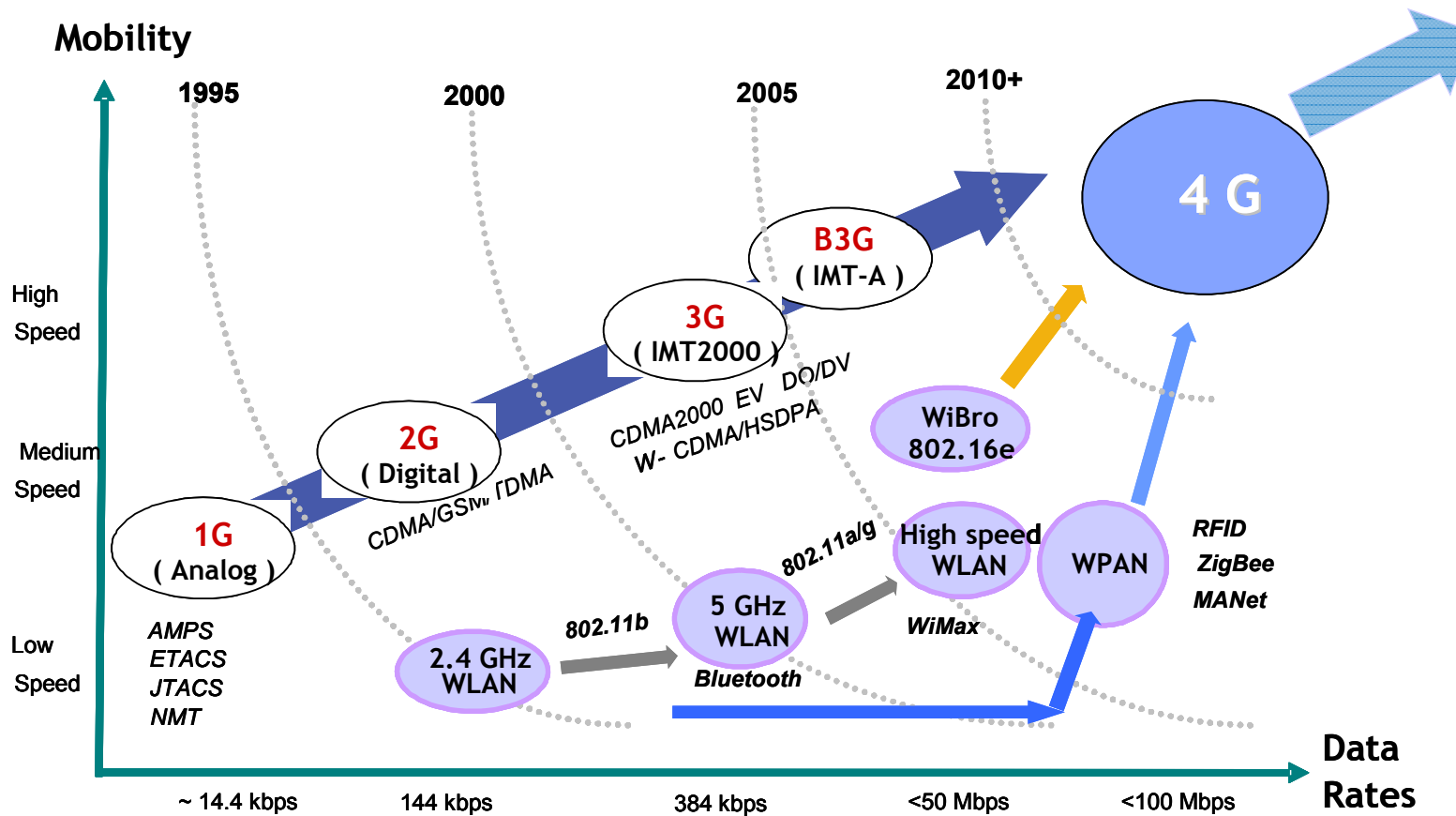
An estimated 4.6 bn subscriptions globally by the end of 2009

Source: ITU World Telecommunication/ICT Indicators Database.

* Estimates.



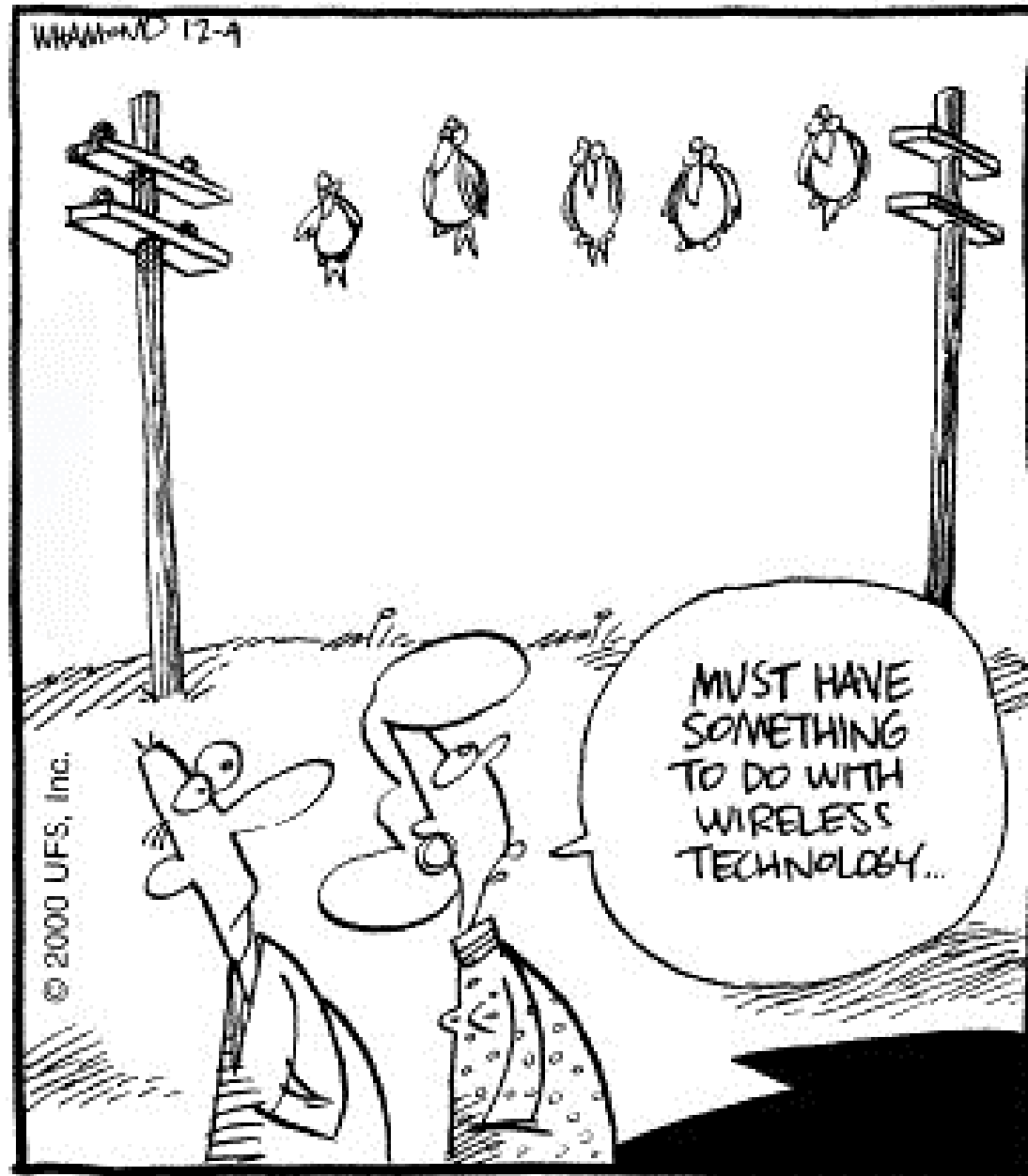
Towards 4G communication systems



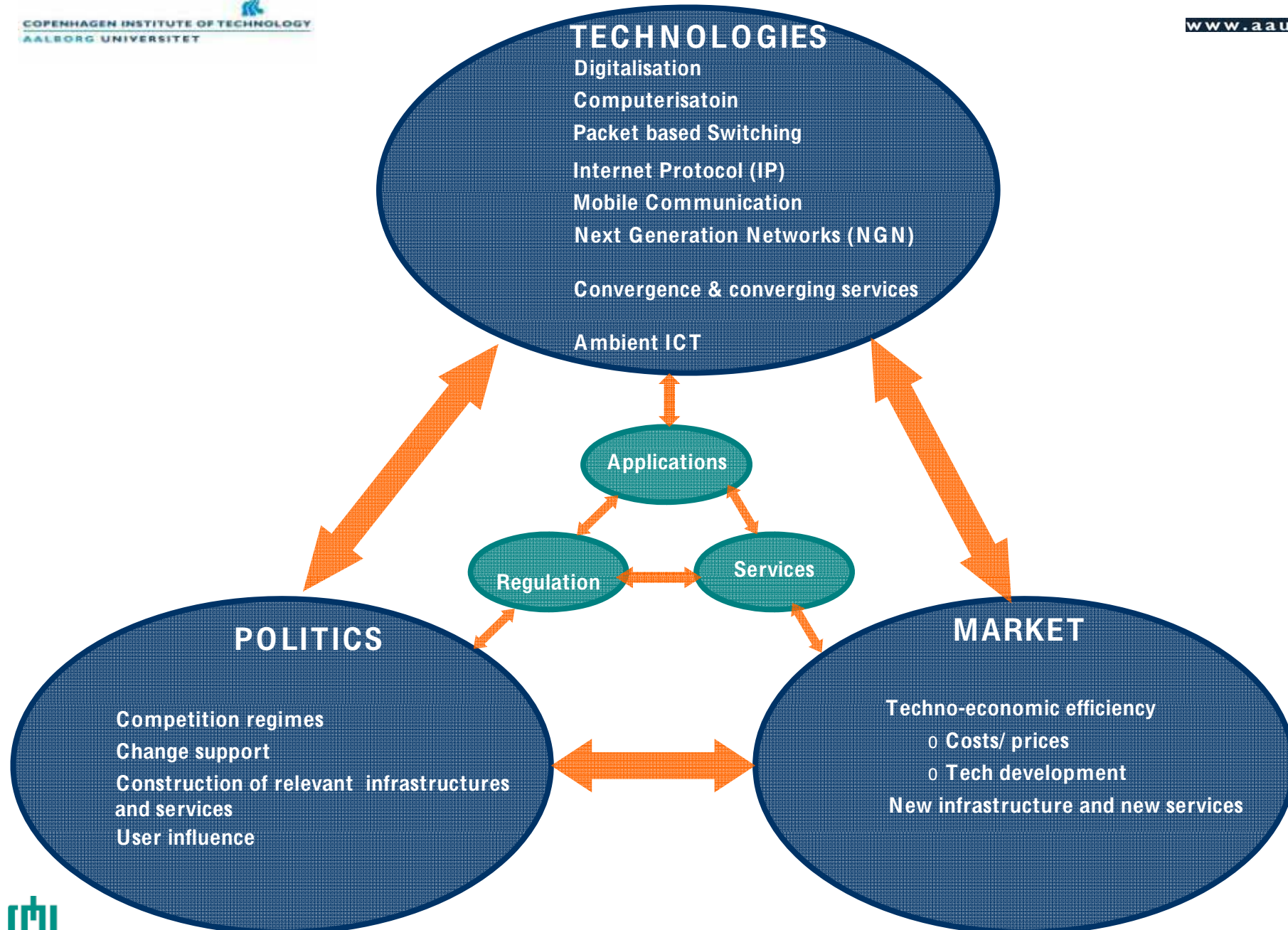
Traditional 'G drivers'

- Novel services/ applications will require higher bandwidth
- Higher bandwidth will foster new services/ applications
- “There has always been something filling up bandwidth”
- Examples:
 - Movie download
 - Sync operations
 - Animated reality, virtual (real) world,
 - Multiple simultaneous access

Wireless trends



Driving forces: Complex Relations



'Technology' and Social Identifications

The techno-economic paradigms/ disruptive technologies also characterized by social currents including general identification patterns – social myths:

- The era of industrial mass production:
 - The owner/ director: A man, his family, his community, his country
- The disruption:
 - The Machiavellian businessman: Un-Identifiable yuppies
- The ICT-era:
 - The free agent: Talent, not seniority rules

Myths: constructs of the social ideology



'Social Identifications and meta-Icons'

- Icons: Harley D./ bikers; Nike: Black Americans...
- Meta-icons associated with the Myths
 - The era of industrial mass production: The Watch
 - The disruption: The Rolex/ the Swatch
 - The ICT-era: The Mobile

- From a symbol of power to a symbol of stability, seniority and succession



- **To a symbol of disruption**



- Cutting of ties
- Rejection of seniority and succession
- The Icon as Icon
 - And creator of communities: sms, twitter..
- 'You' do not create Icons – you understand them
 - The tattoo
 - ?

ICT developments in Africa, 1998-2008 penetration rate

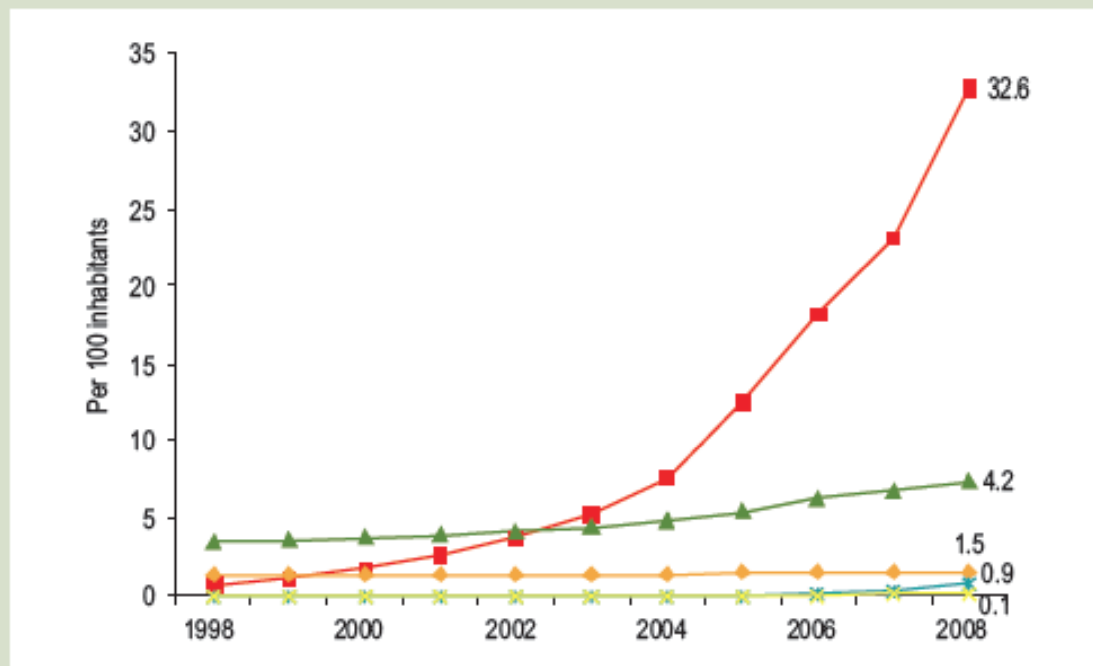


Chart 1.1

- Mobile cellular subscriptions
- ▲ Internet users
- ◆ Fixed telephone lines
- ✱ Mobile broadband subscriptions
- ✱ Fixed broadband subscribers

Source: ITU World Telecommunication/ICT Indicators database.

- Mobile phone use is growing faster in Africa than anywhere else in the world:
 - 2003-08 > 500 percent
- 60 mobile subscriptions for every 100 people in the world.
- In Africa: 33 – more than eight times the level of penetration in 2000
- Per-minute cost
 - Democratic Republic of Congo 26 cents
 - U.S. : 10 cents
 - Germany: 7 cents

- Companies use the mobile phones to obtain information about market developments
- Farmers get information about weather forecasts & transport facilities
- Tracking banana disease and educating farmers to protect their plantations
- New mobile services: banking transactions and new ways of transmitting remittances between people

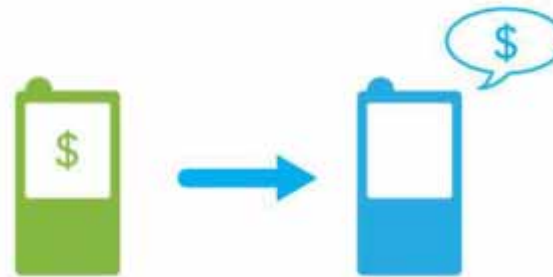
- **M-PESA** (M: mobile, pesa Swahili for money) developed in Kenya 2003–2007. Today Safaricom has 6.5 million customers
 - ‘You can use it to pay for everything from beer to cattle’ – a Masai told that when he sells cows in Nairobi, he puts the money on his phone to ensure that robbers can't get his cash.
- In Tanzania just 5% of the population have bank accounts. In Ethiopia there is one bank for every 100,000 people.

November 2009: Nokia said it would launch a mobile financial service next year - Nokia shares were up 5.1 percent at 9.28 euros

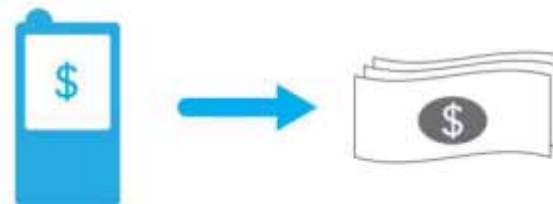
Mobile Money Explained.



The sender's mobile money account is topped up by giving money to a cash-in agent.



The money is transferred to the receiver's mobile money account via SMS.



The receiver collects the money from a local cash-out agent.



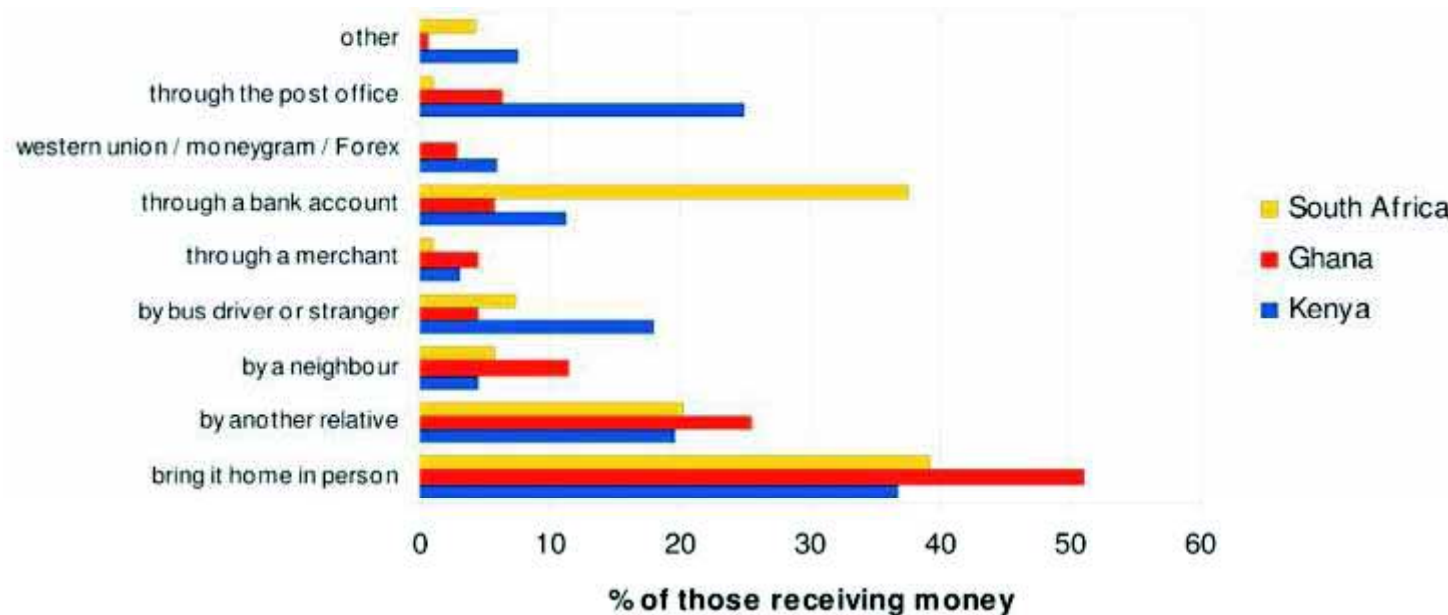
FRONTLINESMS
CREDIT



The rural family in Ghana 1992 & 2005

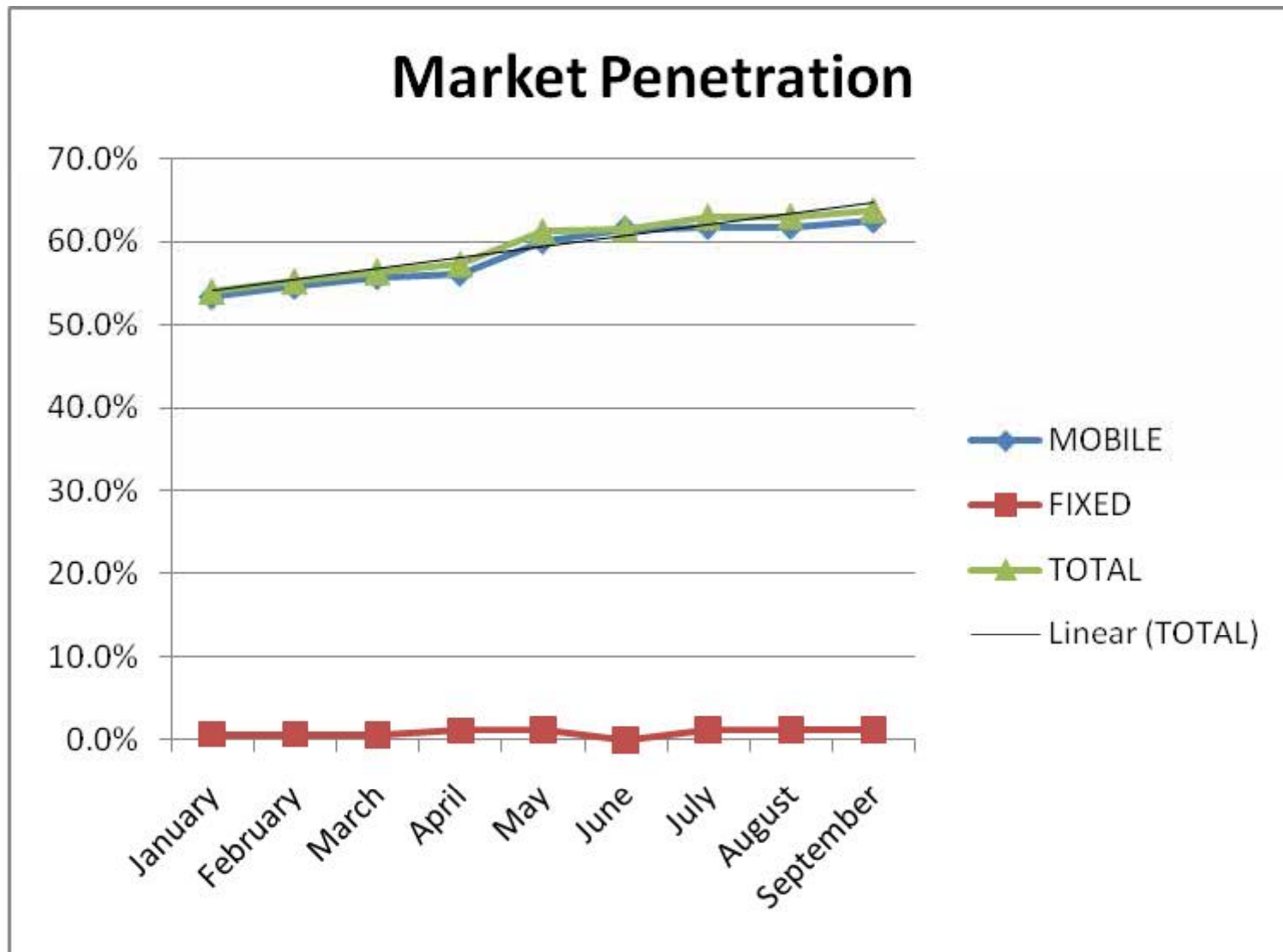


Money transactions 2008/ 09



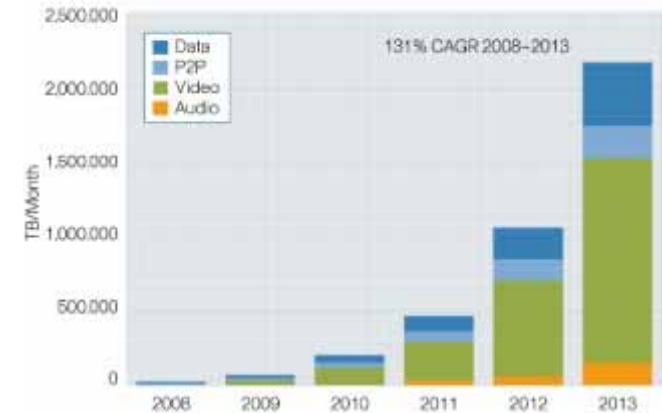
First African mobile system in 1992





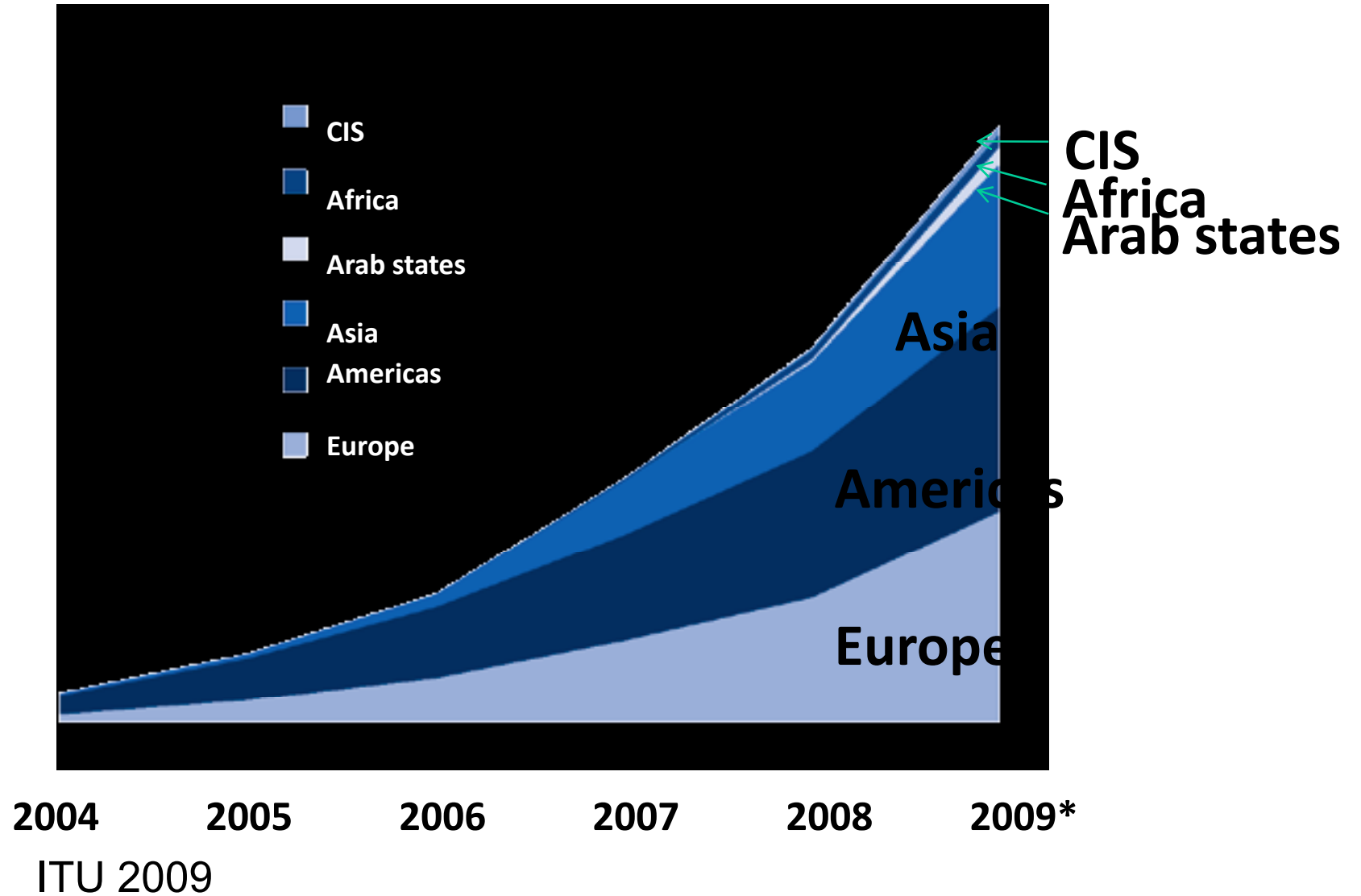
Conclusions

- Mobile growth will continue
 - Still more advanced



- Drivers complex & complicated
- Africa/ developing countries will grow fast(er) – but still a ‘digital divide’

Mobile Broadband



Thank you !

