

# Opportunities and Challenges of Mobile Money

## EAC Regional Meeting on Preventing & Combating Cybercrime

Kampala, Uganda 27<sup>th</sup> – 28<sup>th</sup> May  
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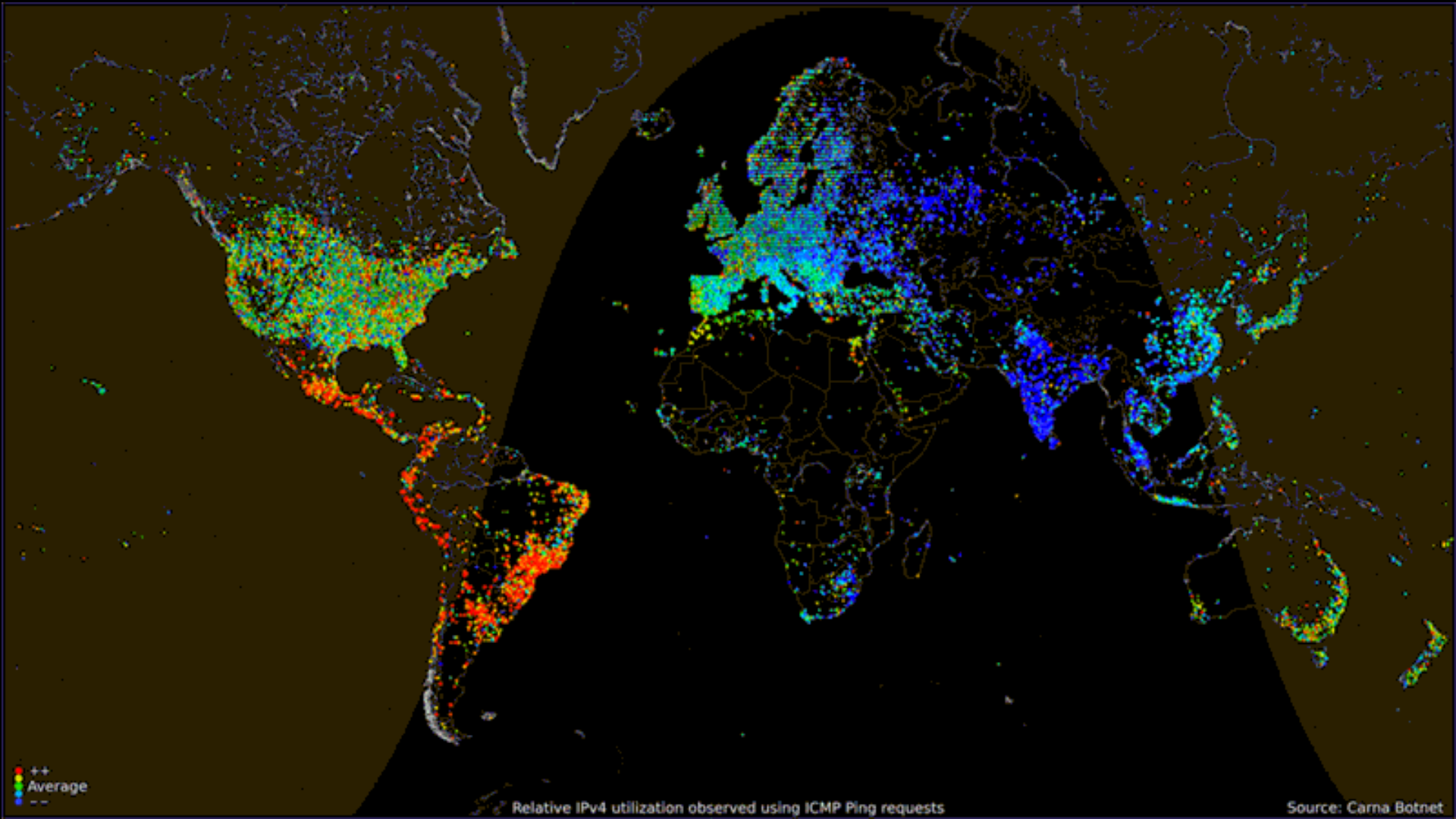
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# Global Internet Usage Based on Time of Day – 24hr risky activity!!!





# Mobile Money ..... From Cash.....



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# .....Mobile Money



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# Mobile Penetration and Mobile Banking

- The Mobile phone has revolutionized life in Africa.
- By 2012 – More than 500 million mobile subscribers in Africa.
- More subscribers in Africa THAN the EU and US.
- Africa fastest growing mobile communication region in the world

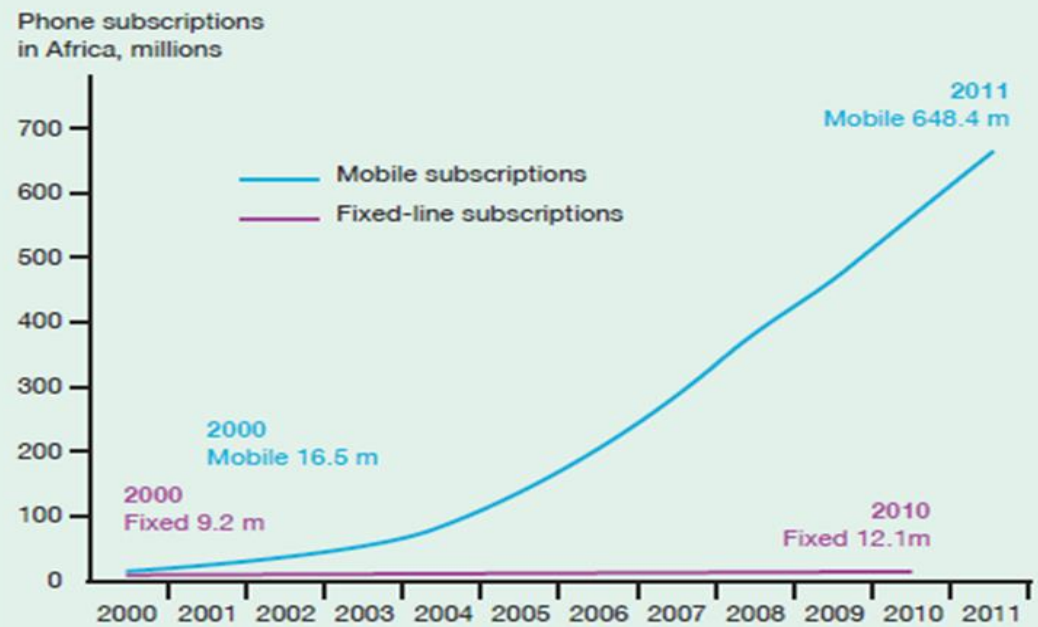




# Cont'd: Mobile Penetration and Mobile Banking

## Africa's mobile revolution

*Mobile phone and fixed line subscriptions in Africa, 2000-2011.*



Source: World Bank, Wireless Intelligence and ITU.

**Increased mobile banking risks**



# Cont'd: Mobile Penetration and Mobile Banking

## The mobile remittance market

**USD 65 billion** in mobile transfers in 2014

Today	2014	2015
Over 75% of the planet has access to a mobile	Up to 13% of formal remittances mobile	Up to 15% of formal remittances mobile
Mobile technology is disrupting traditional models, which rely on fixed infrastructure & agent networks	Transferring <b>USD 65 billion</b> per annum	Generating <b>USD 6.2 billion</b> in commissions

**Increased mobile banking risks**





# Mobile Money Opportunities



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- Cash management
- Electronic money transfers
- Bill presentment and payment
- Balance inquiries
- Airtime dispensing
- Loan applications
- Investments
- Cheque book ordering
- Pay roll etc
- Downloading transaction information





# Cont'd: Mobile Money Opportunities

- Unbanked getting banked – Agency and mobile banking
- Faster access to money
- Socio-economic development
- Sectoral improvements:
  - Banking
  - Agriculture
  - Education
  - Health etc





# Cont'd: Mobile Money Opportunities

- New banking models – agency banking
- Life style improvements:
  - Automated cheque clearance
  - Internet banking
  - Loan management – overdrafts
  - Health benefits
- Reverse innovation - Development of mobile application houses



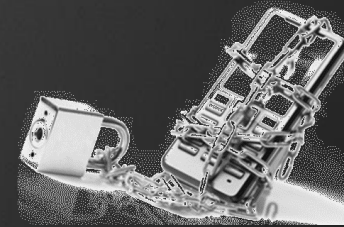


# Mobile Banking Challenges...

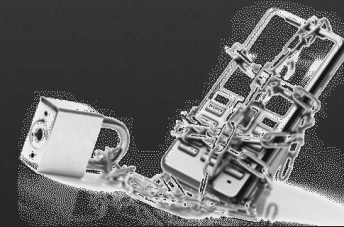
**Security: authentication and identity theft – denial of service! – Mobile Money = Mobile Crime**

## CIA:

- Confidentiality:  
non-authorized users
- Integrity:  
Message authentication
- Authentication  
Genuine source



**Non-repudiation**  
No one should deny  
sending or receiving





# Mobile Banking Challenges...



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- ➔ Health - Paper Money and Diseases
  - Just Google:
    - “paper money and diseases”
    - “viruses on paper money”
- ➔ Is there a correlation between eBanking entrenchment and better health outcomes?
- ➔ Poverty and lack of technological infrastructure and reliable power supply





# Mobile Banking Challenges...



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- Data protection - need for a legal regulatory framework governing eTransactions
- Managerial & Customer ignorance – prefer queues in banks to demonstrate “busy” attitude
- Telco industry vs payments industry





# Mobile Banking Reality...



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## Questions

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