



Connecting Africa

Empowerment through mobile communications

4th Meeting of EuroAfrica-ICT Group
January 31st, Brussels, Belgium

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Socio-economic benefits of mobility

- Being reachable
- Travel avoidance
- Access to information
- Mobile phone/network as a business
- Financial transactions: Banking the unbanked

Macro level:

Can contribute between 5-7% of GDP
Growth in developing countries

Source: Wireless Unbound, 2006: McKinsey&Company

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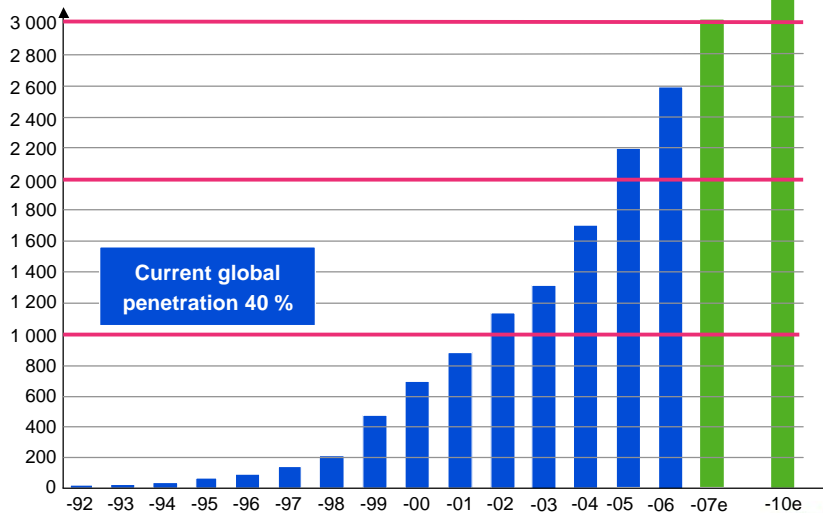
Sectors benefited by mobile technology

- Entrepreneurial activity
- Agriculture
- Healthcare
- Education
- Financial services



Over 3 Billion people connected

Mobile phone subscriptions globally, millions

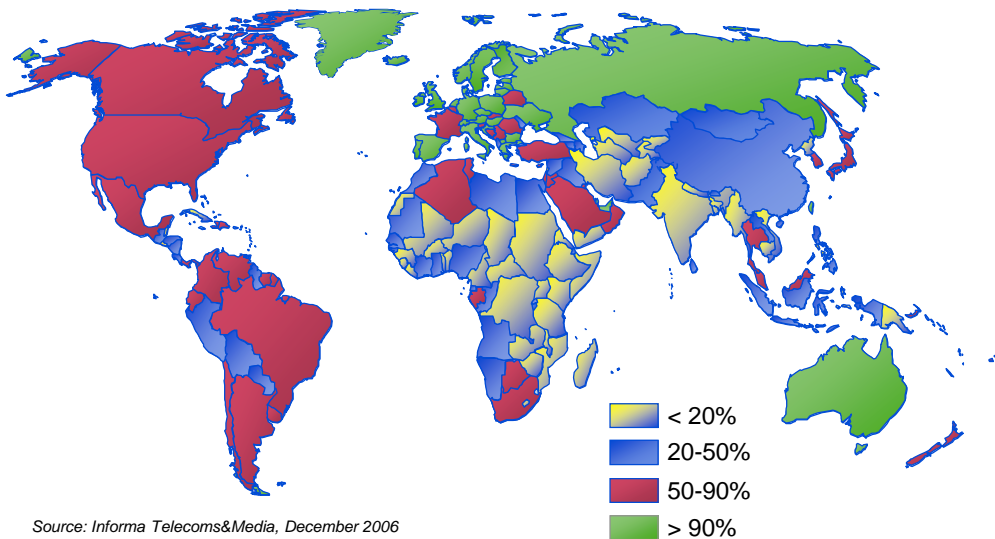


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Africa is one of the fastest growing markets



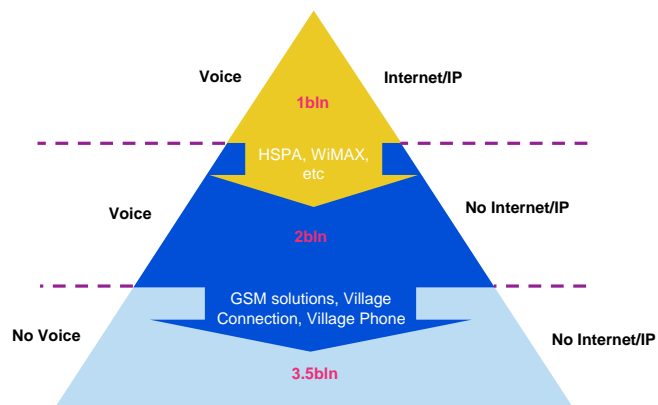
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Most people will access data services via a mobile

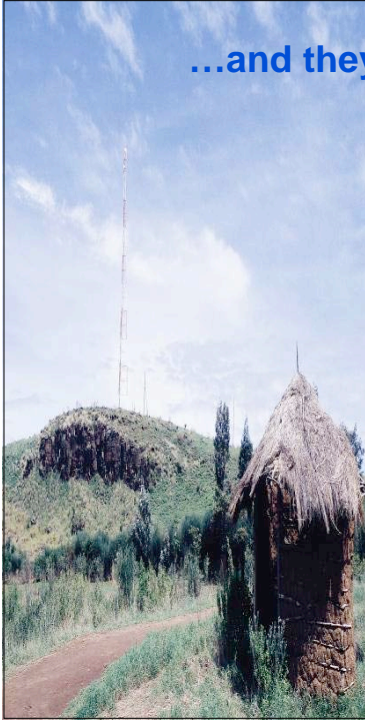


Initials

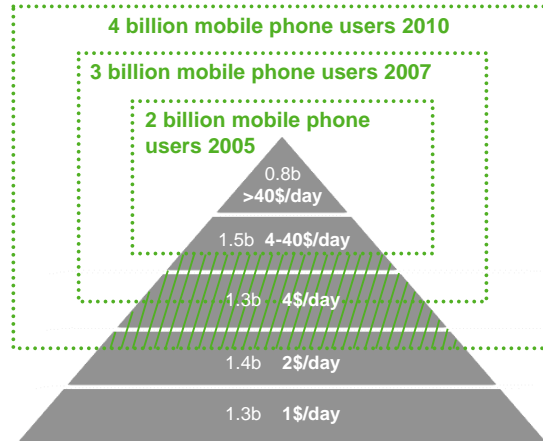


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...and they are the world's poorest



World population split according to income segment (USD per capita per day)



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Low cost but big aspirations...



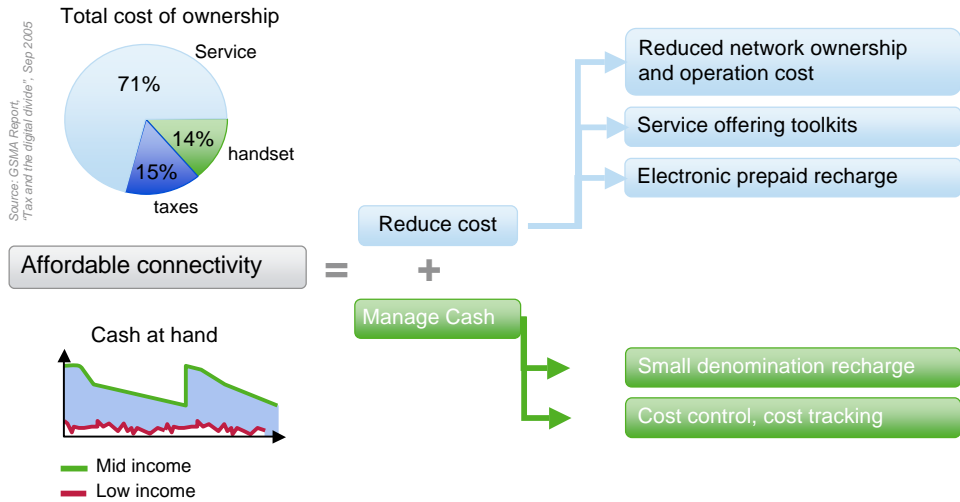
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Making universal access a reality...



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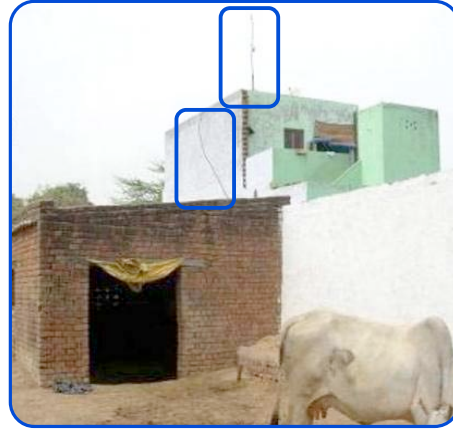
Village Phone model

- Microfinance allows villagers to become Village Phone Operators
- The Village Phone Business Kit:
 - Nokia mobile phone
 - External booster antenna
 - SIM card with preloaded airtime
 - Recharging solution
- Projects in Uganda, Rwanda, Cameroon and the Philippines
- Thousands of Village Phone Operators and numbers continue to grow



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- Affordable communications to rural regions
- Innovation contains:
 - local operation and subscriber management
 - local switching capability and IP transport
 - novel solution architecture that allows significant savings in CAPEX and OPEX
 - provides a village with internet access
- Enables a new franchise-based business model to reach the rural
- Successfully piloted



GSM and Radio antenna on pole on rooftop

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Beyond access



Developing local and relevant content requires competences, tools and ecosystem for the Mobile Internet

To ensure locally relevant content and services, we need:

- Local competence to develop services
- Tools to develop services
- Local business ecosystem to provide content and services: hosting services ...

Missing
 Available



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Project: Building the local competence and ecosystem for mobile friendly Internet service creation

Project contents:

COMPETENCE BUILDING

- University curriculum for mobile friendly Internet content development (including tools)
- 2-3 day training for 5-10 African universities
- Potential: Scholarship professors, Computers + internet connections, Phones for courses (testing the services) + data plans, Incubation, scholarships & funding
- Competition (for students) for the best local mobile friendly Internet services
 - Local: Jury composed of local business representatives
 - Prices: participation to the global competition, mobile phones, ...
 - Criteria can be e.g. business potential, social aspects, usability and quality, ...
 - Global: In connection with major event

Local competences for business start-ups in emerging countries

ECOSYSTEM

- Finding the existing ecosystem players, and if none existing, negotiations with local ISPs/operators for providing name+hosting packages
- Starting packages for ISPs (how to start to do business with mobile friendly Internet services)
- Marketing to to ISPs

Local business potential for hosting services

Connecting 3 billion in rural communities is a challenge...

- Creating opportunities and directly linked to other infrastructure development
 - Availability of clean drinking water
 - Electricity
 - Job opportunities
 - Public services
- Rural access programs
- Local content creation, containing local languages and culture
- Involvement of local people
- Take back programs beginning for e-waste e.g. Nairobi



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Regulators play a key role in multi-stakeholder co-operation Enabling regulatory environment enables growth

- Stability in the regulatory environment
 - Spectrum management
 - Governance
 - Institutional framework; independent regulatory authority
- Encouraging economic environment
 - Intellectual property rights and standards
 - Tax regime
 - Trade policy
 - E-Waste framework



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Mobility is the way forward

- Mobile technology: the best way to offer rural connectivity
- Millions of people out of reach of fixed networks
- Mobile phones:
 - Do not require permanent power supply
 - Can be used by people who are unable to read or write
 - Are not just phones, but also radio, camera, music player, calculator and Internet access devices



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Conclusions

- Mobile communications provide unprecedented opportunity for Universal Access and bridging the Digital Divide
- Socio-economic benefits of being connected are wide spread – building from micro level up to higher GDP growth in macro level
- Total cost of ownership is the ultimate driver of mobile penetration
- Multi-stakeholder co-operation is necessary to make it all happen.

We are on the road towards making Universal Access a reality



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