The Scramble for Africa

cellular wireless networks

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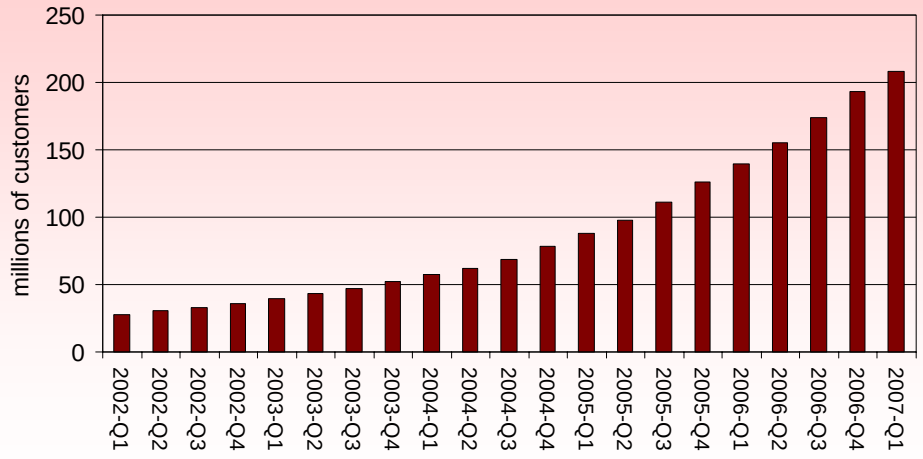
Introduction

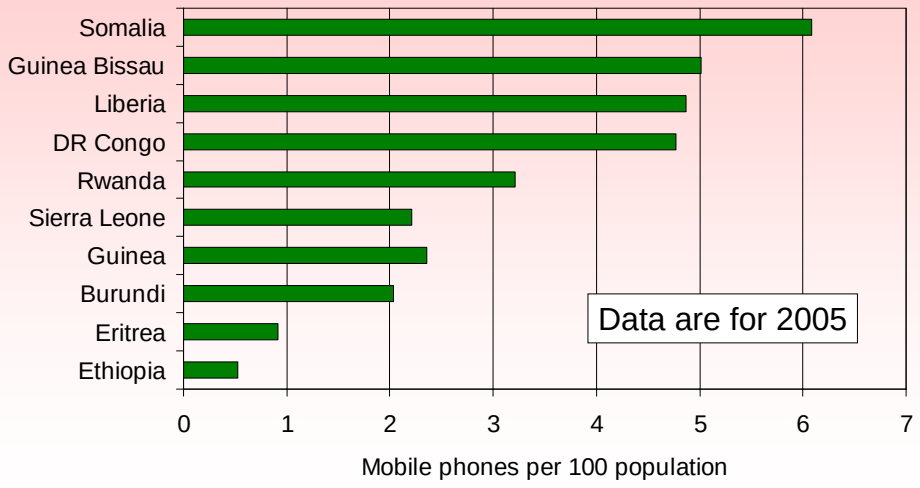
- Introduction
- Growth of GSM
- Political risks
- Large groups and big footprints
- The supply of infrastructure
- Conclusions

The growth of GSM in Africa



Source: GSM Association.

Post-conflict countries

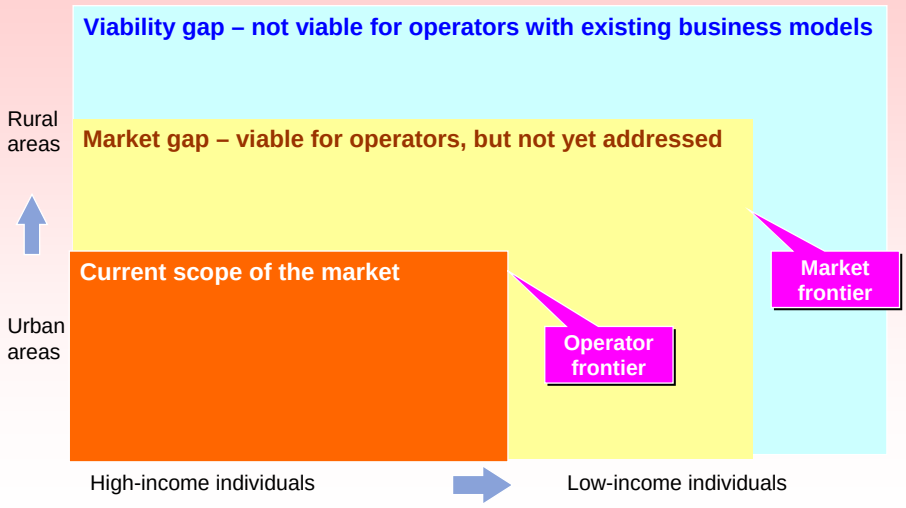


3G in Africa

- South Africa (MTN and Vodafone)
- Tanzania (Vodafone)
- Egypt (Etisalat Misr)
- Mauritania (Chinguitel)
- cdma2000 in 450, 800 & 1900 MHz bands

Vodacom Tanzania – "Tariffs quoted in Tsh, exclusive of VAT, applicable on Vodacom Prepaid and Post-paid options. 1MB=1024KB, 1GB=1024MB, 2GB=2048MB. Internet / WAP charged at accumulated uplink and downlink volume per KB (kilobyte) including any control or session establishment packets, all packet header data and formatting data. Data usage includes any information automatically sent or received by the cellphone or other device, such as application and system tool automatic update checks and downloads etc, whether they are background or foreground (visible or not visible) processes. One unit equals one byte of data."

Gap analysis



Political risks

- War, *coup d'états* and insurrections
- Corruption and cronyism
- Zimbabwe:
  - draconian interception law
  - revocation of Telecel licence
- Gabon:
  - the sensitivities of restructuring an incumbent
  - the poor performance of due diligence
- Operators are also taking licences in Afghanistan and Iraq

There are also natural disasters, famine and pestilence. Then there are economic shocks.

Benin

- A new government seeking to "clean up" the sector
- Imposed new licence conditions in violation of existing concession contracts
- Demanded €46 millions to "renew" licences
- In July 2007 it revoked the licences of:
  - Areeba (Etisalat)
  - Moov (MTN)
- Globacom from Nigeria obtained a new GSM licence in one week in August
- After two months MTN and Etisalat capitulated and paid

Titan Corporation built the first GSM network with French partners. It paid US$ 28.5 millions for violations of Foreign Corrupt Practices Act (FPCA).

Multi-country networks

- Spreading the risks:
  - political
  - economic
- Learning from operations
- Building brand
- Building economies of scale
- Leveraging market power to buy from:
  - manufacturers
  - content providers
- Roaming revenues

The large operator groups

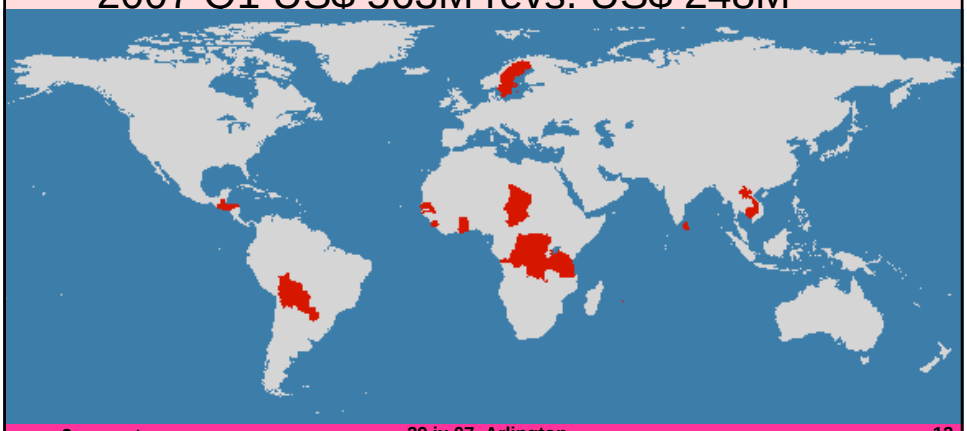
- European:
  - Orange (France Telecom)
  - Tigo (Millicom Group)
  - Vodafone (also Vodacom and Safaricom brands)
- Arabic:
  - Celtel (Zain, formerly MTC Group)
  - Etisalat (also Moov brand)
  - Orascom
- African:
  - MTN

Celtel – one nation

- Part of the Zain Group of Bahrain
- September 2006 abolished roaming charges in:
  - Kenya
  - Uganda
  - Tanzania
- June 2007 extended to:
  - Gabon
  - Democratic Republic of Congo (Kinshasa)
  - Republic of Congo (Brazaville)
- Will be extended to a further 9 countries
- With no prior registration or fee
  post-paid and pre-paid customers can:
  - make calls at local rates
  - receive incoming calls free of charge
  - top-up pre-paid phones with locally-bought airtime
- Forced rivals to collaborate in order to compete

Millicom

- 16.5 M customers
- 2007 Q1 US$ 563M revs, US$ 248M



Portugal Telecom – Africa holding

- Angola (Unitel)
- Botswana (Mascom)*
- Cape Verde (CVT)
- Guinea-Bissau (Guinétel)
- Namibia (MTC)
- São Tomé et Príncipe (CST)

*management contract

Vivendi – Maroc Telecom

- Morocco (Maroc Telecom)
- Burkina Faso (Telmob)
- Gabon (Libertis)*
- Mauritania (Mauritel)

* suspended by the Constitutional Court

In France and Belgium it has an MVNO using the Mobisud brand, targeted at first and second generation Moroccans and Algerians. Calls and SMS to North Africa at domestic rates.

Infrastructure projects

- Afritel sub-regional projects (SRII)
- Boucle de Nord
- Boucle de Sud
- COM-7 (Southern Africa railways)
- East African Backhaul System (EABS)
- East Africa Submarine System (EASSy)
- East African Digital Transmission Project (EADTP)
- FLAG
- GLO-1 (Globacom)
- Infinity West African cable
- Infraco
- NEPAD SPV
- NIGAL (Nigeria-Algeria oil pipeline)
- The East African Marine Systems (TEAMS)
- West African Festoon System

Source: Toure (2007)

Infrastructure and politics

- It is claimed that:
  - there is unmet demand for international infrastructure
  - it cannot be met commercially
- ITU SG has called for a “Marshall Plan”
  - he seems to mean large scale grants
  - it should entail policy reforms, peer reviews, etc
- African Union & NEPAD wants EaSSy
- South Africa is blocking a commercial cable operator
- Biggest risk is bankruptcy from excess capacity

The only real problem is the enduring monopoly over access to undersea cables held by state-owned incumbent operators.

Conclusions – operators

- Building extensive footprints
- Spreading their risks
- Increasing their leverage with manufacturers
- Spreading their learning about customers and markets
- Building continental infrastructure
- They have massive advantages over vertically integrated one-country operators
- They are not limited to Africa, the region covers the Middle East and up to China

Conclusions – public policy

- Relatively easy to licence more operators
- No excuse for not increasing competition
- Early entry is easier than later
  - e.g., South Africa has only 3 operators and close to saturation
- Affordability is helped by competition
- More competitors reduces chances of collusion
- GSM operators will add fixed wireless access
- Opening international gateways is essential

Conclusion – challenge

- The big challenges are not in policy:
  - we already have the answers
- The question is how to migrate to broadband Internet access:
  - WIMAX
  - cdma2000
  - HSPA
  - Mobile Television (DVB, DMB, CMMB)
- How to ensure it is affordable?

Thank you

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