

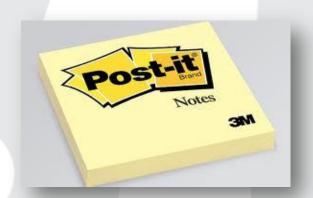
Innovation with Technology: The Emerging Markets Opportunity

NetEvents Press & Analyst Summit, Portugal (27nd - 28th September, 2012) Sunil Joshi MD & CEO Neotel

Innovation – What is?



"introducing something new; to renew or change"







Technology Inside



Mobile banking



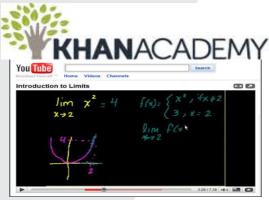
Match making



Car sharing

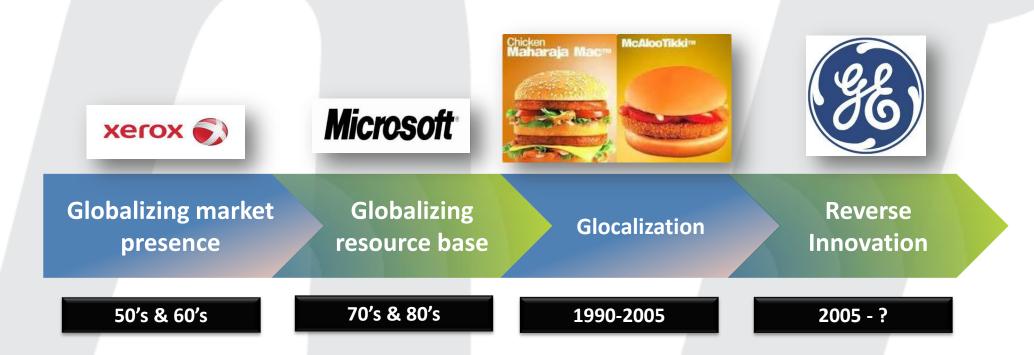


Personal Genomics



Education

Emerging Markets' changing role



- Emerging markets evolving as centres of innovation:
 - Low cost healthcare devices
 - Wind power
 - Micro finance
 - Electric cars



Reverse Innovation

A *reverse innovation*, very simply, is any innovation likely to be adopted first in the developing world.

Increasingly we see companies developing products in countries like China and India and then distribute them globally.

Prof. Vijay Govindrajan,
 Tuck School of Business



GE created a \$15,000 portable ultrasound machine for the rural markets in India and China.

The same machine is being taken to the US market.





M-Pesa is a mobile phone based money transfer service in Kenya allows microfinance borrowers to receive and repay loans using the underlined telecom network.





Nokia's classified ads in Kenya are being tested as new business models. Nokia also incorporated new features in its devices meant for U.S. customers after observing phone sharing in Ghana.





Microsoft is creating new phone app services for "dumb" phones which allow users with existing, non-smartphone devices to access Web sites such as Twitter, Facebook. Built for markets in India and South Africa, there is surprising potential for these apps as a low-cost cloud computing platform.





Mobile Learning for Mathematics Project in South Africa: focuses on active learning by delivering interactive study packages to students' mobile phones. Result highly motivated students chatting with friends and doing math on their mobile phones, even during weekends.





Necessity as the mother of all 'innovation'

More for less

Less than perfect solution at ultra-low price

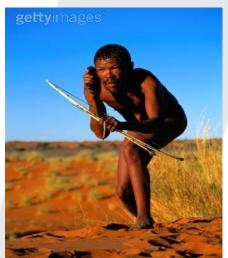


Price pressures in the developed world + rise in performance levels due to technological advancement

Contributing Factors

Leapfrogging technology

Missing precedents Adapting superior and
more efficient technologies



Need for sustainable solutions



LTE - an enabler of and for innovation



Business Model Innovations in Telecom

Network

Developed Markets

- Best of breed technologies to provide high quality of service
- Network and spectrum utilization kept minimum

Sales & Distribution

 Channel exclusivity (except specialized retailers)

Customer Care

 Performed in-house to ensure quality and reliability

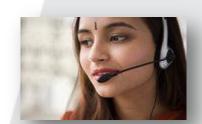
Developing Markets Innovation



- Network Outsourcing
- Network Opex/Capex utilization



- Freelance Sales force
- Micro prepaid Community phones



 Customer Care Outsourcing



#1. Enabling new IT model: InstaCompute Cloud Offering



and Microsoft.

Built-in Flexibility

changing requirements.

Pre- or-postpaid payment options. Multiple processing power options. Private or Public Connectivity. InstaCompute changes with your

TATA COMMUNICATIONS



a click of a button

4-----

Scale up or down
Tap into storage and bandwidth as needed

GET STARTED NOW

#2. Verticalized solutions: *Tata Communications Banking and Infrastructure Limited*



The Opportunity

- Provide integrated and total outsourcing services for the payments (ATM, PoS, Internet and Mobile Commerce) business of Banks
- Bank-in-a-Box' solutions to medium & small private sector and co-operative Banks













■ Tata Communications making most of this opportunity by leveraging one of the largest network footprints in the industry to introduce an: End-to-end "Plug & Play" Banking & Payment Infrastructure Solutions. - truly world-class single-window service management



#3. Value added services: Security Solutions for a web services company

Neotel

TATA COMMUNICATIONS

Client Needs

- Solution that would protect the organization's network from attacks
- Solution had to be future-proof

Solution Delivered

- Tata Communications' DDoS Managed Security service on each of its four IP transit ports
- Solution protects both current and future IP connections
- Highly reliable solution that safeguards customer experience and business reputation

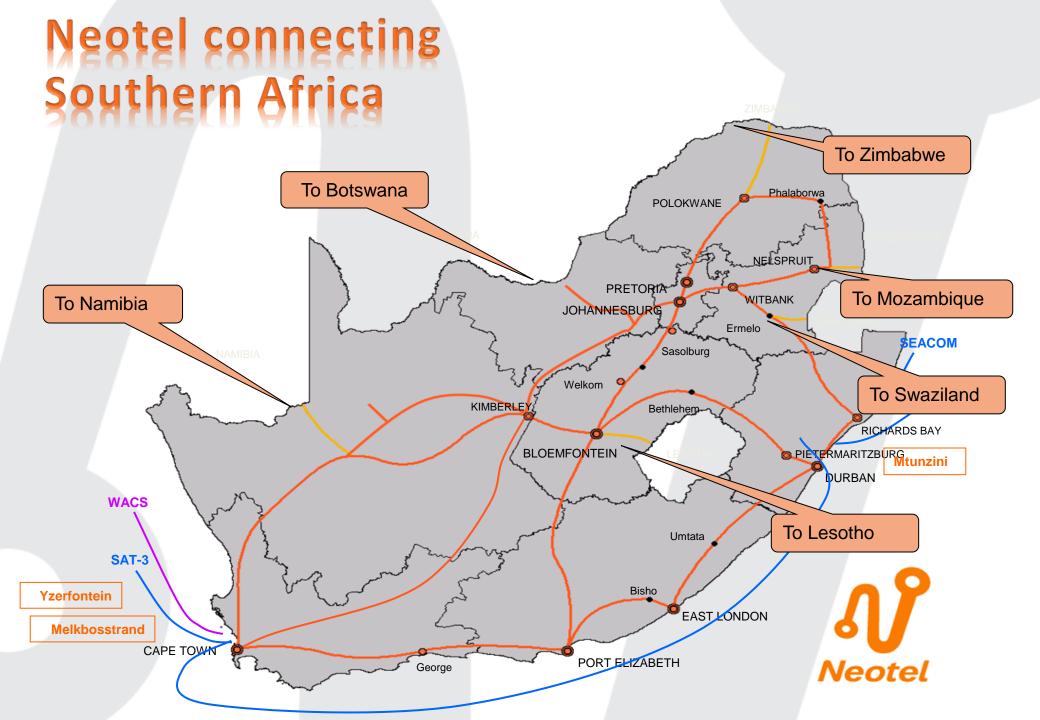


Tata Communications' IP offering coupled with DDoS



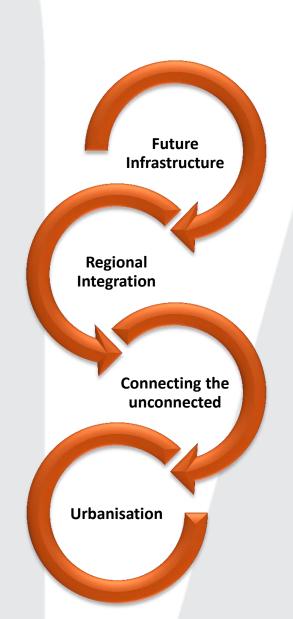
#4. Collaboration: Anchoring the eco-system: Telepresence





Neotel building on the mega trends

Today... 5 submarine cables **Tier 1 Internet Lowest latency** Internet 12,000 km fibre backbone **SADC** connectivity 6,500 km of metro fibre **Fixed Wireless**



Still in 2012...

+2,000 km of own NLD fibre

Content Delivery Network

Meshed ASON protection

Voice, Data and Video Services



Neotel is in the business of connecting people and enterprises in South Africa to themselves and connecting South Africa to the world - mature or emerging - to enable commerce

What business is Neotel in?

Neotel brings innovation to South Africa and the Region 106 K6



Inspiring Possibilities Possipilities Lossipilities

