ICT in SA

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Belo Horizonte workshop
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ICT arrangement

Gauteng

Western Cape

Western Cape 14.4%

North West 6.3%

Northern Cape 2.2%

Mpumalanga 6.8%

Limpopo 6.7%

KwaZulu-Natal 16.7%

Eastern Cape 8.1%

Free State 5.5%

Gauteng 33.3%
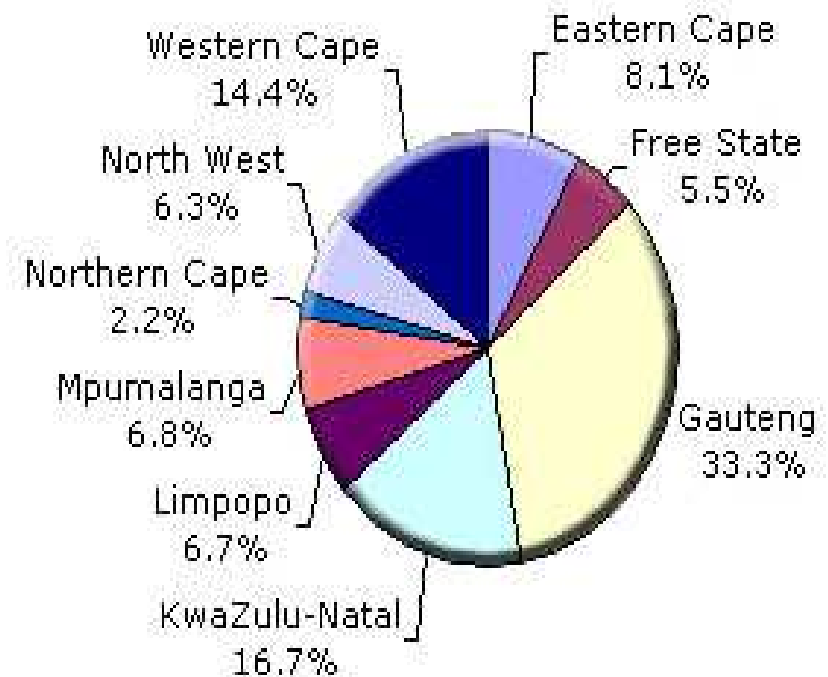
provincial contribution to South Africa's GDP

Gauteng

- firm1
- firm2
- firm3

Western Cape

- firm4 – 100 employees
  - 840 cell phone networks in 220 countries and territories.
- firm5 100 employees
  - 24 million users in over 120 countries

Regime 1: Gauteng/Johannesburg	Regime 2: Western Cape
Sticky knowledge	Non- Sticky knowledge- easy transfer
Local clients **Localisation of products for local and Sub Saharan markets**	Clients can be located anywhere in the world Virtual services
Clusters of larger firms with smaller niche specialised supplier firms	Smaller firms
Urban centres/business hubs- located near concentration of large firms	Lack of attachment to local structures- can be located anywhere Western Cape because of the lifestyle

Regime 1: Gauteng/Johannesburg	Regime 2: Western Cape
Largely B2B -General purpose technology, enablers/support for other services e.g. banking **-Servicing multinationals which are internationalising in Africa by providing localisation of the service, local infrastructural support and local ICT skills and know-how.**	Largely B2C
Global networks internal to MNC subsidiary communication channels (closed loop)	Global networks outside of MNC network

Five interviews

- – Managing Director for Sub Saharan Africa (SSA),
- – Regional head of communications (SSA),
- – Head of the 'Innovations and Partnering' unit (SSA),
- – Head of strategy and marketing for Sub Saharan Africa
- – Strategic Business Adviser to the VP

- Major clients: firm6's, equipment and related services to mobile and fixed network operators

- 1,000 networks in over 175 countries

- 40 percent of all global mobile calls made through firm1 systems

- Directed by 50 billion new connections

- firm6's no longer the major client

- Horizontal client spread-municipalities, govt departments and the 4 billion underserviced

- Greater subsidiary power needed

- Increasing locally sourced management

Developing markets

Non R&D knowledge

- – Headquarters in developed locations
- – Lack of understanding on local needs
- – Navigating around institutional and infrastructural voids
- – Do not understand how to apply and make R&D knowledge relevant to local context especially the 4 billion low income market.

- Markets are fragmented
- Easier to access to 10 large corporations than 100 000 smaller businesses
- Difficult to get products to market
- Low skills, low literacy, low disposable income, security issues.
- Handle with a series of partnerships to get product to market and establish local needs and meet them

Knowledge creation

R&D labs

- Sweden, China, Germany...but not in Africa
  - Shortage skills
  - Smaller markets
- R&D, science based
- Capital intensive
- Created technologies exported and adapted

Innovation and partnering units

- Kenya, Ghana and SA
- Innovation, user based
- Lower capital requirements
- Developed with local partners, local HR
- Translate the 'game changing' R&D catalogues to local needs

- Communication to and from HQ and R&D labs is slow and less flexible
- Losing out to smaller providers
- Shift in power to subsidiaries but difficulty with HR sourcing

Innovation and partnering units

- Small teams- in Jhb only 6 people
- Create project teams with client and smaller local suppliers
- Lower expat fees
- About 10 innovations per year
  - MTN Zone
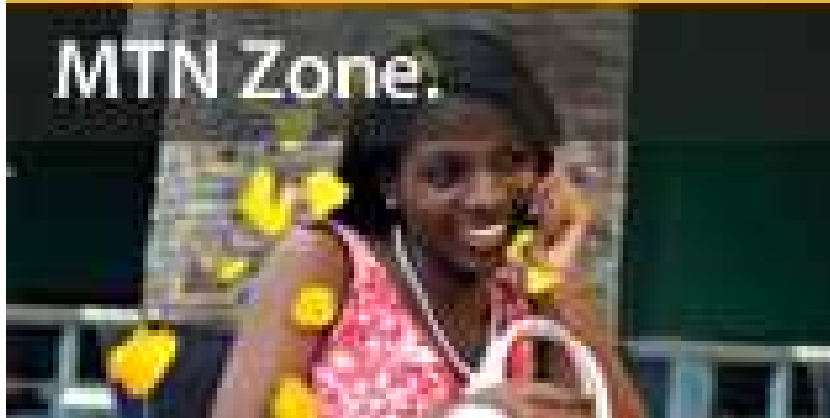 - Shared call- one phone multiple numbers

Local innovation

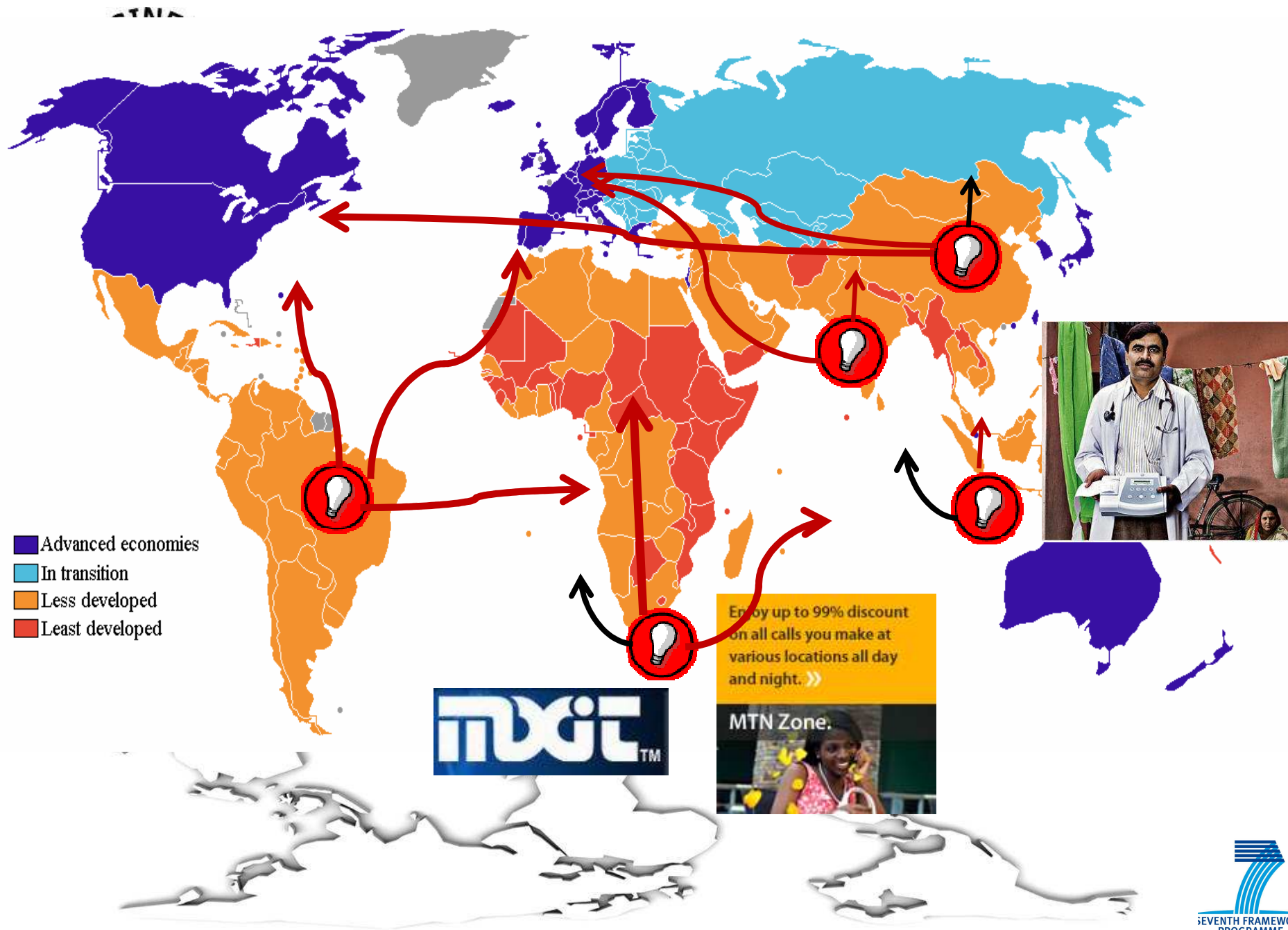
Enjoy up to 99% discount on all calls you make at various locations all day and night. »

MTN Zone.

- Client need to reduce load on mobile towers
- firm1/ small firm collaboration
- Following embargo period, rolled out globally by firm1

Advanced economies

In transition

Less developed

Least developed

mxit ™

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MTN Zone.
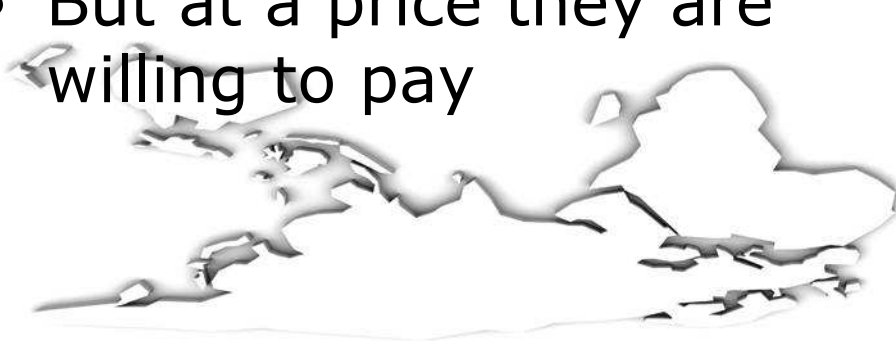
SEVENTH FRAMEWORK PROGRAMME

Frugal engineering

- Bottom up development
- Maximise value, minimise non-essential cost
- Start with a clean slate rather than strip down
- Provide for essential functions
- But at a price they are willing to pay

firm2 Unlimited Potential
'the next billion'

- Business and philanthropic approach: to make technology more **relevant, accessible, and affordable**

- Create global innovation platforms then
  - collaboration among businesses, local governments, educational institutions, and community organizations.

- With partners transform **education**, foster **local innovation**, enable jobs.

- **Partnering with universities**, **businesses, local software developers, and investors**, incubate innovative ideas and then help individuals and communities translate those ideas into business success

"*I always say the mother of innovation is not creativeness or ingenuity it is empathy and compassion, it's sticking to what your customer really needs and understanding that.*"

- Millennium development villages
- Living R&D labs
- No profit pressure
- Learn how people use products & services