

South Africa

A country perspective on e- inclusion

April 2006

Overview

- Inclusion as strategic driver
- Framework for discussion
- Approach

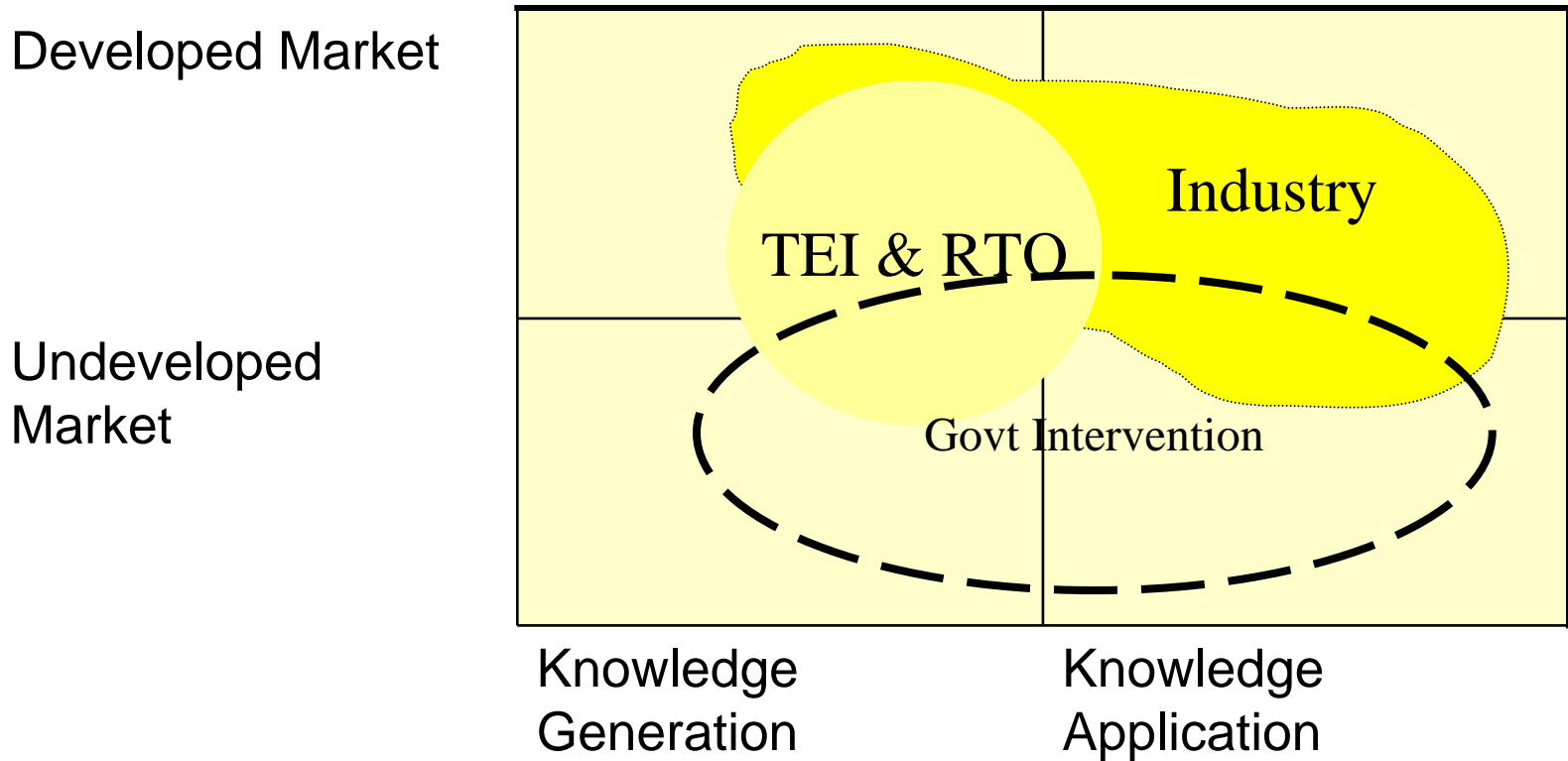
Inclusion – Strategic Driver in SA

- History of exclusion
- Moving towards non-sexist, non-racial, fully inclusive, democratic society
- Achieved a great deal – economics and services still lagging

Framework for discussion

Developed Market		
Undeveloped Market		
	Knowledge Generation	Knowledge Application

Framework for discussion



E-inclusion perspective

DM		
UM		
	KG	KA

- Most typical area (often only area considered)
- Providing access to opportunities and services where there is none
- Not self-sustainable, but essential – Government intervention

International cooperation: Donors, aid, pilot projects

Examples

- Primary health care support and provision in neglected areas
- Basic government to citizen services esp. socially orientated (e.g. grants)
- Providing basic information access & empowering groups to use ICT to function and live better (ranging from disabilities to providing school connectivity)

Projects

- BEANISH – FP6 [Managed care support for TB in underdeveloped areas]
- Telemedicine in Mpumalanga – linking clinics to hospitals

E-inclusion perspective

DM		
UM		
	KG	KA

- Not typically considered as e-inclusion area
- Providing access to opportunities and services on self-sustainable basis
- Self-sustainable, often essential – Government intervention, but strong industry/entrepreneurial involvement

International cooperation: Donors, aid, pilot projects, R&D partnerships, industry partnerships

Examples

- Health care support and provision in developed areas (remote monitoring of home-care patients)
- Advanced (+Basic) government to citizen services e.g. Govt-online
- Providing advanced information access & empowering groups to use ICT to function better

Projects

- micro-finance for communications provision
- South African e-Government portal

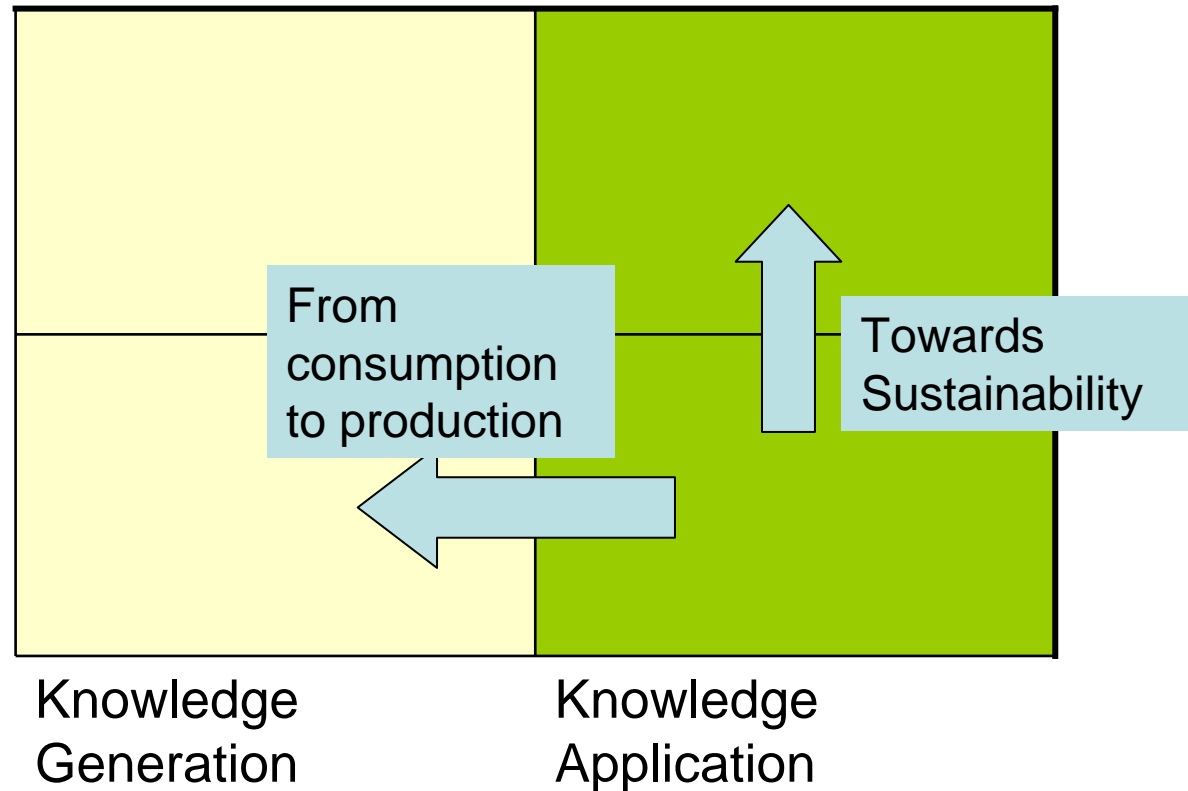
E-inclusion perspective

DM		
UM		
	KG	KA

Strategies

Developed Market

Undeveloped Market



E-inclusion perspective

DM		
UM		
	KG	KA

- Not typically considered as e-inclusion area
- Netto producers of knowledge
- Focus on R&D, knowledge production, leveraging diversity

International cooperation: Donors, aid, pilot projects, *focus on R&D collaboration*

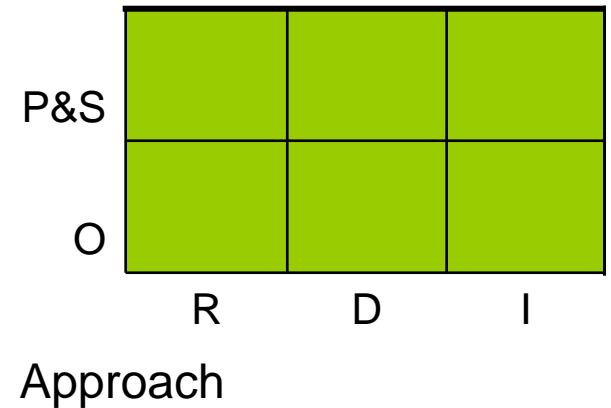
Examples

- Creation of industry in areas of market neglect e.g. low-cost assistance for people living with disabilities
- Involving women in knowledge production activities

Projects

- National Accessibility Portal
- Women in ICT

Collaboration Approach



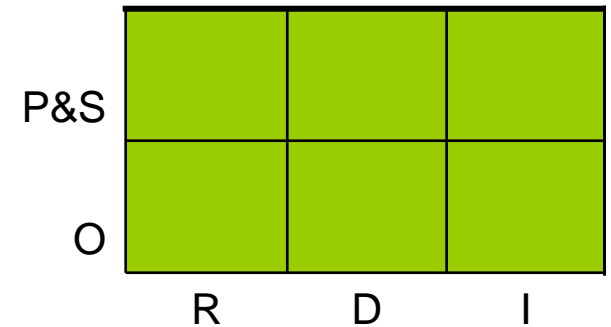
- Significant focus on Human Resource Development
 - Dedicated people flow as basis for cooperation
- Selection of few key areas of collaborative R&D to seed activities, e.g.
 - Human language Technologies
 - High Performance Computing
 - Artificial Intelligence
 - Mobile and wireless systems
 - Large scale datasets

HRD	Focus R&D	Innovation Space
Resourcing, Research Infrastructure, Support		

FP7 in particular

Opportunities

- IST strategically important – EU, SA and Africa
- Excellent research, institutions and infrastructure
- Similar contexts (multilingual, multicultural, different economic situations)
- Shares grand challenges
- Good working relationship with EU colleagues



Challenges

- IST: Differentiation low – expressing unique value contribution
- IST new area of engagement (only since FP6 for SA)
 - Little experience
 - Awareness low both in EU and in SA of SA's involvement
- "Distance"

Thank you

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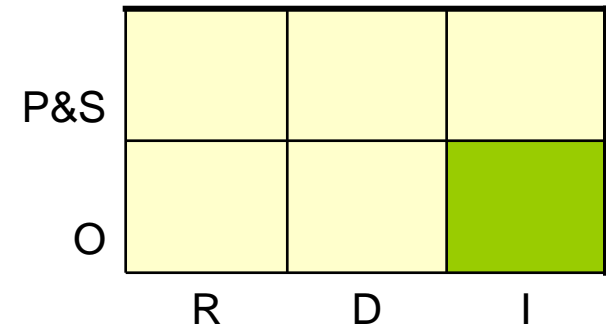
Overview (Appendix)

- Framework
- Industry & market
- Policy
- Research and Development
- Application Areas
- Research Areas
- Collaboration Approach

Framework for discussion

Policy & Strategy			
Operational			
	Research	Development	Implementation

ICT Industry & Market



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- Strong ICT sector
- Limited domestic market, still growing
- Africa recognised as major partner
- Telecommunications and services major components
- Mobile growth only outstripped by China
- Largely retail-based : Local content low
- Industry R&D in ICT low
- Second economy challenges
- Human Capital challenges

Projected Revenue for e-commerce in South Africa (€bn)				
	2000	2001	2002	2003
B2B	1	1.1	3.8	4.1
B2C	0.7	1.1	1.2	2.3
Total	1.7	2.2	5	6.4

Total Historic and Expected Sales in IT and telecommunication sector					
Telecoms (€m)	2001	2002	2003	2004	2005
Services	25735	30088	33293	37381	41643
Infrastructure	7375	7675	7991	8594	9307
Total	33111	37756	41284	45976	50950
Growth	14%	14%	9,5%	11.40%	10%
IT (€m)					
Total vendor revenue	4035	4446	4940	5469	6057
Growth (Nominal)	10.50%	10.20%	11.10%	10.70%	10.80%

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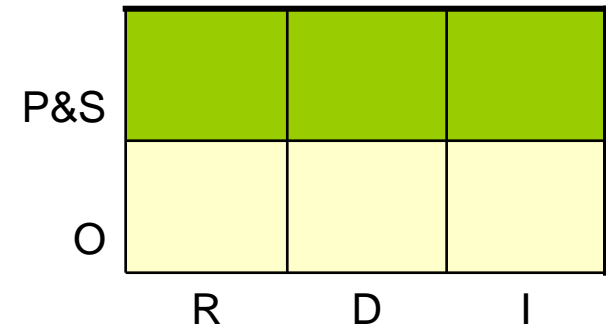
ICT Policy

Key Government Departments

- Dept Science & Technology (DST)
- Department of Trade & Industry (the dti)
- Department of Communications (DoC)

Acts, initiatives, strategies and policies

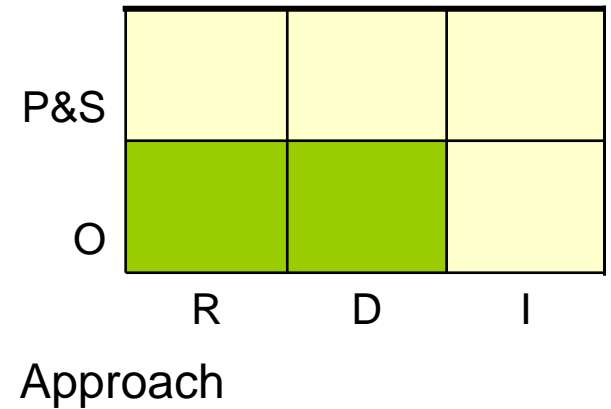
- National R&D Strategy (ICT mission) – *focus R&D activities*
- (ICT R&D Strategy) – to be approved - *focus ICT R&D activities*
- e-Strategy – *Ensure ICT benefit to all*
- Advanced Manufacturing Technology Strategy – *up knowledge contribution in economy*
- ICT Roadmap – *Intensify R&D in industry*
- Electronic Communications and Transactions Act
- Telecommunications Act
- Accelerated Shared Growth Initiative



ICT R&D

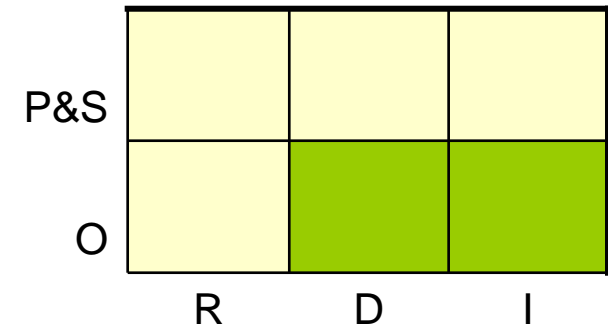
- ICT key part of the national system of innovation
- Excellent institutions
- Vibrant entrepreneurial activities
- Local challenges provide strong drive

- Need to up the level of activity
- Need to intensify research activities in ICT research



HRD	Focus R&D	Innovation Space
Resourcing, Research Infrastructure, Support		

ICT Application Areas



Societal Benefit Areas

- Health
- Education
- Disabilities
- Government
- Disaster management

ICT Roadmap (industry)

- Human Computer Interfacing
- High performance Computing
- Mobile, Wireless & Satellite
- Geomatics & Spatial
- Futureweb

Others

- Natural resource management
- Environment

ICT Research Areas

P&S			
O			
	R	D	I

- Human Computer Interaction
- Human Language Technology (HLT)
- Large Scale Data Challenges (e.g. Earth Observation)
- Artificial intelligence
- Open Source, Software Engineering and Software Architecture
- Mobile, Wireless and Satellite technologies
- High Performance and Distributed Computing
- Futureweb applications
- Next Generation Networks
- Information Security

FP6 in particular

Results

- Involved in a number of SSAs and NoE
 - Focus on building African capacity to engage strongly with FP7
 - Open Source Software
 - e-Health
- Negotiation on involvement in IP, STREPs

P&S			
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	R	D	I

Thank you