



**Tshwane University
of Technology**

We empower people

Tshwane Smart City: Some Considerations

Rasigan Maharajh
Institute for Economic Research on Innovation

Strategy Session
2nd February 2006





Outline

- Introduction
- IERI
- Smart City Case Study
- Lessons





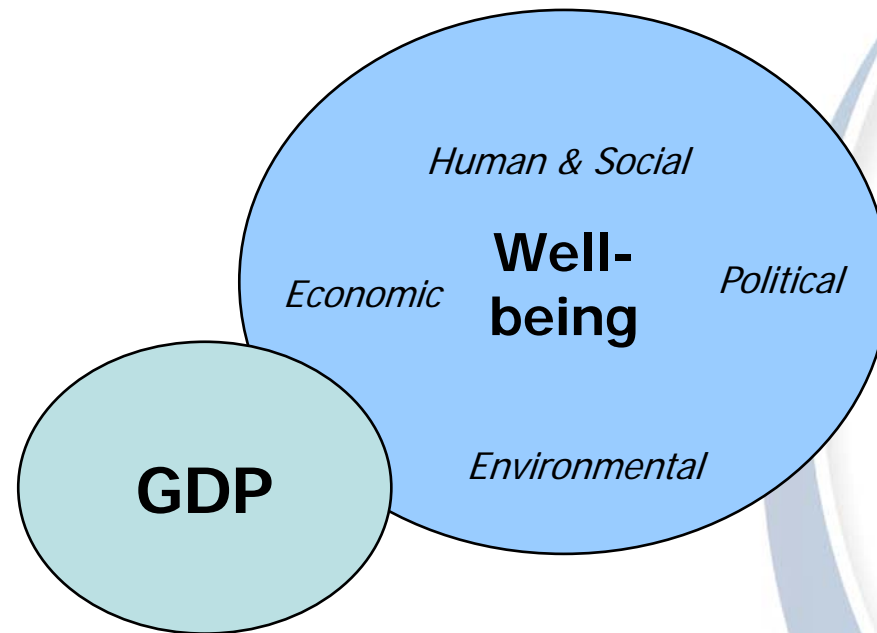
Introduction

Natural Capital
(Endowments)

Produced Capital
*(Physical & Disembodied
Technology)*

Social Capital
*(Norms & networks
facilitating inter- &
intra-group cooperation)*

Human Capital
(Learning & Health)



OECD (2001) Social Capital





IERI: Vision

- Launched by Ministry of Science & Technology in September 2004 based at TUT
- Centre of Excellence in
 - Evidence-based Policy Research
 - Competency Support
 - Capacity Development
 - Networking & Knowledge-sharing





IERI: Mandate & Mission

- Mandate
 - Research & Development Focus Area of Faculty of Economics & Finance
 - Knowledge Intensive Service Provider to Clients & Partner Agencies
- Mission
 - Contribute thought leadership on Knowledge and Development to the Economic, Social and Political spheres of society
 - Focus across Local, Provincial, National, Regional & International Tiers of Governance



IERI: 2006 Faculty

Name	Category	Region
Dave de Groot	Visiting Research Fellow	North America
Enver Motala	Research Fellow Emeritus	Africa
Erika Kraemer-Mbula	Associate Research Fellow	Africa
Gillian Marcelle	Visiting Research Fellow	Caribbean
Hans Binswanger	Visiting Research Fellow	Europe
<i>Lindile Ndabeni</i>	Research Fellow	Africa
Mammo Muchie	Visiting Research Fellow	Africa
Marcia da Mota Daros	Associate Research Fellow	South America
<i>Mario Scerri</i>	Senior Research Fellow	Africa
Mojalefa Ralekhetlo	Associate Research Fellow	Africa
<i>Rajen Govender</i>	Senior Research Fellow	Africa
<i>Rasigan Maharajh</i>	Chief Director	Africa
Saliem Fakir	Associate Research Fellow	Africa
<i>Thomas Pogue</i>	Associate Research Fellow	North America





IERI: Alliance Partnerships

- Financial and Fiscal Commission: MoU awaiting ratification
- Department of Social Development: MoU awaiting finalisation & ratification
- Research Policy Institute of Lund University (Sweden): WiP
- IKE & DRUID of Aalborg University (Denmark): WiP
- Earth Institute of Columbia University (USA): WiP
- Others emerging:
 - PREST @ University of Manchester
 - SPRU @ University of Sussex
 - MERIT @ United Nations University
 - KSG @ Harvard University
 - P&DM @ Wits University
 - ITI @ University of Pretoria
 - CREST @ University of Stellenbosch
 - CESTI @ Human Sciences Research Council
 - Africa Institute of South Africa
 - Knowledge Management Group @ Development Bank of Southern Africa





IERI: 2005 Output

- Development Report 2005: Overcoming Underdevelopment in South Africa's 2nd Economy: DBSA, HSRC, UNDP, NIEP & IERI
- Bridging the Digital Divide: Innovation Systems for ICT in Brazil, China, India, Thailand and Southern Africa, Addonis & Abbey
- Pilot: Household Impact Assessment: South African Cities Network, National Treasury & World Bank
- Global Network for the Economics of Learning, Innovation & Competence-building Systems Annual Conference
- Report of the National Roundtable on Multilateral Environmental Agreement for DST: IUCN, IGD & IERI





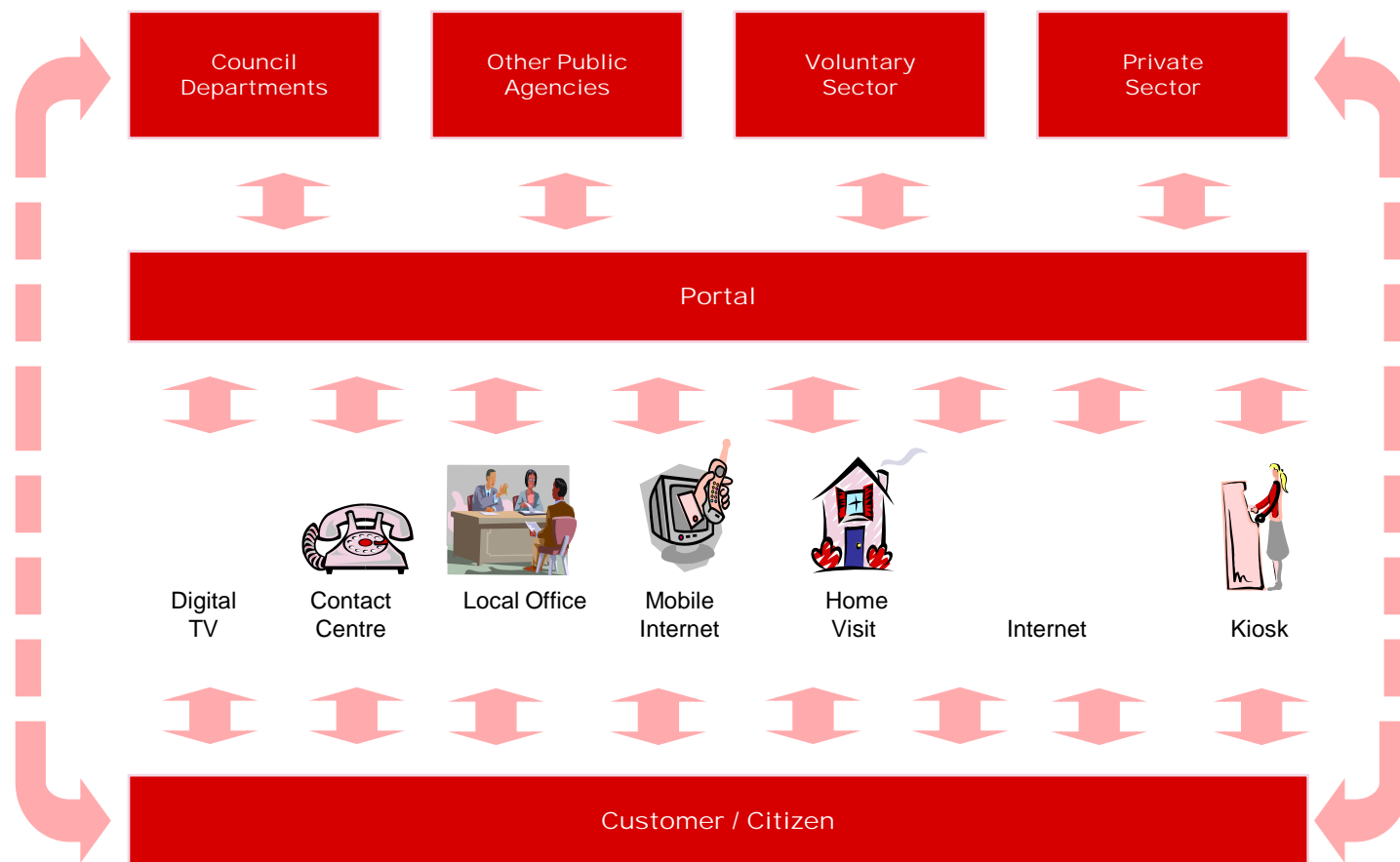
IERI: 2006 Work in Progress

- National Household Impact Survey Rollout (30 000): IERI, National Treasury & World Bank
- Developing Universities – The Evolving Role of Academic Institutions in Economic Growth (14 Country Comparative Study) : IERI, Mandela Foundation & CEPD
- BRICS Systems of Innovation (5 Country Cross-sector Study): IERI, DBSA, HSRC & UP
- Social, Economic and Political Catch-up (Global Sector-based Study): IERI + 25 Agencies
- *Accelerated Growth Strategy: Human Resource Planning and Public Enterprises: Presidency, DPE & DTI*
- GLOBELICS:
 - AfricaLICS Continental Focal Point
 - Doctoral Academy Teaching
- Tshwane Metro
 - Local Economic Development & Smart City Concept
- Ekurhuleni Metro
 - Monitoring, Evaluation & learning of LED
- National Advisory Council on Innovation: Numerous
- Council for Higher Education: Social Science Aspects of Innovation
- National Research Foundation: Redefining Research Priorities in Economics





Edinburgh Architecture





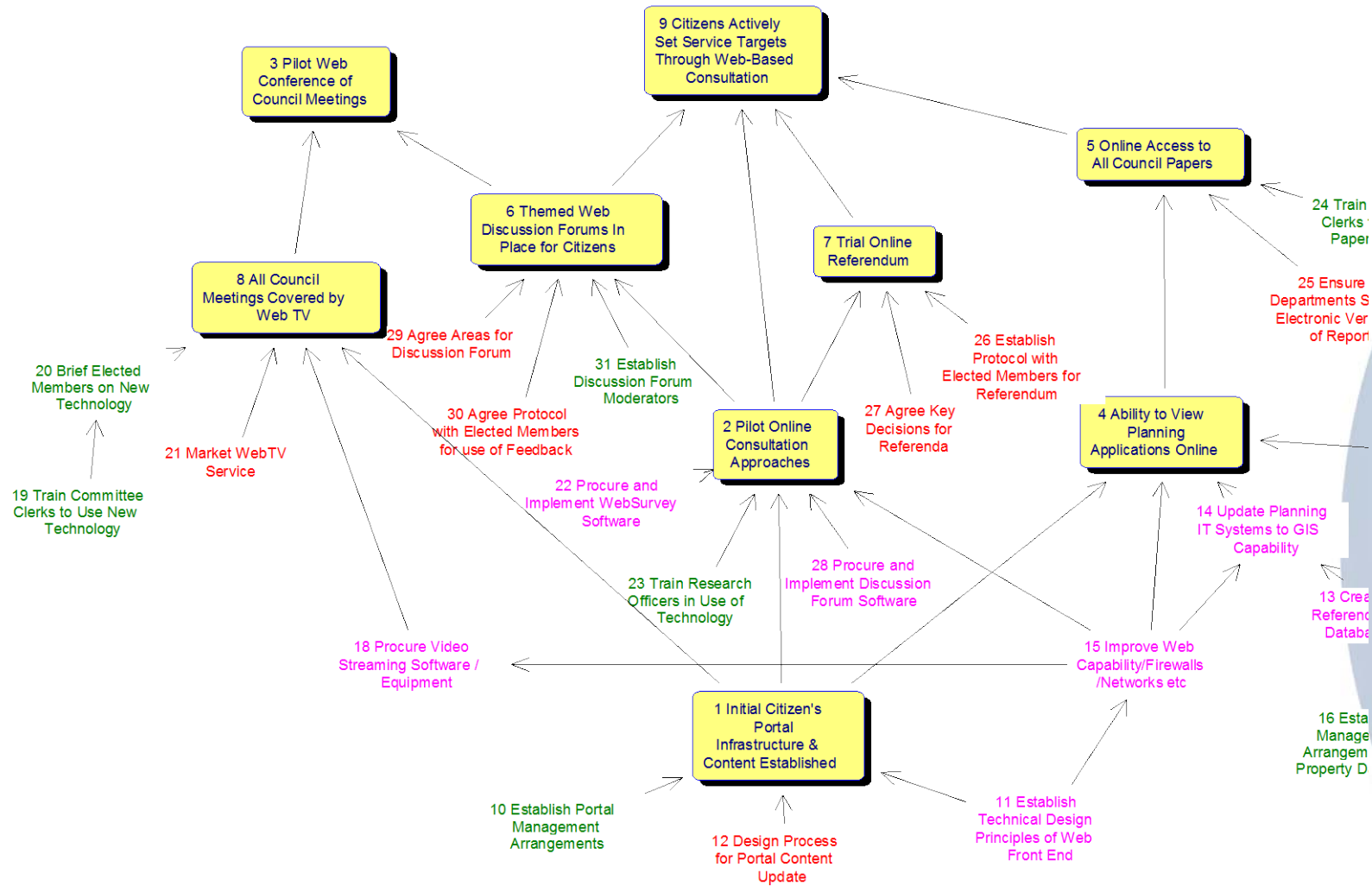
Edinburgh Plan

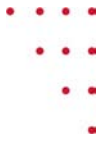
Quick Wins → Re-engineer service delivery → Strategic re-invention →					
To date	2004	2008	2011	Strategic Objective	
Customer Service Continuous Improvement and Working Effectively Partnership Active Citizenship Maximising Opportunity for All	Technical Foundations	Develop customer-facing delivery in key areas		Seamless personalised interaction with citizens	The customer experiences timely and efficient delivery of accessible, integrated services through new and existing channels
		Investment in tools and proving the re-engineering concept.	Deliver fundamental re-engineering of Council processes	Gathering the benefits - doing more with less	The Council uses efficient and effective working practices, deploying technology to deliver more with less. The Council is 25% more efficient in meeting quality of service targets
		Building trust and confidence through small pilot projects	Unified service provision in key areas; joint utilisation of resources with partners	Embedding unified service provision across all services, providing seamless, single view; widespread and effective resource sharing.	The Council works effectively with its service partners to make best use of resources and to deliver seamless services to the Edinburgh community.
		"Look Smart" - accessible information provision and pilot consultation	Widespread e-consultation, integrated with planning and service delivery	Deeper democratic engagement of citizen	Build the environment where all citizens can engage more easily and effectively with the Council to influence public service issues.
		Removing initial barriers and providing the lead in the community	Targeted programmes building a more inclusive environment		The Council is the leader in the community to enable all citizens and community organisations to exploit information age opportunities.





Edinburgh Road Map





Lessons

- Defined Vision
 - IDP – City Strategy
 - Provincial
 - National
- Defined Plan
- Resource Mobilisation
- Research Phase
 - Cluster Analysis
 - Technical Infrastructure
- Stakeholder Compact for Implementation





Thank You

- For more information, contact:
– rasigan@antfarm.co.za

i e r i
Institute for **E**conomic **R**esearch on **I**nnovation

