USING VALUE CHAIN ANALYSIS TO DETERMINE THE IMPACT OF GEOSPATIAL INFORMATION IN THE PUBLIC SECTOR

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(The opinions expressed in this presentation are those of the author and do not necessarily reflect those of any organisation or person)
Three Essential Requirements

Usability

Accessibility

Availability
Where is the money?

National Treasury

National Mapping Organisation

PLEASE SIR

I WANT SOME MORE
INCOME – EXPENSE = PROFIT

BENEFIT – EXPENSE = PROFIT (NON-FINANCIAL)
Public Sector??
Social Cost-Benefit
The Value Chain
Forecasts, Trends & Insight Generation
Decision Support
Modeling, Visualization & Analytics

Revenue and Profitability

Business Intelligence
Market Intelligence
Competitive Intelligence

Accessible, High-Quality Data
Geo-spatial Information – Decision Model (generalised)

Signals from environment → Community / Societal Problem or Opportunity → Decision-making process

- Technical sub-system
- Information cognitive sub-system
- Knowledge sub-system

Implementation → Impact / change to environment

External environment → Impact / change to environment

External knowledge → Internal / specific environment
Consideration given to impact of geo-spatial information:

Indicators - measurables
Decision space
• Decision criteria – geospatial information contributors
• Evidence-based decisions
• Increased rationality
Traditional user needs surveys do not work well.

Analysis of value chain used for assessment of user needs for geo-spatial information.

Moving down the value chain – improved relevance.

Extend this analysis of value chains to assess the impact of geospatial information on public planning, decision making, formulation of public policy and monitoring.
Example:

Traditional

Improved relevance
Social housing
The social housing value chain

**INPUT**
- State funding
- Legislation
- Policy
- Programme
- Capacitation
- Research & development
- SHRA
- Pipeline of projects
- Private sector funding
- Developers
- SHIs
- NASHO
- International Partners

**ACTIVITIES**
- Robust investment process
- Accreditation and Regulatory processes
- Institutional Investment grants
- Monitoring and Evaluation
- SHIs engagement
- NASHO

**OUTPUT**
- Quality, institutionally well managed units
- Well located and with socio-economic amenities
- Energy efficiency, greening, solar products, heat pumps
- Affordability
- Lower loan, lower rental – faster equity build up

**OUTCOME**
- Better managed urban and residential spaces
- More disposable income for health and education
- Stable and sustainable SHIs
- Social mobility
- Rental option that compliments the bond market

**IMPACT**
- Improved livelihoods
- Responsible citizenry
- Long term equity reserves – less dependency on state resources
- Sustainable housing markets
- Short to medium term state investment yielding long term results
- Empowered SHIs
Geo-spatial Information Promoting Transparency:

Open data
Accessible to all

How much is transparency worth?
- cost of corruption!
- Citizen satisfaction!
Toilets in the veld! What happened to the houses?
Cost of making poor decisions/ ineffective policy?
What is the cost?
ENHANCING PUBLIC GEO-EMPOWER

- Acknowledge the key role of geo-spatial information in public decision-making / development planning / public policy formulation;

- Determine geo-spatial information requirements of indicators for evidence-based policy and planning;

- The revised development planning process, which emphasises the use of information and knowledge to achieve the highest possible level of rationality;

- Geo-spatial information in planning and monitoring;
ENHANCING PUBLIC GEO-EMPOWER (cont.)

• Provision of geo-spatial information which is relevant (appropriate to the purpose; received by the user timeously; in a format in which it can easily be used; and, reliable);

• Ensure easy access to relevant geo-spatial information (policies, procedures, standards, systems and organisational remits – i.e. SDI);

• Ensure that reliable supporting infrastructure (communications, electrical power) is in place;

• Development planning process must be participatory – use the power of the community knowledge and resources;

• Geo-spatial information and technology must be usable by all – skills development (particularly functional map literacy).
Working collaboratively in cooperation with each other, with open communication for a coordinated achievement.

Thank you