
Geospatial Information & Statistics in Forward Planning & Risk Management

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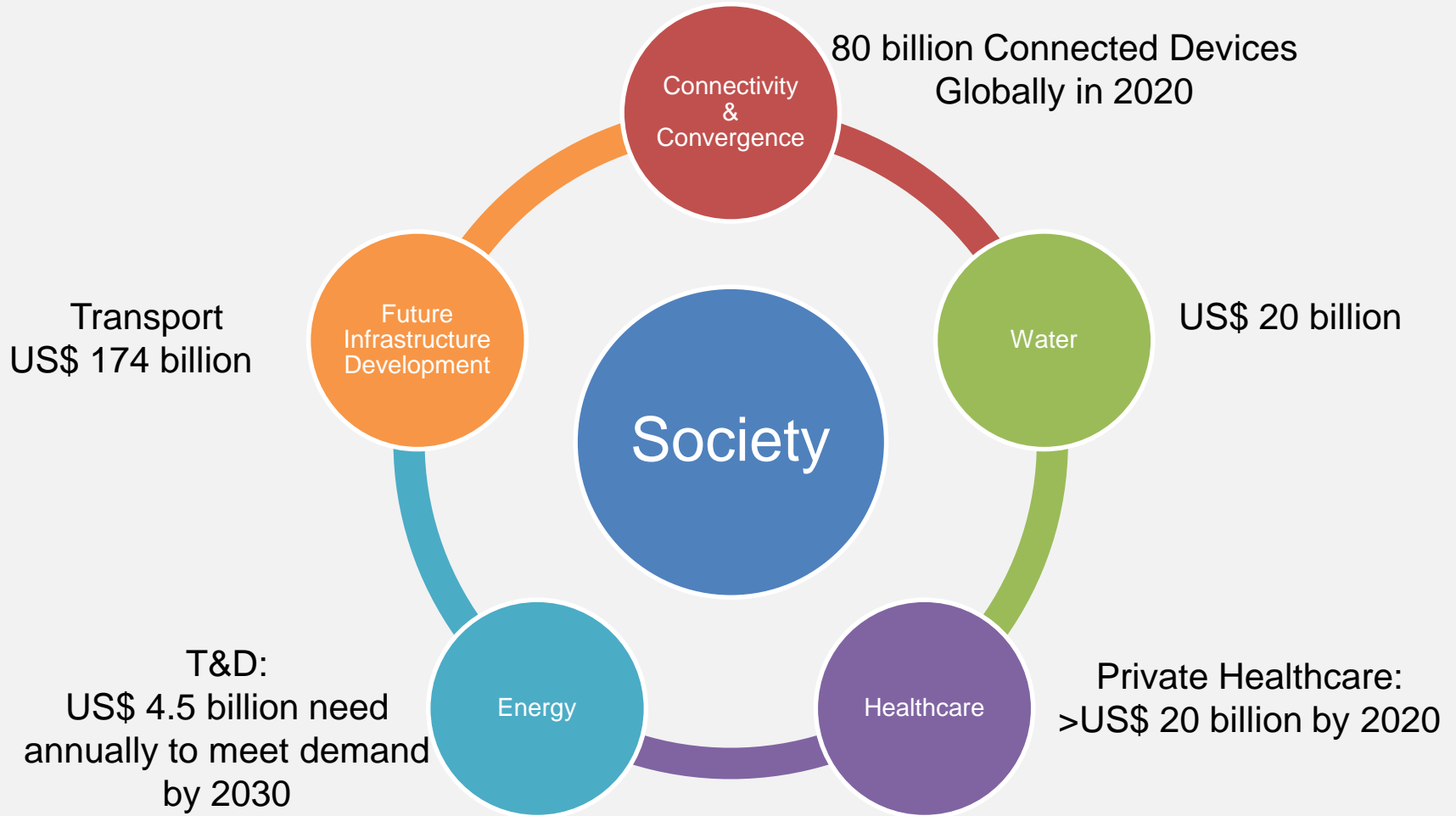
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1. Introduction

- Focus on the theme: Forward Planning and Risk Management
 - SDGs – GIS is an enabler to 12 of 17 SDGs
 - Agenda 2063 – The Africa We Want
 - Road map that requires enablers to achieve all 7 aspirations
- Need for Geospatial and Statistical Information and related data driven solutions
- There is a need for Public-Private Partnerships
 - Private sector can also provide Development Services
 - Need for a process to develop Political, Social and Economic compacts
- 4th Industrial Revolution
 - Revolves mainly around: Physical, Digital and Biological Megatrends
 - GIS can combine all the Megatrends
 - 90% of the global population will be using smartphones with Internet access

1.2 Megatrends in Sub-Saharan Africa

High Growth Opportunity Areas where GIS will have an impact



Total Investment in ongoing infrastructure projects in SSA (Excluding ICT & Telecoms) US\$ 378bn*

* Frost & Sullivan analysis 2012

2. Current Situation

2.1 Overview of Current Situation

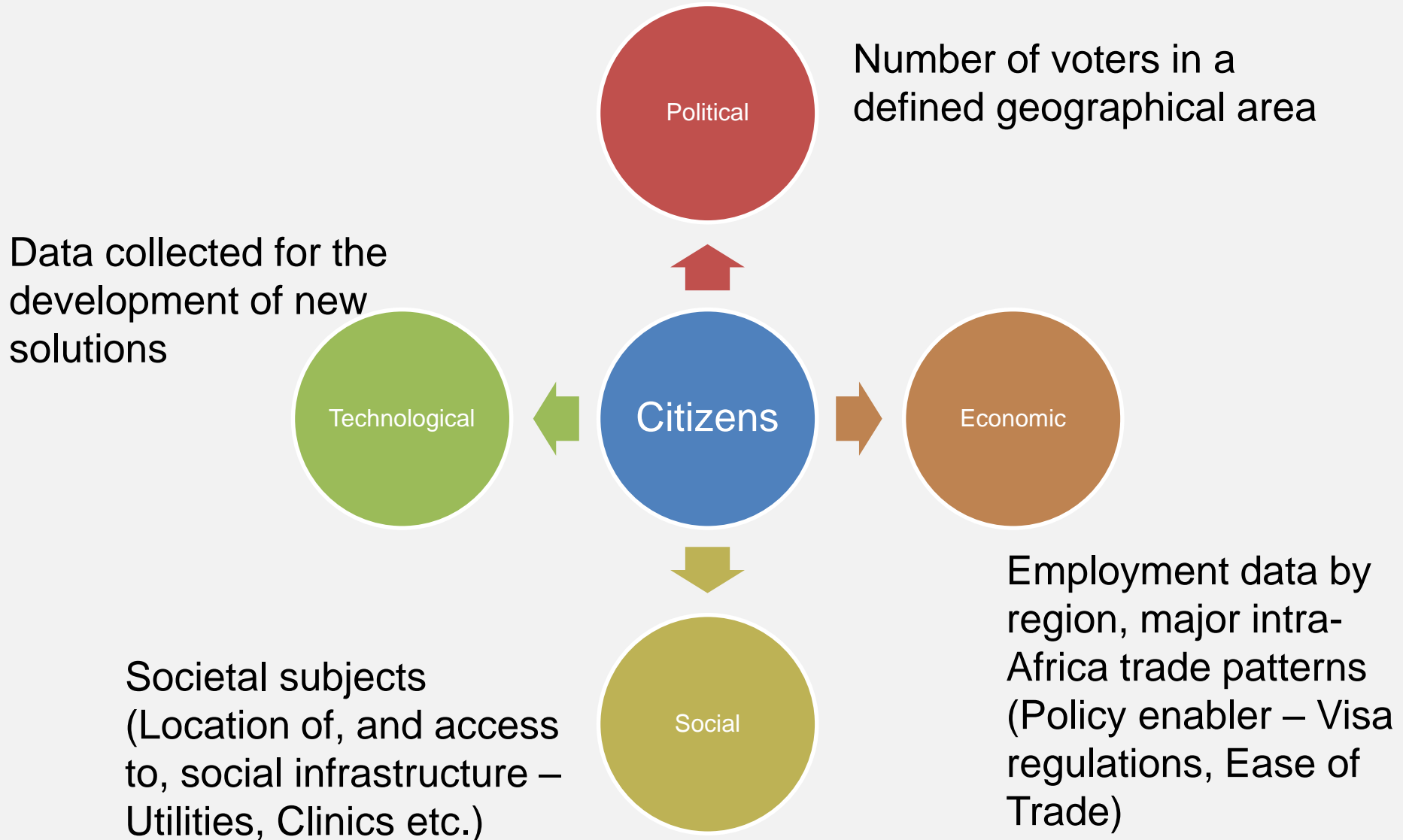
- Lack of Information sharing
 - Data exists in silos (In-Country and Intra-Country)
- Lack of Data Aggregation
 - Solutions for this already exist
- Some countries are better capacitated
 - Planning for Social Infrastructure
 - Management of Risk related to Social Infrastructure
 - Provision of appropriate solutions to meet dynamic needs
- Data is currently being generated on a continuous basis
 - Limited use of Big Data Analytics to inform decision making
 - Fairly new approach and requires a mind shift from traditional decision support tools

3. Does The Data Really Exist?

3.1 What Data Exists?

- Data is generated through various activities on an on-going basis
 - Mobile devices – 80 Billion connected devices by 2020
- GIS data exists in various formats and for different purposes:
 - Planning, Project Implementation, Infrastructure maintenance
 - Some sector, and countries, have better data sets
 - Water, Healthcare, Education, Power, Transport etc
- Available data is currently **not aggregated** and **not effectively** used across the continent
- Data streams are inherently interconnected by their nature
 - Content of Data sets e.g. population data and locational data
- Citizens inherently have data that is generally not captured and/or recorded
 - This is generally locational in nature

3.1.1 Dimensions of Data



- Data is owned broadly by 2 sectors
 - Government (Public Sector):
 - Data for National Planning and service delivery
 - Not always readily available for common use (Some data may have political, economic, security implications etc.)
 - Government alone cannot collect all the necessary data, analyse and use it effectively
 - Despite the existence of GIS and other data Africa still lags behind
 - Private Sector:
 - Has access to capital and tools developed over years
 - Able to collect all forms of data from multiple streams e.g. Google Maps
 - Primarily collect data for strategic objectives
 - Can supply valuable data to government

4. What Is The Future?

1. How can Africa use existing Data?
 - Use what is available to understand the power of GIS as an enabler for the Africa We Want – Data driven decision making tools
 - Digitization of existing data sets to allow for quicker access – Shift from paper based to multi-platform digital based data collection
2. Understand the gaps in Data
 - Use of new technology to rapidly collect and assess data gaps – Big Data Analytics (IoT and IIoT)
 - Pool data into common data pools for use across the continent – An African data pool
3. Define models for partnerships
 - Private sector expertise in GIS and Analytics
 - Tap into locational data generated by connected devices

4. How will this change the lives of Africans?

- Enhanced, and appropriately located, social infrastructures – Principle of a smart city
- Smart production and smart use principles – Resources and resource sharing

END

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