

Mapping the Future of Geospatial Knowledge – Multi-Stakeholder Perspective

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OVERVIEW

1. Geospatial and Digital Ecosystem today
2. Future trends and forecasts
3. Digital Revolution in India – 3 ecosystems
4. Interconnect - Geospatial and 5G
5. Stakeholders - Collaboration and Partnership
6. New Contours/Forms of Partnership
7. Data Privacy and Security
8. Summary

GEOSPATIAL AND DIGITAL ECOSYSTEM TODAY

- Large amount of data is being generated – 0.33 Zeta Bytes per day*
- Advancements in technologies (Digital, Telecom) facilitate faster transmission
- Analysis and interpretation aided by new tools – AI, ML etc.
- Near Real time data available without latency

* Source – Statista, 2023

FUTURE TRENDS AND FORECASTS

- By 2025: 180 Zeta Bytes will be generated per year*
- Mobility Industry contribution to Global GDP – US \$4.9 trillion*
- By 2025: India will need 22 million skilled workers for digital economy**
- Between 2023-2040: 5G technology will boost Indian economy by US \$ 450 Billion
- Innovation and Disruption

* Source – Statista, 2023

** Source – Invest India

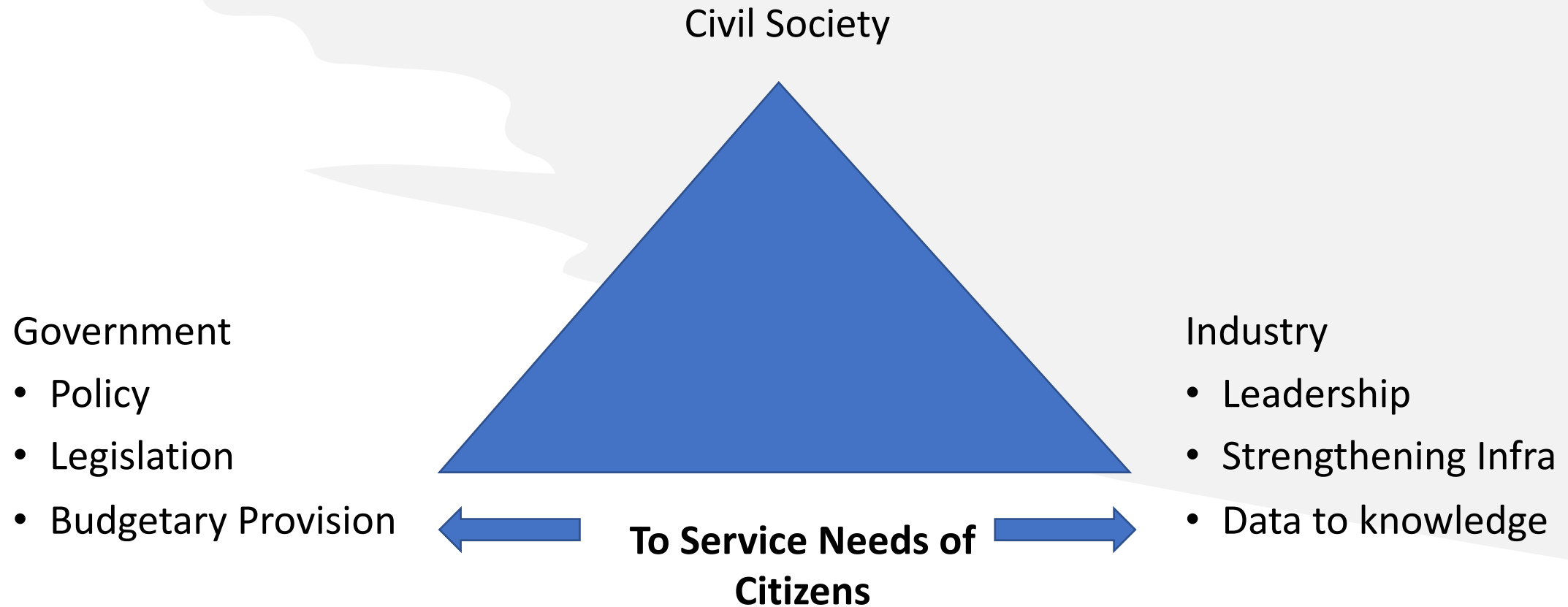
DIGITAL REVOLUTION IN INDIA – 3 ECOSYSTEMS

1. Unified Payments Interface (UPI)
 - In 2022, digital transactions 82.92 billion (P2P and P2M)
 - Bengaluru – 29 million transactions
2. Digital Highways
 - 10,000Kms of OFC infra by 2024-25
3. Digital Agriculture
 - Direct Benefit Transfer (DBT)
 - 21 million crop plots geotagged in the State of Karnataka

INTERCONNECT – GEOSPATIAL AND 5G

- 5G has framework that merges Cloud, Big Data, IoT, Automation and AI.
- 5G brings greater accuracy in positioning services
- Jio is the first telco in India to implement solution using locational intelligence
- Jio Net insight, Jio Coverage validation, Network O&M

STAKEHOLDERS – COLLABORATION AND PARTNERSHIP



NEW COUNTOURS/FORMS OF PARTNERSHIP

- Partnership for
 - a) Increasing application of Geospatial and Digital Knowledge for economic and national development
 - b) Addressing skill gap
- Traditional model of PPP may not suit
- Digital Public Goods(DPG) can be viewed as mixed goods instead of Pure Public Goods
- One option for partnership could be building blocks/stacks of DPGs*

* Source – Centre for Global Development (2021)

DATA PRIVACY AND SECURITY

- Hygiene of Ecosystem.
- 3-Pronged focus
 1. Protection of personal information
 2. Security of Digital Transactions
 3. Defense against Cyber Attacks
- Role of Users, Service Providers and The Government

SUMMARY – PATHWAY FOR FUTURE

- Geospatial Ecosystem will become an integral part of digital ecosystem cutting across all sectors(not mere its subset).
- Encourage innovation and address disruption
- Partnership among stakeholders to increase application of knowledge and address skill gap
- New Partnership model – Stacks of DPGs