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Digital Public Infrastructure: Exemplars from India

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Digital Public Infrastructure and Digital Public Good

Digital Public Infrastructure (DPI) - Foundational digital systems and frameworks that enable the delivery of essential services, facilitate economic transactions, and support social and governmental functions. DPI is typically built and maintained by governments or public institutions, and it forms the backbone of digital ecosystems, allowing various applications and services to function effectively.

- Foundational: Serves as the underlying structure for other digital services

- Interoperable: Supports multiple systems, applications, and services

- Scalable and Inclusive: Can grow to meet the needs of a large and diverse population

- Secure and Reliable: Designed with robust security and reliability to handle critical public service

Digital Public Good (DPG) – DPGs are the digital tools, platforms, and resources that people can use to create solutions. They are built using open-source software with open standards and data, standards and content that make DPI (digital public infrastructure) an operational reality. Examples of DPGs include Beckn protocol, MOSIP, UPI, based on which DPIs are created and implemented.

What is Digital Public Infrastructure

- A set of shared digital building blocks powered by interoperable, open standards or specifications [2].
    - They act as digital building blocks
        - Can be used by public or private players to build software
    - They are built for population scale
        - Designed to drive innovation and inclusion for everyone
    - Can be networks, systems, or platforms
        - Access to underlying data or logic is made available through API's or open protocols

1- C. Alonso, T. Bhojwani, E. Hanedar, D. Prihardini, G. Una and K. Zhabska, Stacking up the Benefits Lessons from India's Digital Journey, International Monetary Fund WP/23/78, March 2023

2 - A. Seth, Enabler for Advancing Financial Inclusion and Productivity Gain, International Seminar on Digital Public Infrastructure, Sept 22, 2023, New Delhi, India
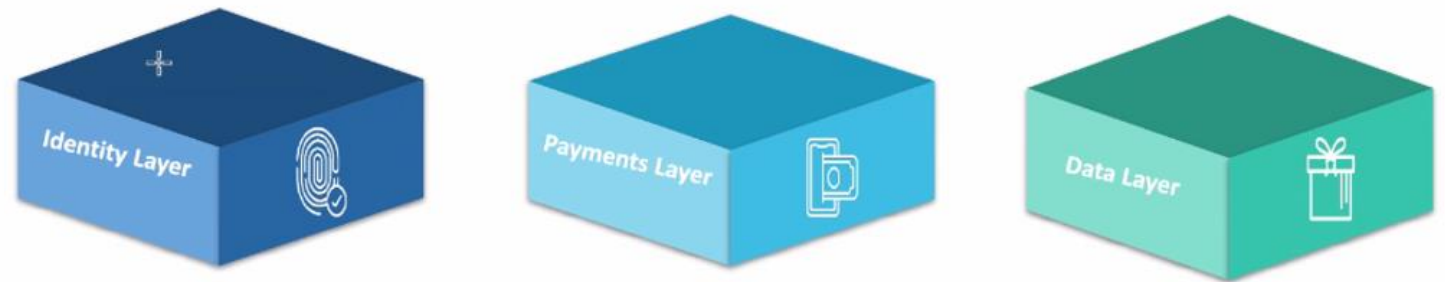
What is NOT Digital Public Infrastructure

- Not an eGovernance initiative

- Not just owned by public sector

- Not every tech platform built by government is, or needs to be DPI
  - Specific solutions are still needed and must be built, building infrastructure is a better and efficient way to accelerate building those solutions.

What is India Stack

- India has developed a world-class digital public infrastructure (DPI) to support its sustainable development goals [1]

- A foundational set of DPIs that have proven to be useful in different contexts in India [1,2]

    - Identity layer
    - Payments layer
    - Data layer

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Lesson from India – Role of Government

- Importance of technology in National ID
- Promotion of technology as utilities
- Effective public-private partnerships
- Financial incentives
- Supporting policies