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**BRIDGING DIVIDES,
BUILDING FUTURES:**
The Global Journey Towards Inclusivity with
Digital Public Infrastructure (DPI)



INTRODUCTION

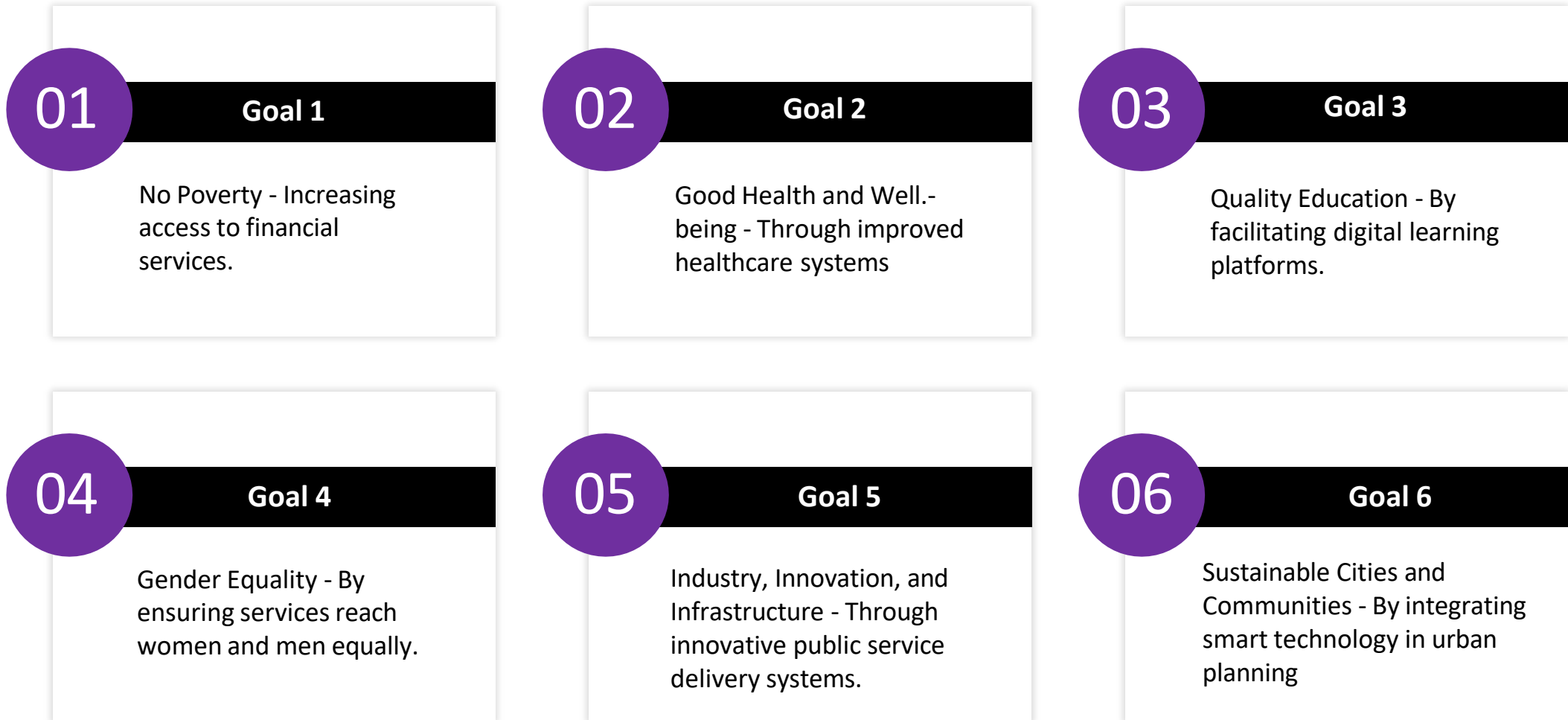
Purpose of DPI

- Explore the transformative impact of DPI globally.
- Bridge the technical aspects of DPI with its implications for:
 - Social equity
 - Economic growth
 - Environmental sustainability



DPI and the Sustainable Development Goals

DPI serves as a powerful tool to advance many of the United Nations' Sustainable Development Goals, particularly:



Why Does DPI Matter ?

DPI is crucial because it



Simplifies and widens access to critical services, supporting efforts to end poverty



Reduces costs and saves time, contributing to economic sustainability



Promotes accountability and fights corruption, crucial for sustainable governance



Bridges the digital divide, ensuring that technology benefits all segments of society

Objectives and Future Directions - Goals & Future of DPI

Today, we will





DPI'S GLOBAL FOOTPRINT - USE CASES

Goal 1: No Poverty

India's Aadhaar and Kenya's M-PESA

- **India's Aadhaar:** Provides biometrically secure digital identity that simplifies access to government subsidies and reduces leakage in welfare programs, directly assisting the impoverished.
- **India UPI:** Revolutionizes digital transactions, fostering economic participation among the unbanked.
- **Kenya's M-PESA:** Mobile money platform that enhances financial inclusion, allowing even remote rural communities to participate in the economy and improve their financial health.





Goal 3: Good Health and Well-being

India's CoWIN and Thailand's e-Health System

India's CoWIN: Digital platform managing COVID-19 vaccinations, ensuring equitable vaccine distribution and authenticating through Aadhaar to prevent fraud.

Thailand's e-Health System (IHIS): Streamlines patient information into a centralized database, improving the efficiency of healthcare services and enhancing patient outcomes across the nation.



Quality Education

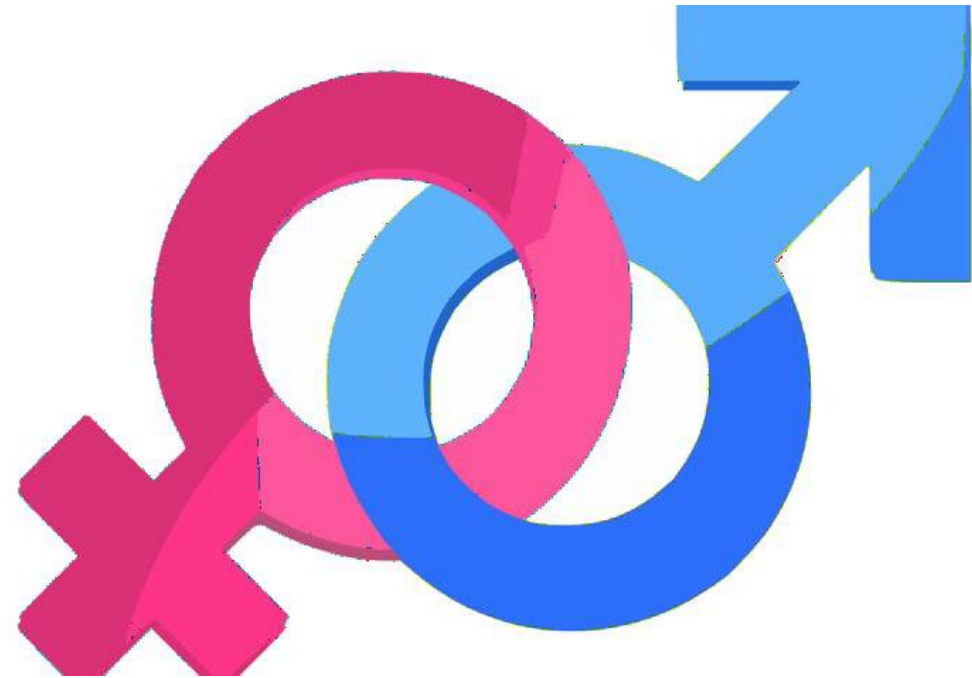
Kenya's Eneza Education and Singapore's Student Learning Space (SLS)

- **Kenya's Eneza Education:** Uses simple mobile technology to provide educational content and assessments to students, particularly in rural areas.
- **Singapore's SLS:** An online platform that offers curriculum-aligned learning and teaching resources, facilitating continued education for students anytime, anywhere.

Goal 5: Gender Equality

Estonia's e-Residency and Thailand's Prompt Pay

- **Estonia's e-Residency:** Allows global citizens to set up and manage businesses in the EU remotely, empowering female entrepreneurs by providing equal opportunities and access to European markets.
- **Thailand's Prompt Pay:** Facilitates secure and easy financial transactions for everyone, particularly enhancing women's access to financial services and fostering economic independence.



Goal 9: Industry, Innovation & Infrastructure

Singapore's Smart Nation and Estonia's X-Road

Singapore's Smart Nation: Implements holistic digital strategies that integrate data and technology to enhance urban living, streamline public transportation via real-time data, and automate public services.

Estonia's X-Road: A decentralized digital data exchange layer between government institutions, enhancing public sector efficiency and promoting innovative e-government services.



Goal 11: Sustainable Cities and Communities

India's Smart Cities Mission and Thailand's Smart City Initiatives

India's Smart Cities Mission: Aims to create 100 smart cities across the country that promote sustainable urban development and use technology to improve infrastructure and governance.

Thailand's Smart City Initiatives: Focus on integrating IoT technologies to optimize urban infrastructure management, thereby enhancing sustainability, reducing environmental impacts, and improving city dwellers' quality of life.





CHALLENGES FOR DPI

Challenges and Mitigation

Digital Divide:

- Access Issues: Disparities in internet access across different socio-economic and geographic areas.
- Digital Literacy: Lack of skills needed to effectively utilize digital technologies, which can exclude many from benefiting from DPI.

Privacy and Security Concerns:

- Data Protection: Risk of personal data breaches and misuse.
- Cybersecurity Threats: Vulnerabilities to cyber-attacks that can compromise sensitive information and disrupt services.

Strategies for Mitigation

- Bridging Gaps in Access: Invest in infrastructure improvements and digital literacy programs.
- Enhancing Data Security: Strengthen legal frameworks for privacy and boost cybersecurity defenses.



Envisioning the Future of DPI

Futuristic DPI Concepts by Sustainable Development Goals

SDG 1: No Poverty

Blockchain-Enabled Financial Inclusion Platforms:

- Facilitate microtransactions and provide secure, transparent financial services to the unbanked and underbanked populations.
- Ensure direct and corruption-free distribution of government subsidies and aid through immutable transaction records.

SDG 3: Good Health and Well-being

AI-Powered Predictive Healthcare Systems:

- Use machine learning to analyze health data and predict outbreaks, ensuring timely interventions and resource allocation.
- Implement telemedicine and remote diagnostics to extend health services to inaccessible areas, improving community health outcomes.





Futuristic DPI Concepts by Sustainable Development Goals

SDG 4: Quality Education

Augmented Reality (AR) and Virtual Reality (VR) in Education:

- Develop VR educational programs that simulate realistic and interactive learning environments for students in remote areas.
- Use AR for real-time information overlay during lessons to enhance understanding and engagement among students.

SDG 5: Gender Equality

Digital Identity Verification Systems:

- Implement blockchain-based identity systems that ensure women and girls have equitable access to public and financial services.
- Use biometrics to create secure and private access to educational and health resources, promoting gender parity.

Futuristic DPI Concepts by Sustainable Development Goals

SDG 9: Industry, Innovation, and Infrastructure

Quantum Computing for Infrastructure Optimization:

- Apply quantum algorithms to optimize logistics and urban planning, reducing costs and enhancing efficiency in public transport systems.
- Use quantum simulations for more resilient and sustainable infrastructure, minimizing environmental impact.

SDG 11: Sustainable Cities and Communities

Internet of Things (IoT) for Smart Cities:

- Deploy IoT devices to integrate and manage urban services, from traffic and waste management to energy and water conservation.
- Utilize smart sensors and networks to monitor environmental conditions and automate public safety responses, creating sustainable and livable urban spaces.





Thank You

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