

The views expressed in this presentation are the views of the author/s and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.

ADB Digital Transformation Journey

August 2024

Information Technology Department
Innovate. Transform. Deliver.



Outline

1. At a Glance: ADB's IT Department
2. ADB's Digital Transformation Journey
3. Digital Transformation Action Plan (DTAP)
4. ADB Challenges Platform
5. AI Use cases – demo
6. Q&A

ITD at a Glance

The **Information Technology Department (ITD)** manages the information systems and technology services required for ADB's Headquarters and Field Offices.

IT Core Values



Openness and Growth Mindset



Commitment to Clients



High Performance and Agile Teams



Organize for Success

IT Principles



Dramatically Simplify Process



Design for Modern Systems



Drive IT Service Excellence



Encourage Real-Time, Transparent, and Open Data



Enable Integrated, Secure, Resilient, and Scalable Environment

Information Technology Department



Stephanie KC Hung
Director General



Naoto Yamamoto
Deputy Director General



Jean Ozdes
Advisor, IT Governance
and Data Management

- IT Governance
- People Management
- Demand Management
- Reporting
- Data quality
- Data stewardship and visualization
- DMSC Support/Secretariat
- Information access and classification policies



Peter Fizelle
Advisor
ITOD-CS

- Audit, Risk and Control
- Cybersecurity Governance
- Cybersecurity Architecture
- Business Continuity



Ozzeir Khan
Director, ITOP

- Software application/ data/ business process management service products delivery and support.
- Digital solutions portfolio and roadmap
- Governance of applications for ADB operations for development
- Digital solutions to support development operations, regional departments, resident missions, sectors and thematic knowledge management and market solution innovation



Ashutosh Chatterji
Director, ITIN

- Software application/ data/ business process management service products delivery and support.
- Digital solutions portfolio and roadmap
- Governance of applications for ADB institutional and corporate administration functions
- Digital solutions to support finance and risk management, human resources, corporate and administration, and other institutional systems



Matt Farley
Director, ITID

- Infrastructure Operations
- Middleware
- Security Operations
- Production Support Services
- IT Platform Management
- End User Device Engineering



Alain Duminy
Director, ITFS

- Budget and Finance Management including Benefits Realization
- IT Procurement and Asset Management
- Resource Management
- IT Service Desk
- IT Learning
- Field Office IT Support



ADB's Digital Transformation Journey



WHAT'S NEXT (3YRC)

WAVE 3: CONTINUOUS DIGITAL TRANSFORMATION

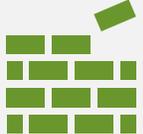
Connecting externally and building digital capabilities while bridging the technical gap
Risks-based, data driven operations-centric digitalization, strategic partnerships, and finishing the technical debt (ERP implementation, CMS, etc.)



IN PROGRESS... (Special Capex)

WAVE 2: DIGITAL AGENDA STAGE 1 (DAS1)

Connecting internal systems, single version of truth, and foundation for innovation
Near real-time access to data, modern integrated systems, culture of innovation



COMPLETED! (Special Capex)

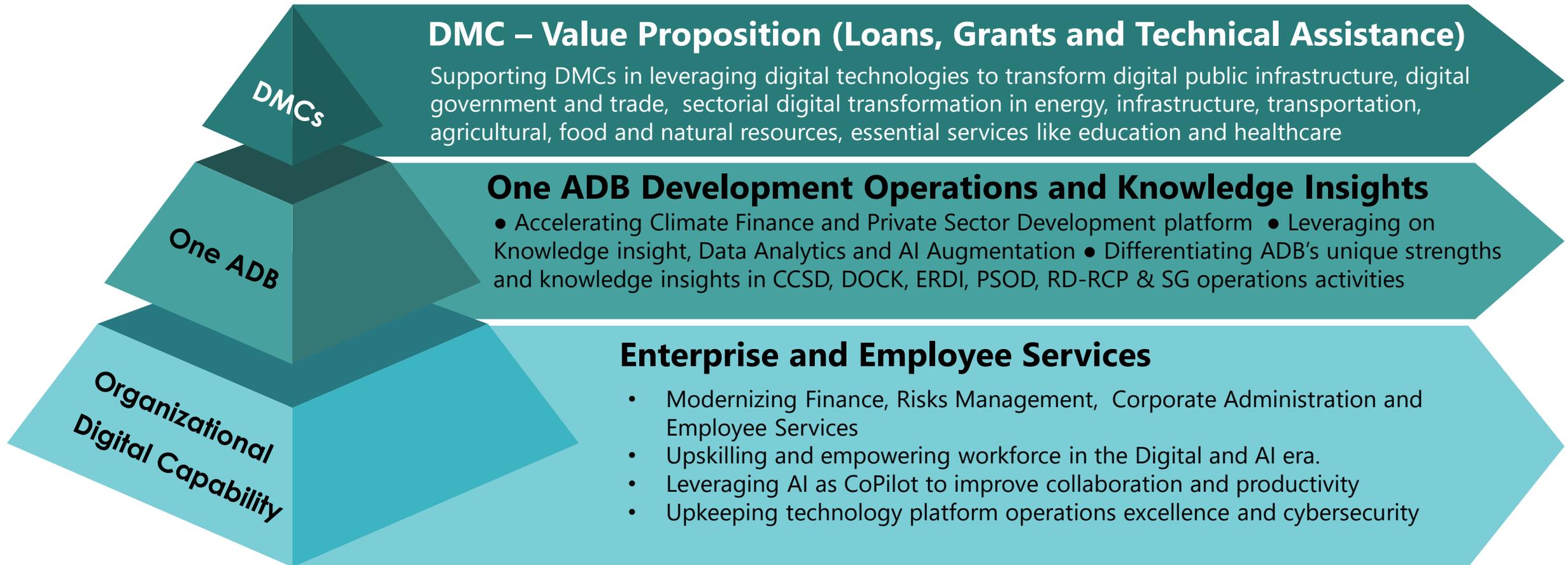
WAVE 1: REAL-TIME ADB IT REFORMS

Building the foundation for resiliency, work anywhere-anytime
Office 365, laptops for everyone, improved connectivity, resiliency, business process automation

DAS1
MIDTERM
REVIEW



Midterm Strategy 2030 Alignment – Digital Transformation Action Plan (DTAP)



Legends

DTAP (White) – DMC

DTAP (Black) – ADB

The Journey Ahead

The Digital Transformation Action Plan (DTAP) aims to unlock digital productivity, development impact, and innovation



Operations

Differentiation of ADB's value proposition to our clients and partners in the DMCs.



Finance, Corporate Automation and Employee Service

Modern, flexible, and innovative products and services; digital literacy; and agile ways of working.



AI and Big Data

More effective decision-making through advanced analytics, responsible AI, and business intelligence.



Cybersecurity and Resilience

Secure and resilient information and systems amid evolving cybersecurity threats and risks.



Technology Operation Excellence

Enhanced and modernized technology landscape to ensure resilience, supportability, and an empowering technology experience.

Extended Partnership Ecosystem

Project scope spans digital solutions for DMCs, Operations and Operations Support

User	Type of digital solutions	Examples	Owner	Source of funding
DMCs	1 Digital and AI solutions in DMC with limited scalability	<ul style="list-style-type: none"> MVP/ Proof of Concepts demonstrating potential of solution Localizing Digital Public Goods to DMC needs 	DMCs	Operational budget (e.g. TA pool)
	2 Scalable digital public goods for DMC use	<ul style="list-style-type: none"> Scalable components of tech solutions, DPGs reuseable in other DMCs 		
	3 Digital and AI solutions built for both ADB and DMC use	<ul style="list-style-type: none"> Climate Finance Platform facilitating private investment into climate projects Economic Data Platform for macroeconomic analysis 		
Operations	4 Digital and AI solutions for project planning and oversight, solely for internal use	<ul style="list-style-type: none"> AI-enabled platform for Concept Note Development; pre-population of RRP Report GenAI for decision augmentation in CTL 	ADB	Operational budget (e.g. TA pool), Partner Funds (Trust Funds), or IAE
	5 Digital and AI solutions that facilitate ADB Operations' internal processes to support DMCs (strategic planning, project preparation, etc)	<ul style="list-style-type: none"> OneOps support SOV/NSO process modernization Partner Fund Management System Integrity Intelligence System Knowledge products (shelfware) in support of DMC TA 		
Operations Support	6 Digital and AI solutions that facilitate ADB Operations' Support processes (performance management, payments, etc)	<ul style="list-style-type: none"> New Talent Management System, HR ServiceDesk SAP Concur 		Internal Administrative Expense (IAE)

Conclusion



DTAP as the next stage of ADB's journey (post-DAS1): DTAP will be funded by 3YRC, optimizing flexibility in financial allocation for sustained innovation.



An approach to deliver more impact to clients: With DTAP Scenario 2, we can deliver better products and enable insight-driven capabilities that can differentiate ADB in the DMCs.



Delivery capacity is being strengthened through reforms in governance, vendor and partner management, and business stakeholders' engagement.



Preparing for technology innovation and disruption is key. DTAP is our proactive, risk-based approach to create value for clients and partners and manage digital disruptions.

ADB Challenges: A Snapshot

ADB Challenges program leverages open innovation to address real-world challenges faced by countries in the Asia-Pacific region.

The program engages a global talent pool of innovators and entrepreneurs to co-create solutions that drive positive change and sustainable development.

Our Work in Numbers:

50+

Challenges hosted*

2100+

Solutions Submitted*

7000+

Problem Solvers Engaged*

20+

Partners Engaged*

**The total number was accumulated since the first hackathon held in 2018.*

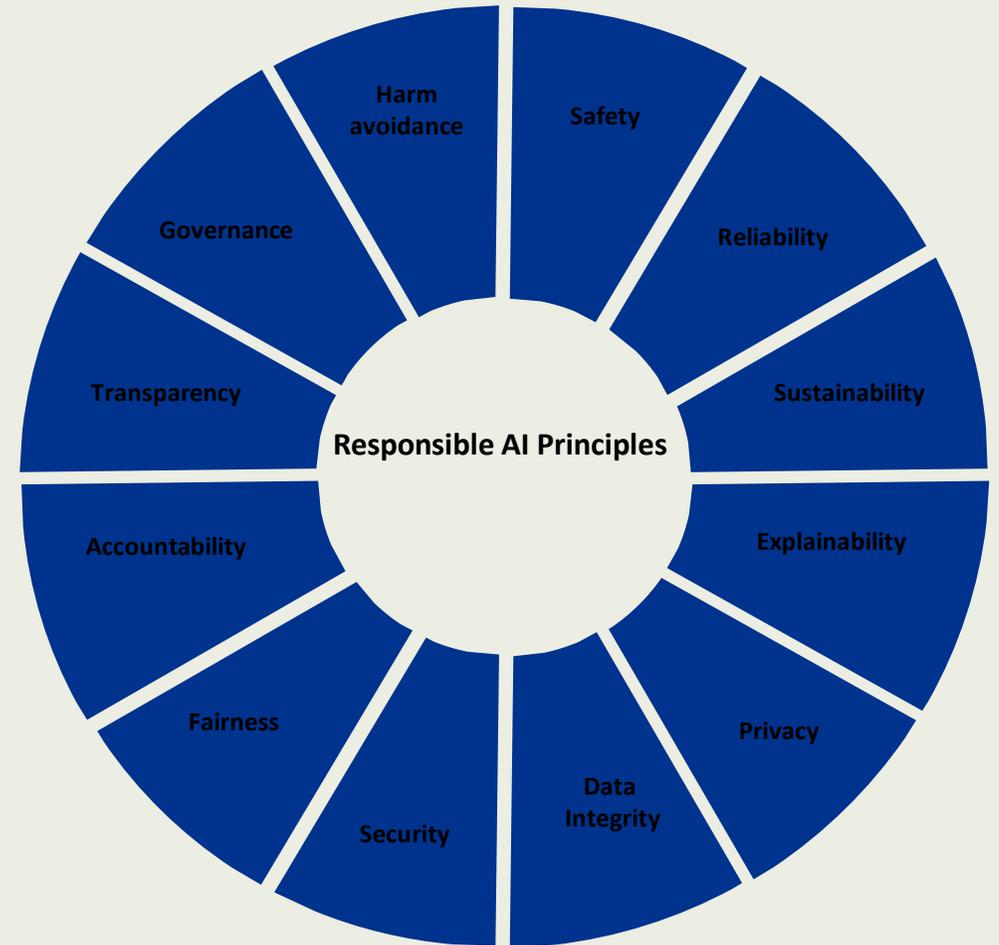
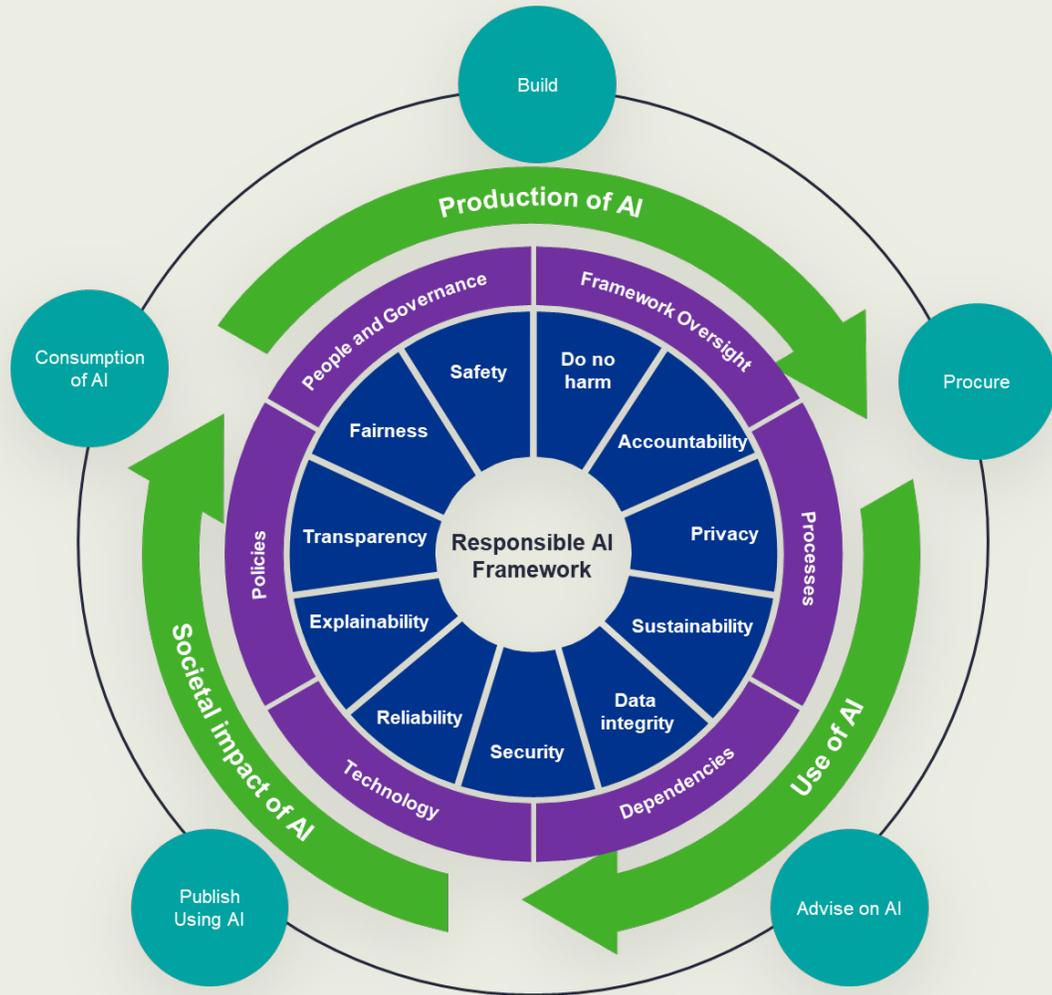
Information Technology Department
Innovate. Transform. Deliver.

ADB Department Served:

- PSOD
- SDCC
- RD
- TD
- CSD
- SERD
- SEADS
- PSFI
- WFX
- ITD
- BPMSD
- ERCD
- CWRD
- SARD

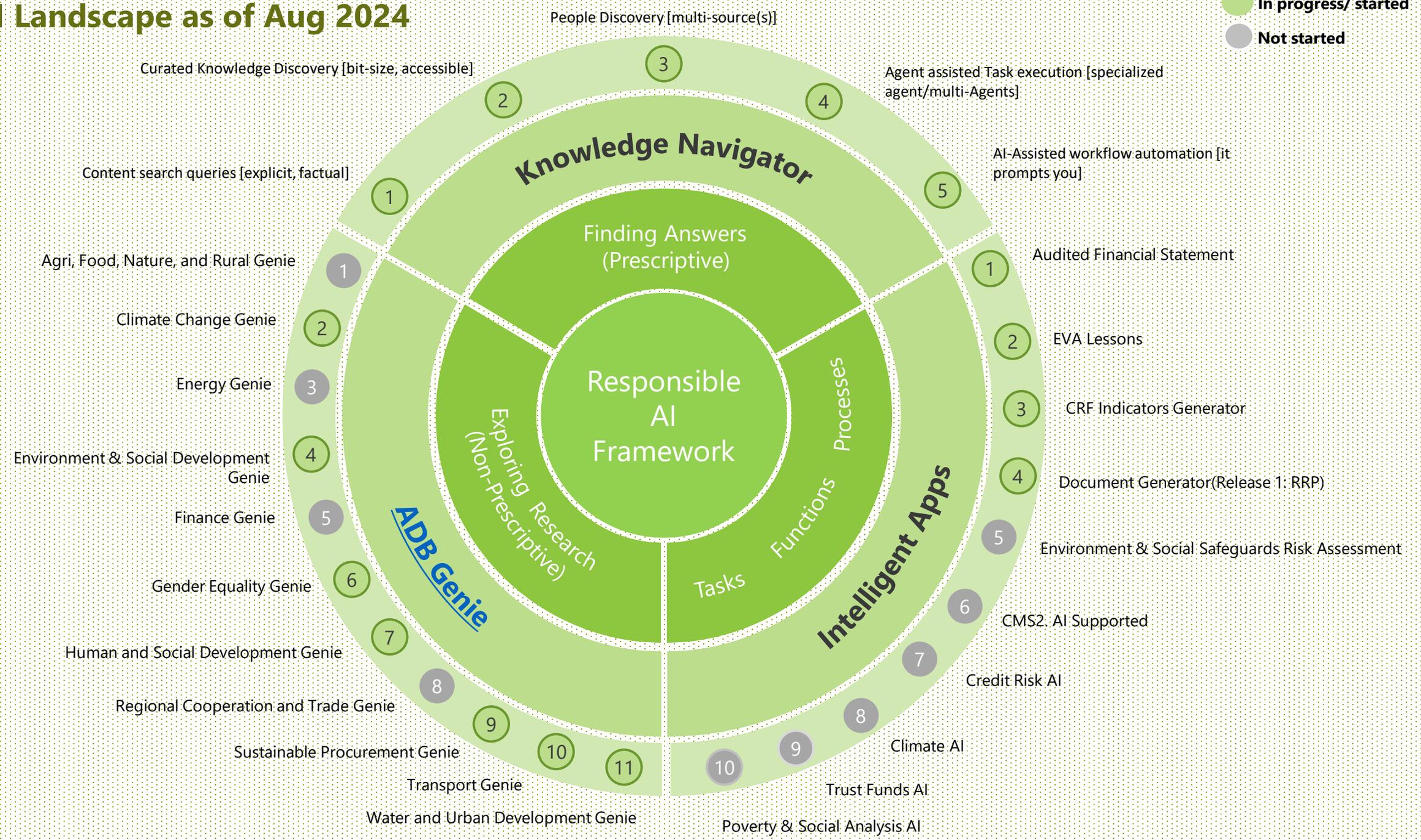


ADB Adopting AI



ADB AI Landscape as of Aug 2024

● In progress/ started
● Not started



Transitioning to a Solutions Bank with ADB's AI-powered Knowledge Navigator

Objectives

Harness the power of data, information, and create accessible "knowledge" to **transform ADB into a Solutions Bank**



Boost employees' efficiency, effectiveness, and productivity, as business needs change, knowledge expands, and new technologies emerge



Enhance collaboration across the organization to **amplify shared knowledge and network effects for innovation**



Improve risk mitigation by enabling retrieval of compliance information, policies, and procedures, and evidence of key actions / decisions



3 Key themes to accomplish the business objectives



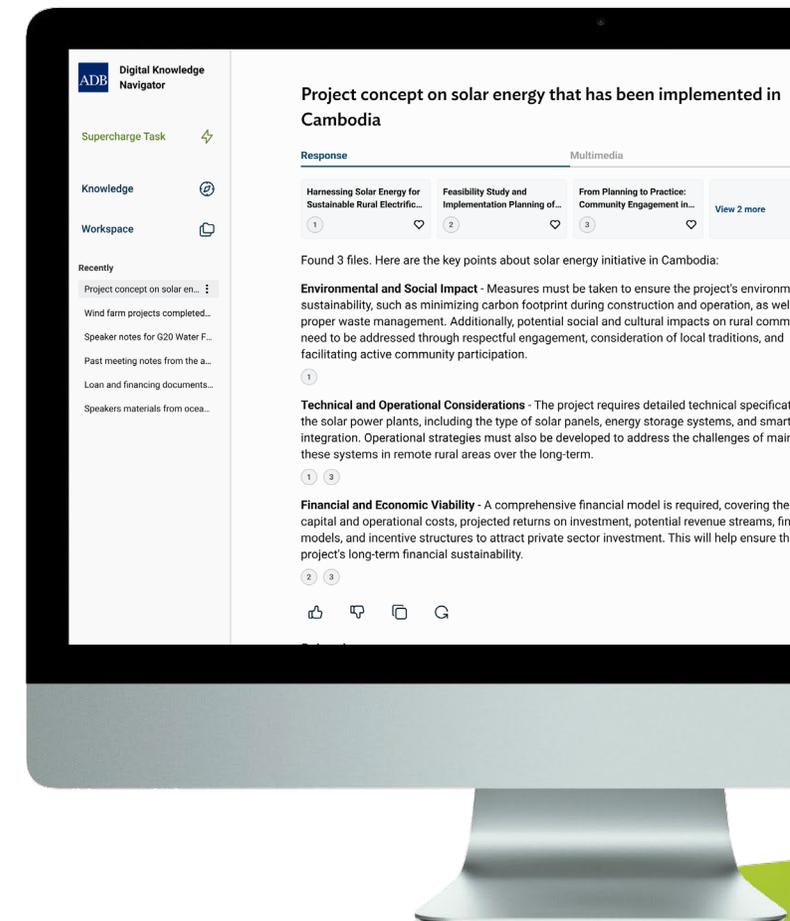
Knowledge Discovery



"Agent-Assisted" Task Execution



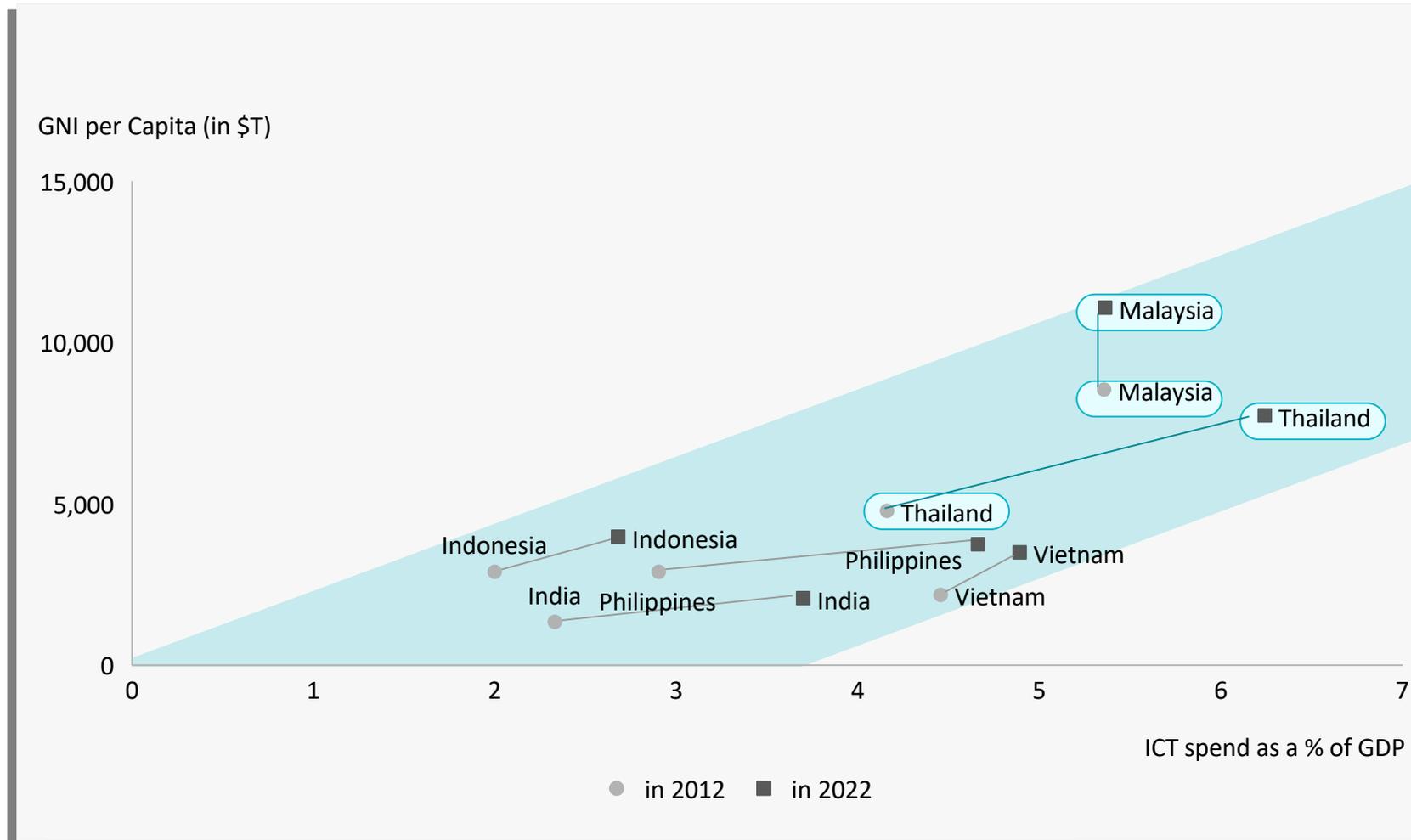
People Discovery



Supplementary



Within DMCs, digital investment is associated with higher levels of economic development



Note: Analysis based on 8 out of 42 developing member countries with data points, 2 outliers excluded
Source: World Development Indicators, IDC 2022



- **1.3x increase in ICT spending as % of GDP in DMCs for selected DMCs** (sample size, n= 6 DMCs). Average of 3.5% GDP in ICT spending in 2012 vs. 4.6% in 2022
- DMCs like **Malaysia and Thailand** that have **invested more in ICT spend as a % of GDP in 2012** have shown higher levels of economic development in 10 years

Digital and AI has been used to improve development outcomes across topics to achieve development outcomes

Digital and AI advancements are changing how DMCs approach development challenges



1

Climate

Lighthouse project: GIS-enabled Coastal Embankment
Bangladesh mitigated climate hazards for ~400K people by using a geographic information system (GIS) platform



2

Agriculture

Lighthouse project: Smart IoT & AI-based Agri-Solution
Smart agriculture in India increased yield by 7% and reduced costs by 8%



3

Energy

Lighthouse project: Smart Power Grid Improvement
Laos reduced electricity losses from 24% to 14% with smart metering and grid improvements



4

Finance

Lighthouse project: Digital Currencies
Bahamas increased payment card usage by 203% with a digital currency



5

Trade

Lighthouse project: AI-enabled National Single Window
Bangladesh simplified 8M transactions annually from automated customs clearance



6

Education

Lighthouse project: EVOKE blockchain-learning
Increased course completion rates from 10%-40% with blockchain-assisted learning



7

Healthcare

Lighthouse project: CDC Data Modernization
Analytics and electronic reporting saved 160K staff hours from real-time disease surveillance and data modernization



8

Transport

Lighthouse project: AI Road Asset Management
Georgia reduced road maintenance costs by 60% with AI road asset management



9

Urban Development

Lighthouse project: Virtual Singapore
Singapore saved 3000 resource days and costs from creating a digital twin

The AI shift presents risks which need to be managed carefully

Not Exhaustive

Addressable

Existential



1

IP infringement, data privacy

AI creates new content based on input parameters, some of which are protected by copyright or infringes on personal data



3

Employment, emotional concerns

Estimated 300 million jobs could be impacted; AI can alter the way people view themselves, their abilities



5

AI Autonomy

Self-improving AI could create machines that are vastly more intelligent and powerful than ourselves, and use lethal autonomous weapons



2

Biased outputs, hallucination

Bias built into training data for the underlying model could lead to biased outcomes include gender, racial, and stereotyping



4

Environmental concerns

As AI becomes as popular as search engines, the energy costs of deploying LLM and AI can be very high with growing data centers

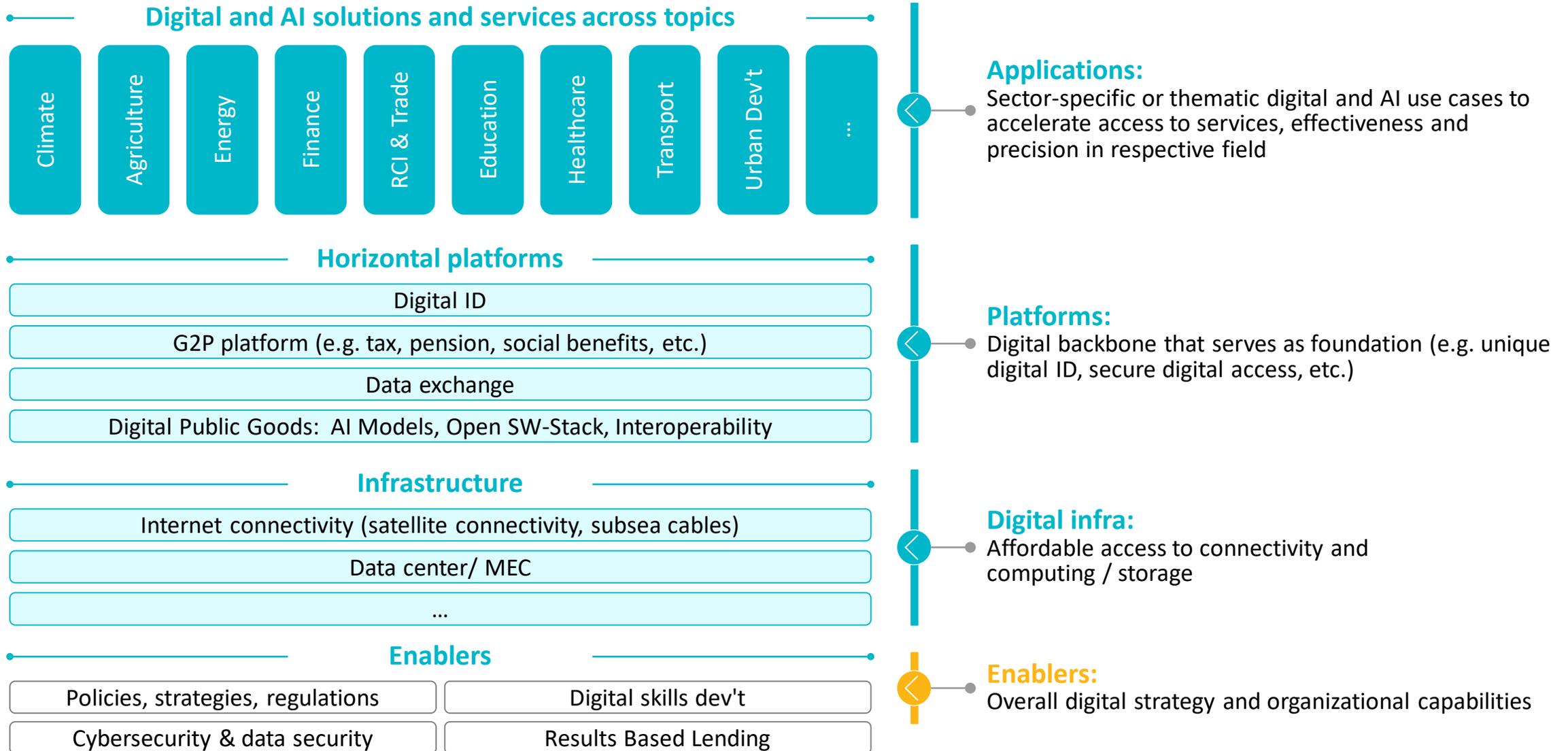


6

Criminal/ ethical concerns

Criminal individuals, organizations, rogue countries could apply AI to malicious ends by weaponizing disinformation and impersonation

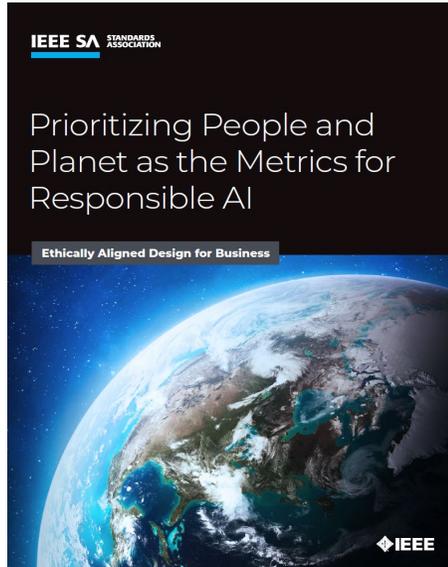
We can categorize DMCs digital and AI needs into 4 types of opportunity areas



References on Responsible AI



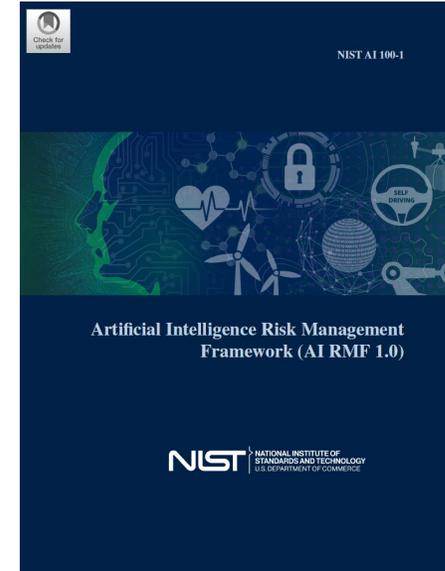
[Ethics guidelines for trustworthy AI | Shaping Europe's digital future \(europa.eu\)](https://european-council.europa.eu/media/en/press-operations/infographic/docs/ai-ethics-guidelines/EN_AI_Ethics_Guidelines.pdf)



[IEEE SA - Autonomous and Intelligent Systems \(AIS\)](https://www.ieee.org/standards/publications/prioritizing-people-and-planet-as-the-metrics-for-responsible-ai)



[SG PDPC AI Model Governance Framework \(2nd Edition\)](https://www.pdpc.gov.sg/SGD-IIM-Model-AI-Governance-Framework-2nd-Edition)



[AI Risk Management Framework | NIST](https://www.nist.gov/ai-risk-management-framework)



[IEC and ISO work on artificial intelligence](https://www.iso.org/standard/72431.html)

Contact: Saad Paracha (sparacha@adb.org)

Thank you