WORLD BANK GROUP
Information and Technology Solutions

TECHNOLOGY INNOVATION OFFICE

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Presentation Flow

1. WBG Digital Transformation Strategy (*5 mins)*
2. Who We Are: Technology Innovation Office *(10 mins)*
3. Human-Centered Design (*20 mins)*
   Futures Thinking and Case Studies
4. Q&A Part 1 (*15 mins)*
5. Human-Centered Design (*30 mins)*
   Design Sprints and Case Studies
6. Q&A Part 2 *(15-20 mins)*

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WBG Digital Transformation Strategy

Leverage information and technology as a force multiplier to accelerate, deepen and sustain development impact.

It is translated into seven strategic themes that outline what the future state will be, to be executed through a set of integrated portfolios and programs.

WBG Digital Transformation Strategy

WBG Priorities

The World Bank Group's Vision is to create a world free of poverty on a livable planet.

The World Bank Group is ensuring that all our operations have a clear line of sight to employment. Our approach to **job creation** is built on three pillars: Investing in the foundational infrastructure critical to job creation; Supporting policy and regulatory reforms that establish a business-friendly environment; and Mobilizing private sector investment at scale.

Client Focus
- Create a single point of contact in every country
- Decentralization and improved Country Partnership Frameworks
- Enhanced engagement in FCV countries

Scale and Replicability
- Foster regulatory quality and innovation & Replicate proven interventions globally
- Enhance access to and operationalize curated knowledge
- Connect knowledge and operations

Catalytic Finance
- New financing tools – co-financing (bi/multi lat)
- Attract private investors priorities aligned with client needs
- Leveraging WBG Guarantees platform
- IFC2030
- Mutual Reliance arrangements

Operational Excellence
- Streamline project preparation
- Unify internal processes and consolidate corporate functions
- Invest in talent and skills development
- Back – and middle-office functions efficiencies
- Streamline accountability and decision-making framework
- Efficient and proactive management of financial and non-financial risks

Vision & Mission

Our vision is to harness information and technology for a world free of poverty on a livable planet.

Our mission is to leverage information and technology as a force multiplier to accelerate, deepen, and sustain development impact.

Strategic Themes

KNOWLEDGE FOR IMPACT
- Data as a Public Good
- High-Value Data and Actionable Insights
- Enabling the Knowledge Bank

Accountability Metric
- Increase Data and Information Maturity Score

BETTER, FASTER BANK
- Scalable WBG Operations
- Corporate Effectiveness
- Expanded Financing Model Flexibility

Accountability Metric
- Increased WBG Scalability Index

CONNECTED CLIENTS & PARTNERS
- Increased & Improved Stakeholder Experiences
- Financial Traceability
- Enhanced Focus on Outcomes

Accountability Metric
- Improved Digital Engagement Index

EMPOWERED WORKFORCE
- Digital Dexterity
- Tech-Augmented Workforce
- Work Anywhere

Accountability Metric
- Increased Digital Empowerment Score

ADAPTIVE DIGITAL CORE
- Cohesive and Flexible IT Ecosystem
- AI Big Bets
- Embedded Innovation

Accountability Metric
- Increased and accelerated value creation

CHANGE CATALYST
- Strategic Advisors & Conveners
- Corporate Orchestration
- Adaptive ITS Culture

Accountability Metric
- Increased Business and Technical Agility

PARTNERING IN GLOBAL THOUGHT LEADERSHIP
- Global Knowledge Sharing
- Credibility and influence
- Relationships and Networks

Accountability Metric
- Increased Contribution to Development Impact

Portfolios and Programs

Operations & Country Engagement	Autonomous Workflows
	Improved Decision-making
	Intelligent Knowledge Curation and Dissemination
	AI-first Operational Platforms
	Update Core ERP Capabilities
Finance	Loan & Payment Handling
	End-to-end Traceability of Funds
	Flexibility in Financing Instruments
	Mobilizing Public and Private Resources
	WBG Risk Management
	Treasury Systems Integration
	Oversight of TFs & Financial Intermediary Funds
Private Sector	Transform Partner Engagement
	Accelerate Origination
	Streamline End-to-end Processes
Corporate	Productive & Efficient WBG Staff Digital Experience
	Digitalized & AI-enabled Corporate Business Functions
	Integrated & Autonomous WBG Back-office Backbone
Data Technology	Seamless Access to High-quality Information
	Responsible and Scalable AI Adoption
	Institution-wide Data-driven Decision-making
Technology Foundation	Frictionless Digital Workplace
	Intelligent Technology Foundation
	Lean Portfolio Management
Adaptive ITS Operating Model	Agile Ways Of Working
	Financial Transparency
	Future-ready Workforce

Guiding Principles

One WBG | Maximize Business Value | Safe, Secure, Resilient

Digital Inclusion and Sustainability | Challenge the Status Quo

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The **Technology Innovation Office** turns frontier tech into secure, scalable solutions that improve World Bank Group operations and development outcomes.

Founded in 2017 as the ITS Innovation Lab, the unit has partnered on 70 + innovative and future-proof projects and has evolved from early blockchain pilots to a broader remit across frontier technologies.

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OUR MISSION:

Embed innovation across the organization, empowering the World Bank Group to be future-ready and support development impact at scale.

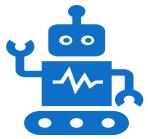
Innovation-as-a-Service

What we do and deliver

A service offering that enables ITS and WBG staff and teams to tap into the expertise, skills, technology stack, and tools of the Technology Innovation Office to drive innovation across the WBG.

Technology Innovation Leadership and Advisory → **Frontier Tech Experimentation and Exploration**

Innovation Futures



Foresight

Horizon & Futures Signals Scanning

Practice & Architect the 'Futures' for Impact

Futures Thinking / Awareness and Literacy

Innovation @Core



Product Innovation

Design sprints, challenge framing, ideation, hackathons

Design new capabilities based on frontier technologies

Communities of Practice (CoP) and Knowledge Sharing

Innovation @Edge



Frontier Technologies

Rapid Prototyping & Piloting with Frontier Tech

Accelerate Learning around Frontier Tech, Catalyst Teams

Exploration sandboxes, tech innovation research and trends scanning

Partnerships and Outreach

Entrepreneurs, Start-ups, Tech Leaders | UN system, IFIs, MDBs |Tech Sector | WBG Corp/Ops/ITS | Academia, Research Institutions

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Technology Innovation Leadership and Advisory

Foresight



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Innovation Futures

Anticipate. Co-create. Future-proof.

Our Approach: We combine Futures Thinking with Human-centred Design Thinking practices to identify signals, spot trends early, explore emerging risks and opportunities, and co-create future-ready strategies and solution pathways — moving from isolated future-gazing to embedding anticipation into core processes.

Flagship Theme: The Future of Jobs & Skills | Exploring how Emerging & Frontier Technologies, AI the green economy, and digital disruption are reshaping work — and what it means for people, policy, and partnerships.

How We Embed Foresight:

- Embed foresight tools in real processes and decisions points (Strategic thinking, Adaptive strategies, Scenarios)
- Curate toolkits and build a Community of Practice
- Engage leadership to champion anticipatory governance
- Connect with global partners: UN Futures Lab, WEF, ADB, Singapore CSF, OECD, Academia

Our Projects:

- *Future of Technology investment in Bangladesh*
- *Future of Development Finance (Group Strategy Office) | Future of Health (Health Services Department)*
- *UNDCO- Future of Investment Financing in Colombia*
- *Partnership with Centre of Strategic Futures, Singapore- Build capabilities on Futures thinking*



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Reimagining the Future of Health

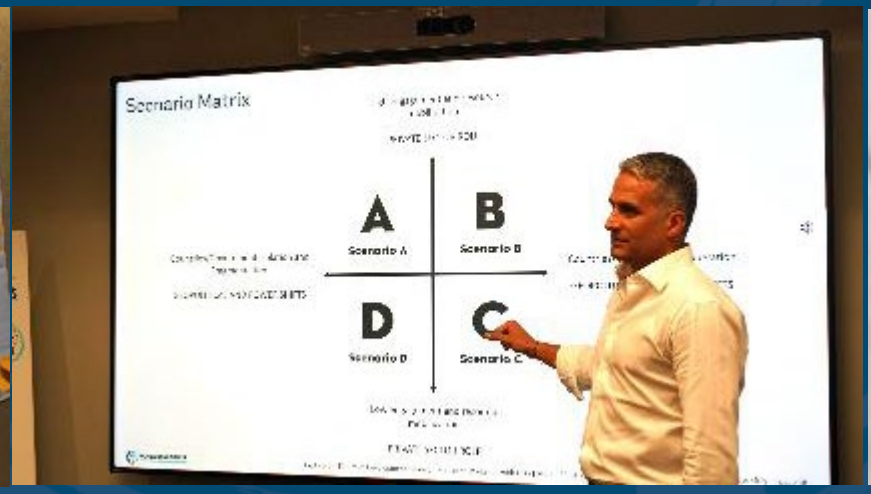






The Future of Development Finance







Frontier Technology Exploration & Experimentation

Case Studies

- ***Multilateral Financing, Global***
- ***Agricultural Financing, Ukraine***



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Fundschain

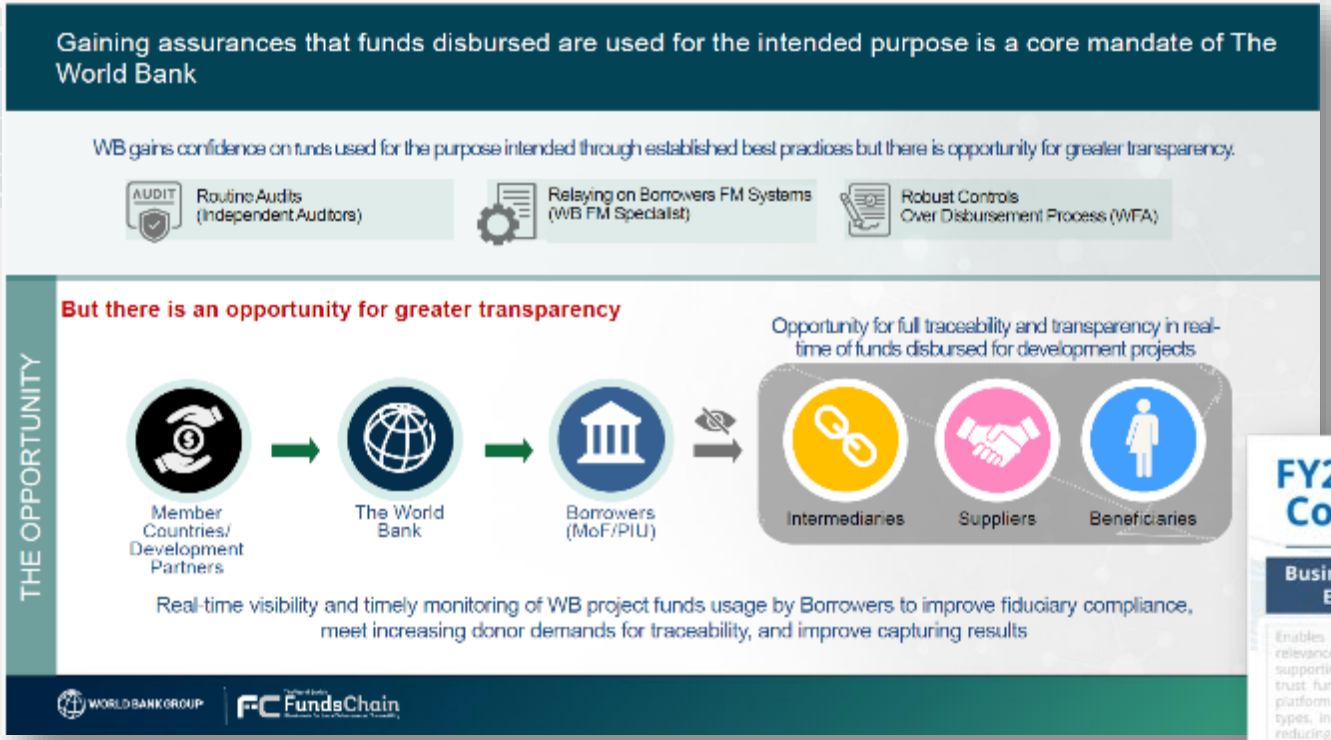
Global Multilateral Financing

- Started in the Technology Innovation Lab exploring the use of Blockchain technologies
- As the first multilateral development institution to implement blockchain for project oversight, the World Bank Group is paving the way in future-ready financial management.
- It integrates technologies such as **cryptography, distributed ledgers, and the internet** to provide a secure platform for all types of transactions.
- It uses Hyperledger Besu, a blockchain solution which allows transactions to be stored by all parties involved in a project and recorded permanently.
- This enables development partners to track funds throughout the lifecycle of a project, and to prepare comprehensive project execution reports, allowing for robust data analysis.
- Successfully tested in 13 projects across 10 countries: **Argentina**, **Bangladesh**, **Comoros Islands, Ethiopia**, **Kenya**, **Madagascar**, **Mauriti us**, **Moldova**, **Mozambique**, and the **Philippines**.
- Will now be scaled up and extended to approximately 250 projects in 2026.

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Fundschain

Increased and accelerated value creation – From Experiment to scaled development impact





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Presto Project (Pilot)

Innovating Agricultural Financing - Ukraine

"How might we utilize emerging technologies to create efficient processes for the CR lifecycle to enable private capital flow for farmers' pre-harvest credit."



- We have been exploring how technology can help innovate crop receipts (CR) as a financing tool to increase financial access for farmers.
- The goal is to innovate and streamline agricultural financing through advanced technology integration.
- By leveraging tokenization, Presto aims to create a seamless connection between digital assets and traditional financial systems, facilitating improved financial outcomes, enhanced liquidity, and broader market access.
- Our collaborators are the finance and information tech teams in the International Finance Corporation (IFC).

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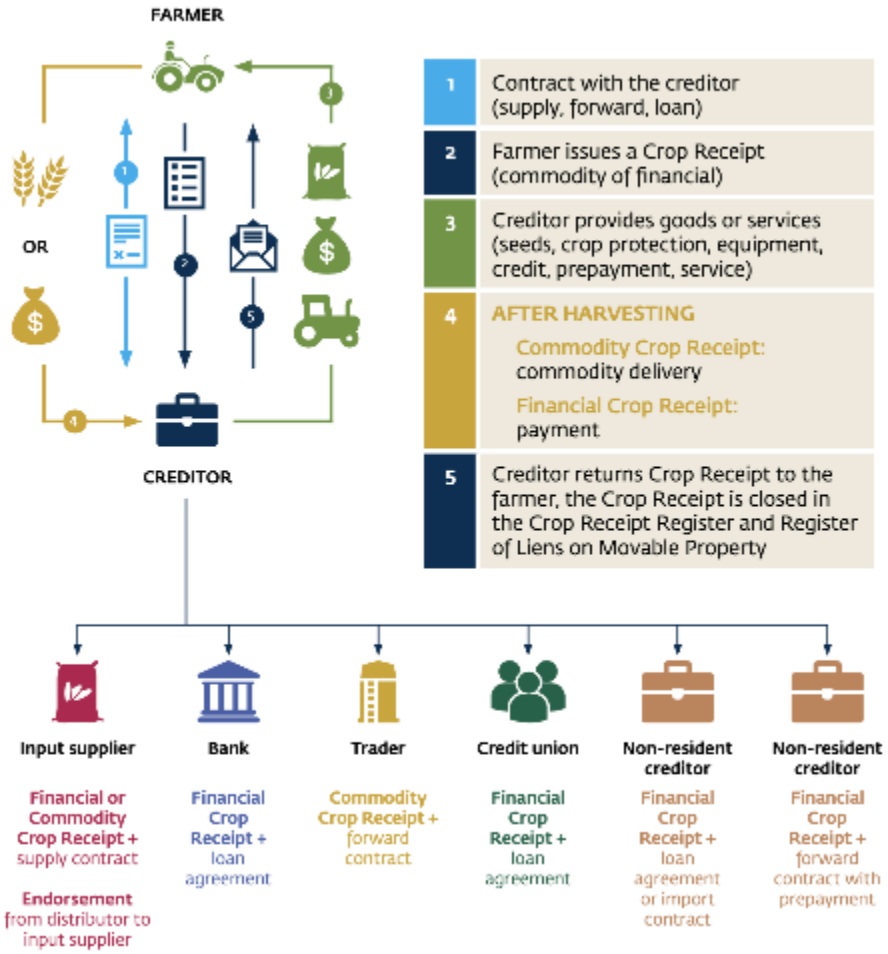
Presto Project (Pilot)

Crop Receipts (CRs) Are Loans with Non-Traditional Collateral

Definition

A crop receipt is a working capital loan extended to a farmer secured against the right to future harvest on the farmer's plot. CR combines the two elements: A loan and a non- traditional collateral.

Process



Purpose

- Allow farmers without sufficient, "normally eligible" assets to establish secure and efficient collateral for lenders
- Facilitate cash payments or input payments against future harvest
- Crop receipts are an effective financing instrument due to the concept "persistent obligations," which means that if there is nonperformance against a crop receipt, the obligation remains attached to the land plots the next season.
- The crop receipts are subject to an "out of court" enforcement procedure, requiring a seven-day response time to seize the pledge for the creditor.
- Crop receipt legislation protects creditor rights, such as the right to monitor the crop and transparency based on a centralized public register, where the creditor can see a farmer's obligations and historical performance in crop receipts

Characteristics

- Bilateral contract / loan agreement Farmer / Creditor
- Right to a pre-agreed value of future production on a specifically identified farm plot
- Financial or physical settlement
- Failure to settle claims in current year means that the claim roles over into the next year
- Enforceable / often via out-of-court process
- Standardized application process and central register of receipts owners and expected settlements

Use Only

Presto Project (Pilot)

Innovating Agricultural Financing - Ukraine

PRESTO Project Outline

Presto Project: IFC FIG has explored crop receipts (CR) as a financing tool to increase financial access for farmers. To extend the opportunities around use of DLT in Crop receipts, we are exploring **'How might we utilize emerging technologies to create efficient/automated processes for the CR lifecycle and CR securitization so as to enable private capital flow for farmers' pre-harvest credit'**

Presto Timeline

Presto Phase 1- Nov 2022- June 2023.
Concept development & confirmation with IFC FIG

Presto Phase 2- January 2024
Launch of RFP to design Presto Tokenization Platform Prototype

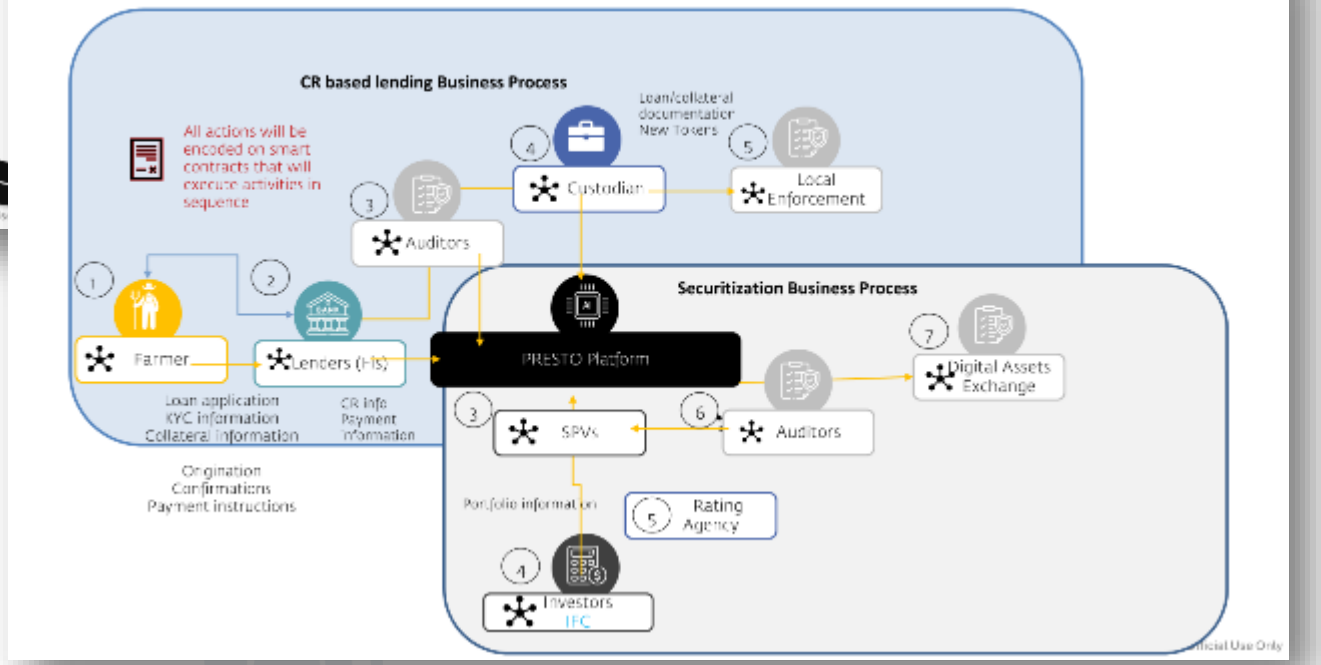
Vendor Selection, Onboarding- June- August 2024
EY, Soramitsu & WHRRL shortlisted to build Prototypes

Technical Development August- November 2024
- Business Model Development, UI/UX Flows, Technical Development
- Hackathons, Presentations to Bank Wide Staff on Web 3.0

Presto Day- November 2024
Presenting the Prototype, learnings and Opportunities to a Bank-Wide audience

Draft Design

PRESTO Platform Connects all Stakeholders



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Q&A Part 1

Technology Innovation Leadership and Advisory

Design Sprints



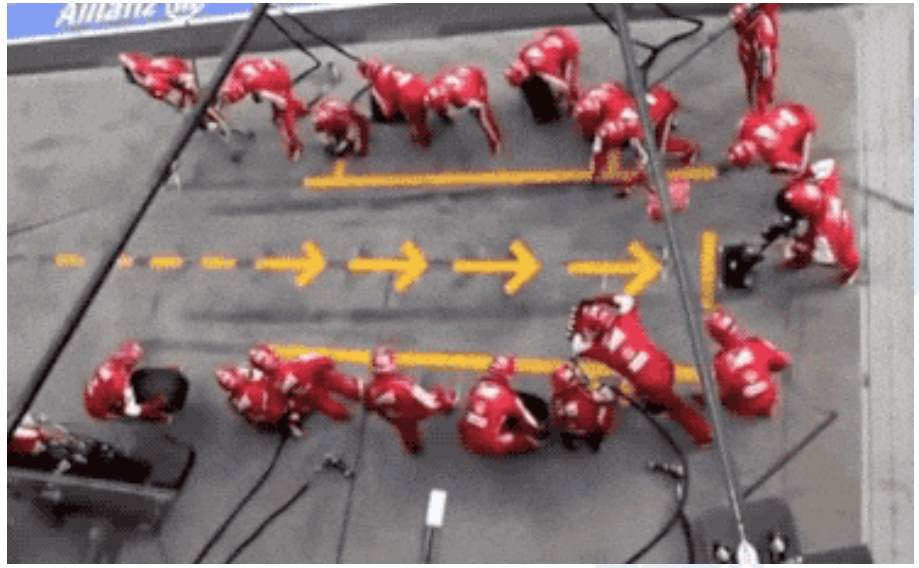
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The Design Sprint

A **focused, time-boxed workshop, collaborative problem-solving** process that aims to quickly design, prototype, and test a solution to a specific problem.







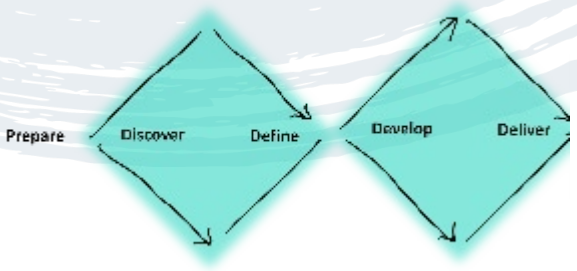
PROBLEM → SPRINT → SOLUTION

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ITS HUMAN-CENTRED DESIGN PRACTICES

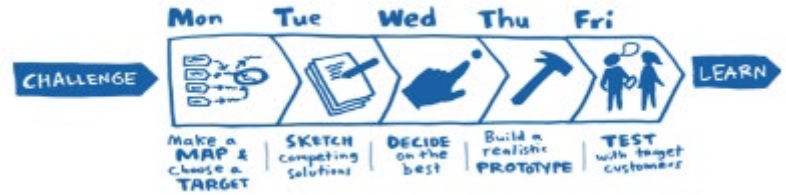
ITS evolution from Design Thinking labs to 5-day Design Sprints

BEFORE



SHIFT FROM DEEPER-DIVE TO RAPID, FOCUSED DELIVERY

NOW



12-week Design Thinking cycles	SPEED AND RESPONSIVENESS	5- day Design Sprints
Demand exceeding capacity	SCALABILITY	Factory-style sprint delivery model
Centralized innovation resources	EMPOWERMENT	Decentralized sprint co-ownership
Agile delivery expectations	AGILE ALIGNMENT	Embedded sprints into Product cycles
Barriers to testing new tech	EXPERIMENTATION	No-/Low-code (e.g. FIGMA) tools in sandbox
Idea/delivery/disconnects	EXECUTION CLARITY	Repeatable pipeline - idea to implementation

Outcome : Preserves **Desirability, Feasibility, Viability | Safe Technology Testing & Experimentation**
Faster innovation cycles – Faster **time to value** | Broader Team Ownership - Greater **alignment with Agile**

DESIGN SPRINTS JOURNEY

Units across the organization have partnered with ITS to apply this methodology from the tech sector to our context

DEC

Dec 9-13 – PAKISTAN HEALTHCARE

- Sindh Primary Healthcare Prototype
- Dashboard tracking fund use at facility & district levels

Dec 10-13 – HR DASHBOARD

- Dashboard Prototype on HR Subdomains
- Staff onboarding, flows, Talent, Position mgt

Dec 2-6 – EXTERNAL FUNDS

- Business proposal and framework to align TF to Business Planning (BB cycles)

NOV

Nov 19-22 OIS CYBER SECURITY INTEL

- Improve threat detection, enhance threat response, minimizing the impact of attacks.

Nov 12-15 - ICR/R REFORM

- ICR/ICRR Portal with dual-version publishing and improved structure

OCT

Oct 18-22 - PFM (PUBLIC FINL MGT)

- Shaping Vision & understanding : Solving PFM problems in a digital world

Oct 18-22 – SUSTAINABLE BUDGETING

- New Green Budgeting Framework

Oct 15-18 : ASSET MANAGEMENT

- Process Simplification

JAN

Dec 16-20 –PAKISTAN EDUCATION

- Khyber Pakhtunkhwa Prototype for Education
- Digital Platform prototype for decentralized budgeting

27 Jan – OPERATIONAL PROCUREMENT

- Future state journeys of end-to-end procurement cycle
- Future-state workflows and framework outlining future data analytics and monitoring capabilities.

FEB

27 Jan – ESMS MODERNIZATION

Focus areas to enhance ESMS.

- E&S monitoring, reporting, improved dashboards
- Systematic & efficient management of the quality review and disclosure of Borrower data.

02 Feb – HR DASHBOARD

- User-centric Dashboard Prototype for key HR subdomains on staff onboarding, staff flows, Talent and position management.
  Set of HR KOIs and metrics, data integration plan and steps for deploying HR Dashboard.

MAR-APR

25-27 Mar– Train the traine

- Scaling and capacity building (WFA, ITS, DEC, OPCS) . ~60 trained

29 Apr-01 May– Train the trainer

MAY

May 18-29– EGYPT eJUSTICE MODERNIZATION

- MoJ Economics Courts ; eFiling Prototype
- Courts of Casation: external digital eService portal
- State Council : Electronic Case Management System

JUNE

Jun 2-5 – VENDOR MANAGEMENT

- A unified vendor management process with centralized registration, automated data collection, and compliant access controls

Jun 9-13 – EXTERNAL CONSULTING

- A streamlined interface with clearer guidance,
- Automated and codified TOR review process,
- Standardized BE/RE clearance workflow,

Jun 20 –EMISSION TRADING SMULATION

- A prototype of cost-effective Emissions simulation trading tool.

FY26Q1

August- JOHANNESBURG M2 CORRIDOR

- Introduced the "Green Innovation Corridor" vision, emphasizing inclusivity, resilience, and sustainability, with distinct development priorities across the precincts

Sept 15-20 AI AGENT for CONSUMER PROTECTION

- AI prototype to streamline contract reviews and boost efficiency.
- Showcased AI's role in enhancing NBKR's compliance monitoring.

September 30- AI JobSeekers Platform (SkillCraft)

- AI platform that matches jobseekers' skills with jobs, training, and entrepreneurship opportunities.
- Enables data-driven policies to tackle unemployment and skills gaps.

20 Nov – DS CoP Launch

Quarter 2-3

Dec 8-12- CENTRAL BANK of PHILIPPENES- SupTech

Nov 10-14- SKILLS, KNOWLEDGE and INNOVATION

Tax Administration- LAC

PFM : Ghana , Uganda, Kenya- GovTech

LEGEND

- CORPORATE
- OPERATIONS
- BUILD CAPACITY

ITSTI : Design Sprints

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Case Studies

- *Urban Development, South Africa*
- *Supervisory Technology (SupTech), Kyrgyz Republic*
- *Justice Modernization, Egypt*
- *Knowledge Innovation, Eastern Caribbean States*
- *Labor Market Access, Global*



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Co-Creating the Future of Johannesburg

Use of Spatial Intelligence, Foresight Methodologies and Collaborative Design Principles



GOAL

*To **co-create a unified, future-ready, and inclusive urban vision** that will revitalize the M2 City Precinct's mixed-use residential area.*

Pilot solutions that can be replicated and help shape the next phases of investments.

VR Headsets to experience **digital twins** and imagine the city's **future state.**





Voices from the Field:

Abhas Jha, Manager, Urban and Disaster Risk Management in Africa



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AI Agent For Consumer Protection

Kyrgyz Republic

THE CHALLENGE

A central bank sought to strengthen consumer protection by improving how financial service contracts are reviewed for compliance.

The existing process was largely manual and resource-intensive, creating risks for consumers and slowing supervisory response to market developments.

OUR COLLABORATION

Through the design sprint, we co-created a **user-centered, AI-enabled concept/prototype** to support consistent, efficient contract template reviews while preserving human oversight.

The engagement is anchored in the World Bank's Supervisory Technology (SupTech) agenda and contributes to **open-source global public goods**, while supporting authorities' mandate to safeguard financial consumers.

Goals of the initiative:

- Improve consumer outcomes by enabling faster, fairer, and more transparent oversight of financial service contracts.
- Enhance regulatory efficiency through automation of key checks and clearer standardization of supervisory decisions.
- Demonstrate responsible adoption of AI in financial supervision, aligned with global good practices.

Main outcomes

- Validated problem framing.
- Testable solution prototype/concept.
- Roadmap for a secure phased implementation, governance, and safeguards.

Modernizing Justice Program

Egypt

THE CHALLENGE

Egypt's justice sector is committed to modernizing, but faces operational constraints: complex workflows, legacy processes and systems.

Justice entities sought to accelerate modernization by **combining institutional reform and digital innovation.**

OUR COLLABORATION

The World Bank's governance and technology teams provided a **rapid diagnostic and co-created digital prototypes** with judicial counterparts.

A Design Sprint convened multidisciplinary teams from several judicial institutions supported by World Bank experts in governance, justice modernization, and digital transformation.

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Main outcomes

- A validated problem statement.
- Prioritized solution concepts/working prototypes for digital platforms.
- A phased implementation and governance roadmap.





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GovTech and Digital Transformation

The initiative aligns with the World Bank's GovTech and justice reform priorities, emphasizing:

- Responsible, human-centered digital adoption.
- Potential knowledge spillovers as global public goods.

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Regional Innovation and Knowledge Transfer

Organisation of Eastern Caribbean States (OECS)

THE CHALLENGE

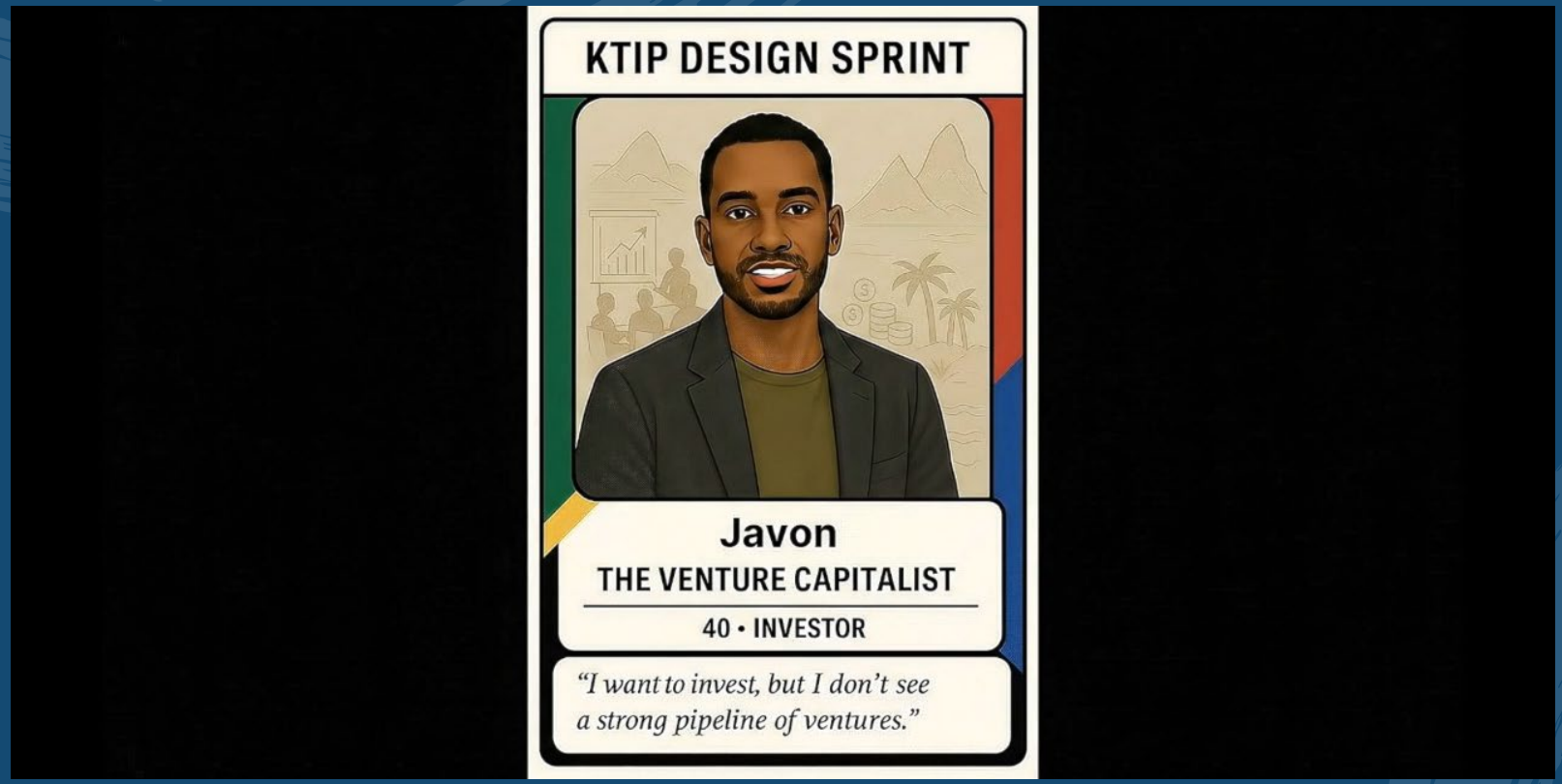
OECS' innovation landscape is diverse, yet coordination remains uneven, making it harder to connect post-secondary education with the private sector. Limited visibility into ongoing initiatives and actors creates information gaps that slow cross-border collaboration.

OUR COLLABORATION

A user-centered design sprint convening multi-stakeholder teams from across the OECS and diaspora.

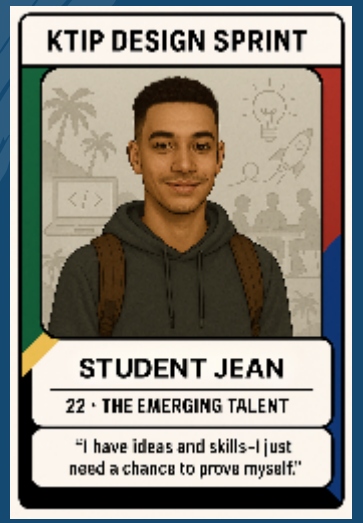
Co-creation around real user journeys and constraints to shift from static strategy documents to a working, testable prototype.

Validated Personas Created with GenAI











Personas representing key participants in the OECS innovation ecosystem helped the team uncover challenges and design features that promote inclusive, cross-border collaboration.

Main outcomes

A prototype of a digital platform that:

- Connects students, entrepreneurs, mentors, investors, partners, and institutions across the region.
- Enables project discovery and matchmaking across different sectors and countries.
- Provides support for mentorship, knowledge exchange, and peer learning.
- Is scalable for regional coordination and innovation monitoring.

Labor Market Access

Global

THE CHALLENGE

In developing economies, job seekers navigate a complex landscape but with the right support, these pathways can be more connected.

Governments and system enablers are well positioned to improve programs but face fragmented data and limited visibility into program outcomes.

OUR COLLABORATION

A design sprint convening technologists, policy experts, and education and human capital development practitioners to ground solutions in local contexts and diverse user needs.

With stakeholders, we co-created an AI-enabled, mobile-first platform, addressing the needs of diverse target users.

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Main outcome: Job Readiness Platform

- *For job seekers:* A mobile-first, accessible platform that provides continuous, adaptive support—from assessment to matching and tools to build networks and social capital.

- *For governments and system enablers:* Anonymized outcome dashboards and feedback loops, enabling responsible AI–driven scaling across contexts and future integration of labor-market data and employer signaling.

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Future State

- The **design sprint is a starting point**. Over time, the platform could function as shared digital infrastructure for workforce development — enabling responsible, agent-based AI to support individuals while generating system-level insights for policymakers.

- By connecting policy objectives with individual aspirations and labor market demand, the platform creates a feedback loop that benefits both users and institutions.

- As labor markets continue to evolve, the platform points toward a new generation of public-interest digital systems: human-centered in design, AI-enabled in practice, and built to scale without losing sight of the individuals they serve.

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Q&A Part 2