10th BUSINESS OPPORTUNITIES FAIR 2019

ADB

Digital Agenda 2030

"Underline the critical role of the Digital Agenda to ADB's digital transformation and implementation of Strategy 2030"

Joint Statement by the Board (31 October 2018)

Pierre Passin

Director, Infrastructure and Technology Operations Division (OIID)

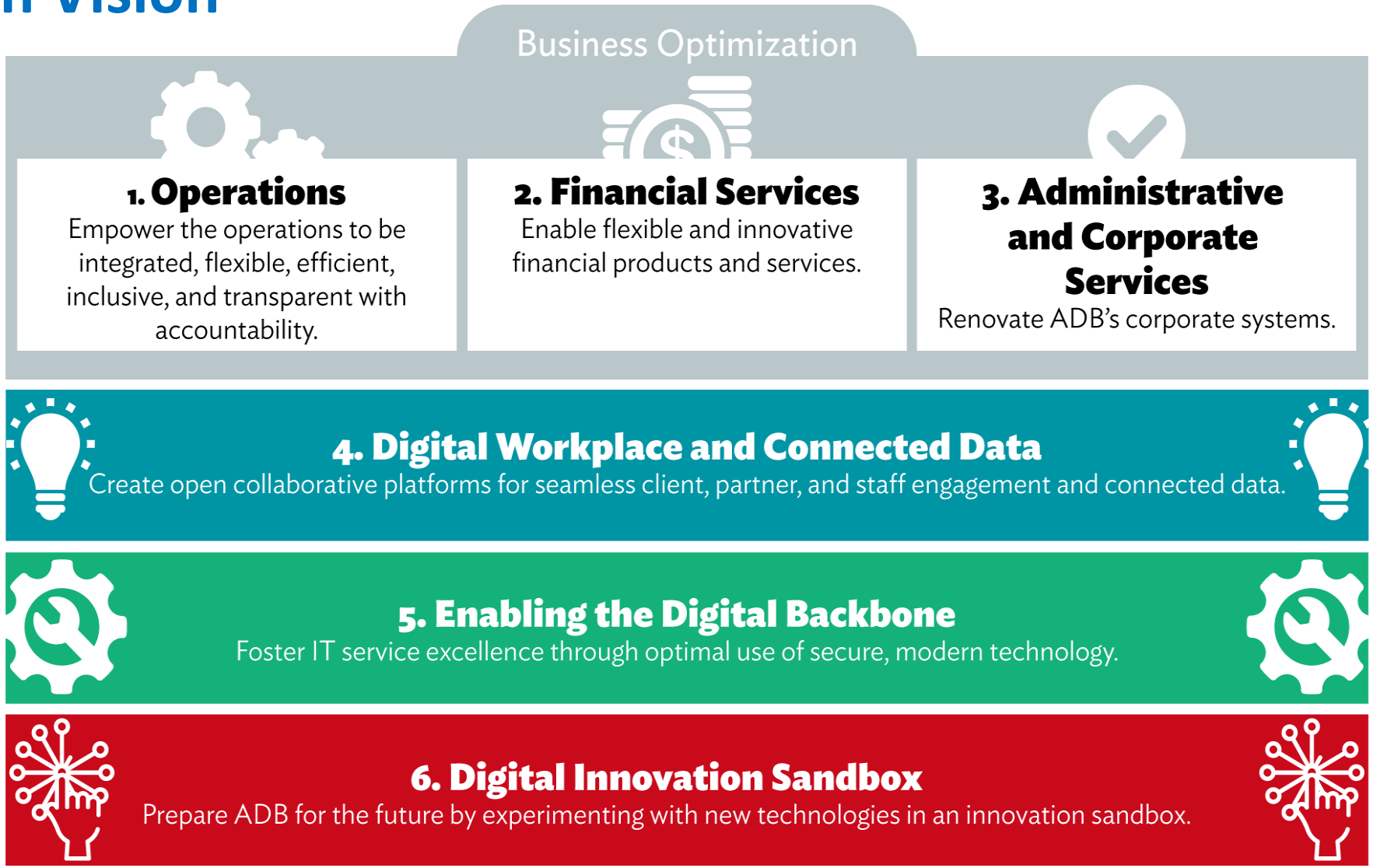
OIST, ADB

28 March 2019

Digital Agenda 2030

Long Term Vision

DIGITAL AGENDA 2030



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Digital Agenda: 6 Programs, 16 Projects = 25++ Business Cases

DIGITAL AGENDA 2030

I. Operations 5++ BCs

- 1. Sovereign Operations
- 2. Nonsovereign Operations
- 3. Board and Institutional Mgt
- 4. Partner Fund Mgt System Phase 2
- 5. Corporate Report Automation

II. Financial Services 5++ BCs

- 6. CLASS Upgrade
- 7. Disbursement System Modernization
- 8. Cash Operation Optimization
- 9. Derivative Valuation Adjustments
- 10. Risk Management System

III. Admin & Corp. Services (#11) 4 BCs

- ERP Modernization Road Map
- Travel
- eLearning
- Budget & Time Mgt

IV. Digital Workplace and Connected Data (#12) 4 BCs

- Governance and Organization Information
- Digital Workplace
- Digital Foundation Services
- Content Migration

V. Enabling the Digital Backbone

13. IT Infrastructure Services 2 BCs

- FO Data Center Modernization
- Conference Rm & Office Modernization
- IT Resiliency
- Enterprise Automation
- Real-time Monitoring & Anomaly Detection
- Data Infrastructure Modernization

14. Cybersecurity 1 BC

- Better detection & response
- Regular security verification and testing
- Consistent application of security controls & processes
- Improved usability and visibility

15. IT Service Delivery Optimization 3 BCs

- Program & Project Assurance
- IT Equipment & Software Mgt
- Adoption & Change Mgt
- Advanced IT Learning Environment
- FO Engagement & Support
- Vendor & Service Level Mgt

VI. Laying the Foundation for the Future State (#16) 1 BC

Legend: 2019 | 2020 | 2021

ADB

2019 Indicative Business Cases

DIGITAL AGENDA 2030

Q1

1. Digital Innovation Sandbox
2. Class Upgrade
3. Cybersecurity
4. IT Infrastructure Services Phase 1
5. Digital Workplace - Governance and Organization Information

Q2

6. Travel
7. eLearning
8. Partner Fund Management System Phase 2
9. Digital Workplace –Digital Foundation Services
10. Board Management System

Q3

11. ERP Modernization Review
12. Sovereign Operations
13. Corporate Report Automation
14. Derivative Valuation Adjustments
15. IT Services: Program and Project Assurance

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Digital Agenda 2030: Infrastructure and Security

Overview

- IT Infrastructure Projects
  - Procurement Needs
  - Timeline
- Cybersecurity Projects
  - Procurement Needs
  - Timeline

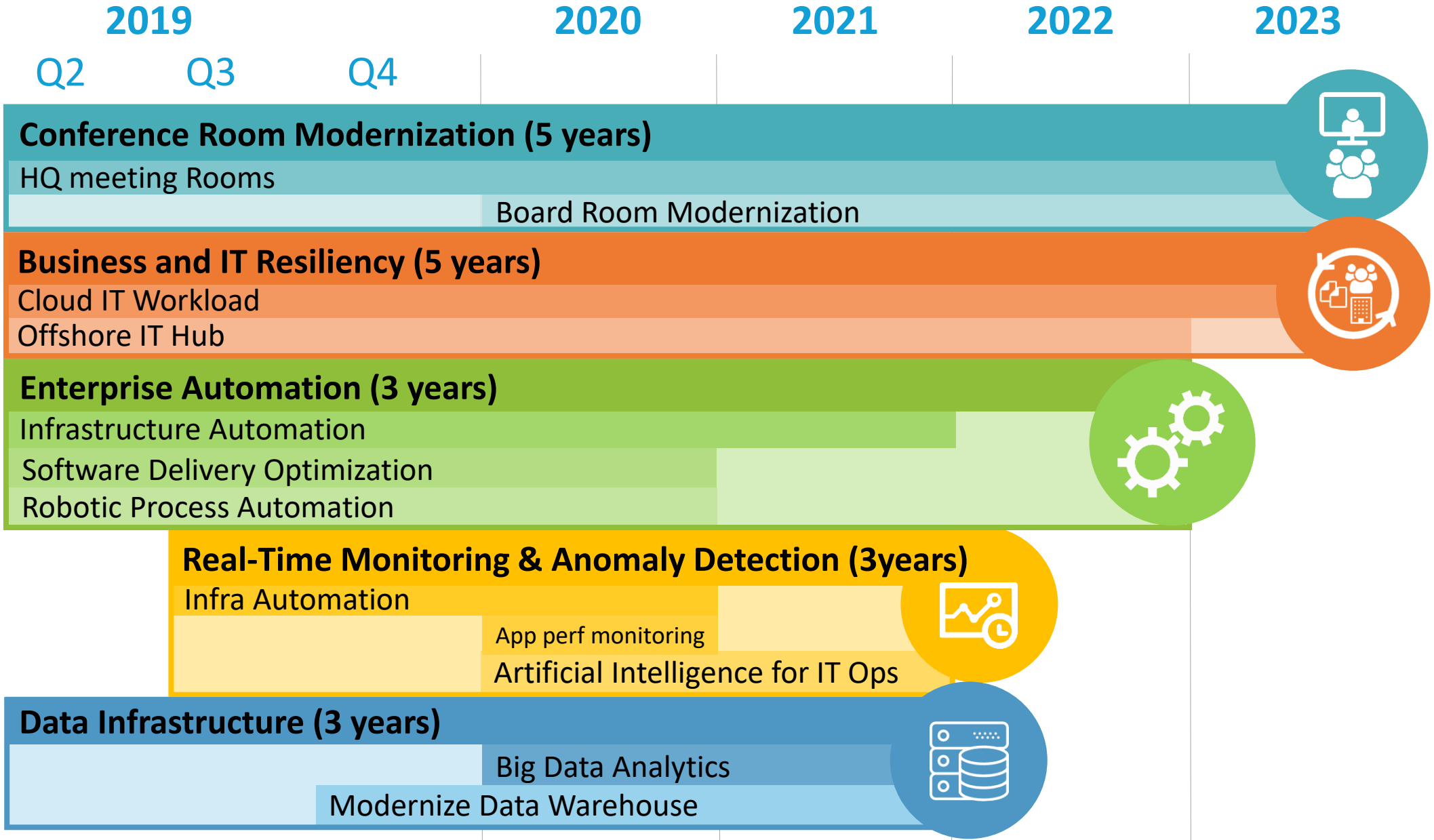
IT Infrastructure Projects

	Sub-Projects	Procurements
Conference Room Modernization	•Board Room Modernization •Meeting Rooms Modernization	•Physical Room Construction •Furniture •Adoption & Change Management
Business and IT Resiliency	•Creation of IT offshore Hub •Migration of Critical IT workloads to Cloud	•ICT Equipment & Furniture •MPLS & Internet •Study on move to Cloud & Subscriptions
Enterprise Automation	•DevOps •Robotics and Process Automation •Infrastructure and Security Automation	•DevOps pipeline SW •RPA software and implementation •Ansible-like SW

IT Infrastructure Projects

	Sub-Projects	Procurements
Real-Time Monitoring & Anomaly Detection	•AI for IT Ops •Infrastructure Monitoring •Application Performance Monitoring	•Datadog + Prometheus, AppDynamics, Moogsoft •Professional/Implementation Services
Data Infrastructure	•Master Data Management •Data Warehouse Modernization •Big Data	•MDM, Data Quality •Cloud Services/Subscriptions •Professional/Implementation Services

IT Infrastructure Projects



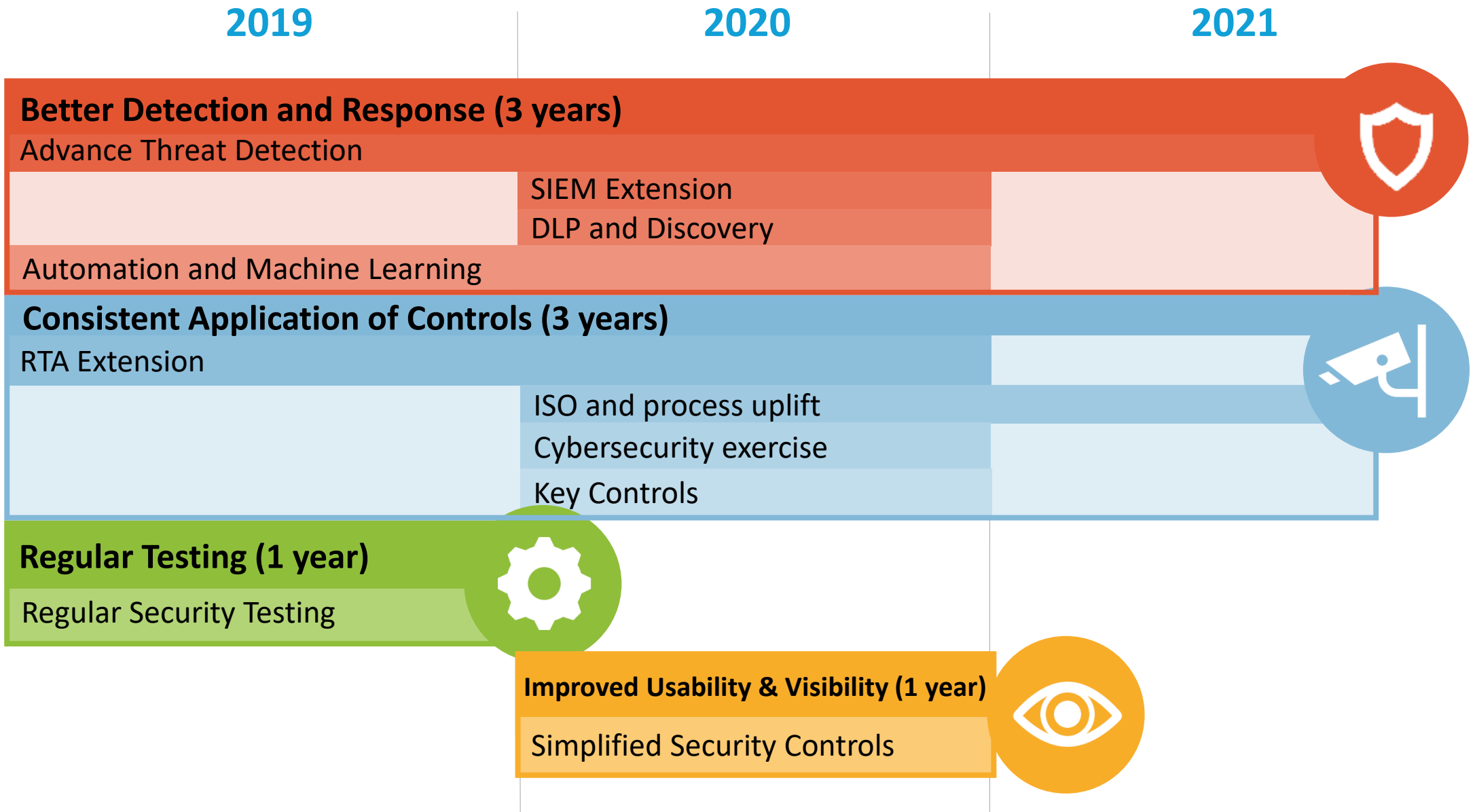
Cybersecurity Projects

	Sub-Projects	Procurements
Better Detection & Response	•Advance Threat Detection •SIEM Extension and Refresh •Data Leakage Protection •Process Automation & Machine Learning	•Equipment •Software •Subscriptions •Professional Services
Consistent Application of Controls	•RTA extension •Cybersecurity exercise •ISO 27001 and process uplift •Key Controls Across Critical Systems	•GRC Software •Consulting Services

Cybersecurity Projects

	Sub-Projects	Procurements
Regular Testing	•Establish a program for regular cybersecurity testing of critical applications	•Consulting Services
Improved Usability & Visibility	•Simplified security controls and interaction	•Licenses •Professional Services

Cybersecurity Projects



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Digital Agenda 2030: Business Optimization and Digital Workplace and Connected Data

Naoto Yamamoto

Director, Solution Delivery Division (OISD)

OIST, ADB

28 March 2019

Business Optimization (Operations)

	Components	Procurements
Sovereign Operations	•Digital Projects •Operation Planning & Monitoring •Corporate Oversight	•Software License/Subscription •Design Thinking •System Integrators •Business Intelligence
Non Sovereign Operations	•Client Engagement •Origination •Portfolio Management	•Software License/Subscription •System Integrators (IDD, CRM) •Business Intelligence
Board and Institutional Management	•Modern Board Management System •Mobile Dashboard for Approval and Doccuments	•Software License/Subscription •Board Management •Design Thinking •System Integrators

Business Optimization (Operations)

	Components	Procurements
Partner Fund Management	•Agreement Management •Partner Portal •Partner Matching •Partner Fund Lifecycle	•Software License/Subscription •Contract Management •System Integrators •Business Intelligence
Corporate Report Automation	•Data Warehouse •Reporting Interface Modernization	•Data Architecture •Business Intelligence

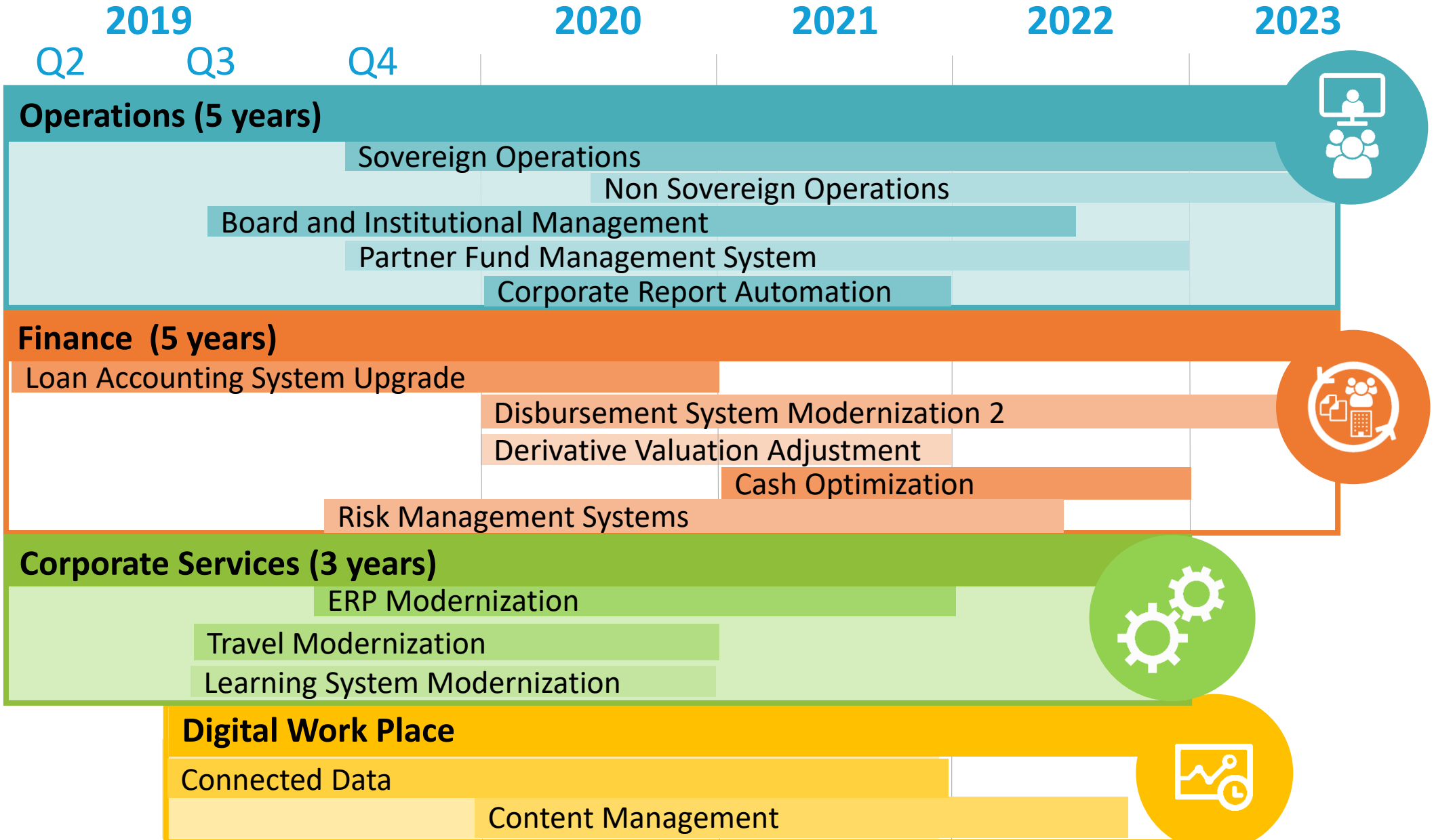
Business Optimization (Finance + Corporate Services)

	Projects	Procurements
Finance	•Disbursement System •Derivative Valuation Adjustments •Cash Operations Optimization •Risk Management System	•Software License/Subscription •System Integrators •Business Intelligence
Administration and Corporate Services	•Modernized Corporate Platform •Travel System Modernization •Learning System Modernization •Budget System Modernization	•BPR Consulting •Design thinking •Software License/Subscription •System Integrator

Business Optimization (Digital Work Place)

	Components	Procurements
Connected Data	•Data Governance •Modern Data Platform •Insights and Analytics	•Data Governance Consultant •Data Architecture Consultant •Information Security Consultant •Business Intelligence
Search & Content Management	• Digital Workplace & App Store •Search Enhancement •Historical Content Migration	•Record Management Consultant •Search Engineer •Application Development •Data Migration Service

Business Optimization and Connected data Timeline



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Digital Agenda 2030:
Digital Innovation Sandbox – Future Proofing ADB

Adopting Emerging Technologies to Support Strategy 2030 Implementation in Asia and the Pacific

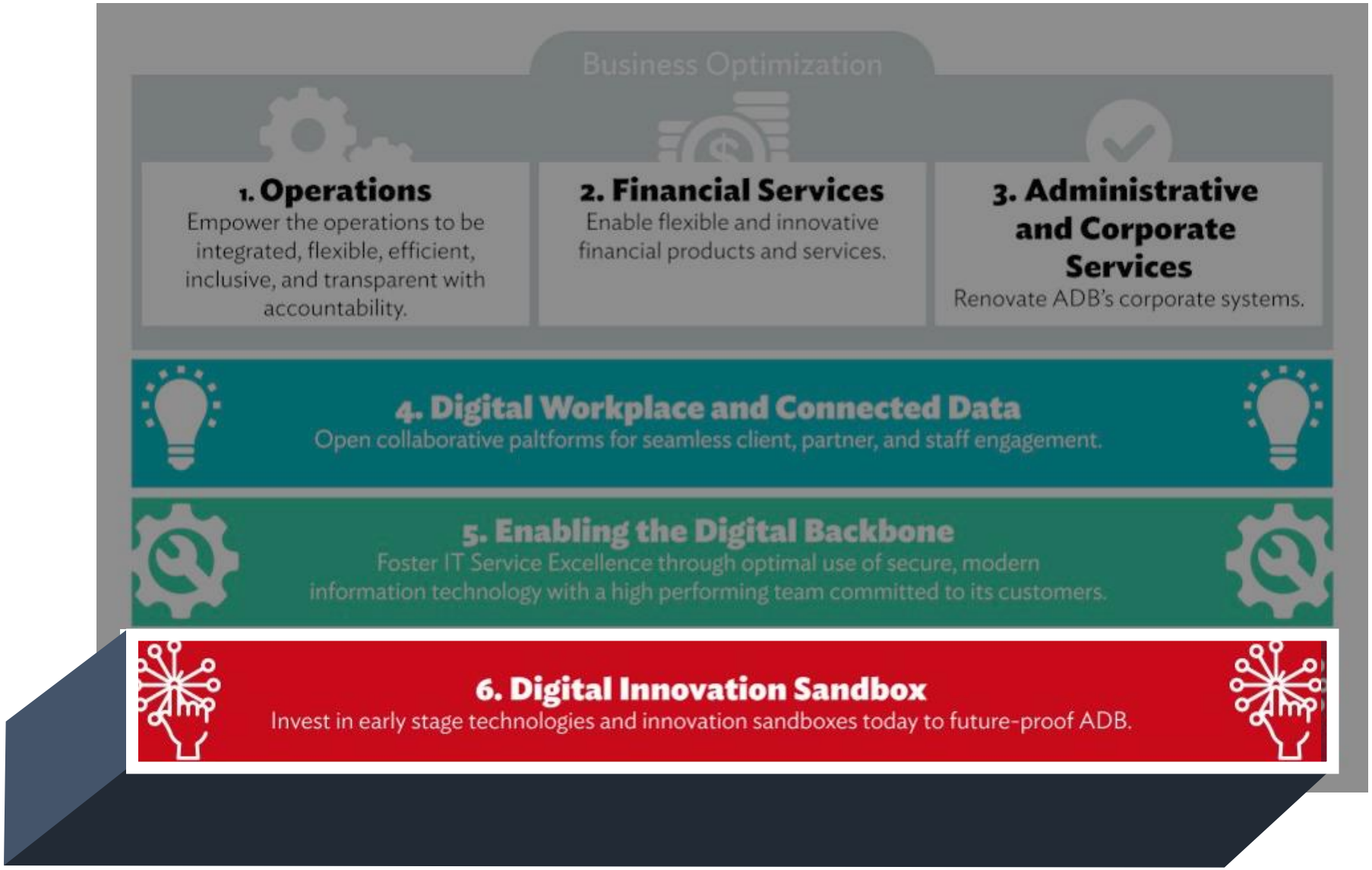
Ozzeir Khan

Director, Business Relationships and IT Strategy Division (OIRS)

OIST, ADB

28 March 2019

Digital Agenda Program 6



Digital Innovation Sandbox Program Components

01 | Digital Platforms

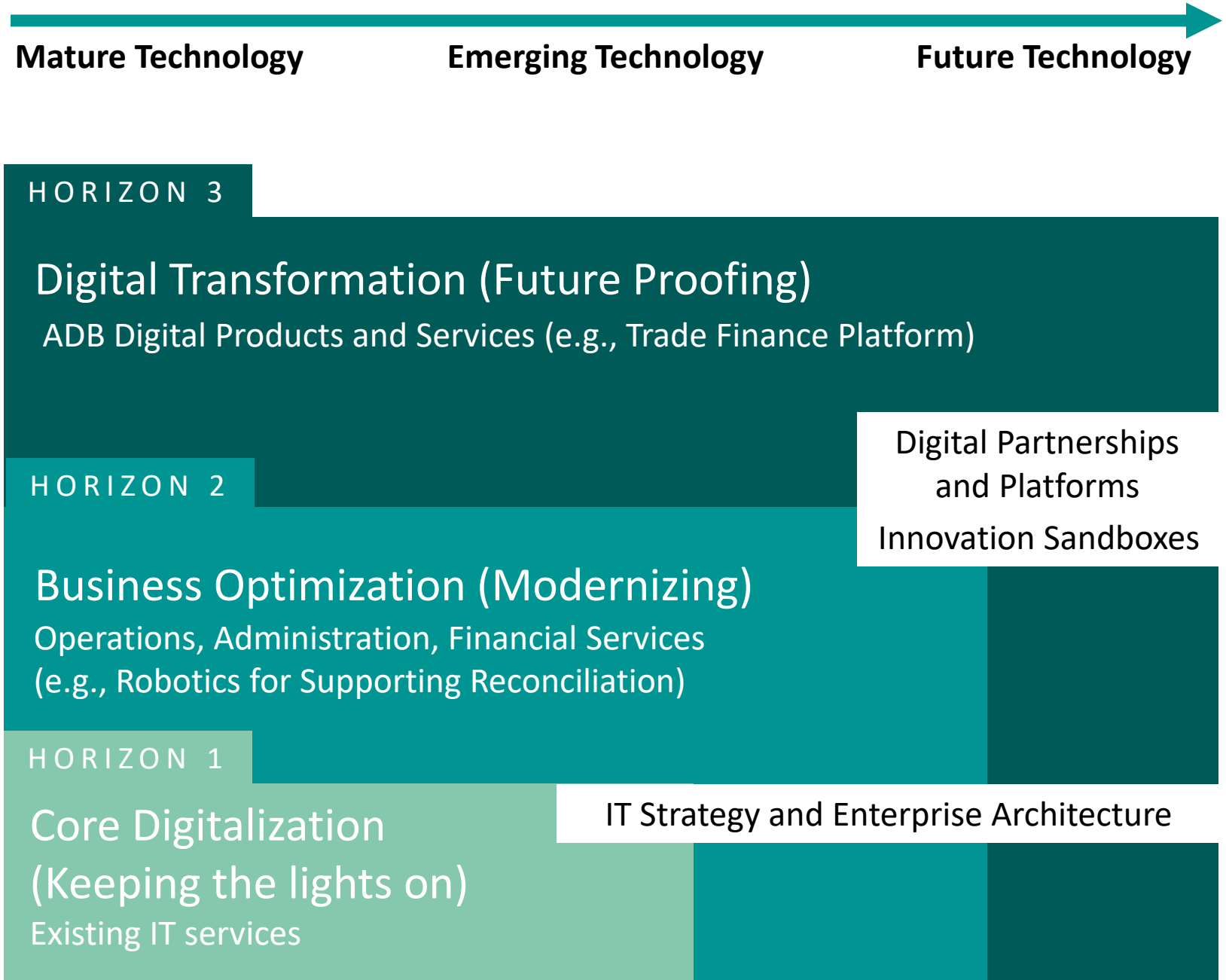
A. Sandbox Infrastructure
B. Sandbox Projects
C. Experiments, Proofs of Concept, and Pilots

02 | Digital Readiness

A. Outreach
B. Inreach

Digital Platforms

Digital Innovation Sandbox Program Positioning



Sandbox Innovation Process

IDEATE	VALIDATE	GATE 1	CREATE	GATE 2	IMPLEMENT	GATE 3	SCALE
Discovery of opportunities, Ideation	Proof of Value (POC, Prototype)		Minimum viable product creation		Pilot launch		Full-scale rollout and support
			$		10x$		> 100x$

Digital Sandbox Program

Partners(Internal Depts/External Partners/OIST Divisions)

Key Demand and Business Owner Snapshot

	Artificial Intelligence	Robotics	Big data	Fintech	Others
Administration	Comprehensive audit (OAG)	Recruitment bot (BPMSD)		ADB pay digital wallet (OAS)	
Financial	Cash management predictive analytics (TD)	Automatic bank reconciliation (CTL) Treasury chatbot (TD)	Predictive analysis of errors and fraud (CTL)	Financial payment engine (TD)	
Knowledge Management	Cognitive search (IED)	Automatic capturing of tacit knowledge (SERD)	Predictive analysis (ERCD)	Digital ID (SDCC) eKYC (PSOD) API** platform for clients (OIST/SDCC)	Predictive future platform (ERCD)
Operations	Digital twins* for projects (all regional departments) Auto generation of parts of project concept paper (EARD)	Robo advisor for information discovery and communication (all regional departments)	Enhancing impact assessments for projects (all regional departments)	Market place for trade finance (PSOD) Real time tracking and monitoring of loan project implementation (EARD)	Miniature models/ recreating development impact of proposed loan using virtual reality solutions (EARD)

* A digital replica of an actual infrastructure project before it is built.
**APIs are a set of functions and procedures that help build applications to access the features or data of a particular system. An API platform helps expose and manage these APIs.

HORIZON 2 | Modernizing

HORIZON 3 | Future proofing

Build-Operate-Transfer (BOT) Model for Sandbox

Build

Experiments and Co-Creation with Partners
Agile Innovation Development

- Work with a specialist team
- Define architecture and policies for compliance and scale
- Build work load for the technology
- Minimum viable product and proof of concept
- Test and go-live

Operate

Pilot Operations

- Streamline workload, policies, and governance
- Build and monitor metrics
- Create SOPs and dashboards
- Audit, resolve, and mitigate risks
- Automate deployments, backups, disaster resilience and more

Transfer

Knowledge and Operations Handover to OIST Teams or Partners

- Create operations manual
- Provide knowledge transfer
- Sign off

Digital Readiness

Making ADB Digitally Ready

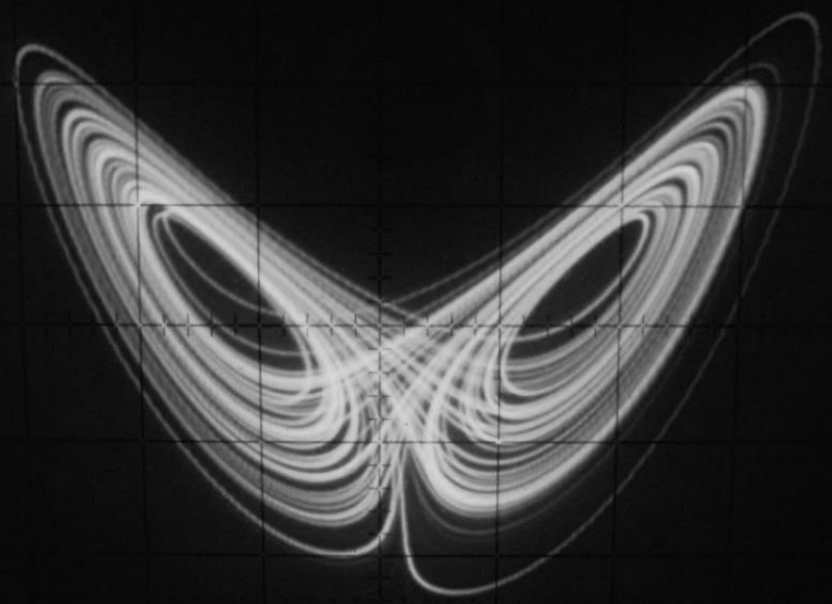
What is digital readiness?

Organizational ability to

- Identify digital opportunities
- Create and offer digital products and services for clients, partners, and staff
- Manage innovation risk

Staff ability to

- Comfortably work in a fully digital environment
- Not simply copy innovation—but instead innovate themselves and navigate the ever emerging digital world



Butterfly effect theory

small technology experiments can have a transformative impact in our complex digital world.

Outreach

Builds innovation partnerships with academia, start-ups, private sector, and influencers

- Innovation platforms (co-creation and start-ups)
- Connect with networks
- Work with influencers to discuss possibilities of where to go
- External hackathons
- Focus on academia, startups, financial and technology partners, MDBs, agencies, nonprofit organizations
- Executive briefings
- Events (online and physical)
- Thought leadership activities

“To discover, we have to reach outside the walls.”

Inreach

Fosters a digital culture shift and promotes innovation as continuous improvement to support the Digital Agenda 2030

- Internal hackathons (ideas for change, solutions)
- Immersive, individual-focused sessions (e.g., experiential workshops for learning)
- Departmental digital future possibilities roadmap
- Events (online and physical)
- Thought leadership activities
- Digital fitness
- Futures gallery

Digital Fitness: Do it!

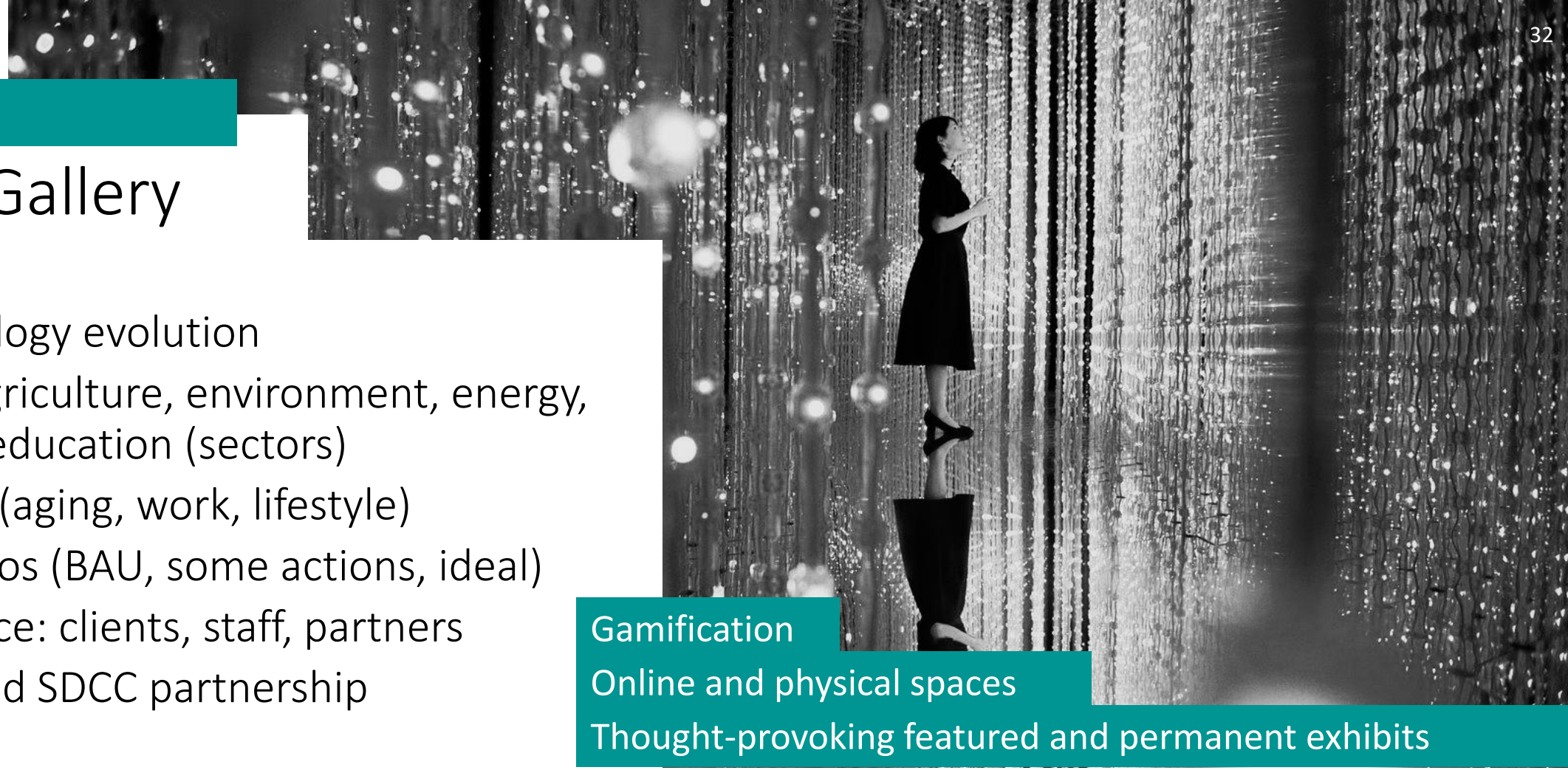
Banking is digital so let's get digitally fit

"Don't just talk about it!"

- Diagnostic platform uses dynamic content and a fitness algorithm
- Digital personal trainer to coach staff
- Continuous learning approach: X minutes, X times a week
- Mandatory: partner with HR and make part of performance evaluation
- "Deep digital dives" with AIM and others for "pro skills"

Futures Gallery

- Technology evolution
- Asia: agriculture, environment, energy, water, education (sectors)
- People (aging, work, lifestyle)
- Scenarios (BAU, some actions, ideal)
- Audience: clients, staff, partners
- OIST and SDCC partnership



Gamification
Online and physical spaces
Thought-provoking featured and permanent exhibits

“To learn from the future.”

2019 Proposed Roadmap

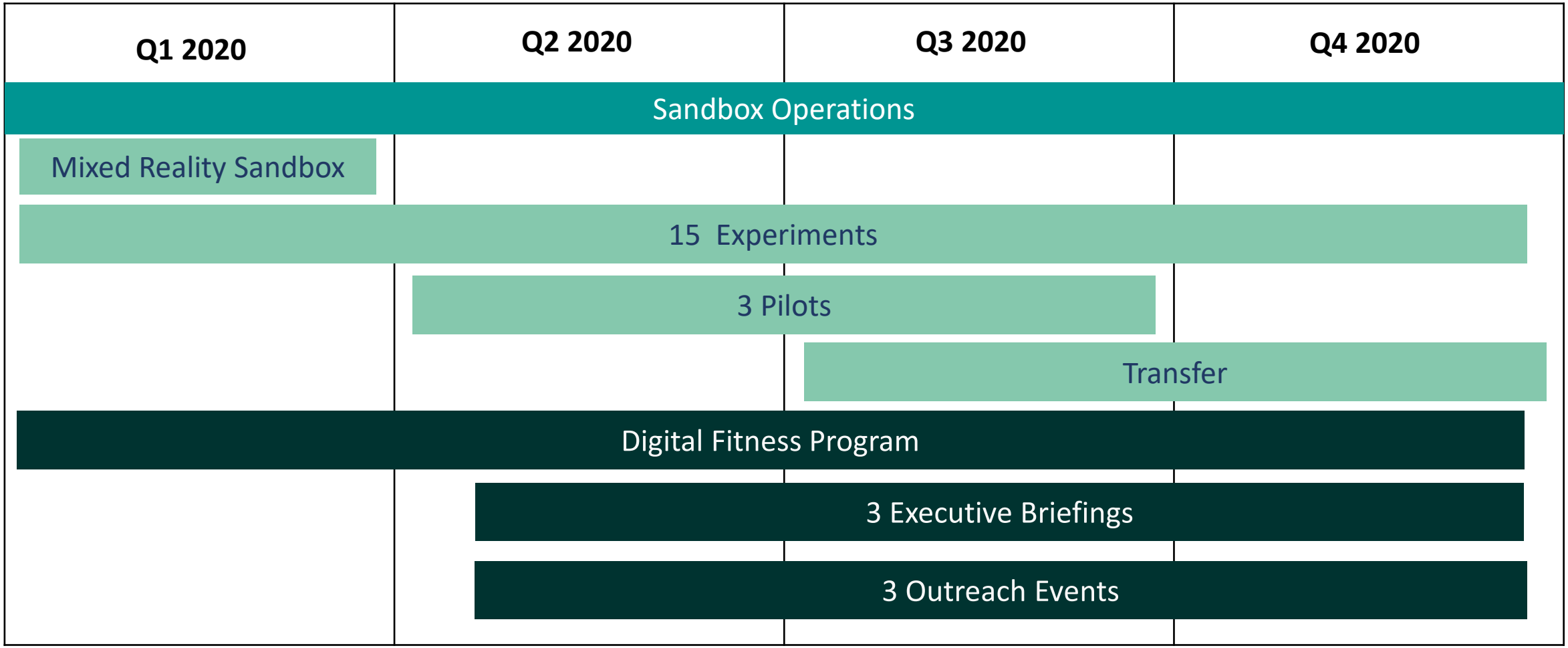
← SOFT LAUNCH

OFFICIAL LAUNCH OF PROGRAM →

Q1 2019	Q2 2019	Q3 2019	Q4 2019
Build the Sandbox Foundation	Develop the Platforms	Launch the Program	Adjust and Stabilize
Sandbox Technology Foundation	AI	Start of 3 Experiments	Start of 6 Experiments
Sandbox Process Development	ROBOTICS		
	BIG DATA	Digital Fitness Program	
	FINTECH		
	3 Executive Briefings		
	3 Outreach Events		

Organizational adoption and readiness management

2020 Proposed Roadmap



Outputs and Outcomes

Outcomes

- A culture more conducive to technology innovation and informed risk-taking
- Foundation laid and defined for Stage 2 of the Digital Agenda
- Robotics project established
- AI foundation laid
- Big data processing capacity established
- Digital fitness platform operational
- Initial fintech products launched

We look forward to doing business with you!

Thank you!