



Digital pathways toward greater education impact

January 29, 2025



Current Global Context



Longstanding global learning crisis



Post pandemic risks of deepening digital inequalities



Artificial Intelligence (eminently Generative AI) is re-envisioning educational futures



Highly dynamic labor market increasingly exhibits skills mismatches



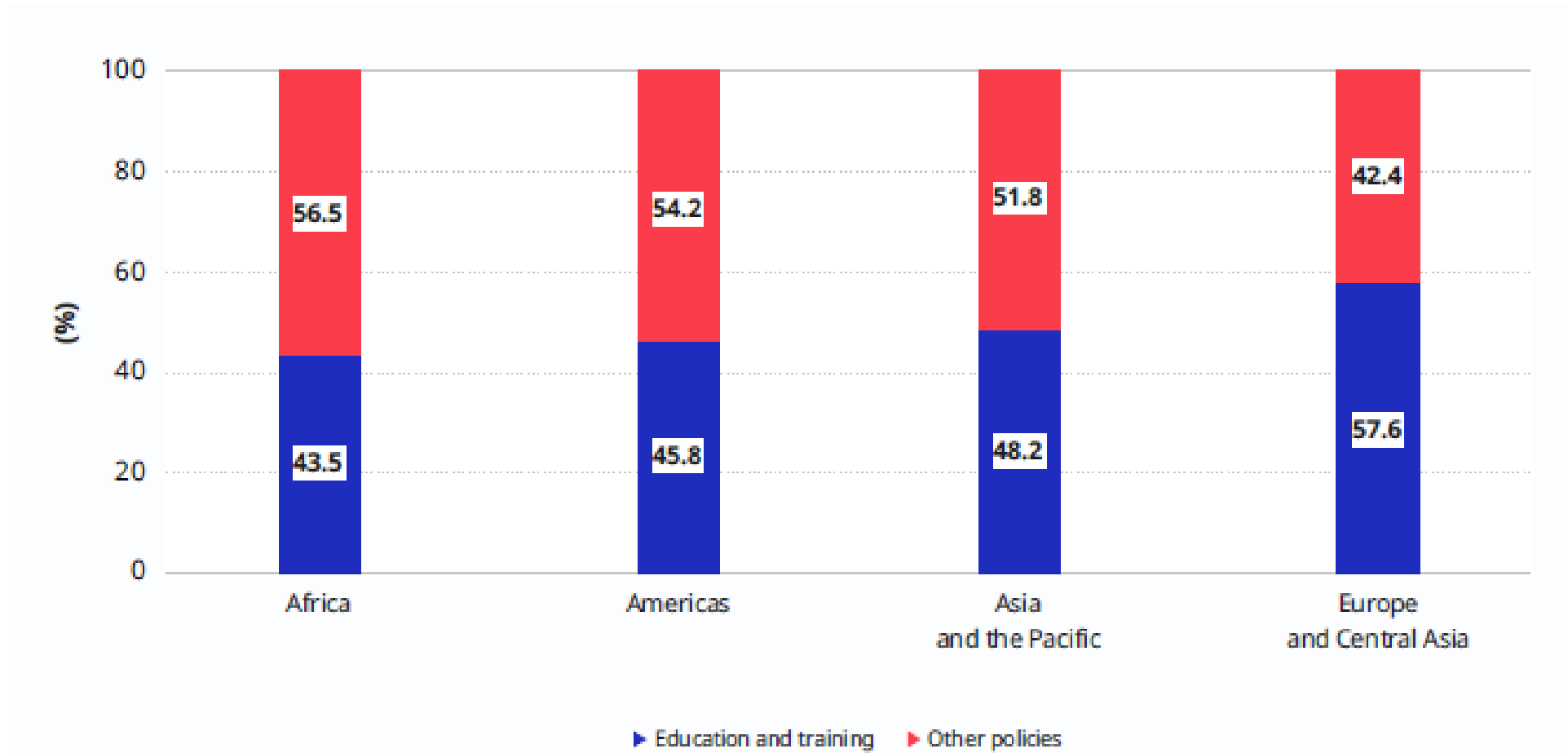
Growing private sector investments and innovations in unproven EdTech solutions, products and services



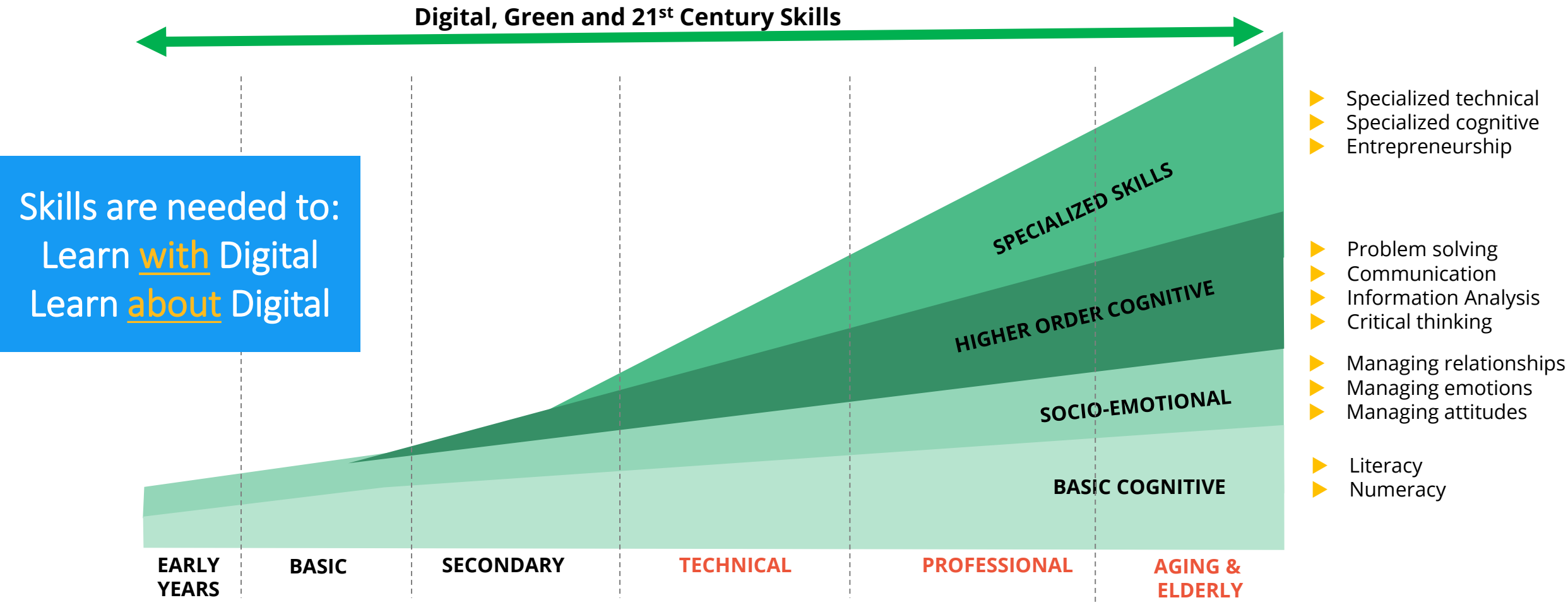
Global trend and efforts to go digital

There is an urgent need for education to deliver labour market relevant skills with flexibility and inclusively

► Figure 3. Education and training measures as a percentage of all youth employment interventions in 65 countries, by region

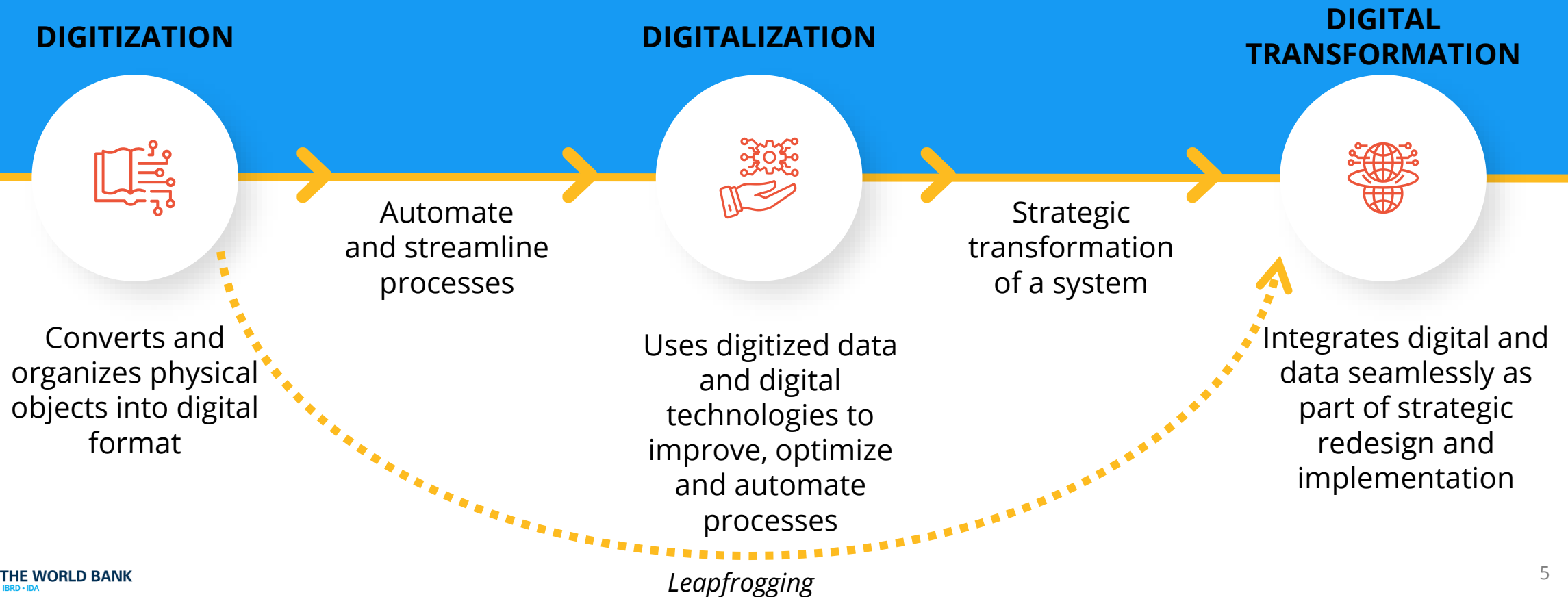


As economies mature, they are more skills focused, with digital playing a transversal role across the learning lifecycle



Digital transitions

This refers to digital advancements along a continuum – analog, digitized, digitalized, and digitally transformed systems, with potential points of inflection and leapfrogging opportunities



Digital transitions

PEOPLE

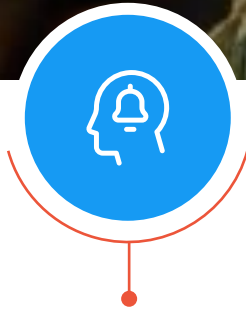
DATA

TECHNOLOGY

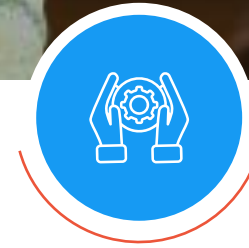
Potential Opportunities but also Risks



WHAT should education leaders, policymakers and practitioners DO?

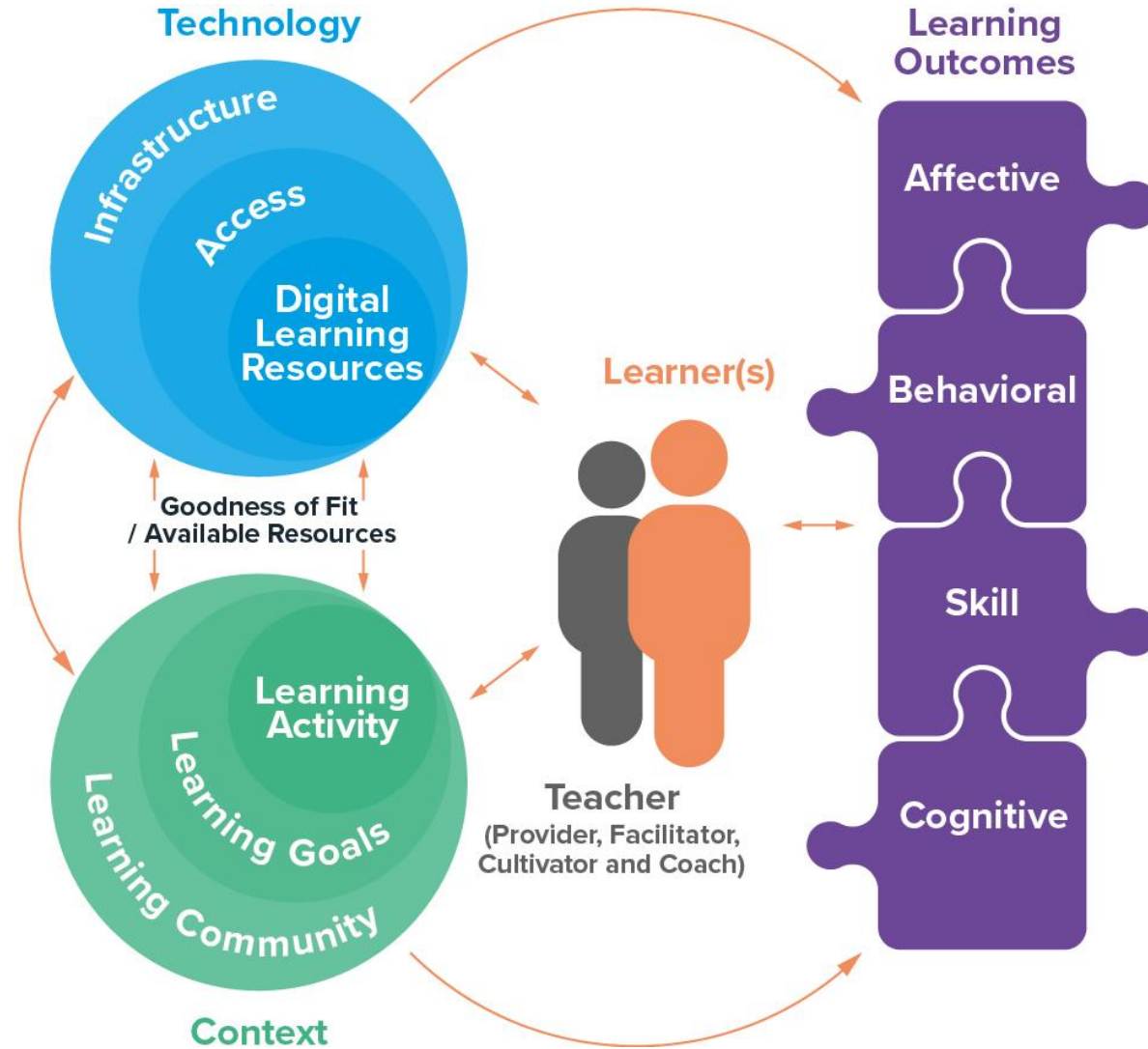


Remind ourselves that **learning, at its core, occurs through human interactions, mediated by the learning environment (physical and digital), and other contextual factors**



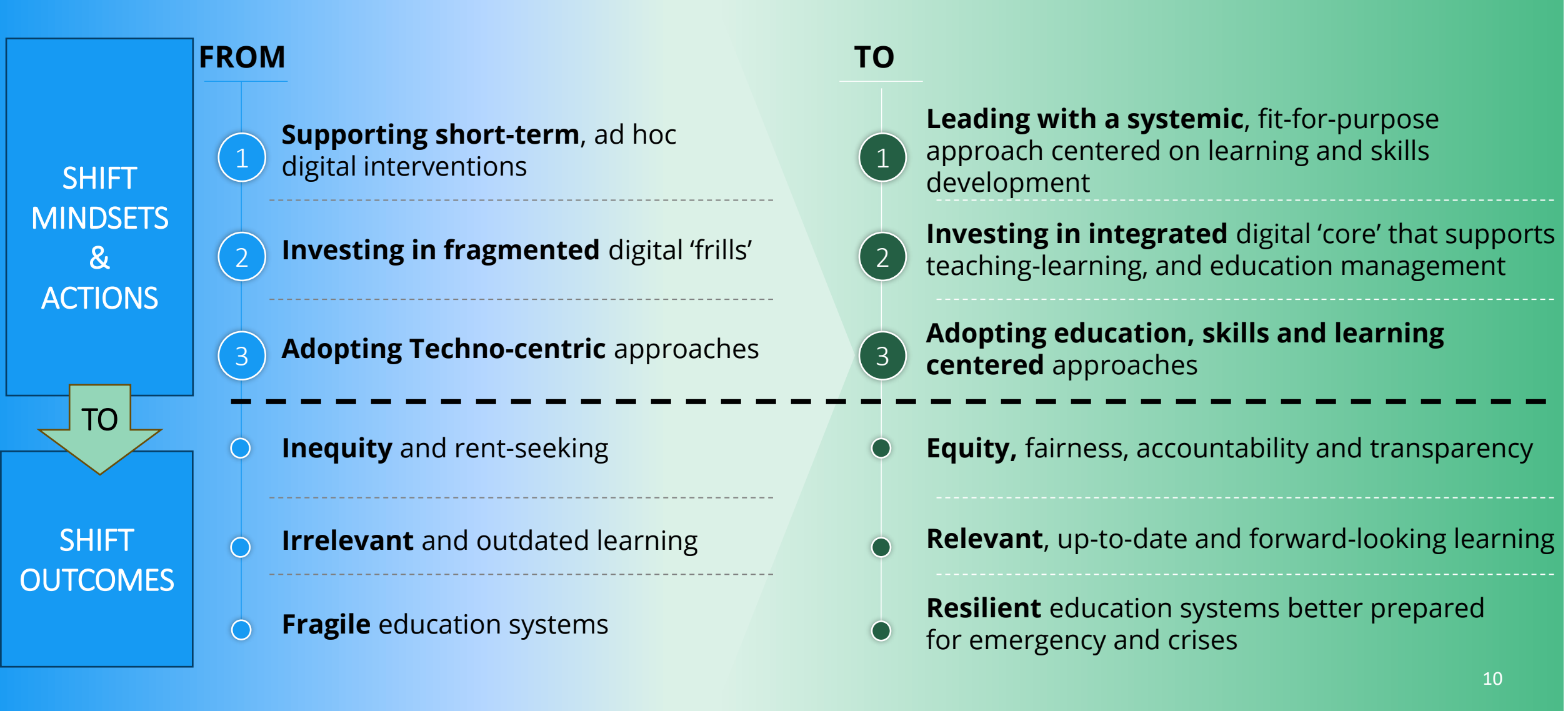
Assimilate three mindset shifts for the education and skills development sector **to lead digital transitions proactively, strategically, and with an evidence-based approach**

Research shows human learning occurs in the INTERACTIONS between learners and teachers, mediated by the environment





Three mindset shifts required for digital transitions in education



Can it be done? How?

Global & Regional Context: Technological advancements; climate change; demographic change; geopolitics

Country Context: Socioeconomic and political context; digital maturity of the economy & society*

Education and Skills Sectoral/Sub-sectoral Context



Policymakers



Private Sector



Academia



Civil Society

Ambition

must determine...

- National goals and priorities
- Education and skills needs

Expected results

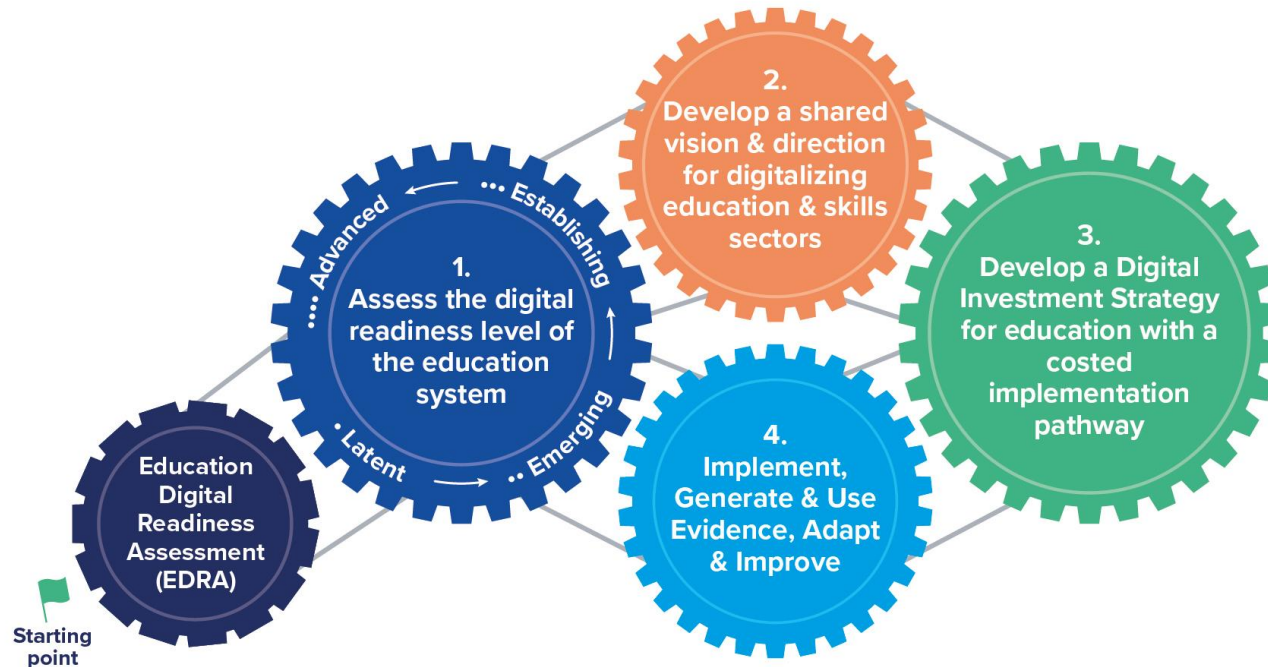
- Learning outcomes
- Socioeconomic outcomes

Rationale

- Equity & inclusion
- Relevance & quality
- Resilience & efficiency

...to lead the pathway forward.

How?



Step 1. Assess Digital Readiness in Context: Five Pillars



CONTEXT MATTERS

The pathway for digital transition in education in a country depends on important digital and non-digital contextual preconditions



EQUITY AND RIGHTS PRIORITY

Prioritize equity and rights for effective and resilient digital transitions in education



- 01 **Strategic leadership and governance** for learning-centered service delivery
- 02 Better and relevant **data and technology infrastructure and management**
- 03 **Digitally-enabled education service delivery and analytics** as appropriate in context
- 04 **Education workforce capacity and culture**
- 05 **Financing and innovation ecosystem** for enabling value-based and rights-based digital innovations in education

The Education Digital Readiness Assessments (EDRA) conducted in [Moldova](#), [Georgia](#), and [Kosovo](#) between 2021 and 2024 evaluated the basic education system's readiness across the five pillars.

Digital Readiness Assessment of the Education System

Areas covered under each assessment pillar

Pillar 1 - LEADERSHIP AND GOVERNANCE

Vision and strategy
Institutional capacity
Legislation, policy, and compliance

Pillar 2 - ENABLING INFRASTRUCTURE

Education enterprise architecture and data governance
Connectivity
Technology infrastructure
Standards and services

Pillar 3 - DIGITALLY-ENABLED EDUCATION DELIVERY AND SCHOOL DIGITAL MATURITY

Content standards and instructional materials
Digitally empowered learning environment
Digital skills of students
Teacher's digital skills and pedagogical practices
School management and administration

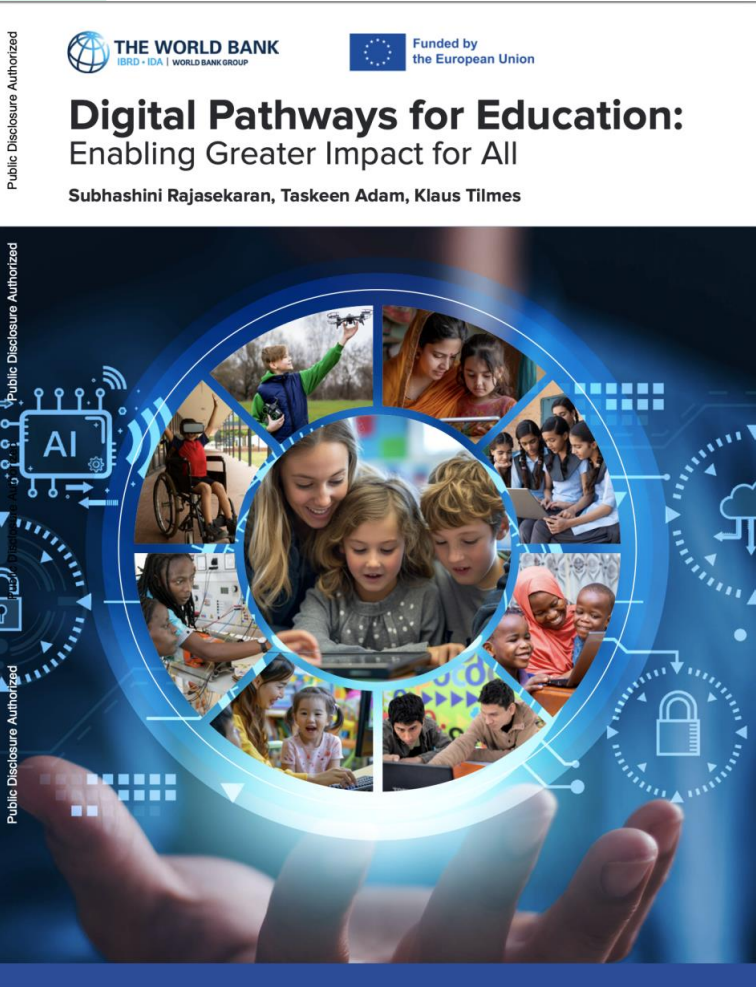
Pillar 4 - HUMAN CAPACITY

Policymaking
School ownership
Wider public
ICT professionalism

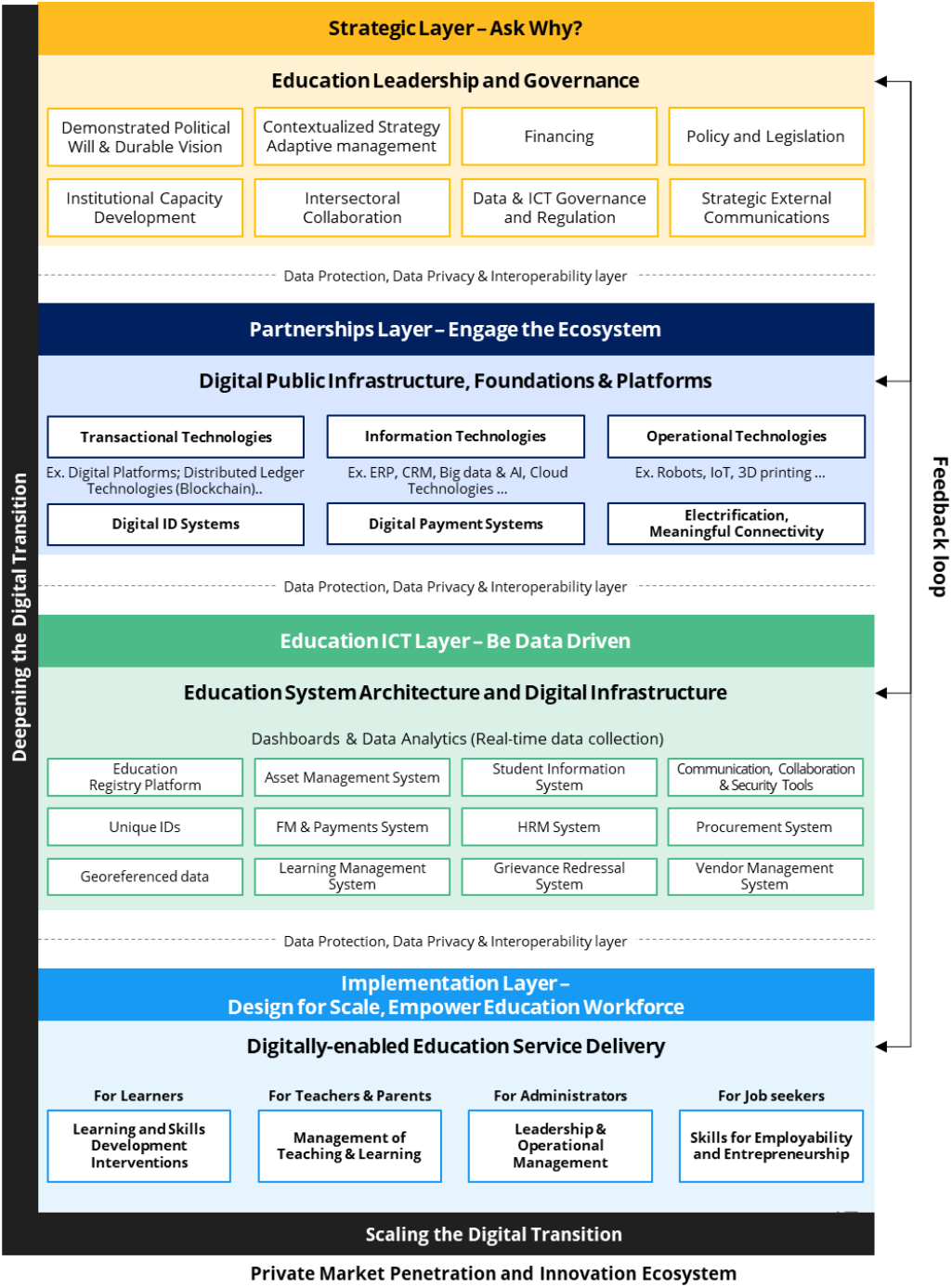
Pillar 5 - EDTECH MARKET and BUSINESS MODELS

Capacity and culture for entrepreneurship
Development, uptake, and management of Edtech products and services
Quality assurance of EdTech
Support for innovative business models and public-private partnerships

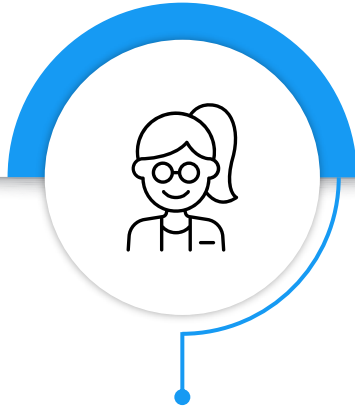
Steps 2 to 4. Use enabling architecture to leverage digital at system level



[Link to the work is here](#)



Three key messages



Recognize and support teachers: they remain central to how humans learn well



Maximize investment effectiveness by delivering with an ecosystem approach



Each country's journey is unique but help is at hand: Tailor Pathways

...and many global examples

Singapore “Transforming Education through Technology” Masterplan 2030

Estonia’s X-Road, E-school bag and many digital education services

India's National Digital Education Architecture (NDEAR)

EU Data Governance Act

Ukraine’s Expansion of Digitally Enabled Education in the Midst of War

Ed-Fi Data Standard and Technology Suite by US Department of Education

Rwanda’s National AI Policy

RIMA (Information Collection for the Improvement of Learning) in Guanajuato, Mexico

Creative technologies for youth by TUMO in Armenia

National Digital Skills Competency Framework, Romania

Open Educational Resources (OERs) such as the African Storybook Project

EdTech Ecosystem for Technological Innovations in Education in Turkiye

Digital Pathways for Education: Enabling Greater Impact for All

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Thank you!



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