Advancing Digital Governance: The Role of AI and Public Administrators

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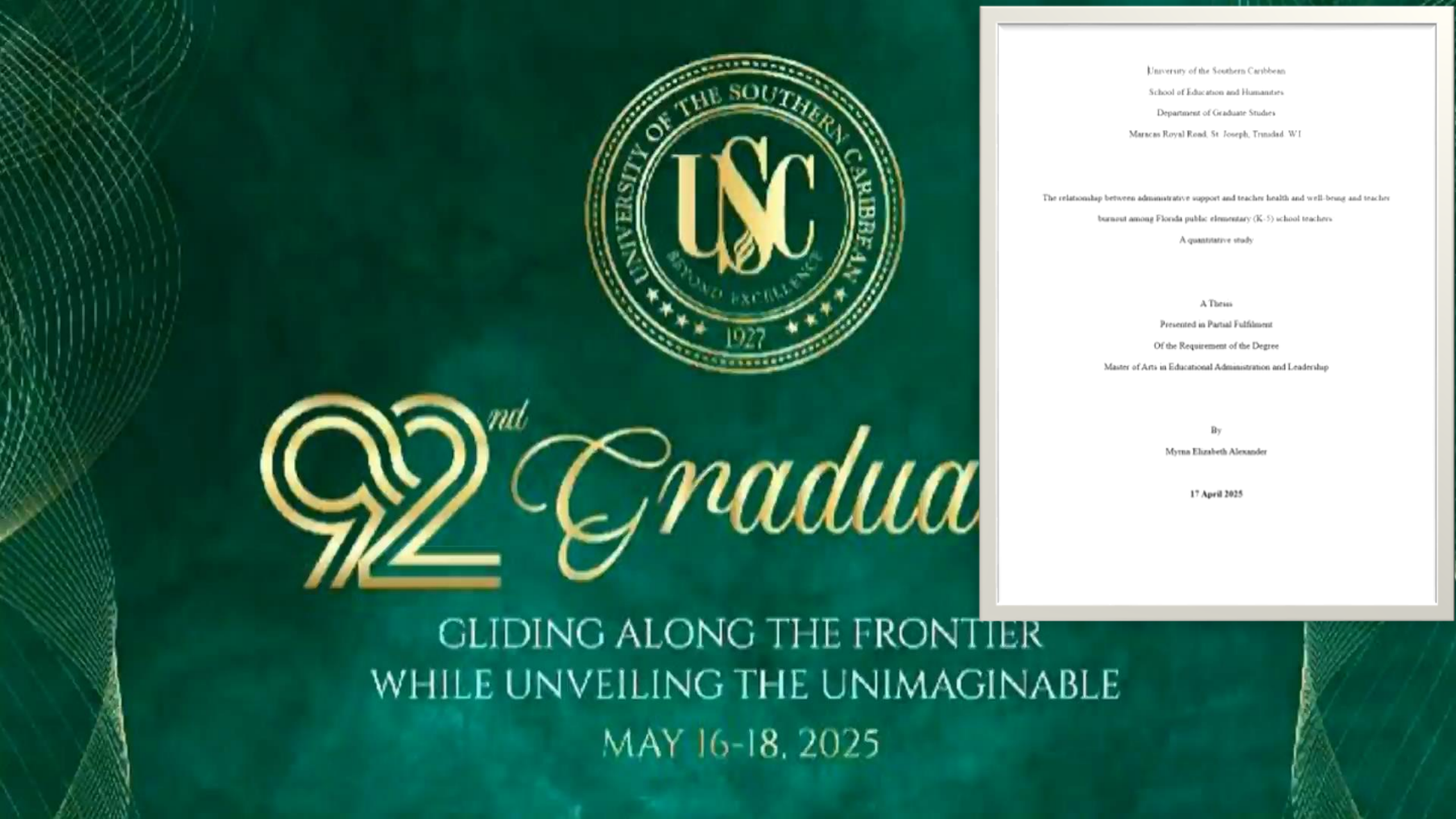
Setting the context

- I have concerns or fears about Artificial Intelligence.
- Why is Digital Transformation important?
- Who do we have in mind when we think of the beneficiaries of Digital Transformation?
- Digital Skills deficit: Who are we targeting?



University of the Southern Caribbean

School of Education and Humanities

Department of Graduate Studies

Maracas Royal Road, St. Joseph, Trinidad, WI

The relationship between administrative support and teacher health and well-being and teacher burnout among Florida public elementary (K-5) school teachers

A quantitative study

A Thesis

Presented in Partial Fulfilment

Of the Requirement of the Degree

Master of Arts in Educational Administration and Leadership

By

Myrna Elizabeth Alexander

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Artificial Intelligence in the Public Sector

Artificial Intelligence (AI) is not an end in itself

AI in the public sector

- Improve the quality of services
- Foster trust
- Increase efficiency and service delivery outcomes

Governments must ensure that AI is adopted effectively for the public good

Ethical Considerations

Bias and Fairness

AI systems can perpetuate or amplify existing biases in data.

Transparency and Accountability

Determining accountability for decisions made by AI systems.

Privacy Concerns

The large amounts of sensitive data AI systems handle can be used for privacy violations.

Ethical Use

Developing and adhering to standards for responsible AI use.

Social Inequality

Disparities in AI access can widen existing social inequalities.

Challenges in Development

Data Quality and Privacy

Ensuring the protection of sensitive and personal information used in large, high-quality datasets needed for AI.

Handling Unexpected Behavior

Ensuring AI systems perform reliably in diverse and unpredictable real-world scenarios, avoiding unintended behaviours.

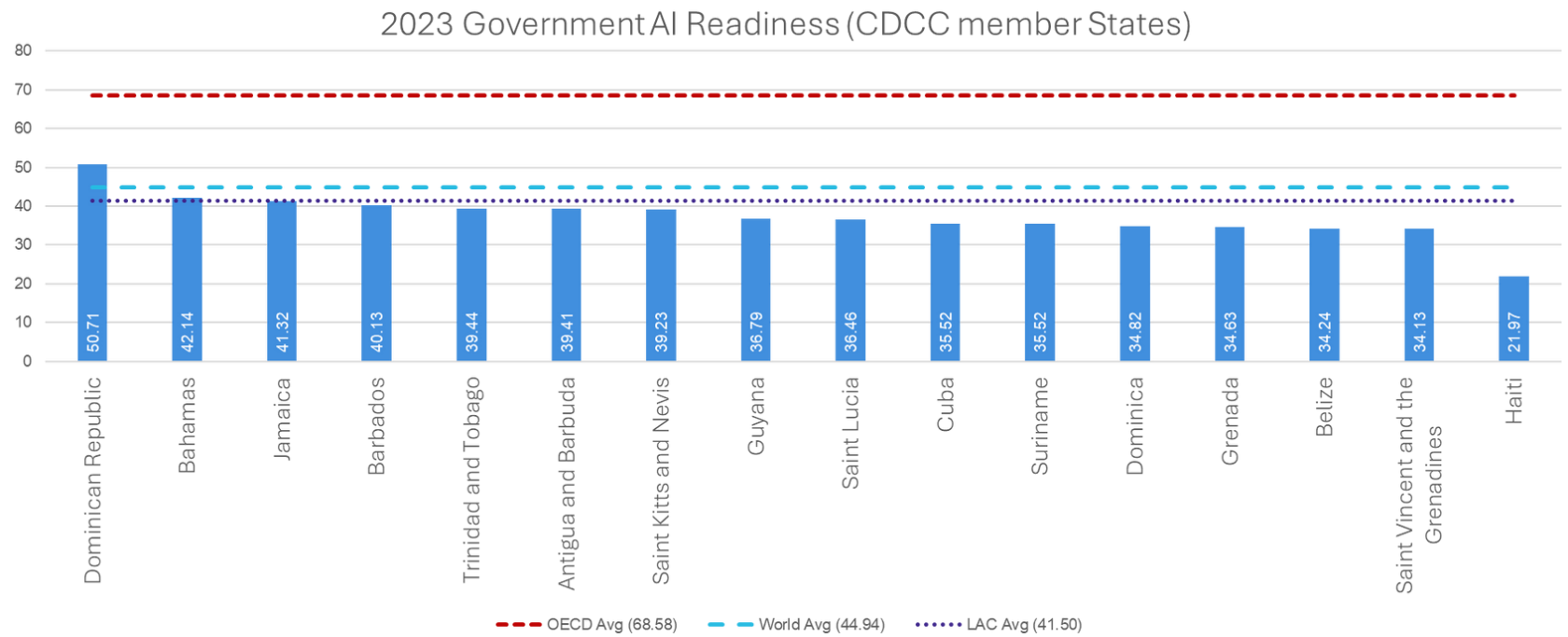
Ethical Design

Integrating ethical principles into AI system development and addressing who is accountable for decisions.

Transparency

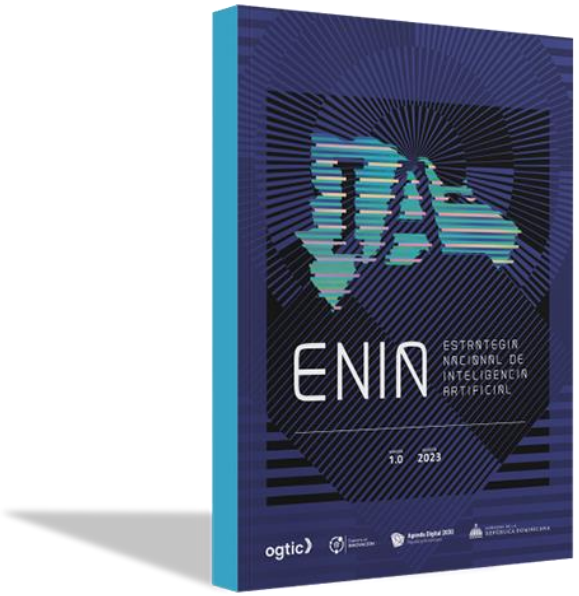
Developing methods to make AI decisions more transparent and interpretable, avoiding the “black-box” problem.

Government Readiness in the Caribbean



Source: Oxford Insights, 2023

AI Strategies in the Caribbean



Dominican Republic

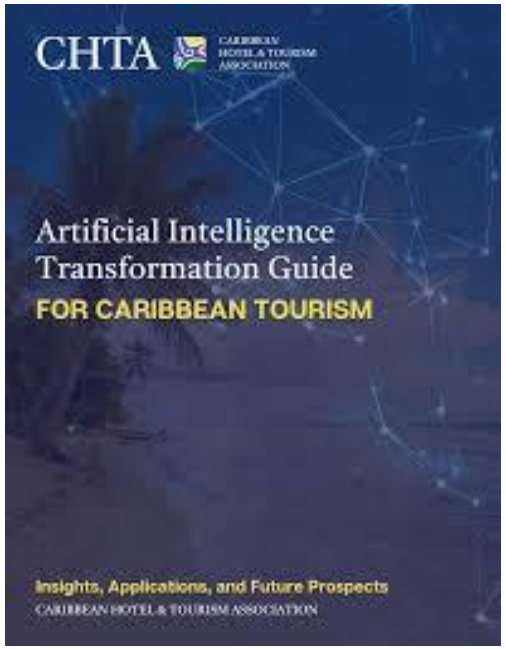
- The “Estrategia Nacional de Inteligencia Artificial” is the first national AI strategy in the Caribbean and part of the country's National Innovation Policy 2030.

In Development

- Cuba, Jamaica, and Trinidad and Tobago are in the process of developing national strategies.
- Digital Transformation is supported in many islands through national strategies and projects.

CARIBBEAN DIGITAL TRANSFORMATION PROJECT

Applications of AI in the Caribbean



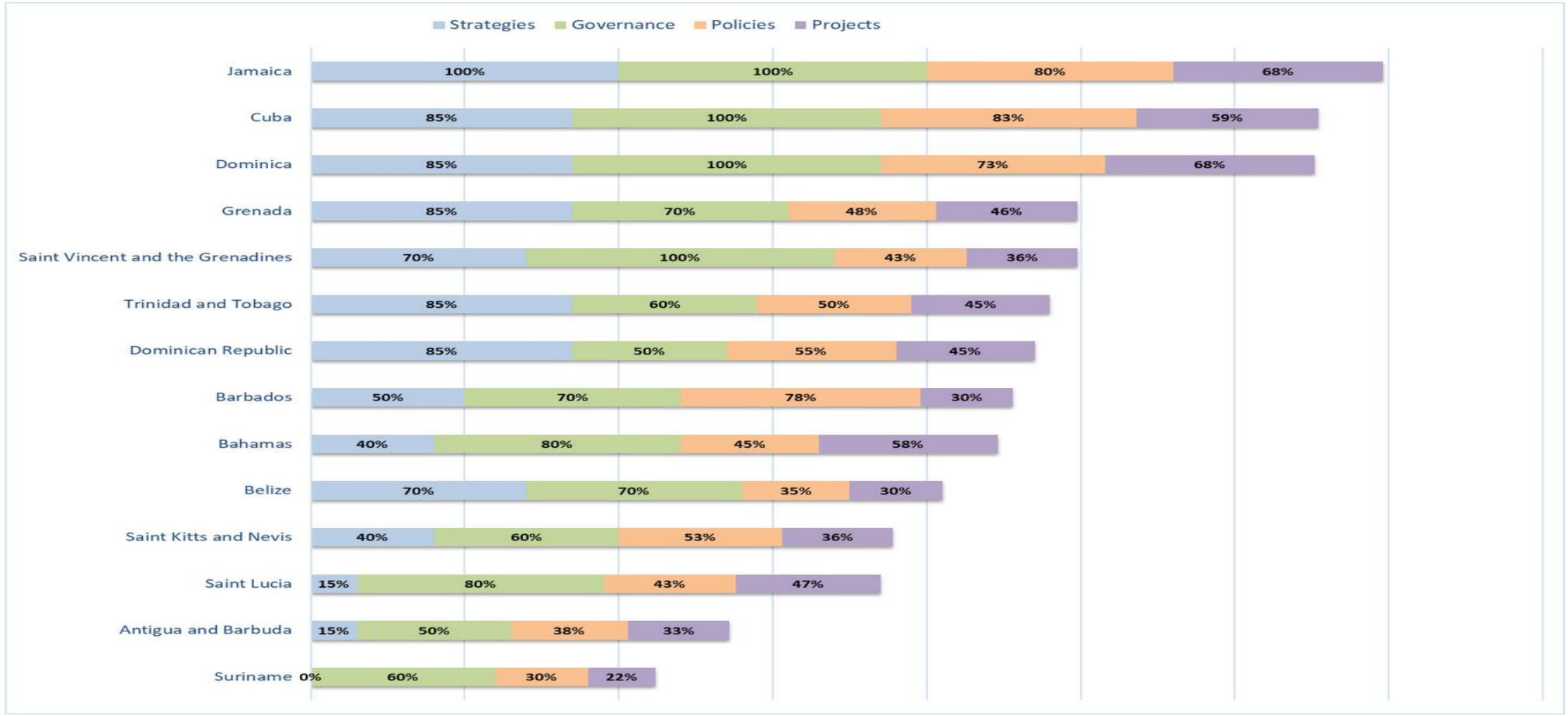
Hospitality and Tourism

CHTA authored **Artificial Intelligence Transformation Guide for Caribbean Tourism** to provide insights on AI applications in tourism industry.

Judicial System

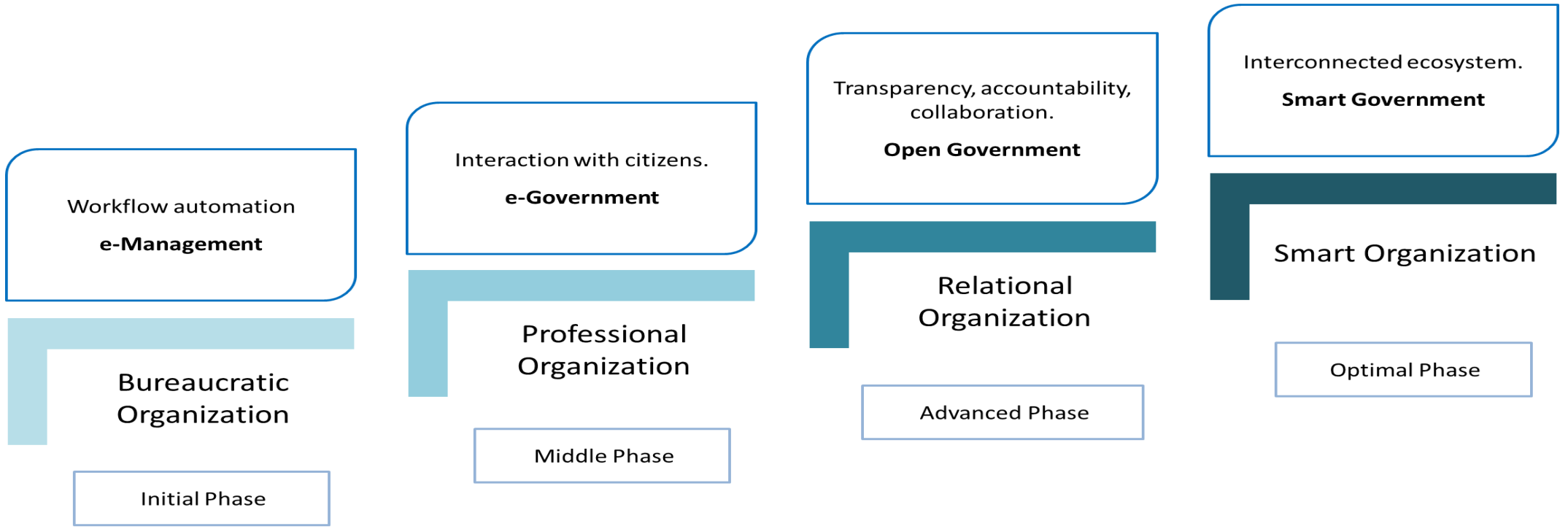
Caribbean Court of Justice announced use of **Aida**, a new AI-based technology developed by the **Caribbean Agency for Justice Solutions**, to streamline the legal research process.

Level of Implementation of Digital Government in the Caribbean



Source: UN ECLAC

Transition towards Smart Government



Source: UN ECLAC

Smart Cities

- “An urban settlement that applies technologies to enhance the benefits and reduce the problems of urbanization for its citizens.” (IMD, 2024)
- AI is employed to optimize various aspects of daily life, from transportation and energy management to public safety and healthcare.

Source: Bareilly Smart City (n.d.).

United for Smart Sustainable Cities (U4SSC)

- U4SSC initiative is a global UN collaboration, coordinated by ITU, UNEP and UNECE, and includes 9 Thematic Groups.

- **Thematic Group on AI in Cities:** develop frameworks to harness AI in conjunction with other frontier technologies to efficiently and effectively deliver urban services and operational processes.

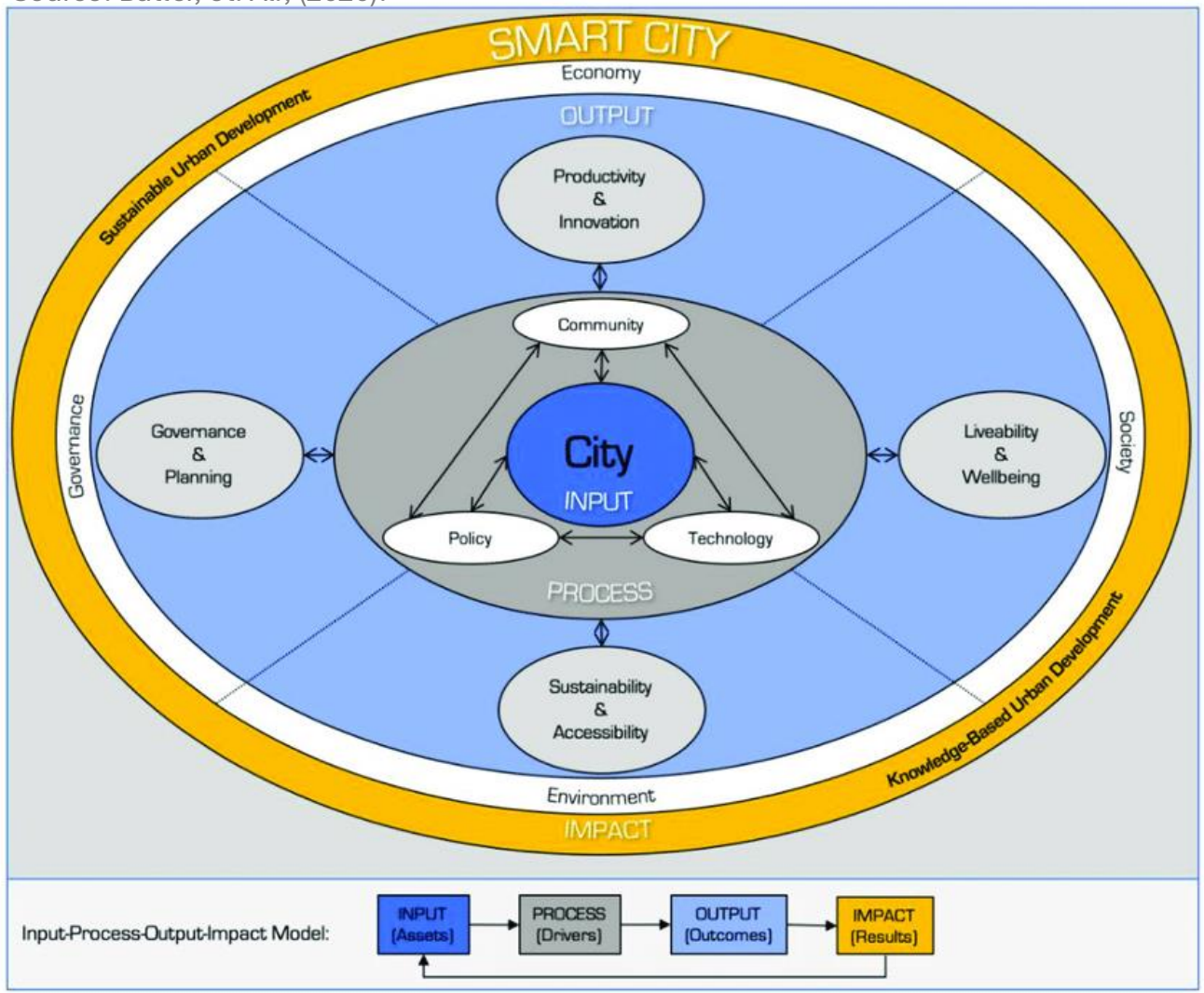
Artificial Intelligence in Cities

Application of AI in Smart Cities

Safety	• Traffic management • Health-service delivery
Living	• Smart-home concept • Air quality monitoring
Mobility	• Autonomous vehicles • Electric vehicles
Energy	• Renewable energy • Building energy forecasting and optimization
Health	• Telemedicine and telecare • Disease control
Pollution	• Optimize waste collection • Predict traffic flow
Industry	• Predict potential issues • Enhance decision making

Source: Adapted from Szpilko, et al., (2023).

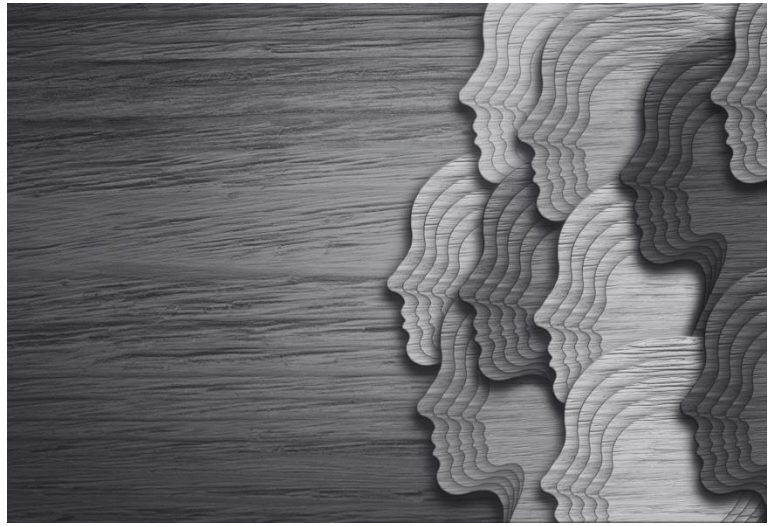
Source: Butler, et. Al., (2020).



The Role of Public Administration

- Public administration plays a critical role in developing and implementing strategies.
- Incorporating smart city strategies to enhance quality of life through digital solutions.
- Using existing assets to develop **citizen-centered** projects.

Public Value Creation

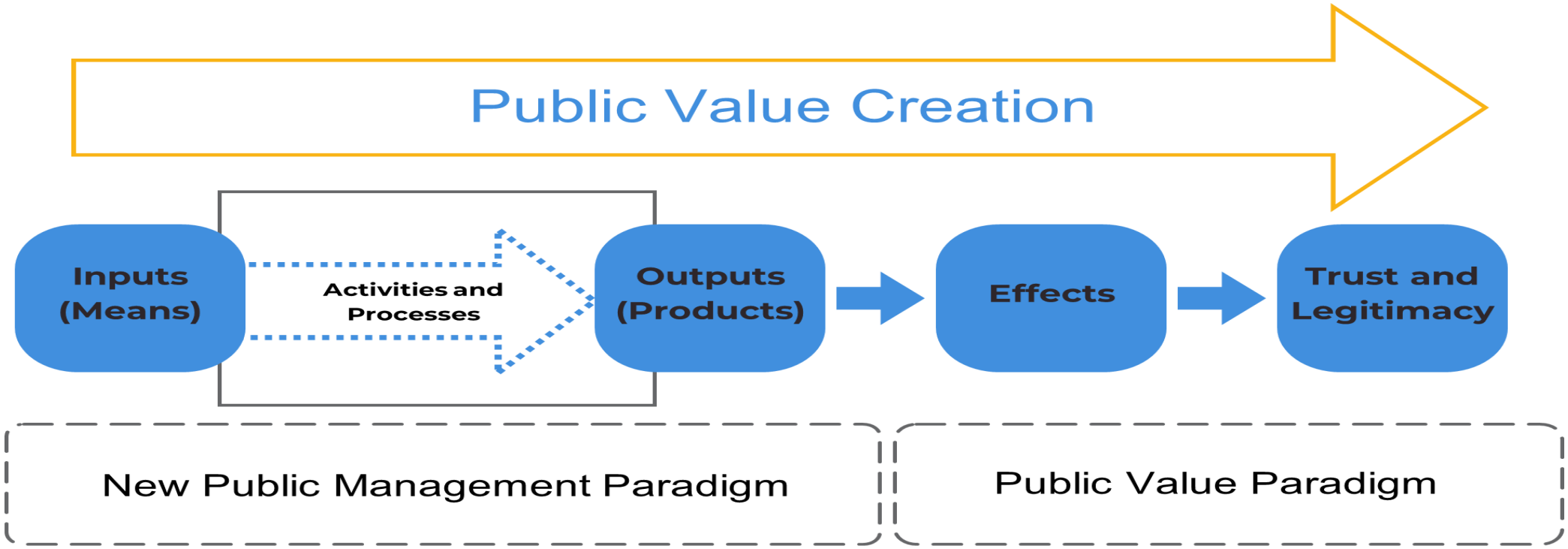


Public value is defined by the citizens who consume the products and services, rather than the producers

Public organizations' primary focus should be on what is valued by the public

Public Value Management highlights longer-term outcomes of the public sphere

Shifting focus from outputs to outcomes



Source: Adapted from Amrani et al., 2022.

The Public Value Creation paradigm extends the value chain to incorporate effects, and trust and legitimacy as part of the outcome process

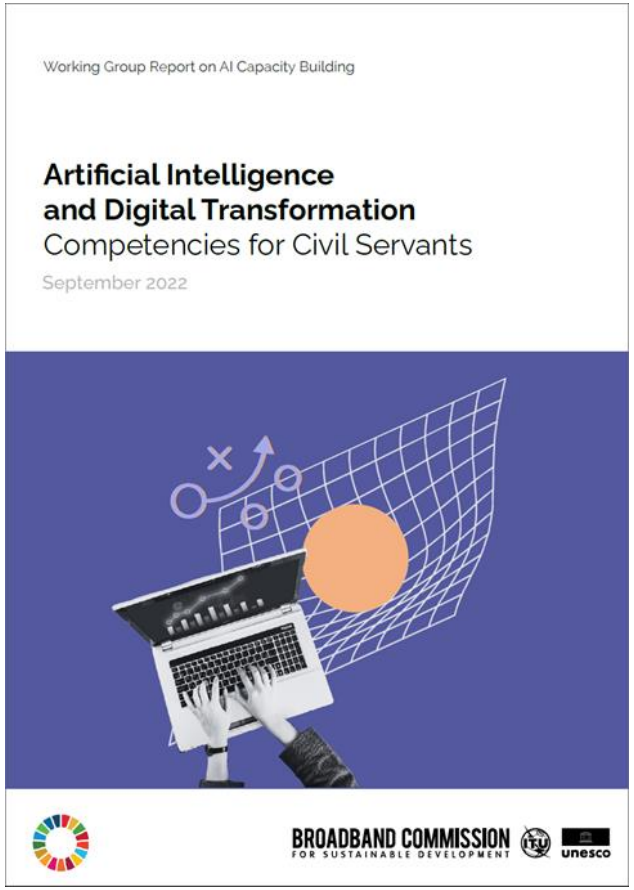
Public Value through AI: Public Sector Skills Development

The mere existence of AI does not create public value and motivation alone is not enough to deploy AI effectively.

New skillsets are required to produce in-depth knowledge of the AI ecosystem.

Every public servant must have some form of AI-related competency, for example to:

- Develop or use AI systems
- Find new ways of working with AI
- Change traditional work procedures
- Imagine new solutions to old challenges



Empowering Digital Transformation Leaders

Internal Source of Transformation

- Public administration managers can serve as internal sources for digital transformation, advocating for and implementing digital tools and digital government transformation.
- Public managers play a leading role in implementation of different tools, technologies, and practices.

Creating a Culture of Innovation

- Supportive leadership is critical to establish a culture of innovation necessary for digital transformation and implementation of strategic plans.

Be willing to undertake long-run projects

- Resisting the tendency to only pursue short-term projects in-line with political terms.

Changing Mindsets: from Fixed to Growth Mindset

Steps to changing mindsets:

STEP 1: Identify

STEP 2: Realize

STEP 3: Understand

STEP 4: Adopt strategies

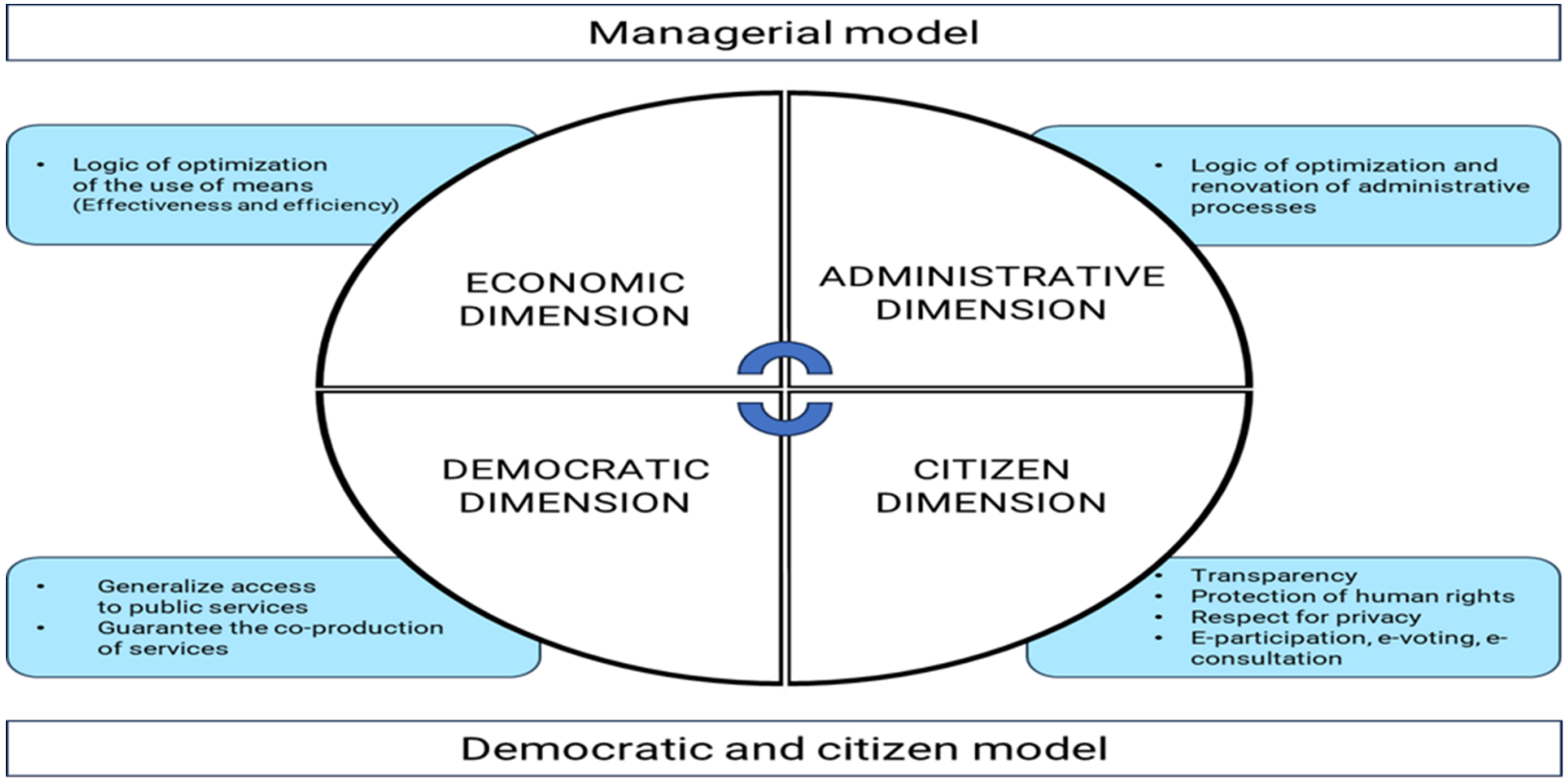
STEP 5: Change beliefs

STEP 6: Transforming behaviors

Source: UN DESA, DPIDG, PMCDU

Breakout Exercise: Indicative Public Value Mapping of Artificial Intelligence

Framework for Assessing the Effectiveness of Artificial Intelligence on Public Value Creation



Adapted from Amrani et al., 2022

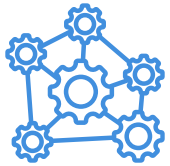
Policy Recommendations

National Strategies

Develop **national AI strategies** that articulate the vision and policy framework

AI Capability

Develop **AI national capability** to ensure the required human resources



Integrate AI Systems

Integrate AI systems in the public sector with a **changing mindsets** approach

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Thank you!

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