

12th IMF Statistical Forum

MEASURING THE IMPLICATIONS OF
**AI ON THE
ECONOMY**

NOVEMBER 20-21

Washington, DC



**Responsible AI
Readiness Index: A tool
to track the progress
and impact of
Responsible AI.**

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Liankhankhup Guite

Deputy Director, Indian Economic Service

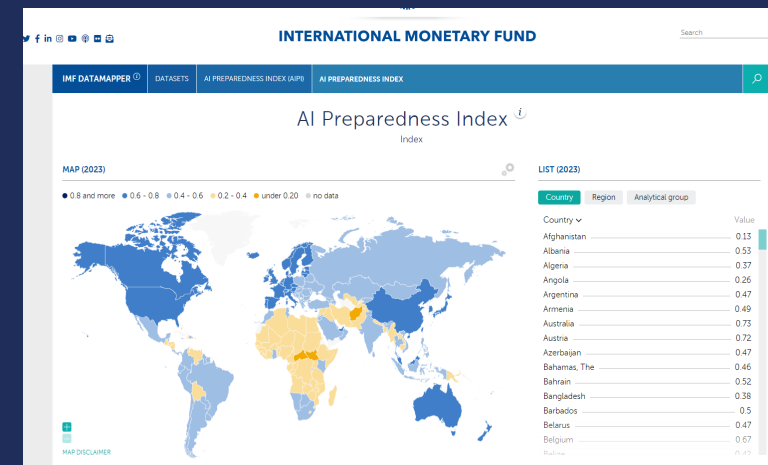
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INTRODUCTION

- Artificial Intelligence (AI) - transformative force revolutionizing industries, economies, and societies worldwide.
- Optimism for policymakers and regulators while raising concerns on privacy, security, labor markets, and social equity.
- AI misinformation and disinformation 2nd highest risk for 2024 by the World Economic Forum's Global Risk Report 2024
- The IMF AI Readiness Index 2024 assesses countries' preparedness to adopt and leverage artificial intelligence based on critical factors such as digital infrastructure, human capital, innovation, and **regulation**.
- The Government AI Readiness Index, produced by the Oxford Insights group, evaluates countries based on their capacity to implement and benefit from AI technologies. The index assesses **governance**, infrastructure, innovation capacity, data availability, and education.

CHALLENGES WITH CURRENT AI INDICES

- The above indexes focus on their foundational capacity and second-generation preparedness.
- IMF AI readiness index does not capture the existence of Responsible AI formulation and its implementation in the legislation of AI Governance.
- The 4th pillar which attempts to capture regulation and ethics is primarily based on **survey of perceptions and not accounting for actual regulations and laws in existence**
- A limited responsible AI has been added to the governance pillar of the Oxford Government AI Readiness Index which **assess the number of AI strategy papers published each year, Digital Capacity & Adaptability**
- Doesn't exactly capture the process of Responsible AI adoption.



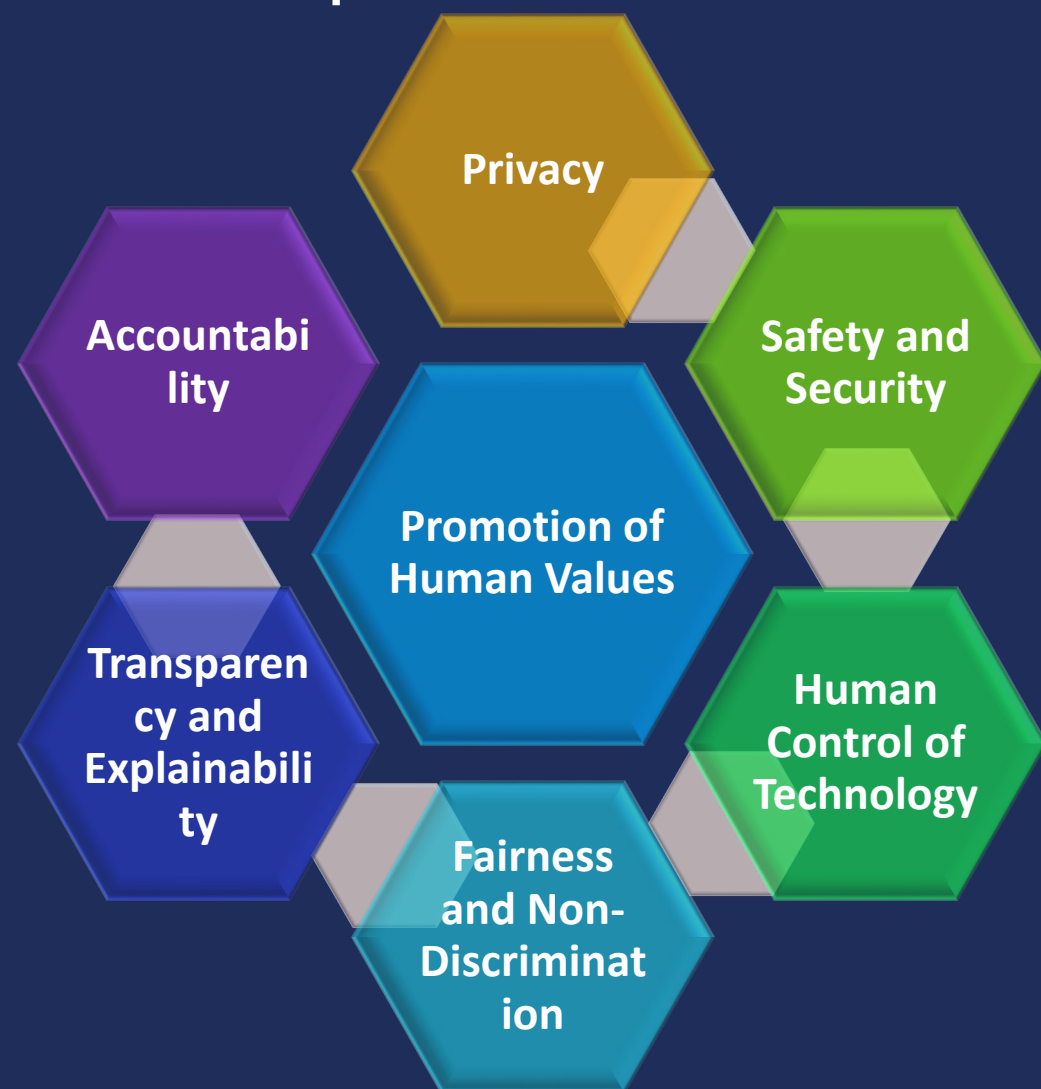
Government AI Readiness Index 2023

The 2023 edition is here! Oxford Insights remains committed to providing valuable insights at the intersection of government and AI. This year we assess the AI readiness of 193 governments across the world. We are also introducing an interactive map to make our data more accessible!

[Explore the index](#)

FRAMING RESPONSIBLE AI READINESS INDEX

A “normative core” of what a principle-based approach to AI ethics and governance should encapsulate:



- The **Responsible AI Readiness Index (RARI)** is based on a multi-pillar framework evaluating **175 countries**.

- The index assesses each country’s readiness in four key areas: **AI laws and policies, Ethical guidelines, skills and educational infrastructure,** and **stakeholder involvement.** (*Framework by Access Partnership*)

- Scoring Criteria:** Each country was evaluated using **40 specific criteria**, across the four pillars, normalized to a **100-point scale**.

- Mixed-method approach:** Combines **qualitative analysis** of legal frameworks with **quantitative scoring** based on data availability

RESEARCH QUESTIONS/OBJECTIVES



How prepared are countries to develop and implement national AI laws and policies?

Evaluates the existence and effectiveness of national AI regulations. (Pillar 1)



Do countries have ethical principles and guidelines in place for responsible AI use?

Assesses the adoption of ethical AI frameworks and guidelines. (Pillar 2)



What is the current state of AI-related skills development for Responsible AI?

Measures the availability of skills, knowledge to develop and deploy AI responsibly (Pillar 3)

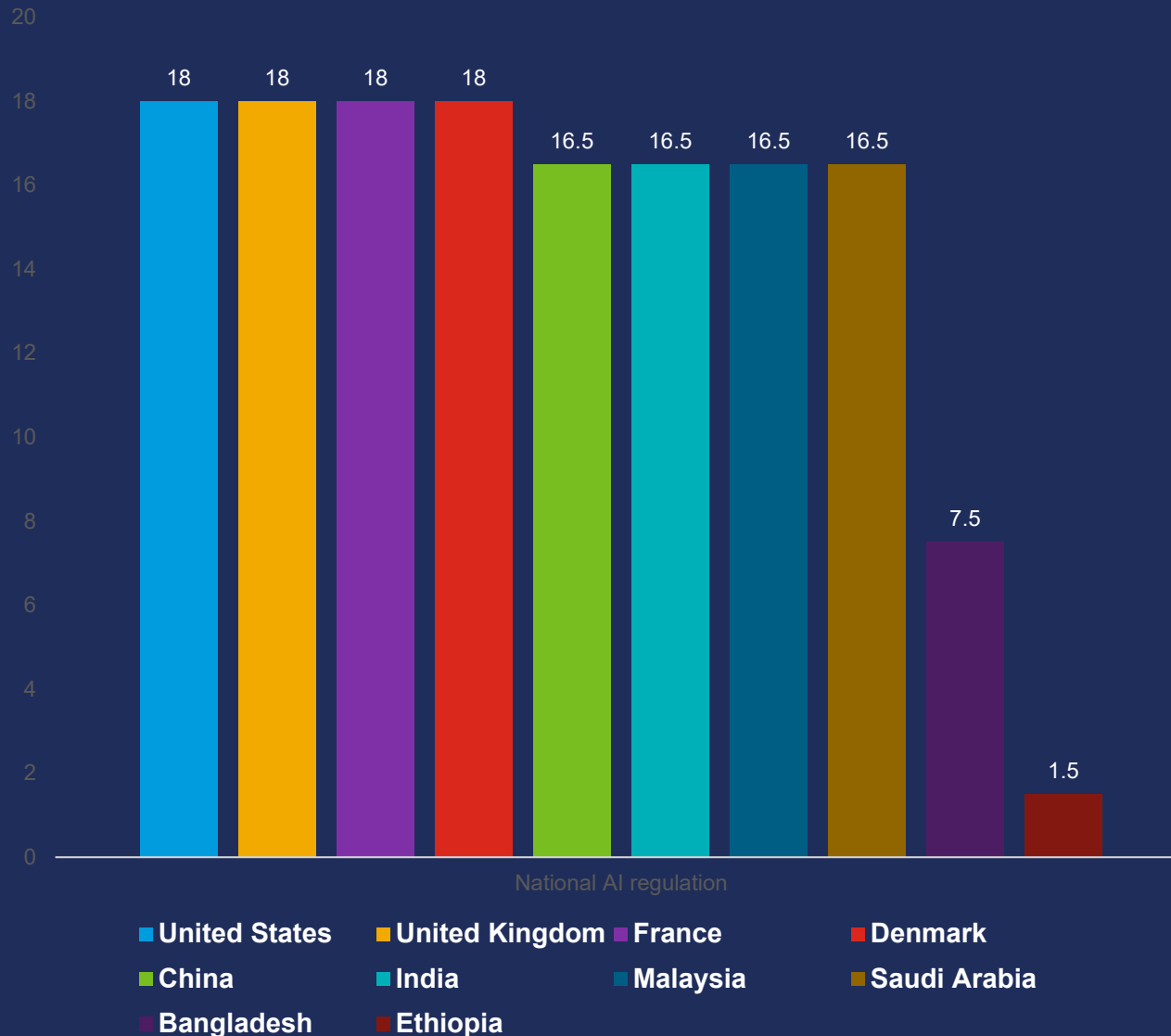


How effectively are stakeholders involved in mitigating AI risks?

Examines collaboration in minimizing AI risks and biases. (Pillar 4)

RESULTS

PILLAR 1: NATIONAL AI LAWS/POLICY/FRAMEWORKS



Key Findings:

48% of countries scored zero in this pillar due to the absence of comprehensive national AI policies/ principles/ frameworks.

AE - United States, United Kingdom, Australia, Canada, Finland, France, Ireland, Sweden Korea

EM- China, India, Malaysia, Saudia Arabia

LIC - Bangladesh and Ethiopia

Countries with **dedicated AI agencies** and comprehensive policies/frameworks scored higher.

PILLAR 2: PRINCIPLES, GUIDELINES & STANDARDS

Key Findings:

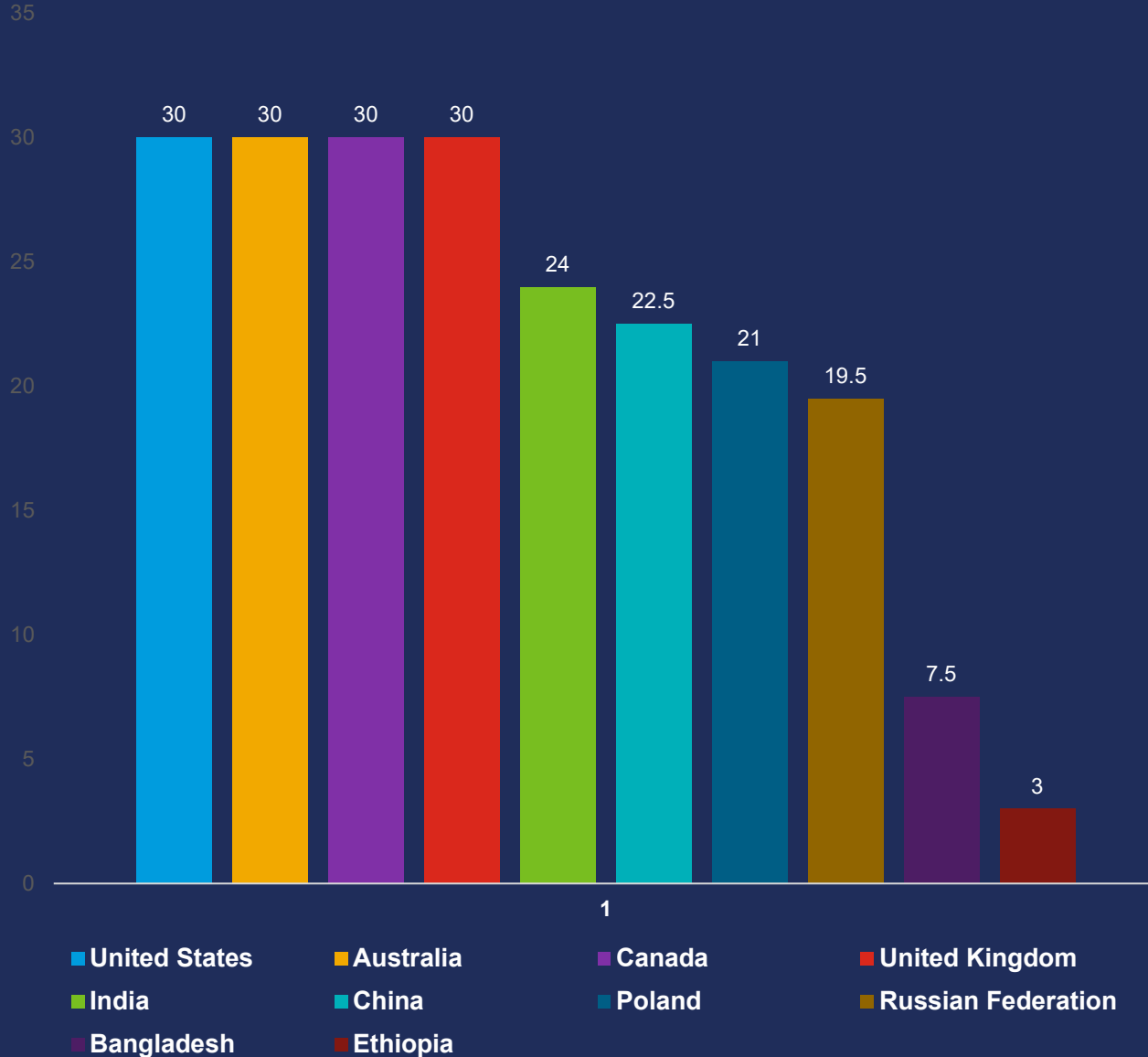
Around 49% of countries have ethical frameworks for responsible AI.

United States, Australia, Canada led with a score of **30** due to robust principles ensuring fairness, transparency, and accountability.

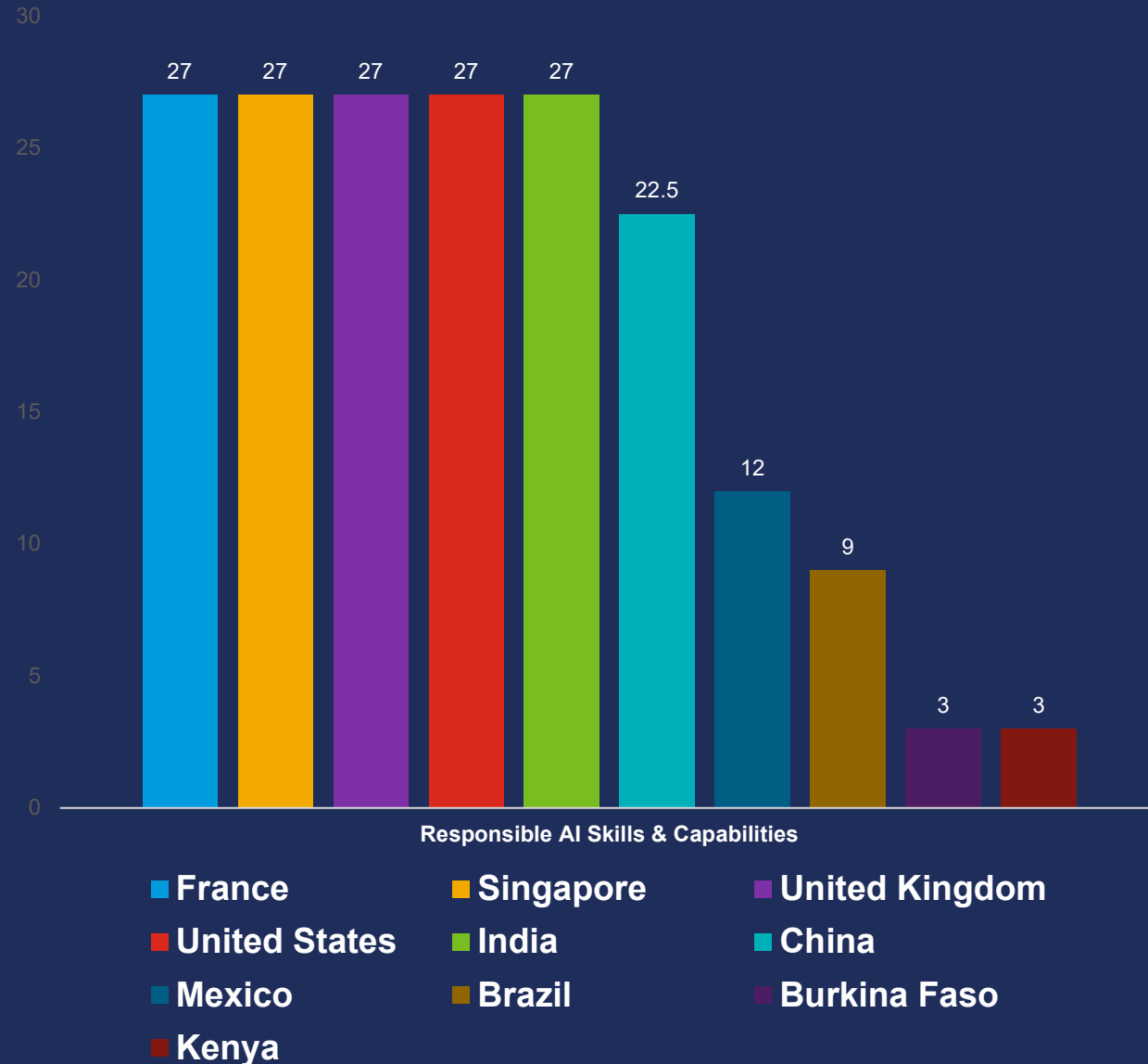
AE- United States, United Kingdom, Australia, Canada, Denmark, Finland, Korea Japan

EM – India, China, Poland, Turkey, Brazil

LIC – Bangladesh & Ethiopia



PILLAR 3: RESPONSIBLE AI SKILLS & CAPABILITIES



There are 5 countries which scored full points namely:

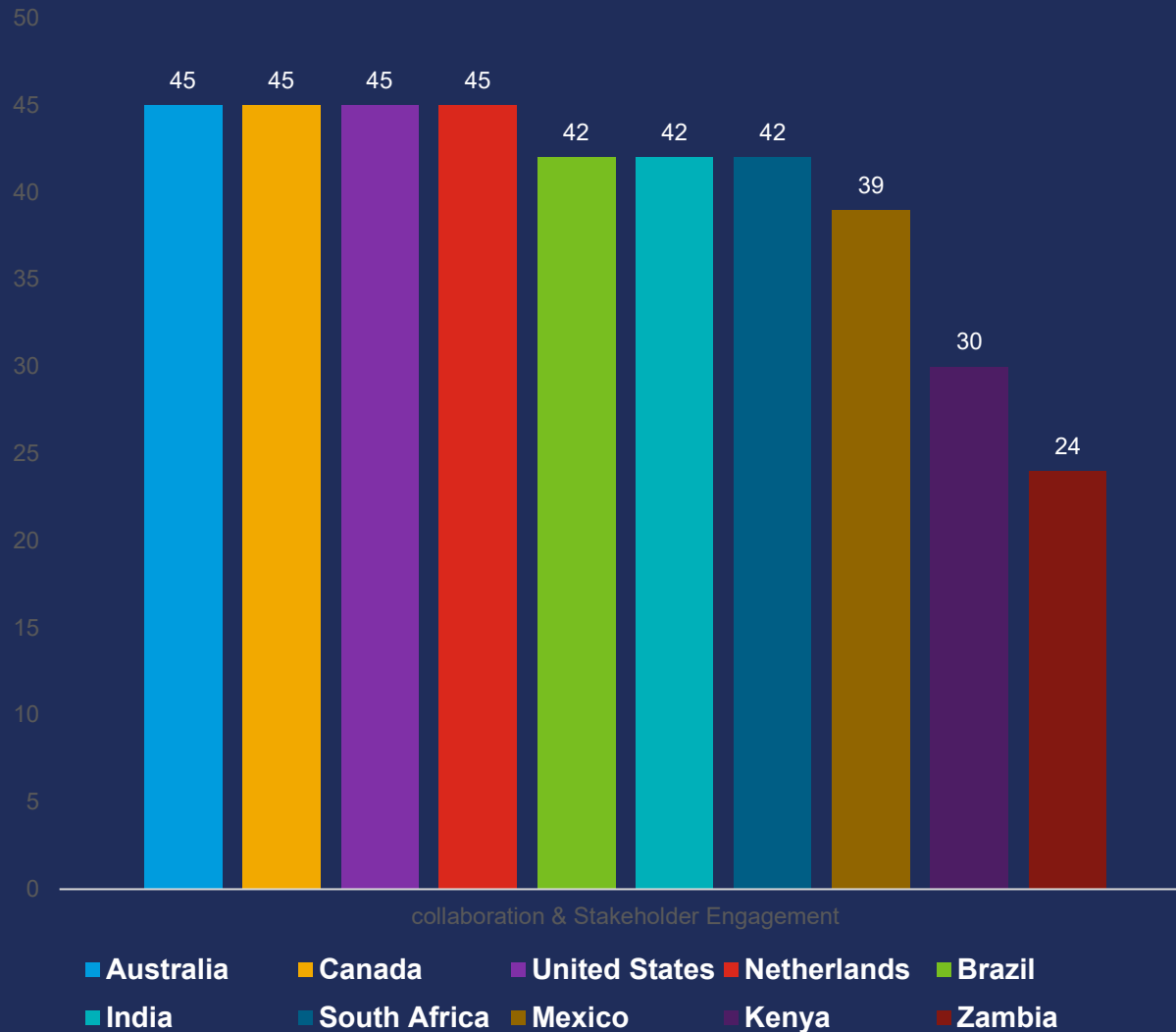
- France
- Singapore
- UK
- USA

EM - India, China, Mexico, Brazil
LIC - Burkino Faso, Kenya

Correlation of 0.76 between STEM education investment and AI readiness.

Countries with dedicated Responsible AI programs in universities ranked significantly higher in this pillar.

PILLAR 4: COLLABORATION & STAKEHOLDER ENG



Key Findings:

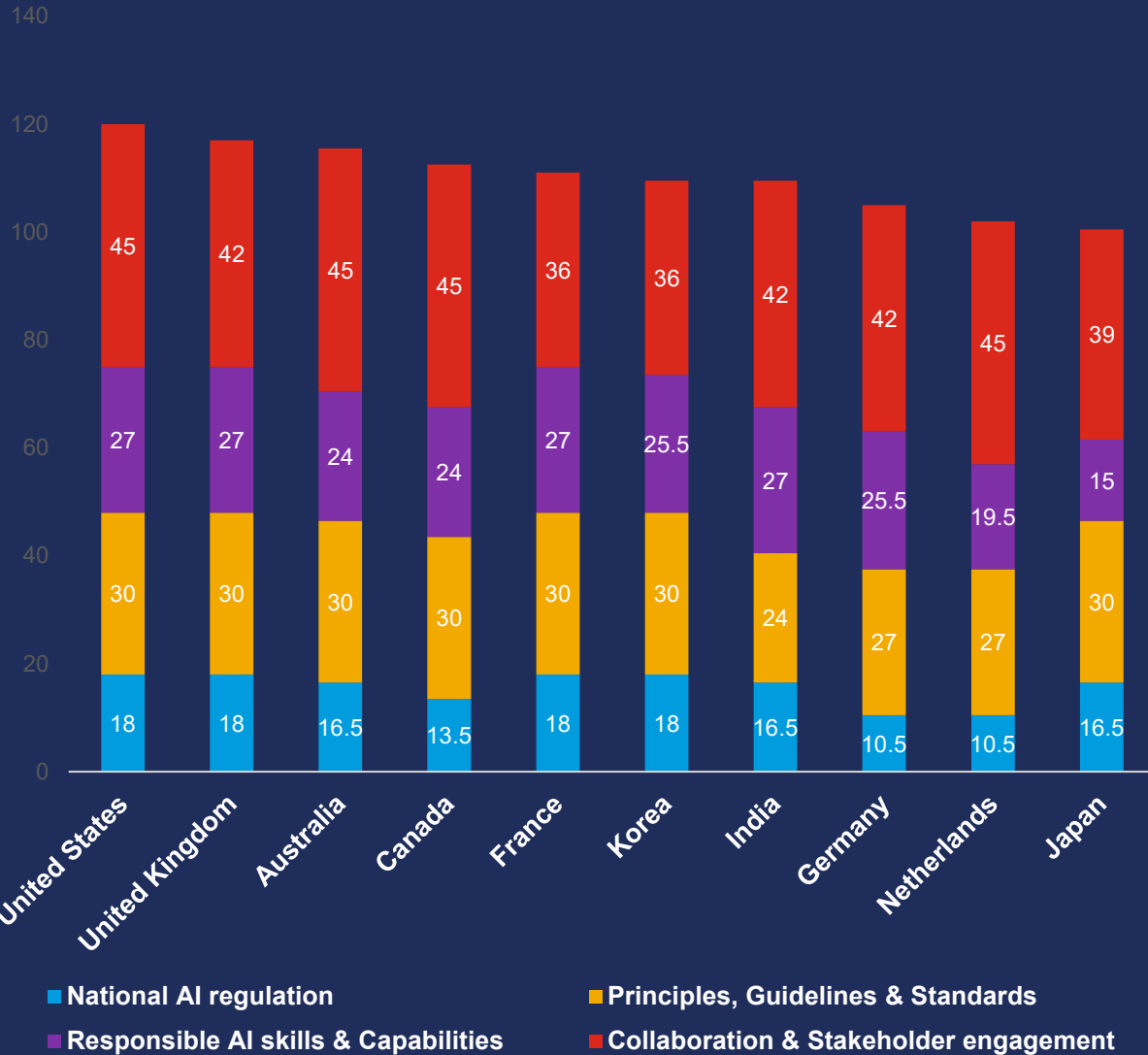
- **Australia** and **Canada** scored high respectively, due to strong stakeholder engagement (private sector, NGOs, academia) in AI risk mitigation.
- Countries with strong **public-private partnerships** were more successful in creating ethical AI ecosystems.

AE – Australia, Canada, United States, Netherlands

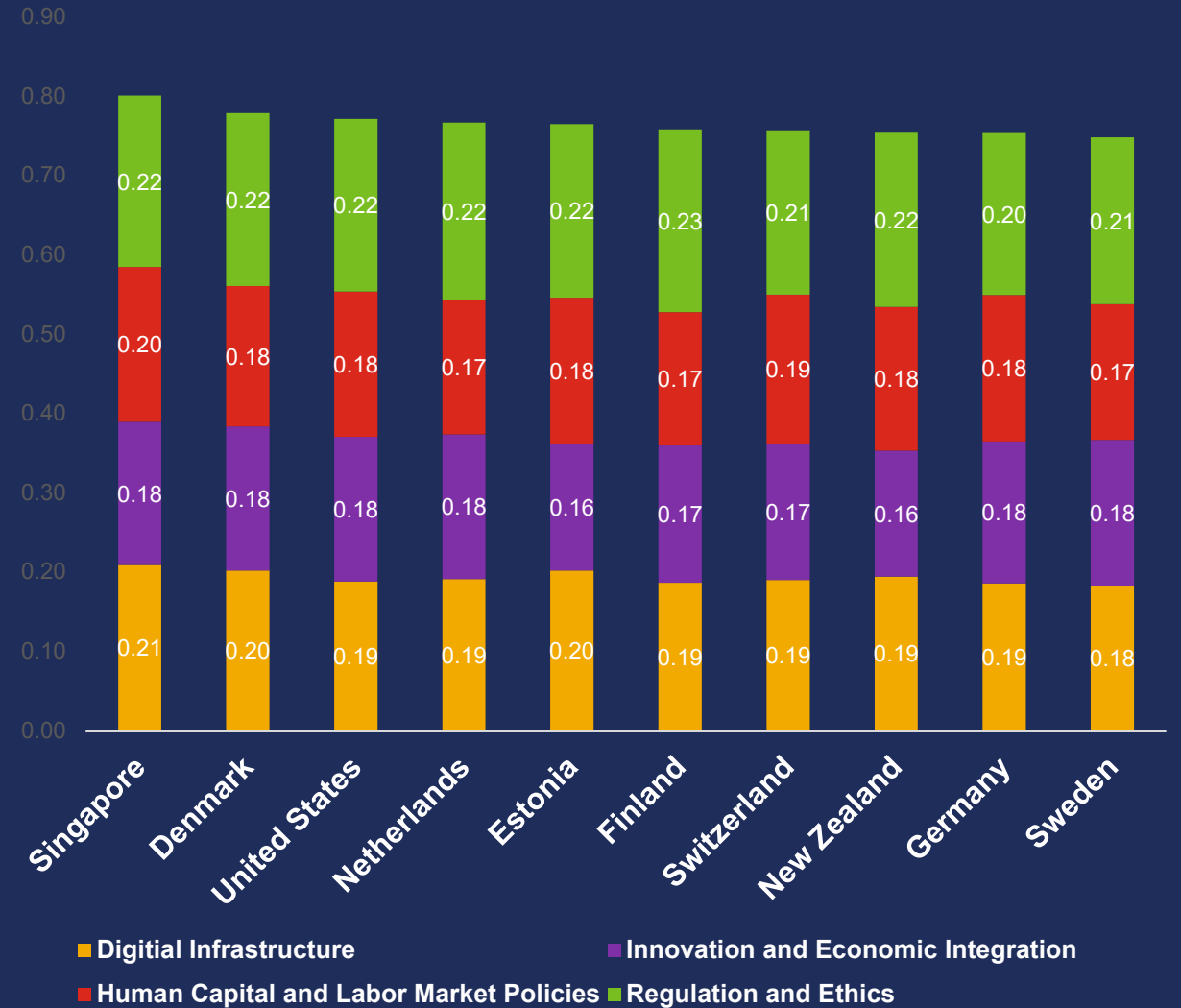
EM – Brazil, India, South Africa, Mexico
LIC – Kenya , Zambia

RARI INDEX AND PILLAR CONTRIBUTION FOR TOP 10

Responsible AI Readiness Index 2024



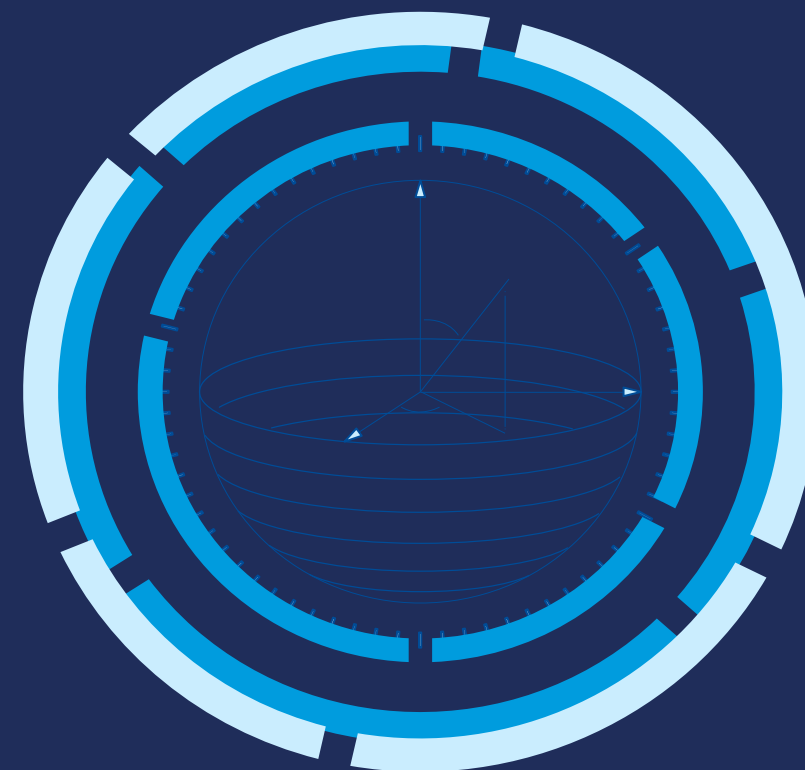
IMF AI Preparedness Index 2024



REGIONAL DISPARITIES IN RESPONSIBLE AI READINESS

Key Insights:

- **Europe** and **North America** lead with high AI readiness due to strong governance, ethical frameworks, and educational infrastructure.
- **Asia** shows a mixed performance with countries like **India, Japan** and **South Korea** excelling, while others are lagging in ethical AI implementation.
- **Africa** and parts of **Latin America** are in the emerging stage, facing significant gaps in AI governance and skills development.



POLICY RECOMMENDATIONS



Develop AI Regulations: Establish clear national AI strategies with defined roles and roadmaps.



Strengthen Partnerships: Encourage public-private collaborations to mitigate AI risks.



Implement Ethical Frameworks: Promote fairness, transparency, and accountability in AI systems.



Invest in AI Education: Expand AI and STEM education programs to bridge talent gaps.



Support Global Collaboration: Share expertise with emerging economies to boost Responsible AI readiness.

LIMITATIONS

- **Secondary data collection:** The assessment was carried out using the published AI documents available on the internet. There could be some divergence between the policy and implementation.
- **Inconsistent Data Availability:** Some countries lack comprehensive or up-to-date data on AI policies, affecting the reliability of their scores.
- **Technological Changes:** The fast-paced development of AI technologies can render policies outdated, requiring frequent updates to maintain the index's relevance.
- **Subjectivity in Ethical Scoring:** Measuring ethical AI principles may involve subjective interpretation, leading to variations in how different countries' efforts are assessed.



CONCLUSIONS



- AI Governance does not translate into Responsible AI.
- Focus on ethical AI, strong governance, and global cooperation is essential for Responsible AI development.
- Universities and Civil Society plays an important role in current responsible AI practices.

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THANK YOU

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