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Are we ready for AI?

A comparative analysis of AI readiness and preparedness indexes

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Are we ready for AI? A comparative analysis of AI readiness and preparedness indexes

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Abstract

Artificial intelligence (AI) is increasingly shaping economic structures, governance, and global power dynamics. Yet existing AI readiness indexes often provide a distorted view of countries' capabilities—rewarding formal strategies and patents while overlooking deployment-first innovations, informal economies, and adaptive governance capacities. These biases particularly disadvantage Latin America and the Caribbean (LAC). This paper makes two contributions to the AI readiness agenda. First, it empirically documents the divergence and conceptual inconsistencies across leading AI readiness and preparedness indexes. Second, it proposes a two-tier measurement framework: a Composite Readiness–Preparedness Index (CoRPI), providing a transparent baseline diagnostic, and an Adaptive AI Readiness Index (AARI), capturing context-specific capacities and policy learning. Together, these frameworks aim to balance comparability with relevance. By piloting the AARI in LAC, the region can serve as a testbed for a model of AI governance and measurement with global applicability.

[1] *Universidad Torcuato di Tella & IADB.* *The author thanks Valentina Gayo for her outstanding research collaboration, Soledad Guilera and Darío Judzik for their invaluable comments, and Elham Tabassi for fruitful conversations on the subject. The usual disclaimers apply.*

Executive Summary

- **Indexes don't agree.** Across the seven leading AI readiness and governance rankings, the average correlation **is less than 50%**.
- **Five structural problems explain the divergence.** They differ on definitions (what counts as AI), miss realities in the data (informal innovation, language bias), lag behind fast-moving technologies, apply one-size-fits-all frameworks, and embed political distortions that drive countries to "invest for the index."
- **Leadership depends on what you value.** The same country can be ranked top-ten in one index and mid-table in another: Estonia is a "readiness leader" for Oxford but a laggard in commercialization; China shines in research but scores poorly in governance; Uruguay excels in e-government but underperforms in patent-heavy metrics.
- **This creates misallocation risks.** Because billions in budgets and reputations ride on index scores, governments are incentivized to optimize what is measured (AI strategies, patents, glossy institutions) rather than what matters (deployment, inclusion, resilience).
- **A better way exists.** The proposed **Adaptive AI Readiness Index (AARI)** is not a single league table but a flexible framework: universal foundations + modular tracks (innovation, growth, social resilience, development) + adaptive capacity.
- **LAC as a test case.** Latin America consistently underperforms across mainstream indexes, often due to measurement mismatch. Yet countries like Uruguay, Chile, and Brazil demonstrate overlooked strengths. Regional institutions (IDB, CAF, ECLAC) could pilot AARI to calibrate indicators, prioritize deployment, and foster learning networks.

Key Findings

- **Indexes diverge widely.** Correlations across major AI readiness indexes average only **33–47%**, meaning rankings often disagree as much as they agree.
- **Five structural problems explain the divergence.** These include:
    1. **Definitional confusion** (different views of what "AI readiness" means),
    2. **Data blind spots** (indexes measure what's easy, not what matters),
    3. **Timing lags** (indexes move slower than AI adoption),
    4. **One-size-fits-none frameworks** (same yardstick for OECD and Global South), and
    5. **Political distortions** (countries "invest for the index").
- **Leadership is in the eye of the beholder.** Who "leads" depends on what you value: the U.S. in commercialization, the EU in preparedness, Estonia in digital government, China in patents, etc.
- **Perverse incentives are real.** Governments risk misallocating scarce resources—publishing glossy strategies, chasing patent counts, or setting up showcase institutions—simply to climb indexes.
- **A better way exists.** The proposed **Adaptive AI Readiness Index (AARI)** offers a flexible, modular framework that adapts to country context and policy priorities rather than imposing one-size-fits-all metrics.
- **Latin America can lead.** LAC is systematically undervalued by current indexes due to informality, mobile-first innovation, and resource constraints. A **12-month AARI pilot co-led by IDB, CAF, and ECLAC** would not only fix this mismeasurement but also provide a global proof of concept.

Introduction

Artificial intelligence (AI) readiness rankings have become influential benchmarks guiding national strategies, investment priorities, and international cooperation. Governments and development institutions increasingly rely on these indicators to gauge their capacity to adopt and govern AI responsibly. The rankings, produced by organizations such as Oxford Insights, the IMF, Stanford University, and Tortoise Media, aim to capture how ready and prepared countries are for an AI-driven future—measuring both their capacity to adopt AI technologies today and their ability to adapt to the transformations they bring. Yet these metrics rarely agree. Depending on the index, Singapore, Estonia, or China may each appear as global leaders in AI readiness or preparedness. In Latin America, countries such as Uruguay, Chile, and Brazil illustrate how current indexes can understate regional strengths in digital governance and innovation, reflecting measurement mismatches rather than genuine unreadiness.[2]

This divergence has far-reaching policy consequences. Governments and international organizations allocate budgets, design AI strategies, and shape reputational narratives based on these scores. Singapore elevated AI governance to the center of government through the creation of the Smart Nation and Digital Government Office and the launch of a national AI strategy under the Prime Minister's Office; the UAE hired away top talent to climb the innovation tables, and Europe's AI Act was partly motivated by perceived readiness gaps. When rankings send inconsistent signals—sometimes correlating as weakly as flipping a coin—policymakers face distorted incentives. The result is what this paper calls the **AI measurement paradox**: multiple, conceptually inconsistent frameworks that claim to assess the same phenomenon but produce contradictory results. Because they define and measure readiness differently, they generate confusion rather than consensus—and risk encouraging countries to invest in what is visible rather than what is valuable. These divergences are not random; they stem from five structural flaws in existing approaches to measurement: definitional confusion, data blind spots, timing lags, one-size-fits-all frameworks, and political distortions—to which we return in more detail below.

This paper contributes to the AI readiness agenda in two ways. First, it empirically documents how major AI readiness and governance indexes diverge—sometimes dramatically—in their assessments of national capabilities, revealing the conceptual and methodological inconsistencies behind these measures. Second, it proposes a two-tier framework that combines a comparable composite diagnostic (**CoRPI**) with a flexible, adaptive instrument (**AARI**) tailored to country context. Together, these contributions link measurement critique with a practical blueprint for reform.

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[2] This has not gone unnoticed in the academic literature; see Jobin et al. (2019) and Floridi & Cowls (2019).

AI Definition Wars

Before we dive into why the rankings disagree so spectacularly, we need to understand what they're actually trying to measure. Here's where things get philosophical fast.

"AI Readiness" sounds straightforward until you realize it's like asking "How ready is your country for the future?" Different experts emphasize radically different aspects. Some focus on whether you can build the next ChatGPT. Others care more about whether your farmers can use AI to optimize crop yields. Still others worry about whether your legal system can handle algorithmic discrimination lawsuits.

Take the Oxford Government AI Readiness Index, which essentially asks: "If your government decided tomorrow to deploy AI across all public services, could it pull it off?" This is the "can you implement AI right now" school of measurement. It's practical, immediate, and heavily focused on bureaucratic competence—the kind of thing that matters if you're a minister trying to digitize healthcare records or automate tax collection.

"AI Preparedness," meanwhile, is the "what happens when the robots actually arrive" perspective. The IMF's AI Preparedness Index reads like it was written by economists who've seen too many sci-fi movies about technological unemployment. It asks harder questions: When AI disrupts entire industries, do you have social safety nets? When algorithms make life-changing decisions, do you have appeal processes? When AI transforms your economy, can your workers adapt?

Table 1. Readiness & preparedness

Dimension	AI Readiness (capacity to adopt)	AI Preparedness (capacity to adapt)
Infrastructure	Data, compute, connectivity	Resilience of infrastructure, security
Human Capital	STEM, AI skills, researchers	Re-skilling, lifelong learning, displaced workers
Institutions	Existence of strategy, data law	Agility, regulation, enforcement
Innovation	Startups, R&D, patents	Inclusive innovation, diffusion
Society	Digital literacy, adoption rates	Trust, ethics, participation
International	Research collaboration	Standards, cross-border governance

The difference matters enormously for policy. A country might excel at current AI deployment (high readiness) but be woefully unprepared for AI-driven disruption (low preparedness). Think of a nation with excellent digital infrastructure and tech-savvy bureaucrats, but rigid labor markets and weak social protection. Or consider the opposite: a country with limited current AI capabilities but robust retraining programs and flexible institutions.

Most indexes try to have it both ways, blending present-state assessments with future-looking indicators. The result? Conceptual confusion that makes comparing rankings like comparing apples, oranges, and the abstract concept of fruit-ness.

Five Indexes, Five Different AI Worlds

Let's explore how each major index constructs its own AI narrative—focusing on different actors, outcomes, and time horizons:

The Government Bureaucrat's Dream: Oxford Insights

"Can your civil service actually implement AI without everything catching fire?"

Oxford's Government AI Readiness Index reflects the perspective of practitioners familiar with the realities of implementing digital reforms in the public sector. Covering 183 countries, it focuses on the institutional foundations that determine whether governments can actually operationalize AI: the existence of data governance frameworks, procurement systems capable of handling AI contracts, and a public workforce with at least a basic understanding of AI concepts.

In Oxford's framework**, Estonia ranks** near the top because its digital-first government is both functional and integrated—while countries with strong AI research ecosystems but weaker administrative capacity fall behind. The index rewards not innovation in the lab, but the ability to translate it into effective service delivery and governance.

The Silicon Valley Perspective: Tortoise Media

"Who's building the AI ecosystem that venture capitalists dream about?"

Tortoise creates a world where private sector dynamism reigns supreme. Their 83-country ranking celebrates places where startups flourish, talent flows freely, and commercialization happens at lightning speed. This is the index that notices when London's AI scene suddenly explodes or when Singapore becomes the go-to place for Southeast Asian AI talent.

Tortoise rewards countries that understand AI as an ecosystem sport—where government, academia, and business create virtuous cycles of innovation. It's less interested in whether your tax authority uses AI and more interested in whether your country produces the next DeepMind.

The Academic's Paradise: Stanford HAI

"Who's publishing the papers that will define AI's future?"

Stanford's 36-country vibrancy tool reads like it was designed by researchers who believe today's academic breakthroughs become tomorrow's commercial applications. It tracks research outputs, notable AI models, and responsible AI research with the thoroughness of a bibliometric obsessive.

The Stanford HAI world is one where countries with world-class universities and strong research funding punch above their economic weight. It notices when smaller nations like Israel or Switzerland produce outsized contributions to AI knowledge, even if their governments aren't AI early adopters.

The Development Economist's Reality: OECD Going Digital

"Is your entire society ready for digital transformation, AI included?"

OECD's broader digital index treats AI as part of a larger transformation story. It asks whether your population can actually use digital technologies, whether businesses are adopting digital tools, and whether your innovation system produces results.

The OECD world is more cautious and comprehensive, recognizing that AI readiness might be meaningless if your population lacks basic digital skills or your businesses haven't figured out e-commerce yet—predictably, since it is **not an AI-specific index**, but rather part of a broader digital transformation framework. As such, it's the index most likely to notice when a country's AI hype outpaces its digital fundamentals.

The Crisis Planner's Nightmare: IMF AI Preparedness

"When AI disrupts everything, will your society survive intact?"

The IMF index feels like it was written by economists who've read every study about technological unemployment ever published. It covers 174 countries with a laser focus on resilience: social protection systems, labor market flexibility, regulatory adaptability.

The IMF world worries less about who builds the best AI and more about who's prepared for AI's consequences. It notices countries with strong social safety nets, flexible education systems, and institutions capable of adaptation—even if they're not current AI leaders.

Do they agree with each other?

Here's where things get a bit confusing. When we correlated these five major indexes, the average pairwise correlation is a modest 47%.[3] Individual results vary:

[3] In samples of roughly 50–100 observations, a Pearson r ≈ 0.4 explains about 16 percent of the variance in one index through another—an association that is modest but statistically meaningful. All index scores were

- **Best friends**: Tortoise's AI Capacity and Stanford's AI Vibrancy correlation is a decent 0.88—apparently private sector ecosystems and research excellence go hand in hand. Similarly, Oxford's AI Readiness and IMF's AI Preparedness correlation is a solid 0.93, suggesting that government competence and institutional resilience are "related".
- **Barely acquainted**: By contrast, the link between AI Preparedness and Vibrancy is a modest 32%--while the relationship between Tortoise's AI Capacity and OECD's Going Digital (correlation: 0.05) looks essentially random.

Two newer indexes add yet more complexity to the picture. The **AGILE Index** (AI Governance International Evaluation Index) is a comprehensive metric assessing AI governance capabilities across four pillars—development, governance environment, governance instruments, and governance effectiveness—based on 43 indicators (or 39 in its inaugural edition) covering up to 40 countries in its 2025 release, ranging from high-income to emerging AI nations. In turn, the **Global Index on Responsible AI (GIRAI)** provides a human-rights-based, multidimensional benchmark of responsible AI implementation, tracking government commitments and capacities across three pillars and 19 thematic areas in over 120–138 countries.

AGILE, which blends regulatory agility and institutional capacity, correlates moderately with both Oxford's readiness (0.50) and the IMF's preparedness (0.72), suggesting it captures some shared concern for institutional robustness. Meanwhile, the Global Index on Responsible AI, focused on ethical and rights-based frameworks, barely correlates with the others—indeed, its relationship with AI Vibrancy is negative (−0.44) and weak across the board. These additions, which bring the average correlation down to 33%, reinforce the point: depending on what you value—innovation, deployment, fairness, or resilience—you'll get radically different answers about who's "leading" in AI (see Appendix I).

Interestingly, the dispersion of results is not necessarily because different indexes cover different things. For example, the average correlation between innovation and R&D measures across six of the seven indexes is 58%, suggesting that they disagree even when they are trying to measure similar aspects.

Part of the low cross-index correlation may stem from differences in country coverage (some indexes include more low-income economies), timing mismatches between editions, or heterogeneous score scales (0–1 vs 0–100). In addition, reliance on diverse data sources—academic, administrative, or perception-based—introduces structural noise that weakens correlations even between conceptually similar metrics.

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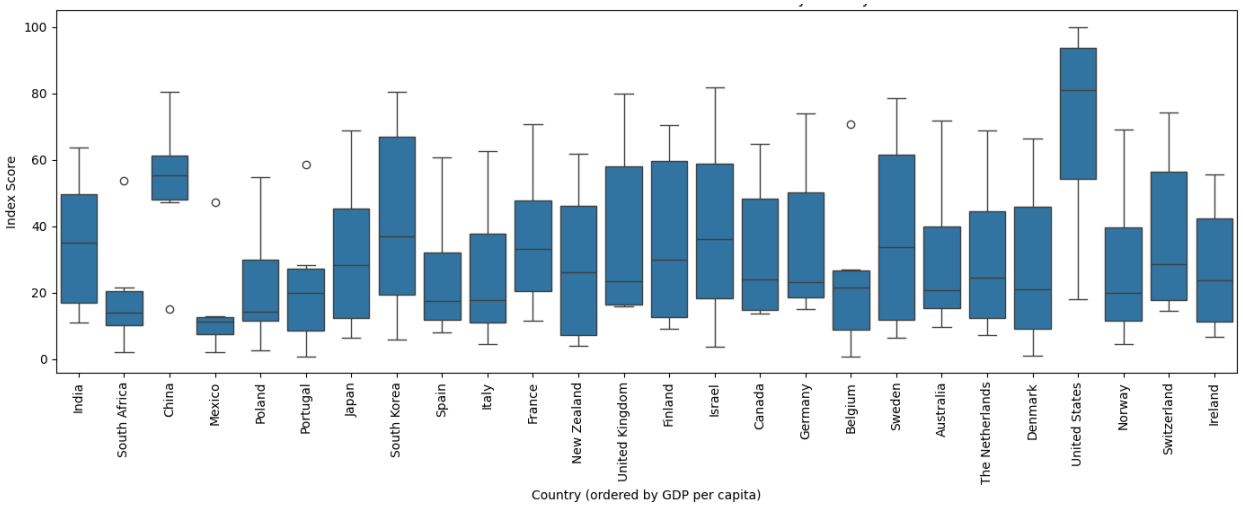
rescaled to a common 0–100 range before correlation analysis to ensure comparability across sources that use different original scales.

Figure 1 illustrates this finding from a different angle, showing the score dispersion for Innovation and R&D for all countries for which this dimension is covered by the indexes.

Figure 1. Distribution of Innovation and R&D Index Scores by Country



Notes: The indexes used include measures of innovation and R&D. These are Tortoise Media, Stanford, Oxford, OECD, IMF and AGILE.

Results from a residual analysis or rank differential across indexes show another take on the diverse readiness approaches (Table 2). For example, **Estonia** is ranked 5th by the IMF Preparedness Index and 32nd in Tortoise—a rank spread that may reflect implementation strength coupled with economic vulnerability. Similarly, **China** ranks 2nd according to Tortoise and Stanford but much lower according to Oxford and the IMF, potentially indicating gaps in openness or research visibility. The dispersion is even higher for India, and whereas the U.S. is consistently ranked at or near the top, even advanced U.K. exhibits non-negligible variations (a rank spread table for the full sample is presented in Appendix I).

Table 2. Rank dispersion – Selected countries

	Estonia	**China**	**India**	**United States**	**United Kingdom**
Rank dispersion	30	31	61	4	12

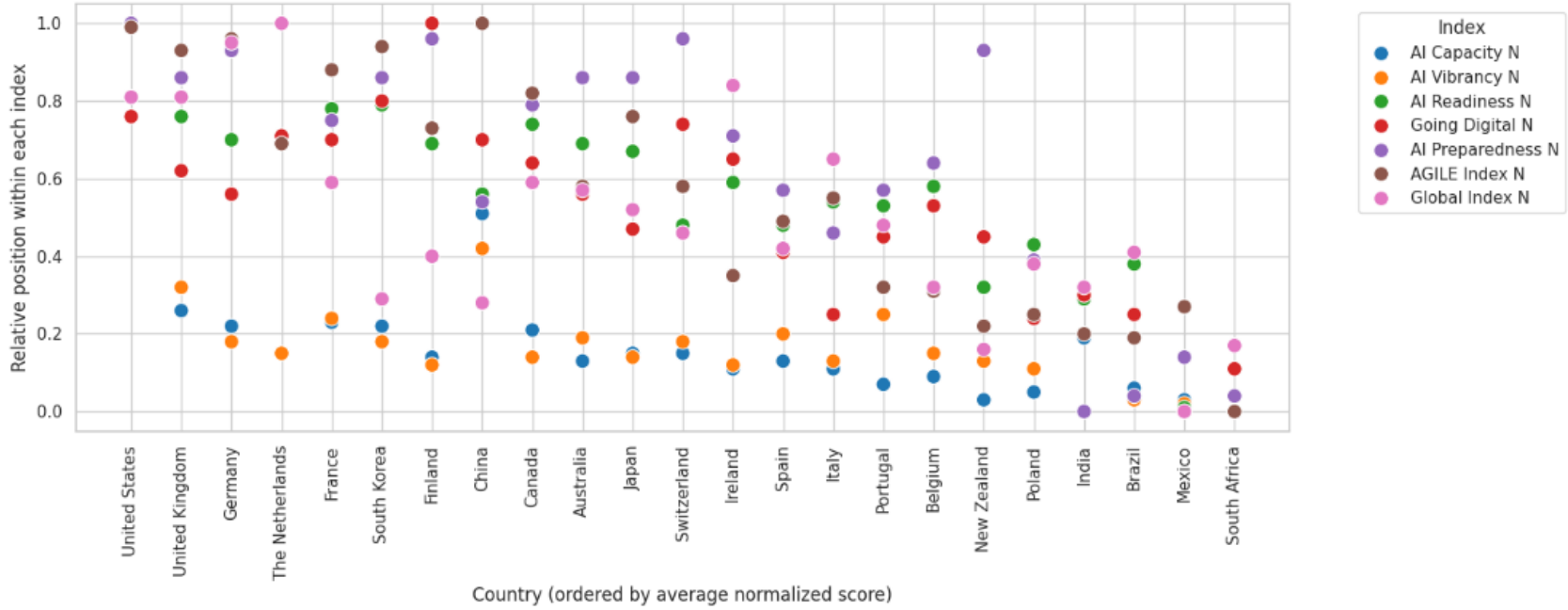
Notes: Dispersion is calculated as the difference between the maximum and minimum ranking across the seven indexes for each country. Further information on the rankings of each index for the countries presented can be found in Appendix I.

Figure 2 shows a beeswarm-style rank spread of the seven indexes, ordered by their average normalized score. As can be seen, consensus leaders (e.g., U.S., U.K., Singapore) appear on the left with relatively tight spreads. Countries like Estonia, China, and India have wide spreads,

showing strong disagreement across indexes. Many developing economies cluster to the right, often with inconsistent scores, reflecting measurement gaps and biases.[4]

[4] Future work could model cross-index relationships using regressions with structural controls to test whether divergences reflect systematic biases related to income level, institutional quality, or regional patterns.

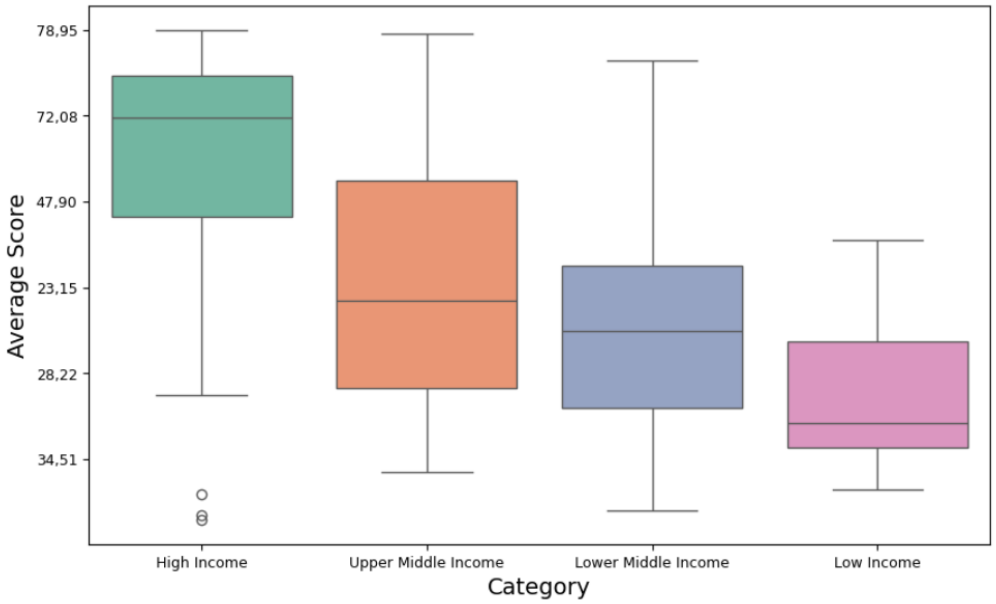
Figure 2. Normalized Rank Spread



Notes: Countries ordered by their average normalized score across six indexes (1 = best, 0 = worst). Y-axis: Relative position within each index (1 = top rank, 0 = last rank). One dot per index for each country. Large vertical spread = strong disagreement across indexes; tight cluster = broad consensus. Only countries present in all six indexes are shown.

Interestingly, while high income countries typically come ahead (Figure 3), the actual correlation between per capita GDP and individual indexes is mostly rather weak (Table 3): Higher income is not necessarily a precondition for AI readiness.

Figure 3. Distribution of AI Index average by per capita income category



Notes: The average score is based on the three indexes with the broadest coverage: Oxford's AI Readiness, IMF's AI Preparedness, and the Global Index on Responsible AI. **High income:** category includes the countries United States, United Kingdom, France, South Korea, Germany, Canada, Japan, Switzerland, The Netherlands, Finland, Australia, Spain, Ireland, Italy, Belgium, Austria, Portugal, Estonia, New Zealand, Slovenia, Chile, Hungary, Greece, Croatia, Lithuania, Romania, Bulgaria, Qatar, Uruguay, Bahrain, Oman, Slovakia, Latvia, Argentina, Panama, Kuwait, Barbados, Guyana, Trinidad and Tobago, Singapore, Saudi Arabia. **Upper middle income:** China, Brazil, Mexico, South Africa, Colombia, Peru, Armenia, Azerbaijan, Albania, Belarus, Botswana, Costa Rica, Dominican Republic, Ecuador, El Salvador, Gabon, Georgia, Guatemala, Jamaica, Kazakhstan, Libya, Mongolia, Montenegro, North Macedonia, Paraguay, Republic of Moldova, Saint Lucia. **Lower middle income:** India, Indonesia, Egypt, Ukraine, Vietnam, Tunisia, Ghana, Nigeria, Benin, Pakistan, Morocco, Kenya, Sri Lanka, Philippines, Bolivia, Cambodia, Cameroon, Congo (Republic), Guinea, Haiti, Honduras, Kyrgyz Republic, Lebanon, Lesotho, Myanmar, Nepal, Senegal, Tajikistan, Tanzania, Zambia, Zimbabwe. **Low income:** Rwanda, Ethiopia, Burkina Faso, Chad, Democratic Republic of Congo, Liberia, Malawi, Mali, Mozambique, Niger, Sierra Leone, Togo, Uganda.

The wide intervals in Figure 3 indicate substantial heterogeneity within upper-middle-income countries, likely reflecting uneven institutional quality and digital infrastructure. Some—such as Uruguay and Chile—approach OECD-level performance, while others lag far behind. This dispersion suggests that within group differences matter as much as cross-group averages.

Table 3. Correlation Matrix: Innovation and R&D Sub-Indexes vs. GDP

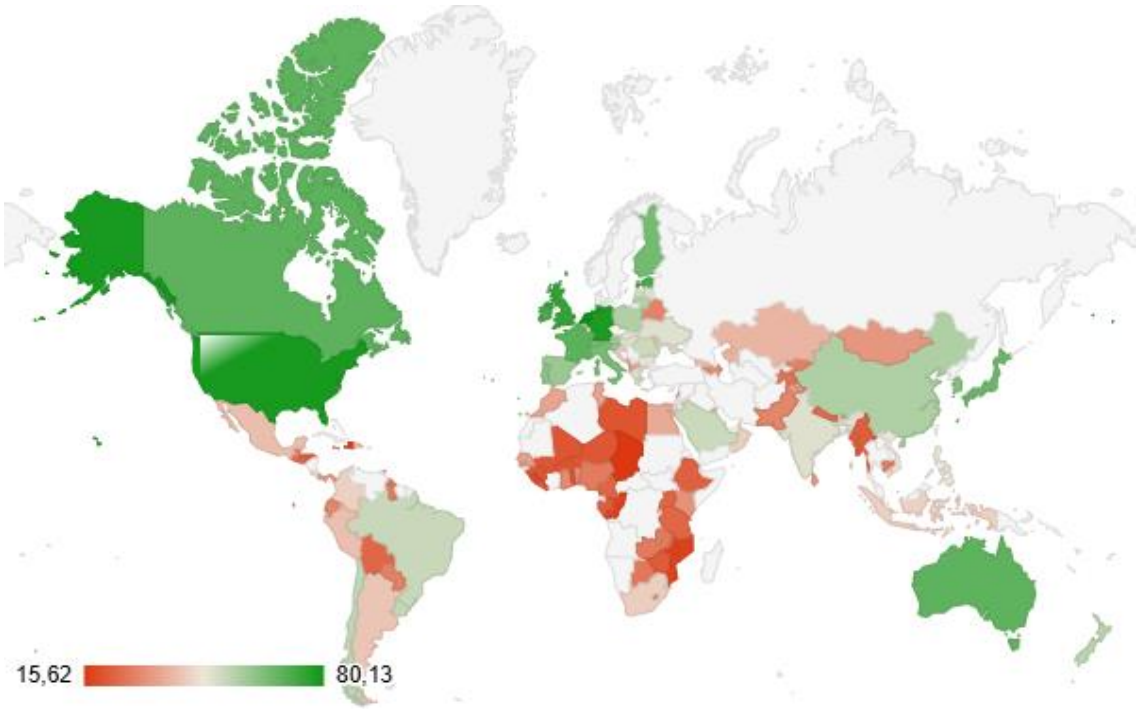
	R&D (Tortoise	**R&D (Stanford)**	**Innovation Capacity (Oxford)**	**Innovation (OECD)**	**Innovation and Economic Integration**	**AI Development Level (AGILE)**

	Media)				(IMF)	
GDP	0.37	0.01	0.59	0.22	0.70	0.70

For additional correlation matrices of sub-indexes, see Appendix I.

Coverage may also introduce some bias, as Africa and Latin America are often underrepresented (Figure 4) or rank systematically lower—not always due to lack of activity, but due to *indicator selection bias* (e.g., reliance on English-language sources or OECD-style metrics) or data availability (to which we will come back below).

Figure 4. 3-index averages by country



Notes: The map shows the average for the 115 countries currently covered by the three indexes with the broadest coverage: Oxford´s AI Readiness, IMF´s AI Preparedness, and the Global Index on Responsible AI.

The discussion above indicates that the low correlations are not mere noise; they reflect deeper conceptual divides over what AI 'readiness' even means and how it should be measured. For policymakers seeking to benchmark progress or guide investment, such inconsistency offers little practical guidance.

Why the Rankings Live in Parallel Universes

Taken together, these mismatches crystallize into five structural problems with AI measurement previewed earlier. First, definitions differ—indexes don't even agree on what counts as AI (Problem #1). Second, they misrepresent reality because of what they fail to

capture—statistical blind spots that penalize informal innovation or non-OECD models (Problem #2). Third, they lag behind fast-moving technological change (Problem #3). Fourth, they apply one-size-fits-all frameworks that ignore contextual differences between advanced economies and developing ones (Problem #4). And finally, they distort policy priorities because governments start to respond to what the indexes reward—investing for visibility rather than local needs (Problem #5).

Together, these five problems explain why the same country can appear both a leader and a laggard depending on who is measuring.

A recent initiative by UNESCO, the **Readiness Assessment Methodology (RAM)** framework, represents important attempts to address these developing country blind spots. Both aim to recalibrate measurement toward inclusion, local relevance, and qualitative context. Yet these efforts also illustrate the inherent trade-off between comparability and depth: the more an index captures local institutional and socio-economic realities, the harder it becomes to maintain cross-country consistency. Conversely, global standardization often flattens context and penalizes non-OECD models of innovation. The challenge, therefore, is not only to fill data gaps but to design adaptive measurement architectures—like the proposed **AARI** (described below)—that preserve comparability while recognizing contextual diversity.

1. The "AI" in AI Readiness Means Different Things

Ask five experts what "artificial intelligence" means for national competitiveness, and you'll get five different answers. Is it about building foundation models? Deploying chatbots in government services? Using computer vision in agriculture? Preventing algorithmic bias in hiring? Creating AI-powered startups?

Each index implicitly chooses different answers, leading to completely different measurement priorities. Stanford focuses heavily on research breakthroughs that might matter in five years. Oxford cares about government applications you could deploy next month. The IMF worries about societal impacts that might unfold over decades.

2. The Data Availability Trap

Here’s a dirty secret of international rankings: they often measure what’s easy to measure rather than what’s important to measure. Economies with better statistical systems, more English-language documentation, and stronger survey response rates systematically appear more “ready” for everything.

Countries may rank lower not because they lack innovation, but because impactful applications often emerge in informal or hybrid sectors. Examples include Kenya’s mobile money ecosystem, India’s agricultural AI services, Brazil’s community health-tech programs, and Nigeria’s fintech

expansion—each showing that frontier technologies can scale even without formal national strategies or large R&D budgets. Yet these developments rarely register in global readiness indexes, which privilege formal R&D spending, published strategies, and government digital infrastructure over adaptive, bottom-up innovation. By contrast, countries that excel at producing AI strategy documents or filing patents in international registries often score higher than those actually deploying AI solutions.

This visibility bias is particularly pronounced in Latin America. Uruguay and Brazil, for instance, have made notable advances in digital governance, open-data infrastructure, and AI ethics. However, because many of these initiatives fall outside standardized indicators—or are documented primarily in Spanish or Portuguese—they remain underrepresented in international datasets and comparative rankings.

In other words, data gaps and methodological shortcuts may skew the picture—rewarding those who can produce countable evidence rather than those who generate real impact.

3. The Timing Tangle

AI moves fast; measurement moves slowly. By the time an index captures a country's AI capabilities, the landscape has often shifted dramatically. Singapore's rapid rise in AI applications, China's generative AI developments, or the EU's regulatory leadership can take years to show up in formal rankings.

Even worse, different indexes update on different schedules using data from different time periods. Comparing a 2024 ranking based on 2022 data with a 2025 ranking using 2023 data is like comparing weather reports from different seasons.

4. The One-Size-Fits-None Problem

Most indexes apply the same measurement framework to Norway and Nigeria, to Singapore and South Africa. But AI readiness for a country with universal broadband and abundant venture capital looks completely different from AI readiness for a country where most people access the internet through mobile phones and AI applications need to work offline.

A developing country that creates ingenious low-bandwidth AI solutions for rural healthcare might score poorly on "infrastructure" while getting no credit for innovation that's actually more impressive than building another AI chatbot in Silicon Valley.

5. The Politics of Measurement

Every index embeds implicit political assumptions about what kind of AI future we should want. Stanford’s emphasis on research output assumes that academic publication leads to practical benefits. Tortoise’s focus on commercialization assumes that venture capital–driven innovation

is optimal. The IMF's preparedness lens assumes that AI will be fundamentally disruptive rather than augmenting. These are not neutral technical choices—they are value judgments about development models, economic systems, and social priorities.

The deeper issue is that these assumptions do not just shape measurement—they shape policies and investment. Because index scores influence reputation, funding, and international visibility, governments often redirect their strategies to align with what the index rewards. In effect, they begin to "invest for the index" rather than for their citizens' needs.

- **Regulation as strategy:** The European Union performs well in preparedness-oriented indexes (IMF, AGILE), which privilege regulatory foresight. This has reinforced its ambition to become the "world's AI regulator" through the AI Act—yet critics argue this comes at the cost of entrepreneurial flexibility and startup dynamism.
- **Commercialization bias:** The United States excels in Tortoise's commercialization-heavy index, reinforcing a policy environment that prioritizes venture capital and unicorn creation. But this comes with relatively less attention to preparedness and inclusive adoption.
- **Glossy institutions:** The UAE established high-profile AI ministries and recruited global talent, among other reasons, to rise in innovation rankings. Similarly, Saudi Arabia launched a new national strategy for data & AI in 2024 that states an objective to rank among the "top 15 countries globally in AI" and "top 10 in the Open Data Index". By contrast, Brazil and Chile have invested in ethics and rights-based AI frameworks that are valuable domestically, but because these don't move rankings dominated by commercialization and patents, they receive little international recognition or capital.[5]

In all these cases, **the measurement frame becomes a policy compass**, regardless of whether it aligns with local priorities. Indexes act not just as scorecards but as *policy signals*, exporting a specific vision of "good AI" and incentivizing countries to conform. This is the deepest paradox: tools meant to measure readiness end up reshaping it—sometimes in ways that distort rather than strengthen real capabilities.

What Should We Actually Be Measuring?

Given this measurement chaos, what's a well-meaning policymaker to do? The answer isn't to find the "best" index—it's to choose measurement frameworks that match your actual policy questions and national context.

[5] That said, there is some anecdotal evidence of *discursive signaling* in that In Latin America, as several countries have published national AI strategies—often in English—to gain visibility in global readiness indexes such as Oxford's, even when implementation budgets are negligible.

I Innovation Leadership

Countries trying to become the next Silicon Valley need measures that predict innovation outcomes:

- **Quality over quantity**: Instead of counting AI papers, measure citation impact and real-world applications.
- **Ecosystem health**: Track how well universities, startups, and corporations collaborate, not just how many AI companies exist.
- **Talent magnetism**: Measure whether top AI researchers want to work in your country, not just whether you graduate AI PhDs.
- **Risk-taking culture**: Assess whether your system rewards ambitious failures, not just documented successes.

AI-Driven Economic Growth

Countries wanting AI to boost productivity and competitiveness need different metrics:

- **Adoption depth**: Measure how deeply AI penetrates across industries, not just how many companies experiment with AI.
- **Productivity impact**: Track actual economic gains from AI deployment, not just investment levels.
- **Market readiness**: Assess whether your businesses can actually integrate AI tools, not just whether AI tools exist.
- **Competitive positioning**: Monitor whether AI is helping your industries compete globally, not just domestically.

Inclusive AI Development

Countries emphasizing equitable AI outcomes need measures that capture social impact:

- **Bias and fairness**: Track algorithmic discrimination in real applications, not just policy statements about fairness.
- **Democratic participation**: Measure citizen engagement in AI policy decisions, not just expert committee meetings.
- **Benefit distribution**: Assess whether AI improvements reach marginalized communities, not just aggregate statistics.
- **Rights protection**: Monitor actual enforcement of AI rights protections, not just legal frameworks on paper.

AI for Development

Emerging economies need frameworks that recognize different pathways to AI success:

- **Leapfrogging innovation**: Credit solutions that bypass traditional infrastructure rather than penalizing for lacking conventional setups.
- **Local adaptation**: Measure how well AI applications address specific development challenges rather than generic business cases.
- **South-South learning**: Track knowledge sharing with similar countries rather than only comparing to traditional AI leaders.
- **Resource efficiency**: Recognize innovations that achieve impact with limited resources rather than only measuring absolute capabilities.

Translating these principles into measurable indicators requires balancing comparability with contextual relevance; illustrative prototypes for how the AARI could operationalize these dimensions are presented in Appendix III.

The Latin America scorecard

Two things become especially clear when viewed from the perspective of developing regions like Latin America and the Caribbean (LAC): The shortcomings of current AI readiness measures, and the fact that the region lags behind most advanced economies on all fronts.

A comparative analysis shows that LAC countries consistently underperform across the five major indexes—even those designed to be inclusive of global development realities. On average, the region scores well below the global benchmark in all five dimensions—AI capacity, research vibrancy, bureaucratic readiness, digital infrastructure, and societal preparedness. The largest gap appears in AI preparedness, where the region reaches only **14% of the normalized global benchmark**, highlighting a blind spot in both policy and measurement.

Yet these results often reflect a *measurement mismatch* rather than genuine unreadiness. Structural realities in LAC—such as high informality, mobile-first connectivity, and resource constraints—are poorly captured by conventional indicators. Countries can appear to lag not because they lack innovation, but because their innovation takes different forms that indexes fail to measure.

- **Uruguay** demonstrates global leadership in **digital public services**, from e-government platforms to digital IDs, but scores modestly because indexes overweight research publications and patents.

- **Chile** has been one of the first in the region to adopt a **national AI strategy** that integrates ethics and education, yet this governance strength is barely visible in the main rankings.

- **Brazil** has advanced in **AI ethics and governance**, launching guidelines on transparency and rights-based AI, but such frameworks are not prioritized in indexes that privilege commercialization or startup ecosystems.

These cases suggest that many LAC countries are innovating *differently, not less*. A good readiness index for LAC—or for any emerging region—should therefore:

- **Calibrate indicators to context**: Avoid penalizing countries for lacking OECD-style infrastructure if they are innovating through low-bandwidth or mobile-first solutions.

- **Prioritize deployment metrics**: Track how governments and firms actually use AI to address pressing problems, from tax administration to disaster response.

- **Highlight resilience readiness**: Given LAC's vulnerability to automation and weak social protection systems, preparedness for disruption must be front and center.

- **Foster regional learning networks**: Indexes should not only rank but also connect countries to learn from each other. Uruguay's digital public services, Chile's AI strategy, and Brazil's ethics initiatives deserve regional visibility and replication.

Ultimately, the LAC case illustrates why adaptive measurement isn't just a theoretical ideal; it is a **practical necessity**.[6]

A comparison of scores across the main indexes paints a stark picture (Figure 5).[7] Latin America consistently falls below the global average, though the size of the gap varies by dimension. The region performs weakest in AI capacity (9 vs. 16) and lags in readiness (50 vs. 56) and preparedness (55 vs. 61). The gap narrows somewhat for digital infrastructure (65 vs. 77) and responsible AI (19 vs. 24). Notably, the AGILE Index presents the region in a more favorable light (58 vs. 77), highlighting how context-sensitive metrics can capture strengths that

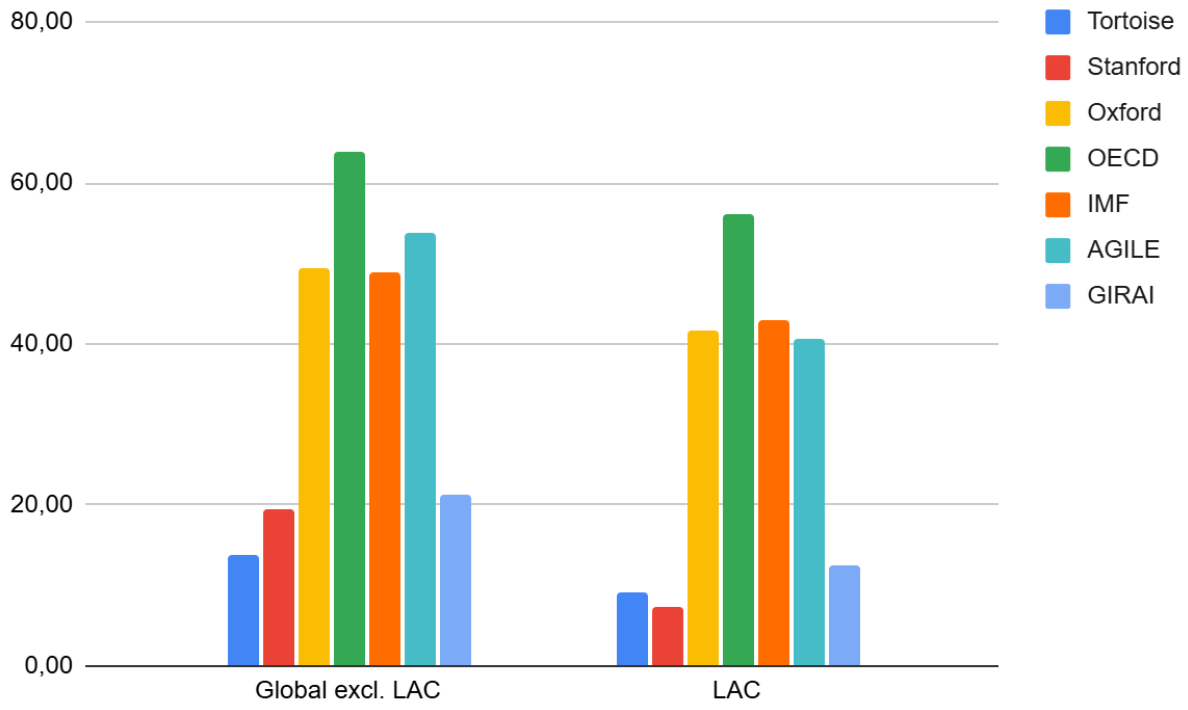
[6] Appendix 1 details a 12-month pilot plan for AARI in LAC, offering a practical roadmap to translate this critique into action.

[7] The *Stanford HAI Global AI Vibrancy Tool (2024)* does not include any Latin American countries in its coverage. This absence is itself evidence of **coverage bias** in existing AI readiness measurement.

conventional indexes tend to overlook. This variation demonstrates why adaptive frameworks are essential to reveal distinctive strengths in regions like LAC.

Taken together, the evidence is unequivocal: across every index—capacity, readiness, infrastructure, preparedness, responsibility—Latin America trails the global average. Coverage gaps and biased metrics may exaggerate some weaknesses, but they do not alter the fundamental picture of a region falling behind at a critical juncture.

Figure 5. Figure LAC vs. rest of the world - Comparative scores across key AI dimensions



Notes: The figure compares average normalized scores (0–100, with 100 = top performer per index) for Latin America and the Caribbean (LAC) and for the global average excluding LAC across six major AI readiness and governance indexes. **Sample:** *AI Capacity (Tortoise Media, 2024)* – LAC sample = 7 countries (Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay); Global excl. LAC = 110 countries. *Bureaucratic Readiness (Oxford Insights, 2023)* – LAC sample = 58 countries (almost entire region, from Argentina to the Caribbean); Global excl. LAC = 306 countries. *Digital Infrastructure (OECD Going Digital, 2025)* – Average of Access TOTAL, Use TOTAL, Innovation TOTAL, Jobs TOTAL. LAC sample = 10 observations (Brazil, Mexico, Chile, Colombia, Costa Rica, some repeated entries for robustness); Global excl. LAC = 78. *AI Preparedness (IMF, 2023)* – LAC sample = 52 countries (South America, Central America, Caribbean); Global excl. LAC = 256 countries. *Responsible AI (GIRAI)* – LAC sample = 34 countries; Global excl. LAC = 240 countries. *Adaptive Readiness (AGILE)* – LAC sample = 12 countries; Global excl. LAC = 66 countries.

Recognizing this comparative lag is the first step. The next is to equip LAC with measurement tools that capture both its vulnerabilities and its distinctive strengths.

Table 4. OLS Regressions of AI Index Scores on GDP per Capita and LAC Region

Index	β_log(GDPpc)	p_log(GDPpc)	γ_LAC	p_LAC	R2
AI Capacity	3.717	0.000	-4.773	0.305	0.179
AI Vibrancy	1.438	0.371	-1.401	0.910	0.026
AI Readiness	7.023	0.000	-9.019	0.001	0.393
Going Digital	3.846	0.002	-1.418	0.772	0.229
AI Preparedness	6.792	0.000	-6.364	0.012	0.434
AGILE	3.202	0.006	-9.992	0.024	0.325
GIRAI	8.146	0.000	-12.711	0.001	0.359

Notes: The dependent variable is the respective index score. Independent variables are the natural logarithm of GDP per capita and a dummy for Latin America and the Caribbean (LAC). "Global excl. LAC" is the reference category for the region variable. Reported coefficients and *p*-values are shown in separate columns. R^2 indicates the proportion of variance explained by the model. Significance levels: $p < 0.10$ †, $p < 0.05$ *, $p < 0.01$ **.

The regression results show a strong and statistically significant relationship between economic development and most AI-related indexes. The coefficient for log(GDP per capita) is positive and significant across nearly all models, indicating that wealthier countries tend to perform better on AI readiness, preparedness, and overall AI capacity. In contrast, the regional dummy for Latin America and the Caribbean (LAC) is negative and statistically significant for several indexes — particularly AI Readiness, AI Preparedness, AGILE, and the Global Index — suggesting that, even after controlling for income levels, LAC countries systematically lag behind other regions in AI-related performance. The relatively moderate R^2 values (ranging from 0.18 to 0.43) indicate that GDP and regional affiliation explain a substantial, though not exhaustive, portion of the cross-country variation in AI outcomes.

An Adaptive AI Readiness Index (AARI)

Latin America could pioneer a new approach: rather than passively absorbing global indexes that miss the region's realities, LAC institutions can take the lead in piloting an Adaptive AI Readiness Index (AARI) tailored to their needs such as the one described in detail in Appendix III. Doing so would position the region to shape the global debate on what it really means to be "AI ready," while aligning its own AI agendas to better prepare for—and benefit from—technological change.

Most efforts to benchmark countries' AI capacity start with a **Composite Readiness-Preparedness Index (CoRPI)** that aggregates indicators of readiness (the ability to adopt AI today) and preparedness (the ability to adapt to AI-driven transformations tomorrow). Such indexes are useful as diagnostic dashboards: they provide a transparent, comparable snapshot across countries, highlighting relative strengths and weaknesses in infrastructure, human capital, governance, or trust.

The CoRPI aggregates comparable subcomponents into six pillars—governance, innovation, infrastructure, skills, inclusion, and adoption—producing a balanced diagnostic architecture (detailed in Appendix II). It provides comparable scores and rankings across countries and relies mainly on internationally available quantitative indicators. It could be used as a baseline diagnostic to identify structural gaps, as a regional benchmark that allows peer comparisons within income groups or regions (e.g., LAC vs OECD), and as a conversation starter with policymakers, showing where their country under- or over-performs relative to peers.

However, as the evidence shows, composite indexes tend to flatten national realities into a single score. As noted, this creates incentives for governments to "invest for the index"—issuing glossy AI strategies, chasing patent counts, or showcasing ministries—rather than investing in the capabilities that matter for their own context.

To avoid these distortions, an **Adaptive AI Readiness Index (AARI)** retains the universal foundations (every country needs digital infrastructure, human capital, institutional quality), but adds modular tracks that countries select according to policy priorities (*innovation accelerator*: research, patents, startup ecosystems; *economic transformation*: sectoral adoption, productivity impacts; *social resilience*: labor adaptability, inclusion, rights; *development catalyst*: leapfrogging, informal sector, rural solutions). Additionally, it embeds adaptive capacity measures such as policy learning, crisis resilience, global integration. Countries select the modules that reflect their strategy, set weights and priorities through stakeholder consultation (government, private sector, civil society) and focus on progress trajectories and context-specific lessons rather than league tables.

Critically, AARI is designed as a voluntary diagnostic tool to inform national policy—not as a condition for development financing or international cooperation. Unlike governance and business climate indexes that explicitly or implicitly influence lending decisions by international financial institutions and private firms, AARI is designed to serve purely as a policy planning instrument. This decoupling from financing conditionality is essential to prevent the same 'investing for the index' behavior that often plagues other rankings. Indeed, because AARI measures gaps against self-selected policy goals rather than producing ordinal rankings, it eliminates zero-sum competition: closing Uruguay's digital government gaps does not require outperforming Estonia.

Thus, the AARI reduces perverse incentives by shifting focus from global rankings to local priorities, makes visible the distinctive strengths of Global South countries (e.g., mobile-first solutions, low-bandwidth AI) and encourages regional cooperation, as similar countries can share modular indicators and lessons (e.g., LAC digital government pilots).

Table 5. Complementary Use of a CoRPI and the AARI

Dimension	CoRPI	AARI	Complementarity
Purpose	Provide a baseline diagnostic: where a country stands today relative to peers.	Serve as a policy design and learning tool: tailor priorities to local needs and strategies.	Composite identifies gaps; AARI helps design responses.
Structure	Fixed pillars (readiness: infrastructure, human capital,	Universal foundations + modular tracks (innovation, economic transformation, social resilience,	Composite offers comparability; AARI adds

	innovation; preparedness: governance, trust, resilience).	development catalyst) + adaptive capacity.	flexibility and contextual nuance.
Indicators	Mainly quantitative, globally available (ITU, UNESCO, OECD, Freedom House).	Mix of quantitative and qualitative, deployment-first (e.g., % of services using AI, leapfrogging innovations, stakeholder engagement).	Composite provides hard data baseline; AARI captures real-world deployment and inclusion.
Output	Single composite scores and cross-country rankings.	Multi-track scorecards, trajectories, and contextual narratives (no global league table).	Composite facilitates regional or global benchmarking; AARI fosters policy ownership and learning.
Weighting	Technocratic (equal weights or PCA).	Participatory (citizen- and stakeholder-defined weights).	Composite ensures objectivity; AARI ensures legitimacy and local alignment.
Use Cases	Benchmarking across countries; communicating strengths/weaknesses; attracting investment.	Designing AI strategies; monitoring progress; aligning policies with social and development goals.	Together, they move from "where do we stand?" (Composite) to "where do we go, and how?" (AARI).
Risks if used alone	Risk of "investing for the index" (cosmetic reforms, patent chasing).	Risk of fragmentation and loss of comparability if only country-specific.	Used jointly, they balance comparability (Composite) and contextual relevance (AARI).

Note: CoRPI produces comparable rankings and composite scores useful for baseline diagnostics and peer comparison. AARI produces gap measures, progress trajectories, and modular profiles—not ordinal rankings—which fundamentally changes the incentive structure by eliminating zero-sum competition between countries.

Given the divergences and perverse incentives documented earlier—and the natural complementarities between different approaches (Table 5)—, a two-step approach (Composite + AARI) reduces noise while enhancing policy relevance. Rather than viewing them as alternatives, they should be seen as complementary: the composite index provides a comparable baseline diagnostic, while the AARI adapts measurement to local priorities and policy needs. The next step is to pilot the AARI framework in partnership with regional institutions and governments, as a proof of concept that can inform global AI readiness measurement.

From Regional Pilot to Global Model

The ultimate purpose of AI readiness measurement isn't to create perfect rankings—it's to help countries make better decisions about their AI futures. This requires moving beyond

technocratic exercises toward participatory processes that connect measurement to democratic deliberation about the kind of AI-enabled society we want to build.

Current AI readiness indexes often feel like report cards issued by distant experts using opaque methodologies. A composite of those indexes could be complemented by an AARI that flips this dynamic: Instead of ranking countries from 1 to 100, AARI would help Singapore learn from Estonia's digital government innovations, enable Kenya to share its mobile AI solutions with other African countries, and allow Denmark to understand how its social protection systems compare to other Nordic approaches to AI disruption.

The low correlations among existing indexes aren't measurement failures—they're opportunities to learn the complexity of the AI landscape and build better tools that serve real policy needs rather than satisfying academic curiosity. The choice isn't between good rankings and bad rankings. It's between measurement systems that help countries navigate AI futures thoughtfully versus systems that reduce complex policy challenges to simplistic league tables.

As AI reshapes global power dynamics and economic structures, getting measurement right is not just a technical exercise but a prerequisite for ensuring that its benefits are broadly shared and its risks carefully managed. Piloting the Adaptive AI Readiness Index in Latin America would position the region as a testbed for a model of AI governance and measurement with global relevance.

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Appendix I. Additional tables and figures

Notes: For each index, we used the official published scores as provided by each source: Global Index on Responsible AI (2024), IMF AI Preparedness Index (2023), OECD Going Digital Toolkit (2025), Oxford Insights Government AI Readiness Index (2023), Stanford Global AI Vibrancy Tool (2024), Tortoise Global AI Index (2024) and AI Governance International Evaluation Index from Global AI Governance Observatory (2025).

The analysis includes all listed countries.

Pairwise correlations were computed on the raw score vectors (not ranks), using the built-in correlation function (=CORREL) in spreadsheet software, which returns the Pearson correlation coefficient between two score vectors.

The “average correlation = 47%” reflects the simple mean of all pairwise correlations across indexes; when including the AGILE Index in this calculation, the average falls to 33%

Rank Comparison - Selected countries

	Estonia	China	India	United States	United Kingdom
AI Capacity Tortoise Media Overall	12.00	54.00	24.00	100.00	30.00
AI Capacity Tortoise Media **Ranking**	**32 (83)**	**2**	**10**	**1**	**4**
AI Vibrancy Stanford Overall	9.50	35.27	27.42	75.47	28.29
AI Vibrancy Stanford **Ranking**	**32 (36)**	**2**	**4**	**17**	**3**
AI Readiness Oxford Overall	72.62	72.01	62.81	87.03	78.88
AI Readiness Oxford **Ranking**	**21 (183)**	**23**	**45**	**1**	**5**
Going Digital OECD Overall	74.33	71.29	62.33	72.76	69.66
Going Digital OECD **Ranking**	**2 (44)**	**11**	**25**	**5**	**15**
AI Preparedness IMF Overall	76.00	64.00	49.00	77.00	73.00
AI Preparedness IMF **Ranking**	**5 (191)**	**29**	**65**	**3**	**12**
AI Governance International Evaluation Overall	-	70.10	41.00	69.90	67.60
AI Governance International Evaluation **Ranking**	**- (40)**	**1**	**34**	**2/40**	**5/40**
Global Index on Responsible AI Overall	67.61	35.30	38.51	72.81	73.12
Global Index on Responsible AI **Ranking**	**6 (138)**	**32**	**25**	**5**	**4**

Notes: The number of observations (in parentheses) differs across indexes. AI Capacity from Tortoise Media has 83, AI Vibrancy from Stanford has 36, AI Readiness from Oxford 183, Going Digital from OECD has 44, AI Preparedness from IMF has 191, AI Governance International Evaluation Index from Global AI Governance Observatory has 40 and the Global Index on Responsible AI has 138.

Correlation Matrix of Innovation and R&D Sub-Indexes

	R&D (AI Capacity)	**R&D** (AI Vibrancy)	**Innovation Capacity** (AI Readiness)	**Innovation** (Going Digital)	**Innovation and Economic Integration** (AI Preparedness)
R&D (AI Capacity)	**1**				
R&D (AI Vibrancy)	0.86	**1**			
Innovation Capacity (AI Readiness)	0.66	0.55	**1**		
Innovation (Going Digital)	0.49	0.30	0.69	**1**	
Innovation and Economic Integration (AI Preparedness)	0.44	0.02	0.75	0.47	**1**
AI Development Level (AGILE)	0.68	0.55	0.84	0.58	0.78

Notes: The amount of observations differs between indexes. R&D (mean between Research and Development) AI Capacity from Tortoise Media has 83, R&D AI Vibrancy from Stanford has 36, Innovation Capacity AI Readiness from Oxford 183, Innovation Going Digital from OECD has 44, Innovation and Economic Integration AI Preparedness from IMF has 191 and AI Development AI Governance International Evaluation Index from Global AI Governance Observatory.

Correlation Matrix of Infrastructure and Technical Capabilities Sub-Indexes

	Infrastructure (AI Capacity)	Infrastructure (AI Vibrancy)	Infrastructure (AI Readiness)	Digital Capacity (AI Readiness)	Access (Going Digital)	Digital Infrastructure (AI Preparedness)	AI Development Level (AGILE)	Responsible AI capacities (Global)
Infrastructure (AI Capacity)	1							
Infrastructure (AI Vibrancy)	0,60	1						
Infrastructure (AI Readiness)	0.72	0.44	1					
Digital Capacity (AI Readiness)	0.56	0.18	0.83	1				
Access (Going Digital)	0.45	0.42	0.82	0.58	1			
Digital Infrastructure (AI Preparedness)	0.62	0.35	0.92	0.83	0.84	1		
AI Development Level (AGILE)	0.70	0.50	0.82	0.60	0.71	0.81	1	
Responsible AI capacities (Global)	0.65	0.37	0.82	0.83	0.64	0.77	0.66	1

Correlation Matrix of Talent, Education and Human Capital Sub-Indexes

	Talent (AI Capacity)	Education (AI Vibrancy)	Human Capital (AI Readiness)	Jobs (Going Digital)	Human Capital and Labor Market Policies (AI Preparedness)	non-state actors (Global)
Talent (AI Capacity)	1					
Education (AI Vibrancy)	0.38	1				
Human Capital (AI Readiness)	0.54	0.28	1			
Jobs (Going Digital)	0.25	0.04	0.59	1		
Human Capital and Labor Market Policies (AI Preparedness)	0.47	0.02	0.78	0.28	1	
non-state actors (Global)	0.51	0.28	0.63	0.33	0.58	1

Correlation Matrix of Governance Sub-Indexes

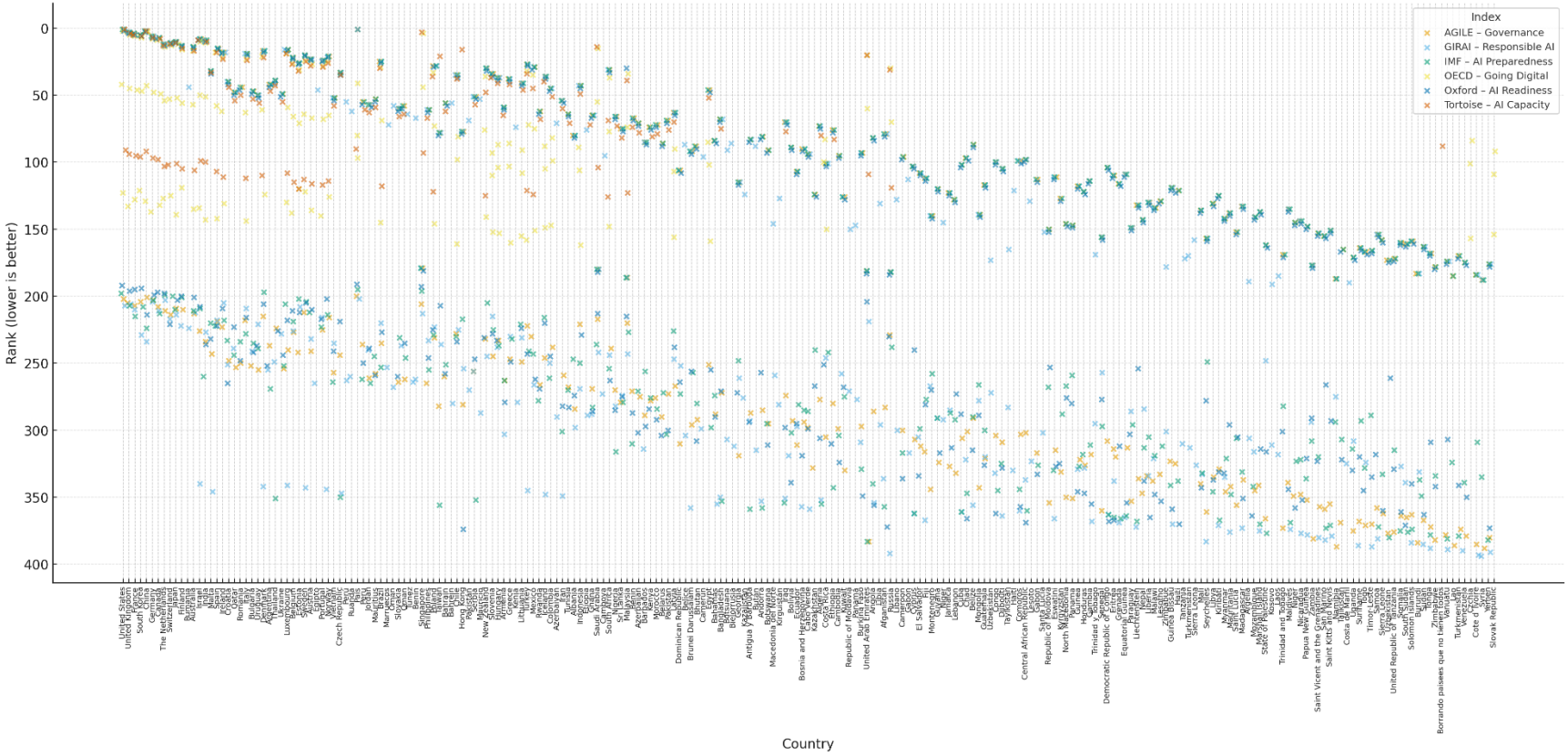
	Government Strategy (AI Capacity)	Governance and Ethics (AI Readiness)	Regulation and Ethics (AI Preparedness)	AI Governance Environment (AGILE)	AI Governance Instruments (AGILE)	AI Governance Effectiveness (AGILE)	Government frameworks (Global)	Government actions (Global)	Responsible AI governance (global)
Government Strategy (AI Capacity)	1								
Governance and Ethics (AI Readiness)	0.40	1							
Regulation and Ethics (AI Preparedness)	0.30	0.85	1						
AI Governance Environment (AGILE)	-0.17	0.02	-0.15	1					
AI Governance Instruments (AGILE)	0.73	0.15	0.31	-0.34	1				
AI Governance Effectiveness (AGILE)	0.31	0.16	0.33	-0.23	0.29	1			
Government frameworks (Global)	0.43	0.76	0.73	-0.09	0.27	0.04	1		
Government actions (Global)	0.60	0.71	0.73	-0.40	0.60	0.39	0.74	1	
Responsible AI governance (global)	0.54	0.79	0.78	-0.32	0.54	0.32	0.90	0.92	1

Correlation Matrix of Economy and Business Environment Sub-Indexes

	Commercial (AI Capacity)	Economy (AI Vibrancy)	Market Openness (Going Digital)	Innovation and Economic Integration (AI Preparedness)
Commercial (AI Capacity)	1			
Economy (AI Vibrancy)	0.74	1		
Market Openness (Going Digital)	0.35	0.29	1	
Innovation and Economic Integration (AI Preparedness)	0.47	0.31	0.56	1

Note: All pairwise correlations were computed over the intersection of countries common to both indexes. When sample sizes differ, coefficients should be interpreted with caution, since Pearson correlations are not directly comparable across samples of different sizes.

Rank Spread Across AI Indexes (Countries Ordered by Average Normalized Score)



Notes: Countries are arranged left to right by their *average normalized score* across six AI indexes. Higher-scoring countries appear on the left, lower-scoring on the right. Each dot shows the country's rank in a specific index. Ranks are inverted (Rank 1 at the top = better). A wide vertical spread means indexes disagree sharply about a country's position; a tight cluster means relative consensus. Consensus leaders (e.g., U.S., U.K., Singapore) appear on the left with relatively tight spreads. Countries like Estonia, China, and India have wide spreads, showing strong disagreement across indexes. Many developing economies cluster to the right, often with inconsistent scores, reflecting measurement gaps and biases.

Appendix II. How CoRPI Aggregates Existing Index Data

The Composite Readiness and Preparedness Index (CoRPI) does not average full indexes. Instead, it reconstructs them from the ground up—combining subcomponents that capture comparable aspects of AI readiness across different sources.

The goal is to preserve empirical continuity with established measures (e.g., Oxford, IMF AGILE, Tortoise, Stanford) while eliminating conceptual overlaps and income biases.

Step 1. Mapping comparable dimensions.
Each existing index was decomposed into its lowest available subcomponents (e.g., "governance quality," "AI research intensity," "digital infrastructure," "human capital," "data accessibility"). These were grouped into six overarching pillars that together define AI readiness and adaptability:

1. **Governance and Regulation** (strategy, ethics, accountability mechanisms)
2. **Innovation and Research** (R&D inputs, patents, startups, technology transfer)
3. **Digital Infrastructure** (connectivity, cloud capacity, interoperability standards)
4. **Human Capital and Skills** (education, digital literacy, reskilling systems)
5. **Inclusion and Ethics** (social reach, gender balance, responsible AI frameworks)
6. **Adoption and Impact** (AI diffusion, sectoral deployment, productivity effects)

Step 2. Normalizing and aligning indicators.
Subcomponents from each source are **normalized to a 0–1 scale** and checked for **conceptual overlap**. When two indicators measure similar constructs (e.g., "AI strategy existence" in Oxford and "policy framework" in AGILE), one is retained and the other used for cross-validation.

Step 3. Aggregation within pillars.
Within each pillar, normalized subcomponents are averaged using equal weights at this stage, though the structure allows for **context-specific weighting** in future applications (e.g., emphasizing inclusion in LAC, innovation in Asia).

Step 4. Building the CoRPI diagnostic.
The six pillar scores form the CoRPI dashboard. The index can be used either as a balanced composite (for cross-country comparison) or as a modular diagnostic (to visualize asymmetries between governance, infrastructure, and innovation readiness).

Step 5. Enabling customization and transparency.
Because CoRPI is built from transparent, public subcomponents, users can **rebuild the index according to their priorities**—for instance, focusing only on governance and skills to assess

social preparedness, or on innovation and infrastructure to guide industrial policy. This flexibility contrasts with opaque, pre-weighted global indexes that mask structural trade-offs.

Table A1. Indicative aggregation matrix:

Pillar	**Illustrative Subcomponents**	**Source(s)**
Governance	AI strategy implementation, regulatory oversight, algorithmic accountability	Oxford, Stanford, UNESCO
Innovation	R&D expenditure, AI patents, startup density	Tortoise, IMF AGILE
Infrastructure	Connectivity, cloud services, open data	IMF, OECD, Oxford
Skills	STEM graduates, AI education, workforce reskilling	Oxford, UNESCO
Inclusion	Ethical frameworks, gender parity, accessibility	UNESCO, GIRAI
Adoption	AI firm use, productivity effects, export of AI services	IMF, OECD, Tortoise

This modular structure allows CoRPI to evolve as new data become available while maintaining backward compatibility with existing indicators. Rather than producing a single definitive ranking, it provides a measurement architecture—a common empirical spine that can support country diagnostics, benchmarking, and adaptive AI-readiness policymaking.

Appendix III. A Blueprint for An Adaptive AI Readiness Framework for Latin American Countries (AARI-LAC)

This Appendix expands on the measurement framework presented above. It illustrates how the Adaptive AI Readiness Index (AARI) could be operationalized through prototype indicators for distinct policy priorities. These examples are illustrative and designed to guide pilot testing, not to prescribe a fixed template.

Three Pillars, Infinite Possibilities

- **Universal foundations.** country needs basic building blocks, regardless of their AI ambitions:
  - **Digital infrastructure**: Not just fiber optic cables, but reliable electricity and mobile connectivity
  - **Human capital**: Not just AI PhDs, but populations comfortable with digital technology
  - **Institutional quality**: Not just AI strategies, but governments that can actually implement complex policies
  - **Economic fundamentals**: Not just venture capital, but stable economic conditions that enable long-term planning
- **Strategic modules.** Countries select measurement modules based on their actual AI priorities:
  - *The innovation accelerator module*: For countries chasing AI breakthroughs
    - ✔ Track research excellence, patent quality, startup ecosystem health
    - ✔ Measure international collaboration, talent attraction, risk capital availability
    - ✔ Assess technology transfer, commercialization speed, global market penetration
  - *The economic transformation module*: For countries focused on AI-driven growth
    - ✔ Monitor sectoral AI adoption, productivity improvements, export competitiveness
    - ✔ Track business readiness, digital transformation progress, workforce adaptation
    - ✔ Measure market dynamics, regulatory responsiveness, international integration
  - *The social resilience module*: For countries prioritizing inclusive AI
    - ✔ Assess algorithmic fairness, digital rights protection, participatory governance

      Monitor benefit distribution, marginalized group access, democratic accountability

- ✔ Track social protection adequacy, community engagement, rights enforcement
- *The development catalyst module*: For countries using AI to accelerate development
  - ✔ Measure leapfrogging innovation, local adaptation, resource efficiency
  - ✔ Track development impact, rural-urban connectivity, informal sector integration
  - ✔ Assess regional cooperation, knowledge sharing, sustainable innovation

➢ **Adaptive capacity.** All countries need resilience for an uncertain AI future:

- **Learning systems**: Institutions that update policies based on evidence rather than ideology
- **Social cohesion**: Societies that can navigate technological change without fracturing
- **Global integration**: Ability to participate in international AI cooperation and governance
- **Crisis resilience**: Capacity to maintain AI benefits while managing AI risks

Measurement Principles

1. **Development-stage calibration**. Indicators would be calibrated to countries' development contexts. A 50% smartphone penetration rate means something different in rural Mali than in urban Singapore. The framework recognizes these differences rather than applying one-size-fits-none standards.
2. **Progress trajectories over snapshots**. Instead of static rankings, AARI would highlight countries making rapid progress regardless of starting position. The fastest-improving countries often provide the most interesting policy lessons, even if they're not current leaders.
3. **Story behind the statistics.** Quantitative indicators would be paired with qualitative assessments explaining why countries succeed or struggle. Policy learning happens through understanding context, not just comparing numbers.
4. **Multi-stakeholder validation**. Country assessments would be validated through consultations with diverse stakeholders—civil society, businesses, academia, citizens—ensuring measurements reflect ground truth rather than statistical abstractions.

Making It Happen: From Concept to Reality

Building AARI requires coordination among international organizations, national governments, and research institutions. Here's a realistic pathway:

Year 1: Proof of concept Start small with volunteer countries representing diverse development contexts. Test the modular framework, refine indicators based on user feedback, and demonstrate that adaptive measurement actually works better than one-size-fits-all

approaches. Governance of AARI would be country-led, with participating nations setting their own module priorities and weights through multi-stakeholder consultations. Regional institutions (IDB, CAF, ECLAC) provide technical support and facilitate peer-learning networks, but do not evaluate or score countries. This ownership model reinforces AARI's nature as self-diagnostic infrastructure rather than external assessment.

Years 2-3: Scaling and learning Expand to 30-50 countries, train national statistical offices in AARI methodologies, and create policy dialogue mechanisms that connect measurement to strategy development. The goal isn't just better numbers—it's better policy conversations.

Years 4-5: Global infrastructure Establish permanent institutions for AARI maintenance, integrate the framework into international cooperation mechanisms, and create policy learning networks that help countries learn from each other's AI development experiences. What would move countries to participate in AARI if no financing is at stake? Three factors should drive adoption: (1) genuine policy value— actionable diagnostics to inform strategy rather than a PR device; (2) regional knowledge-sharing—peer learning networks where Uruguay shares digital government lessons, Chile discusses ethics frameworks, and Brazil explores governance innovations; and (3) reputational benefits from demonstrating learning capacity and policy sophistication rather than from climbing a league table. Thus, **the AARI serves as a policy compass**—helping countries navigate their own AI development paths rather than racing toward someone else's finish line

From Principles to Prototypes: Measuring What Matters

The following illustrative indicators demonstrate how AARI can operationalize its conceptual framework. They are not prescriptive but suggest how countries might measure progress according to distinct strategic orientations.

If You're Chasing AI Innovation Leadership

Policy priority: Stimulating AI innovation and knowledge production.

Quality over quantity

- Field-weighted citation impact of AI publications.
- Share of AI research with documented deployment in products or services.
- Number of patents leading to commercialized applications (not just filings).

Ecosystem health

- Share of joint university–startup–corporate AI projects funded annually.

- Share of startups receiving venture-capital co-investments with universities or public labs.
- Existence and connectivity of national or regional AI clusters (network analysis of firms, labs, incubators).

Talent magnetism

- Net migration balance of AI researchers (inflow − outflow, tracked via LinkedIn/ORCID).
- Share of top 500 cited AI authors affiliated with national institutions.
- Number of international AI fellows or visiting scholars hosted annually.

Risk-taking culture

- Share of AI startups that failed but whose founders launched new ventures (serial entrepreneurship rate).
- Share of public or private R&D funding allocated to high-risk/high-reward AI projects.
- Survey-based measures of tolerance for failure among entrepreneurs and investors.

If You're Pursuing AI-Driven Economic Growth

Policy priority: Accelerating productivity and competitiveness through AI adoption.

Diffusion across sectors

- Share of firms (by size and sector) adopting AI tools in production, logistics, or customer management.
- Share of manufacturing value added generated by AI-enabled processes.
- Number of SMEs receiving technical assistance or credit for AI adoption.

Productivity spillovers

- Growth in total factor productivity in AI-intensive sectors relative to non-AI sectors.
- Share of domestic suppliers integrated into AI-enabled value chains.
- Share of government procurement contracts that include AI-based efficiency components.

Investment climate

- Share of foreign direct investment in AI or automation sectors.
- Ratio of venture-capital funding in AI startups to total tech VC investment.

- Existence of national credit or guarantee instruments for AI adoption by SMEs.

If You're Building Inclusive AI

Policy priority: Ensuring that the benefits of AI extend to all segments of society.

Access and equity

- Share of rural or low-income schools with access to AI-enabled educational tools.
- Gender and socioeconomic distribution of participants in AI-related training programs.
- Share of AI startups led by women or under-represented groups.

Trust and rights

- Existence and enforcement of national AI ethics frameworks or algorithmic-impact assessments.
- Share of public-sector AI projects with ex-ante transparency or bias-testing reports.
- Frequency of independent audits of high-risk AI systems.

Social outcomes

- Measured impact of AI on employment quality and inclusion (e.g., jobs created vs. displaced).
- Share of social-protection programs using AI responsibly for targeting or fraud detection.
- Public trust index in AI governance institutions (survey-based).

If You're Using AI as a Development Catalyst

Policy priority: Leveraging AI for broader national-development goals.

Public-sector transformation

- Share of government services using AI for delivery, monitoring, or citizen engagement.
- Average processing time reduction in digital services after AI integration.
- Number of AI-enabled policy experiments or "AI sandboxes" in social sectors.

Data and infrastructure readiness

- Existence of national data-governance frameworks aligned with open-data standards.
- Share of public datasets meeting interoperability and quality criteria.

- Energy and connectivity indicators for AI infrastructure (renewable share, compute capacity).

Sustainability and resilience

- Share of AI projects addressing SDG-related challenges (climate, health, agriculture).
- Share of AI research focused on low-resource or local-language applications.

Existence of cross-border collaborations for AI-for-development initiatives.