The AI Matrix as Diagnostic: Access, Agency, and Adoption

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Abstract

This paper operationalizes the AI Matrix (Simpson, 2025), a two axis diagnostic of Access and Agency, using public summary data to support national AI strategy. Using public data from the IMD World Digital Competitiveness Report (WDCR) 2025 subfactor ranks (N = 69 economies), we construct Access (regulatory framework, capital, technological framework) and Agency (talent, training and education, scientific concentration) by inverting ranks so 'higher means better' when graphed. Adoption is proxied by IT integration. We place countries on the AI Matrix using median splits and test the Matrix's central claim that adoption rises with both axes but is capped by the weaker side. A falsification step searches for counterexamples (top quartile adoption with one axis below its median) and finds none. Correlations computed on inverted composites (Pearson) and as a rank based check (Spearman) show the strongest association between Adoption and the bottleneck proxy minimum (Access, Agency), not with an average or a difference. Robustness is probed by swapping the adoption proxy (cloud or ERP series), checking short run movement across adjacent years, and adding a light equity overlay (usage, trust, affordability) to guard against national average bias. We provide a minimal replication bundle and a Transition Playbook that translates Matrix position into near term policy actions. Limitations are noted (ordinal ranks, perceptual signal, within country heterogeneity). Even so, the AI Matrix offers a transparent, reproducible orientation tool for coordinated decision-making and a bridge to further deeper causal analysis.

Keywords: artificial intelligence; IMD; empowerment; dependency; economic development; digital transformation.

1. Introduction

Leaders in government, universities, and firms face an overload of AI metrics but lack a common frame to start. The AI Matrix compresses the problem to two questions that any senior team can answer:

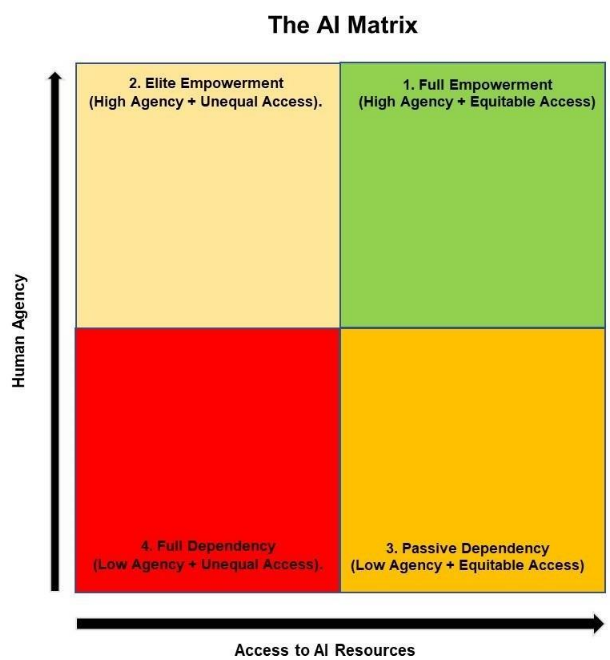
- Do we have broad **Access** to technology, capital, and infrastructure?
- Do we have broad **Agency** in the form of talent, training, and research?

This two dimensional frame is simple, but it is not simplistic. It provides a way to classify a national position and, more importantly, to plan a move to a better position. The contribution of this paper is practical. We show that a useful version of the Matrix can be run with minimal public data, we validate the bottleneck logic with a falsification test, and we deliver a short transition playbook to translate the plot into action. The result is a compact, transparent tool that supports both diagnosis and near-term action

2. Framework: Access, Agency, and Quadrants

Access represents the enabling context for digital adoption. It includes regulation that allows entry and competition, financial capital to fund adoption, and infrastructure that makes tools usable at scale. Agency represents capability to turn tools into value. It includes talent, training systems, and scientific and engineering capacity. Plotted together, the axes define four states as shown in Figure 1. Full Empowerment is high Access and high Agency. Elite Empowerment is high Access with low Agency. Passive Dependency is low Access with high Agency. Full Dependency is low on both[1].

Figure 1: AI Dependency-Empowerment Matrix



Source. Simpson (2025)

Quadrants are not fixed labels. The core strategic question is how to move from a less advantaged state to a more empowered state at the lowest cost and with the highest probability of success.

[1] See Simpson, E. (2025) The AI Matrix: Empowerment or Dependency? A Conceptual Framework. http://dx.doi.org/10.2139/ssrn.5228571 for a full explanation of the AI Matrix.

3. Data and proxies

We adopt a minimal specification that anyone can replicate without heavy collection. Access is proxied by the IMD Technology pillar which aggregates Regulatory Framework, Capital, and Technological Framework (IMD, 2025). Agency is proxied by the IMD Knowledge pillar which aggregates Talent, Training and Education, and Scientific Concentration (IMD, 2025). We invert ranks as InvRank = (N+1) − Rank so that 'higher' is 'better'; all results are reproducible from the nine sub-factor ranks listed in Appendix 1. Future Readiness is kept in reserve as a translator since it includes Adaptive Attitudes, Business Agility, and IT Integration. For an adoption proxy we use IT Integration itself. This is not a perfect measure of realized AI use, but it is a reasonable direction signal for firm level digital adoption. Where possible, the analysis should be rerun with a richer adoption proxy such as cloud uptake or ERP penetration. Figure 2 presents the minimal fields required to reproduce the plots and tests.

Figure 2: Key Fields for Analysis

Field	Rationale	Notes
Country, Year	Keys	WDCR 69 economies used here
Technology pillar or inverted rank	Access proxy	Regulatory, Capital, Technological Framework
Knowledge pillar or inverted rank	Agency proxy	Talent, Training and Education, Scientific Concentration
IT Integration inverted rank	Adoption proxy	Translator in IMD Future Readiness
Optional equity measures	Guardrail	Internet users, secure servers, broadband coverage
Source reference	Audit	Page numbers or profile references

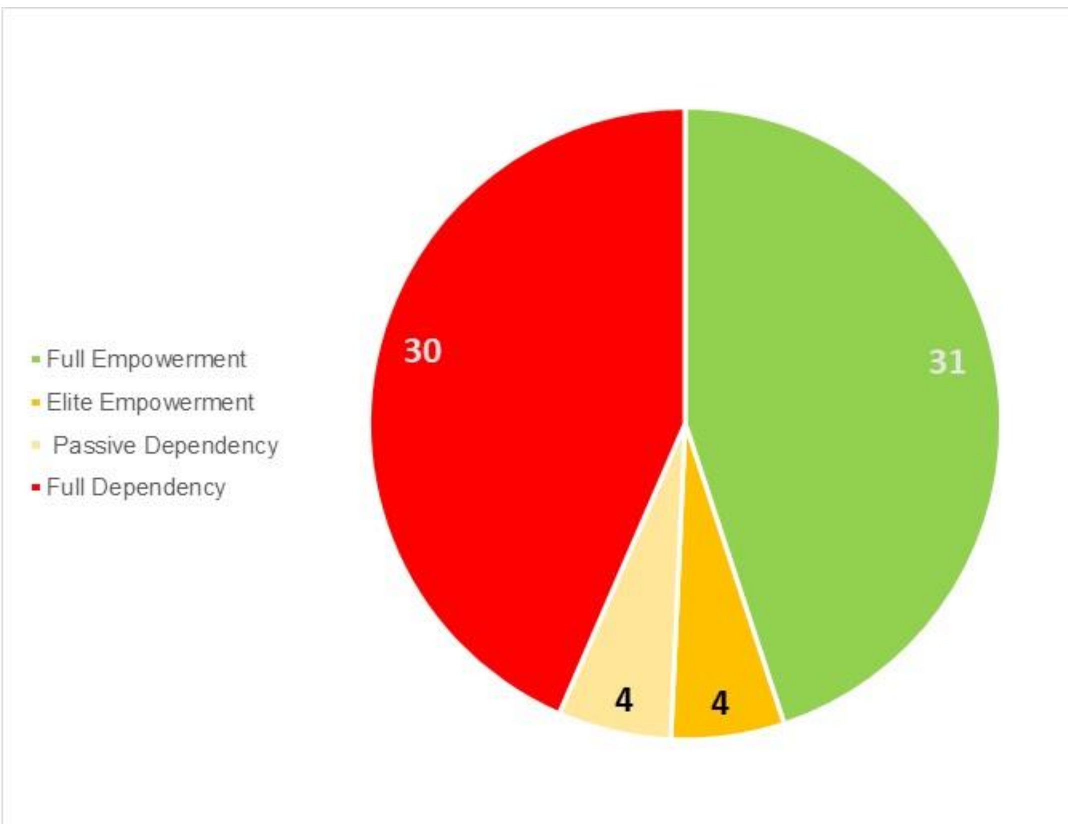
4. Methods

The analysis follows five steps. All source data is drawn from the IMD World Digital Competitiveness Ranking (IMD, 2025). First, we compute Access as the mean of inverted ranks for Regulatory Framework, Capital, and Technological Framework. Second, we compute Agency as the mean of inverted ranks for Talent, Training and Education, and Scientific Concentration. Third, we compute an adoption proxy using the inverted rank for IT Integration. Appendix 1 presents the derived table. Fourth, we set medians on Access and Agency and classify countries into quadrants. Fifth, we test the Matrix with a falsification plan. If the model is weak, we should find countries with high adoption despite a weak axis that ought to be binding. We therefore search for counterexamples. We look for High Access with Low Agency cases that still have high adoption, and for High Agency with Low Access cases that still have high adoption. We also compare adoption against the minimum of Access and Agency which is the bottleneck logic of the Matrix.

5. Results

All correlations are computed for 69 economies (in 2025). Co-movement is strong. The correlation between Access and Agency is 0.901. Adoption rises with both axes. The correlation between adoption and Access is 0.878, and the correlation between adoption and Agency is 0.894. The bottleneck story holds. Adoption correlates best with the minimum of the two axes with a correlation of 0.899. Quadrant counts from a median split are as follows and as shown in Figure 3: Full Empowerment 31, Elite Empowerment 4, Passive Dependency 4, Full Dependency 30.

Figure 3: Country Distribution of AI Matrix Quadrant Positions IMD WDCR 2025 (n=69)

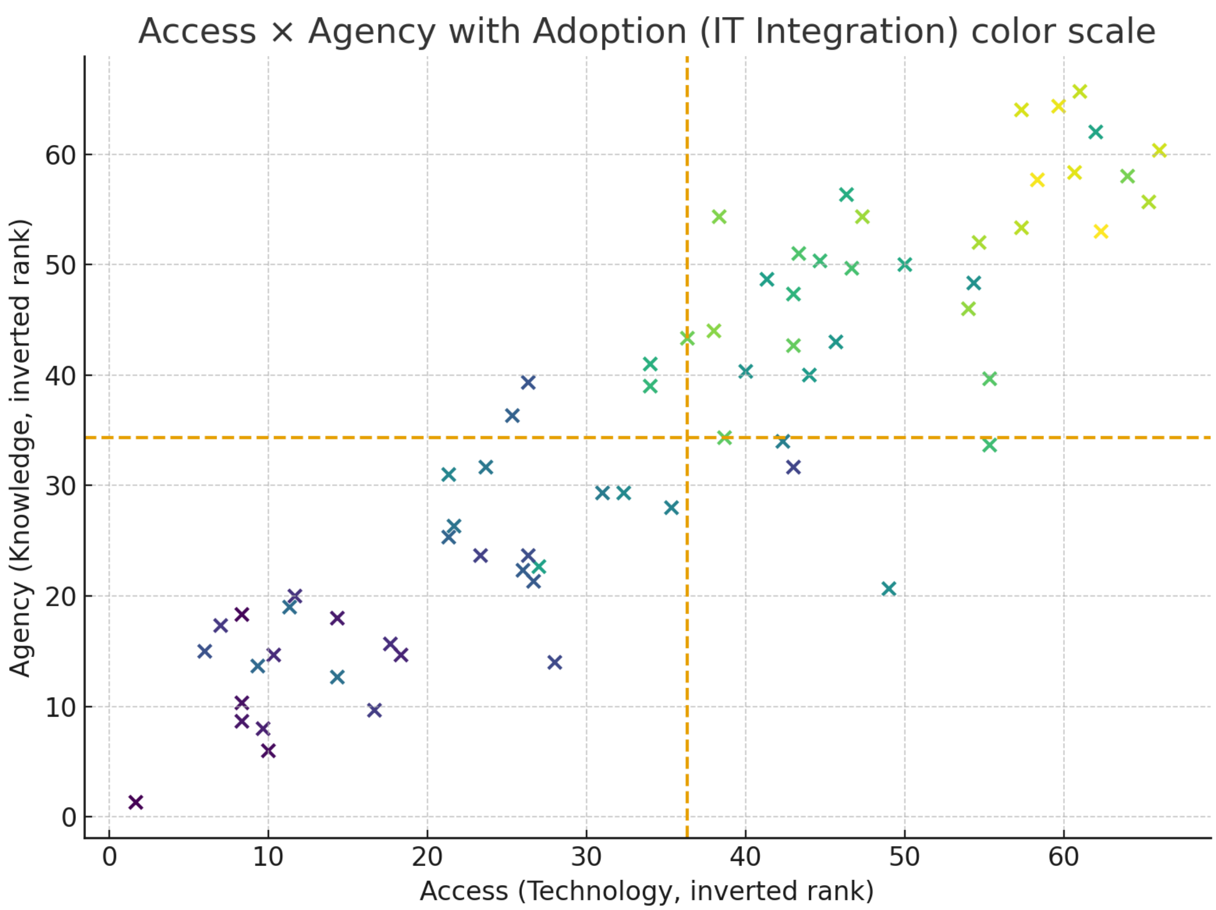


Source. Based on author's calculations

A full listing can be found in Appendix 2. We found zero counterexamples to the binding axis hypothesis. There were no High Access with Low Agency countries that achieved top quartile adoption, and there were no High Agency with Low Access countries that achieved top quartile adoption.

Figure 4 plots the Access and Agency composites with adoption shown as a color gradient. The median lines define the quadrants. Switzerland, Singapore and Hong Kong SAR sit high in the Full Empowerment quadrant, with High Access and High Agency, while Nigeria, Peru and Mongolia are examples in the Full Dependency quadrant, with low Agency and Access.

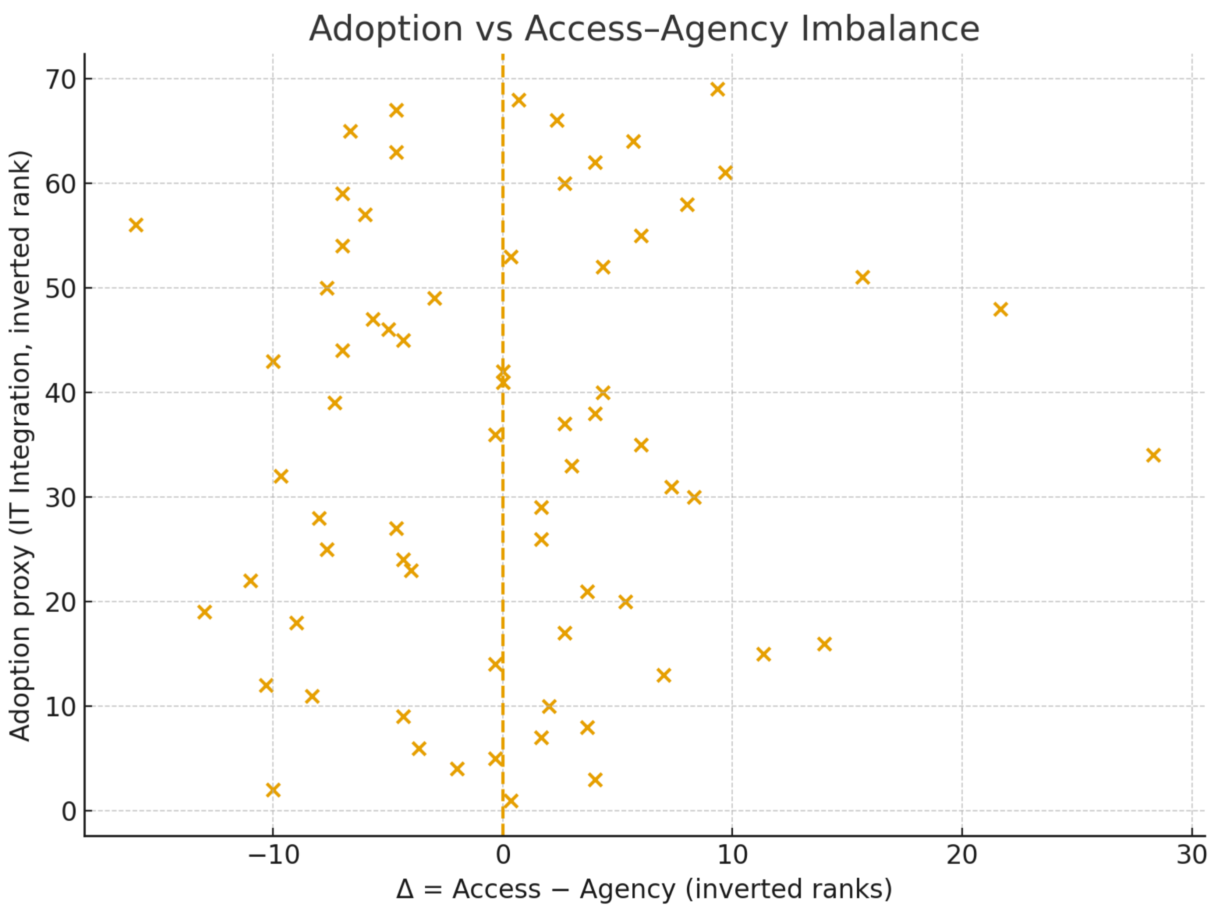
Figure 4: Access and Agency Composites Scatterplot (IMD WDCR 2025 (n=69))



Source. Calculated by author using IMD WDCR base data. Appendix 1 provides a full listing.

Figure 5 plots adoption against the imbalance measure that is Access minus Agency. The pattern is noisy which supports the use of the bottleneck idea rather than the raw difference.

Figure 5: Adoption vs Access-Agency Imbalance (IMD WDCR 2025 (n=69))



Source. Calculated by author using IMD WDCR base data. Appendix 1 provides a full listing.

5.1 Edge Cases

Figures 4 and 5 help identify edge cases that leadership teams can recognize. We present three short vignettes that illustrate mismatches and indicate a first policy lever to pull to stimulate movement. One comes from the Elite Empowerment pattern where Access runs ahead of Agency. Two come from the Passive Dependency pattern where Agency runs ahead of Access.

Qatar. High infrastructure and finance with Agency lagging. The symptom is rapid build out and strong platforms with adoption still thin beyond frontier organizations. The first lever is a workforce and research uplift with applied labs and industry linked projects that deliver production grade prototypes into supply chains. The risk if ignored is a visible gap between the top tier and median firms.

Austria. Knowledge runs ahead of Technology with a large negative delta. The symptom is strong capability in people and research with slower integration in enterprise systems and public service delivery. The first lever is to unblock access with a cloud first approach, modern data rails, and targeted procurement for integration projects. The risk if ignored is a stall in diffusion despite the available talent.

Kazakhstan. High signal on training and education with weaker scores on scientific concentration and technology infrastructure. The symptom is pockets of capability with slow enterprise integration. The first lever is access. There is a need to focus on broadband and cloud access, modernize core systems, and use targeted SME support to pull capability into production contexts. The risk if ignored is passive dependency and a widening productivity gap between large firms and the long tail of SMEs.

6. Robustness and Falsification

The results imply a simple story: Access and Agency move together, adoption rises with both, and the bottleneck logic holds, as no country with a weak axis clears top-quartile adoption. This is visible in the scatter (Figure 4) and in the zero-counterexample "kill test" reported above. That is, we do not observe High-Access/Low-Agency or High-Agency/Low-Access cases with top-quartile adoption, and adoption aligns best with the bottleneck proxy (the minimum of the two axes). These are the specific empirical claims that the robustness checks are designed to probe.

We therefore ran three lightweight tests that are consistent with an illustrative paper and the Matrix's purpose as a decision frame. First, swap the adoption proxy (e.g., use cloud uptake or ERP penetration) and verify that adoption still tracks the weaker axis more closely than an average, as expected if diffusion is bottlenecked. Second, test movement over time by comparing adjacent years and checking whether large, well-documented policy pushes show up as median crossings in the expected direction. Third, add a small equity "strip" (usage, trust, affordability) to confirm that the adoption gradient behaves as expected across lagging regions or firm segments. As a simple sensitivity, replace the capacity average with either a geometric mean or the minimum operator to encode the bottleneck idea directly; the minimum should remain the strongest correlate if the binding-constraint story is true. Together these checks stress the claim without heavy analytics and keep the method transparent and replicable.

Because the Matrix is an orientation tool rather than a causal model, these tests are sufficient for the paper's objective: they show that the central claim is not an artefact of a single proxy or an averaging choice and that the equity overlay does not contradict the pattern. With that assurance, we turn from validation to application in the Transition Playbook**,** which translates quadrant diagnosis and the bottleneck reading into near-term, production-anchored actions for governments, universities, and firms

7. An Intervention Transition Playbook

In this section we outline the foundations of potential good practice for targeted intervention. Adoption rises with both Access and Agency, yet it is predictably constrained by the weaker of the two. In other words, diffusion is governed by a bottleneck logic. The value of technology depends on complementary assets such as skills, organizational change, and process integration, so policy should be organized around the binding constraint, not an average (Bresnahan, Brynjolfsson, & Hitt, 2002; Brynjolfsson & Hitt, 2000; Brynjolfsson, Rock, & Syverson, 2018; OECD, 2023).

Rather than treating the quadrant labels as destinations, it is more useful to treat them as waypoints that inform sequencing. In environments where Access is strong and Agency is weak, frontier/leading organizations already function, but diffusion stalls in the long tail of firms and services. The appropriate priority is not more infrastructure or new frameworks, but translation mechanisms that move capability into line operations. Short, applied micro-credentials should be anchored to concrete system families and job families, and they should be delivered in tandem with firm integration projects so that learning and implementation proceed together (OECD, 2021a, 2024). University–industry labs are best justified when they deliver working prototypes that cross the threshold into production and include explicit handover to operational teams (NSF, 2024; Fraunhofer-Gesellschaft, 2025). Procurement then becomes a lever of diffusion rather than an exercise in compliance: contracts should pay for delivered functionality in live workflows and for the transfer of the capability to maintain it (European Commission, 2018, 2021; OECD, 2025a).

Where Agency is strong and Access is weak, the challenge is seldom a shortage of ideas or people; it is the absence of reliable infrastructures, platforms, and finance that would allow those ideas to travel. Here the credible path forward begins with governments moving their own services to the cloud, not as a rhetorical commitment but as a migration with reference architectures, testing protocols, and published APIs that suppliers and regions can build against (OECD, 2025b). Data rails for identity, payments, and consent create real value only when named services and private actors actually use them; they should be built with committed users and delivery dates rather than generic aspirations (World Bank, 2024). Rules for cross-border data flows and trusted access should be clarified in the same way, since uncertainty here suppresses investment even when technical preconditions exist (OECD, 2019b). Financial instruments should de-risk integration at the firm level through matching grants or tax credits redeemable only on proof of production use (EnterpriseSG, 2025; IMDA, 2025; Government of Canada/ISED, 2024).

In settings where both axes are weak, the temptation is to write comprehensive strategies that attempt to do everything at once. The evidence suggests a narrower approach may work better: equip schools with devices and connectivity, train teachers on a short, tool-neutral curriculum that shows up in classrooms, and develop templated digitization for local firms in accounting, inventory, and customer systems (UNESCO, 2023; OECD, 2021a, 2021b). These foundations generate compounding effects because they are prosaic:

everyday workflows become data-producing and integration-ready, and subsequent investments in more advanced tooling can attach to living processes. Where acute capability gaps block critical functions, targeted visas and diaspora fellowships can import expertise while the local pipeline develops, but they should be embedded in teams charged with building and documenting repeatable patterns rather than performing one-off heroics (OECD, 2021a).

For systems already in Full Empowerment, the binding constraint is often not capacity but distribution. Frontier projects may still merit co-funding, but only where a deployment partner stands ready to absorb outcomes into production and to publish tools that reduce imitation costs for others. Meanwhile, openness and competition in cloud and data services should be preserved to keep pressure on price, quality, and safety; and a fixed share of resources should be reserved for the long tail of firms and lagging regions to avoid steepening the adoption gradient (OECD, 2019a, 2019b, 2021a).

Across all quadrants, success should be measured in production rather than in activity. Practical proxies exist: the share of enterprises using ERP and CRM; the share purchasing cloud services; and, where available, the share using AI in production (Eurostat, 2024; OECD, 2019a, 2024). These indicators track whether learning and infrastructure have crossed into operations. Training counts only when embedded in projects that go live; infrastructure counts only when users rely on it (OECD, 2021a, 2024). A regular delivery cadence that brings policy, universities, and firms to the same table is sufficient, so long as the group can unblock obstacles and redirect funds. A dashboard system reporting Access, Agency, their minimum, adoption in priority sectors, movements in a simple inclusion strip, and a short list of deployments added in the last month could create the right incentives because it is hard to game, transparent and easy to understand (OECD, 2019a).

An equity overlay is not an optional embellishment but a guardrail against self-deception. National averages can hide deep variation within countries, and programs that raise means while not addressing inclusion will eventually fail on their own terms. A small inclusion strip that tracks usage, safety, and affordability is sufficient to keep the system honest: internet users per 100 inhabitants as a usage proxy (ITU, 2024a), secure servers per million as a trust proxy (World Bank, 2025), and a composite of broadband price-to-income and rural coverage as an affordability proxy (ITU, 2024b). If the inclusion strip is weak where adoption is targeted, then a defined share of program funds should be reserved for those regions at the outset, and reporting should show whether inclusion moved alongside adoption.

Financing instruments work best when they force translation. Matching grants and tax credits should be redeemable only on evidence of production use, not on the basis of plans or pilots; outcome-oriented designs and digital procurement reforms are increasingly recommended by international guidance (OECD, 2025a, 2025b; European Commission, 2021). Where risk concentration within a single public team stalls progress, standard contracts that share risk across a portfolio can prevent paralysis without removing accountability (OECD, 2025a). These design choices look technical, but they are often the difference between motion and movement.

Predictable failure modes can be managed if they are acknowledged early. Training without integration creates credentials without change; regulation without users creates platforms in search of a problem; procurement that rewards paper drains time and political capital; vanity metrics reward activity rather than adoption. The countermeasures are now well-documented: pair learning with line projects; build guardrails with committed users; buy working systems with maintenance and training obligations; and publish dashboards that emphasise production use rather than intermediate outputs (OECD, 2021a, 2021b; OECD, 2019a).

Finally, programs should define clear exit criteria in advance. A reasonable threshold for a cycle is met when two of three conditions hold: the weaker axis crosses the median by a clear margin, adoption in production rises materially in the named sectors, and the inclusion strip improves in the priority regions. If these conditions are not met, extending the cycle on the basis of effort is precisely the wrong lesson; either the lever or the target must change. The point is not to defend a plan, but to move the system on the AI Matrix and to leave behind artefacts that lower the cost of repetition by others: a minimal replication bundle that states the proxies and methods, reference architectures and migration patterns for the services that moved, procurement clauses that enforce handover, and education and training programs that are known to produce measurable adoption (OECD, 2019a, 2025b).

8. Limitations and Ethics

This study uses the AI Matrix as an orientation device rather than a causal model. The core constructs are assembled from published ranks, which are ordinal and therefore compress unknown distances between countries. As a result, the composites cannot be interpreted as effect sizes. The approach is appropriate for locating patterns and bottlenecks but not for estimating marginal impacts. A related limitation is level of analysis. National scores can mask substantial within-country variation by region, sector, firm size, and social group. Because adoption is distributed unevenly, national improvements can coincide with widening internal disparities. The equity overlay proposed in the paper is intended as a partial remedy, but it does not substitute for subnational or sectoral data.

Measurement validity is also mixed. Several IMD subfactors include perceptual elements that may move faster than underlying capability or be sensitive to short-term sentiment. Perceptual signal can be policy-relevant, but it can also create lags or overshoots when used as a proxy for capacity. Temporal instability further complicates interpretation. Digital adoption and capability can shift quickly with regulatory change, macro shocks, or platform pricing, so cross-sectional snapshots risk misclassifying transitional cases. The paper mitigates this risk by privileging falsification and robustness checks, and by proposing a short replication cadence, but the risk is not eliminated.

There are ethical concerns that follow directly from these limits. First, there is a risk of misuse if the Matrix is read as a league table, encouraging performative reforms or the diversion of resources to improve headline ranks rather than to close real bottlenecks. Second, there is a distributional risk: national-level gains can be celebrated while disadvantaged regions or firms fall further behind. Third, there is a governance risk if decision makers treat the Matrix outputs as self-validating or deploy them without disclosure of assumptions and data provenance. To address these risks, applications of the Matrix should: (i) publish the replication bundle and all transformation steps; (ii) report adoption outcomes in production rather than activity counts; (iii) include an equity strip with usage, trust, and affordability indicators; and (iv) document any material conflicts of interest or data licensing constraints. The Matrix is therefore presented as a starting point that can help coalitions agree on first moves and on the evidence they will track next, not as a substitute for domain expertise, stakeholder consultation, or causal evaluation.

9. Conclusion

The paper demonstrates that, with public summary data, it is possible to construct a compact, decision-oriented view of national AI readiness and use. By separating Access (infrastructure, capital, rules) from Agency (skills, education, research) and locating countries on a two-axis plane, the AI Matrix reduces complexity to a form that exposes mismatches and likely binding constraints. The falsification exercise finds no credible cases of top-quartile adoption where one axis is weak, and the association is strongest with the minimum of the two axes rather than with their difference or average. This supports the central practical claim: adoption is limited by the weaker side of capacity, so effective strategy begins by raising the minimum.

The contribution is threefold. First, it offers a transparent construction from public ranks that others can reproduce and contest. Second, it treats robustness as a procedural discipline rather than an afterthought, showing how proxy swaps, simple longitudinal checks, and an equity overlay can test the stability of the picture without heavy analytics. Third, it translates diagnosis into an actionable sequence through a transition playbook, which targets the bottleneck first, measures movement in production, and publishes artefacts that lower the cost of repetition by others.

The approach has limits. It does not infer causality, and it cannot resolve fine-grained questions of programme design or local political economy. Its value lies in providing a shared map that focuses attention on the next feasible move and the metrics that justify it. Future work should deepen the evidence base by incorporating subnational and sectoral data, replacing perception-heavy proxies with direct measures of use where available, and exploiting panel variation to study movement over time. In the meantime, the current specification is sufficient to support better near-term decisions: identify the binding constraint, intervene to raise it, verify that adoption in production rises with it, and track whether inclusion improves alongside. This is a practical bridge between minimal data and the more granular analysis that policy and investment ultimately require.

AI use statement.

Language model support was used for redrafting, analysis, and figure generation. All numeric results are computed from public tabulations of the IMD data.

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Appendix 1: Data and methods

Data and coverage

We use publicly reported IMD WDCR 2025 ranks for nine sub-factors and form two composite axes (Access, Agency) as simple averages of their constituent ranks; higher (inverted) values indicate stronger capacity. For summary associations we report Pearson correlations on inverted ranks (N=69, two-tailed), with Spearman correlations on raw ranks as a robustness check (table omitted here but available on request). Ties are rare and handled by average rank.

Rank inversion

To align directionality, each IMD WDCR rank is inverted so that higher values indicate stronger performance: InvRank = (N + 1) − Rank.

Variables

- Access: mean of inverted ranks for Regulatory framework, Capital, Technological framework.
- Agency: mean of inverted ranks for Talent, Training and education, Scientific concentration.
- Adoption: inverted rank for IT integration.
- C_min: minimum of Access and Agency.
- Delta: Access minus Agency (used only for comparison).

Quadrant classification

Median splits on Access and Agency define four quadrants. Ties at the median are assigned to the higher group.

Checks performed

1. Counterexample scan. High adoption defined as the top quartile of Adoption. Count cases where one axis is below its median while Adoption is high.
2. Association. Correlations computed between Adoption and Access, Adoption and Agency, and Adoption and C_min. Pearson correlations are calculated on inverted composites. Spearman rank correlations are calculated as a robustness check. The ordering of results is unchanged under both methods.

Replication steps

1. Invert ranks for the nine IMD subfactors listed above.

2. Compute Access, Agency, Adoption, C_min, and Delta.
3. Compute medians for Access and Agency and assign quadrants using the tie rule stated above.
4. Reproduce the counterexample counts and correlations.

File provided

Data: Country, the nine subfactors (see table A1) as inverted ranks, plus Access, Agency, Adoption, C_min, Delta, Quadrant (see Appendix 2)

Table A1: Subfactors

Spreadsheet column	Full IMD subfactor name
K_Talent_inv	Talent
K_TrainingEdu_inv	Training and Education
K_Scientific_inv	Scientific Concentration
T_Regulatory_inv	Regulatory Framework
T_Capital_inv	Capital
T_TechFramework_inv	Technological Framework
F_Adaptive_inv	Adaptive Attitudes
F_Agility_inv	Business Agility
F_ITIntegration_inv	IT Integration

Licensing note

Analysis relies only on publicly available subfactor ranks and derived aggregates.

Limitations

Some IMD subfactors include perception components. As a planned extension, the study proposes re-running key figures with publicly available usage and affordability series.

Appendix 2: Dataset

Country	K_Talent_inv	K_TrainingEdu_inv	K_Scientific_inv	T_Regulatory_inv	T_Capital_inv	T_TechFramework_inv	F_Adaptive_inv	F_Agility_inv	F_ITIntegration_inv	Access	Agency	Adoption	C_min	Delta	Quadrant
Canada	67	69	56	56	68	48	54	57	65	57,3	64,0	65,0	57,3	-6,7	Q1 Full Empowerment
Sweden	63	68	62	59	66	54	57	53	67	59,7	64,3	67,0	59,7	-4,7	Q1 Full Empowerment
Hong Kong SAR	65	67	54	58	59	69	69	62	41	62,0	62,0	41,0	62,0	0,0	Q1 Full Empowerment
Kazakhstan	34	66	9	43	15	18	37	46	22	25,3	36,3	22,0	25,3	-11,0	Q3 Passive Dependency
Switzerland	68	65	64	63	55	65	63	66	63	61,0	65,7	63,0	61,0	-4,7	Q1 Full Empowerment
Taiwan (Chinese Taipei)	36	64	60	45	65	62	55	68	62	57,3	53,3	62,0	53,3	4,0	Q1 Full Empowerment
Korea Rep.	21	63	69	32	43	55	65	55	50	43,3	51,0	50,0	43,3	-7,7	Q1 Full Empowerment
Germany	38	62	63	53	53	36	42	42	59	47,3	54,3	59,0	47,3	-7,0	Q1 Full Empowerment
Luxembourg	35	61	46	54	31	44	29	39	45	43,0	47,3	45,0	43,0	-4,3	Q1 Full Empowerment
Estonia	40	60	32	41	30	43	56	33	57	38,0	44,0	57,0	38,0	-6,0	Q1 Full Empowerment
Austria	49	59	55	40	36	39	35	38	56	38,3	54,3	56,0	38,3	-16,0	Q1 Full Empowerment
Finland	56	58	59	67	50	58	49	51	68	58,3	57,7	68,0	57,7	0,7	Q1 Full Empowerment
Denmark	61	57	57	68	48	66	66	67	66	60,7	58,3	66,0	58,3	2,3	Q1 Full Empowerment
Japan	7	56	65	27	41	61	34	10	53	43,0	42,7	53,0	42,7	0,3	Q1 Full Empowerment
USA	51	55	68	60	69	63	62	64	55	64,0	58,0	55,0	58,0	6,0	Q1 Full Empowerment
UAE	69	54	36	66	61	60	64	50	69	62,3	53,0	69,0	53,0	9,3	Q1 Full Empowerment
Norway	53	53	50	61	51	52	53	49	60	54,7	52,0	60,0	52,0	2,7	Q1 Full Empowerment
Malaysia	39	52	30	29	40	51	20	27	36	40,0	40,3	36,0	40,0	-0,3	Q1 Full Empowerment
Lithuania	60	51	38	55	35	50	52	60	49	46,7	49,7	49,0	46,7	-3,0	Q1 Full Empowerment
United Kingdom	58	50	61	42	56	41	50	29	43	46,3	56,3	43,0	46,3	-10,0	Q1 Full Empowerment
Singapore	66	49	66	69	62	67	59	58	64	66,0	60,3	64,0	60,3	5,7	Q1 Full Empowerment
Belgium	47	48	51	48	45	31	33	47	39	41,3	48,7	39,0	41,3	-7,3	Q1 Full Empowerment
Ireland	54	47	49	64	29	57	60	56	42	50,0	50,0	42,0	50,0	0,0	Q1 Full Empowerment
Saudi Arabia	57	46	26	57	54	26	61	44	37	45,7	43,0	37,0	43,0	2,7	Q1 Full Empowerment
Netherlands	64	45	58	65	67	64	67	61	61	65,3	55,7	61,0	55,7	9,7	Q1 Full Empowerment
Slovenia	31	44	43	23	26	30	16	23	19	26,3	39,3	19,0	26,3	-13,0	Q3 Passive Dependency
Iceland	48	43	28	51	47	68	68	59	51	55,3	39,7	51,0	39,7	15,7	Q1 Full Empowerment
France	43	42	53	62	58	42	32	41	58	54,0	46,0	58,0	46,0	8,0	Q1 Full Empowerment
Latvia	52	41	10	49	27	40	43	40	52	38,7	34,3	52,0	34,3	4,3	Q1 Full Empowerment
Australia	59	40	52	52	33	49	47	17	47	44,7	50,3	47,0	44,7	-5,7	Q1 Full Empowerment
Oman	37	39	8	35	46	25	44	52	31	35,3	28,0	31,0	28,0	7,3	Q4 Full Dependency
Spain	44	38	48	34	38	37	40	31	54	36,3	43,3	54,0	36,3	-7,0	Q1 Full Empowerment
New Zealand	46	37	37	44	42	46	51	24	38	44,0	40,0	38,0	40,0	4,0	Q1 Full Empowerment
China	42	36	67	47	63	53	48	63	35	54,3	48,3	35,0	48,3	6,0	Q1 Full Empowerment
Thailand	33	35	27	33	49	47	36	36	15	43,0	31,7	15,0	31,7	11,3	Q2 Elite Empowerment
Czech Republic	41	34	42	36	37	29	27	34	46	34,0	39,0	46,0	34,0	-5,0	Q3 Passive Dependency
Portugal	45	33	45	50	25	27	41	11	44	34,0	41,0	44,0	34,0	-7,0	Q3 Passive Dependency
Hungary	22	32	34	39	20	38	3	14	33	32,3	29,3	33,0	29,3	3,0	Q4 Full Dependency
Croatia	15	31	25	19	32	19	14	4	14	23,3	23,7	14,0	23,3	-0,3	Q4 Full Dependency
Poland	19	30	44	13	18	33	19	6	32	21,3	31,0	32,0	21,3	-9,7	Q4 Full Dependency
Colombia	8	29	15	4	11	6	18	35	12	7,0	17,3	12,0	7,0	-10,3	Q4 Full Dependency
Cyprus	16	28	35	21	16	28	15	8	27	21,7	26,3	27,0	21,7	-4,7	Q4 Full Dependency
Qatar	55	27	19	46	64	56	46	65	48	55,3	33,7	48,0	33,7	21,7	Q2 Elite Empowerment
Namibia	27	26	2	9	12	4	4	15	2	8,3	18,3	2,0	8,3	-10,0	Q4 Full Dependency
Slovak Republic	11	25	24	5	8	22	8	7	11	11,7	20,0	11,0	11,7	-8,3	Q4 Full Dependency
Chile	30	24	14	25	22	34	45	21	40	27,0	22,7	40,0	22,7	4,3	Q4 Full Dependency
Italy	25	23	47	30	17	24	38	37	28	23,7	31,7	28,0	23,7	-8,0	Q4 Full Dependency
Jordan	13	22	29	28	39	13	13	54	20	26,7	21,3	20,0	21,3	5,3	Q4 Full Dependency
Mongolia	5	21	5	2	7	16	6	2	4	8,3	10,3	4,0	8,3	-2,0	Q4 Full Dependency
Kuwait	50	20	18	24	34	35	23	32	29	31,0	29,3	29,0	29,3	1,7	Q4 Full Dependency
Bulgaria	12	19	16	14	19	20	11	1	10	17,7	15,7	10,0	15,7	2,0	Q4 Full Dependency
South Africa	9	18	11	8	23	12	21	12	26	14,3	12,7	26,0	12,7	1,7	Q4 Full Dependency
Peru	3	17	6	10	5	10	17	9	5	8,3	8,7	5,0	8,3	-0,3	Q4 Full Dependency
Romania	29	16	22	37	9	32	31	16	21	26,0	22,3	21,0	22,3	3,7	Q4 Full Dependency
India	17	15	39	16	52	11	12	22	17	26,3	23,7	17,0	23,7	2,7	Q4 Full Dependency
Brazil	2	14	41	11	6	17	26	13	25	11,3	19,0	25,0	11,3	-7,7	Q4 Full Dependency
Greece	23	13	40	22	21	21	25	5	23	21,3	25,3	23,0	21,3	-4,0	Q4 Full Dependency
Botswana	28	12	4	18	28	9	5	25	8	18,3	14,7	8,0	14,7	3,7	Q4 Full Dependency
Mexico	10	11	23	6	10	15	28	19	9	10,3	14,7	9,0	10,3	-4,3	Q4 Full Dependency
Puerto Rico	32	10	20	31	57	59	39	30	34	49,0	20,7	34,0	20,7	28,3	Q2 Elite Empowerment
Bahrain	62	9	31	38	44	45	58	48	30	42,3	34,0	30,0	34,0	8,3	Q2 Elite Empowerment
Philippines	14	8	7	3	24	23	30	20	13	16,7	9,7	13,0	9,7	7,0	Q4 Full Dependency
Kenya	26	7	21	26	14	3	7	26	6	14,3	18,0	6,0	14,3	-3,7	Q4 Full Dependency
Türkiye	6	6	33	7	3	8	10	3	18	6,0	15,0	18,0	6,0	-9,0	Q4 Full Dependency
Indonesia	20	5	17	17	60	7	22	45	16	28,0	14,0	16,0	14,0	14,0	Q4 Full Dependency
Argentina	24	4	13	12	2	14	24	43	24	9,3	13,7	24,0	9,3	-4,3	Q4 Full Dependency
Ghana	18	3	3	20	4	5	9	28	7	9,7	8,0	7,0	8,0	1,7	Q4 Full Dependency
Nigeria	4	2	12	15	13	2	2	18	3	10,0	6,0	3,0	6,0	4,0	Q4 Full Dependency
Venezuela	1	1	2	1	1	3	3	29	1	1,7	1,3	1,0	1,3	0,3	Q4 Full Dependency

Source. Author derived from IMD WDCR (2025)