



## Charting Global Government AI Readiness Index: A Five Year Longitudinal Review (2020-2024)

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### ABSTRACT

The Government Artificial Intelligence readiness is a multi-faceted issue as AI-ready government needs a strategic vision, institutional capacity, digital infrastructure and human resources to develop and govern AI in an ethical way. This study attempts to provide comprehensive review of global government AI readiness trends and regional dynamics over the period 2020-2024, using Oxford Insights government AI readiness index. A 5-year longitudinal comparative approach is used to reveal inter-regional differences and intra-regional variations in AI readiness scores across 155 global economies. The global economies are grouped into 9 regions including North America, Latin America and Caribbean, Western Europe, Eastern Europe, East Asia, Middle East and North Africa, South and Central Asia, Pacific, Sub-Saharan Africa. Heat maps are utilized to visualize the spatial distribution of government AI readiness. To classify economies into five categories of government AI readiness - Very Low, Low, Moderate, High and Very High - data driven classification framework of AI readiness scores is utilized. The analysis reveals notable divergence in AI readiness among global regions with North America leading the ranking in AI readiness followed by Western Europe. In contrast, Latin America and Caribbean, South and Central Asia remained among the least in AI readiness followed by Sub-Saharan Africa. The substantial heterogeneity is also observed within the economies of the same region, indicating varying levels of institutional capacity, digital innovations, human skills and infrastructure. The findings offer valuable insights for governments and policy makers seeking to identify regional gaps and benchmark national performance.

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### 1. Introduction

The Artificial Intelligence (AI) is globally recognized as a critical catalyst for the Industry 4.0<sup>1</sup>. In recent times, AI has gone from an academic pursuit to a trillions of dollar industry. The rapid development of AI have made it central to economic policies and geopolitics. The digital

<sup>1</sup> Industry 1.0 (1<sup>st</sup> industrial revolution - steam power), Industry 2.0 (2<sup>nd</sup> industrial revolution - electricity), Industry 3.0 (3<sup>rd</sup> industrial revolution - computers and automation), Industry 4.0 (4<sup>th</sup> industrial revolution - smart digital systems and artificial intelligence). The 4<sup>th</sup> industrial revolution key technologies are: Big data analytics, 5G, Artificial intelligence, Generative AI, Robotics and automation, Internet of Things, Cloud computing and Cyber physical systems.

dominance (in general) and leadership in AI (in particular) is now viewed as a structural economic superiority and geopolitical dominance. Since 2022, out of the 16 trillion US \$ rise in market capitalization of S&P 500 companies, nearly 12 trillion US \$ has been directly from AI-related companies (IEA, 2025). The AI is an umbrella term for digital technologies including but not limited to Machine learning, Generative AI, Algorithms, Robotic systems and Natural Language Processing (NLP). According to Frantz (2003), AI is envisioned as a machine that can efficiently mimic human intelligence in terms of analyzing visual information and decision making.

The Quan and Sanderson (2018) advocated profound effects of AI on social, economic and political spheres. Its human centric adoption accompanied with pragmatic deployment strategy has a great potential to accelerate progress across all Sustainable Development Goals (SDG's). For instance, (i) AI can assist in early disease detection and enhance monitoring of public health outbreaks to support SDG-3 (Good Health), (ii) AI can support progress towards SDG-4 (Quality Education) by scaling access to education, personalizing learning for diverse students, providing assistance to teachers and data driven insights, (iii) AI can facilitate attainment of SDG-6 (Clean Water and Sanitation) by improving water treatment facilities, optimizing usage and detecting water leaks, (iv) AI can support job creation and productivity led growth in multiple sectors to support progress in SDG-8 (Decent Work and Economic Growth), (v) AI-models can also support SDG-13 (Climate Action) by improving climate forecasting, optimizing renewable energy deployment and supporting early warning systems.

In order to realize these AI induced benefits, the governments need to play an effective role in funding research, providing digital infrastructure, ensuring necessary human skills, building resilient workforce, establishing ethical guardrails and modernizing public services. Besides this, the governments are also responsible for mitigating risks associated with AI adoption i.e. job displacements, privacy violations, cyber security threats, economic inequality and carbon impact of AI infrastructure<sup>2</sup> etc. There are multiple uncertainties in how quickly AI will be adopted, how efficient it will become and whether structural, institutional bottlenecks can be effectively addressed. The quick adoption of AI entirely depends on the government AI readiness. The availability of resources in AI readiness refers to the provision of the necessary government support, human skills, technical skills, digital infrastructure, tools and materials required to ensure AI adoption at a larger scale. It is well recognized that resource availability is very important for a government's capacity to handle bottlenecks or seize opportunities in multiple AI domains i.e. education, health, business and disaster readiness, for details see, Duan, Edwards and Dwivedi (2019); Dwivedi et al. (2021); Kumar et al. (2023) and Neumann, Guirguis and Steiner (2024) among others.

The Government AI readiness is a complex and multi-faceted issue as AI-ready government needs a strategic vision to develop and govern AI in an ethical way. In addition to this, an efficient human resource, digital capacity, and infrastructure is needed to ensure good supply of AI tools. A notable attempt to measure the world's first government's AI readiness index is undertaken by Oxford Insights in 2017<sup>3</sup>. The government AI readiness index by Oxford Insights with the support of International Development Research Centre (IDRC) has gone through multiple editions but all have attempted to answer the same question: how ready is a government to adopt AI? To quantitatively assess government AI readiness, they use frame work of three pillars including (i) Government (ii) Technology Sector (iii) Data and Infrastructure. With multiple dimensions and indicators, they report government AI readiness index on annual basis. The indicators of AI index are normalized, equally weighted and arithmetically averaged by dimension and pillar to provide each country a numerical score on the scale of 0 to 100. The numerical score of 100 is interpreted as being the most AI-ready a government/country can be. This index is not

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<sup>2</sup> Training large scale AI models are energy intensive computing tasks. The tech industry and energy sector will become increasingly interlinked in the era of digitalization of global economies. This possess significant threats in terms of environmental sustainability if increased carbon footprint (due to adoption of AI models) is not timely addressed.

<sup>3</sup> In addition to government AI readiness index by Oxford Insights, literature reports two other notable AI related indices i.e. Stanford AI index and Tortoise Global AI index. We prefer to use Oxford Insights readiness index as Stanford AI index is not designed to rank AI readiness of countries, whereas, Tortoise Global AI index provides country rankings across AI ecosystem dimensions rather than government AI readiness.

free from limitations. Given low country coverage, even lack of data altogether in case of some cross sectional units results in changes/revisions in dimensions and indicators of AI readiness index. The global coverage of AI readiness index has tremendously increased from 2017 to 2025.

With this background, this study aims to undertake (i) longitudinal comparative assessment of government AI readiness index from 2020-2024 to reveal inter-regional and intra-regional trends pertaining to public sector AI readiness, (ii) to identify regions and countries as leading and lagging in terms of AI readiness, (iii) to offer policy suggestions based on regional trajectories to strengthen AI readiness. This study will be a contribution to the existing literature that descriptively assess country's readiness in AI adoption. Mostly studies have focused on country specific review of government AI readiness, whereas, this study reviews global data set of government AI readiness over multiple years. This study uses secondary data (country scores) obtained from various government AI readiness annual reports published by Oxford Insights(Oxford Insights, 2021). The study's period is 2020-2024 owing to availability of comparable data across 155 global economies. We restrict our sample period from 2020 to 2024. We do not include year 2025 as government AI readiness index framework pertaining to this year is significantly changed from the framework of AI readiness index of 2020, 2021, 2022, 2023 and 2024. The 2025 index calculates AI readiness by examining 69 indicators across 14 dimensions within 06 pillars i.e. (i) Policy Capacity (ii) Governance (iii) AI Infrastructure (iv) Public Sector Adoption (v) Development and Diffusion (vi) Resilience. The regional classification of economies is exactly adapted from government AI readiness reports by Oxford Insights. The economies are classified into 9 regions as: (i) North America (ii) Latin America and Caribbean (LAC) (iii) Western Europe (iv) Eastern Europe (v) East Asia (vi) Middle East and North Africa (MENA) (vii) South and Central Asia (SCA) (viii) Pacific (ix) Sub-Saharan Africa (SSA).

The novelty of the study lies in (i) undertaking longitudinal tracking of government AI readiness across 155 global economies, grouped into 9 regions, to reveal temporal patterns, (ii) using heat map visualization for spatial distribution and to identify regions and economies as consistent performers, fast improvers, declining or stagnant performers, (iii) applying a common data-driven classification framework of AI readiness average scores to classify economies into five levels of government AI readiness – very low, low, moderate, high and very high. This study is organized as following introduction, section 2 reports methodological overview of Government AI Readiness (GAIR) framework of Oxford Insights, section 3 visualizes the global trends of GAIR scores using heat maps, section 4 analyzes GAIR regional average scores, section 5 discusses and classifies global economies based on data driven GAIR benchmarks and section 6 concludes the paper with policy implications.

## 2. Methodological Framework of Government AI Readiness Index

The Government AI Readiness (GAIR) index prepared by Oxford Insights and IDRC since 2017 provides country specific numerical scores to assess the readiness of governments to largely benefit from the AI adoption. The GAIR index (2020) - third edition of GAIR index - is a comprehensive and robust measure of government AI readiness as compared to 2017 and 2019. The global economies are grouped into 9 regions in 2020 index compilation up from 7 regions in 2019. The latest regional classification includes North America, Latin America and the Caribbean, Western Europe, Eastern Europe, East Asia, Middle East and North Africa, South and Central Asia, Pacific and Sub-Saharan Africa. The GAIR index (2020) explores government readiness by examining 33 indicators across 10 dimensions within three core pillars: (i) Government (ii) Technology Sector (iii) Data and Infrastructure. The list of indicators, dimensions and pillars of 2020 GAIR index is provided in table 1. The data on 33 indicators by Oxford Insights has been sourced from desk research (OECD AI Policy Observatory, Future of Life Institute), UN data protection and privacy legislation worldwide, global cyber security index, global competitiveness index, networked readiness index, UN E-Government Survey, World Bank, global innovation index, Forbes Global 2000, UNCTAD<sup>4</sup>, UNESCO<sup>5</sup>, ILO<sup>6</sup>, QS Engineering and Technology Rankings. The

<sup>4</sup> United Nations Trade and Development

<sup>5</sup> United Nations Educational, Scientific and Cultural Organization

numerical scores pertaining to indicators are first normalized and to calculate total score, the arithmetic mean is used pertaining to each dimension. The final index score of AI readiness is the arithmetic average of three pillars. The skewed indicators are treated using the logarithmic transformation  $\log(1+x)$ . The equal weightage of all indicators, dimensions and pillars is observed while index compilation. For indicators with some missing observations, peer group mean imputation method is utilized. It is relevant to mention that only countries with values of more than 50% of indicators are included in the construction of final index. The excluded economies are listed in appendix A.

**Table 1: Pillars, Dimensions and Indicators of GAIR index (2020)**

| Table 2.1 Pillars, Dimensions and Indicators of SARI Index (2020) |                         |  |                                         |                                                        |                                               |                                                           |                            |
|-------------------------------------------------------------------|-------------------------|--|-----------------------------------------|--------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------|----------------------------|
| Pillars (3)                                                       | Dimensions (10)         |  | Indicators (33)                         |                                                        |                                               |                                                           |                            |
| Government                                                        | Vision                  |  | National AI Strategy                    |                                                        |                                               |                                                           |                            |
|                                                                   | Governance and Ethics   |  | Data protection and privacy legislation | Cyber security                                         | National ethics framework                     | Legal framework's adaptability to digital business models |                            |
|                                                                   | Digital Capacity        |  | Online services                         | ICT use and government efficiency                      | Government procurement of advanced technology |                                                           |                            |
|                                                                   | Adaptability            |  | Government Effectiveness                | Government's response to change                        |                                               |                                                           |                            |
|                                                                   | Size                    |  | Technology unicorns (numbers)           | Market value of public technology companies            | Per capita Value of trade in ICT services     | Per capita value of trade in ICT goods                    | Computer software spending |
| Technology Sector                                                 | Innovation Capacity     |  | Entrepreneurial culture                 | Ease of doing business                                 | Research and Development spending             | Company investment in emerging technologies               |                            |
|                                                                   | Human Capital           |  | Graduates in STEM <sup>7</sup>          | Quality of engineering and technology higher education | Digital skills                                | Knowledge intensive employment                            |                            |
|                                                                   | Infrastructure          |  | Telecommunication infrastructure        | 5G infrastructure                                      | Internet bandwidth                            | Availability of latest technologies                       |                            |
| Data & Infrastructure                                             | Data availability       |  | Open government data                    | Statistical capacity                                   | Mobile-cellular subscriptions                 | Internet users as % of adult population                   |                            |
|                                                                   | Data Representativeness |  | Gender gap in internet usage            | Socio economic                                         | - gap in internet usage                       |                                                           |                            |

Source: Compiled by author

From table 1, it can be deduced that in the construction of 2020 GAIR index, governance pillar is gauged by 4 dimensions and 10 indicators, technology sector pillar is gauged by 3 dimensions and 13 indicators, data and infrastructure pillar is gauged by 3 dimensions and 10 indicators. So overall AI readiness score is based on 3 pillars, 10 dimensions and 33 indicators. The changes in AI readiness score framework during 2020-2024 is reported in table 2 in order to ensure scores comparability across different time periods.

**Table 2: Oxford Insights GAIR Index Framework (2020-2024)**

| Aspects    | 2020 | 2021 | 2022 | 2023 | 2024 | Key Changes                               |
|------------|------|------|------|------|------|-------------------------------------------|
| Pillars    | 03   | 03   | 03   | 03   | 03   | No change                                 |
| Dimensions | 10   | 10   | 10   | 10   | 10   | No change                                 |
| Indicators | 33   | 42   | 39   | 39   | 40   | Few indicators are replaced. <sup>8</sup> |
| Regions    | 09   | 09   | 09   | 09   | 09   | No change                                 |

Source: Compiled by author

<sup>6</sup> International Labor Organization

<sup>7</sup> Science, Technology, Engineering and Mathematics

<sup>8</sup> For instance, digital skills replaced with ICT skills, Cloud providers replaced with Supercomputers (Top 500), Legal framework's adaptability to digital business models replaced with regulatory quality (Worldwide governance indicators).

From the table 2, it can be safely concluded that framework adopted by Oxford Insights during 2020-2024 to numerically score government AI readiness has not gone through some significant changes, thereby, making data comparable during the sample period across the globe(Oxford Insights, 2024).

**3. Mapping Global Trends of Government AI Readiness Scores Using Heat Maps**

The heat map visualization is an effective tool to reveal spatial distribution of government AI readiness. A heat map is developed in Microsoft Excel. The color intensity enables us to map relative AI readiness of each region/economy, facilitating pattern identification and comparative analysis. The green cells indicates high values (more AI readiness), yellow cells indicates moderate values (moderate AI readiness) and red cells indicates low values (low AI readiness). The Government AI readiness (GAIR) index is reported on the scale of 0 to 100.

**3.1. Inter – Regional Scores**

**Table 3: Heat Map of Regional GAIR Index**

| No. | Regions                    | 2020  | 2021  | 2022  | 2023  | 2024  |
|-----|----------------------------|-------|-------|-------|-------|-------|
| 1   | North America              | 79.31 | 82.94 | 81.55 | 80.93 | 82.6  |
| 2   | Latin America & Caribbean  | 38.06 | 41.26 | 40.62 | 42.63 | 43.79 |
| 3   | Western Europe             | 68.90 | 70.56 | 69.69 | 70.19 | 71.90 |
| 4   | Eastern Europe             | 52.56 | 55.24 | 53.82 | 54.67 | 57.88 |
| 5   | East Asia                  | 52.10 | 55.13 | 56.42 | 56.13 | 60.01 |
| 6   | Middle East & North Africa | 47.07 | 49.91 | 49.42 | 51.15 | 53.55 |
| 7   | South & Central Asia       | 38.89 | 40.93 | 44.51 | 42.11 | 42.88 |
| 8   | Pacific                    | 60.15 | 63.89 | 61.62 | 58.55 | 61.55 |
| 9   | Sub-Saharan Africa         | 32.42 | 32.39 | 30.66 | 31.90 | 34.64 |

Source: Prepared by author using data from Oxford Insights annual reports.

The North America’s Government AI readiness score increased from 79.31 (2020) to 82.60 (2024). After recording maximum score in year 2021 (82.94), it slightly declined during 2022-2023 before recovering in year 2024, indicating consistently highest performance. The Latin America & Caribbean rose steadily from 38.06 (2020) to 43.79 (2024), with a small decline in year 2022. This reflects steady improvement over the five-year period. The Western Europe grew modestly from 68.90 (2020) to 71.90 (2024). Minor fluctuations are observed during 2022 to 2023, but the region maintained relatively stable and high scores. The Eastern Europe improved from 52.56 (2020) to 57.88 (2024), showing a slight decline in 2022 followed by a recovery. The East Asia has increased from 52.10 (2020) to 60.01 (2024), representing one of the significant overall improvements. Despite a slight decline in year 2023, the region has reached its peak in year 2024. The Middle East & North Africa has showed an upward trend from 47.07 (2020) to 53.55 (2024). After a small decrease in year 2022, the government AI readiness values increased through the year 2024. The South & Central Asia has improved overall from 38.89 (2020) to 42.88 (2024) but exhibited greater volatility. The government AI readiness score peaked at 44.51 in year 2022, declined sharply in year 2023, and recovered slightly in year 2024. The Pacific AI readiness score has increased from 60.15 (2020) to 61.55 (2024), although the trend is less consistent. After reaching 63.89 in year 2021, AI readiness values declined until year 2023 before partially recovering in year 2024. The Sub-Saharan Africa AI readiness index has recorded the lowest values throughout the period but improved overall from 32.42 (2020) to 34.64 (2024). After falling in year 2022, the region has recovered over the following two years. To sum up, North America remained the highest-performing region followed by Western Europe, while South and Central Asia consistently remained the lowest performing region after Sub-Saharan Africa during 2020-2024. Furthermore, mostly regions recorded higher government AI readiness index in 2024 as compared to 2020.

### 3.2. Intra – Regional Scores

#### 3.2.1. North America

The heat map representation of government AI readiness index of North America from 2020 to 2024 is reported in table 4. An overall steady performance has been observed despite some year-to-year little fluctuations. The USA shaded in green is the top performer in terms of government AI readiness score in North America, whereas, Canada transitioned from red to orange reflects improvements in government AI readiness score.

**Table 4: Heat Map of North America GAIR Index**

| No. | Country                  | 2020  | 2021  | 2022  | 2023  | 2024  |
|-----|--------------------------|-------|-------|-------|-------|-------|
| 1   | Canada                   | 73.16 | 77.73 | 77.39 | 77.07 | 78.18 |
| 2   | United States of America | 85.48 | 88.16 | 85.72 | 84.80 | 87.03 |

Source: Prepared by author using data from Oxford Insights reports.

#### 3.2.2. Latin America and the Caribbean (LAC)

The LAC region shows substantial cross-country variations in government AI readiness during the study period. The countries shaded in green including Brazil, Chile, Colombia and Uruguay are top performing economies in the region, whereas, countries shaded in red and orange are showing comparatively much lesser performance in terms of government AI readiness. The lowest government AI readiness is observed in Haiti followed by Venezuela in the region. Other economies, on average, are transitioning from lowest government AI readiness score to moderate government AI readiness score with little variations year on year basis. The Brazil's government AI readiness has significantly improved from 47.46 in year 2020 to 65.89 in year 2024, reflecting substantial improvements in human resource, digital infrastructure and institutional quality.

**Table 5: Heat Map of LAC GAIR Index**

| No. | Country             | 2020  | 2021  | 2022  | 2023  | 2024  |
|-----|---------------------|-------|-------|-------|-------|-------|
| 1   | Argentina           | 50.75 | 54.36 | 57.39 | 57.72 | 56.40 |
| 2   | Barbados            | 40.80 | 42.20 | 39.53 | 40.13 | 41.11 |
| 3   | Belize              | 31.18 | 32.28 | 29.98 | 34.24 | 37.59 |
| 4   | Bolivia             | 33.03 | 31.62 | 32.56 | 35.25 | 33.08 |
| 5   | Brazil              | 47.46 | 60.64 | 62.37 | 63.70 | 65.89 |
| 6   | Chile               | 53.09 | 60.42 | 62.52 | 61.95 | 63.19 |
| 7   | Colombia            | 51.26 | 58.91 | 59.38 | 57.85 | 59.33 |
| 8   | Costa Rica          | 42.55 | 46.19 | 44.97 | 49.12 | 56.85 |
| 9   | Cuba                | 30.86 | 30.38 | 31.59 | 35.52 | 42.43 |
| 10  | Dominican Republic  | 37.47 | 40.89 | 42.16 | 50.71 | 52.69 |
| 11  | Ecuador             | 32.41 | 39.19 | 37.36 | 40.84 | 41.46 |
| 12  | El Salvador         | 29.66 | 32.41 | 30.96 | 32.58 | 34.09 |
| 13  | Guatemala           | 31.24 | 32.25 | 34.93 | 35.76 | 36.41 |
| 14  | Haiti               | 23.79 | 25.14 | 18.61 | 21.97 | 20.06 |
| 15  | Honduras            | 31.01 | 34.91 | 31.04 | 32.63 | 29.83 |
| 16  | Jamaica             | 38.36 | 41.50 | 37.09 | 41.32 | 37.79 |
| 17  | Mexico              | 49.36 | 52.62 | 51.78 | 50.37 | 53.29 |
| 18  | Nicaragua           | 30.32 | 31.57 | 28.33 | 29.77 | 28.53 |
| 19  | Panama              | 39.59 | 42.98 | 41.49 | 43.91 | 44.39 |
| 20  | Paraguay            | 35.15 | 37.35 | 35.46 | 36.85 | 39.54 |
| 21  | Peru                | 36.57 | 40.56 | 51.97 | 54.87 | 57.11 |
| 22  | Saint Lucia         | 35.04 | 36.61 | 35.86 | 36.46 | 39.11 |
| 23  | Suriname            | 35.46 | 38.58 | 35.11 | 35.52 | 36.87 |
| 24  | Trinidad and Tobago | 41.24 | 40.78 | 36.17 | 39.44 | 40.14 |
| 25  | Uruguay             | 55.57 | 57.93 | 58.25 | 60.57 | 62.21 |
| 26  | Venezuela           | 26.35 | 30.54 | 29.33 | 29.20 | 29.21 |

Source: Prepared by author using data from Oxford Insights reports.

### 3.2.3. Western Europe

The Western Europe (developed economies) shows little variations in government AI readiness index across the countries. The top performing economy in the entire region is United Kingdom but over the years (2020-2024) gradual downward trend of government AI readiness is also observed. The lowest government AI readiness is reported in case of Greece i.e. 47.93 in year 2020 as compared to all other economies of this region. However, transition of Greece government AI readiness score from 47.93 to 57.70 during 2020-2024 is also recorded. The other economies besides UK including France, Germany, Finland, Denmark, Sweden, Norway and Netherlands have recorded, on average, high government AI readiness as compared to other economies in the region. Overall, it can be safely concluded that little inter-regional heterogeneity has been observed in government AI readiness during the study period.

**Table 6: Heat Map of Western Europe GAIR Index**

| No. | Country        | 2020  | 2021  | 2022  | 2023  | 2024  |
|-----|----------------|-------|-------|-------|-------|-------|
| 1   | Austria        | 68.23 | 68.07 | 71.49 | 72.37 | 72.84 |
| 2   | Belgium        | 63.14 | 66.16 | 69.95 | 67.28 | 72.69 |
| 3   | Cyprus         | 54.08 | 59.71 | 59.15 | 60.84 | 61.50 |
| 4   | Denmark        | 75.62 | 76.96 | 74.79 | 73.91 | 74.71 |
| 5   | Finland        | 79.24 | 79.23 | 77.59 | 77.37 | 76.48 |
| 6   | France         | 73.77 | 76.41 | 75.78 | 76.07 | 79.36 |
| 7   | Germany        | 78.97 | 77.26 | 72.64 | 75.26 | 76.90 |
| 8   | Greece         | 47.93 | 56.22 | 58.56 | 57.95 | 57.70 |
| 9   | Iceland        | 57.63 | 58.53 | 59.84 | 69.59 | 69.82 |
| 10  | Ireland        | 68.24 | 72.80 | 70.76 | 69.82 | 73.18 |
| 11  | Italy          | 65.39 | 67.07 | 68.41 | 67.63 | 71.22 |
| 12  | Luxembourg     | 72.62 | 73.37 | 67.91 | 69.41 | 70.63 |
| 13  | Malta          | 62.43 | 64.85 | 62.75 | 63.64 | 63.64 |
| 14  | Netherlands    | 75.30 | 78.51 | 75.11 | 74.47 | 77.23 |
| 15  | Norway         | 74.43 | 76.14 | 73.09 | 72.71 | 76.12 |
| 16  | Portugal       | 63.92 | 64.31 | 68.12 | 68.28 | 70.93 |
| 17  | Spain          | 68.04 | 67.68 | 67.83 | 67.47 | 69.25 |
| 18  | Sweden         | 78.77 | 78.16 | 73.06 | 72.55 | 75.40 |
| 19  | Switzerland    | 69.22 | 68.56 | 68.49 | 68.57 | 69.42 |
| 20  | United Kingdom | 81.12 | 81.25 | 78.54 | 78.57 | 78.88 |

Source: Prepared by author using data from Oxford Insights reports.

### 3.2.4 Eastern Europe

The Eastern Europe shows substantial intra-regional heterogeneity in government AI readiness scores during 2020-2024. The top performing economies are Estonia, Czech Republic followed by Lithuania, Poland and Russia. The lowest performing economies are Bosnia and Herzegovina, Albania, Belarus and Montenegro. The countries transitioned from yellow to green shows noticeable improvements in government AI readiness score including Slovenia, Hungary and Latvia. Overall, it is evident that government of lagging economies of this region needs to pay special attention to improve government AI readiness so that growth inducing benefits of AI can be realized across the entire region to ensure shared prosperity. The increase in government AI readiness score can be materialized by improving human capital, providing AI supporting infrastructure for its speedy adoption and diffusion.

**Table 7: Heat Map of Eastern Europe GAIR Index**

| No. | Country | 2020  | 2021  | 2022  | 2023  | 2024  |
|-----|---------|-------|-------|-------|-------|-------|
| 1   | Albania | 39.99 | 42.90 | 42.10 | 43.26 | 45.47 |

|    |                        |       |       |       |       |       |
|----|------------------------|-------|-------|-------|-------|-------|
| 2  | Belarus                | 46.10 | 46.20 | 40.27 | 39.20 | 39.24 |
| 3  | Bosnia and Herzegovina | 36.25 | 38.67 | 35.17 | 36.49 | 37.02 |
| 4  | Bulgaria               | 51.42 | 60.07 | 60.33 | 58.64 | 60.64 |
| 5  | Croatia                | 48.62 | 52.30 | 48.59 | 49.34 | 51.62 |
| 6  | Czech Republic         | 61.52 | 65.95 | 67.05 | 65.17 | 70.23 |
| 7  | Estonia                | 69.92 | 69.18 | 70.14 | 70.86 | 72.62 |
| 8  | Hungary                | 55.82 | 59.72 | 61.44 | 60.66 | 63.63 |
| 9  | Latvia                 | 57.58 | 62.27 | 59.84 | 60.30 | 61.87 |
| 10 | Lithuania              | 65.02 | 65.19 | 62.20 | 63.33 | 67.80 |
| 11 | Moldova                | 41.74 | 41.71 | 42.04 | 42.97 | 56.03 |
| 12 | Montenegro             | 43.66 | 46.10 | 45.20 | 47.15 | 47.43 |
| 13 | Poland                 | 62.42 | 62.50 | 62.65 | 63.10 | 67.51 |
| 14 | North Macedonia        | 43.00 | 43.73 | 46.11 | 45.40 | 45.12 |
| 15 | Romania                | 50.78 | 53.22 | 53.30 | 52.32 | 58.08 |
| 16 | Russia                 | 60.85 | 61.93 | 61.48 | 62.92 | 64.72 |
| 17 | Serbia                 | 53.43 | 55.98 | 52.96 | 55.57 | 58.49 |
| 18 | Slovakia               | 58.16 | 61.62 | 51.23 | 60.73 | 63.69 |
| 19 | Slovenia               | 55.99 | 65.05 | 61.45 | 62.63 | 65.85 |
| 20 | Ukraine                | 48.90 | 50.58 | 52.80 | 53.29 | 60.57 |

Source: Prepared by author using data from Oxford Insights reports.

### 3.2.4. East Asia

In East Asia, mostly economies are showing low government AI readiness scores during the study period except Singapore, South Korea, Japan, China and Malaysia. The Singapore's performance of Government AI readiness is promising i.e. increasing from 78.70 (2020) to 84.25 (2024). The worst performing economies given the yardstick of government AI readiness scores are Myanmar, Laos, Cambodia and Mongolia. The moderate government AI readiness has been observed in Brunei Darussalam, Philippines and Vietnam. The transition of Indonesia from low AI readiness 47.53 to moderate AI readiness 65.85, during reference period is remarkable. Similar trends has been observed in Thailand, transitioning from low AI readiness 48.16 to moderate AI readiness 66.17 during study period.

**Table 8: Heat Map of East Asia GAIR Index**

| No. | Country           | 2020  | 2021  | 2022  | 2023  | 2024  |
|-----|-------------------|-------|-------|-------|-------|-------|
| 1   | Brunei Darussalam | 51.47 | 52.93 | 48.06 | 48.10 | 55.45 |
| 2   | Cambodia          | 32.20 | 33.35 | 31.17 | 31.88 | 36.63 |
| 3   | China             | 69.08 | 74.42 | 70.84 | 70.94 | 72.01 |
| 4   | Indonesia         | 47.53 | 58.14 | 60.89 | 61.03 | 65.85 |
| 5   | Japan             | 73.30 | 76.18 | 75.25 | 75.08 | 75.75 |
| 6   | Laos              | 32.33 | 34.93 | 31.72 | 33.05 | 36.08 |
| 7   | Malaysia          | 63.66 | 62.46 | 67.37 | 68.71 | 71.40 |
| 8   | Mongolia          | 37.79 | 37.20 | 37.21 | 38.99 | 42.36 |
| 9   | Myanmar           | 31.67 | 31.57 | 32.45 | 30.91 | 34.26 |
| 10  | Philippines       | 42.94 | 47.20 | 55.42 | 51.98 | 58.51 |
| 11  | Singapore         | 78.70 | 82.46 | 84.12 | 81.97 | 84.25 |
| 12  | South Korea       | 77.70 | 76.55 | 76.76 | 75.65 | 79.98 |
| 13  | Thailand          | 48.16 | 52.63 | 64.63 | 63.03 | 66.17 |
| 14  | Vietnam           | 42.82 | 51.82 | 53.96 | 54.48 | 61.42 |

Source: Prepared by author using data from Oxford Insights reports.

### 3.2.5. Middle East and North Africa (MENA)

The heat map representation of government AI readiness index during 2020-2024 for MENA indicates that UAE is the leading economy as compared to other 14 economies of the region. The UAE's government AI readiness score increased from 72.40 (2020) to 75.66 (2024). The Israel's position is second in the region, progressed from moderate AI readiness score 68.83

(2020) to high AI readiness score 74.52 (2024). Few countries including Saudi Arabia, Qatar transitioned from light green to dark green, indicating consistent improvement in government AI readiness score. The lowest performing country is Yemen in the region, witnessing sharp decline from 19.89 AI readiness score in year 2023 to 14.62 AI readiness score in year 2024. The consistent gradual improvement in government AI readiness score is recorded in Qatar, Oman, Jordan during the study period.

**Table 9: Heat Map of MENA GAIR Index**

| No. | Country      | 2020  | 2021  | 2022  | 2023  | 2024  |
|-----|--------------|-------|-------|-------|-------|-------|
| 1   | Algeria      | 33.47 | 37.92 | 35.33 | 35.99 | 39.06 |
| 2   | Bahrain      | 54.75 | 53.54 | 53.59 | 56.13 | 54.33 |
| 3   | Egypt        | 49.19 | 49.75 | 49.42 | 52.69 | 55.63 |
| 4   | Iraq         | 33.88 | 36.93 | 31.52 | 33.40 | 40.91 |
| 5   | Israel       | 68.83 | 70.01 | 70.12 | 65.46 | 74.52 |
| 6   | Jordan       | 41.76 | 44.38 | 51.76 | 56.85 | 61.57 |
| 7   | Kuwait       | 50.61 | 50.97 | 47.68 | 49.86 | 51.26 |
| 8   | Lebanon      | 35.91 | 39.67 | 45.72 | 47.62 | 46.67 |
| 9   | Morocco      | 36.42 | 42.38 | 41.31 | 43.34 | 41.78 |
| 10  | Oman         | 52.10 | 57.26 | 57.83 | 58.94 | 62.91 |
| 11  | Qatar        | 56.78 | 67.18 | 62.37 | 63.59 | 68.22 |
| 12  | Saudi Arabia | 56.23 | 63.42 | 61.96 | 67.04 | 72.36 |
| 13  | Tunisia      | 44.39 | 45.71 | 46.81 | 46.07 | 43.68 |
| 14  | UAE          | 72.40 | 71.60 | 68.54 | 70.42 | 75.66 |
| 15  | Yemen        | 19.33 | 17.93 | 17.32 | 19.89 | 14.62 |

Source: Prepared by author using data from Oxford Insights reports.

### 3.2.6. South and Central Asia (SCA)

In case of SCA, the heat map visualization of government AI readiness index does not reveal significant disparities among the economies. India is the leading economy followed by Turkey, whereas, Afghanistan is the worst performer in terms of government AI readiness during the study period. The score of government AI readiness index in case of all remaining 13 economies is ranging from 29.85 to 53.45 during the study period. Overall, performance of the region reflects moderate government AI readiness. However, the Uzbekistan's government AI readiness has significantly improved from 37.17 (2020) to 53.54 (2024). This in turn reflect the commitment of Uzbekistan's government to adopt AI steadily.

**Table 10: Heat Map of SCA GAIR Index**

| No. | Country     | 2020  | 2021  | 2022  | 2023  | 2024  |
|-----|-------------|-------|-------|-------|-------|-------|
| 1   | Afghanistan | 24.82 | 24.38 | 13.46 | 21.27 | 16.92 |
| 2   | Armenia     | 42.72 | 45.93 | 41.91 | 45.22 | 44.51 |
| 3   | Azerbaijan  | 46.44 | 48.26 | 45.55 | 48.15 | 39.92 |
| 4   | Bangladesh  | 33.00 | 36.10 | 43.63 | 46.04 | 47.12 |
| 5   | Bhutan      | 35.38 | 34.02 | 37.91 | 36.88 | 38.78 |
| 6   | Georgia     | 43.39 | 45.41 | 40.79 | 41.27 | 46.92 |
| 7   | India       | 55.98 | 56.11 | 63.67 | 62.58 | 62.81 |
| 8   | Kazakhstan  | 46.55 | 48.43 | 45.78 | 48.56 | 51.41 |
| 9   | Kyrgyzstan  | 35.81 | 37.61 | 33.91 | 34.10 | 36.55 |
| 10  | Maldives    | 40.32 | 37.47 | 33.54 | 31.71 | 31.43 |
| 11  | Nepal       | 29.85 | 31.92 | 30.75 | 30.77 | 33.14 |
| 12  | Pakistan    | 33.49 | 34.03 | 40.22 | 42.20 | 40.47 |
| 13  | Sri Lanka   | 36.24 | 41.12 | 36.23 | 41.89 | 45.29 |
| 14  | Tajikistan  | 35.01 | 38.49 | 35.83 | 38.78 | 36.72 |
| 15  | Turkey      | 46.01 | 55.49 | 58.97 | 60.51 | 60.63 |
| 16  | Uzbekistan  | 37.17 | 40.13 | 44.51 | 43.79 | 53.45 |

Source: Prepared by author using data from Oxford Insights reports.

### 3.2.7. Pacific

The drastic divergence in government AI readiness of pacific region is indicated by heat map visualization. The Australia is the leading economy with more government AI readiness during study period as compared to New Zealand, whereas, Fiji's AI readiness score is lowest in the region. Although certain improvements in AI readiness of Fiji has been observed but still placed in the bottom.

**Table 11: Heat Map of Pacific GAIR Index**

| No. | Country     | 2020  | 2021  | 2022  | 2023  | 2024  |
|-----|-------------|-------|-------|-------|-------|-------|
| 1   | Australia   | 73.58 | 75.41 | 75.29 | 73.89 | 76.45 |
| 2   | Fiji        | 38.73 | 48.17 | 41.76 | 41.57 | 44.22 |
| 3   | New Zealand | 68.15 | 68.08 | 67.82 | 60.18 | 63.98 |

Source: Prepared by author using data from Oxford Insights reports.

### 3.2.8. Sub Saharan Africa (SSA)

The heat map presents the government AI readiness index for SSA from 2020 to 2024. It highlights differences in government AI readiness score across countries of SSA. An overall steady performance has been observed despite some year-to-year noticeable fluctuations, although, significant disparities have been noticed across economies. Many economies have experienced small declines in 2022 or 2023 before recovering in 2024. This in turn indicates temporary setbacks as opposed to sustained deterioration.

**Table 12: Heat Map of SSA GAIR Index**

| No. | Country       | 2020  | 2021  | 2022  | 2023  | 2024  |
|-----|---------------|-------|-------|-------|-------|-------|
| 1   | Angola        | 23.80 | 22.87 | 24.77 | 29.14 | 26.91 |
| 2   | Benin         | 32.05 | 28.73 | 35.84 | 41.37 | 42.97 |
| 3   | Botswana      | 33.27 | 36.33 | 38.36 | 38.84 | 38.16 |
| 4   | Burkina Faso  | 30.97 | 32.24 | 26.20 | 27.50 | 29.28 |
| 5   | Burundi       | 24.68 | 23.72 | 20.53 | 20.87 | 21.13 |
| 6   | Cameroon      | 30.02 | 31.88 | 30.76 | 30.27 | 33.46 |
| 7   | Cape Verde    | 35.70 | 36.07 | 34.27 | 36.30 | 40.67 |
| 8   | Chad          | 24.78 | 24.00 | 20.58 | 23.44 | 22.66 |
| 9   | Congo         | 30.65 | 30.42 | 26.20 | 24.19 | 25.12 |
| 10  | Côte d'Ivoire | 34.16 | 36.71 | 30.95 | 32.78 | 34.69 |
| 11  | DR Congo      | 24.65 | 23.32 | 20.22 | 21.47 | 22.10 |
| 12  | Eswatini      | 28.11 | 29.76 | 25.46 | 27.05 | 36.23 |
| 13  | Ethiopia      | 26.27 | 27.95 | 25.30 | 32.59 | 38.34 |
| 14  | Gabon         | 35.06 | 36.51 | 32.42 | 33.09 | 34.15 |
| 15  | Gambia        | 34.51 | 30.45 | 27.96 | 30.25 | 26.95 |
| 16  | Ghana         | 38.50 | 40.19 | 36.56 | 32.58 | 43.30 |
| 17  | Guinea        | 29.42 | 27.55 | 27.82 | 27.44 | 30.21 |
| 18  | Kenya         | 43.66 | 45.54 | 40.36 | 40.19 | 43.56 |
| 19  | Lesotho       | 35.55 | 29.84 | 26.13 | 26.21 | 28.21 |
| 20  | Madagascar    | 27.32 | 29.53 | 28.26 | 28.47 | 28.80 |
| 21  | Malawi        | 26.76 | 24.85 | 24.46 | 24.87 | 29.32 |
| 22  | Mali          | 30.24 | 30.14 | 27.34 | 27.45 | 32.27 |
| 23  | Mauritania    | 29.43 | 29.62 | 28.40 | 27.09 | 41.40 |
| 24  | Mauritius     | 53.86 | 52.71 | 53.38 | 53.27 | 53.94 |
| 25  | Mozambique    | 26.17 | 26.23 | 22.54 | 25.62 | 24.22 |
| 26  | Namibia       | 37.10 | 33.14 | 34.57 | 35.37 | 33.28 |
| 27  | Niger         | 29.72 | 27.81 | 23.72 | 24.71 | 25.74 |
| 28  | Nigeria       | 30.90 | 35.15 | 39.10 | 39.88 | 43.33 |
| 29  | Rwanda        | 39.57 | 35.16 | 40.20 | 45.39 | 51.25 |
| 30  | Senegal       | 36.94 | 36.34 | 34.51 | 42.58 | 46.11 |
| 31  | Seychelles    | 45.12 | 47.48 | 39.87 | 38.11 | 44.77 |
| 32  | Sierra Leone  | 26.72 | 29.39 | 24.49 | 24.83 | 25.34 |
| 33  | South Africa  | 48.25 | 48.24 | 47.74 | 47.28 | 52.91 |

|    |          |       |       |       |       |       |
|----|----------|-------|-------|-------|-------|-------|
| 34 | Sudan    | 26.45 | 25.91 | 22.55 | 24.51 | 24.63 |
| 35 | Tanzania | 32.78 | 32.69 | 32.50 | 32.86 | 35.08 |
| 36 | Togo     | 30.55 | 32.68 | 29.82 | 29.69 | 31.32 |
| 37 | Uganda   | 30.96 | 31.76 | 32.66 | 33.44 | 34.63 |
| 38 | Zambia   | 32.14 | 31.21 | 29.63 | 32.36 | 41.87 |
| 39 | Zimbabwe | 27.59 | 29.15 | 29.26 | 30.71 | 32.59 |

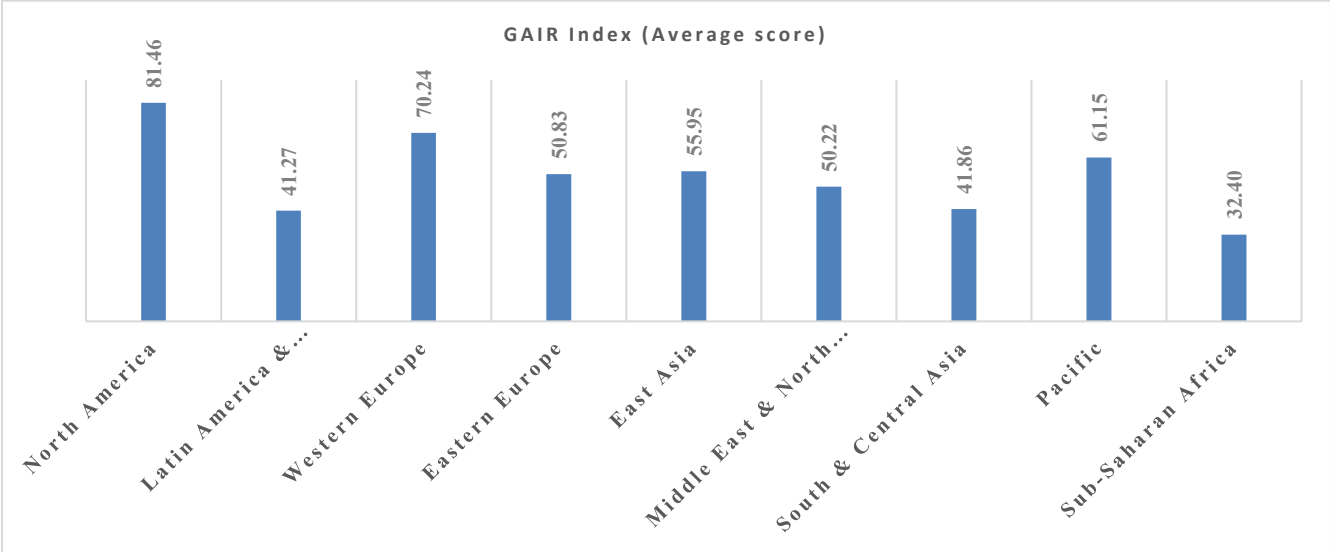
Source: Prepared by author using data from Oxford Insights reports.

The countries shaded in green, such as Mauritius, South Africa and Seychelles, consistently recorded high government AI readiness scores, indicating stronger digital infrastructure, institutional infrastructure and AI governance. The Rwanda’s performance is worth to note as government AI readiness score has substantially improved from 39.57 to 51.25 during 2020-2024. Rwanda and Seychelles consistently performed above the regional average score. Conversely, countries shaded in red exhibited comparatively low readiness throughout the study period. The low government AI readiness is observed in Angola, Chad, Burundi, DR Congo, and Niger. Several countries, including Nigeria, Ghana, Zambia, and Ethiopia transitioned from yellow or orange to greener shades over the years, reflecting gradual improvements in government AI readiness. Countries such as Cape Verde, Botswana, Tanzania, and Namibia maintained relatively stable performance with only modest year to year changes. Several countries showed significant improvement over the five-year period. Angola, Benin, Ethiopia, Ghana, Nigeria, Zambia, and Zimbabwe exhibited noticeable increases in their readiness scores by 2024, suggesting improvements in digital governance, technology adoption, and institutional capacity. Nigeria, for example, displayed a clear increasing trend, moving from the 30.90 in 2020 to above 43.33 by 2024. In a nutshell, it can be concluded that the top performers are: Mauritius, Rwanda, South Africa, Ghana, Seychelles, whereas, lowest performers are: Chad, Burundi, Niger, Sierra Leone and Mozambique.

4. Government AI Readiness Regional Average Scores (2020-2024)

The average government AI readiness score indicates a pronounced regional divide in AI readiness. The developed regions including North America and Western Europe demonstrate higher government AI readiness due to greater investment in AI, stronger technological ecosystems and good governance structure. In contrast, developing regions particularly Sub-Saharan Africa, South and Central Asia, Latin America & Caribbean demonstrate lower government AI readiness due to structural and institutional challenges.

Figure 1: Regional GAIR Average Scores (2020-2024)



Source: Author’s calculations and visualization using data from Oxford Insights annual reports.

The North America outperform with an average score of government AI readiness i.e. 81.46. The highest AI readiness indicates supporting government policies, advanced AI research and strong digital infrastructure. The Western Europe with second highest AI readiness (70.24) reflects its widespread AI adoption, robust innovation ecosystems and good governance. The East Asia AI readiness is above average i.e. 55.95, indicates growing AI capabilities, expanding technological infrastructure and increasing investment. The Eastern Europe shows moderate AI readiness i.e. 50.83 reflecting steady progress but with substantial room for improvement in human skills, governance and digital infrastructure. The MENA also shows moderate AI readiness i.e. 50.22 reflecting ongoing investment in AI strategies, although implementation varies across regional economies. The low government AI readiness is seen in South and Central Asia, LAC i.e. 41.86 and 41.27 respectively. The lower AI readiness is attributed to multiple challenges including limited research capacity and uneven digital divide. The lowest government AI readiness in SSA i.e. 32.40 indicates substantial challenges related to human skills, advanced technological skills, governance quality and funding. These findings suggest that to achieve global balanced AI development, there is a dire need to reduce disparities in human capital, research capacity, digital infrastructure and institutional quality.

5. Classification of Global Economies based on Data Driven GAIR Benchmarks

To facilitate intra-regional comparison, a common GAIR classification framework is applied to all 155 cross sectional units. This common framework is based on five-year average GAIR scores. This approach enables us to ensure consistency in categorizing government AI readiness and mapping AI readiness disparities in a more meaningful way. In addition, the data driven categories enables us to show relative standing within analyzed population. The maximum average score of AI readiness during 2020-2024 is 86.23 (USA from North America). The minimum average AI readiness score during study period is 22.18 (Burundi from Sub-Saharan Africa). Using 5-equal intervals, the economies are classified as very low AI readiness, low AI readiness, moderate AI readiness, high AI readiness, very high AI readiness. The details are provided in table 13.

Table 13: Data-Driven GAIR Index Benchmarks

| Classifications                   | 5 Year (average) GAIR Index |
|-----------------------------------|-----------------------------|
| Very Low Government AI Readiness  | 22.18-34.99                 |
| Low Government AI Readiness       | 35.00-47.80                 |
| Moderate Government AI Readiness  | 47.81-60.61                 |
| High Government AI Readiness      | 60.62-73.42                 |
| Very High Government AI Readiness | 73.43-86.23                 |

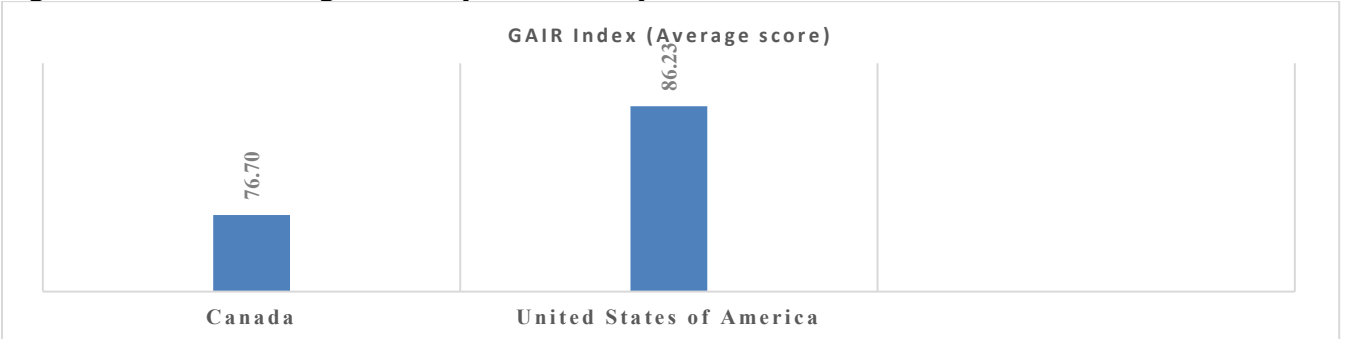
Note: Class width = (Range/class groups) = (86.23-22.18)/5 = 12.81

Source: Author’s calculations

5.1. North America

The North America comprises of only two economies i.e. USA and Canada. The USA is a leading economy with 86.23 GAIR score (on average) during 2020-2024, whereas, Canada is lagging in government AI readiness score in comparison to USA with an average GAIR score 76.70. Both economies possess very high government AI readiness.

Figure 2: GAIR Average Score (2020-2024) – North America

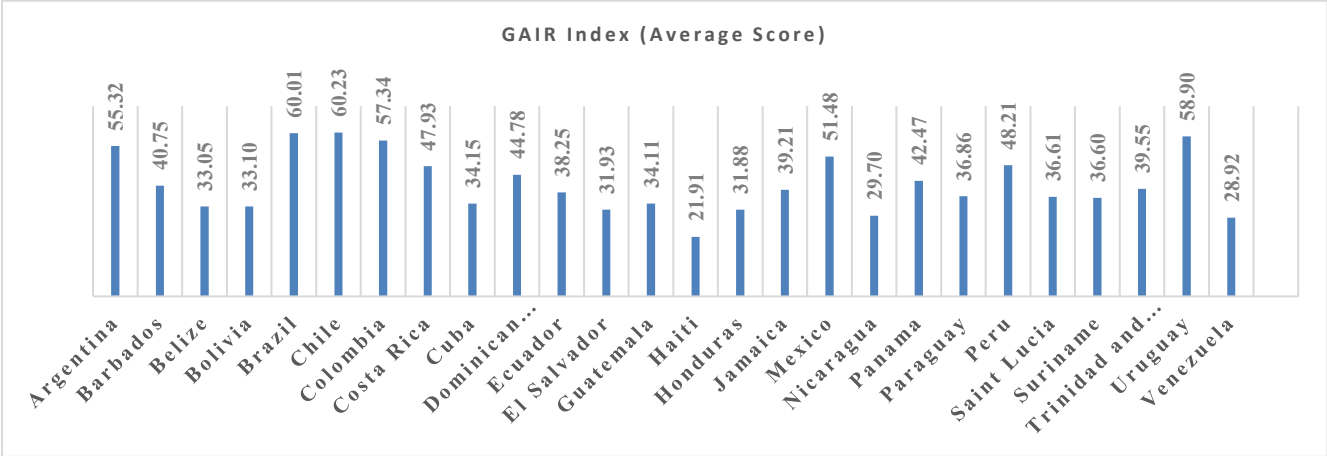


Source: Author’s calculations and visualization using data from Oxford Insights annual reports.

5.2. Latin America and the Caribbean (LAC)

Given significant regional disparities in government AI readiness, this comparative analysis is based on author’s pre-defined data driven GAIR benchmarks to distinguish different level of government AI readiness. The LAC economies are neither qualified for the status of very high AI readiness nor for high AI readiness during the study period.

**Figure 3: GAIR Average Score (2020-2024) - LAC**



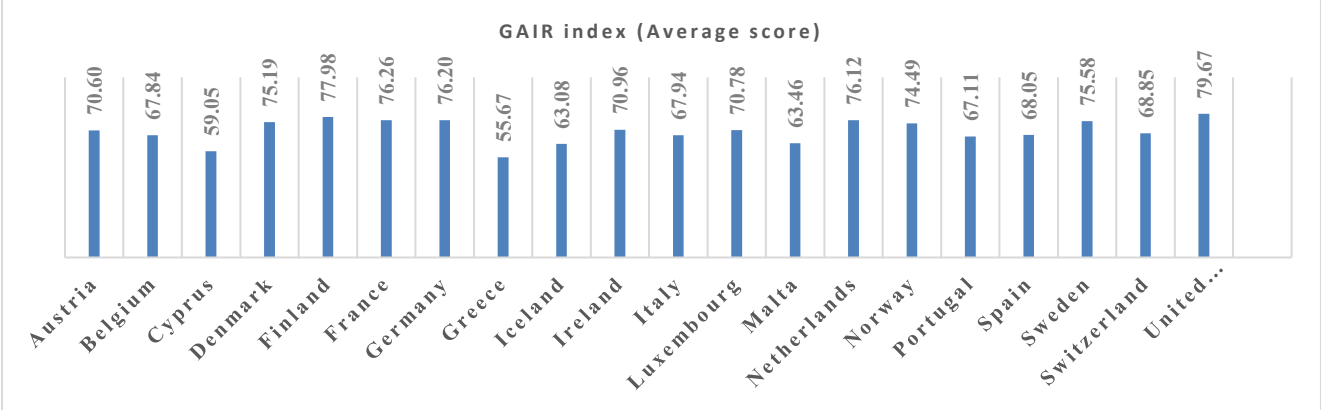
Source: Author’s calculations and visualization using data from Oxford Insights annual reports.

Although the LAC economies have growing AI capabilities but AI innovation output and scale of investment remains smaller as compared to leading regions including North America, Western Europe and parts of East Asia. However, few Latin America and Caribbean economies have experienced moderate AI readiness which includes Chile (60.23), Brazil (60.01), Uruguay (58.90) and Colombia (57.34), Argentina (55.32), Mexico (51.48), Peru (48.21) and Costa Rica (47.93). The low AI readiness economies are: Dominican Republic (44.78), Panama (42.47), Barbados (40.75), Jamaica (39.21), Trinidad and Tobago (39.55), Saint Lucia (36.61) and Ecuador (38.25). The very low AI readiness economies are all those economies that has an average score from 22.18 to 34.99 during study period. All this in turn reflect significant regional divide in AI readiness.

**5.3. Western Europe**

The Western Europe indicates, on average, consistent high performance of GAIR index across economies. Most of the economies have scored more than 65 points of AI readiness during the study period. This in turn reflects mature digital ecosystems, strong institutional quality and advanced innovation capacity. The UK is the regional leader demonstrating exceptional (very high) government AI readiness.

**Figure 4: GAIR Average Score (2020-2024) – Western Europe**



Source: Author’s calculations and visualization using data from Oxford Insights annual reports.

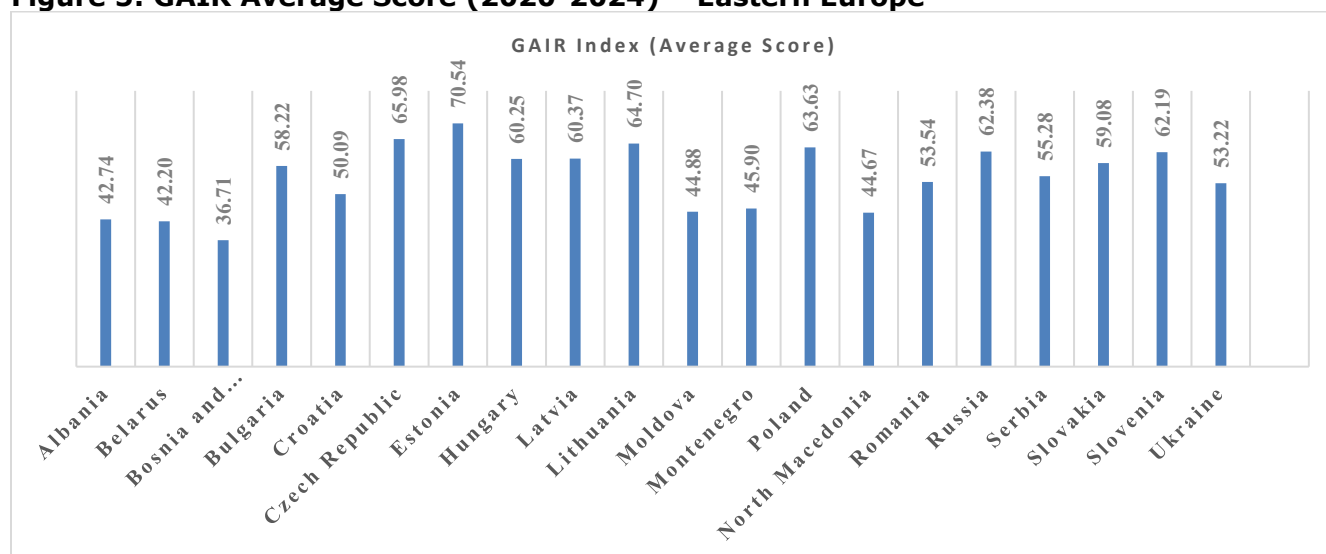
The other very high AI readiness regional economies are: Finland (77.89), France (76.26), Germany (76.20), Netherlands (76.12), Sweden (75.58), Denmark (75.19) and Norway (74.49). The high AI readiness economies are: Ireland (70.96), Luxembourg (70.78), Austria (70.60), Switzerland (68.85), Spain (68.05), Italy (67.94), Belgium (67.84), Portugal (67.11) Malta (63.46) and Iceland (63.08) that demonstrate strong government AI readiness. The moderate AI readiness economies are: Cyprus (59.05) and Greece (55.67). The average GAIR scores demonstrates that Western Europe is one of the World's most AI's prepared region. The intra-regional differences are comparatively small as compared to other regions of the world. Continued investment in AI infrastructure and cross boarder collaboration can significantly help lagging economies to close the remaining gap with regional top leaders.

#### 5.4. Eastern Europe

The Eastern Europe exhibits more intra-regional AI divide as compared to Western Europe during the study period. No Eastern European economy qualifies for a very high government AI readiness, reflecting that Eastern Europe has not reached the benchmark of very high AI readiness. This is due to lacks in AI innovations, development and infrastructure.

The high AI readiness economies are: Estonia (70.54), Czech Republic (65.98), Lithuania (64.70), Poland (63.63), Russia (62.38) and Slovenia (62.19). The moderate AI readiness economies are: Latvia (60.37), Hungary (60.25), Slovakia (59.02), Bulgaria (58.22), Serbia (55.28), Romania (53.54), Ukraine (53.22) and Croatia (50.09). The low AI readiness economies are: Montenegro (45.90), Moldova (44.88), North Macedonia (44.67), Albania (42.74), Belarus (42.20) and Bosnia and Herzegovina (36.71). No Eastern European economy qualifies for a very low AI readiness during study period.

**Figure 5: GAIR Average Score (2020-2024) – Eastern Europe**

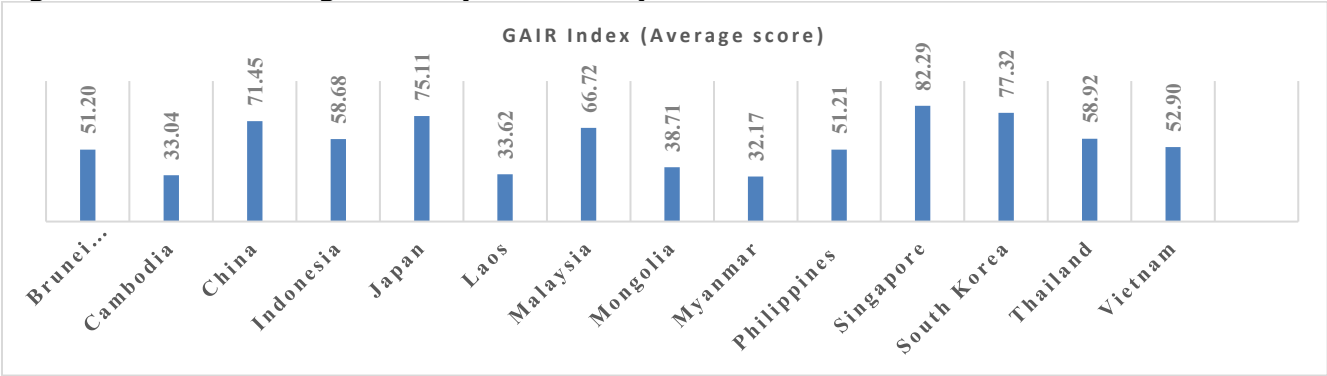


Source: Author's calculations and visualization using data from Oxford Insights annual reports.

#### 5.5. East Asia

The East Asia government AI readiness is severely heterogeneous across the region. Singapore (very high AI readiness) is dominating the region with 82.29 GAIR index, while, Myanmar sits in the bottom (very low AI readiness) with 32.17 GAIR index during study period. This massive gap originates from differences in political stability, infrastructure, digital innovation, human skills and economic resources. Singapore successfully operate forward looking digital economy supported by Singapore's National AI Strategy 2.0, whereas, Myanmar is a candidate of internal conflicts, developmental challenges and institutional deficiencies. Using our data driven classification of government AI readiness, South Korea and Japan besides Singapore falls in the category of very high government AI readiness, China and Malaysia falls in the category of high readiness. Thailand, Indonesia, Vietnam, Brunei Darussalam and Philippines falls in the category of moderate AI readiness. Mongolia falls in the category of low AI readiness. Cambodia and Laos besides Myanmar falls in the category of very low AI readiness.

Figure 6: GAIR Average Score (2020-2024) – East Asia



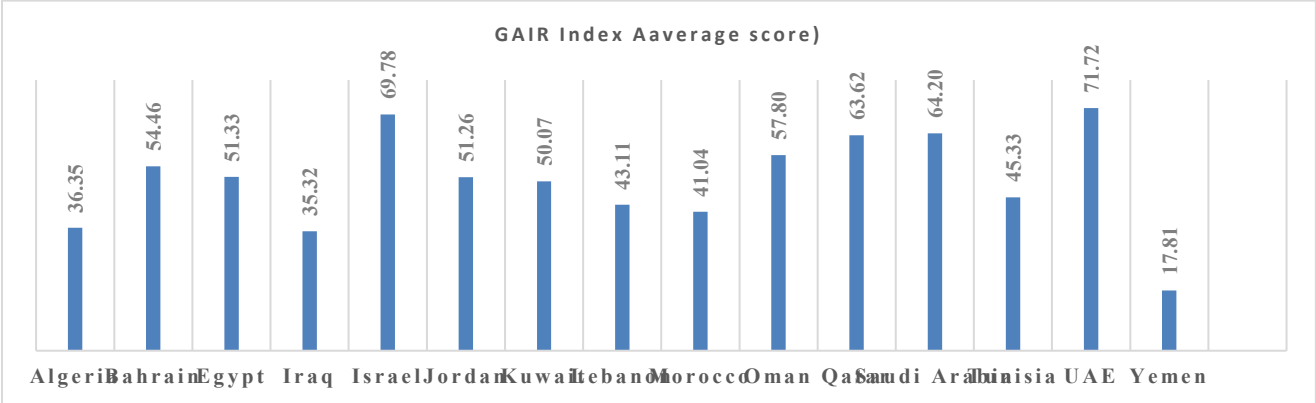
Source: Author’s calculations and visualization using data from Oxford Insights annual reports.

To overcome these regional differences in AI readiness, the East Asian economies must align cross boarder data governance, share computing power, bridge digital infrastructure gaps and execute joint technical training programs.

5.6. Middle East and North Africa (MENA)

In MENA, no economy qualifies the status of very high AI readiness, reflecting that the regional economies (on average) lacks in AI supportive governance, AI-innovations, AI-deployment and AI-infrastructure during study period. It is also pertinent to state that AI readiness in this region is growing led by Gulf States including UAE, Saudi Arabia and Qatar, while wider digital divides and governance issues has been observed in North Africa. Yemen’s AI readiness is in very early foundational stages owing to years of conflict with limited data infrastructure and government digital strategies.

Figure 7: GAIR Average Score (2020-2024) – MENA



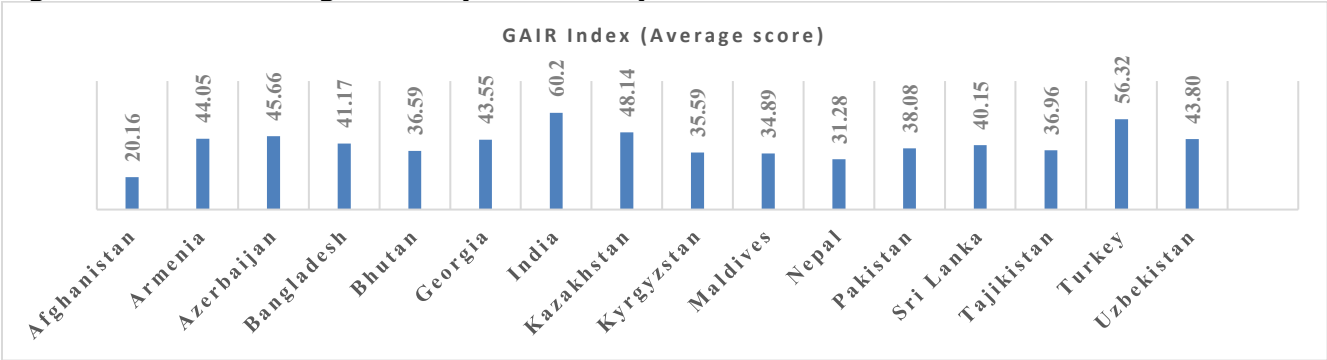
Source: Author’s calculations and visualization using data from Oxford Insights annual reports.

The UAE is a leading economy in this region with 71.12 (average) GAIR score, whereas, Yemen is at the bottom with 17.81 GAIR index. The high government AI readiness is observed in UAE, Israel, Saudi Arabia and Qatar. The moderate AI readiness economies are Oman, Bahrain, Egypt, Jordan, and Kuwait. The low AI readiness economies are Tunisia, Lebanon, Morocco, Algeria and Iraq. Yemen is the only economy in this region that score in the lowest tier of AI readiness.

5.7. South and Central Asia (SCA)

The government AI readiness in SCA is uneven during study period. India is the leading economy (GAIR 60.2 score) in the region followed by Turkey driven by digital public infrastructure and substantial funding to support AI-innovations and deployment. Kazakhstan leads the Central Asia with GAIR 48.14 score, whereas, other Central Asian economies are still building foundational infrastructure.

Figure 8: GAIR Average Score (2020-2024) – SCA



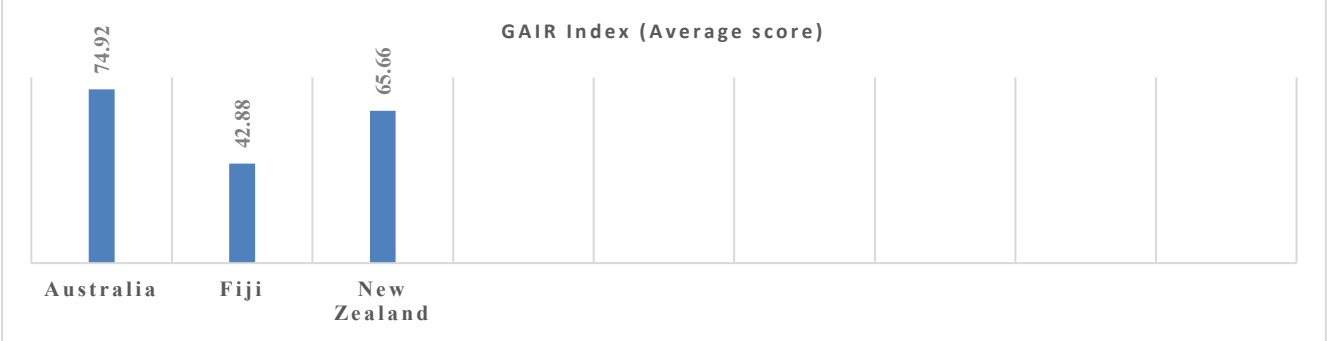
Source: Author’s calculations and visualization using data from Oxford Insights annual reports.

Overall, no economy of this region qualifies for the status of very high or high AI readiness. The economies with moderate AI readiness are India, Turkey and Kazakhstan. The economies with low AI readiness are Azerbaijan, Armenia, Uzbekistan, Bangladesh, Sri Lanka, Pakistan, Tajikistan, Bhutan and Kyrgyzstan. The economies with very low AI readiness are Maldives, Nepal and Afghanistan. Across low AI readiness economies, the common challenges are limited access to data centers, human capital deficits, recurring lag between national AI strategies and actual enforcement and institutional bottlenecks.

5.8. Pacific

Australia and New Zealand lead the region with high innovative capacity, digital literacy rates and advanced AI infrastructure, whereas, Fiji has a developing AI infrastructure. Fiji is facing multiple issues including constraints in data systems, excessively relying on regional partnerships and depending on foreign aid to reduce the digital divide.

Figure 9: GAIR Average Score (2020-2024) – Pacific



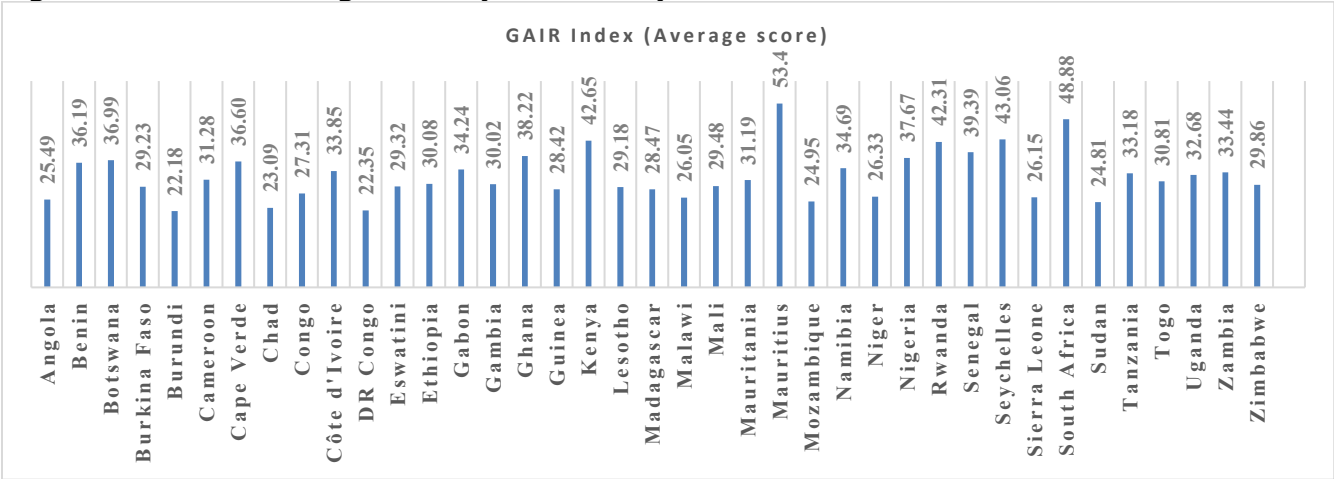
Source: Author’s calculations and visualization using data from Oxford Insights annual reports.

In Pacific, Australia has very high AI readiness, New Zealand has high AI readiness and Fiji has low AI readiness during study period.

5.9. Sub Saharan Africa (SSA)

The government AI readiness in SSA (on average) is in its infancy stages given multiple infrastructure gaps (power shortages, low internet connectivity, deficient resources), education and skill gaps (concentrated hubs), policy and governance issue (regulatory deficits). Except Mauritius (GAIR 53.4 score) and South Africa (GAIR 48.88 score), all other economies of Sub-Saharan Africa possess low AI readiness or very low AI readiness during study period.

Figure 10: GAIR Average Score (2020-2024) – SSA



Source: Author’s calculations and visualization using data from Oxford Insights annual reports.

6. Conclusion and Policy Implications

This study presents the comparative assessment of government AI readiness across 155 global economies during 2020-2024. The Oxford Insights government AI readiness index – comprising of 3 pillars, 10 dimensions and 33 indicators - is utilized to quantify government AI readiness. The economies are grouped into 9 regions as: North America, Latin America and Caribbean, Western Europe, Eastern Europe, East Asia, Middle East and North Africa, South and Central Asia, Pacific and Sub-Saharan Africa. By integrating heap map visualization with data driven classification framework of AI readiness, this research reviews inter-regional AI divide and intra-regional disparities in AI readiness. The data driven classification framework divides global economies into 5 levels of government AI readiness i.e. very low AI readiness, low AI readiness, moderate AI readiness, high AI readiness, very high AI readiness. This classification system has significantly facilitated the comparison among regions and economies. The study contributes in the existing literature on AI readiness by providing a globally comparative and evidence based assessment framework. The findings reveal that North America is a leading global region in government AI readiness followed by Western Europe due to their strong innovation capacity, digital infrastructure, governance and human skills. In contrast, Sub-Saharan Africa sits in the bottom tier of government AI readiness, reflecting continuous challenges in digital infrastructure, technological development, institutional capacity, resources and AI policy implementation. In East Asia, Singapore’s government AI readiness is significant and falls in the category of very high AI readiness followed by South Korea, Japan and China. In MENA, AI readiness is mostly led by Gulf States including UAE, Saudi Arabia and Qatar, whereas, regional divide in AI is observed in North Africa. In South and Central Asia, India is leading in AI government readiness followed by Turkey, whereas, Kazakhstan leads Central Asia in AI readiness. In Pacific, Australia is leading followed by New Zealand and Fiji is lagging in AI readiness. Significant intra-regional heterogeneity has been observed in Eastern Europe and Latin America and Caribbean during the study period.

Based on the findings, it is suggested that government AI readiness policy interventions should be tailored to address local, technological, socio-economic and institutional contexts rather than adopting uniform strategies. In regions with very high AI readiness like North America, Western Europe and few parts of East Asia, policy priority should be sustaining innovation through continued investment in AI development, promoting trust worthy AI and supporting global AI initiatives along knowledge sharing. For high AI readiness economies or emerging leaders of AI including Singapore, South Korea, China, India, Japan, Turkey, Australia, New Zealand, policy priority should be scaling AI adoption across public sectors, strengthening government AI policy frameworks, ensuring responsible use of AI aligned with global data governance standards. Regions facing high intra-regional AI divide like Latin America and Caribbean, Eastern Europe, South and Central Asia, priority should be given to regional collaborative projects through investing in cross border digital infrastructure, exchanging best practice of AI implementation,

providing targeted support to lower AI readiness economies to minimize the regional heterogeneity. For economies with low or very low government AI readiness including Sub-Saharan Africa, policy priority should be targeted to strengthen institutional capacity, to invest in skills and education, to establish national AI frameworks, to strengthen regulatory frameworks and to ensure conducive digital infrastructure to support government AI readiness.

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## Appendix A

**Table A: List of Excluded Economies**

| Latin America and the Caribbean  | Western Europe | Sub-Saharan Africa       | Middle and Africa | East North | South and Central Asia | East Asia        | Pacific          |
|----------------------------------|----------------|--------------------------|-------------------|------------|------------------------|------------------|------------------|
| Antigua and Barbuda              | Andorra        | Central African Republic | Djibouti          |            | Turkmenistan           | North Korea      | Marshall Islands |
| Bahamas                          | Liechtenstein  | Comoros                  | Libya             |            |                        | Taiwan           | Samoa            |
| Dominica                         | Monaco         | Equatorial Guinea        | Syria             |            |                        | Timor            | Solomon Islands  |
| Grenada                          | San Marino     | Eritrea                  |                   |            |                        | Leste            | Tonga            |
|                                  |                |                          |                   |            |                        | Papua New Guinea |                  |
| Guyana                           |                | Guinea-Bissau            |                   |            |                        |                  | Vanuatu          |
| Saint Kitts and Nevis            |                | Liberia                  |                   |            |                        |                  |                  |
| Saint Vincent and the Grenadines |                | Sao Tome and Principe    |                   |            |                        |                  |                  |
|                                  |                | Somalia                  |                   |            |                        |                  |                  |
|                                  |                | South Sudan              |                   |            |                        |                  |                  |

Notes: a. Few economies of 07 regions are excluded given non-availability of data/missing observations.  
b. The data of North America and Eastern European economies are completely available.