TOWARDS SOCIETAL READINESS

Redesigning Humanity's Capacity to Thrive in an Age of AI

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Abstract:

The Societal Readiness Index (SRI) is a multi-dimensional index for assessing a society's readiness to thrive amid rapid AI and digital transformations. It provides a standardized framework to evaluate and compare how well nations (or regions) anticipate technological disruptions, implement adaptive governance, empower their citizens, and ensure ethical, inclusive deployment of AI. The SRI is designed to guide policymakers, industry, and civil society in identifying readiness gaps and tracking progress over time, complementing existing economic and technological indicators with a strong societal lens. Ultimately, the SRI aims to become an internationally recognized benchmark (aligned with OECD AI Principles and UN SDGs) and a tool for steering collective action towards responsible AI-driven prosperity.

Index Structure and Dimensions:

The SRI comprises six pillars, each representing a critical dimension of societal adaptive capacity. Each pillar is measured by a set of quantitative and qualitative indicators, aggregated into a 0–100 score. Pillar scores are weighted (as noted) to calculate the overall SRI score (0–100). The pillars and their scope are:

1. **Governance Agility (25%)** – *Definition*: The ability of governing institutions to rapidly and effectively respond to technological change. This covers legal/regulatory adaptability, policy innovation, and cross-sector coordination. *Indicators*: e.g. Average time to update tech-related legislation FILE-8HCZIUSDJ7YMTSALO2ERWA; presence of adaptive regulation mechanisms (sandbox frameworks, sunset clauses in tech laws); government AI strategy update frequency; extent of international cooperation in AI governance (treaties, joint frameworks). *Rationale*: Agile governance ensures that benefits of AI can be harnessed while risks are mitigated in near-real-time, preventing prolonged policy vacuums.
2. **Citizen Empowerment & Digital Literacy (20%)** – *Definition*: The degree to which the population is informed, skilled, and engaged regarding AI and digital innovations. *Indicators*: e.g. Adult population's AI/Digital literacy rate (assessed via surveys or education stats); participation rates in public AI forums or consultations; trust in AI as measured by opinion polls; proportion of workforce receiving retraining in digital skills annually. *Rationale:* An empowered citizenry can contribute to and critique AI development, make informed choices, and adapt to changes in the labor market, thereby democratizing the benefits of AI.
3. **Ethical AI Infrastructure (20%)** – *Definition*: The systems, institutions, and practices in place to uphold ethics, transparency, and accountability in AI. *Indicators*: e.g. Existence and enforcement of AI ethics regulations (bias audits, algorithmic accountability laws) FILE-JUUAC6UUJLNZWKP647GB2Z; number and diversity of oversight bodies (data protection authority, AI ethics committees) and their effectiveness;

open data practices and AI transparency (e.g. % of government AI systems with published algorithms or audits); adoption of ethical AI frameworks by industry (measured via surveys or certifications). *Rationale*: This pillar ensures that technological advancement does not outpace our safeguards. It reflects a country's commitment to values such as fairness, privacy, and safety in the AI era.

4. **Economic Adaptability & Resilience (15%)** – *Definition*: The flexibility and resilience of the economy and labor force in absorbing AI-driven shifts. *Indicators*: e.g. Investment in workforce reskilling as % of GDP FILE-8HCZIUSDJ7YMTSALO2ERWA; social safety nets coverage (unemployment benefits, UBI experiments specifically related to automation impact); diversity and growth of new job sectors (gig economy or AI-augmented jobs share); number of AI startups and SMEs, indicating entrepreneurial adaptation. *Rationale*: Economic readiness means not just fostering innovation but also cushioning displacement. This pillar gauges whether economies can reinvent themselves (new industries, job transition pathways) as AI alters traditional sectors.
5. **Technological & Data Infrastructure (10%)** – *Definition:* The availability, quality, and inclusivity of the core digital infrastructure supporting AI. *Indicators*: e.g. Internet and mobile broadband penetration rate (urban and rural) EXPORTFINANCE.GOV.AU; national data storage and compute capacity (data center investments, cloud infrastructure per capita); cybersecurity maturity scores (such as existence of national cybersecurity strategy and incident response capacity); open data availability and quality (indices of data openness, representation of minority data in training sets). *Rationale*: Without robust and widespread digital infrastructure, AI readiness remains theoretical. This pillar ensures

we measure the "digital plumbing" that underlies any AI deployment – and that such infrastructure reaches all segments of society (addressing the digital divide).

6. **Inclusive Foresight & Innovation Culture (10%)** – *Definition*: The inclusiveness of strategic foresight and innovation processes, ensuring broad societal input and benefit-sharing. *Indicators*: e.g. Representation of women, youth, and Global South communities in national AI strategy committees or standards bodies FILE-8HCZIUSDJ7YMTSALO2ERWA; frequency of public horizon-scanning exercises or scenario planning involving diverse stakeholders; regional disparities in AI development (AI initiatives beyond major cities, inclusion of indigenous or local knowledge in AI solutions); metrics of AI for social good (number of AI projects aimed at SDGs or underserved populations). *Rationale*: This pillar captures a society's capacity to collectively imagine and build a future with AI that benefits everyone, not just elites. It rewards efforts to democratize innovation and maintain a long-term, inclusive perspective on technology.

*(Alignment Note: These pillars collectively address key areas highlighted by international frameworks – e.g., **OECD AI Principles** (accountability, transparency in Ethical Infrastructure; inclusivity in Foresight; robustness in Governance Agility), and **UN SDGs** (4, 5, 8, 9, 10, 16, 17 through various pillars).)*

Methodology:

- **Data Collection:** SRI relies on a mix of quantitative data (from sources such as UN agencies, World Bank, OECD, national statistics) and qualitative assessments (expert

surveys, citizen polls). Wherever possible, standardized global indicators are used (e.g. ITU's internet usage % for infrastructure, Gallup/WEF surveys for trust in AI). New instruments (surveys or the "AI TownSquare" participatory platform) may be employed to capture data on emerging metrics like AI literacy or public consultation frequency. Each indicator is documented with its source and year.

- **Scoring and Normalization**: For each indicator, raw values are normalized to a 0–100 scale, where 100 typically represents an aspirational target (drawn from policy targets or top-performing country benchmark) and 0 represents the worst-case or a meaningful lower bound. For example, if "days to pass AI law" ranges from 60 (best observed) to 720 (worst observed) in the data, these might map to 100 and 0 respectively, with other countries interpolated FILE-8HCZIUSDJ7YMTSALO2ERWA. Some indicators (especially qualitative ones) may be scored by expert panels against set criteria (e.g. rating the enforcement strength of AI ethics laws). To ensure balance, indicators are grouped under their pillar and averaged (usually equally or by sub-dimension) to form the pillar score.
- **Weighting**: Pillar weights have been set based on the SRI framework's priorities (Governance 25%, Citizen and Ethics 20% each, Economic 15%, Tech Infra 10%, Inclusive Foresight 10%). These weights reflect the conviction that agile institutions and an empowered populace are slightly more critical in tipping the scales of readiness than pure technology or economic factors. However, weights may be adjusted in future iterations via expert review or based on statistical analysis (e.g. factor importance, correlations). In practice, a country's profile (scores on each pillar) is more informative

than the single number – thus the SRI report will present both overall scores and pillar breakdowns.

- **Reliability and Validation**: The SRI methodology has undergone peer review with experts in AI policy, economics, and sociology. A technical appendix provides details on each indicator's rationale and data source, along with measures of uncertainty (such as confidence intervals for survey-based indicators). Where data are missing, imputation techniques or regional benchmarks may be used cautiously, flagged in the dataset. Back-testing the index against historical data (where possible) and correlating SRI scores with independent outcomes (e.g. extent of AI adoption, public trust levels, inequality trends) have been conducted to validate that the index measures what it intends to. This process is ongoing, and feedback from the global community is incorporated in annual revisions.
- **Transparency:** The full SRI dataset and calculation code will be made available openly (under an open license) to enable researchers and governments to replicate and delve into the results. An online dashboard will allow users to visualize and compare SRI scores, and to simulate "what-if" scenarios (e.g. how a change in one indicator might improve a country's readiness).

Operationalization and Governance:

To implement the SRI, a dedicated multi-stakeholder body called the Readiness Institute will oversee data collection, updates, and stakeholder engagement. The Institute operates with the following structure:

- An Advisory Council drawn from international organizations (e.g. UN, OECD, ISO), academia, and civil society to provide guidance and ensure neutrality.

- Regional partners or hubs (possibly hosted by UN regional commissions or development banks) to facilitate data gathering and local outreach.
- A methodology working group that continuously reviews the index for improvements (new research findings, new data sources, evolving AI trends like generative AI impacts).
- Capacity-building programs under the Institute help countries understand their SRI results and implement best practices. This includes toolkits for policy agility, digital literacy curricula, frameworks for ethical AI governance – effectively leveraging high-scoring nations' experiences as models for others.

The SRI will be updated on a regular cycle (proposed annually, every Q1) to remain current with fast AI developments. A formal review of the entire framework is recommended every 3-5 years (in line with ISO standard review cycles and the pace of AI evolution) to add or revise indicators as needed (for example, if quantum computing or other new tech emerges, or if "readiness" comes to require new considerations).

Use Cases and Implementation:

- **Benchmarking and Rankings**: Governments can use SRI scores to benchmark themselves against peers or regional averages. For instance, if Country A scores 60 overall and Country B 75, a deeper look may show Country A lagging in Ethical Infrastructure – prompting targeted reforms like establishing an AI ethics council. The SRI annual report will highlight such comparisons and showcase "leaders" in each pillar to illustrate achievable standards (e.g. which country has the highest Citizen Empowerment score and why).

- **Policy Roadmapping:** Beyond ranking, the SRI is a diagnostic. Each pillar score comes with policy recommendations. E.g., a low Governance Agility score might come with recommendations to implement regulatory sandbox legislation (citing examples from high-scoring nations). By aligning these recommendations with international guidelines (OECD, EU AI Act, etc.), SRI acts as a one-stop reference for building AI readiness.
- **Investment and Partnerships**: Development agencies and investors might use SRI to identify needs and opportunities. A development bank could prioritize loans for digital infrastructure in countries with otherwise good scores but poor connectivity. Likewise, a tech company or NGO might launch AI literacy programs in response to gaps shown in the index. Over time, improvement in SRI could even become a performance indicator tied to development funding or multi-national AI governance initiatives.
- **Public Communication**: For democracies, communicating SRI results domestically can raise awareness and galvanize support for needed changes. Because SRI touches on citizen empowerment and trust, it inherently encourages governments to be transparent with the public about what's being done to prepare for AI – a narrative that can replace fear with empowerment

Conclusion:

The Societal Readiness Index seeks to fill a critical gap in our global measurement toolkit: it is not enough to ask *"Which economies are leading in AI?"*; we must ask *"Are our societies ready for AI?"*. By formalizing SRI as an ISO-aligned index grounded in best practices and global consensus, we provide a practical instrument to drive that readiness. The SRI's comprehensive, values-centric approach can guide nations in building the adaptive capacity needed to ensure AI and other exponential technologies foster inclusive prosperity rather than societal discord.

Through continuous improvement and broad collaboration, the SRI will help reshape how we gauge progress in the 21st century – complementing traditional metrics with a forward-looking assessment of resilience, agility, and collective wisdom in the face of transformative change.