## AI FOR INCLUSIVE DEVELOPMENT AND FUTURE OF WORK

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# Global Al Development: Opportunities and Challenges

#### **Opportunities**

- Circumventing traditional and linear industrial development paths
- Accelerating advancements in medical diagnostics, drug development, clinical care, and patient management
- Improving food security through identification of crop diseases, optimising land and water use, forecasting yields
- Delivering Al-enabled personalised education to students at scale
- Distribution of information and digital tools to marginalised communitites, thereby expanding participation in the digital economy

#### **Challenges**

- Infrastructure deficits causing gaps in connectivity and stable access to compute
- Talent gap and "Brain Drain" driven by local AI engineers and researchers moving to Global North countries, creating a vaccumm in local ecosystems
- Algorithmic biases caused by the overwhelming majority of frontier Al models being developed in the West, leading to inaccurate representation of socio-cultural and linguistic realities of the Global South
- Policy and governance misalignment between nations arising due to regulatory framewoks that lack interoperability
- Automation of white-collar jobs, increasing the risk of "premature de-professionalisation," according to the World Bank

#### **CORE ISSUES FOR ROK AND INDIA**

#### **ROK: The Productivity Imperative**

 Driven by demographic shifts, labor market pressures and Al-driven job losses, South Korea's goal is using Al for sustaining industrial transformation, automation and societal management

#### **India: The Inclusion Imperative**

 Due to a massive demographic dividend with over 80% of the workforce employed in informal sectors, India's imperative is towards economic formalisation, mass inclusion and social development

#### TWO NATIONAL STRATEGIES

A Comparative Look at Two Al Powerhouses

## ROK'S 'AI G3': A TOP-DOWN, MANUFACTURING FIRST STRATEGY

- **Strategy**: State-led and corporate driven to become a top 3 AI superpower
- **Focus**: Building 'Al Factories' massive, state-backed hardware (HBM, GPUs) and data infrastructure
- **Goal**: Boost national productivity to solve for demographic shifts
- **Risk**: Creating a societal faultline between entry-level and experienced workers

### INDIA'S 'AI FOR ALL': A BOTTOM-UP, ECOSYSTEM-LED MODEL

- **Strategy**: A bottom-up Public Private Partnership (PPP) model based on scioeconomic and cultural inclusion
- **Focus**: Using Digital Public Infrastructure (DPI) as a platform for AI delivery; casting a wide-net for delivering digital solutions; securing digital self-reliance
- **Goal**: Solving population-scale challenges in health, agriculture and governance for 1.5B people
- Risk: Long timeframes for local capacity-building in infrastructure and compute

#### **COMPLEMENTARY STRENGTHS**

#### **ROK: Hardware and Capital**

Market-leading hardware (advanced semiconductors, HBM), 'Al Factory' infrastructure, advanced manufacturing capabilities, and deep capital investment

#### **India: Talent and Scale**

Massive and primed user base, diverse datasets, advanced IT workforce, Digital Public Infrastructure, and population-scale targets for Al solutions

## AI DEVELOPMENT AND RISK MANAGEMENT: PATHWAYS FOR STRATEGIC COLLABORATION

#### PATHWAY 1: TALENT MOBILITY

**Context:** South Korea is a global leader in Al competitiveness but is experiencing a gap in Al talent availability; whereas India holds 16% of the global Al talent pool and is estimated to be home to 1.25 million professionals by 2027

#### **Strategy for mutual benefit:**

- Co-funding certifications designed by Korean corporate houses and Indian partners to create a large and scalable pool of job-ready talent
- Establishing joint-fellowships for AI researchers and creating a fast-track visa category for graduates of such joint programmes
- Adding high-demand roles to bilateral trade agreements to streamline worker movement

## PATHWAY 2: SECURING THE FUTURE OF JOBS

- Creating government and industry-backed Al Proficiency Standards certification for entrylevel jobs that align with the requirements of Korean and Indian IT companies
- Establishing a bilateral venture fund that invests in Al startups in both nations aiming to build solutions for SMEs to promote Al adoption and creation of new jobs
- A high-level joint policy body with the mandate to map AI disruption in the labor markets of India and Korea to guide the skilling initiatives in Pathway 1

## PATHWAY 3: ALIGNING AI ETHICS AND GOVERNANCE STANDARDS

- Launching an India-Korea AI Ethics and Governance Forum chaired by officials from both countries to identify shared values, map divergences in regulatory expectations, and facility cross-border stakeholder inclusion (industry bodies, academic institutions, civil society groups)
- Establishing a partnership between Korea's Al Safety Research Centre and India's Al Safety Institute to develop common benchmarks, sharing best practices, and developing joint protocols for Al safety incidents and responses
- Developing a Joint Framework for AI Interoperability that works towards a mechanism for mutual recognition of risk assessments throughout the life-cycle of AI products and services

## PATHWAY 4: INCLUSION-FOCUSED COLLABORATION

- Building on initiatives like the Bhashini project in India, an Indo-Korean Data Commons and Compute framework can be pursued through which developers can leverage data platforms from both countries to create diverse and inclusive datasets
- Promote a Seoul-Delhi Charter on Inclusive AI Governance. This could entail forming a bilateral working group to harmonise Korea's Human-Centered AI (Seoul Declaration) with India's AI for All principles and jointly develop technical standards and auditing frameworks for 'inclusive AI'

#### **CONCLUDING REMARKS**

- The partnership should focus on ensuring that the economic dividends of AI development are distributed as widely as possible and not concentrated in specific regions or groupings
- Al is a transformative technology and the Al value chain is unruly and globally distributed, leading to constant uncertainty about the future. To navigate such uncharted waters, an India-Korea strategic partnership on Al development should be primarily based on shared values such as democracy, social development, and economic inclusion

#### **END**