T20 Policy Brief



Task Force 05 INCLUSIVE DIGITAL TRANSFORMATION



Using Generative AI to Help Create a Human-Centred Society and Recouple Social and Economic Progress

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Abstract

GenAI has the potential to boost global GDP by up to 7% and increase productivity by 1.5% over a decade as well as create considerable positive social impact. For many, these shifts will be significant: knowledge- and service-based economies may augment or automate up to 60% of their jobs whilst manual economies face a 25-40% job shift impact; employers expect up to 23% of jobs may be impacted over the next five years. The economic benefit to workers from GenAI will largely depend on how complementary GenAI is to their roles, how current and fungible their broader skillset is, and how easily workers can transition between roles. Without foundational and technical education, skills, or capacity, many individuals may find themselves falling further behind. To maximise the benefits of GenAI for all people, a human-centred approach that centres on people and puts technology at the service of society is crucial. Five actions by the G20 can help move us toward this vision:1) create a joint communique outlining this new vision and the role of all stakeholders in achieving it; 2) immediately identify 3-5 challenges previously thought not possible to solve and create task forces which can work to address them over the next decade; 3) create a Regulatory and Legal committee with stakeholders from government and across society to understand what new AI and GenAIrelated technologies are under development, identify the impact of these on society, and discuss potential regulatory and legal issues that will need to be considered; 4) establish a joint council on Education and Skilling to share member nations' best practices and lessons learned on creating a 'next-generation,' GenAI-enabled education and skilling system that prepares youth and the workforce for a digital and AI-powered future; and 5) establish a G20 working group to create an authoritative compendium on GenAI's impact on societies and inequality based on member nations' lessons learned, best practices, and across different types of economies, demographics, and vulnerable populations.

The Challenge and Relevance to the G20



Over the next decade, GenAI has the potential to boost global GDP by up to 7%, or USD \$7Trillion, and increase productivity by 1.5% (Goldman Sachs, 2023) as well as helping address critical social challenges. Even a fraction of the possible gains would have extraordinary implications for economic growth and social welfare which have become increasingly decoupled over the last 40 years (Kelly and Sheppard, 2017) and could recharge global and national efforts to close wealth and income gaps. Capturing this potential will require that we shift toward a "human-centred" socio-economic paradigm, one that centres the welfare improvement of all individuals alongside economic growth, helps repair and build trust across society, and uses GenAI (and all technologies) to drive these outcomes¹. Without this vision and the commensurate action required to create it, we risk reducing GenAI to a blunt, expensive cost-cutting tool rather than using it to elevate the quality of our work and lives by accomplishing the previously unimaginable. To accomplish this will require that different decisions are made quickly; once operational decisions get taken and costs get sunk, it is often too late and costly to course correct.

GenAI will largely impact the economic wealth gap through job shifts – whether jobs are augmented or automated – with knowledge and service sectors more heavily affected than manual sectors; indeed, employers expect that 23% of jobs over the next five years will be impacted by these shifts (World Economic Forum, 2023). This is already happening – AI specialist jobs growth has outpaced all others since 2016 (PwC, *AI Jobs*

¹ The idea and phrasing for a human-centred GenAI approach comes from a body of work including Esposito, et.al, 2023 and Samans, et. al, 2017.



Barometer, 2024) – and will likely continue this trajectory as GenAI is adopted more widely. The International Monetary Fund (IMF) provides a useful framework for assessing the potential ramifications of GenAI on different roles: High-exposure, highcomplementarity (HEHC) jobs --predominantly knowledge-based, requiring human intervention, and generally more highly compensated — are more likely to be augmented by GenAI, creating greater opportunity for economic gains. High-exposure, lowcomplementarity (HELC) jobs --service-based, often less well-paid than HEHC roles, and requiring less human intervention — are at higher automation risk, but may create some opportunity for individuals, as their skills may translate easily to similar roles in other industries. Low-exposure (LE) jobs - often lower-paying manual or trade roles have the lowest risk of automation by GenAI but are also least likely to gain economic and professional advantages from GenAI. GenAI has the potential to improve the productivity and quality of life for individuals in all three types of roles, but without careful policy and operational decisions, there is a strong chance that only those individuals holding HEHC roles will see a significant improvement in their jobs and economic welfare from GenAI. Those in HELC and LE roles, who are often in lowerincome strata, may be less educated, and may come from less privileged populations, likely will bear the largest burden of job disruption (International Monetary Fund, 2024).

Understanding intersectionality as it relates to economic equity is vital to creating policies that support the groups at highest risk of job disruption and can help narrow current, and potentially lessen future, economic disparities created by GenAI. It is also vital to ensuring that GenAI serves as a tool by which to begin closing the trust gap that has widened in recent years, including among employers, consumers, and employees. (PwC, 2024 Trust Survey, 2024). Some² of those populations that face significant impact from GenAI include:

- <u>Women</u> are more than twice as vulnerable to job shifts as men across all income levels and are disproportionately represented among the poorest economic groups globally, making job disruptions especially economically and socially disruptive (Saad, et. al, 2022). They are over-represented in HELC roles (Gmyrek, et. al, 2022; International Monetary Fund 2024), which heightens their risk of job disruption but which may also create an opportunity if they have the skills and education to transition to equal or higher-complementarity roles.
- <u>Income level.</u> Individuals in the highest income brackets predominantly hold high-complementarity jobs, while the distribution of low-complementarity jobs is relatively even across income levels. Consequently, individuals with lower incomes will likely experience job transitions 10-14% more frequently by 2030 compared to their highest-earning counterparts (International Monetary Fund, 2024) highlighting that the highest risks and costs associated with acquiring new skills, changing jobs, and gaining experience in new roles fall disproportionately on those who can least afford them.
- <u>Education</u> has a strong positive correlation with employment, particularly in HEHC roles and therefore with potential income and wealth generation, suggesting that populations with less access to education often the poor,

² This is only a representative list of cohorts facing greater economic inequity, which also include disabled individuals, those in rural locations, certain racial or ethnic groups, certain religious groups, and more.



marginalised, girls, from rural communities, or disabled — are at even greater risk of being left further behind in the wake of GenAI (International Monetary Fund, 2024). 60% of workers will need new training and skills before 2027, yet only half of workers have access to the requisite skills opportunities they need (World Economic Forum, 2023). Conversely, GenAI also may be the means by which many disenfranchised populations can get the education and skills needed to thrive in a digitally-driven workforce.

• <u>Age.</u> Many young people (particularly in developing and low-income economies) do not have the essential skills to thrive in a GenAI-centred world. Simultaneously, many developed economies are finding that older workers, with fewer or more basic digital skills, are staying in the workforce longer. As some entry-level jobs become automated, new educational pathways will have to arise to help youth gain entry into the workforce while skilling pathways must be available to older workers who may face massive earnings losses, up to 45%, if they face a job shift without the necessary skills to switch roles (International Monetary Fund, 2024).

The G20 countries – with 89% of the world's GDP (Munyati, 2023), 80% of the world's population (McBride, 2023), and a significant portion of the global labour force (International Labour Organisation, 2023) – have the opportunity and political heft to set a precedent for how all countries can use GenAI to improve their social and economic progress. Knowledge- and service-based economies may see around 60% of jobs impacted, but also potentially benefit more from GenAI given their access to critical elements such as mature digital infrastructure, financing, and education, and strong institutions. Largely manual-based economies are likely to experience job shift impacts



of 25-40% (International Monetary Fund, 2024), but often lack the necessary elements, such as broad connectivity rates, to fully leverage GenAI for economic advancement. Given that AI-exposed sectors demonstrate 4.8 times greater labour productivity (PwC, *AI Jobs Barometer*, 2024), nations too can potentially improve their productivity and economic growth, and create greater economic equity for their citizens, with greater exposure to GenAI. Care must be taken, however, to ensure an equitable distribution of benefits across all income levels and jobs, including through tax and incentive structures, to avoid concentrating wealth in a small number of people and corporations. Without taking deliberate decisions to close these gaps and equitably distribute the benefits, we could further exacerbate today's global wealth and income inequality (Riddell, et. al, 2024).

Recommendations

The "RICE/MM" framework below lays out a pathway to help G20 policymakers envision how to move toward this more human-centred paradigm and consider potential policies to help get us closer to this vision.

Reinvent. *Create a new strategic vision for a human-centred, GenAI-enabled society.* We have an opportunity to reinvent our collective view about who wins and loses in society and the role of technology in creating greater equity. In this society, GenAI augments large parts of our knowledge and service work, as well as supplementing more manual roles such as those in health care, construction, and law enforcement, expediting the closure of the wealth and income gap between all income levels.

• <u>G20 collective action</u>. Create and publish a joint communique that puts forward: a) a vision for a human-centred world, b) GenAI as a key enabler of this vision



and in creating "good jobs" that are fairly paid, motivating, reasonably secure, safe, and make better use of human skills when combined with technology (Sethi, et. al, 2020), and c) outlines the roles of the public, private, and civil sectors, and institutions in helping to create this vision.

Innovate. *Identify and convey new ways to use GenAI to address complex social challenges and create new comparative advantage.* G20 nations can rethink how GenAI can help them create new forms of comparative advantage in a way that simultaneously helps address pressing social challenges. Developing nations, in particular, can use the technology to create new pathways to economic growth, separate from those taken by developed economies, that also deliver on the UN's sustainability agenda.

<u>G20 collective action</u>: Identify 3-5 'moonshots' — audacious, ambitious goals that increase trust across societies by solving a particular economic or social challenge that has eluded us — and create task forces (made up of policymakers, academia, private sector, and multilateral/international institutions) to identify how GenAI can expedite solving these challenges between 2030-2035. Specific examples include using GenAI to meet the targets of UN Sustainable Development Goals (SDGs) 4 (Universal and Lifelong Education), 13 (Targets 13.3 and 13.B, Climate Action), or 5 (Targets 5.6 or 5.B, Gender Equality).

<u>Collective Action. Convene stakeholder ecosystems and facilitate the regulatory and legal frameworks necessary to create and fund the identified innovations and strategic visions.</u> Facilitating these ideas will require we build new ecosystems based on collaborative competition to drive efficiencies, catalyse new forms of innovation, proactively address potential roadblocks, and facilitate a multi-stakeholder



perspective. Finding collective sources of funding will also be necessary to make these solutions viable and sustainable.

• <u>G20 Collective action</u>: Establish a GenAI Regulatory and Legal committee made up of policymakers, senior technology leadership, leading academics, and civil sector advocates to identify upcoming challenges associated with GenAI and related technology, their impact on member nations, and create a comprehensive dialogue among stakeholders, resulting in a published communique highlighting issues, considerations, and possible actions for all stakeholders.

Education. Create more educational and skilling opportunities for youth and workers

to thrive in a digital future. A human-centred, GenAI-enabled society will require more education and skill development opportunities for youth and workers. Free, quality education and lifelong skilling opportunities can help create national workforces that are flexible, adaptable, and fungible across sectors, creating strong economies and resilient societies.

• <u>G20 Collective action</u>: Establish a joint council on Education, Technology, and Workforce with representatives from member nations' Ministries of Education, Youth and Women, Industry, along with private sector and civil society representatives. The council would share best practices and lessons learned in developing national, GenAI-underpinned educational and skilling systems and curricula for youth and workers that prioritise teaching technical and soft skills that employers will require in the future. It would also share lessons learned and best practices for developing national skills programs that help all workers upskill and reskill themselves across their lifetimes.



<u>Measurement and Monitoring. Monitor and assess the impact of GenAI to verify that</u> <u>social and economic progress are advancing concurrently.</u> The impact of GenAI on workers, particularly from vulnerable populations, should be monitored and assessed to ensure that social and economic progress are advancing in tandem. Through measurement, early insights can be gained to determine whether GenAI is facilitating positive outcomes or impeding progress, allowing for timely adjustments.

• <u>G20 Collective action</u>. Establish a G20 working group to create an authoritative compendium on GenAI's impact on societies and inequality based on member nations' national findings. This compendium can provide strategic insights into the impact of GenAI across different types of economies, demographic profiles, and vulnerable populations. Sharing lessons learned will help foster collective action and enable countries to address challenges more effectively.

Moving forward



GenAI is presenting us with a remarkable opportunity to create a new societal construct that prioritises social welfare alongside generating remarkable economic advantages. It is not without challenges – massive GenAI usage will further challenge our collective ability to meet our climate goals, for example - but this human-centred vision can use GenAI to help foster a world where every person, regardless of their economic status, wealth, or birth circumstances, possesses the means to lead a fulfilling life characterized by safety, security, and the ability to provide for themselves and their families in a dignified manner (Sethi, et. al, 2020). It can also be more profitable, for all.

We cannot get to this vision through strong economic progress alone nor if we assume that social progress will occur equitably by default. Without different decisions and policies, we are bound to create systems that operate as they have in the past, yielding similar outcomes and growing current disparities. Trust in institutions is at an all-time low, and social polarisation is at an all-time high, in part because many people feel left behind by societies and economies that don't work for everyone. We have a small window of opportunity to use this technology to catalyse us toward a more equitable world but we must have the courage and will to enable the potential that is ahead of us.

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THE RICE/MM FRAMEWORK



A human-centred approach to GenAI can...

Help mitigate the challenges for...

High exposure, low-complementarity jobs

Women

Low-income individuals

Less educated workers

Older workers

Developing nations



... and create a more prosperous future through ...

Well-compensated and rewarding jobs

Productivity gains

Opportunities for all types of workers

Sustainability

Reinvention

Identify new vision for human-centred society and reassess the role of GenAI in governments and business in achieving this vision

Innovation

Identify new ways to use GenAI to solve complex social challenges and create new forms of comparative advantage

Collective Action

Create stakeholder ecosystem(s) and facilitate regulatory and legal frameworks to help achieve the Reinvention and Innovation visions

Education

Create pathways for free, quality, lifelong education and digital skilling to create more adaptable, fungible workforces



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