ANNEX 1

G20 POLICY EXAMPLES ON HOW TO ENHANCE THE ADOPTION OF AI BY MSMES AND START-UPS

Raising MSMEs' capabilities for AI

MSMEs need strategic resources and capabilities to develop and adopt innovation, including AI. Among others, skills, finance and intangible assets (e.g. data, technology and networks) are critical for AI, and often more difficult to access and leverage for smaller firms.

Raise awareness and improve access to talent and skills

The development and deployment of AI in businesses requires awareness about the possibilities and opportunities offered by AI, as well as the challenges it poses, in particular for developing countries. Entrepreneurs and managers should be made aware and have a good understanding of what AI systems can or cannot do, as well as of which type of function AI can be most beneficial to complement human capabilities, including the challenges it poses.

MSMEs should also be informed about the overall approach to AI that G20 members support, as referred to in the G20 AI Principles.

Workers will need to acquire the skills to work with AI and incentives to try new ways of working with the technology. Specialised AI skills are also required by MSMEs, to develop AI goods and services, and to support the development of a competitive AI-related knowledge market.

Indeed, the development and promotion of talent is fundamental for the success of MSMEs and innovative start-ups and for inclusive and sustainable growth, and requires a multidisciplinary high-quality education, including STEM, social and human sciences. This is central also to ensuring the development of human-centric and trustworthy AI and to addressing the lack of female-led start-ups in tech sectors and the overall gender gap in STEM fields, in addition to other underrepresented groups.

Examples of policies to address these challenges include:

- Raising awareness among MSMEs' entrepreneurs and managers, CEOs and workers about the benefits of AI and on data management in business practices, and disseminating the culture of responsible AI development and use, e.g. through new MSMEs-specific guidelines that consider MSMEs as producers, service providers and users of AI technologies.
- Fostering the endowment of the different sets of skills needed to develop, adopt and work with AI, by different types of entrepreneurs and workers, e.g. by supporting investment in education, skills and by encouraging the participation of MSMEs in training programmes better leveraging the pipeline of skills and talent between MSMEs and academic institutions.

Access to data

Access to data unleashes the potential of AI. MSMEs tend to have fewer resources to access data. They also often have less skills to find, analyse, exploit or valorise relevant data. Although they may produce and handle a great volume and variety of data, small businesses often lack the ability to structure, manage and protect them, and even when they do, these data may not be of adequate quality or quantity to perform pertinent analysis. In addition, having to deal with an increased volume and granularity of data can expose MSMEs to more data breaches, as well as lead, in case of misuse, to liability to MSMEs. Examples of policies to address these challenges include:

- Establishing public standards and infrastructure (e.g. data centres) for some categories of relevant data, e.g. health, research and AI training data, in order to increase data access, use and sharing for MSMEs.
- Defining mechanisms to encourage the use of data and cooperation between large enterprises and MSMEs and among MSMEs, e.g. through incentives and collaboration schemes that tackle data needs in specific industries and value chains.
- Fostering competition in data markets, including through competition policy, to provide a level playing field for AI-related MSMEs, notably as regards the cost and conditions of data access.

Access to finance

AI adoption and diffusion may be costly, especially for MSMEs in developing countries. In addition, AI uptake and transformation may not deliver immediate benefits, thus possibly delaying financial returns for MSMEs. High entry costs and uncertainty may further raise the cost for smaller businesses to finance AI innovation and adoption, as these barriers compound with MSMEs' limited cash reserves and borrowing capacity and known challenges in accessing appropriate forms of finance. Start-ups can be even more dependent on external funding, due to the need for significant up-front investments ahead of revenue growth. Examples of policies to address these challenges include:

- Improving MSMEs' financing for AI-related intangible assets (skills, data, software, process innovation, organisational changes), e.g. through sharing evidence on the cost-benefits of AI for different types of MSMEs, better collateralising intangible assets, and supporting access to alternative sources of finance, such as angel investors, venture capital, equity crowdfunding and private equity.
- Providing public schemes to encourage the participation of private investors in financing AI investments in MSMEs through public kick-start programs and risk-sharing and mitigating mechanisms with private partners.
- Strengthening public-private support for early stage and venture capital, and facilitating the use of intellectual property by start-ups, spin-offs and MSMEs as collateral. Equity investments in start-ups could be combined with R&D support schemes (e.g. grants, tax credits) within broader innovative acceleration schemes that strengthen the link between research and industry and encourage joint technology development between academia, industry and government.

Access to AI technology and networks

MSMEs tend to be more dependent on external sources of knowledge than larger firms. Business linkages, e.g. buyer-supplier relationships, collaborative arrangements and platforms, or the integration into global value chains, can act as channels fostering data exchange and knowledge and, with it, technology diffusion. Yet, MSMEs are less integrated into innovation networks and may lack the absorptive capacity needed to benefit from AI-related spillovers. Examples of policies to address these challenges include:

- Establishing initiatives to increase AI uptake among MSMEs, e.g. through intermediaries, or through controlled environments for training, testing and experimentation of AI systems by MSMEs.
- Improving the supply and delivery of AI-related services and practices from technology diffusion institutions, including AI-related technology transfer from research and higher education institutions.
- Establishing collaborative infrastructures related to AI and open innovation initiatives aimed at increasing formal linkages between actors, including MSMEs, and at fostering an AI-prone ecosystem.
- Strengthening AI-related collaboration within business networks, including between large firms, multinationals and MSMEs and refining practices and policies. Favour AI-related relationships between large enterprises and MSMEs, e.g. related to data access or IP-related arrangements.
- Boosting access to specialised hardware for MSMEs AI developers, including in lagging sectors and regions.
- Fostering AI-related innovation by MSMEs, e.g. through competitions, prizes or challenges. At the same time, enhance public procurement related to AI, with integration of MSMEs in the procurement process, e.g. by reaching out to a variety of AI suppliers, adopting proportionality in requirements, and avoiding unnecessary administrative burdens.

An enabling business environment for AI

MSMEs are typically more dependent on their business ecosystem than larger firms and may have to often divert a relatively greater part of their internal resources to administrative functions than larger competitors. MSMEs, including start-ups, are therefore more vulnerable to deficient framework conditions, administrative and regulatory burdens, weak infrastructure, market failures and economic shocks. AI raises specific challenges for the business environment of MSMEs and start-ups, including those related to policies and practices that support trustworthy AI. Examples of policies to address these challenges include:

- Ensuring a conducive business environment for AI, in accordance with the G20 AI principles, including through the development of MSME-friendly AI guidelines, standards and regulations.
- Implementing agile regulatory approaches related to AI that consider the specificities of MSMEs in different markets and industries, e.g. through the use of regulatory sandboxes or other flexible and outcome-based regulations that can combine security, social sustainability and innovation.
- Levelling the playing field to foster the entry and growth of AI start-ups and to facilitate pro-competitive business dynamics in emerging AI markets.

Sharing practices for MSMEs and start-up policies related to AI

Supporting knowledge sharing and mutual learning, among G20 and in international platforms such as the OECD's AI Policy Observatory can contribute to improve evidence for MSME policies related to AI and nurture the understanding of the role played by different actors, including large firms, business associations, academia, national and local governments as well as international organisations.