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**Forthcoming in Nextrade Group’s 2024 analysis for the USAID eTrade Alliance of 100 digital policies’ adoption conducive to digitization and ecommerce in 60 countries**

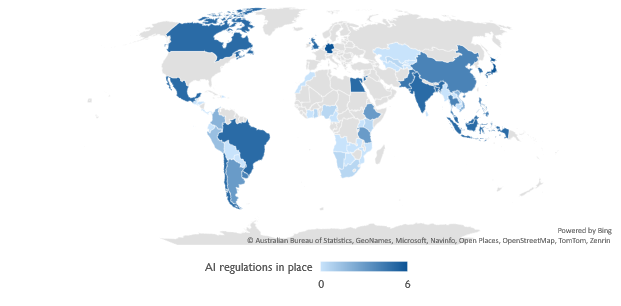
**Artificial Intelligence**

AI is today permeating businesses and governments’ operations around the world. AI can enable MSMEs across sectors to streamline and scale their operations, for example in designing new products, attracting new customers for their ecommerce stores, and managing physical and financial supply chains. For example, AI can enable MSMEs to analyze users’ browsing and purchase histories for customer preferences – that in turn can promote personalized marketing and upselling opportunities. Emerging AI solutions such as visual recognition technologies can track what a customer looks for and accelerate their search process. Nextrade Group data suggest that developing country MSMEs that use AI intensively score productivity gains and improvements in customer service. Of course, companies that support MSMEs that sell online, such as logistics, payments, and financial services providers, are also increasingly AI-driven providing MSMEs with further efficiencies.

Governments around the world are reacting to the rise of AI by putting in place strategies and regulatory and policy frameworks that typically seek to promote AI’s use while mitigating against its downsides. The mapping here reviewed in particular whether governments have adopted AI strategies, regulations or guidelines, and, if so, whether these instruments contain such important aspects privacy provisions for AI use, testing of AI applications against cybersecurity risks, risk-based approaches to AI governance whereby a country regulates AI applications by their level of risk, promotion of skilling and capacity-building to firms and workforces to apply AI, as well as promotion of international collaboration on AI, for example on common AI standards.

The emerging markets and developing countries that have adopted an AI strategy or policy and scored highest in adopting the various elements in their AI policy include Brazil, Chile, Mexico, and Uruguay in Latin America; Egypt, Jordan, and Rwanda in the MENA and Sub-Saharan Africa regions; Bangladesh, India and Pakistan in South Asia; and Indonesia, Malaysia, the Philippines, and Thailand in Southeast Asia (figure x). Much of Africa and Central Asia are still in early stages of adopting AI-related policies, while most of Latin America is quite advanced.

**Figure x** **– AI Policy Scores for 60 Countries (countries in blue were mapped and scored, in gray were not mapped or scored)**



Overall, substantial share, or 53 percent, of the mapped countries have set out to pursue AI-related policies or strategies, or guidelines (figure x). Most of these included guidance on privacy, cybersecurity testing, and skilling, and promoting of crossborder interoperability. However, nuancing AI policy by level of risk is still rare. Some examples include:

* Three-fourths of the mapped countries with an AI policy or strategy have included in their policies references and guidance on treatment of privacy in the AI era. For example, Uruguay’s AI strategy includes Uruguay’s Personal Data Protection principles and discusses “privacy by design” whereby AI solutions should contemplate people's privacy in their design stage.[[1]](#endnote-1) The Indonesia National AI Strategy discusses the importance of data sharing ethics, establishing a Data Ethics Board, strengthening laws to crack down on the abuse of technology and the misuse of data privacy.[[2]](#endnote-2)
* Some 70 percent of countries with an AI strategy or policy discuss in it the need for international cooperation and interoperability in AI use and/or regulations. For example, the 2024 G20 host Brazil proposes to promote discussions, initiatives and partnerships around AI in international forums and drive dialogues between countries and blocs on technological, regulatory and legal AI standards.[[3]](#endnote-3) For its part, Pakistan calls for international collaboration in AI-based research and innovative solutions to complement AI promotion in Pakistan.[[4]](#endnote-4) The UK’s AI strategy aspires for the UK to shape international frameworks and standards for governing AI, to reflect democratic principles, human rights, and the rule of law.[[5]](#endnote-5)
* Nearly 70 percent of countries with an AI strategy or policy promote the testing of AI applications for cybersecurity challenges. Countries are also promoting AI testing. For example, Pakistan is setting up a regulatory sandbox by 2025 to bring an agile and inclusive legal harmonization process through testing and discussion on ethical and legal scenarios.[[6]](#endnote-6) Canada’s proposed Artificial Intelligence and Data Act is more outlines criminal prohibitions and penalties where “reckless” AI deployment causes serious harm or has intent to defraud.[[7]](#endnote-7)
* AI skilling and capacity-building. Almost 70 percent of countries with AI strategies or policies promote skills development for AI. For example, in Jordan, one of the policy goals is to build AI-specialized Jordanian capacities, expertise and skills, and employ knowledge in developing all sectors.[[8]](#endnote-8) Bangladesh’s AI strategy include a strategy regarding skilling and re-skilling the AI workforce, Tanzania’s strategy discusses the need for a curriculum that will advance health care providers’ understanding of and ability to use health AI solutions, while Mexico’s AI strategy discusses efforts to educate Mexican civil servants about AI. [[9]](#endnote-9)
* Few countries have an explicitly risk-based AI policy. In this mapping, Germany as part of the European Union’s AI governance framework, the AI Act in 2023, seeks to mitigate the risks of AI depending on the degree of risk AI poses.[[10]](#endnote-10) For example, systems with unacceptable risk involve discriminatory classification, cognitive behavioral manipulation, and emotion recognition in the workplace, for example, while high-risk systems relate to the management of critical infrastructure, transport, law enforcement, etc. An example of a low-risk system is the development or translation of audio or video content. Also Canada, Japan and South Korea take a risk-based approach.

**Figure x – Share of Countries that Have Adopted AI Policies Conducive to MSME eCommerce**

There are numerous good models that developing countries could consider in adopting AI policies conducive to MSME ecommerce. [[11]](#endnote-11) For example:

* **Viewing and promoting AI as a national development priority.** Several emerging markets have adopted AI strategies with a view of leveraging AI to meet sustainable development goals. For example, Egypt’s 2021 AI Strategy is focused on use of AI technologies to support the achievement of Egypt’s sustainable development goals, inclusive growth, and Egypt’s competitiveness, and promotes regional cooperation within the African and Arab regions in AI.[[12]](#endnote-12) Similarly, the Philippines’ National AI Roadmap aspires to transform the Philippines into an AI hub within the Association of Southeast Asian Nations (ASEAN) region.[[13]](#endnote-13) The roadmap delineates strategic priorities for the government, industry, and universities, and establishes the National Center for AI Research led by the private sector.
* **Skilling MSMEs to use AI is important to democratize and diffuse the technology and accelerate adoption.** Indeed, Nextrade Group data suggest that there are in various countries AI “Superusers”, MSMEs that spend on AI and use AI most intensively, and also report greatest gains from AI, in productivity, cost savings and customer acquisition. Meanwhile, government interventions can be useful in democratizing AI and promoting the diffusion of AI uses cases among underserved MSMEs. One example could be the Finnish AI Region (FAIR) that offers Finnish SMEs free services to leverage and test AI to solve various pain points in their businesses.[[14]](#endnote-14) It is also useful to socialize MSMEs into responsible use of AI. One good example is Singapore’s Infocomm Media Development Authority (IMDA) has developed “AI Verify” to enables businesses to review their conformity with 11 emerging AI governance principles.[[15]](#endnote-15)
* **Promoting guidelines and codes of conduct and sandboxes that enable AI to mature withing guard rails**. AI is nascent and its potential is enormous across countless use cases. Thus promoting the development of the technology and applications is important in lieu of heavily regulating it – but within parameters that ensure safe AI use. Some example of countries that have sought to strike this balance include the UK, which has taken a principles-based approach directing AI regulations to ensure safety, transparency, and redress if an AI system causes harm.[[16]](#endnote-16) Singapore has created the Model AI Governance Framework that provides detailed guidance for businesses to address ethical issues and apply accountability practices when deploying AI solutions.[[17]](#endnote-17) Both UK and Singapore as well as Korea, Germany, and Spain have already piloted AI regulatory sandboxes to enable businesses to experiment with new products or services and regulators to consider different regulatory frameworks.[[18]](#endnote-18) There can also be useful guidelines for government agencies to manage AI. For example, in October 2023, the U.S. Executive Order (EO) on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence Administration directed America’s federal agencies to take measures to ensure privacy, equity and innovation, and competition in the AI era, resulting in dozens of actions by U.S government agencies.[[19]](#endnote-19)
* **Ensuring AI applications are tested against risks and risk mitigation and regulatory compliance is diffused to MSMEs.** In cybersecurity, a “red-teamer” simulates an actual attack on a system. Similar red-teaming approaches need to be applied to AI applications. To be sure, leading companies that develop AI applications also have internal red teams.[[20]](#endnote-20) Governments could partner with businesses to promote these red-teaming approaches, perhaps even at the regional level. There have also been some proposals that AI be governed by a new institution that standardizes and monitors the testing of AI applications.
* **Promote common regional and international AI standards.** The regulatory landscape for AI is fragmented, with counties applying different standards, AI taxonomy, risk measurements, and definitions of transparency, among others. It is also important to adopt common policies and standards to promote convergence in these areas, ensure common approaches to safe uses of AI, and overall promote interoperability of national AI governance system. Subregions can be useful incubators of these standards. For example, the ASEAN economies are working toward guides of common conduct, including a draft guide on AI ethics and governance.[[21]](#endnote-21) The draft is expected to be finalized in January 2024 during the ASEAN Digital Ministers Meeting, and is expected to promote AI use and focus on good governance and risk management, while limiting regulatory burdens on the use of AI.

1. https://www.gub.uy/agencia-gobierno-electronico-sociedad-informacion-conocimiento/comunicacion/publicaciones/ia-strategy-english-version/ia-strategy-english-version/general [↑](#endnote-ref-1)
2. https://s899a9742c3d83292.jimcontent.com/download/version/1610650061/module/8284006463/name/AISCI-2020-Indonesia.pdf [↑](#endnote-ref-2)
3. https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital/arquivosinteligenciaartificial/ebia-summary\_brazilian\_4-979\_2021.pdf [↑](#endnote-ref-3)
4. https://moitt.gov.pk/SiteImage/Misc/files/National%20AI%20Policy%20Consultation%20Draft%20V1.pdf [↑](#endnote-ref-4)
5. https://assets.publishing.service.gov.uk/media/614db4d1e90e077a2cbdf3c4/National\_AI\_Strategy\_-\_PDF\_version.pdf [↑](#endnote-ref-5)
6. https://moitt.gov.pk/SiteImage/Misc/files/National%20AI%20Policy%20Consultation%20Draft%20V1.pdf [↑](#endnote-ref-6)
7. https://www.canada.ca/en/innovation-science-economic-development/news/2022/06/new-laws-to-strengthen-canadians-privacy-protection-and-trust-in-the-digital-economy.html [↑](#endnote-ref-7)
8. https://www.modee.gov.jo/ebv4.0/root\_storage/en/eb\_list\_page/ai\_final\_-\_english\_version.pdf [↑](#endnote-ref-8)
9. For Bangladesh see https://ictd.portal.gov.bd/sites/default/files/files/ictd.portal.gov.bd/legislative\_information/c2fafbbe\_599c\_48e2\_bae7\_bfa15e0d745d/National%20Strategy%20for%20Artificial%20Intellgence%20-%20Bangladesh%20.pdf; for Tanzania see https://www.moh.go.tz/storage/app/uploads/public/65c/61f/590/65c61f59087ac486047849.pdf; and for Mexico, see ttps://datagovhub.elliott.gwu.edu/mexico-ai-strategy/ [↑](#endnote-ref-9)
10. https://www.europarl.europa.eu/news/en/headlines/society/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence [↑](#endnote-ref-10)
11. See also Kati Suominen, “Promoting the spread of AI to fuel Asia's trade,” Hinrich Foundation, February 13, 2024, https://www.hinrichfoundation.com/research/wp/tech/ai-to-fuel-asia-trade/ [↑](#endnote-ref-11)
12. https://ai.gov.eg/Egypt%20National%20AI%20Strategy%20(6-4-2021)4.pdf [↑](#endnote-ref-12)
13. https://www.trade.gov/market-intelligence/philippine-artificial-intelligence [↑](#endnote-ref-13)
14. <https://www.fairedih.fi/en/services/> [↑](#endnote-ref-14)
15. These are transparency, explainability, repeatability/reproducibility, safety, security, robustness, fairness, data governance, accountability, human agency and oversight, inclusive growth, societal and environmental well-being [↑](#endnote-ref-15)
16. https://www.trade.gov/market-intelligence/uk-ai-regulations-2023 [↑](#endnote-ref-16)
17. https://www.pdpc.gov.sg/Help-and-Resources/2020/01/Model-AI-Governance-Framework [↑](#endnote-ref-17)
18. https://techmonitor.ai/technology/ai-and-automation/government-backs-ai-regulatory-sandbox [↑](#endnote-ref-18)
19. See Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence, https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/ [↑](#endnote-ref-19)
20. See, for example, <https://blog.google/technology/safety-security/googles-ai-red-team-the-ethical-hackers-making-ai-safer/>, and https://developer.nvidia.com/blog/nvidia-ai-red-team-an-introduction/ [↑](#endnote-ref-20)
21. https://www.reuters.com/technology/southeast-asia-eyes-hands-off-ai-rules-defying-eu-ambitions-2023-10-11/ [↑](#endnote-ref-21)