



AMCHAM POSITION PAPER

Advancing Digital Transformation and the Use of
Generative AI:
Case of Mongolia

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BACKGROUND

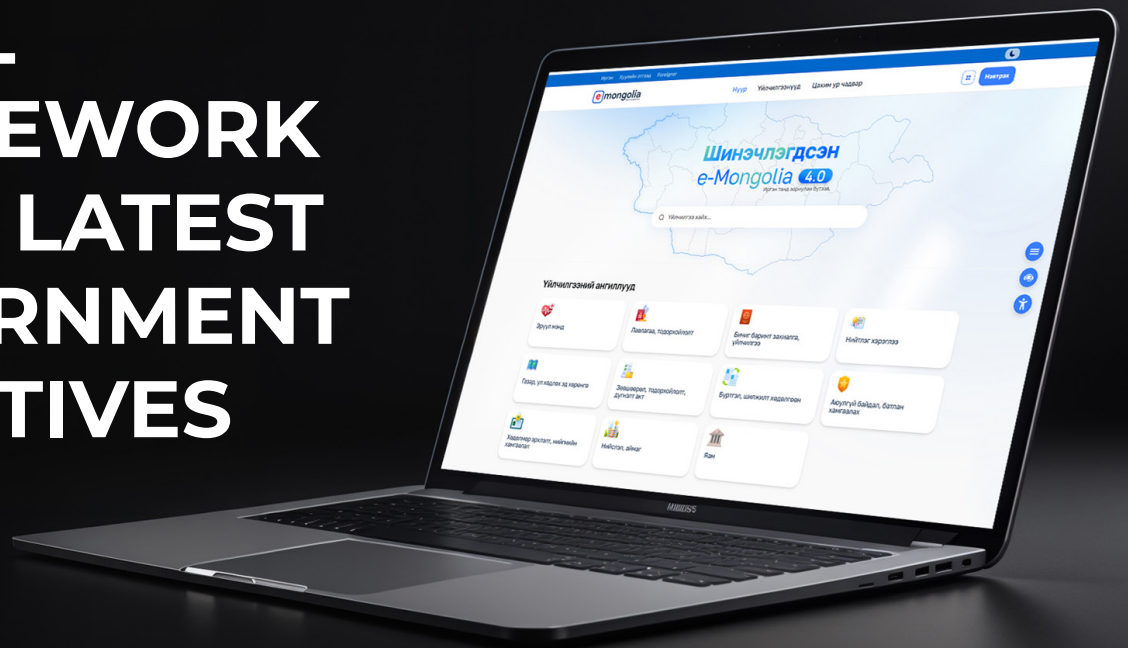
Mongolia continues to advance its digital transformation with initiatives like the E-Mongolia platform and key legislative steps to secure data protection and cybersecurity. There are emerging success stories and cases of the private sector driving these developments in generative AI platforms and blockchain innovation.

Economic diversification efforts are supported by e-commerce initiatives, with international collaborations enhancing digital infrastructure and literacy. Despite the rapid progress, challenges such as the digital divide, sustainability concerns, and the need for coherent and clear legal frameworks remain.

AmCham's Digital Economy and ICT Committee is in the driver's seat, advocating a key policy agenda and presenting Mongolia's case regionally and its digital transformation success stories. This paper reviews the latest legal framework, emerging opportunities and challenges, regional and global trends, and specific case studies in advancing the development of generative AI platforms in Mongolia.

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LEGAL FRAMEWORK & THE LATEST GOVERNMENT INITIATIVES



E-Mongolia Platform: The platform aims to streamline government services and enhance public access to digital resources. This digital initiative reduces bureaucratic inefficiency and enhances citizen satisfaction by enabling convenient access to essential services online. Launched in 2020, the platform marks Mongolia's significant leap toward digital governance by streamlining public service delivery. Initially offering 181 services from 25 government entities, e-Mongolia has rapidly expanded, currently delivering 606 services from 59 agencies as of December 2021. Importantly, this digitization addresses geographic challenges in Mongolia's sparsely populated regions, ensuring equitable service delivery without needing physical presence at government offices. This digital transformation has not only improved efficiency but also fosters transparency and achieves substantial cost savings, estimated at 30 million USD annually through reduced paperwork, postage, and fuel costs. The platform's accessibility was crucial during the COVID-19 pandemic, enabling timely access to critical information and services, further accelerating its adoption across the population.

Digital Policies: Key legislative measures include laws on personal information protection, public information, cybersecurity, digital signatures, and virtual asset service providers. Endorsed in May 2022, these laws provide a robust legal foundation for safeguarding digital transactions, securing data privacy,

and promoting trust in online interactions. By establishing explicit legal guidelines and frameworks, Mongolia aims to mitigate regulatory barriers and streamline processes for the public and private sectors. This regulatory clarity not only supports the current operation of digital services but also encourages local and international investments in Mongolia's burgeoning digital economy.

Initiatives in Education: The government has emphasized the potential of digital technology in supporting multi-faceted online learning activities, particularly in the education sector. The focus on linguistic accuracy and enhancing the quality and effectiveness of education through technological advancements were discussed in a meeting attended by representatives from companies like Bolorsoft and MLUB. Alongside educational institutions and language experts, they explored the integration of artificial intelligence into the education sector.

Mongolia launched an education program partnership with Google, a significant milestone in bringing a global technology company into the country and advancing education access opportunities.

UNLEASHING AI'S POTENTIAL: OPPORTUNITIES AND CHALLENGES

AI and Technology Innovation Success

Stories: Despite Mongolia's relatively recent development of artificial intelligence and machine learning, it has made notable strides through private sector efforts.

Obortech is an excellent example of a successful Mongolian startup, emerging with its Smart Hub platform, integrating blockchain and IoT to optimize global supply chain management. It features a user-friendly interface similar to social media apps and provides real-time notifications. Obortech leverages extensive logistics knowledge and international partnerships to drive innovation in supply chain operations worldwide. Obortech's solution has multiple benefits. It can streamline and digitize any manual data gathering from field users, factory experts, remote suppliers, transportation, and office workers through its web and mobile applications and open API tools. Collected data is registered on a tamper-proof blockchain platform that is accessible and verifiable by multiple actors. Users can act promptly and make agile decisions based on real-time notifications and events sent via IoT sensors and the platform's users. Another benefit is speed, in terms of the time needed to provide the product to customers.

The Smart Hub platform connects different actors, creates value for them, and helps reduce food waste in the food supply chain: <https://bit.ly/3zGVUXX>. This solution also creates efficiency and enables traceability in the mineral export logistics process between Mongolia and China: <https://bit.ly/3UylEuz>. Obortech's Smart Hub platform has multiple pilots in Europe and Asia's fruit and meat supply chains. It has partnered with the World Bank, Elbe-Obst (the largest apple exporter in Germany), logistics and freight forwarding companies, government and customs organizations, food and health certification laboratories, and meat producers. The pilot program's performance and use cases are presented here: <https://blog.obortech.io>.

Obortech has offices in Poland, Estonia,

and Mongolia. It has 12 awards and grants from multinational organizations, including the following: 1) World Bank's 70K USD grant for digitizing the meat supply chain; 2) Microsoft's Century Program grant of 150K USD for a connected supply chain (Top 6 among 500 projects); 3) one of nine leading startups in the PwC Scale program for sustainable manufacturing; 4) 50K USD Poland Prize grant from the MIT Enterprise CEE Accelerator (Top 22 among +300 projects); 5) top 20 startups for the world's largest event for the fruit industry, Fruit Logistica; 6) Google Web3 Startup's 200K USD grant; 7) Berlin Landing Pad by Berlin Partners; and 8) 10 Top Logistics Industry Trends & Innovations in 2024 by StartUs.

Obortech aims to implement AI for its Smart Hub platform, which is integrated with blockchain and IoT technologies. AI will enable greater efficiency and higher value for the platform's users, such as reducing manual inspections and labor for customs officials by helping them identify risky container shipments and building reliable supply chain networks between suppliers and producers in the livestock industry through machine learning based on the blockchain-based traceability information of the supply chain actors. Learn more about Obortech's partnership with the World Bank to digitize the livestock industry: <https://bit.ly/4aNOW1e>.

LendMN distinguished itself as a pioneering fintech startup in Mongolia by introducing a fully automated digital consumer lending platform in 2017, leveraging advanced AI technology and digital solutions for its KYC and underwriting processes. Now, LendMN is one of the largest non-bank financial institutions (NBFIs), catering to a staggering 90 percent of the economically active population in Mongolia.

In 2024, LendMN cemented its innovative leadership by becoming the first financial institution in the market to offer digital business loans. This initiative enhances financial

accessibility for unregistered micro-enterprises. LendMN automates the estimation of business revenue and profit margins as well as the know-your-business (KYB) validation process using advanced machine learning models and AI algorithms. This technological advancement allows these micro-enterprises to secure financing within five minutes, a significant improvement over the traditional process, which typically requires a minimum of seven business days. These digital business loans are instrumental in providing enterprises with the necessary capital to scale their operations and foster business growth.

LendMN's success transcends national boundaries, presenting a replicable model for Southeast Asian markets, where MSMEs play a pivotal role in economic development. This model has the potential to significantly enhance financial inclusion and stimulate economic growth across the region.

Economic Diversification: Mongolia is looking to e-commerce to help overcome geographical challenges and diversify its economy, which relies heavily on the mining of copper, coal, iron ore, and gold. According to the UN in Mongolia, "The digital way opens up a whole new facet for all aspects of economic diversification and especially trade." UNCTAD has supported this initiative by conducting an eTrade Readiness Assessment, providing insights and a roadmap for building a robust e-commerce ecosystem.

International Collaborations: The World Bank's Smart Government II project to enhance government e-services in Mongolia was recently announced. The project includes cloud computing infrastructure, digital literacy training for 13,000 citizens, and creating 3,000 digital jobs. The project also involves updating the National Data Center and digitizing government processes to improve efficiency. This initiative exemplifies how partnerships can significantly improve Mongolia's digital infrastructure and literacy.





Digital Divide: Mongolia's internet penetration rate was 83.9 percent at the start of 2024, leaving 16.1 percent of the population, or about 558,300 people, offline. While there is steady growth of internet users, growing by 1.4 percent from January 2023 to January 2024, ensuring equitable access to digital services across urban and rural areas remains a significant challenge, exacerbated by unstable internet connectivity and digital literacy gaps.



Sustainability: The rapid adoption of AI technology raises environmental concerns, particularly regarding energy consumption and electronic waste management. It is crucial to address these issues in Mongolia, which will become essential for sustainability as technology evolves in the region.



Improving Technology: To upscale these processes, there needs to be an emphasis on developing a robust legal and institutional framework, enhancing digital literacy, and fostering collaboration between local and international stakeholders.

CONCLUSION AND POLICY RECOMMENDATIONS

The journey toward digital transformation and AI integration in Mongolia is marked by notable progress and significant potential. Through strategic initiatives like the E-Mongolia platform and Smart Government II, coupled with strong legal frameworks and international collaborations, the country can continue to position itself to improve its digital infrastructure.

However, addressing challenges such as the digital divide and sustainability concerns remains crucial for ensuring equitable and environmentally conscious growth. Mongolia can overcome these obstacles by focusing on expanding internet access, enhancing digital literacy, and promoting sustainable practices.

With continued dedication and collaboration among neighboring government bodies, private sector partners, and international stakeholders, Mongolia has the opportunity to leverage digital technologies to diversify its economy, drive innovation, and significantly improve the quality of life for its citizens.

AmCham Mongolia is committed to continue taking the lead in constructively engaging with the new government to share knowledge and best practices and contribute to enhancing regulatory frameworks.

