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Kazakhstan's Transformative Role in IT Innovation and Development



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Published on 16th October 2023



In recent years, Kazakhstan has emerged as a rising star in the global information technology industry, with its thriving tech ecosystem driven by a young and dynamic workforce and country leadership. Today, it stands as one of the largest markets for technological innovation in Central Asia, and the country is focused on accelerating its digital transformation to pave the way for a greener, wealthier, inclusive, more innovative, and more competitive future. The rapid ascent is largely attributed to the Digital Kazakhstan programs, which have become the cornerstone for the republic's technological growth and the transition to electronic services.

President Kassym Tokayev's Vision

President Kassym Tokayev's leadership actively implements the digitization program in state bodies and companies. The Digital program is becoming the basis for the rapid growth of technology in the republic and the shift to electronic services. Last month, President Kassym Tokayev, articulated a significant state-of-the-



nation address titled "Economic Course of a Just Kazakhstan." This agenda encompasses ambitious plans, aligning with global trends as Kazakhstan strives to become an IT-focused nation. President Tokayev acknowledges Kazakhstan's position as a world leader in e-government and fintech development, highlighting the nation's digital potential. The

commitment to increase IT services exports to one billion dollars by 2026 through partnerships with major foreign IT companies reflects a dedication to unlocking the tech sector's economic potential.

Digitalization and Start-up Innovation

Within the framework of the “Strategic Development Plan of the Republic of Kazakhstan until 2025,” top priorities revolve around the establishment of a new economic framework, technological revitalization, and the digitalization of production.



In 2021, the national project,

"Technological Breakthrough through Digitalization, Science, and Innovation," was introduced, focusing on infrastructure development and scientific-technological for economic digitalization. Since February 2022, the draft Concept of Digital Transformation of Kazakhstan has been the subject of comprehensive discussions.

This program is built upon five key directions: digitization of economic sectors, transitioning to a digital state, implementing the digital Silk Road, developing human capital, and creating an innovative ecosystem. In support of this ecosystem, free economic zones such as Alatau Information Technology Park and the international



science park for IT start-ups, Astana Hub, have been established to nurture hi-tech companies and support existing ones.

The development of start-ups in Kazakhstan is gaining momentum. The country has yet to establish a thriving venture capital ecosystem, and few investors are willing to back IT start-ups that may take time to generate profits. This situation calls for business models with short payback periods or immediate returns. To further foster innovation, the government supports small and medium-sized businesses, large enterprises, innovators, and startup entrepreneurs through various state bodies and development institutions, such as innovation centers like Astana Hub and TechGarden.

Moreover, Kazakhstan has taken steps to simplify business registration processes, promote entrepreneurial activities, and stimulate new innovative projects. The government has introduced tax incentives, startup grants, and programs aimed at supporting small and medium-sized enterprises, and the country is actively attracting foreign investment and technology, especially in IT and the digital economy.

In the field of education, Kazakhstan has embarked on establishing specialized AI schools. The schools feature a comprehensive seven-year program formalized through a partnership with international universities. Additionally, an AI-Literacy program, initially implemented as a pilot across 14 universities with Google's support, is set to become a mandatory course at all higher educational institutions based on the promising pilot results.

Kazakhstan's progress in this sector is evident by a fivefold increase in investment. The government is also considering opening joint ventures with major foreign IT companies to harness the potential of artificial intelligence and create a skilled workforce in this field. Collaboration with international companies and renowned universities is on the agenda, aiming to advance training and research in artificial intelligence, thus propelling Kazakhstan towards a knowledge-based economy.

Astana International Financial Centre (AIFC)

Kazakhstan envisions a providing computing power to global markets, emphasizing the need for favorable investment conditions and incentives for the development of large data

centers. The Astana International Financial Centre (AIFC) plays a crucial role in this regard. The AIFC Tech Hub has conducted a comprehensive study, "Fintech Startup



Landscape in Kazakhstan," offering valuable insights into the country's startup ecosystem.

The Astana International Financial Centre (AIFC) has attracted more than \$8.3 billion of international investment since its launch in 2018. Nearly 2,000 companies from 75



countries operate at the AIFC. The world's largest financial institutions, including Chinese banks, financial companies from the Middle East, and well-known technology companies, are opening their representative offices at the AIFC.

The AIFC Tech Hub serves as a hub for global startups, entrepreneurs, corporations, investors, experts, and specialists in the field of innovation. Their focus on fintech development includes



programs for startup support, corporate innovations, and the venture capital market. Specialized rules and regulators have been established to allow the testing of fintech products and solutions. These initiatives are indicative of Kazakhstan's commitment to fostering a vibrant fintech sector.

Kazakhstan is also making remarkable strides in payment technology development, with innovations that are groundbreaking on a global scale, particularly in terms of payment enhancements.

In conclusion, Kazakhstan's journey towards becoming a technology hub in Central Asia is led by President Kassym-Jomart Tokayev, a boost in investments, and ambitious



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programs like Digital Kazakhstan. The nation's growing tech ecosystem is becoming increasingly competitive on the global stage, and its focus on fostering innovation and supporting startups positions Kazakhstan for continued growth and technological advancement in the years to come.