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Advancing the Frontier: Turkish Governmental Policies in Technology Development

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Turkey's technology policies, especially under the AK Party, have been marked by a strategic, consistent approach that fosters long-term growth. By establishing robust frameworks and forging global partnerships, the government has created an integrated system that accelerates technological advancement across key sectors. This methodical progression, particularly over the last two decades, positions Turkey as a competitive player in the global tech landscape, with policies designed to build on past successes while addressing emerging national technology requirements, consistently adapting to an evolving world.

Effectiveness of National Tech Development Strategies and Policies

The leadership in Türkiye has consistently acknowledged the pivotal role of technology in driving economic growth and enhancing global competitiveness, particularly emphasised during the two decades of the AK Party's governance. Since 2002, there has been a concentrated effort to not just build required infrastructure but also enable both local and international partnerships to enable the effective execution of various technological initiatives.

The first such strategic initiative that had a long term view on technology and how the country can build on past efforts was undertaken in 2011 by the name of Vision 2023. It was designed as a roadmap to mark the centennial of the Republic of Türkiye, setting ambitious goals for making the country one of the top global economies with full utilisation of technological progress to power export driven growth. The emphasis on science, technology, and innovation targeted sectors like defence, aerospace, electronics and information technology (IT), aiming to increase the share of high-tech products in Türkiye's exports. Vision 2023 outlines Türkiye's ambitions to become one of the top 10 global economies. This strategy includes significant investments in research and development (R&D), aiming to foster homegrown innovation and reduce reliance on foreign technology. In the defence sector, for example, Türkiye has focused on developing indigenous technologies, such as drones, missiles, and electronic warfare systems, to enhance its military capabilities and export potential. The aerospace sector has seen similar advancements, with projects like the development of a national fighter jet and satellite technologies. Electronics and IT are also central to this vision, with efforts to build a robust digital infrastructure, encourage entrepreneurship and create a supportive ecosystem for tech startups.

In terms of execution, the Turkish government significantly increased investments in R&D, establishing technoparks and private R&D centres to stimulate technological development. By 2023, 82 technoparks were operational, hosting around 9000 companies and contributing to nearly 8 billion USD in exports. These technoparks facilitated collaboration between universities and industry, leading to the creation of over 1800 academic startups, leading to the creation of 32,000 patents through private R&D centres and numerous technology-based startups. In addition, the government introduced the Industrial Thesis Program (SanTez) and the Technology Transfer Office (TTO) Support Program, both aimed at enhancing university-industry collaboration and commercialising research. Beyond the progress in R&D and technoparks, the country has made strides in technology-based entrepreneurship through initiatives like the Individual Young Entrepreneur Support Program (BIGG), which has supported around 2,000 startups with 37 million USD in funding.

The strategic policy framework of Vision 2023 was followed up by the development of the consolidatory National Technology Initiative (NTI), which was announced in 2018. The NTI operates within the framework of Vision 2023, particularly in sectors critical to national security and economic independence. This initiative prioritises indigenous production of high-tech products, particularly in the defence and aerospace sectors, aligning with Vision 2023's emphasis on increasing the share of high-tech products in Türkiye's exports. Upon inauguration in 2020 of the Centre for the Fourth Industrial Revolution Network to manage digital transformation, President Recep Tayyip Erdoğan stated that "we aim to make Türkiye a hub of the Fourth Industrial Revolution products and technologies in line with our National Technology Initiative". The NTI in Türkiye serves as a consolidation effort to unite various stakeholders and mobilise them towards strategic objectives crucial for national interests. Comprising five main elements including developing high technology and innovation, facilitating digital transformation and industrialisation drive, supporting entrepreneurship, cultivating human capital and building infrastructure, it aims to bring together government agencies, private sector companies, universities, research institutions and NGOs, ensuring coordinated efforts in key areas like artificial intelligence, cybersecurity, advanced manufacturing and aerospace. The NTI has driven economic growth by fostering innovation, creating high-tech jobs and providing training opportunities such as through DENEYAP Technology Workshops and specialised scholarships.

In alignment with Vision 2023, policies supporting the NTI include tax incentives for R&D activities and the creation of more than a 100 specialised technology zones, 87 of them being fully operational across the country. Educational programs, such as those offered by the Kesif Kampus and Bilim Türkiye aim to improve science communication and foster interest in science and technology on a national scale. By aligning technological progress with national interests, the NTI strives to create a self-sufficient, innovative and globally competitive technology ecosystem in Türkiye. This strategic initiative builds on Vision 2023 and was designed to propel Türkiye towards greater technological self-sufficiency and innovation in a more organised and directed manner.

The Digital Transformation Office (DTO) of the Presidency of Türkiye, also established in 2018, plays a crucial role in the country's efforts to achieve the goals set out in Vision 2023 and the NTI. As part of the Presidency, the office is tasked with spearheading Türkiye's digital transformation by developing strategies to enhance digital infrastructure, cybersecurity and data management across public and

private sectors. It focuses on integrating advanced technologies like AI, big data, and blockchain into government operations, thereby increasing efficiency and transparency. Furthermore, the DTO supports the broader goal of positioning the country as a global leader in technology by promoting digital literacy, fostering innovation, and encouraging the adoption of new technologies, the office contributes to increasing the share of high-tech products in Türkiye's exports, a key objective of both Vision 2023 and the NTI.

In terms of efficacy, the DTO's efforts contribute to cost savings and efficiency improvements in government operations, with reports suggesting reductions of up to 30 percent in operational costs through digital means. Furthermore, the office's initiatives support broader economic goals, such as increasing the digital economy's share of Türkiye's GDP by 15 percent by 2025. On the adoption front, the Turkish government's investment in digital services has been notable, with the e-Government Gateway (e-Devlet) seeing over 50 million active users as of 2023.

Launched in 2021, Türkiye's National Artificial Intelligence Strategy (NAIS) aims to position the country as a technological leader by 2023, in alignment with Vision 2023 and the NTI. Spearheaded by the DTO, the strategy focuses on advancing AI research and development, enhancing educational programs, and investing in technological infrastructure. Evidence of its success includes a 15 percent annual increase in AI-focused tech startups and over 1 billion USD allocated by the Turkish government for AI research and infrastructure through the NTI. Türkiye's digital economy is projected to grow by 10 percent annually, reflecting these initiatives' impact. The AI strategy emphasises robust data infrastructure, AI applications, and policies for data governance and ethical AI use. The AI and Data Economy Project exemplifies these goals by leveraging data and AI to enhance economic performance, with over 500 million USD invested in AI and big data technologies in recent years.

Key Executing Institutions

To effectively translate the above strategic frameworks and policies into action, has launched several partnerships, programs and funding mechanisms aimed at supporting innovation and technology development. Central to these efforts are government agencies like the Digital Transformation Office (DTO) that manage funding and oversee research projects. Research institutes such as the Universities and educational institutions play a crucial role in developing talent and conducting research, while private sector partners and international collaborators help integrate Türkiye into the global tech landscape. Innovation hubs and various funding mechanisms further drive technological progress and foster a vibrant tech ecosystem. Through key targeted initiatives and strategic partnerships, the Turkish government was able to translate its technology policies into actionable outcomes and enhance the country's position in the global technology arena.

The first of these key institutions is TÜBİTAK (The Scientific and Technological Research Council of Türkiye). As delineated in Chapter 2, TÜBİTAK, another key institution established early in 1963, supports Türkiye's science, technology and innovation (STI) by formulating policies, funding research and development projects, performing STI research and promoting scientific literacy. Initially focused on basic and applied academic research and encouraging scientific careers, it now manages ten research grant committees and a Science Fellowships and Grant Programmes Division. TÜBİTAK oversees several research institutes, including the National Research Institute of Electronics and Cryptology (UEKAE), Marmara Research Centre (MAM), Defence Industries Research and Development Institute (SAGE), Space Technologies Research Institute (UZAY), National Metrology Institute (UME) and others. These institutes support STI infrastructure, international collaborations and the publication of academic and popular science materials. TÜBİTAK's BiGG Investment program supports entrepreneurs from the idea stage to market, helping transform technology and innovation-driven ideas into high-potential enterprises. The program offers entrepreneurship training and technical, commercial, and administrative support from experienced mentors and promotes innovative, high-tech products for international markets. The TÜBİTAK 1507 SME R&D Startup Support Program helps SMEs enhance competitiveness by improving their technology and innovation capabilities by providing significant monetary support in the form of grants. SAYEM is another TÜBİTAK program that fosters collaboration between private firms, technology zones, universities, and end-users to co-create high value-added, technology-based products through innovation networks in targeted sectors. These along with many other TÜBİTAK's efforts have helped to position Türkiye as a growing player in the global scientific community.

Another key institution supporting technology development is Küçük ve Orta Ölçekli İşletmeleri Geliştirme ve Destekleme İdaresi Başkanlığı (KOSGEB), established in 1990 under Law No. 3624. Initially, KOSGEB focused on SMEs in the manufacturing sector. However, in 2009, its scope expanded to include SMEs in the service and trade sectors following the passage of Law No. 5891. By 2017, KOSGEB shifted its focus toward supporting industrial businesses, particularly those involved in technology production. KOSGEB evolved from two earlier initiatives, KÜSGEM and SEGEM. KÜSGEM was launched in 1973 as a pilot project under the Ministry of Industry and Trade, in collaboration with the United Nations Industrial Development Organisation (UNIDO), to assist small-scale industrial enterprises in Türkiye. It initially provided technical con-

sultancy and promoted modern business practices, helping to improve quality standards, boost technological production, and increase employment. SEGEM, established in 1978, offered educational programs to address the training needs of SMEs and their employees. However, the temporary nature of these programs proved inadequate to meet national needs, leading to the creation of KOSGEB. Today, KOSGEB remains a critical organisation, offering essential support to SMEs by enhancing their technological capabilities and fostering technology-driven domestic production. Some programs include KOBİ Dijital Dönüşüm Destek Programı (SME Digital Transformation Support Program) and KOBİ Teknolojik Ürün Yatırım Destek Programı (SME Technological Product Investment (TECHNO-INVESTMENT) Support Program) both offer significant monetary (up to 10M Turkish Lira) and technical support to both Turkish and international entrepreneurs in the country's growing technology space.

The third institutional partner of note is the Türkiye Varlık Fonu (TVF), or the Turkish Wealth Fund. TVF was established in 2016 under Law No. 6741 as the strategic investment arm and equity solutions provider for the country. As an asset-backed development fund, it focuses on driving the growth of its portfolio companies through value creation programs, investments in key sectors, and visionary projects that support the country's economic development. At the time of writing, TVF manages a diverse portfolio of 31 companies across 7 sectors, along with 2 licences and various real estate assets. These include technology companies such as Türk Telekom, Türksat and Turkcell. The TVF also includes a Türkiye Technology Fund that provides access to capital for technology startups in the country. As a funding mechanism, it is designed to support venture capital (VC) funds that invest in startups with strong connections to Türkiye. These startups must either be established in the country, employ domestic engineers or technical staff, conduct research and development locally, or generate the majority of their intellectual property or revenue in Türkiye. By directing investments into such companies, the fund aims to foster innovation, create jobs, and enhance the country's technological and economic ecosystem. This initiative aligns with the "Century of Türkiye" vision, promoting sustainable growth and local technological development.

Key Implementation Mechanisms

Drawing from the Turkish government's strategic technology frameworks and policies developed over recent years, the mechanisms of implementation include a variety of targeted partnerships and funding initiatives designed to drive innovation, enhance competitiveness, and foster technological advancement. By leveraging strategic institutions like TÜBİTAK and TVF as well as specific initiatives such as the SME R&D Startup Support Program and SAYEM Industrial Innovation Networks, the government has utilised specific mechanisms to translate national tech policies into tangible outcomes and promote sustainable growth. These include Public Private Partnerships (PPPs) and International Collaborations.

Public-Private Partnerships (PPPs)

Public-Private Partnerships (PPPs) are collaborative arrangements between government entities and private sector companies designed to deliver public services or infrastructure projects. In a PPP, both parties share resources, risks, and rewards to achieve common goals. By sharing risks between the public and private sectors, PPPs minimise financial exposure and encourage innovation through the introduction of new technologies and practices. PPPs allow governments to concentrate on their core functions while benefiting from private sector capabilities. The long-term value of PPPs is reinforced by performance-based contracts that ensure high standards and sustained value. They have emerged as a crucial mechanism in advancing Türkiye's technology agenda.

Main types of successful PPPs in Türkiye illustrate their diverse applications and significant impact. The first type involves the Turkish defence sector and showcases the effectiveness of PPPs through collaborations between government agencies and companies such as ASELSAN, TAI, and Roketsan. These partnerships have driven advancements in unmanned aerial vehicles (UAVs), radar systems, and missile technology, highlighting their role in developing indigenous defence capabilities. The second type is initiated by the Technology Transfer Offices (TTOs) within universities and exemplifies another key aspect of PPPs that they can facilitate the commercialisation of academic research through collaborations with private companies. These offices bridge the gap between academia and industry, transforming research outputs into marketable products and services. Finally, the third type involves digital transformation projects collaborating with tech giants like Microsoft, IBM, and Google to demonstrate how PPPs can drive innovation across various sectors, including education, healthcare, and agriculture. Such collaborations often include knowledge transfer, training programs and the creation of tailored technological solutions for public services, underscoring the broad scope and impact of PPPs in advancing Türkiye's technological and industrial landscape. Türkiye has invested 80 billion USD (TL 1.08 trillion) in 257 PPPs since the 1990s, according to the PPP Centre of Excellence.

ASELSAN, Türkiye's leading defence electronics company, serves as a notable example of a successful PPP in the Turkish defence sector. Founded in 1975 by the Turkish Armed Forces Foundation (TAFF), which holds a majority stake, ASELSAN operates with government support to fulfil national defence requirements. At the same time, it

functions as a publicly traded company on the Borsa Istanbul, engaging private investors and working with various private sector companies to develop, produce, and market advanced defence technologies. ASELSAN also partners with universities and private firms for research and development, fostering innovation and technological growth. While its primary focus is on defence, ASELSAN also produces civilian products in areas like telecommunications and transportation, reflecting its broader public-private collaboration.

ASELSAN emerged as a significant player in the global defence industry, exporting its products to over 60 countries in 2019. Key achievements include the development of the KORAL electronic warfare system and the ASELFLIR electro-optical targeting systems, which are integral to Türkiye's indigenous UAVs. The collaboration has notably reduced Türkiye's dependency on foreign defence technologies, fostering self-sufficiency and technological independence. In terms of the Turkish defence industry as a whole, Türkiye's arms exports increased by 106% between 2019 and 2023 compared to the 2014-2018 period, positioning the country as the world's 11th largest arms exporter.

A prominent example of a PPP involving Technology Transfer Offices (TTOs) in Turkish universities is the Research Development and Technology Transfer Office (SUATT), which was established in 2001 at Sabancı University as a model for other Turkish universities, and plays a key role in managing research within an institutional framework. It works in tandem with Sabanci University Inovent A.Ş., which operates as a fully owned subsidiary of Sabancı University. Established in 2006, it is Türkiye's first technology commercialisation and seed fund company, focused on transforming early-stage technologies, especially those from university faculty, into successful businesses. Inovent works closely with private sector investors and government agencies, fostering collaborations that bridge the gap between academia and the business world. It plays a key role in promoting venture capital, angel investment and the strategic management of intellectual property (IP) as a driver of economic development. Another example is the Yildiz Technical University (YTU) Technopark and the YTU Technology Transfer Office (TTO), which was established in 2013. The TTO is among the first ten supported by TÜBİTAK's 1513 Technology Transfer Offices Support Program and also works to create sustainable collaborations between academia, industry, and entrepreneurs. Serving over 2000 academics, more than 400 firms, and having achieved over 250 patents, YTU TTO has been effectively supporting academic-industry partnerships and the commercialisation of new technologies.

Furthermore, Microsoft's new technology centre in Istanbul focuses on digital transformation, artificial intelligence (AI) and smart production systems, offering Turkish companies and startups access to cutting-edge technologies and global markets. It demonstrates how PPPs can drive innovation across various technology sectors as governments can collaborate with international tech giants. The Turkish government is actively involved with the project by supporting its establishment and integrating it into Türkiye's broader technological development strategies. By hosting foreign partners and displaying Turkish-developed technologies, the centre will act as a bridge, promoting Turkish software and solutions to global markets. Essentially, it's a hub for fostering international collaboration, increasing Türkiye's tech exports and enhancing its global competitiveness. It is expected to make a contribution of 2.5B TL to the Turkish economy.

Government partnerships with technology companies can be seen across other sectors as well: Turkcell, 26 percent of which is owned by the TVF as noted above, has spearheaded the digital transformation of Turkish state hospitals, beginning with Yozgat in 2017 and expanding to Adana, Elazığ, Eskisehir, and Bursa. Through a PPP with the Turkish Ministry of Health, Turkcell integrated hospital information systems with intelligent building technology, enabling real-time data sharing between medical devices and eliminating paper records. Yozgat State Hospital became the first fully digitalised hospital in the country, achieved international certifications of excellence.

Given these developments, Turkish companies are highly likely to participate in PPPs abroad, as evidenced by several factors. Türkiye's successful PPP projects, including Istanbul Airport, city hospitals, the Eurasia Tunnel, and the Yavuz Sultan Selim Bridge, have gained international recognition and showcased the capabilities of Turkish firms. This global acknowledgment has attracted attention from senior officials in numerous countries, boosting Turkish companies' credibility. Additionally, Turkish firms have demonstrated their competence with significant international projects, such as hospitals in Azerbaijan and an international airport in Kazakhstan. The increasing interest from Central Asian countries in Türkiye's infrastructure models further highlights the potential for expansion. The PPP Centre of Excellence's focus on leveraging revenue from existing projects to fund new investments underscores the ongoing and future opportunities for Turkish companies. These elements collectively suggest a robust likelihood for Turkish firms to continue and increase their participation in international PPPs.

International Collaborations: Crafting a Collaborative Future

International collaborations have been pivotal in advancing Türkiye's technological capabilities across various sectors, including defence, energy, and telecommunications. Each partnership has introduced unique expertise and innovation, enhancing Türkiye's growing influence

on the global tech stage. Whether through joint technology development, raw material production, or the co-development of industrial applications, these collaborations have significantly contributed to Türkiye's technological transformation. By leveraging global partnerships, Türkiye has improved its strategic ecosystems and made a notable impact worldwide.

Italy and the Defence Industry

The T129 ATAK helicopter, a twin-engine, multi-role attack aircraft, is the product of a strategic collaboration between Turkish Aerospace Industries (TAI) and Italy's Leonardo, formerly known as AgustaWestland. Initiated in 2008, this partnership focused on addressing the Turkish Armed Forces' need for a versatile, high-performance attack helicopter. The collaboration facilitated significant technology and knowledge transfer, enabling TAI to adapt and enhance the Agusta A129 Mangusta platform, resulting in the T129 ATAK. This customised version includes advanced avionics, weaponry, and protection systems, specifically tailored to meet Türkiye's unique operational demands. The T129 ATAK has since become a cornerstone of Türkiye's military capabilities and is positioned for export. This model is already purchased by the Philippines and Nigeria, with potential customers such as Brazil, Qatar, and Iraq expressing interest. The success of the T129 ATAK highlights the ongoing defence cooperation between Italy and Türkiye, while also reflecting Türkiye's growing independence in defence manufacturing. For Italy, this partnership has allowed its technology to be adapted and evolved, contributing to Türkiye's defence capabilities and offering a platform for Italian defence firms to collaborate on new technologies. However, Türkiye's increasing focus on indigenous development, such as with the T625, T929 ATAK 2, and T925 helicopters, signals a shift toward self-sufficiency in defence production.

For Türkiye, this development marks a major advancement in its defence industry, showcasing its ability to locally develop sophisticated aerospace technologies. Transitioning from licensed production to indigenous design, Türkiye is positioning itself as a strong competitor in the global defence market. This growing capability is likely to reduce reliance on foreign suppliers, such as Italy, in the long term while enhancing Türkiye's potential to export defence products. However, this positioning does not imply a weakening of ties with Italy. Instead, it offers an opportunity to redefine and strengthen Turkish-Italian defence cooperation. Both nations seem to prefer to continue collaborating in ways that mutually benefit their defence industries and beyond.

Russia and the Energy Sector

The Türkiye-Russia cooperation on the Akkuyu Nuclear Power Plant (NPP) is a significant strategic partnership, emphasising the close energy ties between the two countries. Located in Mersin Province, Akkuyu NPP is Türkiye's first nuclear power plant. In tandem with its technological advancements, nuclear energy is becoming critical for Türkiye as the country's energy market is projected to grow by 4 percent annually over the next two decades, and power generation must be adjusted to meet rising industrial demand. To address this need, Ankara appears focused on increasing power from renewable sources and nuclear energy. Additionally, this partnership enables Türkiye to achieve its 2053 net zero emissions target, with plans for two additional nuclear plants beyond the Akkuyu NPP. Türkiye's nuclear energy program aligns with the COP28 goal of tripling global nuclear capacity by 2050.

The Akkuyu NPP is being developed by Russia's state-owned nuclear corporation, Rosatom. The project, initiated with a 2010 agreement, is the first nuclear plant globally to be fully funded and owned by a foreign entity. Rosatom holds a 100 percent ownership stake, with Russian financing covering the entire estimated cost of 20 billion USD, highlighting growing economic relations between Türkiye and Russia. Once operational, the 4800 MWe plant, with the first unit expected to come online in 2025, is set to generate about 10 percent of Türkiye's electricity, aiding in the diversification of energy sources and reducing reliance on imported gas and coal. As mentioned above, the Akkuyu NPP is a significant step toward enhancing Türkiye's energy security and diversifying its energy portfolio. It helps decrease dependence on imported fossil fuels, potentially stabilising energy prices and contributing to economic stability. Additionally, the plant advances Türkiye's technological capabilities by incorporating sophisticated nuclear technology and construction methods. Turkish manufacturers are providing essential equipment and materials for the Akkuyu Nuclear Power Plant, including valves, pipes, storage tanks, and insulation materials, providing a platform for developing local expertise in nuclear energy, which may drive future innovations in Türkiye's energy sector.

It must be noted that Turkish diplomacy has played a crucial role in facilitating the Akkuyu NPP, especially considering the regional significant security concerns that could have otherwise hindered such an endeavour. Türkiye appears to have strategically leveraged its position as a key player in regional energy and security discussions to align its interests with those of Russia. By negotiating a favourable "build-own-operate" agreement with Rosatom that evidences its commitment to nuclear non-proliferation, Türkiye secured substantial foreign investment and technology transfer while maintaining a strategic stake in the

project. This approach helped mitigate potential geopolitical risks and ensured that Türkiye could benefit from the expertise and resources of a major nuclear power without compromising its strategic interests.

Additionally, Türkiye has managed to navigate complex regional dynamics by emphasising the economic and energy benefits of the Akkuyu NPP. By framing the project as essential for its energy diversification and economic stability, Türkiye has garnered support both domestically and internationally. This focus on economic development and energy security has helped Türkiye build a compelling case for the project, which has been pivotal in maintaining diplomatic and commercial relations with Russia despite broader regional security issues. Furthermore, Turkish diplomacy has been adept at balancing its relationships with multiple stakeholders. While collaborating closely with Russia on the Akkuyu NPP, Türkiye has also engaged with other international partners and institutions to ensure that the project aligns with global nuclear safety standards and environmental regulations. This multifaceted approach has helped Türkiye mitigate potential objections and foster a cooperative atmosphere conducive to the successful advancement of the plant.

China and 5G Technology Applications

Türk Telekom and Huawei have formalised a significant partnership through the TurkTech 2.0 Memorandum of Understanding (MoU), announced at the Mobile World Congress in Barcelona. Türk Telekom's majority shares are owned by the Turkish Wealth Fund (Türkiye Varlık Fonu), which became the largest shareholder in 2018, while a significant portion of the shares had previously been held by state-owned entities. Although the Chinese government does not hold shares in Huawei, the company operates within a regulatory environment shaped by government policies and maintains close collaboration with it. Thus, the partnership can be considered government endorsed.

This collaboration represents a major advancement in Türkiye's telecommunications sector, focusing on the deployment of next-generation 5G technology. The MoU highlights a shared commitment to developing 5G-ready networks and applications, which are crucial for accelerating Türkiye's digital transformation. By combining Huawei's technological prowess with Türk Telekom's extensive local knowledge, the partnership aims to enhance digital infrastructure and expand network capabilities. One key project under this partnership is the 'Smart Tractor Systems,' an agritech innovation that uses 5G to power autonomous tractors. These tractors perform precise agricultural tasks with minimal human intervention, utilising video analysis and real-time data to promptly address any operational anomalies, thus boosting efficiency and productivity in agriculture. Additionally, the collaboration will introduce 'HADO,' an Augmented Reality (AR) game, to Türkiye, enabling real-time global competitions and integrating Türkiye into a major esports ecosystem.

Overall, this partnership not only advances Türkiye's technological infrastructure but also sets a global precedent for innovation in telecommunications. For Türkiye, it accelerates digital transformation, enhances industrial productivity, and supports various sectors such as agriculture, health, entertainment, and urbanisation. The cooperation strengthens Türkiye's position as a regional tech hub, supports its broader economic and technological goals, increases international integration and yet fosters local innovation by reducing dependency on foreign technology.

Strategic Evolution

Throughout its history, and particularly during the AK Party era, Turkish leadership has steadfastly nurtured the nation's technological infrastructure. The cornerstone of Türkiye's tech policy success lies in its consistent and progressive approach. This strategy has provided a stable foundation, allowing stakeholders, enterprises, and academic bodies to reliably anticipate and build upon the government's enduring vision. These policies, strategically layered over time, forge a dynamic and integrated structure that propels sustainable technological development and addresses emerging national challenges. For instance, the establishment of robust frameworks, strategic institutions, and global partnerships, supported by savvy diplomatic efforts, epitomises this systematic coherence. Each initiative is designed to enhance and amplify the preceding ones.

This methodical strategy has particularly accelerated in the last two decades, underscoring a resolute commitment to leverage past achievements while rectifying past oversights. This rapid evolution spans defence technologies to consumer electronics, propelled by strong governance, ensuring Türkiye remains synchronised with swift global tech advancements. This continued progress in critical sectors attests to the effectiveness of Türkiye's forward-looking policies in boosting technological growth and enhancing international competitiveness.