# AI Industry in Turkey Landscape Overview

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## Introduction

In the rapidly evolving landscape of Artificial Intelligence (AI), Turkey stands at a unique crossroads, embodying a bridge between the East and West. This prologue introduces the burgeoning AI industry in Turkey, a testament to the nation's strategic ambition and innovative prowess.

As Turkey navigates through the complexities of AI governance, fostering an environment of technological advancement and ethical consideration, it also cultivates a dynamic ecosystem ripe for digital transformation. This platform, aims to shed light on Turkey's multifaceted approach to AI—balancing regulatory frameworks, pioneering startups, and international cooperation.

By exploring Turkey's role in shaping global AI discourse and harnessing AI's potential for societal benefits, we embark on a journey through the heart of Turkey's AI aspirations, setting the stage for an insightful exploration into its AI landscape.

# Introduction

Turkey is emerging as a significant player in the Artificial Intelligence (AI) landscape, bridging East-West AI governance and fostering an environment ripe for technological innovation and international cooperation. Our Industry in Turkey platform aims to encapsulate the vibrant ecosystem of AI development, regulation, and application within Turkey, positioning it as a nexus of cultural and technological exchange between diverse global AI governance philosophies. Turkey's strategic significance in the global AI discourse is underscored by its efforts to harmonize differing regulatory approaches and governance models. As evidenced by Turkey's participation in international dialogues, such as the World Internet Conference Nishan Dialogue on Digital Civilization, the country is not only contributing to but also shaping the future of AI regulation and its ethical implications on a global scale. This involvement highlights Turkey's proactive stance in navigating the complex web of AI governance, balancing innovation with ethical considerations, and sovereignty with international cooperation.

The AI industry in Turkey is characterized by a dynamic startup ecosystem, government initiatives aimed at digital transformation, and an increasing awareness among the populace about AI's potential benefits and challenges. Innovative startups like Myth.AI and Cognitiwe, which focus on AI-driven solutions for the fashion and retail industries respectively, exemplify the entrepreneurial spirit driving Turkey's AI sector forward. These ventures not only address specific market needs but also contribute to sustainable development goals, showcasing the practical applications of AI technologies in solving real-world problems.

However, the journey towards an AI-integrated future is met with challenges, including concerns over job displacement and the need for comprehensive digital literacy. Surveys indicating a majority of Turks fear losing their jobs to AI highlight the necessity for educational reforms and initiatives to prepare the workforce for an AI-driven economy. Recognizing these concerns, Turkish authorities are advocating for updates in digital media literacy to ensure a smooth transition to a future where AI plays a central role in various sectors.
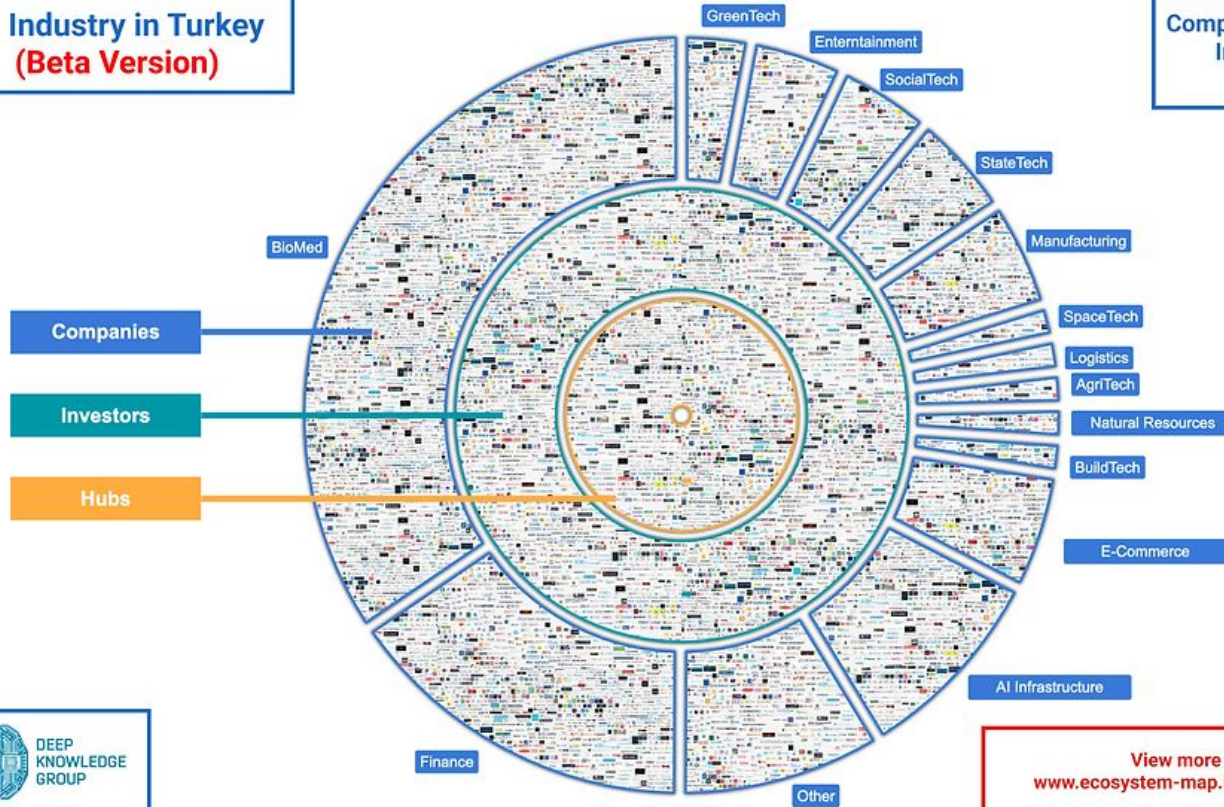
# Introduction

Turkey's ambition to develop AI-backed military technologies, such as the 6th-generation fighter jet, further demonstrates the nation's commitment to leveraging AI for national security and maintaining a competitive edge on the global stage. This venture, alongside major Foreign Direct Investment (FDI) projects, signals confidence in Turkey's investment climate and its potential to attract global capital, fostering an ecosystem conducive to AI research and innovation.

As Turkey strides forward in the realm of Artificial Intelligence (AI), it becomes increasingly clear that its journey is not just about technological advancement but also about creating a sustainable and inclusive future. The nation's efforts to harmonize East-West AI governance underscore a broader vision that seeks to leverage AI for the betterment of society, ensuring that technological progress is aligned with ethical standards and contributes positively to global challenges. In this penultimate analysis, we delve deeper into Turkey's strategic initiatives, such as the emphasis on digital literacy and the integration of AI in national defense, reflecting a comprehensive approach to AI adoption. These efforts are complemented by the government's support for AI startups and investments, which not only fuel innovation but also position Turkey as a competitive player on the international stage. Furthermore, Turkey's role as a mediator in global AI governance discussions highlights its potential to contribute to a more equitable and balanced technological future. By fostering an ecosystem where innovation thrives alongside ethical considerations, Turkey is not just navigating the AI revolution but is also shaping it, demonstrating a commitment to a future where technology and humanity progress hand in hand.

In conclusion, the "AI Industry in Turkey: Landscape Overview" aims to highlight Turkey's strategic efforts in fostering AI development, navigating global governance challenges, and harnessing AI for societal benefit. By bridging the gap between Eastern and Western perspectives on AI regulation and governance, Turkey is not only positioning itself as a key player in the global AI arena but also contributing to the development of a more harmonized and collaborative international AI landscape.

**AI Industry in Turkey (Beta Version)**

Companies - 1260
Investors - 50
Hubs - 25

Companies
Investors
Hubs

GreenTech, Enterntainment, SocialTech, StateTech, Manufacturing, SpaceTech, Logistics, AgriTech, Natural Resources, BuildTech, E-Commerce, AI Infrastructure, Other, Finance, BioMed

DEEP KNOWLEDGE GROUP

View more at www.ecosystem-map.info/turkey-ai

*Source:* platform.dkv.global/mind-map/AI-in-Turkey/
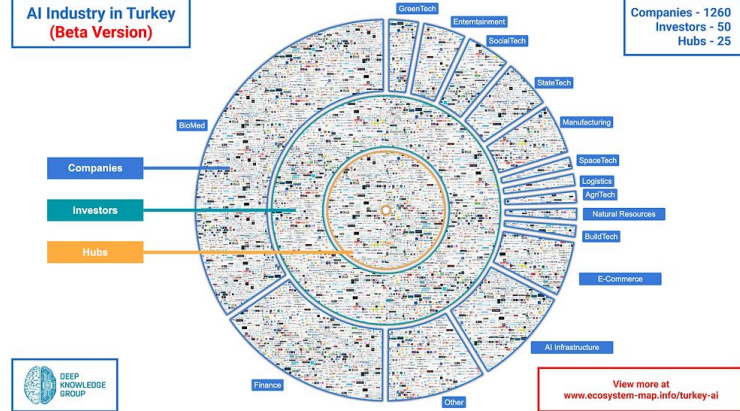
# AI Industry in Miami

## Platform Overview

# Platform Overview



**Source:** www.ecosystem-map.info/turkey-ai

# Platform Overview



**AI Investors in Turkey**

| Companies | Investors | Technology - oriented Investor |
|-----------|-----------|-------------------------------|
| 1260 | 50 | 40 |

BETA VERSION

**AI Investors by Types**
- Amount
- Percentage (%)

Venture Capital / Micro VC / Angel Group / Corporate Venture Capital / Private Equity Firm / Other

**Number of Investments**
- 12
- 1-10 Investments

**Focus Area of Investors**
- Technology - oriented Investor with Venture Investment
- Investors with Large AUM (Assets Under Managem...)
- Education and Research Endowments
- Other

**AI Ecosystem Map of Turkey**

Istanbul
Hosts a vibrant AI community with universities, R&D, and startups

The AI Industry in Turkey platform offers a unique overview of the developing AI industry, composed of profiles, mindmaps, and databases of **1260 companies, 50 investors, and 25 hubs**. Their innovative approaches are contributing to the advancement of such fields as BioMed, AI Infrastructure, Finance, Manufacturing, SocialTech, E-Commerce and many other important sectors. The creation of a strong AI ecosystem in Turkey depends on the cooperative efforts of businesses, investors, and hubs, which are represented on this platform.

**Tech Ecosystem in Turkey Leaders:** Explore the database featuring influential figures shaping Turkey technology and innovation landscape. Delve into the profiles of decision-makers driving advanced solutions and visionary leaders charting the course for Turkey future in technology.

***Source:*** *www.ecosystem-map.info/turkey-ai*

# AI Industry in Turkey Summary

## Turkey AI Companies by Sectors

| | |
|---|---|
| Technology Consulting | 188 |
| Internet Media & Services | 176 |
| Fintech | 85 |
| HealthTech | 81 |
| Blockchain & Transaction Analysis | 54 |
| EdTech | 52 |
| AI Training Platforms | 49 |
| Other | 575 |

**1260 COMPANIES**

## Turkey AI Companies by Industry

| | |
|---|---|
| BioMed | 480 |
| Finance | 218 |
| AI Infrastructure | 132 |
| SocialTech | 79 |
| E-commerce | 72 |
| StateTech | 63 |
| Other | 216 |

**480 BIOMED COMPANIES**

## Focus Area of Investors

| | |
|---|---|
| Technology - oriented Investor with Venture Investment Focus | 40 |
| Investors with Large AUM (Assets Under Management) | 1 |
| Education and Research Endowments | 1 |
| Other | 8 |

**50 INVESTORS**

**1335 ORGANIZATIONS**

## Investors by type

| | |
|---|---|
| Venture Capital | 15 |
| Micro VC | 9 |
| Corporate Venture Capital | 9 |
| Angel Group | 8 |
| Private Equity Firm | 3 |
| Other | 6 |

**15 VENTURE CAPITAL INVESTORS**

## Investors by Money Investment

| | |
|---|---|
| Medium Investments | 40 |
| Small Investments | 2 |
| Other | 8 |

**40 MEDIUM INVESTMENTS**

## AI Hubs in Turkey

| | |
|---|---|
| Accelerators | 8 |
| Incubators | 5 |
| R&D Hubs | 1 |
| Government Offices | 1 |
| Other | 10 |

**25 HUBS**

*Source:* www.ecosystem-map.info/turkey-ai

# AI in Turkey Knowledge Hub Beta Version

| Scientific & IT Resources | Education & Collaboration | Media & Trends | Rankings & Top Leads | Online Communities |
|---|---|---|---|---|
| 20 AI Books | 20 Conferences in Turkey | 30 Turkey Leaders Interviews | 1260 Turkey AI Companies | 20 Linkedin |
| 20 AI Journals | 20 Workshops in the Turkey | 25 Podcasts by Turkey experts | 100 AI Leaders | 20 Facebook |
| 200 AI Articles | 20 Turkey Certification Programmes | 50 Turkey Blogs | 80 Turkey Cities | 10 Reddit |
| 15 AI Benchmarks | 20 Turkey University Programs | 500 News in the Turkey | 50 Investors | 10 GitHub |
| 40 AI Reports | 20 Online Courses in the Turkey | 100 Social Networks in the Turkey | 25 Hubs | 10 Quora |
| 40 AI Databases | 20 Lectures by Turkey Leaders | 10 Market Trends in the Turkey | 30 Consulting Services in the Turkey | 10 Twitter |
| 10 AI Software | 20 Turkey Research Projects | 10 Turkey Diversity Trends | 20 Startups in the Turkey | 10 Discord |
| 20 AI Models | 20 Scholarship Funds in the Turkey | 10 Women Leading the Field | 205 Turkey Universities | 10 Other Forums |

***Source:*** *platform.dkv.global/view/ai-in-turkey/*

# AI Industry in Turkey

AI Industry History and Main Principles

# The Advantages of Artificial Intelligence Technology

## 5 Common Features of Artificial Intelligence

### Learning & Adaptation

AI systems have the ability to learn from data and adapt their behavior over time. This learning process can occur through various techniques, such as machine learning, where algorithms analyze patterns in data and adjust their models to improve performance.

### Problem Solving

AI is designed to solve complex problems by processing and analyzing large amounts of data. This involves making decisions, drawing conclusions, and generating solutions based on the information available to the system. Problem-solving in AI can range from simple tasks to highly intricate and specialized domains.

### Automation

One of the primary goals of AI is to automate tasks that traditionally require human intelligence. This can include routine and repetitive activities, as well as more complex tasks such as decision-making, problem-solving, and natural language understanding.

### Perception and Interaction

AI systems often incorporate capabilities related to perception and interaction with the environment. This can involve computer vision for image and video analysis, speech recognition for understanding spoken language, and natural language processing for comprehending and generating human language.

### Adherence to Instructions

AI systems follow instructions or algorithms to perform specific tasks. The ability of AI to execute tasks based on instructions is a fundamental characteristic, whether it's in the form of rule-based systems, expert systems, or more advanced machine learning models.

# The Benefits and Challenges of Artificial Intelligence

Artificial Intelligence (AI) brings a host of benefits, driving efficiency, automation, data analysis, and personalized experiences across industries. It enhances decision-making processes, improves safety and security measures, and fosters innovation. However, AI adoption is accompanied by significant challenges. Ethical considerations, such as privacy and bias concerns, require careful attention. The lack of transparency in AI decision-making, security risks, data privacy issues, and technical limitations pose additional hurdles.

## Benefits

- Data Analysis and Pattern Recognition
- Improved Decision Making
- Efficiency and Automation

## Challenges

| | |
|---|---|
| Ethical Concerns | Data Privacy |
| Lack of Transparency | Technical Limitations |
| Security Risks | Job Displacement |
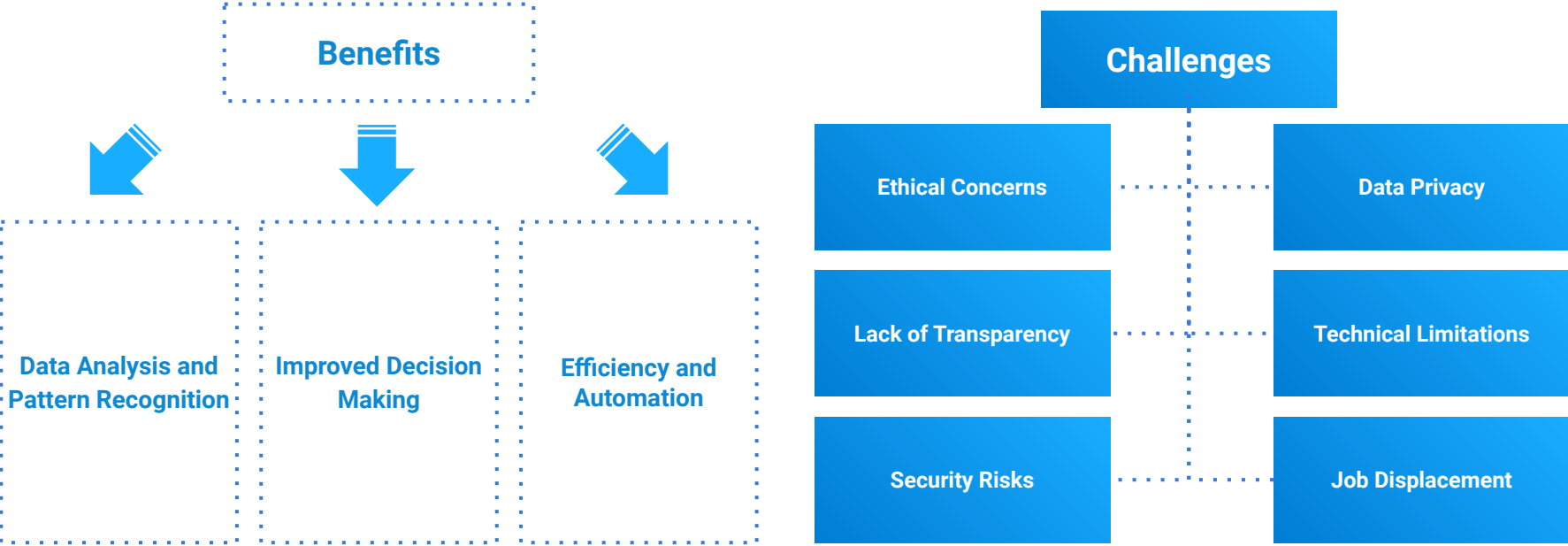
# Artificial Intelligence in TurkeyAnalytical Framework

## AI Infrastructure

Building robust systems to support AI workloads, optimize hardware, scalable cloud solutions, efficient data storage

## SocialTech

Applications range from sentiment analysis for community well-being to AI-driven solutions addressing social challenges

## BuildTech

Integrates AI in construction and real estate. Enhances project management with predictive analytics, accelerates design processes

## Entertainment

Enhances user experiences. Content recommendation algorithms deep learning creates realistic animations, and chatbots engage audiences, shaping a dynamic and immersive entertainment

## E-commerce

AI Optimizes business and customer experience. Algorithms provide detailed customer behavior analysis, augmented reality technologies, supplier management and many more

## Finance

AI revolutionizes operations. From algorithmic trading and fraud detection to personalized financial advice, AI enhances efficiency, minimizes risks, and provides insights for decision-making

## Biomed

AI accelerates healthcare innovation. It aids in drug discovery, interprets medical images for diagnosis, and personalizes treatment plans through predictive analytics, ushering in a new era of precision medicine

# AI Industry in Turkey

## Current State and Recent Developments

# AI Industry in Turkey: Types of Key Hub

The types of institutional hubs likely driving the AI industry in Turkey are:

**Turkish Government Ministries and Committees:** The Turkish government has shown a keen interest in advancing AI technologies, as evidenced by the establishment of AI committees and digital policies under the AK Party government. These entities are crucial for setting the regulatory framework, fostering innovation, and ensuring that Turkey's digital transformation aligns with its cultural and societal values. Their role includes encouraging entrepreneurship, protecting individual rights, and promoting secure and responsible digital practices.

**Research and Development (R&D) Hubs:** Turkey's R&D ecosystem, comprising universities, technology parks, and research institutes, plays a pivotal role in the AI industry. These hubs are essential for the creation of new knowledge, development of innovative AI technologies, and training of skilled professionals. They facilitate collaboration between academia and industry, driving forward Turkey's ambitions in AI research and applications.

**Startups and Entrepreneurial Ventures:** Startups like Cognitiwe and Myth.AI are at the forefront of Turkey's AI innovation, providing AI-driven solutions to various industry challenges. These companies are instrumental in translating research into practical applications, attracting investment, and demonstrating the commercial viability of AI technologies. Their success stories highlight the vibrant entrepreneurial spirit and the potential for scalable AI solutions emerging from Turkey.

**International Cooperation Platforms:** Turkey's involvement in global dialogues and conferences, such as the World Internet Conference Nishan Dialogue on Digital Civilization, positions it as a bridge between East and West in AI governance. These platforms allow Turkey to share its unique perspective, learn from global best practices, and foster international collaborations. This not only enhances Turkey's role in the global AI discourse but also opens up avenues for cross-border investments and technological exchange.

These hubs collectively contribute to a comprehensive ecosystem that supports the growth of the AI industry in Turkey, balancing technological advancement with ethical considerations and societal needs.

# AI Industry in Turkey: Key Hubs

**Cognitiwe**
This Turkish-founded company specializes in AI solutions for visual analysis and successfully closed a funding round of over $1M. The investment underscores the vibrant ecosystem for AI startups in Turkey, demonstrating both local and international investor confidence in Turkish AI innovation. Cognitiwe's focus on retail industry solutions, particularly in enhancing operations through visual analysis, positions it as a key player in Turkey's burgeoning AI sector. Their approach exemplifies how AI technologies can be leveraged to solve practical industry challenges.

**Tübitak BILGEM (Informatics and Information Security Research Center)**
As Turkey's leading research institution in the field of information technologies, Tübitak BILGEM plays a pivotal role in the AI landscape. It focuses on conducting advanced research and development activities, developing information security solutions, and fostering innovation in AI technologies. BILGEM's initiatives are instrumental in shaping national AI strategies and enhancing Turkey's competitiveness in global technology markets.

**Middle East Technical University (METU) - Artificial Intelligence and Data Science Research Center:**
METU is renowned for its strong emphasis on research and development in science and technology. Its AI and Data Science Research Center is a testament to the university's commitment to advancing AI knowledge and applications. The center collaborates with industry partners, conducts cutting-edge research, and provides training programs to nurture AI talent, contributing significantly to the growth of Turkey's AI sector.

**Turkish Technology Team Foundation (T3 Foundation)**
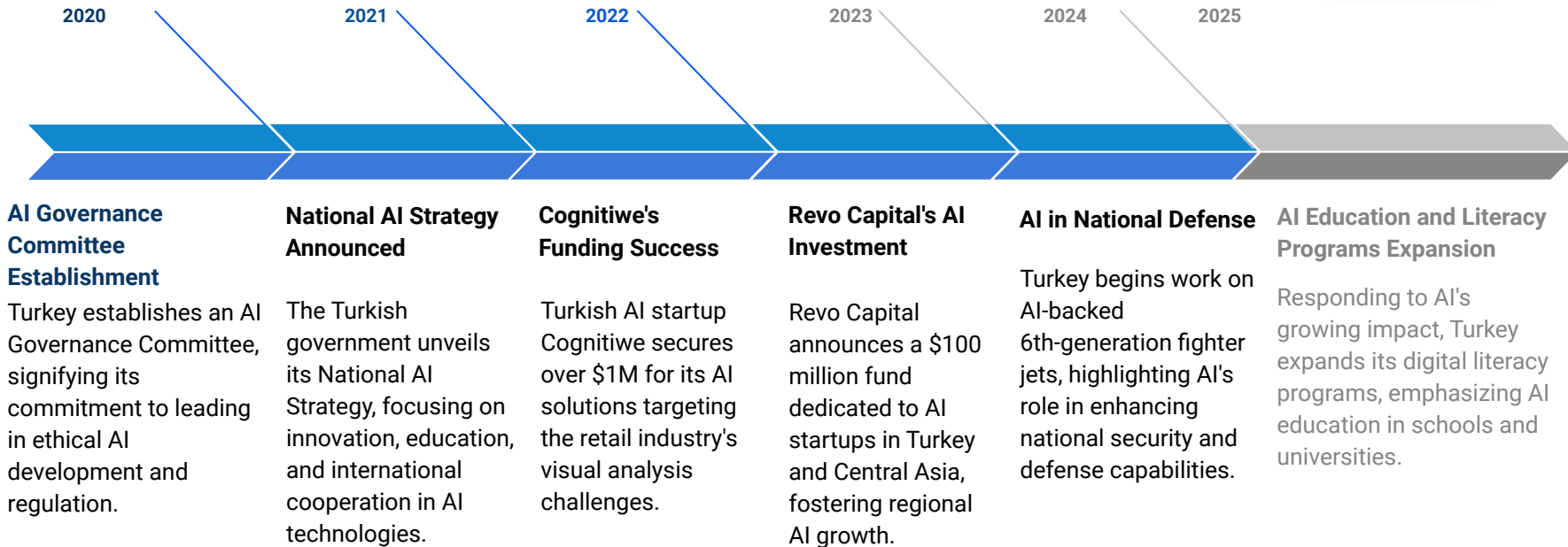The T3 Foundation is a key player in Turkey's technology ecosystem, supporting startups, encouraging innovation, and facilitating technological advancements, including AI. Through its incubation centers, funding opportunities, and collaboration platforms, the T3 Foundation accelerates the development of AI startups and projects, thereby bolstering Turkey's position in the global tech arena.

# AI Industry in Turkey: Recent Developments

**REPUBLIC OF TÜRKİYE MINISTRY OF INDUSTRY AND TECHNOLOGY**

In 2021, the government of Turkey published the country's National Artificial Intelligence Strategy for 2021-2025 .Prepared by the Digital Transformation Office of the Presidency and the Ministry of Industry and Technology, the strategy hopes to solidify Turkey's artificial intelligence ambitions, and lay the foundation for a more aggressive investment plan.

## 2020 — AI Governance Committee Establishment

Turkey establishes an AI Governance Committee, signifying its commitment to leading in ethical AI development and regulation.

## 2021 — National AI Strategy Announced

The Turkish government unveils its National AI Strategy, focusing on innovation, education, and international cooperation in AI technologies.

## 2022 — Cognitiwe's Funding Success

Turkish AI startup Cognitiwe secures over $1M for its AI solutions targeting the retail industry's visual analysis challenges.

## 2023 — Revo Capital's AI Investment

Revo Capital announces a $100 million fund dedicated to AI startups in Turkey and Central Asia, fostering regional AI growth.

## 2024 — AI in National Defense

Turkey begins work on AI-backed 6th-generation fighter jets, highlighting AI's role in enhancing national security and defense capabilities.

## 2025 — AI Education and Literacy Programs Expansion

Responding to AI's growing impact, Turkey expands its digital literacy programs, emphasizing AI education in schools and universities.

# AI Industry in Turkey

**Key Conclusions: The Road Ahead**

# Obstacles and Solutions to AI Adoption in Turkey

Enhance data accessibility and quality: Develop open data initiatives to improve the availability and quality of datasets for AI applications.

Establish unified AI governance framework: Create a comprehensive AI strategy that includes clear regulations, standards, and ethical guidelines for AI development and use.

**Limited access to quality data**

**Insufficient AI literacy and education**

**Fragmented AI governance and regulation**

**Lack of infrastructure and investment**

Invest in AI education programs: Implement national AI literacy programs and specialized AI education at universities to build a skilled workforce.

Boost infrastructure and funding support: Increase public and private sector investment in AI research and development, including infrastructure and financial incentives for startups.

# History, Current State and The Road Ahead

## Where is AI in Turkey Headed?

### History

The Turkish AI industry's history is rooted in a foundational blend of academic research, governmental initiatives, and burgeoning tech entrepreneurship. Early efforts were largely concentrated in universities and research institutions, focusing on theoretical aspects of AI and machine learning. The government's recognition of digital transformation's potential led to policies aimed at fostering innovation ecosystems, supporting tech startups, and investing in digital infrastructure. This period laid the groundwork for Turkey's AI landscape, emphasizing education, research, and development as cornerstones for future growth in this sector.

### Current State

Today, Turkey's AI industry is characterized by a dynamic and rapidly evolving ecosystem. Governmental bodies, such as the Ministry of Industry and Technology, have launched various initiatives to promote AI research and development, including funding opportunities and collaborative projects. Startups and tech companies are increasingly adopting AI to innovate and improve services across sectors like finance, healthcare, and retail. The establishment of AI-focused venture capital funds and incubation centers further supports this growth, marking a significant shift towards operationalizing AI for economic and societal benefit.

### The Road Ahead

The potential future trajectory of the Turkish AI industry is promising, poised for significant expansion and international collaboration. With continued investment in education and workforce development, Turkey can cultivate a rich talent pool to drive innovation. The government's commitment to digital transformation and supportive policies suggests a favorable environment for AI advancement. Furthermore, Turkey's strategic geographical position could serve as a bridge between East and West, potentially becoming a hub for AI research and development, fostering global partnerships, and contributing to international AI governance and ethical standards.

# Key Takeaways

**Venture Capital Investment:** One of Turkey's largest venture capital firms, Revo Capital, is set to significantly boost the AI sector by raising $100 million. This fund aims to support AI-related startups within Turkey and across Central Asia, marking a pivotal move towards enhancing the country's AI ecosystem and international appeal.

**International Recognition and Challenges:** Despite notable investments, such as in the Turkish delivery startup Getir, Turkish firms often face challenges in gaining attention from foreign investors. The new venture capital fund by Revo Capital aims to address this gap, highlighting the need for greater visibility and investment in Turkey's burgeoning AI sector.

**Broader Impacts and Integration:** The investment in AI not only signifies a substantial financial boost but also represents a broader impact on Turkey's tech landscape. By focusing on AI startups, Turkey is poised to advance its technological capabilities, fostering innovation and potentially leading to significant advancements in various sectors influenced by AI technologies.

# Deep Knowledge Group