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YOUTH PERSPECTIVES, STAKEHOLDER INSIGHTS, AND POLICY TRENDS IN TÜRKİYE

ERASMUS+ PROJECT
PROJECT NO 2023-2-DE04-KA220-YOU-000176952

Shaping AI: Youth Perspectives, Stakeholder Insights, and Policy Trends in Türkiye
Regional White Paper

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July 2025

As part of the Erasmus+ Key Action 2 project
YouthGovAI - PROJECT NO 2023-2-DE04-KA220-YOU-000176952

Co-funded by the European Union

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

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Introduction

This report, developed by YouthGovAI research group, offers a comprehensive overview of Artificial Intelligence (AI) regulation and its practical applications in Türkiye, with a particular focus on the perspectives and experiences of young people. As AI rapidly integrates into daily life, education and public services, understanding its governance and societal impact is essential. Drawing on Türkiye's National Artificial Intelligence Strategy (NAIS 2021–2025) and its 2024–2025 Action Plan, alongside the recently submitted "Artificial Intelligence Bill No. 2/2234," this document examines how Türkiye is aligning its emerging regulatory framework with international norms such as the EU AI Act. It also considers the role of existing statutes—most notably the Personal Data Protection Law (KVKK), intellectual property and consumer-protection provisions—and the guidance issued by bodies like the Personal Data Protection Authority. Beyond this legal landscape, the report explores dynamic political, institutional, and cultural debates—balancing the imperative for innovation against the need for transparency, accountability, and privacy. Through an analysis of a 127-respondent survey of Turkish youth and insights from national stakeholder discussions, it illuminates young people's AI familiarity, confidence, usage patterns, and critical perceptions of reliability and control. The report also includes results of 30 participants from Focus Groups and Co-creation Session. Ultimately, this report underscores the dual imperative of closing the AI literacy gap among Türkiye's next generation and forging inclusive channels for their participation in AI policy and governance—ensuring that the country's AI future is both innovative and responsibly stewarded.

1. Regulatory Framework: AI and National Adaptation

As AI continues to garner attention across all sectors, Türkiye has begun integrating it into its regulatory landscape. Although the country does not yet have a specific AI law, the National Artificial Intelligence Strategy (NAIS) stands out as a significant initiative, developed in alignment with the Eleventh Development Plan and the 2021 Presidential Annual Program (Ergül, 2025). More recently, on June 24, 2024, the "Artificial Intelligence Bill No. 2/2234" was submitted to the Grand National Assembly, marking Türkiye's first formal step toward a dedicated AI regulatory framework (Kosterit, 2025). This legislative move also reflects an effort to align with global standards, as reflected in EU AI Act (Okumuş & Takmaz, 2024). The bill is under review and has attracted some discussion about its current form being approved (Yönt, 2024). The bill does not only aim for safe, ethical, and fair AI utilization but also emphasizes personal data protection and privacy. Additionally, it seeks a comprehensive framework for AI systems' lifecycle which should be guided by safety, transparency, fairness, accountability, and privacy principles (Yönt, 2024). Risk assessments are mandated, with special measures for high-risk AI systems. This requires registration and conformity assessments (Kosterit, 2025). Significant financial penalties have been proposed in the Bill for non-compliance, reaching up to 35 million Turkish Lira or 7 percent of annual turnover for banned AI uses; even lesser breaches may attract fines of 15 million TL (or 3 percent), while supplying false information can trigger 7.5 million TL (or 15 percent) penalties [1].

With recent effort to have an AI bill, existing laws in Türkiye have some degree of impact AI, Notable among the laws is the Personal Data Protection Law No. 6698 (KVKK). The KVKK is relevant due to its AI's extensive personal data processing. Articles 4, 5, 6, and 11 of the KVKK outline data processing principles, conditions, sensitive data handling, and data subject rights which includes objecting to automated decisions (Şahinkaya et al., 2024). The Personal Data Protection Authority (KVKK) issued AI-specific recommendations in 2021, emphasizing data protection principles, risk assessments, transparency, and user rights.

Türkiye's Intellectual Property Law (IP) and Copyright Law also affect AI, particularly regarding AI-generated content ownership and copyrighted material use for training.

[1] https://www.morogluarseven.com/tr/news-and-publications/yapay-zekaya-iliskin-duzenlemeleri-iceren-kanun-teklifi-tbmm-baskanligina-sunuldu/

Current law requires a human author for copyright protection, excluding AI. However, the 2024-2025 Action Plan aims to clarify IP rights for AI-generated content and standardize AI product patenting. Other laws like the Law on Consumer Protection, the Law on Regulating Electronic Commerce, and the Turkish Criminal Code also have indirect implications for AI (Tağa et al., 2025).

Ministry of National Education (MoNE) has also taken important steps in terms of policy making. In June 2025, MoNE (2025) has published "Artificial Intelligence Policy Document and Action Plan for Education (2025-2029)" which is a five-year roadmap for bringing AI safely and ethically into every layer of Türkiye's school system. The policy gives Türkiye a phased, ethics-first blueprint that pairs systemic teacher-student upskilling with robust data-infrastructure and governance, positioning the country to use AI for more personalized, equitable and evidence-based education.

2. National Artificial Intelligence Strategy 2021-2025 and the 2024-2025 Action Plan

The "National Artificial Intelligence Strategy 2021-2025" (NAIS), launched in August 2021, provides Türkiye's AI policy framework. It was prepared in collaboration with the Presidency of the Digital Transformation Office (DTO) and the Ministry of Industry and Technology (MoIT) in Türkiye, and was published in the Official Gazette on August 20, 2021, with Presidential Decree No. 2021/18, thereby entering into force. Its vision is "to transform Türkiye into a nation that produces global value through an agile and sustainable AI ecosystem". NAIS was updated in July 2024 with the "Artificial Intelligence 2024-2025 Action Plan," to align with the 12th Development Plan of Türkiye. The updated version outlines specific regulatory actions which includes developing a national AI regulation that incorporates international norms, legal assessment guide for AI applications, framework for AI values, and AI impact analysis principles (DTO and MoIT, 2021). Additionally, while there is deliberation of the AI bill at The Grand National Assembly of Türkiye, the Ministry of Industry and Technology is actively playing a key role in formulating the NAIS and providing support for AI R&D. The Digital Transformation Office of the Presidency coordinates digital strategies which include AI policy development and the NAIS preparation. The Personal Data Protection Authority (KVKK) oversees data protection in AI applications and issues guidelines and to ensure KVKK compliance. Other Ministries and large bodies are following these main guidelines to structure their AI pathway.

Türkiye actively engages with international AI-governance initiatives. Its draft Artificial Intelligence Bill No. 2/2234 is explicitly considered in line with the EU AI Act's risk-based approach, signaling a desire for regulatory harmony that would facilitate economic ties with the Union. Türkiye also joined the Global Partnership on Artificial Intelligence (GPAI) in November 2022, underscoring its commitment to multilateral AI norms (Ministry of Foreign Affairs of Türkiye, 2022). Civil-society groups encourage Turkish authorities to sign the Council of Europe's Framework Convention on AI and Human Rights. Finally, the Ministry of Foreign Affairs' 2024-2028 Strategic Plan as summarized by Arslan (2024) and Şahinkaya et al. (2024) assert that Türkiye is open to further international cooperation on AI regulation, including the development of joint large-language-model projects with regional partners.

3. Good Practices of AI in Education in Türkiye

Government-Led Initiatives

MoNE, through the Directorate General for Innovation and Education Technology (YEGİTEK), is actively integrating AI into the education system. YEGİTEK aims to enhance digital skills and create seamless learning experiences (MoNE, 2024). The MEBI, AI supported and personalized learning platform launched in 2024, uses AI to assist high school students and graduates in university entrance exam preparation. MEBI offers adaptive tests, tailored content, and personalized study plans, that benefit over 1.1 million users as of March 16, 2025. It aims to eliminate educational barriers by providing free, comprehensive materials and tracks student progress using AI. MEBI focuses on the Higher Education Institutions Exam (YKS) with video lectures, exercises, and trial exams. The YEGİTEK also provides teachers with AI handbooks, middle school AI curriculum, online learning sessions, and AI-integrated lesson plans[2]. Establishment of Department of Artificial Intelligence and Big Data Applications in 2025 under MoNE YEGİTEK has been another important step towards AI initiatives in education.

AI Curriculum Development and Applications

The Ministry of National Education in Türkiye has launched the Education Technologies Incubation and Innovation Hub (ETKİM) in 2023 to spearhead digital transformation in

[2] https://www.dailysabah.com/turkiye/ai-tool-in-turkiye-personalizes-education-for-high-school-students/news

education. One of the core goals of the Innovation Hub has been supporting AI-assisted personalized learning tools. Like this main digital project by MoNE; many authorities and city directorates have also started AI initiatives for education and youngsters (Ceylan, 2025).

The Turkish Maarif Foundation (TMF), established by the enacted law on June 17th, 2016, by the Turkish Parliament, is the sole entity authorized to provide educational services abroad. With its international network, it has introduced a new AI curriculum in its pilot schools starting in the 2024-2025 academic year. The object of the integration is to enhance educational standards for its schools across the globe. The initial application is for high schools and later be expanded to middle school and all levels subsequently. A dedicated AI working group is assigned to collaborate with experts to develop the curriculum, textbooks, and teacher handbooks. The curriculum aims to disseminate digital competence and AI education as well as to integrate AI into subjects like mathematics and social studies. TMF coordinates with the MoNE and recognizes the significance of AI advancements and integration of traditional education with future AI demands[3].

AI Applications in Turkish Universities

Istanbul Technical University pioneered undergraduate AI education in Türkiye; its 2020 department formation is now a national template for coupling classroom instruction with an innovation ecosystem (ITU AI Center + ARI Teknokent). METU's nascent AI Hub signals a research-led counterpart, already yielding clinically oriented tools such as an Alzheimer's-risk predictor.

Momentum is spreading as Ankara, Hacettepe, Bahçeşehir, Bilkent, Koç, and Ibn Haldun universities all run AI programs or centers, while YÖK continues to authorize new AI-themed programs that draw top-ranked entrants. Strategic partnerships (e.g., ITU-Odine) illustrate how universities translate research into industrial solutions, and THKÜ's space-monitoring project shows sectoral breadth—the use of AI beyond computing and health into aerospace.

Collectively, these initiatives help the integration span full degree pathways, translational R & D hubs, and cross-sector collaborations that reach as far as orbital surveillance.

[3] https://www.dailysabah.com/turkiye/turkish-maarif-foundation-launches-ai-curriculum-in-pilot-schools/news

Private Sector and Institutional Collaborations:

Collaborations between educational institutions and private sector technology providers are driving AI integration in Türkiye. For example, Noodle Factory partnered with Kolibri Education to bring AI-powered teaching assistants and personalized learning tools to Türkiye and the Middle East (Noodle Factory, 2024). EON Reality announced in February 2024 that its AI-enabled AR/VR authoring suite, EON-XR, would be rolled out to Turkish universities and vocational colleges (EON Reality, 2024a). Similarly, Since November 2021, Hisar School, a private K-12 institution in İstanbul, has collaborated with Microsoft Türkiye to embed edge-AI infrastructure into its secondary-level computer-science curriculum (Microsoft, 2021). Using Azure Stack Edge Pro hardware and AutoML services, student teams built a machine-learning model that screens anonymised MRI and cognitive-test data for early indicators of Alzheimer's disease. The YEGİTEK (2024) at the Ministry of Education has partnered with Cube Incubation Technopark to support AI and digital education entrepreneurs.

Ethical Considerations and Guidelines in Education

There is growing awareness of ethical considerations in AI education in Türkiye. The NAIS focuses on trustworthy and ethical AI integration. Türkiye AI policies are increasingly emphasizing on the importance of AI literacy and ethical engagement. Discussions on algorithmic bias, data privacy, transparency, and accountability are increasing being discussed among policy makers and AI professional in Türkiye. The Council of Higher Education released ethical guidelines for generative AI in academia (Daily Sabah, 2024). ITU and MoNE have collaborated to train educational professionals and students on AI risks and data ethics (ITU AI Center, 2025)

Stakeholder Analysis

1. Public Sector

The Turkish public sector's approach to AI policy is relatively centralized, with key responsibilities largely concentrated in a few governmental bodies, but with involvement from several ministries. The Presidency of the Republic of Türkiye, particularly through the Digital Transformation Office, plays a central role in guiding national AI strategies that aims to integrate AI into various sectors to enhance public services and economic competitiveness. Key ministries include the Ministry of Industry and Technology (MoIT),

which is responsible for fostering innovation and promoting AI's role in the industry as well as overseeing national strategies like AI Strategy Papers. MoNE is focused on integrating AI into education as strategy to build a workforce for the future of AI and establish related curricula across education institutions (MoNE, 2021). Additionally, the Ministry of Justice is involved in regulating the legal implications of AI, particularly regarding privacy, intellectual property, and ethical considerations. It also focuses on aligning Türkiye's regulations with international norms (Turkish Law Blog, 2024). The Personal Data Protection Authority (KVKK) is a key player in ensuring that AI technologies comply with Türkiye's Personal Data Protection Law and that AI adoption respects citizens' privacy rights (KVKK, 2021).

AI-related governance in Türkiye also involves collaboration between regulatory bodies such as TSE (Turkish Standards Institute), which develops AI-related standards, and the Information and Communication Technologies Authority (BTK), which oversees telecommunications and data infrastructure crucial for AI implementation. As the AI landscape evolves, these bodies are expected to coordinate Türkiye's national AI strategies to conform with international regulations and standards (Ongun, 2023), particularly as the European Union AI Act influences policy discussions across the EU. With the recent developments in the AI Strategy Paper of Türkiye, which emphasizes a balanced approach to AI innovation and regulation, the future direction will likely prioritize economic growth through AI and ensures that ethical considerations and data privacy remain central (DTO, 2021)

Data protection is a significant area of focus, with the KVKK issuing guidelines for privacy-compliant AI systems (KVKK, 2021). The Türkiye Cyber Security Council also monitors AI's implications for national security and cybersecurity, while the Competition Authority (RK) keeps an eye on AI's impact on market competition, especially in the tech sector (Competition Authority, 2023). The Grand National Assembly of Türkiye (TBMM) has started to explore AI policy, with various parliamentary committees discussing the need for a legal framework for AI governance. Turkish states (provinces) also play a role, particularly in areas like local AI innovation hubs and regional education initiatives (DTO, 2021). In terms of regional collaboration, Türkiye's relationship with the EU and participation in international AI discussions, such as G20 or bilateral forums, continues to influence the country's AI policy development.

2. Private Sector in Türkiye

The Turkish private sector has a significant stake in AI adoption and regulation, especially among large tech, industrial, and telecommunications companies. Major corporations like ASELSAN, Baykar, Trendyol, Havelsan, and Turkcell view AI as a crucial element for maintaining future competitiveness. These companies are generally supportive of clear legal frameworks, but they caution against overly burdensome regulations that could stifle innovation. For example, Turkish Technology and Industry Organizations have voiced support for AI regulations that foster innovation without creating excessive barriers. These organizations advocate for regulations that strike a balance between safety and technological advancement, emphasizing that overly strict AI laws could hinder development and impact the competitiveness of Turkish companies on the global stage (DTO, 2021).

In practice, many Turkish companies have begun preparing for compliance with emerging regulations, including developing internal AI ethics frameworks and participating in discussions through industry associations. The Turkish Informatics Association (TBD) has played a role in advocating for a "proportionate and future-proof" regulatory environment for AI, urging the government to focus on risk-based rules that allow for flexibility and adaptability in AI research and development (Aktaş, 2024). Additionally, the Turkish Entrepreneurs and Businessmen's Association (TÜSİAD) emphasizes the importance of ensuring that AI regulations do not hamper innovation, productivity, or the digital economy. TÜSİAD's position is that a risk-based approach, with clear definitions of AI applications and the inclusion of regulatory sandboxes, would benefit businesses and foster innovation.

There are some AI NGOs such as Artificial Intelligence and Technology Association (YZD), Türkiye Artificial Intelligence Initiative (TRAI), Artificial Intelligence Policies Association (AIPA); and most importantly T3Vakfı which have all played crucial roles in shaping AI regulations and have ensure that the regulations are not overly burdensome for emerging companies. These NGOs generally support strong AI rights protections but emphasize the necessity for flexible regulations to allow for experimentation and early-stage innovation. Turkish startups also seek access to international markets, and their participation in discussions regarding regulatory frameworks ensures that their voices are heard in policymaking.

Overall, the Turkish private sector's concerns focus on ensuring that compliance costs remain manageable, particularly for small and medium-sized enterprises (SMEs), avoiding unnecessary overlaps with other regulations such as personal data protection (KVKK) and sector-specific laws, and ensuring that Türkiye remains globally competitive. The private sector's influence is exerted through formal consultations with the government, participation in industry groups, and ongoing dialogue with international AI standard-setting bodies (Competition Authority, 2023).

3. Civil Society and Academia in Türkiye

In Türkiye, civil society organizations (CSOs) and academic institutions play crucial roles in shaping the discourse surrounding AI adoption and regulation. Research institutions and universities are central to AI research and development, providing essential expertise and influencing government policy through consultations and advisory panels. Notable Turkish academic entities, such as İstanbul Technical University, Sabancı University, and Middle East Technical University (METU), host leading AI research labs that contribute to national and international AI initiatives. These academic institutions not only advance critical AI research but also educate and train future AI professionals. They often advocate public funding to support AI innovation and research, emphasizing the need for open standards and ensuring AI systems are developed responsibly. Academic experts are also involved in exploring the societal impacts of AI, regularly publishing studies on issues like algorithmic bias, privacy, and data ethics, and providing input on policy formation, including AI ethics curricula.

Digital rights and ethics NGOs in Türkiye serve as watchdogs, advocating for strong protections for individuals' privacy, security, and autonomy in the face of increasing AI adoption. The Turkish Informatics Foundation (TBV) raise concerns about the potential misuse of AI technologies, particularly with regard to surveillance, algorithmic bias, and data privacy violations. These organizations call for comprehensive data protection laws that ensure transparency and accountability in AI systems. They have urged the government to adopt a regulatory framework that includes mandatory risk assessments and effective mechanisms for citizens to challenge AI-related decisions that affect their lives (Yönt, 2024). For instance, they emphasize the importance of transparent AI policies that prioritize human dignity and autonomy, with AI systems subject to strict ethical guidelines that prevent harmful impacts on individuals and society.

Consumer protection organizations in Türkiye, such as Consumers Union of Türkiye (TÜKODER), also voice concerns over the potential risks posed by AI. TÜKODER has warned that AI technologies could result in manipulative marketing, biased decision-making, and a lack of accountability for algorithmic decisions. These groups advocate for strong national oversight and regulatory frameworks to ensure consumer interests are protected, particularly in e-commerce, banking, and healthcare sectors, where AI is increasingly being used. They call for the establishment of an independent consumer protection body to monitor AI deployment in the market and ensure fair practices (Güçlütürk,2025).

Similarly, labor unions, such as The Confederation of Turkish Trade Unions (DİSK) and The Turkish Union of Public Employees (Kamu-Sen), emphasize the need for AI systems to benefit workers rather than replace them. These organizations stress that workers should be involved in the design and implementation of AI systems in the workplace to ensure AI technology is used to enhance working conditions and productivity without jeopardizing job security. The unions argue that AI must be deployed in ways that improve workplace efficiency and reduce the potential for job displacement, advocating for training programs to upskill employees in AI literacy (Özer, 2025).

Furthermore, one of the leading advocates for AI technologies and public awareness in digital Türkiye is the T3Foundation (T3Vakfı), which organizes international-level technology competitions focused on digital innovation and artificial intelligence under the name TEKNOFEST. In collaboration with the Ministry of Youth and Sports, the Ministry of Industry and Technology, and TÜBİTAK, T3Vakfı also supports the DENEYAP Workshops. These maker centers operate within Youth Centers across all 81 provinces, providing training to approximately 15,000 young people through 104 workshops. DENEYAP and many national structures equip thousands of students with technological skills, preparing them to participate in TEKNOFEST—Türkiye's premier aerospace and technology festival. Over the years, TEKNOFEST has experienced substantial growth in its digital and AI competition tracks, which are designed to promote innovation and interdisciplinary collaboration. In 2024 alone, the festival received a record-breaking 1,630,000 contestant applications from 788,161 teams, making it the largest contest in the world.

In summary, civil society and academia in Türkiye exert significant influence on AI policy through research, advocacy, and public debate. These stakeholders push for strong safeguards in AI regulations, including robust privacy protections, transparency, and

accountability mechanisms, while also advocating for policies that foster innovation and ensure the ethical use of AI. Their active involvement ensures that AI governance in Türkiye considers both technological advancement and the protection of fundamental rights, ensuring a balance between progress and ethical responsibility.

4. European Union Institutions in Türkiye

European Union institutions play a significant role in shaping Türkiye's AI regulatory landscape. Although Türkiye is not a full EU member, it maintains a close relationship with the EU through the Customs Union and various cooperation agreements. EU regulations, particularly in areas like data protection and artificial intelligence, influence Türkiye's national policies. The European Commission's AI Act (2024), which came into effect in August 2024, is the first comprehensive AI regulation in the world. While Türkiye is not bound by EU legislation, the EU AI Act's risk-based approach will have an indirect impact on Türkiye's AI strategies, particularly regarding data privacy and ethical AI development. Türkiye has expressed its commitment to aligning with international standards, including those set by the EU, to ensure its tech industry remains globally competitive.

Turkish institutions are actively engaged in aligning AI policies with EU standards. The Ministry of Industry and Technology (MoIT) and the Ministry of Justice are the main governmental bodies coordinating Türkiye's AI regulation efforts, often collaborating with EU institutions to ensure compliance with the General Data Protection Regulation (GDPR) and the EU AI Act. TÜBİTAK (The Scientific and Technological Research Council of Türkiye) has supported research initiatives aimed at establishing a national AI framework that is compatible with the EU's regulatory approach. For example, The 1711 Artificial Intelligence Ecosystem Call by TÜBİTAK aims to transform AI technologies developed by Turkish companies into products or solutions tailored to the needs of client organizations within Türkiye.

Moreover, Türkiye's Digital Transformation Office works with EU agencies to stay aligned with EU digital policies and to enhance Türkiye's AI strategy in a way that fosters innovation while protecting fundamental rights.

The European Data Protection Supervisor (EDPS) and the European Data Protection Board (EDPB) are critical EU bodies that influence Türkiye's data protection policies, particularly regarding AI. Türkiye's Personal Data Protection Authority (KVKK) often collaborates with these EU bodies, drawing on their expertise to shape national

regulations related to AI and data privacy. In practice, Turkish institutions follow a similar path to EU rules regarding data privacy, as the GDPR has set a global benchmark for handling personal data in AI applications.

While Türkiye is not directly involved in the EU legislative process, it closely monitors developments and adjusts its policies accordingly. The Turkish government is committed to following EU guidelines to ensure that Türkiye's AI sector remains internationally competitive and ethically responsible. Stakeholders such as the Turkish Artificial Intelligence Initiative (TRAI) and civil society organizations in Türkiye actively follow the EU's AI legislative debates, engaging in dialogues and consultations to ensure that Türkiye's regulations do not diverge significantly from EU standards. As EU regulations like the AI Act and GDPR continue to evolve, Turkish policymakers are expected to update national strategies and enforcement frameworks to align with the new European regulatory landscape, ensuring Türkiye's technological advancement stays in step with global developments.

Stakeholders within the Power-Interest-Matrix

1. High Power / High Interest – Manage Closely

These are stakeholders who are key in shaping implementing AI Policy and regulation at both national and EU level. They are the main actors in decision making, designing and drafting policy.

- **Presidency of the Republic of Türkiye:** Construction of national vision and direction of AI and digitalization; driving national policy and strategic plan for AI and positioning Türkiye in a rank within EU and global fronts.
- **Ministry of Industry and Technology:** Core implementers of the national strategic plan, sets national priorities and indicators; sets national innovation and competitions standards.
- **EU Institutions (European Commissions):** Main EU AI act drafters; providing legislations, and enforcement authority.
- **Türkiye Cyber Security Council:** monitors AI's implications for national security and cybersecurity
- **Major Private Sector Companies (ASELSAN, Microsoft, etc):** lobbying power and strong economic interest and regulatory outcomes.

2. High Power / Low Interest – Keep Satisfied

These institutions have regulatory power and play formal roles in driving AI adoption, usage of AI, and other matters related to AI and digitalization drive.

- **Ministry of Transport and Infrastructure:** Providing the needed infrastructure to support digitalization and AI drive
- **The Turkish Consumer Association (THD)[4]:** Highly influential in regulating, AI content, protects consumer rights and are very key ethical usage of AI and digital product.
- **Competition Authority (RK):** keeps an eye on AI's impact on market competition, especially in the tech sector
- **Personal Data Protection Authority (KVKK):** Key player in ensuring that AI technologies comply with Türkiye's **Personal Data Protection Law** and that AI adoption respects citizens' privacy rights.
- **Telecommunication Companies (Turkcell, Vodafone, Turk Telecom, etc):** Powerful in providing data driving solution that are central to the AI revolution, plays a key role in shaping, innovation development.

3. Low Power / High Interest – Keep Informed

These stakeholders are more interested in the integration of AI and society. They look at the impact of AI and frequently engage in public discourse on the best possible way to adopt AI.

- **Academia and research Institutes:** Critical research, offers advice, and policy recommendation
- **Civil Society and NGOS (Habitat, Genç Stem, Kodluyoruz etc):** Represent a niche and plays significant role AI education and adoption.
- **TÜBİTAK:** Primary drivers and implementor of strategic plans, sets innovation standards, encourages and supports nation research; key AI and innovation advocators.
- **AI Startups and Tech Companies (e.g., Trendyol):** less influence but strong interest in AI ecosystem.

4. Low Power / Low Interest – Keep Informed

These stakeholders are not directly involved in AI regulation but may be impact by activities related to AI.

[4] https://tuketicihaklari.org.tr/

- **General public / non-engaged citizens:** They mainly consume AI and digital product without knowing the rules and consequences. They only become aware when there is negative impact of on them during their involvement.
- **Non-tech local businesses:** Use AI tools but do not shape regulatory framework.

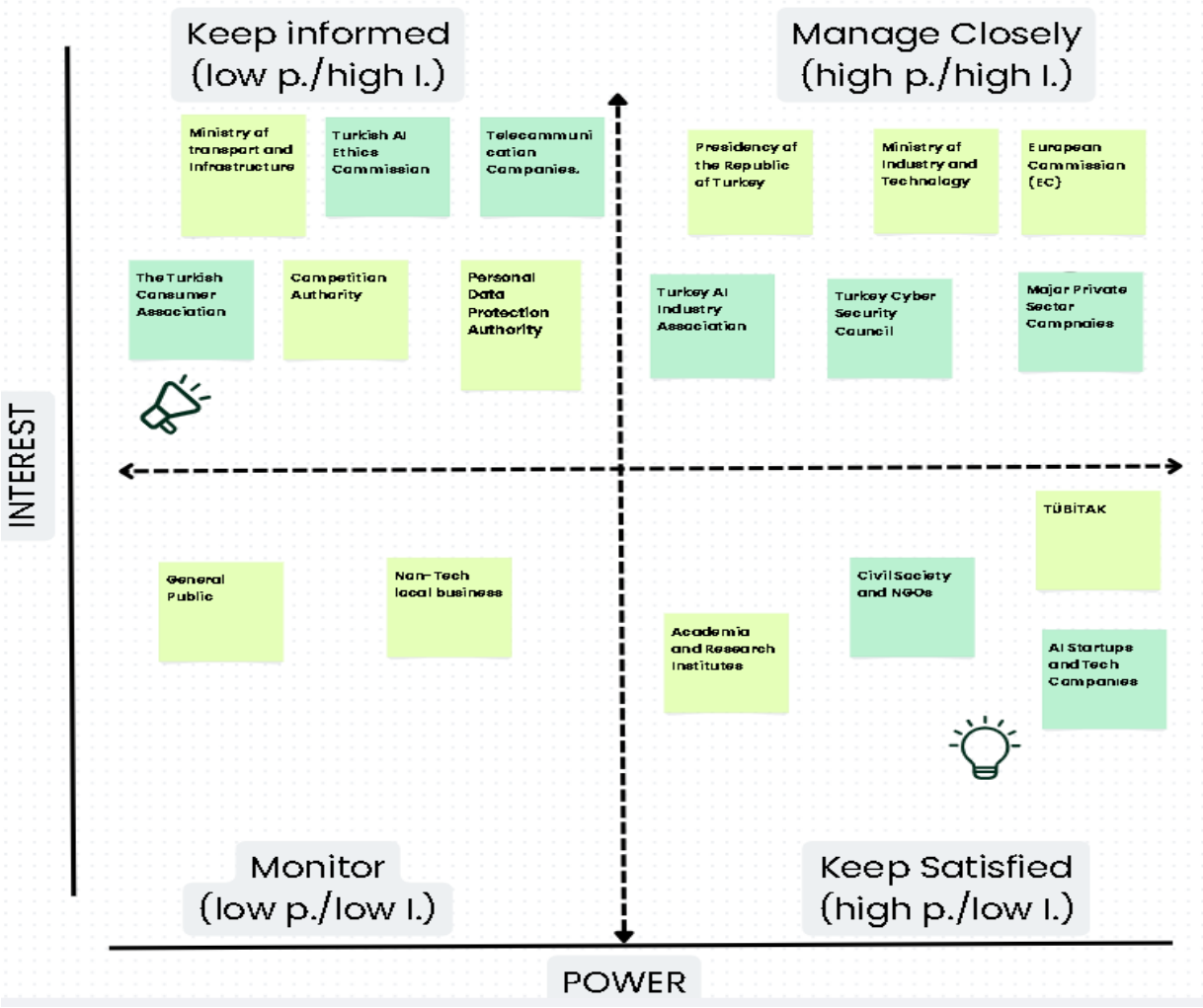

Figure 1: Power-Interest Matrix.

Survey's results

This analysis delves into the survey results of Turkish youngsters' knowledge, attitudes, and potential misconceptions regarding Artificial Intelligence, crucial for understanding the landscape of AI regulation. In total, 127 youngsters from Türkiye took part in the survey under YouthGovAI project.

1. Demographic Overview

The age distribution of the Turkish sample (n = 127) is heavily concentrated in the oldest cohort: 21 years and above respondents account for 78.7 percent of the total. Those aged 19–21 comprise 14.2 percent, whereas the 16–18 age group represents just 5.5 percent and the youngest bracket (13–15 years) only 1.6 percent. Such a profile indicates that the survey overwhelmingly reflects the views of young adults—many of whom are enrolled in higher education—with limited participation from secondary-school-aged individuals.

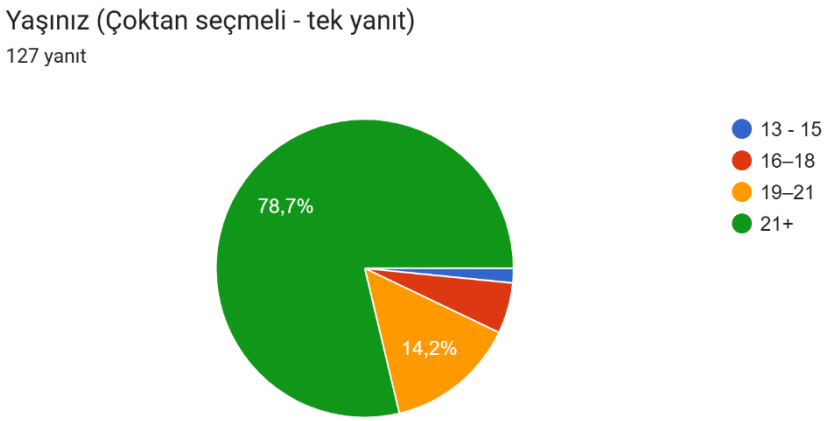

Figure 2: Age distribution

In the Turkish sample of 127 respondents, the gender distribution is imbalanced as data collection is based on voluntary and convenience sampling: 111 individuals (87.4 %) identified as female, 15 (11.8 %) as male, and only one respondent (0.8 %) declined to disclose their gender. This pronounced skew toward female participants suggests that the survey findings predominantly reflect women's perspectives in the Turkish context within this study.

Figure 3: Gender distribution

The Turkish sample's educational profile (n = 127) is dominated by those with a bachelor's degree: 40.2 percent of respondents report having completed an undergraduate program. An equal share—28.3 percent—are still enrolled in formal schooling and those who have finished general secondary education (high school), respectively. Only 1.6 percent hold an associate (ön lisans) degree, and another 1.6 percent have attained a master's (yüksek lisans) qualification. No participants indicated completion of vocational training or "other" qualifications.

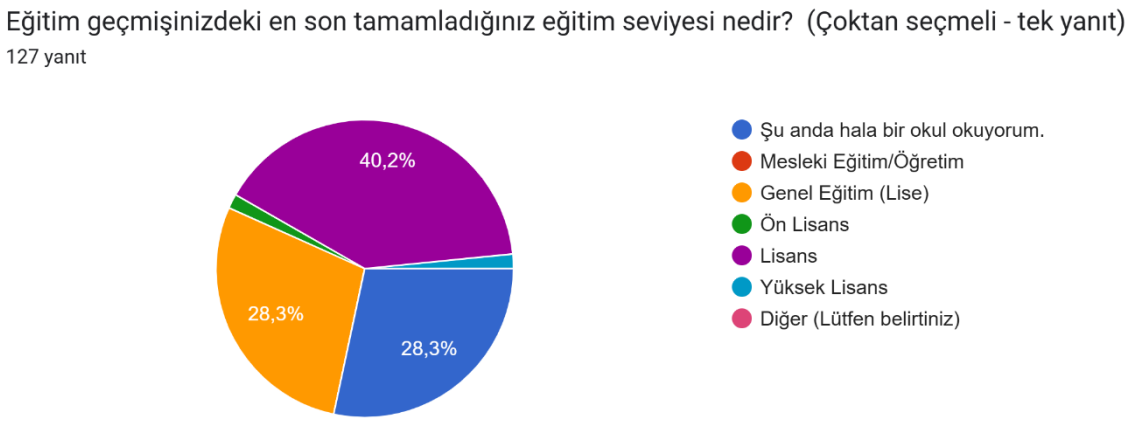

Figure 4: Education level distribution

2. Familiarity with AI

In the Turkish cohort of 127 respondents, a substantial majority (74.8 %, n = 95) reported that they had heard the term “artificial intelligence” and felt confident in explaining its meaning. A further 24.4 % (n = 31) acknowledged familiarity with the term but conceded that their understanding was incomplete, while just one individual (0.8 %) had encountered the phrase yet could not articulate any meaning. No respondent indicated having never heard of “artificial intelligence.” These results demonstrate a high level of baseline awareness among Turkish young adults, although the quarter of participants with only partial comprehension suggests a clear need for more in-depth educational initiatives to deepen conceptual understanding.

Figure 5: Familiarity with AI

When participants were asked ““When you think of ‘artificial intelligence,’ what is the first thing that comes to mind?” below is a thematic coding of the 127 free-text responses to this question responses were grouped into nine categories as shown in in Table 1.

Table 1: When you think of ‘artificial intelligence,’ what is the first thing that comes to mind?

Category	**n**	**% of 127**
Other (diverse associations)	52	40.9 %
General technology	22	17.3 %
Robots	18	14.2 %
ChatGPT/DeepSeek etc.	15	11.8 %

Category	n	% of 127
Information/Data	9	7.1 %
Internet/Search engines	5	3.9 %
Future/Innovation	2	1.6 %
"Intelligence" as an abstract	2	1.6 %
Software/Coding	2	1.6 %

The largest share of answers fell into "Other," reflecting a wide array of first-thoughts—from automation ("longer tasks done quickly") and education aids, to affective reactions ("risky, frightening"), named figures ("Elon Musk"), or highly idiosyncratic associations. Beyond this heterogeneity, three clearer clusters emerge. First, many simply equate AI with "technology" in general (17.3 %). Second, robots remain a vivid mental image for a substantial minority (14.2 %). Third, generative tools—ChatGPT in particular—account for nearly 12 % of immediate associations. Smaller groups mention the Internet or search engines (3.9 %), raw data/information flows (7.1 %), or reference AI's role in future innovation (1.6 %). Very few respondents foreground the abstract idea of "intelligence" itself or low-level software/code.

Overall, while "AI" is broadly seen as a technological phenomenon, Turkish young adults tend to anchor their understanding in concrete manifestations—especially robotics and conversational agents—alongside a rich diversity of personal and affective associations.

3. Confidence in AI Knowledge

In the Turkish sample (n = 127), respondents' self-assessed confidence in their knowledge of what artificial intelligence is and how it works falls primarily in the "moderately confident" range: 51 individuals (40.2 %). Just 18 respondents (14.2 %) felt fully confident and another 10 (7.9 %) felt "very confident" . On the other end of the scale, 38 participants (29.9 %) reported only a little confidence while 10 (7.9 %) admitted they did not trust their understanding at all. Overall, a clear plurality expresses moderate assurance in their AI knowledge, yet nearly four in ten (37.8 %) demonstrate only limited or no confidence—highlighting a substantive segment that could benefit from deeper,

more structured educational interventions to strengthen their conceptual grasp of AI's principles and operations.

Figure 6: Confidence in AI knowledge

4. Confidence in Identifying AI Technologies

In the Turkish sample (n = 127), self-assessed confidence in recognizing specific AI technologies peaks at the "moderately confident" level, with 52 respondents (40.9 %) choosing this option. A substantial minority—40 individuals (31.5 %)—rated themselves as only "slightly confident," while 19 (15.0 %) felt outright "confident" and just 9 (7.1 %) felt "very confident." Only 7 participants (5.5 %) admitted they have no confidence at all in identifying AI technologies. Taken together, these results suggest that although most Turkish young adults believe they can at least partially recognize AI applications, fewer than one in four feel fully or very confident in doing so, pointing to a gap between general

familiarity with AI concepts and the ability to pinpoint concrete AI implementations.

Figure 7: Confidence in identifying AI technologies

5. Frequency of AI Use (Daily Life)

In the Turkish sample of 127 respondents, 31 individuals (24.4 %) report using AI technologies every day, while the largest group—50 participants (39.4 %)—uses them two to four times per week. A further 17 respondents (13.4 %) engage with AI roughly once a week, and 25 (19.7 %) use it less than weekly. Only 4 participants (3.1 %) indicated that they never employ AI in their daily tasks. These figures demonstrate that a clear majority of young adults in Türkiye (63.8 %) integrate AI into their routines multiple times per week or more, underscoring the technology's pervasive role in everyday life, with very few refraining entirely.

Figure 8: Frequency of AI use in daily life

6. Frequency of AI Use (Schoolwork or Learning)

In the Turkish sample (n = 127), AI's role in academic work is pronounced: 21.3 percent of respondents report using AI tools every day for homework or studying, and another 33.9 percent use them two to four times per week. A further 19.7 percent engage with AI about once a week, 20.5 percent less than once weekly, and only 4.7 percent never employ AI in their schoolwork. Taken together, more than half of young adults in Türkiye integrate AI into their learning routines multiple times per week, highlighting both the technology's growing importance in education and the need for frameworks that address academic integrity and foster critical digital literacy.

Figure 9: Frequency of AI use for school and learning

7. Confidence in LLM Information Accuracy

When Turkish respondents were asked how much they trust the correctness of information produced by large language models such as ChatGPT, the most common answer—chosen by 42.5 percent of the sample—was that they feel "moderately confident." A further 26.8 percent rated themselves simply as "confident," yet only 5.5 percent felt "very confident" in the accuracy of LLM-generated outputs. By contrast, almost one in four (23.6 percent) admitted only slight trust, and a very small minority (1.6 percent) said they have no confidence at all. In sum, while a solid majority (69.3 percent) place at least moderate trust in LLMs, the relatively small share expressing strong confidence underscores the need for educational efforts that teach critical appraisal of AI-generated information.

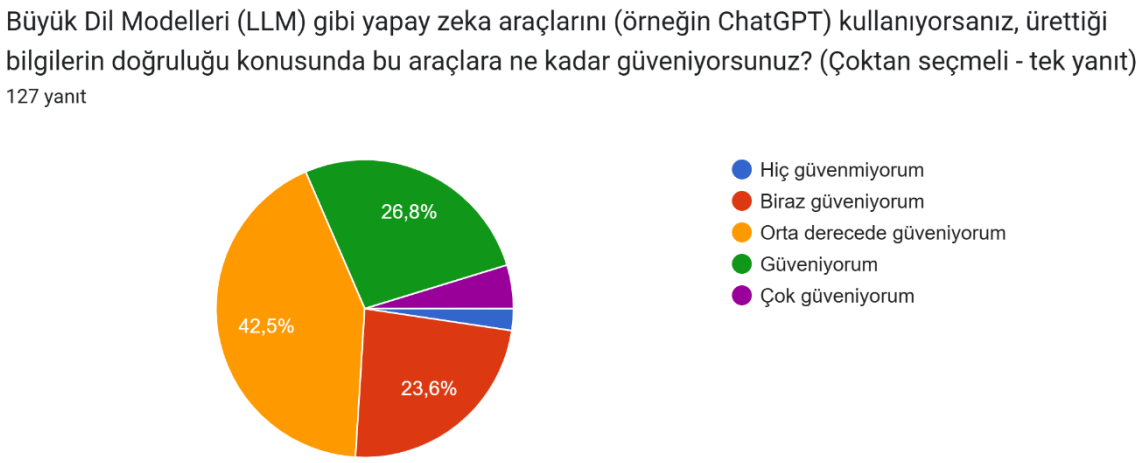

Figure 10: Confidence in LLM information accuracy

8. Confidence in Detecting AI Disinformation

When asked how confident they are in detecting AI-generated disinformation or fake content, 127 Turkish respondents most frequently rated themselves as "moderately confident" (n = 59; 46.5 %). A further 35 individuals (27.6 %) indicated they are only "slightly confident," while 14 (11.0 %) felt fully "confident" and 7 (5.5 %) described themselves as "very confident." Meanwhile, 12 participants (9.4 %) admitted they have no confidence at all in identifying AI-produced falsehoods. In total, although a majority (57.5 %) place at least moderate trust in their ability to spot disinformation, nearly four in ten respondents (37.0 %) report low or no confidence. This distribution underscores a critical gap in digital literacy: many young adults recognize the threat of AI-enabled fakery yet lack the assurance—and perhaps the skills—to reliably discern it. Targeted

interventions in media literacy and critical thinking are therefore essential to equip this population with the tools needed to evaluate and challenge AI-generated content.

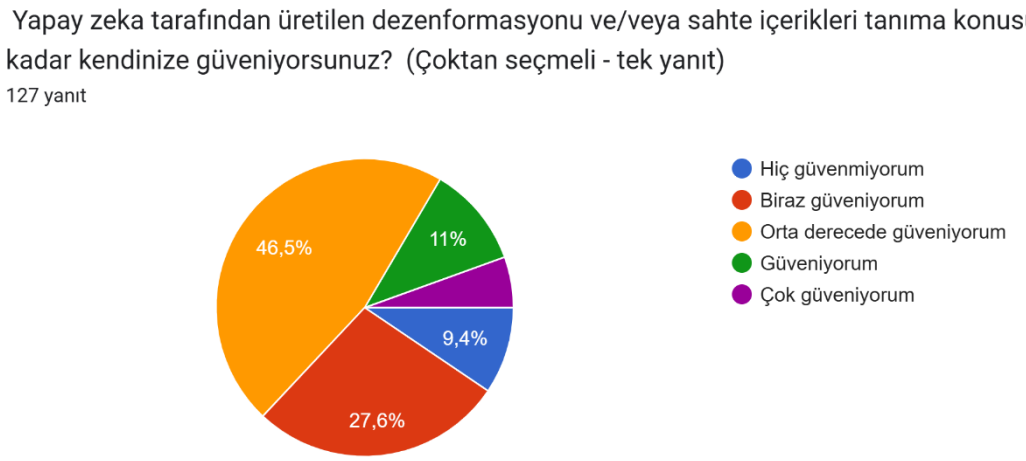

Figure 4: Confidence in detecting AI disinformation

9. AI Decisions in User Interest

In response to the assertion that "an AI always makes decisions in the interest of its users," Turkish participants (n = 127) displayed widespread uncertainty and mixed beliefs. Only 7.9 percent judged the statement as fully true and 35.4 percent as somewhat true, yielding a combined agreement of 43.3 percent. In contrast, 7.9 percent saw it as somewhat false and 9.4 percent as outright false (17.3 percent in total), while the largest single group—39.4 percent—expressed that they were "not sure." This pattern indicates that fewer than half of respondents unreservedly trust AI to act benevolently on their behalf, yet a similarly small minority actively reject the notion; most remain ambivalent. Such ambivalence suggests a critical gap in public understanding of AI alignment and design biases. For policymakers and educators, these findings underscore the need for clearer communication about how AI systems are programmed, the trade-offs involved in their objectives, and the mechanisms by which their behavior can diverge from individual user

interests.

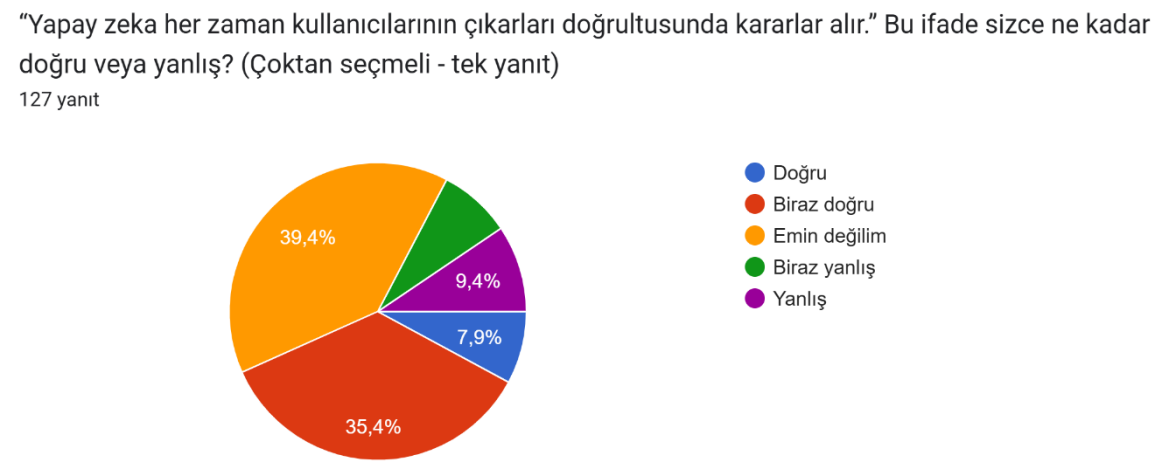

Figure 5: AI misconception - AI decisions in user interest.

10. AI Beyond Human Control

When presented with the statement that "artificial intelligence can avoid human control and, in the worst case, act against the will of its developers," Turkish respondents (n = 127) again showed a high degree of ambivalence. Only 21.3 percent judged the claim to be fully true, and a further 30.7 percent considered it somewhat true. The largest single group—33.1 percent—answered "not sure," while just under sixteen percent in total disagreed (approximately 7.9 percent "somewhat false" and 7.9 percent "false"). Thus, although just over half of participants (52.0 percent) lean toward believing in the possibility of a runaway AI, one-third remains uncertain, and only a small minority flatly rejects the scenario. This pattern suggests that Turkish young adults recognize both the theoretical plausibility and the complexity of AI autonomy, yet lack a firm grasp of its current technical limits. For regulators and educators, these findings point to the need for clear, accessible explanations of AI safeguards, human-in-the-loop design principles, and the real-world mechanisms by which developers maintain control over intelligent systems.

Figure 13: AI misconception - AI beyond human control.

11. The benefits and hazards of AI for young people

Overall, Turkish young adults overwhelmingly view AI as a convenience and enabler—first and foremost as a tool that streamlines tasks and democratizes information. AI has both positive and negative outcomes for the youth as documented in Table 2 and 3.

Table 2: The benefits of AI

Category	Count	Percentage
Convenience & Ease	53	42.1 %
Information Access	27	21.4 %
Miscellaneous	20	15.9 %
Time Saving	16	12.7 %
Educational Support	5	4.0 %

Convenience & Ease (42.1 %): The largest cluster of responses emphasize how AI simplifies daily life—making tasks "easier," "more accessible," and "more practical."

Information Access (21.4 %): Many participants highlight AI's power to deliver information rapidly and reliably, citing "access to information," "fast information," and "faster then internet."

Time Saving (12.7 %): A significant share specifically call out "time saving" or "time efficiency," underscoring AI's role in speeding up work.

Educational Support (4.0 %): A smaller group notes AI's utility in learning contexts—help with "homeworks," "courses," and "exam" preparation—pointing to its emerging role in education.

Miscellaneous (15.9 %): This bucket includes responses that either describe high-level future visions (robotic symbiosis, Asimovian positronic brains), automation-focused comments, error-reduction mentions, or idiosyncratic observations.

Table 3: The hazards of AI

Category	Count	Percentage
Other / Miscellaneous	65	51.2 %
Privacy & Data Security	15	11.8 %
Misinformation & Disinformation	15	11.8 %
Dependence & Laziness	13	10.2 %
Autonomy & Control Loss	10	7.9 %

A majority of responses (51.2 %) fell into an "Other / Miscellaneous" bucket, reflecting a wide array of concerns—from ethical/legal issues and job displacement to health effects and abstract fears ("end of human life" "stable life"). Beyond this heterogeneity, four clear risk perceptions emerge:

Privacy & Data Security (11.8 %): Many worry about breaches of personal data, loss of privacy, and misuse of personal information.

Misinformation & Disinformation (11.8 %): Concerns about AI propagating or amplifying false content and chaotic "information pollution" are prominent.

Dependence & Laziness (10.2 %): Respondents note the risk of over-reliance on AI leading to intellectual passivity, reduced creativity, and diminished mental effort.

Autonomy & Control Loss (7.9 %): Fears of AI "escaping human control," being weaponized, or evolving beyond regulation also appear.

These findings suggest that while Turkish young adults hold varied and sometimes idiosyncratic risk views, they consistently articulate anxieties around data privacy, truthfulness of AI outputs, personal autonomy, and the societal costs of dependency. Tailored educational and policy measures should address each of these top concerns.

12. Implications for AI and AI Regulation in Türkiye

The results from the Turkish cohort (n = 127) reveal a highly engaged yet unevenly confident youth population when it comes to artificial intelligence. Although nearly three-quarters of respondents have clearly heard of "AI" and can explain its meaning, fewer than one in four feel fully confident in their theoretical knowledge (Figure 5) or in identifying concrete AI applications (Figure 6). At the same time, a large majority employ AI tools regularly—both in daily life (64 % at least bi-weekly; Figure 7) and in educational contexts (55 % at least bi-weekly; Figure 8). Trust in AI-generated information is moderate overall (69 % at least "moderately confident"; Figure 9), but confidence in spotting AI-driven disinformation is markedly weaker (57 %; Figure 10). Respondents also hold ambivalent views about AI's alignment with user interests (43 % agreement; Figure 11) and its potential to escape human control (52 % agreement; Figure 12). Free-text responses underscore that Turkish young adults see AI primarily as a force for convenience, rapid information access, and time savings, while also voicing substantive concerns about data privacy, misinformation, dependence, and loss of autonomy.

In sum, while Turkish young adults are already active AI users, a coordinated effort across educational institutions, industry stakeholders, and government bodies is essential to build the critical competencies, regulatory safeguards, and public trust needed for a resilient, responsible AI ecosystem in Türkiye.

These findings carry several urgent implications for Turkish educators, policymakers, and regulators:

- **Develop Holistic AI Literacy Curricula.** Integrate foundational AI concepts with hands-on exercises that improve participants' ability to recognize and evaluate real-world AI systems, closing the gap between general awareness and practical competence.
- **Embed Critical Media and Disinformation Training.** Given lower confidence in detecting AI-generated fakery, educational programs should include exercises in source verification, fact-checking, and adversarial thinking tailored to social media and LLM outputs.
- **Strengthen Privacy and Data-Protection Frameworks.** Respondents' privacy concerns (12 % of risk responses) call for clearer legal standards on data collection, consent, and transparency for AI services, complemented by public campaigns that explain users' rights under Türkiye's KVKK (Personal Data Protection Law).

- **Promote Transparency and Accountability in AI Design.** To address ambivalence around AI autonomy and benevolence, regulators should require explainability disclosures from platforms and enforce auditing mechanisms that reveal how AI decisions are made and by whom.
- **Foster Responsible Innovation and Skills Development.** University and vocational programs should balance AI tool training with modules on ethical design, bias mitigation, and human-in-the-loop methodologies, ensuring that the next generation of developers and users can deploy AI technologies safely and equitably.

Focus Group with National Stakeholders

The focus group discussions included a diverse group of participants (n=15) , consisting of high school students (HS), university students (US), and youth leaders (YL). These discussions were conducted in an interactive format with refreshments provided. They were asked generally what they think about AI and its governance.

Table 4. Participants in Focus Groups

Group	*f*	Code
HS	5	HS1, HS2, HS3, HS4, HS5
US	5	US1, US2, US3, US4, US5
YL	6	YL1, YL2, YL3, YL4, YL5, YL6

Note: due to privacy concerns the participants opted to use code names as seen in the table above.

The high school students are student in technical and STEM schools, the university students are student who have one way or the other have come into contact with AI, are engaged in AI engineering, or have studied something relative to AI and digitalization.

1. Youth Participation in AI Governance

The discussion forum was lively and very energetic from the start. Various groups expressed their opinion relative to the participation of youth in AI governance. Through our engagement it turned out that only the university student and youth leader groups were expressively engaged in conversation relative to AI governance discussions in an academic or project context. The high school students had indirect participation, such as

passing short comment training sessions or conferences, where they engaged more as observers rather than active contributors.

A notable trend where the youth get a semblance of engagement in AI governance was through attending events like seminars or conferences, which allowed them to gather information without playing a role in the decision-making processes. Furthermore, social media was another significant channel through which youth gained information about AI governance, although this engagement was more passive.

There were participants who said they have never participated in any AI governance activities. They enumerated several factors which accounted for this lack of involvement. The main reasons included insufficient information, the absence of proper guidance, and limited opportunities. This lack of participation was particularly pronounced among youth leaders, who expressed frustration at not having a platform or access to AI governance discussions.

2. Youth Role in AI Policy and Governance

When it comes to their role in AI policy and governance, the majority of participants reported a low level of involvement. The most common position for youth was as consumers or end-users of AI technologies, rather than as contributors to the decision-making process. Only a few participants indicated they had actively engaged in developing AI policies or governance frameworks. There was a consensus among the participants that youth should have a more active role which will ensure a greater representation in the decision-making process.

The discussions highlighted several factors contributing to the lack of youth participation in AI governance. These included a lack of proper platforms for youth engagement, insufficient education and information on AI governance, and a lack of guidance or encouragement to participate in decision-making processes. Despite the potential interest in the field, the youth were not adequately encouraged to engage with or shape AI policy. This represents a significant structural gap in involving youth in AI governance.

3. Reasons for Non-Participation in AI Governance

The reasons for non-participation were explored through several themes during the discussion process. The key barriers identified were information gaps, access issues, and cultural or systemic exclusion. Many participants felt they lacked the necessary technical

knowledge to participate in discussions on AI governance, with some citing complex terminology and inaccessible content as significant obstacles.

Furthermore, economic factors, including financial barriers to accessing resources and programs related to AI, were frequently mentioned as key challenges. In addition, some participants noted the absence of mentors or guidance, which further compounded their feelings of exclusion.

Another major theme was the perception that youth's opinions and contributions were not valued in AI governance discussions. Several participants mentioned a sense of systemic exclusion, where their ideas were either dismissed or not taken seriously. Some also expressed fears of speaking out, particularly regarding the legal or political repercussions that might arise from challenging the status quo. This cultural and systemic marginalization was seen as a critical barrier to fostering more inclusive youth participation.

4. Benefits of Including Youth in AI Governance

Including youth in AI governance was seen as a significant opportunity for the future of AI development and policy. Participants emphasized that youth have unique perspectives that could greatly enhance the governance process, particularly as the next generation of AI users and developers. Youth involvement was viewed as essential in shaping AI technologies that conforms with societal needs and values. Moreover, the youth's proficiency with digital technologies and their ability to rapidly learn new skills position them as valuable contributors to AI governance. This, the participants believe, will ensure that the development of AI systems is more inclusive and forward-thinking.

In addition to their technical skills, the youth view themselves as capable of offering creative solutions to the challenges posed by AI. Their ability to think outside the box and approach problems from fresh angles could lead to more innovative and effective AI governance. Several participants also pointed out that the involvement of youth would bring about faster access to information which enables them to keep up with rapidly evolving technologies and better understand their societal implications.

5. Barriers to Effective Participation

Despite the clear benefits of involving youth in AI governance, several barriers continue to limit their participation. The most significant of these barriers include gaps in digital

literacy, insufficient access to the necessary technology, and the lack of supportive educational frameworks. Many young people do not have the necessary background knowledge to engage in AI governance, and the technical nature of the subject matter further complicates their ability to contribute meaningfully.

Economic barriers also played a role, as many participants cited the cost of accessing AI tools, platforms, and training as a key limitation. This economic gap disproportionately affects disadvantaged youth, further exacerbating inequalities in AI participation. Additionally, participants pointed out that educational institutions often lack the resources or programs to equip young people with the skills and knowledge required to engage with AI governance processes.

6. Recommendations for Enhancing Youth Involvement

Participants proposed several recommendations to enhance youth involvement in AI governance. The most widely suggested solution was the creation of youth-focused platforms, such as advisory boards and forums, where young people could actively participate in discussions and decision-making processes. It was emphasized that policymakers should take concrete steps to create these opportunities for youth and ensure that their contributions are valued and acted upon.

Furthermore, the participants recommended that educational institutions increase their efforts to teach AI-related topics, integrate AI into school curricula, and provide accessible training programs for young people. These initiatives could help bridge the knowledge gap and equip young people with the tools they need to participate effectively.

Lastly, the participants suggested that collaboration between policymakers, educators, and youth organizations would be crucial in ensuring that youth voices are heard and incorporated into AI governance. This partnership would help establish a more inclusive and comprehensive approach to AI governance that reflects the interests and needs of younger generations.

7. Key take-aways and learnings for the project

Youth participation remains low, mostly indirect via seminars, conferences, and social media. Very few have been involved in decision-making or policy development related to AI. This indicates a significant gap in opportunities for youth to actively shape AI policies, which can be addressed by creating more inclusive platforms for youth participation.

Youth's digital proficiency and creativity should be harnessed through co-creation and advisory mechanisms.

Concrete actions: create youth advisory boards, develop interactive educational programs, and ensure representation in AI governance.

A major barrier to youth involvement in AI governance is the lack of adequate information and training. Many participants expressed that they lack the technical knowledge required to engage in meaningful discussions about AI. Additionally, the technical and complex nature of AI policies makes it difficult for youth to participate. This highlights the need for accessible educational resources that simplify AI concepts and governance structures for young people.

Significant gaps in information, training, and resources highlight the need for accessible educational materials and economically inclusive opportunities. Economic constraints and limited access to technology were frequently mentioned as obstacles to youth participation. The participants stressed that they often struggle to afford the necessary tools or attend paid training sessions. There is the need to ensure that AI governance opportunities are economically accessible and the provision of digital resources to underrepresented youth are key steps in fostering inclusivity.

The discussion and sessions emphasized that young people, with their digital proficiency and creative problem-solving skills, are well-positioned to contribute to AI governance. Their unique perspectives can lead to more innovative and effective governance systems. The potential of youth to shape the future of AI should be nurtured by creating spaces where they can actively participate in both the development and oversight of AI technologies.

To improve youth involvement, the co-creation session and focus group discussions recommended several actions which includes creating youth advisory boards, offering accessible and interactive educational programs, and ensuring that youth are represented in AI policy discussions. Additionally, integrating AI topics into school curricula and fostering collaboration between policymakers, educators, and youth organizations could ensure that young people are better prepared to engage with AI governance in the future.

Co-Creation Groups and Results

The co-creations analysis presents a comprehensive need analysis of the knowledge, skills, and literacy of young people and youth workers regarding artificial intelligence

(AI). It explores their engagement with AI, barriers to accessing AI education, integration of AI into youth programs, and recommendations for designing effective AI literacy courses. The findings are derived from qualitative data, including 15 participant quotes, and are organized into several headings that highlight key themes, sub-themes, and their frequencies across three participant groups: 5 university students (Coded as US), 5 high school students (Coded as HS) and 5 youth leaders (Coded as YL).

1. AI Knowledge and Skills

Young people and youth workers have a superficial, user-level understanding of AI, primarily through tools like ChatGPT, but lack technical knowledge about its mechanisms (e.g., algorithms, machine learning). There is a clear need for education to address this gap.

Key Observations:

• Superficial Awareness: All groups are familiar with AI applications but lack deeper technical understanding.

• Technical Knowledge Deficiency: High school students report the highest gap.

• Educational Need: Youth leaders emphasize training needs.

• Practical Usage: AI is used in digital life (e.g., social media) and education, with creativity less prominent.

2. AI Literacy Deficiencies

Cognitive and technical deficiencies, including limited critical thinking, ethical awareness, and programming skills, foster a consumer-oriented approach to AI rather than a producer-oriented one.

Key Observations:

•Cognitive Deficiencies: Ethical awareness is a significant gap, especially for youth leaders.

•Technical Deficiencies: Youth leaders report the highest lack of technical knowledge.

• Inclusivity: Limited access for disadvantaged groups is noted but less frequent.

3. Participation in AI Governance Discussions

Meaningful participation in AI governance requires technical understanding and socio-ethical competencies, including ethical principles and legal awareness.

Key Observations:

•Educational Competence: Technical understanding is emphasized by university students.

•Socio-Ethical Competence: Legal and political dimensions are highlighted by high school students and youth leaders.

4. Barriers to Accessing AI Education

Access to AI education is hindered by infrastructural, socio-economic, and educational barriers, particularly in disadvantaged regions.

Key Observations:

•Infrastructural Barriers: Hardware and internet access issues are prominent.

•Socio-Economic Barriers: Financial limitations and lack of support are significant.

•Educational Barriers: Curriculum deficiencies are most notable for high school students.

5. Barriers to Integrating AI into Youth Programs

Youth workers face challenges due to insufficient technical knowledge, resources, and institutional support, compounded by time constraints and societal resistance.

Key Observations:

•Education and Material Deficiencies: Technical knowledge gaps are significant for university students and youth leaders.

•Workload: Time scarcity hinders integration.

•Support Deficiencies: Institutional and societal support are lacking.

6. Accessibility and Appeal of AI Learning Materials

Engaging AI learning materials should incorporate visuals, interactivity, and cultural relevance, tailored to diverse learning styles and age groups.

Key Observations:

•Visuals and Interactivity: Gamification is highly valued, especially by youth leaders.

•Accessibility: Customization is emphasized by university students, and simple language by youth leaders.

7. Topics for AI Literacy Courses

Courses should balance technical knowledge (e.g., basic concepts, technical details) with ethical and societal considerations to foster critical engagement.

Key Observations:

•Knowledge-Based Competencies: Basic concepts are critical for university students.

•Value-Based Orientations: Ethics is a priority across all groups.

8. Structure of AI Literacy Courses

Courses should be application-based, interactive, and supported by digital tools, with modular structures and real-life connections.

Key Observations:

•Learning Process: Application-based learning is highly valued by university students.

•Learning Environment: Digital and visual materials are emphasized by youth leaders.

9. Effectiveness of AI Learning Activities/Tools

Interactive methods like gamification, group work, and simulations enhance learning effectiveness.

Key Observations:

•Participant-Centered Activities: Gamification is highly effective across all groups.

•Digital Media Tools: Videos and simulations are valued, especially by high school students and youth leaders.

10. Multi-Stakeholder Support for AI Literacy

Collaboration among policymakers, tech companies, and NGOs is essential for widespread AI literacy, emphasizing curriculum integration and inclusive access.

Key Observations:

•Information Strategies: Curriculum integration and course dissemination are emphasized by university students.

•Access Support: Inclusivity is critical for youth leaders.

11. Role of Youth in Shaping AI Literacy Programs

Youth should be active participants, contributing through idea-sharing, feedback, co-design, and dissemination to ensure programs meet their needs.

Key Observations:

•Youth Roles: Youth leaders emphasize co-design and dissemination.

•Engagement: Idea sharing and feedback are critical for university and high school students.

12. Sustainability and Currency of AI Literacy Courses

Courses must remain current through flexible structures, feedback mechanisms, and continuous educator training.

Key Observations:

•Proposed Strategies: Flexible structures are emphasized by youth leaders, and feedback mechanisms by high school students .

13. Design of Effective AI Literacy Courses

Effective courses require clear, practical, and updated content, with a focus on ethics, societal impact, and participant engagement.

Key Observations:

•Learning Experience: Application-based learning and continuous updates are critical.

•Stakeholder Approach: Multi-stakeholder collaboration is emphasized by youth leaders.

14. Overlooked Critical Elements

Ethical considerations, inclusivity, and psychological/emotional impacts are often neglected but critical for comprehensive AI literacy.

Key Observations:

•Additional Considerations: Ethics is frequently overlooked by university students, and inclusivity by high school students and youth leaders.

15. Recommendations for Effective AI Literacy Courses

Courses should prioritize modularity, practical content, inclusivity, and participant involvement, with attention to ethical and societal dimensions.

Key Observations:

•Recommendations: Modular structure is highly valued by youth leaders, and practical content by university students.

• Inclusivity: Emphasized by university and high school students.

Based on all key observations, the study reveals that young people and youth workers have a basic, user-level understanding of AI but lack technical depth and critical engagement. Barriers to AI education include infrastructural, socio-economic, and educational challenges, necessitating inclusive solutions. Effective AI literacy courses should be modular, practical, and engaging, incorporating ethical and societal dimensions while involving youth as co-designers. Multi-stakeholder collaboration and continuous updates are vital for sustainability. These findings highlight the need for systemic interventions to foster a critically engaged, AI-literate generation capable of contributing to AI governance and innovation.

Conclusion

This report has mapped Türkiye's evolving AI landscape—from high-level strategy and nascent legislation through real-world applications in education, stakeholder dynamics, and the lived experiences of young people—to distill both progress and persistent gaps. At the regulatory level, the National Artificial Intelligence Strategy (NAIS 2021–2025) and its 2024–2025 Action Plan establish a clear vision for a sustainable, innovation-driven AI ecosystem, while the pending "Artificial Intelligence Bill No. 2/2234" signals Türkiye's commitment to safe, transparent, and rights-preserving AI governance in alignment with global norms. Existing statutes—from the Personal Data Protection Law (KVKK) to intellectual-property and consumer-protection regimes—already shape AI practice, but the new framework promises a more coherent lifecycle approach with risk-based assessments and stringent conformity requirements.

Education emerges as both a proving ground and a pressure point for Türkiye's AI ambitions. Government-led platforms such as MEBI, the Turkish Maarif Foundation's AI curriculum pilots, and university–industry collaborations demonstrate that AI integration can enhance personalization, equity, and research capacity. Yet ethical guidelines, teacher training, and curriculum coherence remain works in progress, underscoring the importance of robust multi-stakeholder partnerships—spanning public agencies, private firms, civil society, and academia—to safeguard inclusion and ethical agency.

Survey findings and qualitative engagements with youth reveal a dual reality. Turkish young adults are enthusiastic adopters of AI—using tools daily and exhibiting strong baseline awareness—yet fewer possess the deep technical, critical, and ethical

competencies required to shape AI's trajectory. Confidence in spotting disinformation, understanding algorithmic bias, or contributing to governance remains uneven, reflecting infrastructural, socio-economic, and educational barriers. Focus-group and co-creation sessions confirm these structural obstacles but also surface youth's latent creative potential, digital fluency, and desire to co-design AI literacy initiatives.

Taken together, these insights point to a holistic roadmap for Türkiye's AI future. First, regulatory evolution must be matched by comprehensive, practice-oriented AI literacy curricula that bridge theory and hands-on learning—embedding ethics, critical media skills, and human-in-the-loop governance into formal education and youth programs. Second, data-protection and transparency safeguards must be actively enforced, with clear user-rights messaging and accountability mechanisms for high-risk applications. Third, inclusive platforms—youth advisory councils, co-design labs, and regional innovation hubs—should empower young people as equal partners in policy and program development. Finally, continuous multi-stakeholder dialogue—leveraging Türkiye's unique mix of government bodies, universities, NGOs, and EU engagements—will be essential to ensure that Türkiye's AI ecosystem remains both cutting-edge and anchored in fundamental rights. Only by uniting strategic vision, operational excellence, and democratic inclusion can Türkiye realize an AI future that is innovative, equitable, and responsibly governed.

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