Evaluating the Impact of Artificial Intelligence on Public Service Delivery in the Context of Local Governments

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ABSTRACT

The advancement of technology and the integration of artificial intelligence into our lives have impacted both individuals and public administration. Public administration is utilising artificial intelligence in public services, and a transition to a web-based structure is now underway. In this process, local governments, seen as a stepping stone in adapting to artificial intelligence and raising awareness, have introduced smart solutions in areas such as managing and improving urban infrastructure, healthy traffic management, energy efficiency, and waste management. Consequently, quality, speed, and efficiency have increased in local service delivery, where AI has a significant impact. In light of this information, this study aims to evaluate the impact of artificial intelligence on public service delivery within the framework of local governments and services. In line with this fundamental objective, a detailed literature review was conducted for this study. Based on case studies and scientific data obtained from secondary data sources, it was determined that AI significantly improves local service delivery. However, it has also been determined that legal and administrative regulations must be urgently established to prevent potential ethical and legal issues that may arise during citizens' use of AI-supported services.

Keywords: Public Service, Artificial Intelligence, Technology Management, Local Governments

Yapay Zekanın Kamu Hizmet Sunumuna Etkilerinin Yerel Yönetimler Bağlamında Değerlendirilmesi

ÖZ

Teknolojinin büyük bir hızla gelişmesi ve yapay zekânın hayatımıza girmesi bireyleri ve idareyi etkilemiştir. İdare, kamu hizmetinde yapay zekâdan faydalanmaktadır ve artık web tabanlı bir yapıya geçiş yapılmaktadır. Bu süreçte yapay zekâya uyum sağlamak ve bilinç oluşturmada bir basamak olarak görülen yerel yönetimler, şehir altyapısının yönetilmesi ve iyileştirilmesi sağlıklı trafik yönetimi, enerji verimliliği, atık yönetimi gibi alanlarda akıllı çözümleri ortaya koymuşlardır. Dolayısıyla YZ'nin belirgin etkiye sahip olduğu yerel hizmet sunumunda kalite, hız ve verimlilik artışı sağlanmıştır. Verilen bilgiler ışığında bu çalışmada da yapay zekanın kamu hizmet sunumuna etkisinin yerel yönetimler ve hizmetleri çerçevesinde değerlendirilmesi amaçlanmıştır. Bu temel amaç doğrultusunda çalışmada detaylı bir literatür incelemesi gerçekleştirilmiştir. İkincil veri kaynakları üzerinden sağlanan vaka incelemeleri ve bilimsel verilere göre YZ'nin yerel hizmet sunumunu önemli ölçüde artırdığı değerlendirilmiştir. Ancak vatandaşların yapay zeka destekli hizmetlerin kullanımları esnasında ortaya çıkabilecek olası etik ve yasal sorunların önüne geçilmesi adına hukuki ve idari düzenlemelerin bir an önce sağlanması gerektiği de tespit edilmiştir.

Anahtar Kelimeler: Kamu Hizmeti, Yapay Zekâ, Teknoloji Yönetimi, Yerel Yönetimler

1. Introduction

The Fourth Industrial Revolution (4IR) has gained momentum in the field of public administration; governments, policymakers, practitioners and analysts have begun to emphasise the importance of artificial intelligence (AI) as a catalyst for social services and the management of state institutions. With the COVID-19 pandemic, the idea of remote working for public employees, which was impossible to stop for governments in economic and social terms, emerged, followed by the demand for AI as a driving force for efficient service delivery (Hassan et al., 2023, pp. 120-121).

The classical or traditional understanding of public administration has been shaped within the framework of Max Weber's Theory of Bureaucracy. It was used as the dominant method of public administration for much of the 20th century and is a system based on the concepts of hierarchy and

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meritocracy. Furthermore, efficiency and effectiveness are guiding principles in the management of financial and human resources within this system. However, over time, it became apparent that traditional administration encouraged bureaucratic obstacles and bottlenecks, failed to take into account various environments and administrative ecology, emphasised methods over objectives, and hindered human initiative and innovation due to its strict adherence to regulations (Şat, 2009, p. 96; Adejuwon, 2017, p. 73). This situation has paved the way for services shifting towards artificial intelligence and has enabled reforms in terms of the importance of public administration and its role in increasing people's welfare. This is because public services encompass all organisations that exist as part of the government mechanism and exist to implement policy decisions and provide valuable services to citizens (Onah et al., 2022, p. 15). Globally, service delivery is provided separately as local and central public services.

The services provided by a state institution in the field of local governance include sanitation and environmental management, public transport services, urban planning and development services, cemetery and burial services, and social assistance or cultural activities (Arslaner & Yavan, 2016, pp. 283-284). In the context of all these service deliveries, local governments have increased their efficiency and accessibility by finding opportunities to communicate with the public, develop service policies, and use limited resources effectively thanks to artificial intelligence. This study aims to evaluate the impact of artificial intelligence on public service delivery within the framework of local governments and services. To this end, a detailed literature review has been conducted to determine the effects and develop recommendations for the future.

2. The Concept of Public Service

The concept of public service is an important concept that emerged in the late 19th century and became one of the fundamental ideas of administrative law. This is because public service has been addressed in state norms throughout various periods. Different views have been put forward regarding the definition and importance of this concept, which has led to many debates on the subject (Yılmaz, 2008, p. 1216). These debates centre on the scope and elements of public service and the manner in which the state provides these services, with approaches to defining the concept also shaping its fundamental characteristics. Public services are services provided by public institutions or private enterprises under their supervision. For a service to be considered a public service, it must be public-oriented, beneficial and continuous. Public services are seen as a reason for the state's existence and encompass activities under the administration's responsibility. The quality of public services provided by the state influences whether it is characterised as a strong or weak state (Altın, 2013, p. 111; Staats, 2018, p. 374).

Changing social, economic and political conditions over time have reshaped the scope, delivery methods and management approach of public services. Changes in public administration have also affected the concept of public service and created differences among service providers. This change can be examined in three periods. In the first period, public service was limited to areas such as diplomacy and security, while in the second period, the scope of services expanded with the welfare state approach. After 1979, the new liberal approach narrowed the scope of public services and led to the transfer of some services to the private sector (Özer & Yıldırım, 2022, p. 226). These transformations changed not only the scope and providers of services but also the values and management approach on which public services were based. Along with advancing technology and the world order, a new public service approach has emerged as a model that emphasises democratic values, focuses on serving citizens, and aims to serve the public interest. This approach encourages dialogue processes between public employees and citizens and argues that the state's role should diminish alongside the development of the private sector. However, there are concerns about how the privatisation of public services affects important issues such as accountability and transparency.

The governance approach also adopts similar principles, emphasising civil society, active citizenship and cooperation in public policies (Ayhan & Önder, 2017, p. 23). When evaluated alongside the fundamental principles that must be observed in the provision of public services, this new understanding and governance principles establish an important framework in terms of the scope and quality of services. The principle of equality is important in the provision of public services, and these services are provided

for the public good. What constitutes a public service is determined by political will and is generally provided free of charge.

Public services are divided into four main groups (Denek, 2019, p. 420):
• Administrative public services (education, health),
• Economic public services (industrial and commercial activities),
• Social public services (pensions, social security),
• Scientific, technical and cultural public services (science, art, music).

Public services also have principles such as continuity, equality, impartiality, free of charge and judicial oversight. These principles ensure that public services maximise social benefit and are provided in a reliable and fair manner to citizens (Özlüer, 2022, p. 280). Therefore, these principles, as fundamental criteria determining the quality of public services, guarantee the state's responsibility to its citizens and the effectiveness of services.

3. Local Government Structure in Turkey And Basic Local Public Services Provided in Accordance with Legislation

The history of local government in Turkey does not date back very far, and there is no tradition in the modern sense. Local government in the Western style began to be established at the beginning of the 20th century, and new laws and regulations were introduced with the Tanzimat Reforms. Local government in Turkey began during the Ottoman Empire with structures such as the "kadı", "muhtesip", and "subaşı". The Tanzimat period brought changes to local government, transforming the social and physical structure. The Ottoman-British Trade Agreement, which ended in 1839, liberalised foreign trade and gave rise to a new bourgeoisie. The protection of property rights and land laws increased social stratification. New labour relations and forms of trade accelerated the need to establish municipalities (Koçak & Ekşi, 2010, p. 296; Aslan, 2018, pp. 2-10).

Today, Municipal Law No. 5393 came into force on 3 July 2005. This law raised the population threshold required for establishing municipalities from 2,000 to 5,000 and prohibited the establishment of municipalities in areas close to drinking water basins. It also facilitated the establishment and naming of neighbourhoods. It ensured the integration of municipalities with a population of less than 2,000 into neighbouring larger municipalities. The law changed the definition of 'local citizen' to give residents the right to participate in municipal decisions. The responsibilities of the municipality were also summarised into two main groups. Municipal formation has been restructured with the new regulations. Furthermore, it has determined how internal and external audits are to be conducted and ensured that the results are disclosed to the public (Özgür & Kösecik, 2005, p. 312; Atmaca, 2013, p. 171). These legal and structural regulations clarify the duties and powers of municipalities, enabling different actors to play a role in the provision of public services and the implementation of various service models. There are three main parties involved in the provision of public services: the regulator (municipalities), the producer (private contractors) and the consumer (citizens). Municipalities can either provide these services themselves or have them provided by private companies. In this process, each party is interdependent in terms of authority control, production, and financing, and different service models may emerge (Eryılmaz, 2015, p. 85).

Local authorities use alternative methods to provide effective and high-quality services, and the methods used to provide services include the following (Usta & Bilgiç, 2016, pp. 251-252):
• Entrustment Method: The performance of certain tasks through established committees without a public institution or private sector.
• Tender/Contract Method: The execution of public services through contracts with the private sector.
• Concession Method: The monopolisation of public services by a private company.
• Build-Operate-Transfer Method: This is based on the principle of private companies operating public real estate and transferring it at the end of the term.
• Municipal Companies: Municipalities may establish companies to provide efficient and high-quality services.

• Inter-Administrative Cooperation: Local administrations may procure certain services in cooperation with other local administrations. Such cooperation is typically applied in areas such as infrastructure and transportation.

These methods enable local authorities in Turkey to fulfil their duties and responsibilities as defined by legislation, while making service delivery more effective, high-quality and citizen-focused. As mentioned above, Turkey's Municipalities Law No. 5393 and other relevant legislation regulate in detail the establishment, duties and responsibilities of municipalities. Within the scope of this legislation, public services are provided to citizens in areas such as infrastructure services, health and education support services, social and cultural services, and environmental management. Along with the legislation, both the provision of public services and the sustainability and accountability of these services are ensured. Furthermore, new regulations are emerging in today's world, where citizen participation is being encouraged (Ateş Eren, 2025, p. 183).

4. The Concept Of Artificial Intelligence (AI)

Artificial intelligence is used in many fields, from engineering to medicine, and is considered an important topic by scientists. Artificial intelligence is defined as machines that mimic human intelligence and helps to increase efficiency. In its different definitions, it is categorised into thinking like humans, rational thinking, behaving like humans, and rational behaviour (Raphael, 2022, p. 2).

There is no clear consensus on artificial intelligence. One approach aims to explain human, animal, and machine intelligence by focusing on the aerodynamics of intelligence, while another approach emphasises creating machines similar to human intelligence. There are four main types of AI: rule-based systems, natural language processing, robotics, and machine learning. Furthermore, the categories include systems that think like humans, systems that behave like humans, systems that think rationally, and systems that behave rationally. The three stages of AI are artificial narrow intelligence, artificial general intelligence, and artificial superintelligence (Kaplan & Haenlein, 2019, p. 2).

The purpose of artificial intelligence is to contribute to economic and social transformation and to improve living standards. For this reason, AI-supported applications are rapidly becoming widespread in various sectors (Shams, 2025, p. 332) and are being incorporated into various processes in all areas of life, from politics to economics. Advances in technology are making many things possible that were previously unimaginable in this field. Recent developments in artificial intelligence include chatbots, smart cars, and IoT (Internet of Things: A network created through data connection and sharing between physical objects via the internet using information systems.) devices. Furthermore, autonomous vehicles are being used to increase property values by reducing travel times. The areas of application for artificial intelligence are expanding, but its potential threats remain a subject of ongoing debate (Akyol & Özkan, 2023, p. 122).

5. Artificial Intelligence and Its Impact on the Delivery of Local Public Services, Changing Dynamics

Globalisation and information technologies have led to a transition from an industrial society to an information society. Many institutions have been affected by this process. Between 1950 and 1970, technology and management approaches in state institutions had a limited impact (Pollitt, 2012, p. 12). In the 1980s, computerisation contributed to the rapid development of information. In the 1990s, the internet initiated a new era in the public sector, and services began to be digitised. Since 2010, greater importance has been placed on smart city applications (Bayraktar, 2007, pp. 52, 75).

These developments in information and communication technologies have led to fundamental changes not only in public administration but also, in particular, in the way local authorities deliver services. With globalisation, local governments and cities have become more important. Issues such as increasing population, environment, transportation and infrastructure are creating problems. Local governments are turning to new technologies to respond to rapid population growth, provide quality services to citizens and improve quality of life.

Smart city applications are an important method for solving these problems (Batal & Tuğlu, 2018, pp. 192-193). These applications enable resources to be used more efficiently, while citizens also participate

more in decision-making processes. Smart solutions are used in many areas, such as traffic control, energy management and waste collection systems. Furthermore, smart meters and water quality monitoring systems have been developed for water resources (Köseoğlu & Demirci, 2018, p. 50).

Therefore, smart city applications bring about not only a technical transformation but also a fundamental change in management understanding, social participation, and sustainability principles. Smart cities aim to solve urban problems and improve local services by using information and communication technologies in a people-oriented manner, based on the principles of participation, transparency and sustainability. Technological projects such as green energy, virtual cities, artificial intelligence and the Internet of Things are being developed in smart cities in different parts of the world. The goal of smart cities is not only to use technology but also to develop society, improve quality of life, and ensure good governance, economic development, educational opportunities, and social equality. It is important for local and central governments to adopt a smart approach (Köseoğlu & Demirci, 2018, p. 42).

Different policies must be combined for the smart city concept. The six fundamental characteristics of smart cities have been defined as smart economy, smart people, smart governance, smart mobility, smart environment, and smart living (Centre for Regional Science, 2007, p. 11). Smart city applications ensure service quality and resource savings. As an example, in Los Angeles, smart transport systems have reduced delays by 35%, intersections by 20%, and travel times by 13%, while fuel consumption has fallen by 12.5%.

Smart street lighting in Oslo has resulted in a 70% saving in electricity (Deloitte, 2016, p. 10). South Korea also saved $40 billion in 2010 through digital procurement processes (Shin, 2016, p. 107). Indonesia saved $26 billion between 2008 and 2013 through e-procurement applications (Köseoğlu & Demirci, 2018, p. 44). It is evident that the tangible benefits provided by smart city applications in different geographical areas have paved the way for the more comprehensive use of artificial intelligence and digital technologies in local administrations. This is because artificial intelligence and communication technologies enable local administrations to find solutions to problems more quickly and make citizens' lives easier.

Similarly, the number of digital services has also increased with e-municipality, another common example of the impact of digital technology on local service delivery. Citizens can submit their requests via municipal websites, mobile applications or call centres (Karaca & Öztürk, 2019, p. 532). Furthermore, citizens can track their requests thanks to tracking numbers. For example, Helsinki, Barcelona and Amsterdam inform the public by sharing information about their social projects and provide support to disadvantaged groups (Floridi, 202, pp. 544–546).

In Turkey, municipalities such as Istanbul, Ankara, and Izmir are increasing citizen participation by broadcasting council meetings live and using social media (Yılmaz, 2024, p. 5). At this point, the infrastructure and data-driven management approach provided by smart city applications have also paved the way for more effective use of artificial intelligence and digital services in local governments. With the rise of the information age, citizen participation in governance has increased, leading to greater accountability for local governments, particularly municipalities. As citizen expectations rise, local governments are placing greater emphasis on efficiency and effectiveness in their services (Doğan & Ustakara, 2013, p. 6). Increased citizen participation is vital to improving the effectiveness of local services. The concept of e-transformation contributes to improving quality and efficiency, creating new opportunities at the local level, developing civic awareness, and encouraging citizen participation.

E-governance uses technology to monitor citizens' needs in real time and enables online participation in activities. It also includes various e-government platforms that offer 24/7 services (Qian, 2011, p. 128; Cheshmehzangi, 2022, p. 53). In this context, the development of e-governance has accelerated the transition of public services to the digital environment, paving the way for the widespread adoption of e-government and e-municipality applications.

Today, many public services provided by administrative units are offered electronically. This change has led to the emergence of e-government and e-municipality applications. E-government refers to the execution of various official processes electronically, while e-municipality is the local adaptation of these

applications (Kıraç & Boyalı, 2024, p. 396). Citizens can easily manage their affairs, which increases the quality and efficiency of services and saves time and money. Local governments, especially municipalities, benefit from e-municipality applications that aim to involve citizens in governance. These services include mobile signatures, vehicle tracking, online applications, and online debt payments (Erdoğan, 2019b, p. 558).

In this context, e-government and e-municipality applications enable local governments to provide citizen-focused services using technology and improve service quality with the opportunities offered by information and communication technologies.

Information and communication technologies provide benefits in identifying public needs, achieving financial savings, increasing citizen participation, and reducing bureaucracy in local governments. These technologies enhance the quality of local services, increase satisfaction levels, and strengthen the relationship between local governments and citizens. In light of all these reasons, local authorities must adapt to technological innovations in order to reap these benefits. Artificial intelligence is considered essential in local service delivery in order to meet global standards.

6. Examples from Around the World and Turkey of Artificial Intelligence in Local Government Public Service Delivery

Since the 1990s, with the development of computer technology and the internet, government services have begun to move to the digital environment. This has given rise to the concepts of e-Government and e-Municipality. E-municipality refers to local governments providing services using information technology (Bojang & Bwando, 2018, p. 3). Municipalities provide transparency and accountability by offering their services through official websites, mobile devices and social media. Both the state and the private sector play a role in the development of e-municipality. This process supports a citizen-focused service approach by reducing bureaucracy (Karabulut, 2025, p. 286).

The 2004 final report of the Second Turkish Information Technology Council outlined the results concerning various areas of services that could be provided electronically. Among these public services, it was reported that there were estimates and analyses on topics such as mapping and cadastral operations, urban planning, technical infrastructure services, crisis management, urban control, transportation, traffic, address numbering systems, subscriber systems, online tax payments, public transport systems, and service desks (Osman, 2006, p. 26). The subsequent process also focused on these service areas. This is because it is believed that countries that are successful in e-government applications will also be able to manage e-municipality applications. A study examining 1,797 e-government portals in 198 countries found regional differences in digital performance. In this study, North America ranked highest, followed by Asia and Western Europe. Turkey ranked 56th and 53rd in different assessments, respectively.

In 2021, Turkey ranked 48th among 64 countries in terms of e-government performance. The United Kingdom has rapidly advanced in e-transformation, ensuring that all public services were available online by 2008 and securing its place among the countries that completed their digital transformation very early on. Another global study, the Digital Cities Index 2022, found that many cities had connection speeds below optimal levels, with Copenhagen and Singapore emerging as the leading cities (Arslan, 2022, pp. 83-84).

When examining examples from around the world, the Municipality of Molenwaard stands out. The Municipality of Molenwaard planned to construct a new building with a budget of 3 million euros for public services, but upon learning that the cost would be 15 million euros, it decided to create a 'digital municipality'. A virtual project was launched in September 2013, and the physical building was closed on 8 October 2014. Since then, 90% of municipal services in the city have continued to be provided through a simple website. Citizens can access services by making appointments and reporting their complaints to AI chatbots online; meetings can be held in different venues. With AI-supported systems, Molenwaard facilitates process tracking and informs citizens through digital municipal administration. In addition, various data is made available online in the city, enabling citizens to respond digitally to council decisions.

This has improved service quality, and according to research conducted at Tilburg University, the city's service rating rose from eight points before the digital transition to nine points after the transition (Erdoğan, 2019a, p. 12; Erdoğan, 2019b, p. 557).

In Azerbaijan, local governments also use technologies such as urban information systems, e-document management and mobile applications supported by AI to improve their services. Many local public services have been moved online to reduce bureaucracy and save time. Common e-municipality services include e-signatures, council meeting broadcasts, and online applications for services. However, Azerbaijani municipalities have faced challenges such as inadequate website management, lack of contact information, and limited online communication options for citizens. Issues such as security concerns, slow connections, inadequate staff training, high costs, and user-unfriendly websites hinder effective e-municipality services (Sadigova, 2021, p. 491).

China, one of the leading countries in the social use of artificial intelligence services, utilises artificial intelligence support in the provision of public services in almost every municipality. This support is used for services such as identity verification, IP address and serial number checks, facilitating communication between the administration and the public, environmental control, and sustainability (Ma et al., 2020, p. 167).

In their study, Nwosu et al. (2024) reported that, although still in the early stages in Nigeria, there are promising developments in AI-supported public services in areas such as e-government, healthcare, the banking sector, the real estate sector, and law enforcement/security units.

Nada et al. (2024) examined AI-supported public services in the city of Semarang, Indonesia, and reported that AI support has now begun to be used in services provided in villages in particular. It was reported that AI support is particularly beneficial in terms of visual communication with villagers, that public duties can be explained more accurately through graphic designs, and that information systems in government institutions can be provided through visuals.

There are also successful examples of e-municipality in Turkey. The Kahramanmaraş Metropolitan Municipality website offers a wide range of services. The e-municipality menus include various information such as e-payment, funeral services, on-call pharmacies, and public transport information. The solution desk, supported by AI, receives citizens' requests, provides information about burial sites through the cemetery information system, and allows users to track the addresses of weekly neighbourhood markets. In addition, market prices and city cameras are also among the services offered (Kılıç, 2025, pp. 22-23).

At Çanakkale Municipality, AI-supported e-government applications such as document tracking, suggestion platforms, and subscription services have improved the quality of life. The municipality's main objectives include reducing environmental threats and ensuring community participation. Features such as digital payment systems and mobile applications increase transparency and sustainability. Digital transformation improves service delivery and strengthens effective governance (Gümüş & Yıldız, 2025, p. 285).

In Antalya, community-supported policing has been introduced specifically by the Antalya Police Department to ensure citizen participation in the provision of public services. Under the "Komşu Kollama Sistemi: Neighbourhood Watch System" (KKS) and "Keşke Demeden: Without Saying 'If only'" projects, changes in crime rates in the provincial centre, written/verbal face-to-face reports, criticisms, comments, suggestions and improvements have been made available to citizens.

7. Conclusions and Recommendations

This study, which aims to evaluate the impact of artificial intelligence on public service delivery within the framework of local governments and services, has determined that digitalisation has been achieved in the delivery of local public services in Turkey and around the world, and that artificial intelligence-supported systems are being offered. Consequently, AI systems have become an indispensable technology for modern states. However, during the development of these systems, many challenges are encountered, such as ethical issues, data management, privacy, and security. The role that states will play in this process is more important than that of other organisations. Governments must make the necessary changes and

establish regulatory policies to protect social welfare and global peace. This makes the principles of oversight, accountability, and transparency even more important.

As demonstrated by examples from various countries, AI has the potential to make public services faster and of higher quality. This technology is attracting attention due to its ability to solve long-standing public administration issues. AI can provide significant benefits to public administration and society through automated processes and reduced bureaucratic burdens. On the other hand, while AI has the potential to influence human judgement in processes, it also offers new opportunities for decision support systems. In particular, the use of AI and machine learning in the public sector is increasing, which improves decision-making processes. Data analytics enhances governments' decision-making capabilities and ensures efficiency. For example, AI assists in detecting tax evasion or managing citizens' welfare claims. However, the question of whether AI can be better than humans is open to debate. Human judgement is always important, and the primary function of AI should be to facilitate human processes.

In addition to all this, AI can provide more efficient management by reducing the workload of civil servants. However, it should be remembered that AI will never completely eliminate the human factor in some situations and that human input is needed to make complex decisions. Therefore, the correct use of AI can deliver faster and more personalised results in government services. Nevertheless, in order to make the most of the advantages offered by AI, more investment is needed in service quality.

In light of all this data, it is evident that the advancement of AI in the provision of public services is important. Research in this field is necessary to understand the results of integrating AI into public services and its social dimensions. Although AI is still in its early stages in public administration, this process is expected to lead to major changes in the future. E-government is an important stage in the modernisation and reform efforts in the provision of public services, and this process is seen to take a long time. An e-government application should implement principles such as accountability, transparency and efficiency. Leading countries are determined to resolve issues related to e-government.

It is important for countries with the potential to become leaders in this field, such as Turkey, to support e-Municipality applications, raise public awareness, and take measures to reduce the digital divide. Researching the solutions of countries that have experienced similar problems in the past will be beneficial in eliminating problems in AI integration in advance. In addition, examples of countries offering fully electronic municipal services should be examined, and the strategies of countries such as South Korea should be adopted. To ensure centralised management and localisation through the e-government approach, the effectiveness of AI-supported e-municipality applications should be enhanced. Portals should go beyond merely providing information and reach a level that increases user participation, has high processing capacity, and follows global standards. To achieve this, issues such as budget, infrastructure, and training must be resolved quickly.

It is also important to prevent illegal practices, whether software-related or user-related, during the provision of AI-supported services. The necessary legal regulations to ensure this must be implemented quickly, particularly in the areas of data security and responsibilities. In addition private-public partnerships are also crucial for sustaining the technical infrastructure. Indeed, issues such as increasing internet access and educating citizens must be addressed through effective coordination.

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