Legal Protection of Personal Data Security in Indonesian Local Government Apps: Al Farabi's Perspective

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Article	Abstract
	The rapid advancement of technology is a double-edged sword. While it provides easy access to information, it also opens the door to unrestricted access, including personal data. Governments worldwide are leveraging technology to enhance their connection with citizens and deliver top-tier public services. In this vein, the Provincial Government of DKI Jakarta as an Indonesian local government, launched a SuperApps called JAKI in 2019 as a dynamic platform for two-way communication between DKI Jakarta residents and local authorities. This research employs empirical juridical methods, incorporating statutory and conceptual approaches. Drawing from primary sources, including DKI Jakarta Regional Secretariat Decree Number 99 of 2022 concerning the Citizen Relations Management application and interviews with the Smart City Developer Service Unit, the study demonstrates that JAKI ensures robust data security. The app complies with ISO 2700, an international standard that regulates information security management systems and fulfils the three core components: confidentiality, integrity and availability. Furthermore, in alignment with Al Farabi's concept of information security accountability, the emphasis is placed on collaborative social responsibility between data owners and collectors, represented by DKI Jakarta Provincial Government. This cooperation is both fair and beneficial, adhering to the fundamental principles of political philosophy and ethics.

INTRODUCTION

Digital technology has revolutionised how we interact, work and live (Haleem et al., 2022; Pencarelli, 2020). Innovations like the Internet, computers, and smartphones have made access to information and services easier (Hidayah & Anggraeny, 2023).

These advancements in information and communication technology have profoundly impacted human civilisation worldwide. The rise of information technology has broken down boundaries and sparked significant social changes at an unprecedented pace (Aditya & Al-Fatih, 2021). Today, technology plays a dual role: it drives human progress and civilisation while becoming a platform for crime and lawlessness. Indonesia, with one of the world's largest populations, is at the forefront of transformation and innovation in information technology. This rapid progress allows Indonesians to access services and information quickly and effortlessly, domestically and internationally (Al-Fatih & Sinha, 2023). As technology evolves at lightning speed, communication and information sharing become increasingly seamless.

In today's world, information technology (IT) plays a significant role in shaping the social fabric of society (Schroeder, 2017). Information technology has evolved into a powerful tool that meets a wide range of basic human needs (Ernayani et al., 2021; Santo Gitakarma & Tjahyanti, 2022). With the rise of the Internet, people now have access to information through countless online platforms available to everyone. However, this accessibility comes with challenges, particularly in filtering the content. Online media provides unrestricted access to information, often without proper oversight. Without an editorial team to manage the flow of content, anyone can share information freely, leading to the rapid spread of misinformation and fake news or hoaxes. As technology advances, it has become an integral part of human life, aimed at simplifying daily activities at work (Muslih & Supeno, 2022; Santoso et al., 2020).

Information and communication technology can significantly enhance government operations' efficiency, effectiveness and transparency (e-government). All organisations or companies must continue to update and integrate IT innovations due to increasingly rapid data growth. Data security requires the protection of devices, networks, and related infrastructure, making information security a crucial component in managing information technology. In light of today's fast-paced developments, continuous evaluation and innovation are essential. This is particularly true for government sectors, where the rising threat of cybercrime in Indonesia highlights the need for strong preventive measures and rapid response strategies (Masyhar et al., 2023). As such, safeguarding information security has never been more critical in this evolving digital landscape.

In today's legal situation, it is crucial to anticipate the potential misuse of scientific and technological progress as tools for crime when drafting legal policies, including the system of evidence and criminal responses. Many internet users lack a proper understanding of digital security and fundamental security principles (Sadhu et al., 2022). Habits like neglecting software updates, using weak passwords, and being unaware of the risks associated with their online activities leave them vulnerable to cyberattacks. Cybercriminals are quick to exploit these gaps in security awareness. It is undeniable that while internet technology offers numerous benefits, it also brings

negative consequences. Conventional crimes, such as threats, theft, defamation, pornography and terrorism, have now moved online, facilitated by technological advances. Consequently, these criminals are increasingly difficult to apprehend, yet their actions seriously affect society and the nation.

The right to privacy serves as the basis for ensuring information security in cyberspace (Anggen Suari & Sarjana, 2023; Hasibuan & Putri, 2024). It is a universal principle recognised by many countries, whether through written laws or unwritten moral norms safeguarding human spiritual needs, such as respect for their feelings and thoughts and the right to enjoy their lives. This protection allows people to access, process, and share information through various media platforms. Therefore, social media has become increasingly popular, directly influencing how individuals receive and disseminate information in today's digital age.

In the DKI Jakarta provincial government, a leading example of the Electronic Based Government System (SPBE), various applications have been developed to enhance public service delivery. Some key applications supporting public services in DKI Jakarta include JAKI Super Apps, Avocado Betawi, JDIH, JakLingko, JakSehat, PPID Jakarta, and Berita Jakarta. These applications are managed by several OPDs (Regional Government Organisations) under the coordination of the DKI Jakarta Provincial Government. Among them, the JAKI (Jakarta Kini) superApp stands out as one of the most prominent tools in improving service accessibility.

JAKI Super Apps is an application that accommodates more than 80 DKI Provincial Government public services in just one smartphone. JAKI Super Apps was launched in 2019 and has developed since the pandemic as an extension of information by the DKI Jakarta provincial government to the residents of Jakarta and its surroundings regarding the spread of COVID-19. To date, JAKI Super Apps have been downloaded by 1 million smartphone users via the Play Store and App Store applications. JAKI Super Apps provides two functions: it allows Jakarta residents to share information and submit complaints online to the DKI Jakarta provincial government, and it enables the DKI Jakarta provincial government to monitor the condition of the city of Jakarta and control problems based on the information collected.

Based on the development of the JAKI SuperApps application with almost 2 million smartphone users, it has become more of a responsibility for users and the DKI Jakarta provincial government to fulfil the right to privacy as a form of information security for JAKI SuperApps users. As the data collector, the provincial government must have double security to ensure JAKI SuperApps user data is safe. As in December 2023, JAKI SuperApps was hacked following the presidential election debate. The management of JAKI SuperApps claims that they have made efforts to investigate, mitigate, and ensure that there is no leak of user information from the JAKI SuperApps application.

Government accountability in providing public services, such as those offered through the JAKI SuperApps, aligns with Al Farabi's concept of social cooperation, where mutual and reciprocal relationships exist between society and the government. In this fair collaboration, the freedom and equality of citizens must be safeguarded and not compromised for any interests (Muthhar, 2018). The responsibility for protecting personal data is shared between the data owner and the entity entrusted with the data, which in the case of the JAKI application, is the DKI Jakarta provincial government. Therefore, it is urgent to understand how responsibilities are shared and how collaboration is established between the JAKI SuperApps users and the DKI Jakarta provincial government to ensure the security of personal data.

METHOD

Research regarding the legal protection of information security in the JAKI SuperApps application employs empirical juridical research methods, combining statutory and conceptual approaches (Al-Fatih, S., & Siboy, 2021). The legal regulatory approach is reviewed from Law Number 27 of 2022 concerning Personal Data Protection, while the conceptual approach draws from Al Farabi's ideal state model. Data was gathered from interviews with JAKI SuperApps developers, specifically the Jakarta Smart City Management Unit under the DKI Jakarta provincial government, along with secondary data obtained from similar research on personal data protection. The analysis integrates these insights with applicable regulations and Al Farabi's concept.

RESULTS AND DISCUSSION
Legal Protection for the Security of Personal Data in DKI Jakarta Provincial Government Public Service Applications

The digitalisation of public services has sparked an interesting trend, with central and regional governments competing to develop digital applications aimed at enhancing effectiveness and efficiency in governance (Graham et al., 2003). Ensuring the security of public service activities in the digital realm has become a key priority for governments, requiring comprehensive monitoring of online platforms. This oversight involves tracking activities, collecting information, and intervening when issues or discrepancies arise. Such supervision is essential across various sectors, including business, education, and security, to improve efficiency, effectiveness, and accountability. In the rapidly evolving world of information technology, monitoring information security is crucial for safeguarding data integrity, confidentiality, and availability (Budi et al., 2021). As cybercrime threats grow, protecting information security becomes even more vital. The Jakarta Smart City Business Services Unit is critical in overseeing and maintaining information security through various policies, regulations, and technical measures, ensuring the protection of government systems and sensitive data.

Data protection efforts have been initiated with the issuance of several regulations by the central government. Minister of Communication and Information Technology (Kominfo) Regulation No. 4 of 2016 concerning Information Security Management Systems regulates security aspects of information distributed through electronic media and digital platforms. The institution or body responsible for managing aspects of communication and information technology within the government is Diskominfo. In 2022, the Ministry of Communication and Information has succeeded in stimulating the realisation of Law Number 27 of 2022 concerning Personal Data Protection, passed on October 17 2022, by the DPR RI.

Personal Data Protection is a human right, serving as a form of self-protection. In terms of privacy rights, the Personal Data Protection (PDP) Law fulfils the demands of the concept of human rights, which are divided into derogable-rights and non-derogable rights. According to Suparman Marzuki, non-derogable rights are absolute and cannot be taken away (Wardani Amnesti et al., 2023). On the other hand, derogable rights can be reduced or limited by the state party, such as the right to peacefully assemble, associate, receive, and impart information and ideas without regard to frontiers and express opinions. From the explanation above, it becomes clear that privacy rights fall under the category of derogable rights, meaning they can be restricted or limited under certain conditions (Fauzi & Radika Shandy, 2022).

The number of data breaches highlights the weakness in Indonesia's security and regulatory systems, raising concern about the potential misuse of personal data (Rahman Najwa, 2024). Irresponsible parties can exploit this data for illegal actions, such as fraud, piracy, illicit access and manipulation. Everyone needs legal protection over their personal data and the state, as the policymaker is responsible for safeguarding these basic rights. "Everyone has the right to protection of himself, his family, honour, dignity and property under his control, and has the right to a sense of security and protection from the threat of fear of doing or not doing something." (Article 28 G (1)UUD NRI).

Information protection and security in the DKI Jakarta Provincial Government is realised by providing duties and authority attached to the Communication and Information Department in the field of electronic system management and digital transformation as stated in the Regulation of the Governor of the Province of the Special Capital Region of Jakarta Number 57 of 2022 concerning Organization and Work Procedures Regional Apparatus. In the context of information development and security, the Jakarta Smart City Management Unit is tasked with (1) Developing plans and implementing management of business processes, data and information, application services, security and electronic system infrastructure and digital transformation of Jakarta Smart City; (2) Arranging the development of electronic systems and digital transformation of Jakarta Smart City; (3) Formulating and preparing plans and implementing risk management for electronic systems and Jakarta

Smart City Management Unit Services according to the scope of their duties; (4) Developing governance development and integration standards for networks, data and electronic systems for digital co-working spaces with the Jakarta Smart City system; (5) Carrying out study planning, analysis, research and development of Jakarta Smart City and (6) Carrying out risk management, compliance and quality assurance of study management.

The realisation of information security by the Jakarta Smart City Management Unit reminds us of the importance of information security in protecting information and its essential components, such as systems or hardware used to store and transmit data. Confidentiality, availability, and integrity are the three main goals of information security, according to McLeod and Schell (2008). This data security allows us to detect attacks on data early. We cannot immediately avoid attacks or danger. This usually comes from books, references on the Internet, or personal experiences (Akraman et al., 2018).

JAKI Super Apps is a groundbreaking platform for public service complaints, managed by the Jakarta Smart City Management Unit as an extension of the DKI Jakarta Provincial Government's Communication and Information Department. As one of 13 public complaint platforms, including JAKI and Report 1708, JAKI Super Apps stands out for its customer-centric approach. As the developer, the Smart City Service Unit has introduced system enhancements focused on privacy by default and design, ensuring the confidentiality of reporter data. When sending a complaint, the complainant can choose whether the report is public or private (anonymous). However, by default, the system automatically directs private complaints to maintain the complainant's confidentiality (privacy by default). Next, the reporter can select a problem category and write a description of the problem. At the end, the reporter will get a receipt code for real-time monitoring of their complaint's status.

The growing concern about potential data leaks, which makes residents anxious about their privacy as complainants on the JAKI SuperApps, highlights the primary focus for improving the risk management of Super Apps JAKI. This issue became especially pressing after numerous national media outlets in 2021, reported on the alleged leak of complainant data managed by the DKI Jakarta Provincial Government, fuelling public concern. Therefore, it is necessary to carry out a number of in-depth studies regarding efforts to maintain public trust by using slogans to reduce citizens' anxiety and identify the real source of the problem. Given the growing concerns, especially on social media, evaluations need to be carried out to restore public trust as users. It should primarily look at how the public views the leak, what they know about it, and how assigned officers think about data security and privacy policies. Citizens provide feedback that can be used to build complaint channels.

The importance of collecting as much data and information as possible in assessing data and information security requires a process of coordination and

communication across regional apparatus. Apart from that, collecting news articles from various media sources continues the overall complaint management process chain, from the reporting stage to the follow-up stage. This includes sending complaints related to the use of goods and services. Real action is needed to respond to the issue of data and information security, helping to reduce anxiety and negative public opinion from escalating. Jakarta Smart City is well-positioned to take swift measures to mitigate and minimise potential risks. Following Governor Regulation No. 122 of 2020 concerning the Implementation of Risk Management in the DKI Jakarta Provincial Government, this would be the right step.

In the same way, as the manager of the public complaint system in DKI Jakarta, the Jakarta Smart City Service Unit strives to ensure that every citizen has access to a complaint channel that is efficient, effective, transparent and accountable without losing aspects of security and comfort. For this reason, Jakarta Smart City has issued Regional Secretary Decree No. 99 of 2022 concerning Follow-up Guidelines for Handling Complaints Through the Rapid Community Response Application. This needs to be done to maintain the reputation that has been built and produce the best innovations that enable fast and complete management of 7ublicc service complaints.

The update to Regional Secretary Decree No. 22 of 2020 concerning Follow-up Guidelines for Handling Public Complaints Through the Citizen Relations Management Application into Regional Secretary Decree No. 99 of 2022 concerning Follow-up Guidelines for Handling Public Complaints Through Citizen Relations Management Applications has an impact on the system. So, the system was adjusted to the latest regulations, including complaint categories, complaint resolution times, and more. In addition, there has been an adjustment to the number of official channels. System and regulatory updates are intended to address needs and efforts to improve the quality of handling public complaints in Jakarta. A series of maintenance is needed to improve data security in managing the system and prevent it from cyberattacks. Apart from that, system management is carried out in a hybrid manner to be more easily accessed and monitored regularly. Maintenance and monitoring are carried out periodically to ensure smooth operation, with 11 maintenance sessions scheduled in 2022 alone. The system is supported by robust security measures, networks, and other essential infrastructure to keep data on Jakarta Smart City's servers safe from cyber threats while ensuring that the applications continue to function as intended for users.

Maintenance or upkeep of the JAKI SuperApps system is carried out with several activities, namely preventive maintenance and corrective maintenance. At the end of 2022, preventive maintenance efforts will be carried out as a form of prevention so that the maintenance process is carried out before damage occurs. This form of prevention is done by increasing the system's storage capacity or migrating from the old system to the new one. Meanwhile, corrective maintenance is carried out after the system experiences damage and is then repaired so that it can run properly. All these

activity processes are carried out after the investigation process is complete, so the estimated completion time can be projected as information for service users.

The JAKI SuperApps system maintenance process by the Jakarta Smart City Management Unit can refer to Salazar's information security strategy relating to efforts to protect against various threats, ensure business continuity and minimise business risks as well as in the context of increasing investment and business opportunities. Some of these strategies include (1) Physical Security, securing physical assets related to Force Majeure events; (2) Personal Security in protecting organs within the agency; (3) Operation Security, which focuses on the ability to secure the agency from interference in carrying out work; (4) Communication Security, which aims to secure communication technology media and the usefulness of equipment to realise organisational goals; (5) Network Security, related to the security of network equipment and organisational data and its contents. This is proven by the achievement of ISO 270001:2022 regarding Providing an Information Security Management System for JAKI SuperApps Electronic Infrastructure Management.

SNI ISO/IEC 27001:2022 certification, issued by the International Organization for Standardization (ISO), sets the international standards for Information Security Management Systems (ISMS). Covering aspects such as Information Technology, Security Techniques, Information Security Management Systems, and Requirements, this certification serves as a crucial framework for Jakarta Smart City in establishing, implementing, maintaining and continuously improving an information security management system. ISO certification is essential, especially in today's digital era, where technological advancements provide easier access to sensitive data and systems, increasing the risk of cybercrime. As managing cyber risks becomes more challenging, especially for government bodies like the DKI Jakarta Provincial Communications, Informatics, and Statistics Service, adherence to such standards ensures better protection against these growing threats.

In the context of implementing the Information Security Management System in the Jakarta Smart City, the DKI Jakarta Provincial Communication, Information and Statistics Department, especially the JAKI application, provides a number of benefits. First, through effective risk management, JAKI can better identify, evaluate and overcome potential threats to information security. In addition, by increasing resilience to cyber threats and guaranteeing data integrity, confidentiality and availability, JAKI can maintain user trust and protect company data, systems, reputation and assets. Readiness to face new threats becomes a solid foundation. Meanwhile, cost savings and operational excellence increase JAKI's efficiency and competitiveness in the market. Jakarta Smart City is committed to maintaining security, integrity, and the availability of information for users and partners. JAKI In this way, JAKI is gradually ready to serve the citizens of Jakarta more safely and better. It will recover with the achievement of this international certification.

Apart from controlling it, the responsibility for protecting personal data falls on public bodies, individuals, and international organisations, as outlined in Article 19 of the PDP Law. Furthermore, Article 35 of the PDP Law states that personal data controllers are obliged to ensure the protection and security of data obtained by implementing several steps: (1) Developing and implementing technical, operational steps to protect personal data from interference with personal data processing which is contrary to the Law. The DKI Jakarta Provincial Government has prepared several regulations related to this matter by issuing Governor Regulation No. 122 of 2020 concerning the Implementation of Risk Management and SOPs in public services on JAKI SuperApps through Regional Secretary Decree No. 99 of 2022 concerning Follow-up Guidelines for Handling Complaints Through the Rapid Community Response Application. (2) Determining the level of security of personal data by taking into account the nature of the risks of personal data that must be protected in processing personal data. As with the achievement of ISO 270001:2022 certification, JAKI Super Apps has fulfilled the elements of information security, including (1) confidentiality, the aspect of ensuring the confidentiality of data and information with limited access only to authorised persons; (2) Integrity, the aspect that guarantees that data is not changed without permission from the authorities to maintain the accuracy and integrity of the information, as well as the process method to guarantee this integrity aspect; (3) Availability, where the JAKI SuperApps manager guarantees that data is available when needed, to meet information transparency and to connect to devices related to public complaint services. Article 58, paragraph (1) of Law Number 27 of 2022 states that the government fully protects people's personal data. Westin, in a theory of the right to privacy, states that privacy is a claim from an individual or group to have their information communicated publicly or openly to create independence and benefit the entire community. Andrie Yuswanto, a staff in the coding sector at the DKI Jakarta Provincial Government Diskominfo, said that the government, especially the DKI Jakarta Provincial Government Communication and Informatics Service, has made optimal efforts to monitor, protect and even prevent leaks of personal data, several efforts have been made by the Communication and Informatics Service, one of which is budgeting for the system. A firewall can protect and prevent people's personal data from being taken over by irresponsible people (Widiasari & Thalib, 2022).

The activities of the DKI Jakarta provincial government in realising data protection and information security, if viewed from the theory of legal protection according to Soerjono Soekanto, contain five main factors. First, the legal framework involves a range of regulations and SOPs, such as Governor's Regulations and Regional Secretariat Decrees related to data processing and information security. Second, law enforcement returns to the sanctions contained in the PDP Law and ITE Law. Third, the infrastructure factor provided by the Jakarta Smart City Management

Unit to increase security includes farewell system budgeting, preventive maintenance and corrective maintenance. The fourth factor involves public education as citizens are made aware of their responsibilities in protecting personal data through an outreach program, which is emphasised when they download JAKI SuperApps from Play Store and App Store. Lastly, the cultural factors are oriented towards aligning with international data and information security standards, as demonstrated by ISO 270001:2022 certification. This culture of compliance ensures that information system security risks are managed appropriately and effectively, fostering maximum security control. Implementing this legal protection can increase the credibility of the DKI Jakarta Provincial Government, especially the Jakarta Smart City Management Unit, in processing and managing data so that trust can be created in the eyes of the JAKI SuperApps user community (Firdaus, 2023).

Legal Protection for the Security of Personal Data in DKI Jakarta Provincial Government Apps: Al-Farabi's Perspective

Abu Nasr Muhammad bin Muhammad bin Tarkhan bin Uzlagal Al Farabi was born in 257 H/870 CE and died in 339H/950 CE. Al Farabi is a famous Muslim philosopher with several ideas in science. Some literature implies that Al Farabi has a phenomenal work entitled Ara Ahl al Madinah al Fadhilah. This book discusses politics, the state, and society based on Al Farabi's perspective. According to Al Farabi at the level of the concept of an ideal state is the term al Madinah al Fadhilah, where a country can be said to be ideal if it achieves happiness in this world and the hereafter (Nur Alisa et al., 2023). Al Farabi had a different concept of the State compared to other Muslim thinkers. According to Al Farabi, three relations between religion and the state emerged when Al Farabi's thoughts regarding the state emerged, in which Al Farabi positioned religion in the state as ethics and morality (Moh. Asy'ari Muthhar, 2018). A state cannot only be led by one person but can be managed by several people together (Al Farabi, 1996). He also stated that a good country is one whose people work together in a proportional division of labour. In this case, he likens state life to body parts. Each member of the body has different functions and tasks, each requiring each other (Al-Farabi, 1993). The conditions of cooperation between leaders and their people based on Al Farabi's thinking are in line with Jurgen Habermas's thinking regarding the concept of Deliberative Democracy, including:

1. Inclusive: No parties are excluded from participating in relevant discussions. The provincial government takes advantage of technological developments by providing additional accessibility menu features for people with special needs on the official website and JAKI Super Apps. With an inclusively designed Website and JAKI SuperApps, it can support easy access for people

with disabilities to search for information directly on the official platform belonging to the Jakarta provincial government.

2. Free of coercion: Everyone can engage in arguments freely without being dominated or intimidated by other parties. In the context of the development of JAKI SuperApps and the official Jakarta Provincial Government website platform, the Jakarta Smart City Service Unit, as the party that collects and manages data, gives the public the freedom to submit reports, suggestions and input directly with the application either anonymously or by showing their identity. This can be seen in the privacy and statement menus, where users can choose whether to display complaints by showing their identity or hiding it.

3. Open and symmetrical: Each participant can initiate, continue and question discussions on relevant topics. The principle of openness in collecting and managing data by the Founder of JAKI SuperApps can be seen in the application description, where the provider states that there is no data sharing with third parties. JAKI SuperApps uses a method of changing the form of data into several codes that are difficult to translate so that just no one can read them. This is known as data encryption, as explained in the JAKI SuperApps settings.

Even though no technological advances had been discovered at the time of Al Farabi, Al Farabi's ideas regarding data security, as applied today, are related to the fundamental principles of Al Farabi's political and ethical philosophy regarding the security of one's personal data. In these fundamental principles, the ethics of a leader are explained in the following:

1. Wise and responsible: This is reflected in the current data security context where there should be accountability from the government regarding security (Jamalul Muttaqin and Syamsiyani, 2022). Al Farabi believes mutual interests must be prioritised above personal and group interests. The government and technology providers must have a clear policy on the security and privacy of technology users regarding data leaks like today. For example, in 2022, the JAKI application was reported to have experienced a data leak involving 1.3 million users' personal data regarding identity, such as name and email, telephone number, among others (Mohamad Farhan Zhuhri, 2023). This has an impact on identity misuse, fraud, and even loss of public trust in the government. The DKI Jakarta government already had data management guidelines in Governor Regulation Number 6 of 2022 before the PDP Law was passed. As explained in Article 16 of DKI Jakarta Governor Regulation Number 6 of 2022, the obligation to implement electronic data collection is to maintain system security, which includes guaranteeing confidentiality, integrity, availability and non-repudiation of resources related to data and information.

2. The law must be fair and firm, reflected in the context of strict and firm regulations for taking action against perpetrators of data protection violations. According to Al Farabi, fair laws will balance technological progress and the protection of human rights, in this case, data security (Dwianto, 2018). The state should protect the privacy of its citizens' data with legal regulations. In this case, the state has passed regulations related to the PDP Law and ITE Law. Meanwhile, the Provincial Government has introduced DKI Jakarta Governor Regulation Number 6 of 2020 concerning the Collection and Exchange of Electronic Data within the DKI Jakarta Provincial Government, where Article 16 paragraph (2) states that violations of obligations for system protection and security are subject to sanctions according to statutory regulations. However, the regulation of the threat of sanctions in Article 16 paragraph (2) in the format of a Governor's Regulation will certainly not directly mention sanctions for violators.

3. Education and public awareness: Al Farabi believes education is essential to support a good society. In the current context, education can be interpreted as digital literacy, where the public must have a comprehensive understanding of how to use the JAKI application and understand how to protect their own privacy. In this context, the state should facilitate the public to receive this education to increase public awareness of digital literacy.

4. Welfare: Al Farabi emphasised that prosperity is a state goal achieved together. In the context of the JAKI application, security and protection of personal data are goals that must be achieved for collective prosperity. According to Al Farabi's concept, the main country is a country where the society is perfect, as reflected in the completeness of each organ (Muhammad Syafi'i, 2017).

5. Supervision and transparency are the fundamental principles that must be present in a policy. Al Farabi stated that an ideal country provides mechanisms related to public supervision and transparency in the use of data. Transparency will refer to the role of a fair leader. The state must comply with the principles of justice, truth and benefit (Agustina & Mutiullah, 2024). In this case, the DKI Jakarta government in the JAKI application must implement supervision and transparency to inform the wider public regarding how their data is collected, used and stored safely. These principles are very relevant if applied in the current era of digitalisation, especially in the JAKI user community.

Al Farabi's concept of the state is likened to a unified body, emphasising that the leader occupies the position of the heart in the body's organs. The heart is the main function of life, the organ with which other members can develop. If one part of the body hurts, the other parts feel pain. Happiness and well-being are felt if all body parts can move and function normally. This is in line with the concept of security in data protection, which is the obligation of all parties involving the public as the owner of

personal data, the government as the leader, and other data processors. The creation of cooperation between communities with a high level of awareness in using and disseminating data, as well as with the government and other parties as data processors who can function optimally in providing guarantees for the security of existing or processed data. As is the third concept of deliberative democracy with the implementation of openness and symmetry, where the public is given a statement guaranteeing the security of personal data, which is outlined in a regulation and proven by a series of audits carried out by a third party as issued by DKI Jakarta Governor Regulation Number 6 of 2020.

On the other hand, the DKI Jakarta Provincial Government has received SNI ISO/IEC 27001:2022 certification as compliance with international standards for Information Security Management Systems (SMKI). The DKI provincial government implements city data, where data from various sectors and other sources is collected in real-time to improve city operations efficiency and the quality of life for its residents. Some data may be private, restricted, or protected for security, privacy, or other regulatory reasons. In line with Al Farabi's philosophy, happiness can be achieved in two ways: by cultivating good habits consistently and by individuals harnessing their inner potential. In this case, not only does the DKI provincial government strive for happiness for its citizens, but it is the habit of community members to get used to being aware of personal data. On the other hand, the DKI Jakarta provincial government carries out its functions optimally by increasing security in the form of farewell system budgeting, preventive maintenance and corrective maintenance in providing information, which is transparent but limits personal matters so that the privacy of community members is maintained.

This state concept aims to create an ideal, civilised and just society. As explained in the book, a city (Medina) is made up of interconnected elements that work together to realise the vision of an ideal state. As per his idea, the state is functionally an institution that accommodates individual interests to create a better social life, with various communities forming the foundation of the state (Nur Alisa et al., 2023; Sunaryo, 2023). Similarly, Al Farabi likens the state to the structure of a healthy and perfect human body, where each part collaborates to achieve shared goals (Dwianto, 2018). Al Farabi views the state as an organisation consisting of several interconnected elements. The state was born based on the collective agreement of the citizens of the country and originates from urban society. This underscores the pivotal role cities play in a nation's prosperity. A prosperous country is one where its citizens enjoy material, spiritual and social well-being (Sariding & Rohmah, 2020). This theory resolves conflicts in communities that focus on finding an ideal country. A country's constitution is the highest legal reference that serves as the basis of state life.

Again, the legal protection that exists for a person's personal data is contained in the regulations related to Public Information Service Standards in the Republic of

Indonesia Information Commission Regulation Number 1 of 2021. In the SuperApps application, JAKI has implemented personal data protection as per public information service standards. In this application, a person's personal data is protected by regulations from the local government and the PDP and ITE laws. This shows that the state guarantees the welfare of its citizens in terms of the security of a person's personal data, which complies with the concept of a Prosperous State by Al Farabi. The depiction of the state and its people as members of a body is reflected in the state's function in terms of data protection. With the JAKI application, which aims to provide access to information about a prosperous city, it can be said that its citizens have achieved the goal of a dream city. Al Farabi believes that the state must have ideas (Ara'u) or reason that are truly fought for to achieve shared prosperity. This goal will lead to a point of happiness, one of which is by realising a smart city, which in this case is used as an indicator of an adequate public service system for the common good of society.

The JAKI SuperApps application serves as an accessible public service platform for city residents, offering simplicity and affordability. This application has become a means/container for connecting the citizens of DKI to the vision of al Madinah al fadilah (the ideal state). As highlighted in M. Zainal Abidin Ahmad's book, an ideal country should have concrete goals, with the ultimate goal being the happiness of its people. Each citizen is aware of their respective roles in supporting their country's aspirations to achieve happiness. According to Al Farabi's concept, establishing an ideal country is not just about realising happiness in the afterlife. However, it must be understood that creating a safe, peaceful and prosperous country requires the government and society's role. The DKI Provincial Government has attempted to develop a concept of cooperation with different levels of society. The JAKI SuperApps application reflects these efforts. However, it has also revealed tensions between the government and the wider community as they work together to transform DKI Jakarta into an ideal city.

Some translate the concept of the al Madinah al fadilah state as a vision of civil society. Al Farabi's concept rests on two main pillars: the concept of leadership and the concept of happiness, emphasising that for people to achieve true happiness, a leader is essential and that a leader must guide through both teaching and character building. This concept envisions a society that not only follows the law but also understands its reasoning and purpose (Kurniawan, 2018). For Indonesia, as a unitary state, the legal framework serves as the foundation for governance. Regional autonomy allows each region to strengthen its leadership, including DKI Jakarta, which is rapidly advancing—not just in infrastructure and the economy but also in areas like smart city development.

The smart city concept has become a competitive benchmark, with regions striving to establish themselves as smart cities, focusing on key indicators, such as

smart economy, smart governance, smart people, smart mobility, smart living and smart environment. Using the JAKI Super Apps application, one of 13 complaint platforms, including mass media and Report 1708, serves as a key tool for public service complaints. The Smart City Service Unit, responsible for developing JAKI, has centred its efforts on user-focused initiatives, including privacy-by-default and privacy-by-design solutions to safeguard complainant data. Through this digital infrastructure, DKI Jakarta has embraced the elements of a smart city, integrating them into its smart governance approach to enhance public services.

In 2014, DKI Jakarta transitioned to a smart city 4.0 with the formation of Jakarta Smart City (JSC). This regional public service agency is under the auspices of the DKI Jakarta Province communications, informatics and statistics service (Diskominfotik) with the task of optimising technology-based public services. All regulations regarding JSC have been accommodated in Gubernatorial Regulation Number 280 of 2014 concerning the Establishment, Organisation and Work Procedures of the Jakarta Smart City Management Unit. One of JSC's service products is the JAKI Application, Jakarta's first super-app developed in 2019. It is called a super-app because JAKI integrates more than 60 features and approximately 150 applications belonging to regional government organisations. This makes public services more effective and efficient. With this application, public transparency can also be achieved while still providing access to personal data protection the application users. This application provides services, including citizen reports, where this service is integrated with the Community Rapid Response (CRM) system, allowing submitted complaints to be followed up quickly. On this page, the personal data of a reporter/complainant is hidden from the public so that the reporter's security can be protected. This is in accordance with the SOP developed in JSC policy. If we return to the concept of an ideal state by Al Farabi, this service concept is in accordance with the idea of Al Madinah Al Fadilah, where there is a relationship between the leader and the people, specifically the leader as a forum that protects the people by creating access to public services without leaving the element of security for its citizens.

DKI Jakarta has been a smart city from 2020. Almost all aspects of government and public services are application-based. Thus, there need to be aspects of adequate legal protection as stated in the 1945 Constitution, Article 28 letter G, the ITE Law, and Minister of Communication and Information Regulation Number 5 of 2020 concerning Private Environmental Electronic System Operators. Furthermore, the Information Commission Regulation of the Republic of Indonesia Number 1 of 2021 concerning Public Information Service Standards also mandates that personal data must be stored, maintained, and protected as confidential.

In line with these regulations, the JAKI super-app application has implemented SOPs in the form of Governor's Regulations and Regional Secretariat Decrees, ensuring secure data processing and information protection. Law enforcement, as

stipulated by the PDP Law and ITE Law, plays a crucial role in safeguarding these processes, while the Jakarta Smart City Management Unit continuously enhances security farewell system budgeting preventive and corrective maintenance. Furthermore, the public is educated about their responsibility to protect personal data, a duty that also lies with the application users, as outlined in the information provided on the Play Store and App Store.

However, the effectuation of DKI Jakarta Governor Regulation Number 6 of 2022 concerning the Collection and Exchange of Electronic Data within the DKI Jakarta Provincial Government as a basis for data protection, security as well as monitoring and evaluation requires adjustments to data protection efforts that are in line with the Personal Data Protection Law that was passed ten months later. To strengthen these efforts, regional regulations are needed, particularly to enforce criminal penalties for data misuse.

CONCLUSION

This research presents a scientific analysis of the legal protection of individual citizens' personal data managed by government public service applications. According to the theoretical framework, the right to privacy is a human right whose nature is personal, and ownership is inherent in each individual. The responsibility for processing and managing personal data lies with the individual and the data processing party. Since a policymaker as a data processing party is obliged to assure the security of the data itself, the DKI Jakarta provincial government has issued Governor Regulation Number 6 of 2020 concerning the Collection and Exchange of Electronic Data within the DKI Jakarta Provincial Government and has received international standard certification in the field of data management and security. From Al Farabi's perspective on the concept of an ideal state, the responsibility for fulfilling a major state's criteria is determined by the leader and the support of cooperation from the community as citizens as a unified organ. Several fundamental principles are reflected in the ethics of a leader, especially in providing guarantees for the protection of personal data, including the principles of wisdom and responsibility, legal principles that must be fair and firm, education and public awareness, welfare principles and compliance with the principles of supervision and transparency.

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