1. Introduction

In the ever-evolving digital era, information technology has become an integral part of everyday life. Generation Z, which consists of individuals born between 1997 and 2012, grew up and adapted to this technology early in their lives. One of the latest innovations that have caught the attention of generation Z is the introduction of the digital identity card (digital ID card). As a substitute for physical ID cards that have been around for a long time, Digital ID cards offer various benefits and attractive potential for generation Z. In this approach, digital ID cards are a digital version of a person's identity that is stored electronically, with personal information such as name, address, and number identity. However, a digital ID card is not just a substitute for a physical ID card but a tool that enables generation Z to make wider use of information technology. This study aimed to explore the use of digital national identity cards in generation Z. This research is qualitative research that explores and describes in detail a situation or phenomenon of the research object being researched by developing concepts and gathering existing facts. Raw data is analyzed and organized by data collection date, data source, data type, data description, and data nature. All data must be read in order to find out what data has been obtained, the source of the data, and its meaning. Overall, generation Z has a positive opinion of digital ID card services. They see it as convenience and convenience to access their identity electronically, avoiding the need to carry physical documents all the time and speeding up administrative processes. Generation Z also appreciates the administrative efficiency offered by digital Identity Card services, enabling them to process ID card extensions or personal data changes more easily and quickly. Apart from that, generation Z also appreciates the integration of digital ID card services with other digital platforms. They can integrate their identity with banking services, e-commerce, or online ordering platforms, enabling them to make transactions easily and quickly. Generation Z is also aware of the positive impact of using digital ID cards on the environment by reducing the use of physical documents and contributing to sustainability.
One of the main benefits of digital ID cards for generation Z is easy access to public services and online transactions. With a digital ID card, generation Z can access various government services, such as making passports, driving licenses, or online education registration without having to visit an office or fill out physical forms. This not only saves time but also increases efficiency and convenience. In addition, digital ID card also opens up new opportunities in terms of security and privacy. In a digitally connected world, privacy is becoming an increasingly important issue. Digital ID cards can be equipped with high-level security features, such as data encryption and two-factor verification, which help protect gen Z’s personal information from misuse and cybercrime (Boyd, 2007). Generation Z can also easily control access to their personal information, granting permission only to those they trust.

In addition, the digital ID card also allows generation Z to be actively involved in a digital society. Using their digital identity, they can easily participate in online platforms, interact with communities, shop online, or access relevant digital content. Digital ID cards can also provide an opportunity to build a positive digital reputation, which can have a positive impact on aspects of their education, career, and social life. However, the use of digital ID cards also poses certain challenges and considerations. Generation Z needs to have a strong understanding of digital ethics and security in order to avoid identity abuse or cyberattacks. In addition, the government and service providers must ensure the security of the digital infrastructure that supports the use of Digital ID cards and involve generation Z in the decision-making process regarding the use and development of this technology (Prensky, 2001; Lenhart, 2010). This study aimed to explore the use of digital national identity cards (digital ID cards) in generation Z.

2. Literature Review
Digital national identity card (Digital ID card)
A digital identity card (digital ID card) is a digital or electronic version of the national identity card (ID card) that is usually issued by a country's government to its citizens. A digital ID card is designed to store a person’s personal identity information, such as name, address, date of birth, and identity number, in digital form. Digital ID card uses information and communication technology to replace the traditional physical form of ID card. Identity information in the digital ID card is stored in a protected electronic database and can be accessed through the appropriate computer system or electronic device. Digital ID card allows easier and faster access to government or private services that require official identification, such as making a passport, opening a bank account, or enrolling in education. With a digital ID card, individuals can apply online without needing to visit an office or fill out a physical form.

A digital ID card can store more information than a physical ID card. In addition to basic identity data, a digital ID card may include additional information such as medical history, educational history, or organizational membership records, which can facilitate further administrative and identification processes. Digital ID cards can increase security and privacy. Advanced security technologies can be implemented in digital ID cards, including data encryption and digital signatures, which help protect personal information from misuse or forgery. In addition, digital ID card users can have more control over access to their personal information by giving permission only to those they trust (Livingstone, 2016; Ofcom, 2019).

However, implementing a digital ID card also requires serious security and data protection considerations. It is important for governments and service providers to adopt appropriate security measures, including protections against cyberattacks and data abuse, as well as robust privacy policies to
protect individual rights. The digital ID card is an evolution of the traditional physical ID card, bringing benefits in terms of accessibility, efficiency, and security. In the current digital era, the digital ID card is an important tool for generation Z and future generations in utilizing advances in information technology for identification purposes and administrative services.

Generation Z

Generation Z refers to a group of individuals who were born between 1997 and 2012. They are a generation that grew and developed in a rapidly developing digital era. Generation Z is often referred to as "Digital Natives" because they are accustomed to and highly skilled in using information and communication technologies, such as the internet, social media, mobile devices, and digital applications. Generation Z grew up in a highly digitally connected environment. They have grown up with easy access to the internet and technology that allows them to connect with others, get information, and access various services online. Generation Z has developed capabilities for multitasking, digital problem-solving, and adapting quickly to changing technology (Bennett, 2008; Twenge, 2017).

Generation Z also shows a tendency to have media consumption preferences. They are more likely to spend time on digital platforms such as YouTube, Instagram, Snapchat, and TikTok than traditional media such as television or newspapers. They are also active in sharing their own content via social media and engaging in online communities.

In addition, generation Z also shows unique social characteristics. They tend to have an inclusive outlook, accepting multiple identities and sexual orientations. They also often participate in social movements and have a great concern for issues such as climate change, gender equality, and social justice.

Generation Z has had a significant impact on many aspects of life, including education, work, and popular culture. They influence fashion trends, lifestyles, and consumer preferences. In the context of education and work, generation Z has the ability to adapt quickly to changes in technology and take advantage of it for academic and career purposes. Overall, generation Z is a group that grew up in the digital era and had a strong influence on culture, technology, and social dynamics. Their technological prowess, inclusive attitude, and concern for global issues make them a significant force in shaping and changing the world we live in today.

Factors influencing the use of digitization services

Accessibility

One important factor is the availability and accessibility of digital infrastructure, such as fast and affordable internet access, as well as the availability of devices such as computers, smartphones, or tablets. If digital infrastructure is not available or difficult to access, the use of digital services can be hampered (Hargittai, 2013).

Digital literacy

The level of individual digital literacy also affects the use of digital services. Digital literacy involves understanding how to use digital technology, the ability to search, evaluate and use information online, as well as the ability to maintain security and privacy in the use of digital services. Individuals with low levels of digital literacy may not feel comfortable or confident in using digital services (Litt, 2013).

Age

Age can also affect the use of digital services. The younger generation, such as Generation Z and millennials, tend to be more skilled and familiar with digital technologies and, therefore, more likely to actively use digital services. However, with the increase in digital literacy among the older generation, the use of digital services may also increase (Rideout, 2015).
Trust and privacy

Trust in data security and privacy is an important factor in the use of digital services. If individuals feel unsure or concerned about the security of their personal data when using digital services, they may be reluctant to use or share their information online (Helsper, 2010).

Value and benefits

Individuals are more likely to use digital services if they see clear value and benefits. If digital services offer significant convenience, convenience, efficiency, accessibility, or other advantages over non-digital alternatives, usage of those services is likely to increase (Boyd, 2010).

Social and cultural context

The social and cultural context also influences the use of digital services. Factors such as cultural norms, government regulations, social customs, and technology adoption in the surrounding environment can influence interest and habit of using digital services.

User experience

Previous experience in using digital services can affect the comfort level and individual confidence in using digital services in the future. Positive experiences with digital services can encourage wider use, while negative experiences can make individuals hesitant or reluctant to use digital services.

Economic factor

Economic factors, such as internet access fees, device fees, and fees for using digital services, can also affect the use of digital services. If costs are too high or unaffordable for certain individuals or groups, the use of digital services may be limited. Overall, these factors interact with each other and can affect the level of use of digital services. Efforts to increase accessibility, digital literacy, trust, and the benefits provided by digital services can drive wider adoption and use in different groups of society.

3. Methods

This research is qualitative research that explores and describes in detail a situation or phenomenon of the research object studied by developing concepts and gathering existing facts. This research was conducted online by utilizing various online communication features to obtain information from informants. The informants in this study were generation Z, who were more than 17 years old, had identity cards, the informant’s contact number had been obtained by the researcher through a legal process and did not violate applicable regulations, and report have agreed to participate in this study. The sampling process was carried out until data saturation occurred from the informant interview process.

To collect data from information sources (informants), research requires assistance instruments, namely screening forms, informant data, interview guidelines, and recording equipment. In this research, primary data and secondary data are needed. Primary data is data directly from the original source. This data was collected at the time of conducting interviews through cellular communication channels or through various other communication media. While secondary data is data obtained through a review of documents and literature sources, journals, and research reports related to the theme of this research. The raw data to be analyzed is organized based on the data collection date, data source, data type, data description, and data nature. All data must be read in order to find out what data has been obtained, the source of the data, and its meaning. After collecting data, researchers must know what information each informant conveys and compare it with other informants. By understanding all the data, the researcher will be able to select/reduce important, new data and data related to the research question. Furthermore, researchers can
also classify or group, or create themes for the selected data. Coding is the process of marking the data that has been grouped. Groups of similar data are given the same code. Through coding, researchers can produce new categories or themes. Through coding, researchers produce themes or categorizations of research data which are findings. Based on the resulting themes, the researcher then makes brief and systematic descriptions so that the themes found become clearer. The next step is to look for relationships between one theme and another. The results of the construction of relationships between themes or categories then need to be interpreted so that other people understand them.

4. Results and Discussion

The results of interviews with 50 informants found that around 52% of the informants had used digital ID card services. Meanwhile, around 48% report stated that they had not used the digital ID card service. The affordability of 52% is still relatively good. However, the existence of 48% is reported. Those who have not used this digital ID card service need further attention and exploration in order to support the affordability of more digital ID card services massive. Around 48% of informants stated that there was a problem with the accessibility of digital ID card services. The informant stated that the digital ID card service only reached Android users and was not yet available for iPhone users. The new digital ID card is available in the Play Store and is not yet available on the Google Play Apple store. When a digital service is only available on one particular platform, for example, only in the Play Store for Android devices and not yet available in the App Store for iOS devices, this can cause barriers to affordability. If a digital service is only available on the Play Store, users using iOS devices such as iPhones or iPad cannot access the service directly. The same is true if the service is only available on the App Store, Android device users will face a similar obstacle. This causes some users to be limited in accessing the service. When a digital service is only available on one platform, users who prefer or have better accessibility to other platforms will lose the option to use the service. This can limit the possibility of using digital services and reduce user satisfaction. With limited accessibility on a single platform, digital service developers may miss opportunities to achieve affordability wider. If the service is only available on one app, users on other platforms can’t download it, so developers may lose out on the potential user base and the affordability that platform might bring.

Digital ID card services can provide convenience and comfort for generation Z. With a digital ID card, they no longer need to carry their physical ID card documents all the time. With digital ID cards, Gen Z can quickly access their identity electronically. This simplifies the identity verification process in a variety of situations, including online purchases, opening accounts on digital platforms, or enrolling in other digital services. They can use their digital ID card to prove their identity more conveniently, avoiding the need to fill out forms or send physical copies of their digital ID cards. The digital ID card service allows generation Z to have easy and fast access to their identity on their mobile devices. They can easily show their digital ID card via their smartphone in situations that require identity verification, such as when traveling, attending events, or accessing digital services. This provides greater flexibility and mobility compared to carrying a physical ID card. With digital ID cards, gen Z doesn’t have to spend time and effort looking for and carrying their physical ID card every time it’s needed. Physical documents can easily be lost or damaged, and finding or replacing them can take significant time. With digital ID cards, this process becomes more efficient and saves time and effort. The use of digital ID cards can contribute to sustainability and environmentally friendly efforts. By reducing the use of physical documents, such as photocopies of ID cards or printed forms, we can reduce the paper waste and consumption of natural resources associated with
the production and distribution of physical documents (Valkenburg, 2007; Reich, 2012).

Digital ID card services can help generation Z save time in administrative processes. With a digital ID card service, generation Z does not need to queue at the population administration service office to apply for an extension of the ID card or make changes to personal data. They can access these services online, avoiding the time spent queuing and waiting their turn. This helps save valuable time and allows them to use that time for other, more productive, or enjoyable activities. Digital ID card services can be accessed anytime, 24 hours a day, 7 days a week. Generation Z can update their ID card information or carry out other administrative processes without having to pay attention to the working hours of the population administration service office. They can do it at a time that is most convenient for them, including evenings or weekends, without having to disrupt their daily schedule. With digital ID card services, generation Z can quickly access and update their ID card information online. Time-consuming administrative processes, such as filling out forms, collecting documents, and physically sending them, can be avoided. This saves the effort and effort required in traditional administrative processes. Digital ID card services can be integrated with other digital services, such as banking applications, e-commerce, or online ordering platforms. Generation Z can use their digital ID card as an identity verification tool in various digital services without the need to upload or send a physical copy of their ID cards. This makes the transaction or registration process more efficient and easy to do (Lenhart, 2001; Livingstone, 2009).

Generation Z is very sensitive about the security of their personal data. Concerns about data security in digital ID card services are normal. To build trust and adoption of these services, strong security measures must be taken. Personal data in digital ID card services must be encrypted using a strong encryption method. Encryption ensures that data can only be read by those who have the correct encryption key. This helps protect data from unauthorized access or information theft. The network used to transfer data in digital ID card services must have adequate security measures in place. A secure communication protocol, such as HTTPS, must be used to protect the integrity and confidentiality of data during transmission. Digital ID card services must have strong measures for verifying user identity. This includes using secure authentication methods, such as two-factor verification, which combines something known (e.g., a password) with something one has (e.g., a smartphone) to ensure that only the rightful owner can access ID card data. Digital ID card data must be stored securely in an adequate infrastructure. It is necessary to implement physical and logical security measures, such as firewalls, storage encryption, and strict access controls, to protect data from internal and external threats. Digital ID card services must be accompanied by a clear and transparent privacy policy. Users must be provided with information about how their data will be used, stored, and protected. They should also be given the option to give consent or withdraw their consent regarding the use of their personal data (Jones, 2008; Subrahmanyam, 2008).

For generation Z, digital inclusion and equal access are very important in Digital ID card services. Adequate digital infrastructure is the main prerequisite for ensuring the accessibility of Digital ID card services. A stable and wide-reaching internet network, including in rural areas, must be available so that everyone can access digital ID card services equally. It is important for the government and related institutions to continue to expand the reach of digital infrastructure so that all individuals can easily access these services. Generation Z realizes that affordable internet access is a key factor in ensuring digital inclusion. The high cost of internet access can be an obstacle for the less fortunate to access digital ID card services. Therefore, the government and related institutions need to work together with internet service
providers to reduce access costs and expand subsidy programs so that internet access can be reached by everyone. Generation Z realizes that the availability of digital devices such as computers, smartphones, or tablets is also important in ensuring digital inclusion (Poushter, 2016). Many people, especially those on low incomes, may not have access to these devices. Initiatives such as device subsidy programs or computer access in public places can help ensure that all individuals have equal access to Digital ID card services. Apart from infrastructure factors, education, and awareness are also important in ensuring digital inclusion. Generation Z can play an active role in increasing public awareness about the benefits and processes of using Digital ID card services. Education and training programs should be provided to communities to ensure that they have sufficient knowledge and skills to use these services effectively.

5. Conclusion

Overall, Generation Z has a positive opinion of digital ID card services. They see it as convenience and convenience to access their identity electronically, avoiding the need to carry physical documents all the time and speeding up administrative processes. Generation Z also appreciates the administrative efficiency offered by digital ID card services, enabling them to process ID card extensions or personal data changes more easily and quickly. Apart from that, Generation Z also appreciates the integration of digital ID card services with other digital platforms. They can integrate their identity with banking services, e-commerce, or online ordering platforms, enabling them to make transactions easily and quickly. Generation Z is also aware of the positive impact of using digital ID cards on the environment by reducing the use of physical documents and contributing to sustainability.

However, generation Z also emphasizes the importance of security and protection of personal data in digital ID card services. They have concerns about the security of their data and request strong security measures and clear privacy policies to build their trust in using the service. Overall, Generation Z sees digital ID card services as an innovative solution that provides significant benefits in their digital life. However, they also encourage the government and related institutions to prioritize data security and ensure equal access for all individuals in utilizing digital ID card services.

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