



Jogja smart service as a digital public services: based on agile governance perspective

Bagaskoro Nur Abu Yogar¹, Dyah Mutiarin¹, Muhammad Noor Cahyadi Eko Saputro¹

^{1*} Department of Government Affairs and Administration, Universitas Muhammadiyah Yogyakarta, Indonesia

ARTICLE INFORMATION ABSTRACT

Article History:

Submission: 31-05-2023

Revised: 11-06-2023

Accepted: 11-06-2023

Keywords:

Jogja smart service;
digital; public service;
covid-19; agile
governance.

*** Korespondensi:**

Dyah Mutiarin

dyahmutiarin@umy.ac.id

*Jogja Smart Service (JSS) is a digital-based public service innovation created by the Yogyakarta city government, the purpose of creating Jogja Smart Service (JSS) is to meet the needs of the public service sector to the citizens of Yogyakarta which was driven by the high number of Covid-19 cases in Yogyakarta at that time, this forced the city government to continue to provide services to the society even amid a pandemic. This research uses a qualitative type of research with a case study approach. This research aims to test the theory of Agile Governance developed by Kruchten to innovate digital-based public services Jogja Smart Service (JSS). Researchers will test 3 indicators contained in the theory of Agile Governance against Jogja Smart Service (JSS), namely indicators: 1) Based on Quick Wins, which will assess Jogja Smart Service (JSS) in terms of speed and accuracy. 2) Systematic and Adaptive Approach, which will assess systematic and adaptive aspects. 3) Simple Design and Continuous Refinement which will assess the aspects of the ability of the Yogyakarta city government to develop Jogja Smart Service (JSS). Based on the results of the research, it can be concluded that the purpose of creating Jogja Smart Service (JSS) is to make it easier for the Yogyakarta society to get public services from the government by only accessing **them** through digital devices. The result of the study concluded that there are still several aspects of the Agile Governance indicators that are still not fulfilled by Jogja Smart Service (JSS), this digital-based public service innovation can be a breakthrough that is very useful and also needs to be continuously refined both in server quality, service response, features, and data security, it is useful for improving the quality of digital-based public services in Indonesia.*

1. INTRODUCTION

Indonesia is one of the countries with the highest number of positive cases of Covid-19 in the world. Reported from the official page of WHO [1] shows that as of November 15, 2022, Indonesia had a total of 6,582,291 million confirmed Covid-19 cases, 6,365,087 million individuals who had recovered, and 159,253 persons who had passed away. In the meantime, there were 232 countries and 632,533,408 cases worldwide, and 6,592,302 people died [2] Covid-19 positive cases have continued to spread throughout Indonesia up until this point. This virus is thought to spread very quickly and is gradually reaching both urban and rural areas of Indonesia. Therefore, despite the existence of a mass vaccination campaign in nearly all regions of Indonesia, statistics indicating the number of positive cases of Covid-19 are always available. Indonesia has established numerous different strategies to support the increasing rate of positive cases of Covid-19 in addition to the intense vaccination campaign carried out by the government and commercial organizations in various parts of the country. That is accomplished



by altering the Lockdown to Large-Scale Social Restrictions (PSBB) and Implementation of Restrictions on Society Activities (PPKM) [3].

Large-Scale Social Restrictions (PSBB) are described as health quarantine measures in Indonesia that forbid residents from leaving their houses to lessen outdoor activity that is thought to be a source of the Covid-19 virus. Government Regulation (PP) No. 21 of 2020 Concerning Large-Scale Social Restrictions (PSBB) in the Context of Accelerating the Handling of Coronavirus Disease 2019 (Covid-19) is the legal foundation for PSBB [4]. The PSBB is typically used in locations where there is concern that they might become sites of Covid-19 transmission, including schools, houses of worship, workplaces, campuses, marketplaces, shopping centers, and tourist attractions. To stop the increase in Covid-19 cases, the PSBB continued with the Implementation of Restrictions on Society Activities (PPKM). However, PPKM is only used in areas where Covid-19 infection is spreading, such as the islands of Java and Bali. The Instruction of the Minister of Home Affairs number 1 of 2021 contains the PPKM itself [5].

It is necessary to resume normal operations because Indonesia cannot just stop moving since the world keeps rotating. Hence, the coining of the phrase "New Normal". The term "New Normal" refers to a situation where Indonesians may resume their daily routines. They must, however, adhere to stringent health regulations, such as wearing masks in public and always using hand sanitizer. It is envisaged that the New Normal would revitalize the Covid-19-affected industries. The Covid-19 epidemic poses a risk to more than just human health. However, Covid-19 has also influenced nearly all industries, such as tourism, the economy, transportation, social issues, gastronomy, and even the public sector and services [6]. The public sector, which at first provided more traditional services, saw one of the biggest changes because of the Covid-19 pandemic. Epistemologically, the term "convention" refers to a decision reached by members of an organization, a society, or even a nation. Therefore, conventional might be seen as a consensus. The word conventional may also indicate something conventional or old-fashioned [7]. The traditional phrase for public services or bureaucracy refers to situations where the population can receive services manually or where they must be provided directly, including contacts between people. However, there is concern that it could spread Covid-19 if there is contact.

The Special Region of Yogyakarta is one place where the conventional public service system must be replaced with a digital one. In Yogyakarta, there were 227.869 confirmed cases of Covid-19 as of November 2022 [8]. Affected by the government's PSBB strategy is also Yogyakarta. The Yogyakarta municipal administration also developed an invention in the form of an application or news portal, entitled Jogja Smart Service, to continue serving the society (JSS). In the middle of the Covid-19 pandemic, digital innovation in the form of JSS is anticipated to make it easier for Yogyakarta residents to communicate with the government and access public services. The conversion of traditional services to digital ones is an example of digitization that is supposed to make it easier for people to connect with the government at anytime and anywhere without having to worry about doing so face-to-face, particularly in the middle of the Covid-19 pandemic.

The government was asked to be agile in providing public services even amid the Covid-19 pandemic at that time, Luna, Kruchten, and Moura described agile governance as follows: "Agile government is the ability of human societies to sense, adapt and respond rapidly and sustainably to changes in its environment, using the coordinated combination of agile and lean capabilities with governance capabilities, to deliver value faster, better, and cheaper to their core business". [8]. Therefore, it can be concluded that in this agile governance concept, the government is required to be agile in dealing with developments both unexpected and unexpected. So that in dealing with various situations, the government can take fast, appropriate, and innovative actions. Luna, Kruchten, and Moura (2015) put forward six indicators of Agile Governance theory, such as 1) Good Enough Governance, 2) Business Driven, 3) Human Focused, 4) Based on Quick Wins, 5) Systematic and Adaptive Approach, 6) Simple Design and Continuous Refinement. The research objective of the article is the Jogja Smart Service (JSS) system that is

uses by the City Government of Yogyakarta. The problem statement of the research article is to address development of public services such as digital government, e-government, digitization, and digital technologies. Public administration, the emergence of digital-based public services has developed with the digitalization that has begun to be widely applied in the development of smart cities.

2. LITERATURE REVIEW

2.1 Digital disruption

Based on the findings from [9] explains that the implementation of digital-based public services must have two competencies, namely managerial competence and serving competence. The findings from [10] explain that collaboration is needed in the implementation of digital-based public services as carried out by the Bantul Village Information System (SID) [11]. The findings show that in the transformation of public services from conventional to digital, it must meet the aspects of being fast, precise, easy, and safe [12]. The findings explain that in the implementation of digital-based public services, a legal basis is also needed so that it can run well [13]. The results of research explain that the use of websites is very supportive of the implementation of digitalization of public services [14].

Research from [15] explained that advances in digital-based technology, often known as disruption 4.0, need the bureaucratic system to implement reforms in work patterns. This is consistent with findings from [16] who explained that the idea of ASN Corporate University that must be implemented by public institutions or organizations to encourage the creation of Smart ASN. In the current era of pandemic and disruption, the government is asked to be responsive to technology, and to continue to provide public services that keep up with the times. One of the innovations needed is e-government.

E-government is a service that offers information, business-related advice, health information, and the most recent news on the news that the government relays to the public. E-government may be applied to legislative, judicial, and administrative processes to improve internal efficiency, public service delivery, and democratic governance processes. Based on the research's findings [17] It is expected that Indonesia can enhance the performance of e-Government by internal and external parties with the adoption of the Electronic Information and Transaction (ITE) Law so that e-Government may be fully felt by every level of Indonesian society [18]. Research explained that with the insistence of Covid-19, forcing the government to make a change or transformation [19], especially in the bureaucratic system, it is hoped that both the government and the society can adapt to these changes. Research from [20] shows the need for the public's perception of old public administration to change for the bureaucracy to be optimal and productive with a collaborative approach from the government. Research from [21] shows that one aspect of digitization is the conversion of patient data-gathering techniques from traditional to website/digital. The use of digitization can simplify illness diagnosis for healthcare professionals as well as consultation and monitoring procedures.

Indonesia is one of the countries that is still developing e-Government, as seen by the development of the Jogja Smart Service application. Based on research by [22] Jogja Smart Service is seen as feasible in an endeavor to develop the notion of a Smart City in Yogyakarta. This is consistent with the findings of [23] who claim that the Jogja Smart Service application offers a variety of services, including those that help Yogyakarta residents with emergencies, grievances, public services, and up-to-date information.

So that the Jogja Smart Service application may function properly and according to schedule. As a result, the Yogyakarta city administration must actively promote socialization at all societal levels. For the usage of Jogja, Smart Service to be fully effective, the society and the government must communicate and reciprocate. According to research from [24] to foster intensive bureaucratic communication, which is then anticipated to transmit real and trustworthy information to satisfy the demands of the society, it is required to develop a favorable and communicative work environment. The bureaucracy requires a two-way

communication system, according to research [25] to prevent meaning from being distorted or diverted.

Studies on public services in the last 10 years have been studied in several research scopes such as e-government, digital government, digital technologies, and digitization. The following are the results of "network visualization" of digital public services keywords that refer to data on the distribution of these topics based on the relationship between these topics and other topics in the Scopus database.

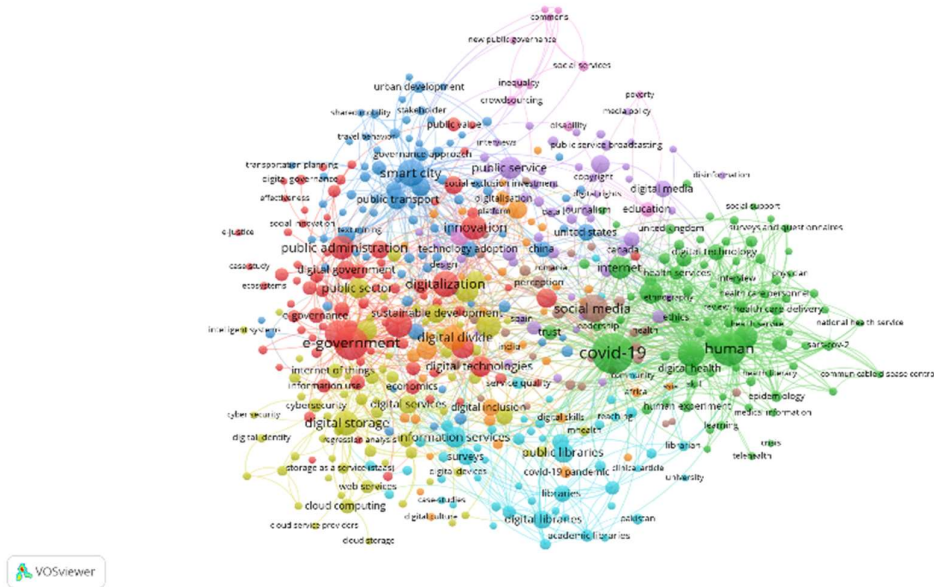


Figure 1. Network visualization of digital public services keyword

The analysis of network visualization data according to the following Figure 1 data, it is found that the development of digital technologies in public services has accelerated during the covid-19 period. In addition, in the perspective of public administration, the emergence of digital-based public services has developed with the digitalization that has begun to be widely applied in the development of smart cities. Through rapid developments in the study of digital public services, digital government is not only limited to developing e-government but must be able to be agile in the face of disruption. Therefore, this research will fill in the gaps that will focus on agile governance theory in reviewing Jogja Smart Service (JSS). The theory that will be used in this study is Krutchin's Agile Governance theory which has 6 indicators, namely:

- a. Good enough governance: In the first indicator, it can be interpreted as the level of governance must always be adapted according to the organizational context or the government must refer to the organization as the main foundation in service to the society
- b. Business-driven: In the second indicator, it can be interpreted as the business must be the reason for every decision and action
- c. Human focused: the third indicator, can be interpreted as People must feel valued and incentivized to participate creatively or the government must focus on doing services to the society directly
- d. Based on quick wins: In the fourth indicator, it can be interpreted as the quick wins have to be celebrated and used to get more impulse and results or the first achievement must be used as motivation to return to achieve the next success
- e. Systematic and adaptive approach: the fifth indicator, can be interpreted as Teams must develop the intrinsic ability to systematically handle change
- f. Simple design and continuous refinement: In the sixth indicator, it can be interpreted as teams must deliver fast, and must always improving

Therefore, this study aims to fill the gap in previous research and assess the implementation of the theory of Agile Governance in the Jogja Smart Service (JSS) application. Where researchers will use several indicators in this study, such as 1) Based on quick wins, 2) Systematic and adaptive approach, 3) Simple design and continuous refinement

3. METHOD

This research uses a qualitative type of research with a narrative review. According to Denzin & Lincoln, qualitative research is an attempt to rationalize and interpret or interpret the reality of life based on what the researcher understands. Therefore, this type of research usually involves a large amount of evidence in the form of field data that describes the natural and problematic events of the life of each human being [26]. According to [1], a narrative review is a structured approach used to present and conduct a comprehensive review of existing literature on a research question or particular topic [27]. Where the discussion will be divided into six indicators according to the Agile Governance theory by Luna, Kruchten, and Moura Figure 2.

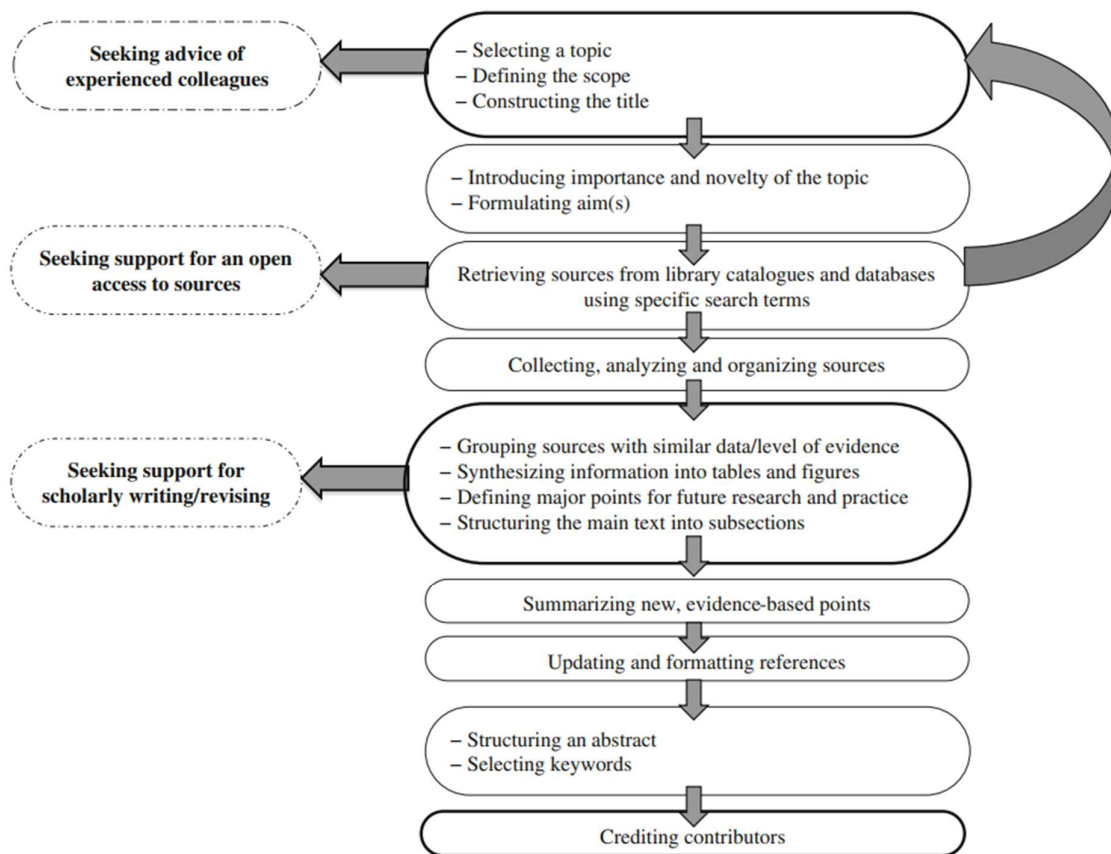


Figure 2. The main step of narrative review Source: Adapted by [1]

4. RESULT AND DISCUSSION

Jogja Smart Service (JSS) is a public service innovation that can be accessed through its official website by accessing the link: <https://jss.jogjakota.go.id/> and can also be downloaded through the Google Play Store for Android users and the App Store for iOS users. In JSS, there are quite a lot of services that can be used by residents, especially in Yogyakarta. In the chart below, researchers have grouped services into various types of public services in various fields:

Based on Figure 3 above, it can be concluded that people more often access General Service features such as the Yogyakarta city government's free hotspot feature. Then people also tend to

often use social features such as access to the latest news that has been provided and is always updated in Jogja Smart Service (JSS).

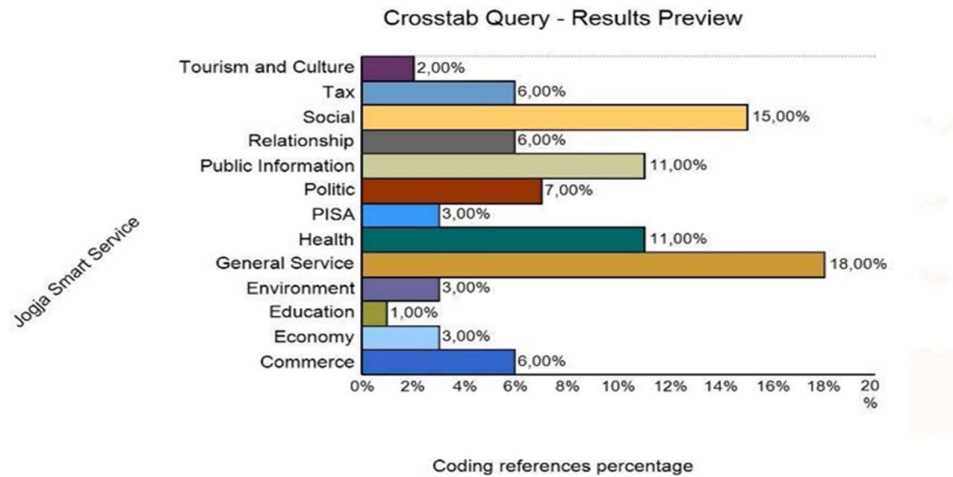


Figure 3. Crosstab query analysis of the most frequently used JSS features source: processed by author from NVivo 12 Plus

4.1 Based on quick wins

The first indicator to be outlined is "Based on Quick Wins". In this indicator, researchers will assess two aspects of Jogja Smart Service (JSS), namely speed and accuracy. The main purpose of creating the Jogja Smart Service (JSS) application is to make it easier for the people of the Yogyakarta Special Region to obtain information and public services from the city government quickly, precisely, and actually. If assessed from the aspect of accuracy. Researchers assess that Jogja Smart Service, which since it was first issued on June 7, 2018, has met the aspects of accuracy, this was seen when the first outbreak of Covid-19 in Indonesia was estimated to enter in 2020. This is what makes the use of Jogja Smart Service (JSS) increasingly used by the people of Yogyakarta, because of the limited activities outside the home, therefore Jogja Smart Service is a solution to these limitations in fulfilling online society services that can be reached anywhere and anytime and from various kinds of electronic devices.

On the aspect of speed. Researchers assessed that Jogja Smart Service (JSS) still does not meet this aspect. This can be seen from the complaints submitted by the society in the comments section about downloading the Jogja Smart Service (JSS) application to Android users on the Google Play Store and iOS users on the App Store. Users of the Jogja Smart Service JSS application complain that this application is still quite slow in server issues and responses. Based on the explanation above, it can be concluded that the Jogja Smart Service application has not met the indicators from Based on Quick Wins. This is because there are still server issues that are considered slow and sometimes the response from the application is also slow. Therefore, improvements are needed in the future so that the Jogja Smart Service application can run optimally.

4.2 Systematic and adaptive approach

The second indicator, researchers will assess the Jogja Smart Service application in two aspects, namely the Systematic aspect and also the Adaptive aspect. The Systematic aspect of the Jogja Smart Service (JSS) Application can be interpreted as the ability of the city government team who have developed the Jogja Smart Service (JSS) application as a digital-based public service innovation. Therefore, the researcher concluded that Jogja Smart Service (JSS) has fulfilled the Systematic aspect. In the Adaptive aspect, the Jogja Smart Service (JSS) application can be considered to have met the Adaptive aspect, this can be seen on the official Jogja Smart Service (JSS) website directly, where JSS can adapt to the situation. This adaptation is in the form of a change in the public service system which at first could only be done conventionally or

directly, but Jogja Smart Service (JSS) can digitize the public service system, and people can access and get public services from the government using only an application. Based on the explanation above, it can be concluded that Jogja Smart Service (JSS) has met the Systematic and Adaptive Approach indicators. This is because Jogja Smart Service (JSS) has fulfilled the Systematic aspect and the Adaptive aspect.

4.3 Simple design and continuous refinement

The last indicator can be interpreted as the ability of the Yogyakarta city government team in designing and making the Jogja Smart Service (JSS) website and application pages feel simple and easy to use by the public. In addition to being assessed in terms of appearance, the Yogyakarta city government team must also pay attention to the security of users' data. Researchers assess that Jogja Smart Service (JSS) has fulfilled aspects of the Simple Design and Continuous Refinement indicator which of course still needs improvement, both improvements in server quality, improved service response, improved features, and improved user data security to avoid cybercrime. Here is the display of the main page menu of Jogja Smart Service (JSS):

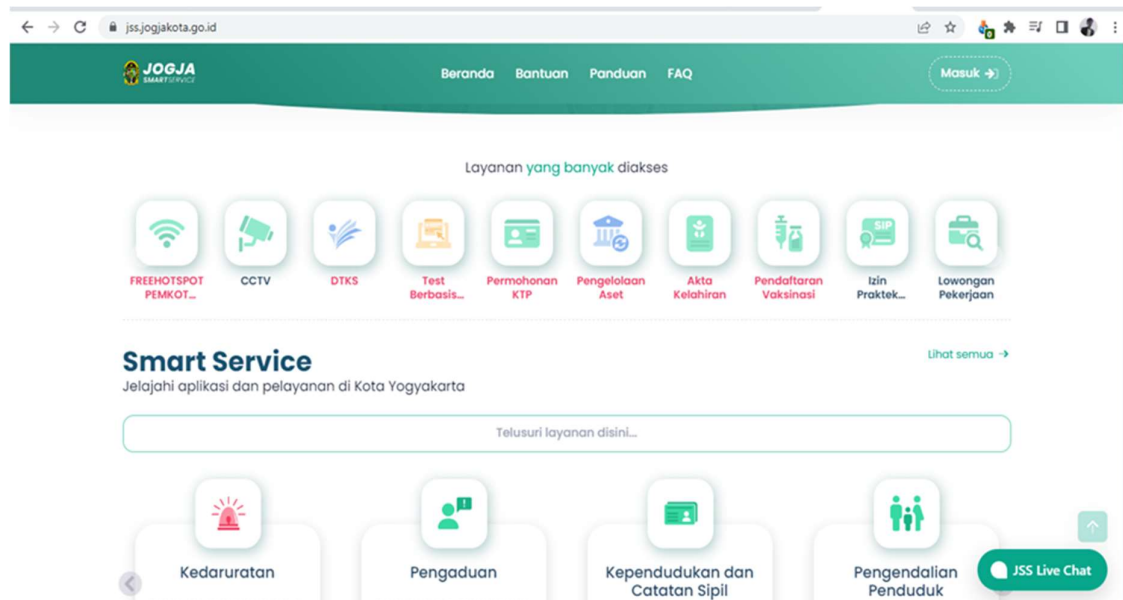


Figure 4. Display of Jogja Smart Service (JSS) main menu source: <https://jss.jogjakota.go.id/>

Figure 4 the Jogja Smart Service is a digital platform from Government City of Yogyakarta that provides various services to the Yogyakarta Society. The JSS platform serves multiple functions that are relevant into post-pandemic environment. The Society can avail and access online services through the Jogja Smart Service platform. Through this platform, the system can manage and collect a significant amount of data related to public service delivery, community needs, and user interactions. The data can be analyzed to identify trends, derive insights, and inform evidence based decision-making.

5. CONCLUSION

Based on the results of the research above, it can be concluded that the purpose of creating Jogja Smart Service (JSS) is to make it easier for the Yogyakarta society to get public services from the government by only accessing **them** through digital devices. This is also related to the implementation of the principles contained in Agile Governance, which prioritizes aspects of speed and accuracy in public services to the society. Although the overall results of the study show that there are still several aspects of the Agile Governance indicator that are still not fulfilled by Jogja Smart Service (JSS), this digital-based public service innovation can be said to

be a breakthrough that is very useful and also needs to be continuously refined both in server quality, service response, features, and data security, it is useful for improving the quality of digital-based public services in Indonesia. There are several potential areas of development for Jogja Smart Service and future research to adapt to the post pandemic environment and enhance its services.

REFERENCE

- [1] A. Y. Gasparyan, L. Ayvazyan, H. Blackmore, and G. D. Kitas, "Writing a narrative biomedical review: Considerations for authors, peer reviewers, and editors," *Rheumatology International*, vol. 31, no. 11, 2011, doi: 10.1007/s00296-011-1999-3.
- [2] F. Díaz, *New normal*, vol. 2021, no. 107, 2021.
- [3] K. K. dan Informatika, "Rencana Strategis 2020-2024 Kementerian Komunikasi dan Informatika," *Rencana Strateg. 2020-2024 Kementeri. Komun. dan Inform.*, 2021.
- [4] S. Schieman, P. J. Badawy, M. A. Milkie, and A. Bierman, "Work-Life Conflict During the COVID-19 Pandemic," *Socius*, vol. 7, 2021, doi: 10.1177/2378023120982856.
- [5] P. P. Siregar and A. H. Zahra, "Bencana Nasional Penyebaran COVID-19 sebagai Alasan Force Majeure, Apakah Bisa?," *Direktorat Jenderal Kekayaan Negara Kementerian Keuangan*. 2020.
- [6] R. Rani, "Impact of corona virus on the Indian economy," *UGC Care J.*, vol. 40, no. 60, pp. 3618–3626, 2020.
- [7] A. Rori, M. Mangantar, and J. B. Maramis, "REAKSI PASAR MODAL TERHADAP PENGUMUMAN PEMBATAAN SOSIAL BERSKALA BESAR (PSBB) AKIBAT COVID-19 PADA INDUSTRI TELEKOMUNIKASI DI BEI," *J. EMBA J. Ris. Ekon. Manajemen, Bisnis dan Akunt.*, vol. 9, no. 1, 2021.
- [8] Y. Winduajie, "Update Covid-19 DI Yogyakarta 15 November 2022," 2022. <https://jogja.tribunnews.com/2022/11/15/update-covid-19-di-yogyakarta-15-november-2022-tambah-135-kasus-baru-127-pasien-dilaporkan-sembuh>.
- [9] R. Suchowerska and A. McCosker, "Governance networks that strengthen older adults' digital inclusion: The challenges of metagovernance," *Gov. Inf. Q.*, vol. 39, no. 1, 2022, doi: 10.1016/j.giq.2021.101649.
- [10] A. Yunaningsih, D. Indah, and F. Eryanto Septiawan, "Upaya Meningkatkan Kualitas Layanan Publik Melalui Digitalisasi," *Altasia J. Pariwisata Indones.*, vol. 3, no. 1, pp. 9–16, 2021, doi: 10.37253/altasia.v3i1.4336.
- [11] Dewi Fadila *et al.*, "Peningkatan kesadaran masyarakat akan kesadaran destinasi agrowisata di Sumatera Selatan melalui pemanfaatan media sosial," *BEMAS J. Bermasyarakat*, vol. 3, no. 2, 2023, doi: 10.37373/bemas.v3i2.489.
- [12] D. F. Eprilianto, G. W. Pradana, and Y. E. K. Sari, "DIGITAL INOVASI SEKTOR PUBLIK: EFEKTIVITAS KOLABORASI DALAM IMPLEMENTASI INOVASI DEGA DIGITAL," *J. EL-RIYASAH*, vol. 10, no. 2, 2020, doi: 10.24014/jel.v10i2.8909.
- [13] A. Afriyani, D. Muhafidin, and E. Susanti, "Transformasi Digital Pelayanan Perizinan Berusaha (SI ICE MANDIRI) di Mal Pelayanan Publik Kabupaten Sumedang," *J. Manaj. dan Organ.*, vol. 13, no. 2, 2022, doi: 10.29244/jmo.v13i2.38093.
- [14] J. T. Nugraha, "E-Government Dan Pelayanan Publik (Studi Tentang Elemen Sukses Pengembangan E-Government Di Pemerintah Kabupaten Sleman)," *J. Komun. Dan Kaji. Media*, vol. 2, no. 1, 2018.
- [15] M. et al Amin, "tunjangan memiliki bobot paling besar yaitu 24.47%. Pada faktor dimensi motivasi kerja diketahui bahwa faktor yang memberi kontribusi besar atau dominan terhadap peningkatan kinerja pegawai Dinas Sosial Kabupaten," *Edukasi Islam. J. Pendidik. Islam*, vol. 11, no. 1, pp. 1167–1182, 2022, doi: 10.30868/ei.v11i01.2979.
- [16] K. J. Ferdian, D. Faedlulloh, and I. Ibrahim, "Birokrasi, Disrupsi, dan Anak Muda: Mendorong Birokrat Muda menciptakan Dynamic Governance," *J. Transform.*, vol. 7, no. 1, pp. 112–127, 2021, doi: 10.21776/ub.transformative.2021.007.01.5.

- [17] D. Faeflulloh, S. Maarif, I. F. Meutia, and D. Yulianti, "Indonesia Bureaucracy and Industrial Revolution 4.0 : Preventing the Myth of Smart Asn in Indonesia ' S Bureaucratic Reform Agenda," *J. Borneo Adm.*, vol. 16, no. 3, 2020.
- [18] D. Faedlulloh, S. Maarif, I. F. Meutia, and D. Yulianti, "Birokrasi dan Revolusi Industri 4.0: Mencegah Smart ASN menjadi Mitos dalam Agenda Reformasi Birokrasi Indonesia," *J. Borneo Adm.*, vol. 16, no. 3, 2020, doi: 10.24258/jba.v16i3.736.
- [19] U. Arifah , "TRANSFORMASI BIROKRASI MELALUI E-GOVERNMENT," *Cakrawala J. Manaj. Pendidik. Islam dan Stud. Sos.*, vol. 4, no. 2, 2020, doi: 10.33507/cakrawala.v4i2.245.
- [20] I. T. Firdaus, M. D. Tursina, and A. Roziqin, "Transformasi Birokrasi Digital Di Masa Pandemi Covid-19 Untuk Mewujudkan Digitalisasi Pemeritahan Indonesia," *Kybernan J. Stud. Pemerintahan*, vol. 4, no. 2, 2021.
- [21] A. Doramia Lumbanraja, "Urgensi Transformasi Pelayanan Publik melalui E-Government Pada New Normal dan Reformasi Regulasi Birokrasi," *Adm. Law Gov. J.*, vol. 3, no. 2, 2020, doi: 10.14710/alj.v3i2.220-231.
- [22] D. T. Yulianti and A. T. Prastowo, "Pengembangan Digitalisasi Perawatan Kesehatan Pada Klinik Pratama Sumber Mitra Bandar Lampung," *J. Teknol. dan Sist. Inf.*, vol. 2, no. 2, 2021.
- [23] B. Wibisono and S. Handoko, "IMPLEMENTASI PROGRAM JOGJA SMART CITY DI KOTA YOGYAKARTA DALAM MENINGKATKAN PELAYANAN PUBLIK BERBASIS SOSIO-KULTURAL," *J. Kewarganegaraan*, vol. 4, no. 1, 2020, doi: 10.31316/jk.v4i1.880.
- [24] A. Novriando, "Efektivitas 'Jogja Smart Service' Terhadap Pelayanan Publik di Kota Yogyakarta," 2020.
- [25] S. Bahri, D. M. Midyanti, and R. Hidayati, "Pemanfaatan QGIS Untuk Pemetaan Fasilitas Layanan Masyarakat Di Kota Pontianak," *CESS (Journal Comput. Eng. Syst. Sci.)*, vol. 5, no. 1, 2020, doi: 10.24114/cess.v5i1.15666.
- [26] Y. M. Thauhid, "PERANAN 'TWO WAY COMMUNICATION' DALAM MENUNJANG KERJA KOMUNIKASI BIROKRASI YANG EFEKTIF DI KANTOR DINAS PENDIDIKAN PROVINSI ...," *uniska*, 2018.
- [27] D. Sugiyono, *Metode penelitian kuantitatif kualitatif dan R&D*. 2010.