



SIPANDUK Application: E-Government Innovation for the Effectiveness of Population Administration Services in Kuningan Regency

Intan Sandika Putri¹, Rima Rismayanti^{2*}, Mukarto Siswoyo³, Khaerudin Imawan⁴
Public Administration, Faculty of Social and Political Sciences, Swadaya Gunung Jati University

Corresponding Author: Rima Rismayanti, rimarsmy@gmail.com

ARTICLE INFO

Keywords: SIPANDUK, E-Government, Program Effectiveness, Public Services, Population Administration

Received : 18, February

Revised : 4, March

Accepted: 18, March

©2025 Putri, Rismayanti, Siswoyo, Imawan: This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

This research is motivated by the development of the SIPANDUK application by Disdukcapil Kuningan Regency to facilitate access to population administration services online. However, its implementation still faces obstacles, such as low public knowledge, less user-friendly application displays and unstable network connections. This study aims to analyze the effectiveness of the SIPANDUK application, identify barriers to its use and formulate solution strategies. Using a descriptive qualitative method through interviews, observations and literature studies, this research refers to Budiani's (2007) theory of program effectiveness with four indicators: program objectives, program socialization, program target accuracy and program monitoring. The results show that the SIPANDUK application is not yet optimal. Socialization strategies and program monitoring are needed to ensure this application provides maximum benefits to the community.

INTRODUCTION

The Kuningan Regency Government through the Population and Civil Registration Office (Disdukcapil) has launched the SIPANDUK application (Population Administration Service Information System) on April 1, 2021 to improve the quality of public services and make it easier for people to access population administration services online (Kuningan, 2021). This application is designed to increase efficiency, speed up the service process and reduce queues at the Disdukcapil office (Nur'aini & Fitriana, 2023).

This is in line with Kuningan Regency Regional Regulation (Perda) No. 6/2017 which regulates the administration of population administration with the aim of providing better services and convenience for the community in accessing services related to population administration. With the presence of SIPANDUK, the community is expected to be able to more easily take care of population administration such as making KTP (Identity Card), KK (Family Card), Birth Certificate, and other population data changes without having to visit the Disdukcapil office directly.

The implementation of the SIPANDUK application also supports national policies related to population administration as stated in *Law Number 24 of 2013 concerning Population Administration*. This law regulates the importance of organizing population administration based on information and communication technology to improve fast, efficient and integrated public services. In addition, the SIPANDUK application is guided by the *Minister of Home Affairs Regulation Number 7 of 2019 concerning Online Population Administration Services* with the aim of accelerating the service process and facilitating access for the community.

The implementation of SIPANDUK is a strategic step in realizing the vision of e-government in Kuningan Regency. E-government or electronic-based government is an effort to use information and communication technology (ICT) by the government to improve efficiency, transparency and accessibility of public services (Hardiyansyah, 2018). This is in line with *Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE)* which encourages digital transformation in government administration to achieve better, responsive and affordable services for the community.

However, although the SIPANDUK application aims to improve civil registration services, its implementation still faces a number of obstacles. The main obstacle is the low level of knowledge about the SIPANDUK application among the community, which has led to many residents continuing to apply directly at the Disdukcapil office rather than using the SIPANDUK application. In addition, the appearance and procedures in the application, which are considered less user-friendly, further reduce the level of use of the application. Weak or frequently interrupted internet connections, coupled with server disruptions, hampered the process of using the SIPANDUK application (Norris and Moon, 2005). The unstable internet network in some areas, especially in hilly areas, is also a significant factor that hinders the optimal utilization of the SIPANDUK application.

Previous research has been conducted by (Prasityo, 2023) on Public Service Innovation through the SIPANDUK Application which provides

convenience for the community in managing population administration. However, the research has not examined in depth the effectiveness of the implementation of the innovation program in the community. Thus, this research aims to find out how the effectiveness of the SIPANDUK application, identify factors that inhibit the use of the SIPANDUK application and formulate strategies that can be used to overcome problems that arise in its implementation. This research is important so that the innovation program implemented by the Kuningan Regency Government continues to make improvements and is truly beneficial to the community.

The characteristics of Kuningan Regency, which is dominated by rural areas with hilly geographical conditions, also attract the author's attention because with these characteristics there must be its own challenges in implementing e-government. So the author formulates this research with the title "SIPANDUK Application: E-Government Innovation for the Effectiveness of Population Administration Services in Kuningan Regency."

LITERATURE REVIEW

Public service is the main function of the government in meeting the needs of the community through various forms of services, including population administration. In its development, public services must be oriented towards the interests of the community by prioritizing transparency, efficiency and ease of access (Denhardt & Denhardt, 2015). One form of transformation in public services is the application of digital technology through the concept of e-Government, which aims to improve service quality by facilitating community access, reducing complex bureaucracy, and increasing the efficiency of population administration (Rizki et al., 2023). In assessing the success of a public service innovation, effectiveness is the main indicator. Effectiveness is a condition that describes the extent to which plans can be realized and goals or targets have been successfully achieved (Siswoyo et al., 2019). In the context of population administration, the effectiveness of digital services can be measured by the accuracy of program targets, ease of access and user satisfaction. The easier and faster services are accessed by the public, the more effective the program is in meeting public needs.

The digital era has brought significant changes in the public service system, where processes that were previously carried out conventionally and manually have become more digital (Khumayah et al., 2020). Digitalization itself is the process of converting activities and data into digital form, while digital transformation reflects broader changes in technology-based governance (Imawan et al., 2023). In population administration, the use of this technology aims to increase service accessibility, speed up the process and improve accuracy in the management of population documents.

A number of studies have examined the effectiveness of digital-based population administration services in various regions. Research by Thalita & Nawangsari, 2024 on the SIAPEL application at the Disdukcapil of Malang City found that this digital innovation was able to increase user accessibility and speed up the service process. Another study by Herlina L & Santoso T, 2022

which examined the effectiveness of the ALPUKAT application in Jatipulo Village during the COVID-19 pandemic showed that digitization of population administration services can be a solution in overcoming conventional service constraints. The results of this study strengthen the argument that technology-based innovation has the potential to improve the quality of public services by providing convenience and efficiency for the community.

Kuningan Regency has also developed digital-based population administration services through the SIPANDUK application. This application allows the community to access services anytime and anywhere without having to come directly to the Disdukcapil office. However, as with other digital innovations, the effectiveness of this application needs to be evaluated to ensure that the service really provides optimal benefits to the community. In evaluating the effectiveness of SIPANDUK, this study refers to the effectiveness theory proposed by (Budiani, 2007) which includes four main indicators, namely program objectives, program socialization, program target accuracy and program monitoring. Program objectives focus on the success of SIPANDUK in achieving the predetermined targets. Program socialization is an important factor so that people understand the benefits and how to use the application. The accuracy of program targets measures the extent to which this service reaches the community groups in need, while program monitoring aims to evaluate and oversee the continuity of the service so that it remains optimal.

Furthermore, to understand the implementation of e-Government in SIPANDUK application, this research also uses an approach based on the six main components in e-Government implementation proposed by (Indrajit et al., 2005), namely content development, competency building, connectivity, cyber laws, citizen interfaces, and capital. Content development focuses on developing digital service content that is informative and easily accessible. Competency building is related to increasing the capacity of the apparatus in managing digital systems. Connectivity covers technological infrastructure that supports service accessibility. Cyber laws highlight regulations that ensure data security and protection of public information. Citizen interfaces relate to the ease of use of applications by the public, while Capital refers to the financial support required for the sustainability of E-Government systems. Through this approach, this research seeks to provide a more comprehensive picture of the effectiveness of the SIPANDUK application in supporting digital transformation in the public service sector.

By considering the results of previous research and the innovations that have been implemented in the SIPANDUK application, this research is expected to provide insight into the effectiveness of digital services in the field of population administration. In addition to identifying the benefits that have been felt by the community, this research also aims to find obstacles that are still faced in the implementation of the SIPANDUK application. The findings of this research are not only useful for the development of population administration services in Kuningan Regency, but can also be a reference for other regions in optimizing the application of technology in public services.

RESEARCH METHODS

This research uses a descriptive qualitative approach with the aim of obtaining a clear and in-depth understanding of the topic under study. Data collection was carried out from sources who have the competence to provide relevant information. Therefore, researchers determined key informants including the Head of the Population and Civil Registration Office (Disdukcapil) of Kuningan Regency, the Head of the Data Utilization and Service Innovation Division (PDIP) and the SIPANDUK Operator. In addition, the community as users of the SIPANDUK application were also involved as supporting informants. Data collection techniques were carried out through in-depth interviews face-to-face between researchers and informants. In addition to interviews, researchers also used observation methods and thorough documentation studies to support the completeness of the data. To ensure data validity, this research applied data validity testing through data source triangulation techniques. In this process, researchers compare and confirm information from various data sources to ensure the consistency and validity of the data obtained.

RESULTS AND DISCUSSION

The results and discussion are organized based on the problem formulation that has been set previously, including:

Accessibility of SIPANDUK Application

The effectiveness of the SIPANDUK application relates to the extent to which this application provides convenience and accessibility for the people of Kuningan Regency in managing population administration efficiently. Through the features provided, this application is expected to be able to simplify the process of processing population documents, so that the community can feel the benefits directly.

In testing the effectiveness related to the accessibility of the SIPANDUK application, this research refers to the theory of effectiveness put forward by Budiani, 2007. Based on the results of research at the Population and Civil Registration Office (Disdukcapil) of Kuningan Regency, the researcher found the following:

Program Objectives

Program objectives are measures or parameters used to assess the success of a program in achieving predetermined goals (Khoirurrijal, 2023). The Population and Civil Registration Office (Disdukcapil) of Kuningan Regency has an innovation program, namely the SIPANDUK application which aims to facilitate the community in taking care of population administration anytime and anywhere.

Based on the research, the aspect of program objectives can be said to have not been implemented properly. This is shown by the fact that although the banner application has been launched to facilitate the accessibility of population

administration services, there are still many people who prefer to come directly to the *disdukcapil* office. This condition occurs because of the lack of public understanding of the existence of the application, so that the benefits have not been fully felt. One of the main causes is the lack of public understanding of the existence and function of the SIPANDUK application. As a result, the purpose of the application to simplify the service process and reduce queues at the *disdukcapil* office has not been fully achieved. With this suboptimal accessibility, the community continues to rely on conventional services, so the efficiency and convenience that technology should bring has not been widely felt.

Program Socialization

Program socialization in an innovation program is quite crucial because it can determine the extent to which information about the program can be received, understood and implemented by the community or targeted parties. Through effective socialization, the program can strengthen its existence in the scope of communication while ensuring the dissemination of information goes well (Suranti et al., 2016).

Based on the research conducted, the socialization of the SIPANDUK application in Kuningan Regency can be said to be not optimal. The findings in the field show that most people do not know about this application, which should facilitate the population administration process. Socialization so far has only been limited to village or sub-district operators, so information about the application does not reach the wider community. This has resulted in the SIPANDUK application service only running at the village level, without adequate dissemination of knowledge to the general public. Thus, although this application has great potential in improving the efficiency of civil registration administration, the lack of public understanding is a major obstacle to its optimal utilization.

The Accuracy of the Program

The accuracy of program targeting refers to the extent to which an innovation program successfully reaches and benefits the target group that has been determined (Rawinarno et al., 2024). In the context of the SIPANDUK application innovation program, the main target of this program is the people of Kuningan Regency, who are expected to feel the direct benefits of the application in facilitating the population administration process.

From the research that has been carried out, it can be concluded that the target accuracy of the SIPANDUK application program has not been achieved optimally, considering that the community has not yet felt the benefits significantly. Some of the obstacles encountered include difficulties in the registration process, especially at the email verification stage, as well as ignorance about how to convert files needed for sending requirements. In addition, many people are unaware that population administration services can be accessed through the SIPANDUK application. According to the data, out of 376 villages in Kuningan Regency, around 200 villages have not accessed the SIPANDUK application, which further confirms that the application has not been successful in reaching all of its intended targets. This finding shows that the

purpose of implementing the SIPANDUK application has not been well achieved, because the application has not succeeded in providing convenience and benefits to all levels of society in accordance with the targets that have been set.

Program Monitoring

Program monitoring focuses on efforts to ensure that program implementation goes according to planning and achieves the set objectives (Hidayah et al., 2023). In the context of the SIPANDUK application, effective monitoring is essential to evaluate the extent to which this application can run in accordance with its original purpose, which is to make it easier for people to access population administration services.

Based on the analysis of program monitoring, monitoring of the SIPANDUK application is carried out through a WhatsApp group involving relevant partners, such as hospitals, PONEC, midwives, KUA (Religious Affairs Office), and all villages registered to use the SIPANDUK application. The Population and Civil Registration Office (Disdukcapil) of Kuningan Regency collaborates with Kuningan University as the developer and the party responsible for maintaining the application, which is carried out once every six months or twice a year. However, findings in the field show that the SIPANDUK application is not yet available on the App Store for iOS users and the application registration process experienced problems at the email verification stage. In addition, the dropdown menu in the application makes it difficult for some people to find the services they need. These findings indicate that program monitoring has not been running optimally, as some communities still face obstacles in using the application, reflecting shortcomings in the implementation and supervision of the SIPANDUK application.

Obstacle of Utilizing SIPANDUK Application

Barriers to the use of the SIPANDUK application are various obstacles that can reduce the optimization of application use by the community. These obstacles can be in the form of limited access to technology, such as the absence of adequate devices or uneven internet access, lack of digital literacy in the community regarding the use of applications, as well as technical problems that may occur in the application system itself. Based on the obstacles to the utilization of the SIPANDUK application for the effectiveness of the SIPANDUK application in population administration services at the Kuningan Regency Disdukcapil according to (Indrajit et al., 2005), they consist of competency building and connectivity.

According to (Indrajit, 2002) competency building is very important in the implementation of e-government implementation. The competence in question is human resources who are experts in their fields. The Population and Civil Registration Office (Disdukcapil) of Kuningan Regency refers to the Regulation of the Minister of Home Affairs No. 5 of 2024 concerning One Domestic Government Data, which includes 11 important points in fulfilling population administration, one of which is improving the quality of human resources (HR).

For the Data Utilization and Service Innovation (PDIP) Division, the minimum qualification set is a D3 graduate majoring in computers. However, the reality shows that the educational background of employees in the PDIP field is quite diverse. Although the ability of operators who handle the submission process through the SIPANDUK application is adequate, the need for operators who have special expertise in system maintenance and internet management is still a concern. This can be seen from the technical problems that are often faced by the community, such as problems with the email verification process, which shows that system maintenance has not been optimized. To overcome these problems, experts with relevant competencies in the field of information technology are needed.

Connectivity is the availability of infrastructure for e-government implementation including aspects used to measure quality, accessibility and efficiency in connecting users with services or systems. The results showed that one of the main obstacles in connectivity in Disdukcapil Kuningan Regency, especially in the Data Utilization and Service Innovation Division (PDIP), is the limited facilities and infrastructure. The devices used to process service applications are mostly old devices released in 2012 with inadequate specifications. In addition, some of the printers and computers available are not functioning properly. Ideally, each operator should be equipped with two computers, as the SIPANDUK application server and the Population Administration Information System (SIAM) cannot be connected directly. However, in reality, out of six operators, only one operator has two computer units as required.

In addition, obstacles related to connectivity are also found in infrastructure limitations, especially for the community. The SIPANDUK application can only be accessed by Android users, so accessibility is still limited for IOS users. In addition, the internet network in Kuningan Regency has not been evenly distributed, with some villages still in blank spot areas. The service menu in the SIPANDUK application that uses a drop-down format is also considered less intuitive, making it difficult for the community to find the type of service needed. These obstacles indicate the need for infrastructure improvement and application development to support the ease of access of the community as a whole.

Strategies to Increase the Effectiveness of SIPANDUK Application Implementation

Strategies to improve the effectiveness of SIPANDUK application implementation include two main aspects, namely Socialization and Program Monitoring. In the socialization aspect, there are several strategic steps that can be taken. First, promotional campaigns through various media such as social media, radio, and local television need to be intensified to increase public awareness of the SIPANDUK application. Secondly, direct socialization is also important, especially in villages that have not yet accessed this application. In this activity, officers can bring samples of the application and provide a detailed explanation of how to use it and its benefits. In addition, cooperation with

community leaders such as village heads, imams, and other community leaders is needed to expand the reach of promotion and build public trust in the SIPANDUK application. To strengthen this strategy, it is also necessary to produce informative posters and brochures, so that information about the SIPANDUK application can be widely disseminated and easily accessed by village communities.

To overcome various obstacles in using the SIPANDUK application, several solutions need to be implemented. First, the email verification process must be improved so that users can more easily complete registration. Second, the completion of the SIPANDUK application submission process in the App Store needs to be accelerated so that iOS users can access the service more practically. In addition, to overcome network problems, cooperation with internet service providers is needed to expand coverage in villages that are in blank spot areas and improve connections in hilly areas that often experience interruptions. Finally, infrastructure development, such as internet networks and electricity, must continue to be carried out in villages that do not yet have access to the SIPANDUK application, so that digital-based population administration services can be enjoyed by all communities without being constrained by technical problems.

In the aspect of program monitoring, some important steps that need to be implemented include daily monitoring of the SIPANDUK application to ensure that the application operates properly and minimizes technical disruptions. In addition, data collection related to the use of the application such as the number of users, frequency of use, and the level of community satisfaction also needs to be carried out regularly to monitor program progress. Furthermore, program evaluation is conducted to identify successes and obstacles in the implementation of the SIPANDUK application. This evaluation is important to determine the right improvement strategy and ensure the program is running as intended. Finally, regular application development is needed to improve the application's performance and add new relevant features based on user feedback.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research on the implementation of the SIPANDUK application at the Kuningan Regency Disdukcapil, it can be concluded that this program has not run effectively and has not reached the expected target. In terms of accessibility based on Budiani's (2007) effectiveness theory, the four dimensions of effectiveness show that program implementation is still not optimal. In addition, referring to the theory of E-Government implementation according to Indrajit et al. (2005), the utilization of the SIPANDUK application is also not as expected. To improve the effectiveness of this program, a strategy is needed that includes strengthening the socialization and monitoring of the program as previously described. With the implementation of these strategies, it is expected that the SIPANDUK application will be able to provide maximum benefits to the community in accordance with the stated objectives.

FURTHER STUDY

Further research can be conducted to evaluate user experience and the level of public satisfaction with the SIPANDUK application. A quantitative approach with a survey method can provide data on the level of user acceptance and satisfaction.

REFERENCES

- Budiani, N. W. (2007). Efektivitas Program Penanggulangan Pengangguran Karang Taruna “Eka Taruna Bhakti” Desa Sumerta Kelod Kecamatan Denpasar Timur Kota Denpasar. *Ekonomi Dan Sosial*, 2(No. 2 Februari 2009).
<https://doi.org/ojs.unud.ac.id/index.php/input/article/view/3191>
- Denhardt, J. ., & Denhardt, R. B. (2015). *The New Public Service: Serving, Not Steering*. Public Administration Review.
<https://doi.org/https://doi.org/10.1111/puar.12347>
- Hardiyansyah. (2018). *Kualitas Pelayanan Publik (Konsep, Dimensi, Indikator dan Implementasinya)* (Revisi). Penerbit Gava Media.
- Herlina L, & Santoso T. (2022). Efektivitas Aplikasi ALPUKAT Dalam Meningkatkan Pelayanan Publik Selama Pandemi Covid 19 Pada Kantor Kelurahan Jatipulo Tahun 2022. *Jurnal Ilmu Administrasi Publik*, Vol. 2(No. 3), 298–306.
<https://ojs.stiami.ac.id/index.php/JUMAIP/article/view/2932>
- Hidayah, N. N., Pulungan, D., & Elfrianto, E. (2023). Implications of Monitoring and Evaluation for Improving School Quality. *Indonesian Journal Education*, 2(1), 7–13. <https://doi.org/10.56495/ije.v2i1.524>
- Imawan, K., Ahimsa-Putra, H. S., & Simatupang, L. L. (2023). Tarling Music Industry Ecosystem in The Digitalization Arena. *Uva Doc*, 2, 24–48.
<https://uvadoc.uva.es/handle/10324/60791>
- Indrajit, R. E. (2002). *Membangun Aplikasi E-Government*. PT Alex Media Komputindo.
- Indrajit, R. E., Rudianto, D., & Zainuddin, A. (2005). *E-Government In Action*. Yogyakarta: Andi.
- Khoirurrijal. (2023). Stakeholders’ Perception of Vision, Mission, Objectives, and its Implications on Curriculum Development. *An Nabighoh*, 25(2), 147.
<https://doi.org/10.32332/an-nabighoh.v25i2.7485>
- Khumayah, S., Astuti, R. P., & Agustina. (2020). Dinamika Transportasi Berbasis Online Di Era Revolusi Industri 4.0. *SAINS: Jurnal Manajemen Dan Bisnis*, 12(2). <https://doi.org/10.35448/jmb.v12i2.6840>
- Kuningan, D. K. (2021). *1 April 2021 SIPANDUK Resmi Melayani Masyarakat*

Kabupaten Kuningan Secara Online. Website Disdukcapil Kab. Kuningan.

- Norris dan Moon. (2005). Does managerial orientation matter? The adoption of reinventing government and e-government at the municipal level. *Information System Journal*, 15(1), 43–60. <https://doi.org/10.1111/j.1365-2575.2005.00185.x>
- Nur'aini, M. H., & Fitriana, K. N. (2023). Innovation Of Population Administration Services Based On The Dukcapil Smart Application at Disdukcapil Bantul Regency. *Journal Of Public Policy And Administration Research*, 01. <https://journal.student.uny.ac.id/index.php/joppar%0AInovasi>
- Peraturan Daerah (Perda) Kabupaten Kuningan No. 6 Tahun 2017. (2017). JDIH Kabupaten Kuningan. <https://jdih.kuningankab.go.id/index.php/peraturan-daerah/peraturan-daerah-kabupaten-kuningan-nomor-6-tahun-2017-tentang-perubahan-atas>
- Peraturan Menteri Dalam Negeri No. 5 Tahun 2024 Tentang Satu Data Pemerintahan Dalam Negeri. (2024). JDIH Kemendagri. <https://peraturan.bpk.go.id/Details/300009/permendagri-no-5-tahun-2024>
- Peraturan Menteri Dalam Negeri Nomor 7 Tahun 2019 tentang Pelayanan Administrasi Kependudukan Secara Daring. (2019). JDIH BPK. <https://peraturan.bpk.go.id/Details/127856/permendagri-no-7-tahun-2019>
- Peraturan Presiden Nomor 95 Tahun 2018 tentang Sistem Pemerintahan Berbasis Elektronik (SPBE). (2018). JDIH BPK. <https://peraturan.bpk.go.id/Details/96913/perpres-no-95-tahun-2018>
- Prasityo, N. (2023). *Inovasi Pelayanan Publik Melalui Aplikasi SIPANDUK Pada Dinas Kependudukan Dan Pencatatan Sipil Kabupaten Kuningan* [Universitas Pasundan]. <http://repository.unpas.ac.id/id/eprint/66913>
- Rawinarno, T., Alynudin, S., Widiarto, A., Setyoko, H., & Shafira, N. (2024). Efektivitas Program Kartu Indonesia Pintar (KIP) Tahun 2021-2022. *Jurnal Ilmiah Niagara*, 16(1), 27–42. <https://doi.org/10.55651/niagara.v16i1.190>
- Rizki, C., Nabilla, Y., & Prasetyawan, A. (2023). *Efektivitas Penggunaan Teknologi Informasi Dalam Meningkatkan Kualitas Pelayanan Publik (Studi Pada Aplikasi Poedak di Kabupaten Gresik)* *The Effectiveness Use of Information Technology in Improving the Quality of Public Services (Study On Poedak Applications in Gresik District)* (Vol. 1, Issue 3). <https://journal.unesa.ac.id/index.php/innovant/article/view/26189>
- Siswoyo, M., Permana, I., & Sudrajat, M. (2019). Government Policy on

Additional Income to Civil Servants. *Atlantis Press*, 306, 80-82.
<https://doi.org/10.2991/isseh-18.2019.19>

Suranti, S., Sutopo, J. K., & Hastjarjo, S. (2016). Sosialisasi Intelligent Research And Innovation Services (IRIS) 1103 Bagi Civitas Akademika UNS (Studi Evaluasi Model CIPP terhadap Sosialisasi IRIS1103 oleh Lembaga Penelitian dan Pengabdian kepada Masyarakat Universitas Sebelas Maret). *Interaksi: Jurnal Ilmu Komunikasi*, 5, 101-111.
<https://doi.org/10.14710/interaksi.5.2.101-111>

Thalita, E. N., & Nawangsari, R. (2024). *Efektivitas Pelayanan Online Melalui SIAPEL Di Dinas Kependudukan Dan Pencatatan Sipil Kota Malang*.
<https://siapel.malangkota.go.id/>.

Undang-Undang Nomor 24 Tahun 2013 Tentang Administrasi Kependudukan. (2013).
JDIH BPK. <https://peraturan.bpk.go.id/Details/38985/uu-no-24-tahun-2013>