PIONIRS: Implementation of Public Service Innovation Policy to Promote E-Government System in Pontianak City Government, West Kalimantan

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ABSTRAK

Dinas Kependudukan dan Pencatatan Sipil Kota Pontianak telah menerapkan inovasi lisensi online pada berbagai aspek pelayanan sebagai upaya mendukung penerapan e-government, termasuk program PIONIRS (Pelayanan Online dari Rumah Sendiri) yang bertujuan mengakomodasi masyarakat Kota Pontianak dalam pembuatan dokumen kependudukan. Penelitian ini merupakan penelitian jenis deskriptif dengan teknik analisis kualitatif untuk menggambarkan proses implementasi kebijakan inovasi pelayanan publik melalui PIONIRS di Dinas Kependudukan dan Pencatatan Sipil Kota Pontianak yang meliputi organisasi, interpretasi, dan aplikasi. Hasil penelitian menunjukkan bahwa inovasi ini diidentifikasi sebagai langkah progresif yang memiliki potensi untuk diadopsi oleh perangkat daerah lainnya. Hal ini terlihat dari kehadiran mitra sosialisasi yang terlibat dan peluang mempercepat transisi pemenuhan kebutuhan publik. Namun, proses implementasi inovasi kebijakan pelayanan publik masih menghadapi beberapa kendala, seperti keterbatasan jumlah dan kapasitas sumber daya pelaksana, ketiadaan prosedur operasional standar (SOP) untuk program online seperti PIONIRS. Serta, sosialisasi yang belum mencapai pemahaman yang memadai bagi masyarakat sebagai penerima kebijakan inovasi pelayanan. Sistem yang terintegrasi berdampak pada pencapaian kinerja yang mengedepankan efisiensi dan kepuasan publik melalui metrics penyederhanaan layanan dan peningkatan keterlibatan pengguna dengan layanan online. Rekomendasi menekankan pentingnya pengembangan sistem terstruktur untuk mendukung inovasi dalam pemrograman, perluasan jaringan mitra dan sektor, serta pelaksanaan edukasi afirmatif kepada masyarakat melalui sosialisasi.

ABSTRACT

The Pontianak Agency of Population Administration and Civil Registry has implemented online licensing innovations in various aspects of its services to support e-government implementation, including the PIONIRS (Online Services from Home) program, which aims to simplify obtaining population documents for the people of Pontianak City. This study employs a descriptive approach with qualitative analysis techniques to examine the implementation process of public service innovation policies through PIONIRS at the Pontianak Agency of Population Administration and Civil Registry, covering organization, interpretation, and application. The results indicate that this innovation represents a progressive step with potential for adoption by other regional entities, as evidenced by the involvement of socialization partners and the ability to accelerate public needs transition. However, the implementation process still encounters several challenges, including limited resources, the lack of standard operating procedures (SOPs) for online programs like PIONIRS, and insufficient community understanding of the service innovation policies. The integrated system aims to improve performance by prioritizing efficiency and public satisfaction through service simplification and increased online service engagement. Recommendations emphasize the importance of developing a structured system to support innovation in programming, expanding networks of partners and sectors, and implementing comprehensive affirmative education for the community through outreach.

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INTRODUCTION

Recent modern era with advances in technology and the internet, public services are obliged to be adaptive to the people's behavior who are inextricably linked to the internet. As a result, it creates a demand for the community to get administrative services that are simpler, faster, and more realistic. A crucial aspect of creating innovative and responsive public services is involving citizens in the design and delivery processes (Hardyman et al., 2022). This is important to be considered by agencies that provide services to the community. Changes in behavior and desires of the community must be balanced by public service providers. Public service is serving the needs of people who have an interest in an organization in line with established rules and procedures (Mulyadi, 2016). Public services are regulated in regulation no. 25, concerning public services; that public services are activities or series of activities in the context of fulfilling service requirements in line with statutory regulations for every citizen and resident for goods, services, and/or administrative services provided by public service providers. One form of service that has been carried out in the form of website-based services or known to be part of the form of e-government.

According to Kurnia (2013, p. 156) stated that "...one of the theories that can change attitudes is a functional approach which shows that changing the basic motivation of individuals can change individual attitudes towards a particular object" Thus The need for innovation that positions the function of service products that are featured and prioritized to meet public needs for services from public agencies. Starting from these problems, the Population and Civil Registry Office provides an innovation, namely Online Service Innovation from Home commonly called PIONIRS. This innovation proposes to assist and provide facilities to people in Pontianak City who want to get the required population documents from home to overcome time constraints for those who cannot be in person.

Innovation refers to new ideas and alternatives, manifest in the implementation process within the public sector by encompassing changes, improvements, and enhancements in the quality of inputs, processes, and the delivery of goods and services (Kurhayadi, 2022; Wicaksono, 2019). The implementation of policies always plays an essential role in bridging the correlation between policy objectives and their realization as outcomes of governance. This aligns with the perspective of Van Meter and Horn (Grindle, 1980, p. 6) that the primary urgency in implementation is to build networks that enable the realization of public policy objectives through activities involving various stakeholders (policy stakeholders) within government agencies.

The Department of Population and Civil Registration (Disdukcapil) of Pontianak City proceeds as an implementor of public service innovation policies related to population administration, there is a role to be responsible for implementing these policies at the regional level. As an Implementor who has an important role in carrying out policies and ensuring that the policy objectives are achieved properly, applicable innovations are needed from each unit in mobilizing the achievement of the implementation of a policy, meaning that there are supporting forms to achieve these goals. Policy implementation grows into a complex process and involves many stakeholders with the ultimate goal of achieving integrated accessibility and significant change. Organizing in implementation plays a crucial role in directing, coordinating, and ensuring that policies and innovations are theoretically and practically capable of being implemented effectively. This includes involving important aspects, including:

a) Strategic planning involves identifying specific objectives, determining the resources required, and setting realistic timelines for implementation.
b) Collective Consolidation and Coordination, there are many different work units required to deliver services. Organizing plays an important role in coordinating efforts between these various units. This includes structuring the roles and responsibilities of each unit in policy implementation, as well as ensuring that all parties involved work synergistically.
c) Resource Distribution is a key aspect in allocating capacity and capability to both the main implementers and the partners involved. This allocation is not only human but also budget, personal, and supporting technology. This aspect is closely related to the concept of Charles O Jones (1994, p. 296), that bureaucratic organization is related to 3 things, namely (a) the formation or rearrangement of resources, (b) units, and (c) methods used to drive the program.

The use of information technology presents a significant opportunity for local governments to enhance citizen initiatives and interaction. Through Minister of State Apparatus Empowerment and Bureaucratic Reform Regulation (PERMEN-PANRB) Number 91 of 2021 concerning Public Service Innovation Development, the Pontianak City Government is responsible for establishing an ecosystem that builds public service innovation capable of addressing inclusive access and community needs. There has been a paradigm shift in public services, especially technological advancements and the need for more efficient services. PIONIRS emerges as a relevant solution to accessibility and effectiveness, particularly during the transition period caused by Covid-19, and is currently being implemented as part of e-Government adoption.

Table 1.
Transformation of Government Work Processes Based on E-Government

Then	Now
Frequent government work processes still rely on physical documents or paper-based systems.	The process of electronically archiving various documents is growing up to be increasingly common.
Procedures based on departments.	Service-oriented procedures.
The coordination network is not yet centralized, requiring personal visits to individual government offices for contact.	The coordination network and access are more efficient as they are now singular and online, thus eliminating the need for personal visits.
Department-level information resource management results in duplication and inefficiency due to the absence of integration, leading to differences in access between departments.	Integrated and mapped information resource management is a methodology that utilizes common standards and is marked by convergence.

Source : (Lee (2009), as cited in Rahayu et al., 2020)

This research focuses on aspects related to the implementation process of PIONIRS and the challenges faced in responding to user needs. This includes identifying technical, social, or policy barriers that affect the effectiveness and sustainability of the PIONIRS program. With a focus on the implementation process, this research aims to provide in-depth insights into how PIONIRS is applied in the field. The PIONIRS system has a significant impact on communities constrained by time and distance in obtaining civil documents. This system brings the issuance of civil documents closer to the community, which previously felt distant, making it easier and more

accessible. This is evidenced by the performance achievements of the Disdukcapil, which have continuously improved since the inception of PIONIRS in 2020 until 2022.

Literature Review

Implementation of Public Policy

According to Van Meter and Horn (Grindle, 1980, p. 6), the primary urgency in implementation is to build a network that enables public policy goals to be realized through the activities of government agencies, involving contributions from various stakeholders. Various theories and concepts describe the process of policy implementation. In this study, the researcher chose the theory or model developed by Charles O. Jones because it emphasizes more comprehensive and relevant components and parameters and provides a schematic way to analyze the case study in this research. According to Charles O. Jones (Kadji, 2015) the implementation process is determined by three main activities:

1. Organization: The actualization of policy implementation begins with the existence of a legitimate organization that plays a major role in mapping out a clear framework.
2. Interpretation: Efforts are made to understand the intentions and goals of the policy, breaking them down into more technical and implementable details.
3. Application: This involves the routine application of a series of instruments, including decisions and regulations, through activities aimed at achieving policy goals.

E-Government

The existence of E-Government is categorized into three types according to (Kusnadi & Ma, n.d.) :

1. G2C (Government to Citizens): This type is a common form of E-Government application.
2. G2B (Government to Business): This type is created by the government for the business sector to ensure the proper functioning of the national economy.
3. G2G (Government to Government): focuses on the interactions and collaborations between different governmental agencies and departments, as well as between different levels of government (local, regional, national, and international).

The study titled 'The Effectiveness of E-Government-Based Public Service Innovation (SIMPELIN) During the COVID-19 Pandemic: A Case Study at the Population and Civil Registration Office of Sukabumi Regency' by (Muzni Hanipah & Aryani, 2022), examines the effectiveness and impact of SIMPELIN, an online service system, at the Population and Civil Registration Office of Sukabumi Regency during the COVID-19 pandemic. The research employs a qualitative method to evaluate the implementation of e-government and SIMPELIN services. According to the findings, SIMPELIN services have been effective in terms of production, efficiency, satisfaction, adaptability, and innovation development, based on the theory proposed by Gibson Ivancevich Donnelly (2003). Additionally, the study provides recommendations for improving SIMPELIN, including conducting more extensive socialization with the public and enhancing the system's functionality. This research is significant in understanding the effectiveness of e-government-based public services during the pandemic and provides insights for future improvements in online

service systems. Bureaucratic reform can be a viable long-term solution to enhance governance and improve public service quality (Anwar et al., 2022).

The study titled "Regional Innovation in Improving Public Services in Batam City" by Sari & Pratiwi (2021) focuses on developing innovative approaches to enhance the accessibility of public services in Batam City. The research findings indicate that the Batam City Government has gradually and sustainably implemented region-based service-oriented innovations in various departments, demonstrating their commitment to improving public service effectiveness. By prioritizing the needs and accessibility of the community, these innovations play a crucial role in enhancing the quality of life for residents while also strengthening the city's economic competitiveness. Therefore, this research provides an essential foundation for the development of broader innovation strategies at the regional level, with a focus on improving public services and fostering inclusive economic development in Batam City.

The research by Afifuddin et al., (2023) highlights the importance of innovation in restructuring and enhancing service delivery processes, beyond the mere introduction of new technologies This research uses a case study approach to evaluate the process and implementation of a hybrid program called "Subuh Keliling Sukseskan Administrasi Kependudukan Terintegrasi" (Suling Sakti) in Malang Regency. The program integrates governance aspects and spiritual values. Pre-implementation socialization and adjustments underscore the significance of community engagement and considering local contexts. The implementation stages, including redefinition, clarification, and routinization, emphasize the significance of a sustainable process in improving and integrating the program into daily institutional operations. Although the program reduced document application backlogs and raised community awareness, challenges such as early implementation schedules underscore the need for continuous improvement in innovative programs.

In line with these studies, the research introduces novelty by proposing a novel approach to implementing a Public Service Innovation Policy to uphold E-Government in the Pontianak City Government. This innovative approach involves integrating a network of collaborators to provide seamless service provision. It aims to create integrated services that cater to the diverse needs of the community and contribute to the advancement of e-government initiatives. The research focuses on distributing various service options to the community and examines the implementation approach. It highlights the unique challenges and opportunities in implementing public service innovation policies within an e-government framework in Pontianak City. By analyzing the process of integrating collaborative networks and addressing diverse community needs, this research aims to offer comprehensive strategies for enhancing public service delivery in Pontianak City.

RESEARCH METHODS

This research was conducted in Pontianak City, precisely at The Pontianak Agency of Population Administration and Civil Registry (Disdukcapil) with the main focus on the implementation of public service innovation policies to support E-Government in the Pontianak City Government. This research was a descriptive type of research with qualitative analysis techniques to describe the process of implementing public service innovation policies through PIONIRS at the Pontianak Agency of Population Administration and Civil Registry of Pontianak City which includes organization, interpretation, and application. Data analysis techniques were taken through 3

steps, namely simplifying data, presenting data systematically, and drawing to verify conclusions (Miles et al., 2014; Qomar, 2022).

The purposive technique is employed to select individuals who possess relevant knowledge and experience for research purposes. Informants are chosen based on their understanding and experience related to the research subject. For this particular research, the informants selected are IR as JFT Policy Analyst Young Expert (Collaboration and Service Innovation, who has extensive experience in developing and implementing policies aimed at enhancing collaboration and innovation within public services and AB as the Head of General Affairs and Personnel Subdivision, who plays a crucial role in ensuring that the PIONIRS system is well-integrated into the existing administrative framework and that staff are adequately trained to use the new system. Community members who use the PIONIRS service as well as those who have not yet used it are also included. Data sources are gathered through observation, interviews, and documentation relevant to the research. The research encompasses both user and non-user perspectives.

RESULTS AND DISCUSSIONS

Organization in Public Service Innovation through PIONIRS

Policy implementation is a complicated process that involves numerous stakeholders with the ultimate goal of attaining integrated accessibility and meaningful change. Organization in implementation is critical for guiding, coordinating, and guaranteeing that policies and innovations may be implemented effectively both theoretically and practically. This aspect is closely related to the concept of Charles O Jones (1994: 296) (Nugroho, 2023), that bureaucratic organization is related to 3 things, namely (a) the formation or rearrangement of resources, (b) units, and (c) methods used to drive the program. Linking the issue of the 3 important aspects described by Charles O Jones with the existence of *Disdukcapil*, it is discussed in detail as follows:

A. Resources

The distribution of human resources in the implementation of service innovation through PIONIRS is divided into the following roles:

a) Head of the Department of Population and Civil Registration of Pontianak City as the coordinator: Coordinating all activities related to the implementation of the PIONIRS program. Develop work plans and strategies to ensure smooth implementation of the program. Facilitate meetings and coordination between various related parties. Monitor and evaluate the progress of program implementation to ensure target achievement.

b) The head of Population Administration Information Management and Data Utilization (PIAK) acts as the person in charge: Responsible for the operational implementation of the PIONIRS program at the field level. Direct the team in the technical implementation of the program. Ensure that the information system used in the program runs well. Provide technical support and training to relevant staff. Divided into three fields as follows, JFT Computer Officer Young Expert in Population Administration Information Systems, JFT Computer Officer Young Expert in Management and Presentation of Population Data, and JFT Policy Analyst Young Expert in Collaboration and Service Innovation.

c) Staff at *Disdukcapil* of Pontianak, role as administrators and Front Office/operators of the PIONIRS application: Act as administrators in managing population administration data. Providing front office services to the public regarding the PIONIRS application.

Operate the PIONIRS application to provide services to the community. Collecting and updating population data through the PIONIRS system.

Nevertheless, at the empirical level, there were limitations in managing incoming information both from the community who individually perform services and from partners on data verification and validation, since in its management, staff outside the PAID field were also involved in offline data management. The limited quantity of resources also affected the process of fulfilling service requests.

Table 2.
Composition of the PIONIRS Management Team

Name	Position
Coordinator	
Erma Suryabi, S.Sos, M.Si	Head of the Agency of Population Administration and Civil Registry (*Disdukcapil*)
Person in Charge	
Yopie Indra Pribadi S.Kom, M.Eng	Head of Population Administration Information Management and Data Utilization (PIAK)
Administrator of the PIONIRS system	
Irni Irmayani, ST (IR)	JFT Policy Analyst
Chintya Christina, S.Kom	Staff of the Population Information Administration and Data Utilization Division
Muhammad Aldy Subagja, S.Kom	Staff of the Population Information Administration and Data Utilization Division
Front Office PIONIRS System	
Desi Lestrasi	Operator PIONIRS System
Hanana Mujia	Operator PIONIRS System

Source: Agency of Population Administration and Civil Registry

A collaborative approach to exchanging and integrating resources can better utilize common resources, and address public interests and needs (Eriksson & Hellström, 2021; Fox et al., 2019). To improve public services in population administration, *Disdukcapil* of Pontianak City has taken important steps to expand the reach and accessibility of its services.

Competition is getting tougher in the current era of a globalized world. This highlights the importance of establishing a government that prioritizes customer satisfaction by enhancing service management. This shift is crucial for staying competitive. Thus, there's a need to rethink how we manage the quality of services in both public and private organizations (Rengifurwarin, 2022). In addition to relying on officers operating within *Disdukcapil* itself, this expansion effort also involved human resources from various partner agencies involved in the public service ecosystem known as "socialization partners".

In addition, efforts to regulate the joint role of socialization partners, the manifestation of cooperation formed by *Disdukcapil* is by realizing through agreements such as MoUs in the form of Cooperation Agreements (PKS) with various partner agencies, and coordination and requests for cooperation are carried out by officers in charge of application operators. Efficient and practical productivity can only be attained through effective coordination, especially in tasks that require collaboration among various work units, personnel, or organizations (Muharsono et al., 2023). The cooperation agreement includes different parties, their intentions and objectives, subjects and objects, the scope of agreement link-up, the implementation process, a duration of 3 years, financing matters, and other provisions. Access to an example agreement

can be found through the following link: https://drive.google.com/file/d/1Nuofbr-2ax4Z_LnUv2mx-CRd26simhil/view.

It implies that to carry out cooperation with partners, *Disdukcapil* uses officers in charge of application operators, indicating that there are personnel specifically appointed to coordinate and manage the implementation of cooperation. These designated human resources are responsible for ensuring that the cooperation runs in line with the established agreement. Thus, this effort to expand the reach and collaboration across agencies is an integral aspect of improving the effectiveness and efficiency of population administration services in Pontianak City.

The agreement on cooperation and technical guidance explanation to Service Partners contains the following explanations:

1. Each *admin* of the Service Partner is provided with a special account to input resident data into the PIONIRS application.
2. Completed applications are then scanned and uploaded into the application.
3. Completed identity documents are sent to the email address of the Service Partner.

Figure 1.
Sample Letter of Cooperation Agreement with Socialization Partners

Source: Agency of Population Administration and Civil Registry

The following table shows the PIONIRS Partnership as an innovation of *Disdukcapil*:

Table 3.
List of Pontianak City Population and Civil Registration Office PIONIRS Partnership

| No.	Partner Agency				
Hospital/PMB/Community Health Centre (Puskesmas)					
1.	RS Mitra Medika	7.	PMB Jamilah, A.Md	13.	RSB Pesona Bunda
2.	RS Antonius	8.	PMB Aina	14.	PMB Hayati
3.	RS Jeumpa	9.	PMB Desi Arisandi	15.	RS Nasaba
4.	RS Anugrah Bunda Khatulistiwa	10.	PMB Marsini Karni	16.	RS Yarsi
5.	PMB Yeanny Herlinda	11.	RS Anugerah Kuburaya	17.	Puskesmas Gg. Sehat

6.	PMB Titin Widyaningsih	12.	RS Kota Pontianak		
Sub-Districts (Kelurahan-Kecamatan)					
1.	Kecamatan Pontianak Utara	3.	Kelurahan Siantan Hilir		
2.	Kelurahan Siantan Tengah	4.	Kelurahan Batulayang		
Court					
1.	PN Pontianak Class 1A				
Religious Affairs Office (KUA)					
1.	KUA Barat	3.	KUA Tenggara	5.	KUA Kota
2.	KUA Utara	4.	KUA Timur		

Source: Agency of Population Administration and Civil Registry

Furthermore, observations of facilities and infrastructure that support service innovation activities at Disdukcapil revealed that employees were provided with computer specifications that support the data collection process, accuracy, and all forms of population data management to provide optimal services. To facilitate service activities for the community, employees need facilities and infrastructure to support their performance. The facilities and infrastructure needed are computers, printers, internet networks, paper, and ink in quantities according to their needs. The other facilities and infrastructure that help support services to the community are as follows: 1) Queue waiting room; 2)Lactation Room or Breastfeeding Room; 3)Children's play area; 4) Office Stationery (ATK) and Photocopy Shop; 5) Canteen.

In addition to the supporting facilities owned, researchers tried to test the speed/performance of the website on the PIONIRS service tool. It is because the base of the PIONIRS service innovation is in the form of a website so there is a close attachment to internet usage. This internet speed test was carried out directly using the official service website https://online.disdukcapil.pontianak.go.id/pionirs through the Google PageSpeed Insight evaluation tool, with the following results:

Figure 2.
Diagnosis of Website Performance Problems (Processed by Researchers, 2023)

Mobile Usage (Cellphone)   Desktop Usage
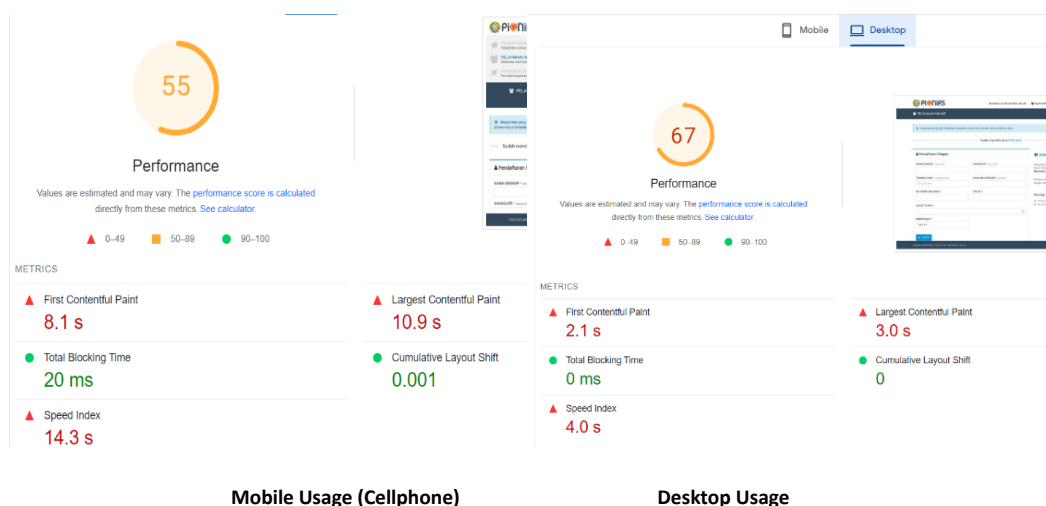
Based on Figure 1. above, the test results showed that the performance of the PIONIRS website scored 55 on mobile devices and 67 on desktop devices. While these scores indicated that the website performs reasonably well, there is room for further improvement to ensure more

efficient use and a better experience for users. Regular evaluation and improvement of website speed is an important step in maintaining the quality of PIONIRS services and ensuring safety and convenience for users.

A. Organizational Units/Structure

Departing from the above organizational measures for this research by linking the results of observations and interviews, there were no new units or the formation of special units in the process of implementing PIONIRS as a service innovation tool. Rather, *Disdukcapil* as an organizational regional apparatus organization adopted an internal restructuring approach by allocating an organizational structure that previously involved Kasi (Section Head) to JFT (Specific Functional Position) positions. The distinction between Kasi and JFT is key to this change. Kasi, in his managerial role, is responsible for the management of the team at the section level, while JFTs, with their specialized focus, bring more functional expertise in a particular field without the need to be involved in managerial decision-making.

This reflects the organization's efforts to maximize the knowledge and functional expertise required in the context of PIONIRS implementation without drastically changing the organizational structure. This restructuring approach is expected to help the organization achieve its innovation goals more efficiently and effectively without disrupting existing operations.

B. Method

The existence of "methods" in all forms of providing various public services could make it easier for regional apparatus organizations to optimize the resources they have to achieve the changes that have been designed in the provision of services to the community. Two crucial aspects need to be considered, based on the researcher's analysis of the status quo of public service innovation, starting from a) Mapping and analyzing needs, meaning that the creation of this innovation arises because of the urgency of this to happen immediately and detailing which aspects and actors need to be involved and addressed; b) Innovation project management, this included systematic planning, implementation, supervision, and evaluation of innovation projects.

Researchers tried to draw details on the methods used by Disdukcapil by linking Standard Operating Procedures (SOPs) as the basis for methods in implementing service innovation policies through PIONIRS that affect the principle of certainty in services. Representing Disdukcapil, IR as the JFT Analis Kebijakan Ahli Muda (Collaboration and Service Innovation) Specialist, stated:

"For our services, we have standard operating procedures (SOP). PIONIRS is just a tool, and the certainty of its timing comes from the SOP and service standards of each service point, such as the processing time for Family Cards (KK) and Birth Certificates (Akta). All complete details are available on the website."

The interview results show that the PIONIRS innovation does not have its binding SOPs related to aspects of use and control as a public service innovation. Thus, this affected what kind of parameters are then intended for the presence of this innovation to affect public trust in their sensitive data, when personal information is uploaded online.

Interpretation of Service Innovation Delivery through PIONIRS

The background of the emergence of PIONIRS in service innovation is due to the responsive efforts of government agencies, especially Disdukcapil of Pontianak City, to the situation that

occurred in Indonesia, namely the COVID-19 pandemic including its spread in every region such as Pontianak City in March 2020. This situation forces the entire community to stay at home, this situation also encourages Disdukcapil, which has been closely related to practices carried out conventionally or cannot be separated from offline queues, to take incentives to make changes.

The presence of PIONIRS provides an effort to facilitate service by transforming from offline to online which is available 24 hours a day and 7 days a week for 24 types of services and expanding to 26 service request options that can be done fully online. In empirical development, it is undeniable that there are still many community members who prefer to receive services in person or face-to-face. The ratio between the use of face-to-face services and services available from home is 1:4, with only around 20% of the community adopting the PIONIRS innovation as a solution for their services. In contrast, around 80% of the community still choose to get services face-to-face. This comparison data was traced from interviews with PIONIRS implementers.

To see the interpretation that moves on the socialization partners involved in the integration of service delivery, researchers found some supporting data on how massive they are in contributing, one of which is in making online birth certificates. The following is a list of the number of birth certificate applications by health sector partners:

Table 4.
Online Birth Certificate Report Registration Via RS/RSB/PMB (PIONIRS) At the Agency of Population Administration and Civil Registry of Pontianak City in June 2023

No	Hospital/RSB/Clinic/PMB	2020-2022	Tahun 2023						Total Year 2023	Total
			Jan	Feb	Mar	Apr	May	Jun		
1.	RS ABK	1.278	33	22	40	25	27	26	173	1451
2.	RS Antonius	168	3	5	8	5	4	6	31	199
3.	RSUD Kota Pontianak	-	0	0	0	0	0	0	0	0
4.	RS Mitra Medika	525	19	10	14	15	15	12	85	610
5.	RSIA Anugrah	-	8	26	74	19	2	3	132	132
6.	RSB Jeumpa	832	16	18	17	18	22	18	109	941
7.	RS Yarsi	-	0	0	0	0	0	0	0	-
8.	RSB Nabasa	-	0	0	0	0	0	0	0	-
9.	Klinik Pesona Bunda	-	0	0	1	2	0	1	4	4
10.	Puskesmas Gg. Sehat	-	0	0	0	0	0	0	0	-
11	PMB Titin Widyaningsih	-	0	0	0	6	8	6	20	20
12.	PMB Hayati	-	0	0	0	2	3	2	7	7
13.	PMB Aina	22	0	0	0	0	0	0	1	23
14.	PMB Desi Arisandi	-	3	0	1	0	0	0	4	4
15.	PMB Yeanny Herlinda	324	16	6	11	14	14	5	66	390
16.	PMB Marsini Karni	-	0	0	1	1	1	0	3	3
17.	PMB Jamilah	-	0	0	0	0	0	0	0	-
Total		3,149	98	87	168	107	96	79	635	3,784

Source: Disdukcapil of Pontianak City (2023)

Based on the explanation of Table 2. the use of PIONIRS can be significant in the sense that it brings the ability to integrate population data between health agencies and Disdukcapil in supporting e-government. This can be seen in how massive the 5 health service sectors in the 2020-2023 range starting from ABK Hospital which is also registered in the PIONIRS system up to 1. 451 birth certificates, followed by RSB Jeumpa with a total of 941 birth certificates, Mitra Medika Hospital 610 birth certificates, PMB Yeanny Herlinda with a total of 390 birth certificates, Antonius with a total of 199 birth certificates, and followed by the joining of several new partners such as PMB and Puskesmas. The creation of birth certificates can participate in integrating the creation of new KKs because of birth certificates and KIA.

Although some partners have adopted the PIONIRS system well, there were still some who have not actively used the system, despite having been partners for a long time. There are various indications of causes, such as lack of understanding of the system, technical constraints, misunderstanding of the interpretation formed, or non-compliance in carrying out cooperation. The partners involved in cooperation with Disdukcapil in utilizing PIONIRS include 9 Hospitals, 1 Community Health Center (Puskesmas), 7 Independent Midwife Practices, 1 District Office, 2 Sub-districts, 1 Court, and 5 Offices of Religious Affairs (KUA). Of the several partners involved, several partners are not active in using PIONIRS, for example, the Pontianak City Hospital health agency, this is due to a lack of further socialization of the PIONIRS system so only a few partners are still active. Additionally, some partners are not prepared to take on additional tasks beyond their assigned roles and functions. For example, several districts have not yet integrated to operate this PIONIRS system.

Therefore, further efforts are needed to improve understanding, training, and support for partners who have not yet used PIONIRS so that all parties can benefit from the convenience offered by this system in the process of registering birth certificates and requesting population services according to the institution's domain. Service innovation through PIONIRS as e-government support has entered its 4th year of development, things like updates, and improvements continue to be formed to expand the reach of partners and various other service requests. Currently, the Disdukcapil through PIONIRS has successfully integrated 26 types of application needs for users with their respective fulfillment requirements, including the following:

1. Issuance of a new family card (KK) (broken family card due to marriage)
2. KK issuance (due to data change)
3. KK issuance (due to loss)
4. KK issuance (due to damage)
5. Issuance of new KIA
6. KIA issuance (lost)
7. KIA issuance (damaged)
8. Certificate of moving (out of district/province)
9. 2 in 1 service for birth certificate and family card
10. 2 in 1 service for divorce certificate and KK
11. 2 in-1 service for the death certificate and family card
12. Moving between Kelurahan/Kecamatan
13. Change of birth certificate for children under 17 years old, mother and father (change of name / TTL / name of parents with the oldest document)
14. Birth Certificate Marginal Note (with court order)
15. Birth Certificate (that has been entered into the KK)
16. [SPECIAL MENU] Only filled in by Pontianak District Court Officers
17. Birth Certificate (due to loss)

18. Death Certificate (due to loss)
19. Peripheral record of adult birth certificate
20. Birth Certificate (due to damage)
21. Addition of a Family Member in KK (who already has a Birth Certificate)
22. [SPECIAL MENU] Only filled in by Pontianak Religious Court Officers
23. Marriage Certificate (due to loss)
24. Issuance of New Family Card (broken family card due to divorce)
25. Cancel Move SKPWNI
26. [SPECIAL MENU] Only Filled by Pontianak Religious Affairs Office Officers.

Based on Disdukcapil data, the usage of PIONIRS has been continuously increasing year by year. Until June 2023, PIONIRS can be accessed 24/7, offering 26 services. There have been 13,071 requests and 24,713 accounts created. Trust in government pertains to the perception or belief of individual citizens regarding the government and its affiliated entities' capability, honesty, and effectiveness in providing high-quality public services via e-government platforms (Mensah et al., 2020).

Figure 3.
Certificate of Appreciation for the PIONIRS Program as a Public Service Innovation

Source: Disdukcapil of Pontianak City (2023)

In 2022, the PIONIRS innovation was ranked as the fourth-best innovation at the city level in Pontianak. In 2023, PIONIRS also emerged as the third-best innovation at the provincial level in West Kalimantan and made it into the TOP 99 National Innovations by the Ministry of Administrative and Bureaucratic Reform (KEMENPAN-RB).

In the context outlined, the realization of the great opportunity for partners to directly integrate the needs of the community and build an understanding of the followership. This involves monitoring parameters that not only focus on increasing usage through PINIRS partners alone but also encourage each individual in the community to understand and actively participate in the application process at PIONIRS individually. Therefore, understanding the substance of service policies and implementing them dynamically and understandably for all parties is key, especially for local government agencies such as Disdukcapil Kota Pontianak to achieve their goals in community service as well as increasing participation and learning for the community itself.

Innovative approaches are crucial in shaping the Strategy for Enhancing Public Service Delivery, which focuses on the development of an integrated e-Government platform, especially in the

context of the PIONIRS program. This program can serve as a key strategy for transforming the level of public service improvement by fostering an integrated government system that simplifies bureaucratic processes. It has the potential to foster collaboration among interconnected regional organizations and departments, going beyond mere cooperation between organizational units or sectors. Moreover, the innovations introduced through PIONIRS can enhance the capacity to gather continuous feedback from citizens, effectively identifying and addressing service deficiencies.

Application in Providing Service Innovation through PIONIRS

Various platforms utilized by national and local public agencies to create public services shape and oversee the production and delivery processes of those services (Cordella & Paletti, 2019). The configuration of these platforms determines both the organizational and technological aspects that define how public administration produces and delivers public services. Consequently, this configuration represents the operational capacity of public administration, which is a result of the merging of ICT and organizational features (Zammuto et al., 2007).

Application refers to the concept of contextualization of how policies that have been formulated can be applied in practice. The implementation of innovations carried out by Disdukcapil Pontianak City develops along with changes in community needs and conditions. Applications that were originally direct can now be taken digitally and are more integrated, so this provides convenience and comfort for the community itself.

Its flexibility is seen in its ability to adapt to various factors such as time, location, and community conditions. In other words, people have easier and more affordable access to this service which was previously only available offline. People only need to do so at home or anywhere anytime by uploading the data requested by the PIONIRS system. This creates efficiency in service delivery by allowing easier online access for the community, in addition to being efficient in terms of time this innovation is also efficient in terms of space, it can be said that services carried out at home can reduce crowds in offices that do have limited space. With this innovation, it can be seen how public policies and services can keep up with the development of society and technology so that they remain relevant and useful in changing situations.

Empirically, during the research process involving interviews, observations, and data analysis, it was revealed that there were no concrete indicators of success for PIONIRS. This innovation seemed to only measure its success based on the number of successfully utilized users, without any more in-depth measures or parameters to measure its impact holistically.

IR as a JFT Analis Kebijakan Muda DISDUKCAPIL, explains that there is no specific determination of success indicators for us; we only target the number of users. So, if the number continues to increase every month, it signifies the success of our socialization efforts. Despite being in the era of 4.0, people still prefer face-to-face interactions. Interestingly, contrary to the assumption, factors such as the need for social interaction and direct experiences remain a priority for many individuals, even among generation Z who may be more comfortable at home. Our success might be apparent if people opt more for using PIONIRS rather than coming in person. Indirectly, the indicator lies in the increase in online service usage compared to offline. Currently, only 20% opt for PIONIRS, while 80% prefer coming in person.

Facilitating conditions in e-government refers to citizens' belief in the availability of resources to encourage their use of e-government services (Verkijika & De Wet, 2018). Trust in government can impact citizens' willingness to recommend e-government services.

Certainty regarding service innovation through PIONIRS is based on Standard Operating Procedures (SOP) and Service Standards (SP) related to each application option that will be submitted. More information about the SOP and SP can be accessed through the following page: https://disdukcapil.pontianak.go.id/page/standar-operasional-prosedur. In addition, the Disdukcapil also provided additional technical guidance on the use of PIONIRS, as well as the mechanism for Online Services from Home (PIONIRS):

A. Procedure for Account Registration at PIONIRS Disdukcapil of Pontianak
   1) Account Creation: The public as service users can enter the link on the website https://online.disdukcapil.pontianak.go.id
   2) Login using the registered account.
   3) Complete Personal Data: Service users complete the form to create a further account by uploading a selfie photo, KK photo, and KTP photo with clear information fiber data.
   4) Account creation process Completed

Figure 4.
**Procedure Registered and Verified Account**
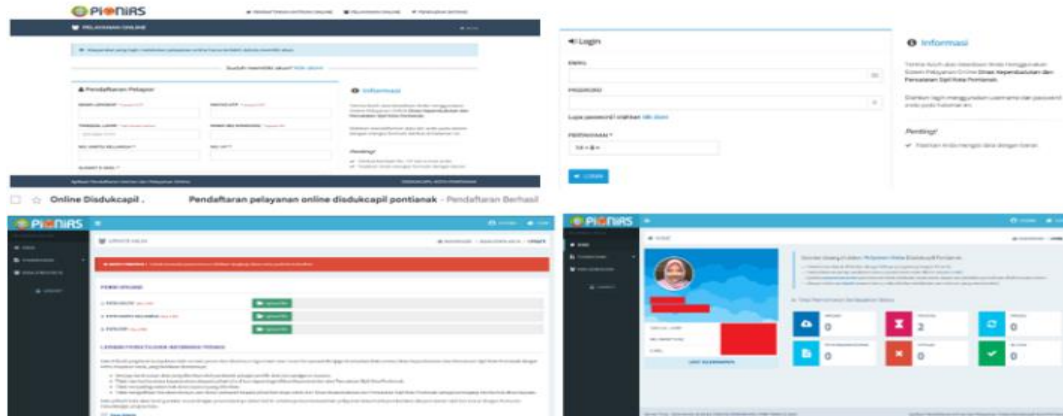
Source: (Disdukcapil PIONIRS website, 2023)

A. Procedure for Accessing Document Request Services
   1) Log in to the website https://online.disdukcapil.pontianak.go.id/pionirs
   2) Users log in using the previously registered account (e-mail and password) and answer captcha, then click LOGIN
   3) The user is directed to enter the new application menu and select one of the 26 types of service requests according to the needs needed.
   4) Notification of application process.
   5) Users, enter the document uploading stage of the requirements. Once the user's application has been verified, the user can proceed with uploading the next requirement.
   6) Once the required documents have been attached, the user will receive and be able to monitor the status of the application (Status Menu: upload Status, Pending Status, File Submission Status, and Completed Status).
   7) Users can check and receive results via e-mail from siakonline@dukcapil.kemendagri.go.id for 1-2 working days to get the previously submitted application document file and can do the printing independently.

Figure 5.
Procedure for Accessing Document Request Services
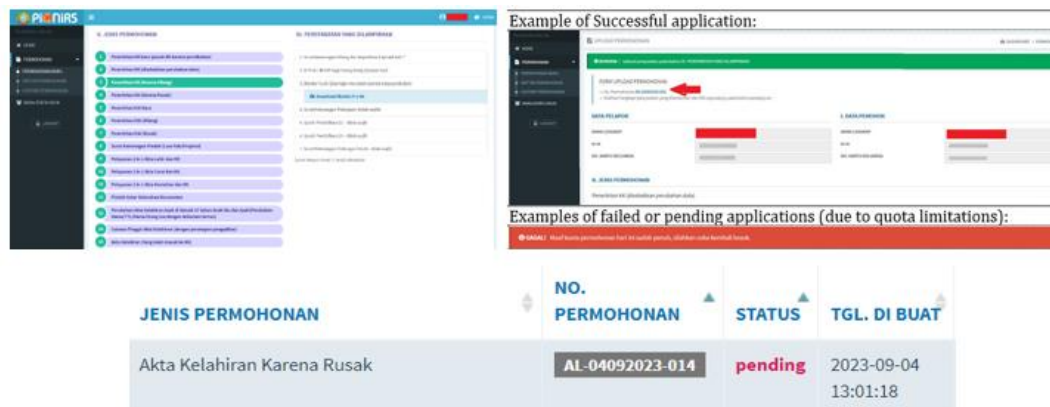
Source: Disdukcapil of Pontianak City (2023)

Table 5.
Total of PIONIRS Services at the Agency of Population Administration and Civil Registry (Disdukcapil) of Pontianak City from September 2020 to June 2023

No	Services	Summary Report			
		2020	2021	2022	2023
		Sep-Dec	Jan-Dec	Jan-Dec	Jan-Jun
1.	Issuance of new family card (KK) (due to marriage)	73	275	324	147
2.	KK issuance (due to data change)	79	292	404	246
3.	KK issuance (due to loss)	15	32	45	28
4.	KK issuance (due to damage)	8	33	62	45
5.	Issuance of new KIA	233	647	941	551
6.	KIA issuance (lost)	18	15	17	18
7.	KIA issuance (damaged)	28	30	49	40
8.	Certificate of moving (out of district/province)	78	333	453	304
9.	Birth Certificate and KK	157	437	1549	1067
10.	Divorce Certificate and KK	6	10	16	5
11	Death Certificate and KK	63	232	176	126
12.	Moving between Regency	39	132	169	114
13.	Marginal Note (Caping) Oldest Document	1	11	28	13
14.	Marginal Note (CaPing) with court order	0	14	28	14
15.	Birth Certificate (that has been entered into the KK)	18	127	112	55
16.	Pontianak District Court Officers (PN)	0	14	12	3
17.	Birth Certificate (due to loss)	0	23	66	41
18.	Death Certificate (due to loss)	0	8	2	3
19.	Peripheral record of adult birth certificate (Caping)	0	10	29	13
20.	Birth Certificate (due to damage)	0	2	13	11
21.	Addition of a Family Member in KK (who already has a Birth Certificate)	0	16	90	40
22.	[SPECIAL MENU] Only filled in by Pontianak Religious Court Officers	0	0	5	8
23.	Marriage Certificate (due to loss)	0	0	6	6
24.	Issuance of New Family Card (broken family card due to divorce)	0	0	0	10
25.	Cancel Move SKPWNI	0	0	0	10
26.	Move-In (new KK)	170	481	655	715
	Quantity	986	3205	5251	3629
	Total (2020-2023)	13.071			

Source: Disdukcapil of Pontianak City (2023)

The data presented in the report shows the usage of PIONIRS services by the Civil Registry Office of Pontianak City from September 2020 to June 2023. The data indicates that there has been a significant use of PIONIRS services during this period, especially as the data collection comes from socialization partners who have collaborated with the Disdukcapil. Although many partners have processed birth certificate data, the use of other online application options is still not widespread and optimal. The analysis of the data, based on interviews with JFT, reveals that 80% of people still prefer to visit the office while only 20% use PIONIRS. Further details regarding the analysis can be explained as follows:

a) KK issuance (due to marriage): The requests for Marriage Certificate (KK) issuance through PIONIRS experienced an increase, integrated through the socialization partner role via the Religious Affairs Offices (KUA) from various regions. The surge in service request accesses saw a rise in online usage.

b) KK issuance (due to data change): The numerical data indicates that the use of online services for changing ID card information also experiences fluctuations. Despite an increase from year to year, many still come directly to the office.

c) Issuance of new KIA: This service is highly sought-after online. The number of online applications is consistently increasing, with 551 applications submitted in the first half of 2023. This could indicate that the public is increasingly comfortable with using online services for new Family Cards (KIA), especially given the mobilization efforts by partners such as hospitals, midwifery practices, and others. This implies that the integration efforts towards many systems, besides birth certificates, also bring additional benefits.

d) Certificate of moving (out of district/province): While online usage has increased, over 60% of requests are still submitted in person.

e) Birth Certificate and KK: This service demonstrates an increase in online usage year after year, yet the majority of requests are still processed individually in the office.

f) Moving between districts: More than 70% of requests are still being made in physical offices.

g) Move-In (new KK): This is one of the most requested services online, with over 70% of requests submitted through PIONIRS.

After analyzing the available data, it can be concluded that while some types of services have experienced an increase in online usage, the majority of the population still prefers visiting the office in person. The collaboration with various partners has proven successful, as evidenced by the increased issuance of documents such as birth certificates. However, the Disdukcapil continues to face challenges due to certain members of the public being hesitant to adopt available innovations."

There is a difference in the level of online usage among different types of services. Services like 'Issuance of New ID Cards – New Birth Certificates' and 'New Move-In (New Household ID Card)' are shifting towards online/digital platforms. The potential for online usage is significant, and there are opportunities to increase public awareness of the benefits of using online services as well as overcoming any barriers that may arise in the online request process.

To improve the usage of online application services, the Civil Registry Office of Pontianak City should concentrate on educating the public, enhancing user interfaces and experience, and ensuring the security and quality of their online services. This will help to build trust and confidence among the community.

To ensure the security of user data on the website, it is necessary to have relevant Standard Operating Procedures (SOPs) in place. These SOPs should be specific to the website, particularly about PIONIRS, to make users feel more comfortable and secure when using the website. SOPs

are required to regulate the operations of website-based innovations due to several important reasons, which will be explained below. Quality

1) Consistency: By implementing specific Standard Operating Procedures (SOPs), the website's ability to maintain consistent quality over time can be ensured. This involves preserving the design, concept, content, and functions according to the established standards. Consistency is important in maintaining the reputation and image of the Civil Registry Office.
2) Security: Websites can be considered the primary target for cybercriminals. By implementing specific security protocols, it is possible to minimize criminal activities and aid in swiftly and effectively identifying, preventing, and responding to security threats. Consequently, users need not worry about the security of their sensitive data.
3) Problem Handling: When websites encounter issues or disruptions, this SOP will aid the technical team in responding promptly, seeking solutions, emergency contacts, and recovery procedures in case of failures.
4) Scalability: When planning and executing changes for website expansion and growth, this SOP is useful for ensuring scalability.
5) Regulatory Compliance: Having specific SOPs can help organizations comply with regulations and policies regarding accessibility, data privacy, copyright, and other areas. Adherence to these regulations is critical to avoid legal repercussions for non-compliance.

CONCLUSIONS

Based on the discussion of the results of field research conducted by researchers at The Pontianak Agency of Population Administration and Civil Registry related to the Implementation of Public Service Innovation Policies in the Context of Supporting E-Government at the Pontianak City Government, several conclusions can be drawn, as follows:

- The Department of Population and Civil Registration has succeeded in presenting and developing various service innovations to facilitate services for the community, counting 11 innovations currently in active use including the very meaningful PIONIRS service innovation. PIONIRS allows the community to access services flexibly added with cooperation with various public and private agencies from various sectors such as health, courts, villages, sub-districts, and so on. The massive number of applicants who were also recorded through the partners involved showed a significant number, in addition to partnering with the various agencies involved this innovation also reached many aspects of population data requirements.
- The weaknesses or shortcomings, in this case, were that in practice this innovation has not reached a wide range of people, especially in Pontianak City, there were still many people who were more accustomed to conventional or face-to-face services rather than online services for the 26 application options available. Among the partners involved, some partners were passive in using this PIONIRS service innovation so the data obtained showed that only a few partners were actively involved and were only able to mobilize certain options.
- Broadly speaking, the principle of the presence of PIONIRS is a progressive step that allows it to apply to the Department of Population and Civil Registration in various other regions to be able to apply it to be able to especially the concept of integrating the convenience of digital applications with the existence of technology, but in the empirical level of the approach in practice there are still obstacles ranging from the SOP of this innovation only relying on the SOP of each service, although this is only as a tool, this is

important to maintain legal legitimacy, system management in PIONIRS itself, to and public trust in the website base that is owned. It is necessary to increase the capacity and qualifications of both internal and external resources, which are present from socialization partners, to ensure the success and sustainability of this innovation.

Based on the analysis and conclusions derived from this research, the following recommendations are presented to provide valuable input and guidance for the Civil Registration Office of Pontianak City. Firstly, there is a need to improve both the quantity and quality of human resources involved in the use of technology, ensuring personnel are adequately equipped to leverage technological advancements for better service delivery. Secondly, the development of specific Standard Operating Procedures (SOP) and Service Protocols (SP) for the PIONIRS initiative is crucial. These procedures will legally legitimize the tools used to support this service innovation, extending beyond technical guidelines to enforce regulatory compliance, maintain consistent website quality, ensure security, facilitate maintenance and updates, and uphold regulatory adherence. Additionally, these protocols are vital for maintaining public trust in the handling of sensitive data. Thirdly, the expansion of the network of partners involved in the socialization process should be driven by the partners' abilities and preparedness, aiming for broader and more effective outreach. Lastly, mass socialization of service innovations through PIONIRS can be conducted via various methods, including direct introductions at relevant offices, organizing socialization programs with local administrations, and employing various forms suitable to the ideal situation. Implementing these recommendations will significantly enhance service delivery, ensure compliance with regulatory standards, and improve public trust and engagement.

This research has limited interview data, as it was only conducted with a few subjects from Pontianak City, as well as a few user communities. To conduct future research, it is recommended to analyze the synergy of actor networks and conduct surveys to assess public awareness regarding the implementation and impact of the PIONIRS innovation.

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