

# Implementation of the Regional Government Information System (SIPD) in the Budget Planning Process at the Secretariat of the Bandung City Regional House of Representative

Raisa Rafifiti Choerunnisa<sup>1</sup>, Mershiva Ramadhisha<sup>2</sup>

{raisa.rafifiti@poltek.stialanbandung.ac.id<sup>1</sup>, mershiva21@gmail.com<sup>2</sup>}

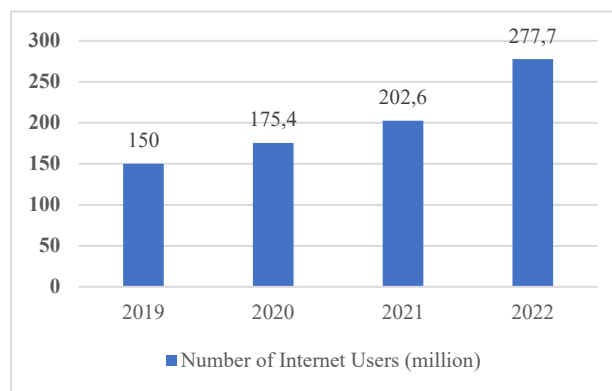
Politeknik STIA LAN Bandung, Bandung, Indonesia

**Abstract.** This study describes the budget planning process through the Regional Government Information System (SIPD) at the Secretariat of Provincial Legislatives Council (DPRD) in Bandung City. This research was motivated by an order from the Ministry of Home Affairs (Kemendagri) to immediately use SIPD in the context of regional financial management as a form of embodiment of the Electronic Based Government System (SPBE). However, there are obstacles in its implementation, such as Human Resources (HR) who do not have an understanding of SIPD, difficulties in entering data, and data that changes during the process of entering data into SIPD. This study aims to describe and analyze the implementation of SIPD in the budget planning process at the Bandung City DPRD Secretariat, to analyze the obstacles encountered during implementation, and to analyze the efforts made by the Bandung City DPRD Secretariat in overcoming obstacles that occur during implementation. This study uses qualitative research methods with a descriptive research approach with data collection techniques through interviews, observation, and documentation studies. The results showed that based on 4 (four) determinants of the success of policy implementation according to George Edward III it was known that the implementation of SIPD in the budget planning process at the Bandung City DPRD Secretariat had not run optimally because of these four factors there were factors that had not been implemented properly, namely communication factor and bureaucratic structure factor. However, there are aspects that have been going well, namely the resource factor and disposition factor. Efforts made by the Bandung City DPRD Secretariat to overcome the obstacles that occur are by conducting meeting discussions and evaluations attended by all parties involved to find out how much budget realization will be achieved because budget realization has an effect on determining the success of regional financial management. In addition, the Bandung City DPRD Secretariat also coordinates with other parties, both with other sections in the Bandung City DPRD Secretariat and with other OPDs to maintain the continuity of the SIPD implementation properly. It is intended that budget planning can be carried out optimally up to the reporting stage.

**Keywords:** System, Planning, Budget, Data, Management

## 1 Introduction

Technology continues to develop from time to time and this has a huge impact on life. With these developments continuing to occur, technology has become an important need in everyday life. Through technology, people can use it in various activities such as for studying, working, accessing digital platforms, and so on. Accessing software such as applications, information systems and websites can generally only be accessed via the internet. Currently, almost all people use the internet to carry out various activities or events which causes an increase in the number of internet users every year. The following is the number of internet users in Indonesia based on Internet World Stats via Hootsuite and We Are Social from 2019 to 2022.



**Fig. 1.** Number of Internet Users in Indonesia 2019-2022  
Source: Data Reportal [1]

Based on Picture 1, it can be seen that from 2019 to 2022 the number of internet users in Indonesia continues to increase. This is due to the encouragement to use the internet, which has now become one of society's needs, especially since the COVID-19 pandemic occurred in Indonesia in 2020. Budget planning is a part that is interrelated with the preparation of regional government work programs. This is because with budget planning that has been prepared systematically and in detail, the implementation of programs and activities can run more effectively and efficiently so that success in achieving the goals you want to achieve can be achieved. In the budget planning process, there are innovations to create effectiveness, such as the use of technology which is expected to make budget planning easier. A system is used to provide various information containing financial-related information that can be accessed by the public as a form of manifestation of transparency in a regional government.

A management information system is a system that is able to meet information needs aimed at achieving the desired goals. A management information system includes activities for collecting, storing and processing data, the results of which produce information at all levels of management and are related to management functions in resource management. Management information systems aim to organize a collection of information in one unified system so as to facilitate efforts to achieve a goal to be achieved [2]. The following are the three roles of information systems according to Rusdiana and Moch Irfan in a book [3]:

1. Increasing operational efficiency, this is because the existence of an information system can help operations run more efficiently which has the impact of cost advantages because

the use of information systems results in cost savings compared to before the use of information systems.

2. Introducing innovation in business, this is because the existence of an information system can produce new innovations that have never happened before.
3. Building strategic information sources, this is because the existence of an information system will produce strategic information sources because the information system contains all the data stored in it. The existence of strategic information sources gives rise to the possibility of developing system networks, the existence of resources that have expertise in information systems, and so on.

According to the Director General of Financial Balance, the use of the Regional Financial Information System (SIKD) in regional governments in Indonesia in 2020 is described as follows:

**Table 1.** Number of Users of Regional Financial Information Systems (SIKD) in Local Government in The Year 2020

No.	Type of Information System	Number of User Regions
1	SIMDA (Regional Management Information System)	287
2	SIPKD (Regional Financial Management Information System)	89
3	Other System	111
4	Not Using a System	55
	Total	542

Source: A. Ariyani and S. Maghfiroh, S. [4]

Based on table 1, it can be seen that the information systems used by each regional government are different. This has resulted in the realization of the Electronic Based Government System (SPBE), it is known that in its implementation there are still many systems that have not been integrated and the number continues to increase. Based on news published on the narasi.tv article, it is known that President Joko Widodo ordered Ministries/Institutions to stop creating new applications because the purpose of realizing SPBE was not to build new applications[5]. It is known that by 2023 there will be 27,000 applications that are expected to make digitalization easier but are actually causing difficulties for society. This is because people have to create an account for each application. Apart from that, the large number of applications actually wastes the state budget because each application requires maintenance costs and some applications are not accompanied by optimization so that the application does not function according to its purpose. Seeing that there is no uniformity in the use of information systems for regional financial management, the central government issued a Regional Government Information System or hereinafter referred to as SIPD which is guided by Minister of Home Affairs Regulation Number 70 of 2019 concerning Regional Government Information Systems (SIPD). SIPD is a form of information system that includes regional development planning, regional finance and regional supervision which can be accessed via the official website issued by the Ministry of Home Affairs.

The implementation of this system is the impact of Minister of Home Affairs Regulation Number 70 of 2019 concerning Regional Government Information Systems Article 31 which states that all systems related to electronic-based Regional Development Information and Regional Financial Information that existed before this regulation came into effect are required to be integrated into SIPD as soon as possible within a maximum period of 1 year

from the promulgation of the regulations. Previously there were still regional governments that used the Regional Management Information System or SIMDA guided by Minister of Home Affairs Regulation Number 13 of 2006 and there was no encouragement to use SIPD. After the issuance of this policy, regional governments were asked to immediately use the Regional Government Information System or SIPD completely and comprehensively, starting from budgeting, administration, to reporting, guided by Minister of Home Affairs Regulation Number 77 of 2020 concerning Technical Guidelines for Regional Financial Management. The following is the front page of the official SIPD website, namely [www.sipd.go.id](http://www.sipd.go.id).



**Fig. 2.** Official Website SIPD  
Source: Official Website SIPD, 2023

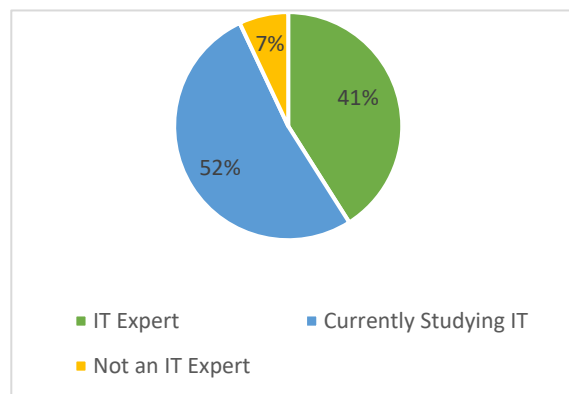
The aim of the Regional Government Information System (SIPD) is to improve the quality of planning, control and evaluation of regional development using accurate and accountable data and information. However, at the beginning of 2023, SIPD underwent changes, where previously SIPD was a monolithic-based information system, changing to SIPD-RI, which was microservice-based. The purpose of this system change was conveyed through a circular issued by the Ministry of Home Affairs that the implementation of regional financial management from planning to accountability is carried out through SIPD-RI for inputting RKPD data in 2024. Initially SIPD had an initial concept which was later changed because there were obstacles that causing its implementation to not be able to run in accordance with the laws and regulations used. The following are the differences between the old concept and the new SIPD concept.

**Table 2.** Difference Between the Old and New Concepts of SIPD

Old Concept	New Concept
In the process of data collection, there is a data collection process that is not yet focused on its purpose	The data collection process will focus on each objective related to the data collection
Data completeness is a key component in SIPD that leads to the low commitment of the local government in managing SIPD	Component-based data is not only about data completeness but also the purpose of data usage
Data groups, data types, and data elements, along with data and information, are still mixed in one section of the system	Data is divided into 4 (four) sections, which include <i>e-Database</i> , <i>e-Planning</i> , <i>e-Budgeting</i> , dan <i>e-Monev</i>

Source: Badan Perencanaan Pembangunan Daerah, Penelitian dan Pengembangan [6]

Based on table 2, it can be seen that initially SIPD had a concept that gave rise to problems or obstacles, one of which was that previously SIPD did not have a feature where the data contained in it could be categorized based on data groups, data types, or data elements which caused the data to be in one system randomly. This will hamper the process of implementing SIPD because searching for data will take a long time because the data is mixed with other data that is not needed. This obstacle is not in accordance with information system principles because the function of an information system is to speed up tasks that were previously carried out manually and then become an information system that collects various types of data on one platform. The use of SIPD aims to facilitate the provision of regional government information because it is connected to one information system which includes the management of regional development information, regional financial information and other regional government information in order to realize success in implementing development in Indonesia. To achieve this, each government agency needs human resources who are competent and capable of using SIPD, considering that SIPD is an information system whose use requires electronic devices. However, this could not work properly because problems were discovered such as human resources who did not understand technology but were still assigned to be operators in managing SIPD. The following is a graph of the IT HR skills of SIPD managers at the North Sumatra Province Department of Industry and Trade.



**Fig. 3.** IT Expertise of SIPD Managers in the Department of Industry and Trade of North Sumatra Province  
 Source: Dela Alfani, J.N.[7]

Based on Picture 3, it can be seen that the human resources in the North Sumatra Province Department of Industry and Trade are still considered a small number because this means that less than half of the total number of human resources are considered not to fully understand the use of SIPD. The use of SIPD aims to integrate with related parties or input data directly into SIPD as one of the results obtained by local governments. The input data aims to meet community needs. This is because population data allows residents to access government programs and public services provided by the government to fulfill the rights of citizens without exception[8]. The implementation of SIPD by local governments can be carried out through 2 (two) methods, namely integration and direct data input. However, in its implementation, problems or obstacles were found that could affect the effectiveness of SIPD as a form of information system used by regional governments, such as the number of

data entries not matching the actual number of regional governments. The description of the method of using SIPD by all regional governments by province, district or city for 2022 is further outlined as follows:

**Table 3.** Local Government Data Using SIPD Baed on the Chosen Method for the Period of 2022

	Integration	Direct Input	Method Not Selected Yet
Province	22	12	0
Regency	210	168	37
City	57	30	6
Total	289	210	43

Source: Situs Resmi SIPD, 2022

SIPD facilitates everything from planning to budgeting systems consistently so that there are no additions or reductions to programs when all data has been input into the initial planning according to the predetermined time limits[9]. Budget planning is a process that plays a very important role in organizing government, specifically in financial management. This is because the initial stage of financial management is planning the budget to realize the performance targets to be achieved. Budget planning must be prepared as detailed and thorough as possible because accurate budget planning according to targets will make it easier to carry out the next stage, namely effective budget implementation[10]. However, this is different from the data input process which is carried out in accordance with the Regional Apparatus Needs Plan (RKPD) by the Secretariat of the Bandung City Regional House of Representative (DPRD), where the data input process has been carried out according to the plan but there are changes to the budget after the data has been input. This is due to several factors, such as budget changes during the data input process and the amount of the previously planned budget being reduced and then the remaining budget being allocated to other programs. The following is a recapitulation of the RKPD ceiling of the Bandung City DPRD Secretariat in the Budgeting Facilitation and Supervision Section based on program type and before and after the implementation of data input into the SIPD.

**Table 4.** Summary of The Planned Budget for Regional Device Needs (RKPD) in the Secretariat of the Bandung City Regional House of Representative (DPRD), Facilitation of Budgeting and Oversight Section

No.	Nomenclature of Programs/Activities/Sub-Activities	2023 RKPD Budget Ceiling Before Entry	2023 RKPD Budget Ceiling After Entry
	Ministry of Home Affairs Regulation No. 50/2020		
1.	Discussion on Budget Policy	6.719.174.693	6.439.918.720
a)	Discussion of the Budget Ceiling and the Budget Implementation Plan (KUA and PPAS)	1.403.838.293	1.454.874.320
b)	Discussion of the Revised Work Plan and Budget Implementation Plan (KUPA and PPAS)	1.256.173.600	896.680.000
c)	Discussion of the Regional Budget (APBD)	1.337.485.600	1.363.790.000
d)	Discussion of the Revised Regional Budget (APBD)	1.301.185.600	1.221.977.000
e)	Discussion of the Semester Report	83.006.000	167.112.400
f)	Discussion of the Accountability of the Regional Budget (APBD)	1.337.485.600	1.335.485.000
2.	Budget Policy Oversight	7.820.632.171	7.820.632.171

a)	Supervision of Government Affairs in the Field of Governance and Law	1.909.075.652	1.909.075.652
b)	Supervision of Government Affairs in the Infrastructure Sector	1.897.266.745	1.897.266.745
c)	Supervision of Government Affairs in the Welfare of the People Sector	2.136.798.961	2.136.798.961
d)	Supervision of Government Affairs in the Economic Sector	1.877.490.813	1.877.490.813
3.	Absorption and Collection of Community Aspirations	13.420.202.620	13.405.120.600
a)	Formulation of the Main Ideas of the Regional House of Representative (DPRD)	220.000.000	903.850.000
b)	Implementation of Recess	13.200.202.620	12.501.270.600
4.	Implementation and Oversight of the Code of Ethics of the Regional House of Representative (DPRD)	1.104.508.669	1.104.508.669
a)	Supervision of the Code of Ethics of the Regional House of Representative (DPRD)	1.104.508.669	1.104.508.669
5.	Discussion on Regional Cooperation	110.000.000	110.000.000
a)	Facilitation, Verification, and Coordination of Regional Cooperation Agreements	110.000.000	110.000.000

Source: Secretariat DPRD Bandung City, 2022

Based on table 4, it can be seen that there are programs/activities whose budgets are reduced from before the data was input and after the data was entered into the SIPD, namely in the Budget Policy Discussion program. However, there are also budget changes where the data entered before data entry increases after data entry, as in the red table. This is because there are changes to the budget during the process of inputting data into SIPD but the data that has been planned cannot be changed. From the description of the phenomena contained in the ongoing implementation of SIPD in regional government, the author brought this into research with the title "Implementation of the Regional Government Information Systems (SIPD) in the Budget Planning Process at the Secretariat of the Bandung City Regional House of Representative".

## 2 Methods

This research uses a qualitative research method where the research aims to understand issues regarding the situation and reality that occurred and then these issues can be understood by anyone who reads the final results of the research. Qualitative research is used to understand issues regarding situations and realities that occur and then these issues can be understood by anyone who reads the final results of the research. John W. Creswell[11] in his book entitled *Research Design: Qualitative, Quantitative, And Mixed Methods Approaches* defines qualitative research as research that relies on the researcher as an instrument in collecting data using various comprehensive methods. The type of research used in this research is descriptive research, where the research aims to measure certain social phenomena as carefully and in as much detail as possible. In this case, this type of research is used to examine the Implementation of the Regional Government Information System (SIPD) in the

Budget Planning Process at the Bandung City DPRD Secretariat. Information and data obtained based on research results will be conveyed through this type of descriptive research.

The data collection technique used in relation to this research uses library research which includes books, journals, papers and other forms of written work that are relevant to the research being conducted. Data collection was also carried out through observations at the Bandung City DPRD Secretariat, interviews with informants relevant to the research, as well as documentation studies aimed at informants deemed relevant to research related to the Implementation of the Regional Government Information Systems (SIPD) in the Budget Planning Process at the Secretariat of the Bandung City Regional House of Representative. The data collection methods used by researchers are interviews, observation and documentation studies.

### **3 Result and Discussion**

Policy is a series of activities or actions carried out by individuals or groups with the aim of overcoming obstacles that occur. Policy can also be interpreted as a provision that must be followed and adhered to by all parties involved in it. Policies show the abilities or qualities possessed by someone who is educated, good and experienced [12]. Regional Government Information System Policy is regulated in Minister of Home Affairs Regulation (Permendagri) Number 70 of 2019 concerning Regional Government Information Systems. The issuance of this policy is one of the orders from the Central Government for all OPDs (Regional Apparatus Organizations) to immediately use SIPD in collecting Regional Government information to realize success in regional development. One of the OPDs that has been directed to immediately use SIPD is the Bandung City DPRD (Regional House of Representative) Secretariat. As one of the Regional Government institutions whose role is to facilitate elements of administrative services as well as providing support for the duties and functions of the Bandung City DPRD, the Bandung City DPRD Secretariat strives to fulfill its duties by using SIPD as an information system used to carry out budget planning.

On January 6 2023, through the Ministry of Home Affairs' official YouTube, SIPD-RI socialization activities were carried out via Zoom Meeting. It can be seen that the Ministry of Home Affairs provided information through circulars that the implementation of regional financial management starts from planning, budgeting, administration, to accounting, reporting and financial accountability. regions are carried out through SIPD-RI. The use of SIPD-RI has been implemented since 2023 in accordance with a circular from the Ministry of Home Affairs as the institution that issued this information system, which means that all Regional Governments in Indonesia have used SIPD-RI to input RKPD data for 2024. SIPD-RI is a technological update from It is hoped that this update can help OPD to carry out regional financial management activities because there are still regional governments that have not input RKPD (Regional Development Work Plan) data into SIPD-RI, to be precise, there are 61 Regional Governments, consisting of 11 Governments. Province, 42 Regency Governments, and 8 City Governments. In terms of use, SIPD-RI has no significant changes compared to the previous SIPD. However, there are technical obstacles due to the transfer of information systems, plus based on an agreement from the Ministry of Home Affairs which makes SIPD-RI a general application, which means that all Regional Governments are required to immediately use SIPD-RI based on an official decision from the Ministry of Home



Affairs. Budget planning is the initial stage of regional development planning contained in SIPD, including several stages, namely as follows:

- a. Data planning;
- b. Data collection;
- c. Electronic data entry; And
- d. Electronic-based data checking

One theory of policy implementation that states the factors that influence the success of a policy is the theory of George Edward III [13] which states that there are four variables which are factors that influence policy implementation. It is hoped that these factors can shape the character of the parties involved in implementing SIPD in the budget planning process so that they can realize the results of planning reports optimally and can realize the budgeted activities as an embodiment of optimal regional development. These variables are further described as follows:

- a. Communication

Policy implementation can run well if there is clarity regarding the policy objectives conveyed by the policy implementers. Communication is very important in policy implementation because budget planning involves many parties because it aims to realize programs and activities as a form of regional development. Based on the results of observations and interviews with informants, it can be seen that the communication variable has not been implemented well in the SIPD implementation in the Budget Planning Process at the Bandung City DPRD Secretariat. It can be seen that there was a socialization activity but not all assigned parties could participate, so the representatives who took part in the socialization then gathered SIPD operators from their OPD and presented the results of the socialization to all the operators. The delivery of the information obtained is not necessarily complete because each individual's understanding is different, thus allowing miscommunication to occur in the application of SIPD in the budget planning process. Even though there are obstacles in obtaining information on the results of the socialization, it is known that if there are problems in inputting data, an online discussion will be held, namely through a Zoom Meeting which is attended by the agencies, OPDs and SKPDs involved to discuss solutions that can be implemented to overcome the obstacles that occur and also Weekly evaluations are held by all sections of the Bandung City DPRD Secretariat.

- b. Resources

To realize effectiveness in implementing a policy, adequate resources in any form are required. With the availability of resources in accordance with previously determined requirements or qualifications, the budget planning process through SIPD can run optimally so as to realize success in managing regional government finances. Based on the results of observations and interviews with informants, it can be seen that the resource variable has been implemented well in the SIPD implementation in the Budget Planning Process at the Bandung City DPRD Secretariat. It can be seen that there are certain requirements or qualifications to become a SIPD operator, such as having an understanding of IT and an understanding of the regional financial management cycle. Apart from that, there is also information available regarding the use of SIPD in the budget planning process and can be studied by SIPD operators via the internet. There are also existing facilities and infrastructure that continue to adapt

to what operators need so that the budget planning process through SIPD can run well and according to the predetermined schedule.

c. Disposition

Implementing a policy requires support from the implementor or policy implementer so that the implementer's attitude or disposition needs to know what they have to do to implement the policy and have an honest, responsive, committed and responsible attitude in implementing the policy. Based on the results of observations and interviews with informants, it can be seen that the disposition variable has been implemented well in the SIPD implementation in the Budget Planning Process at the Bandung City DPRD Secretariat. This can be seen in how operators go through the budget planning process starting from implementing socialization regarding the budget ceiling and how operators respond to changes that occur in SIPD where currently the information system is microservice based and has changed its name to SIPD-RI. This means that operators must understand the changes that have occurred and study the differences between SIPD-RI and the previous SIPD, where one of the changes is that budget planning is more transparent because the input of planning data is more detailed and detailed because SIPD-RI contains components from each program and activity. However, SIPD operators responded to these changes well, this can be seen how the operators immediately studied and understood the existing components so they felt more focused with this change.

d. Bureaucratic Structure

This indicator has an understanding that the successful implementation of a policy is influenced by the authorized bureaucratic organization which acts as the organizer of the implementation of the related policy. Based on the results of observations and interviews with informants, it can be seen that bureaucratic structure variables have not been implemented well in the SIPD implementation in the Budget Planning Process at the Bandung City DPRD Secretariat. It can be seen that there is no Standard Operating Procedure (SOP) regarding the use of SIPD so that employees tasked with being SIPD operators inevitably have to study individually through various sources. If employees experience problems in inputting data into SIPD, employees find out through statutory regulations or existing guidelines because there is no SOP that shows procedures for implementing SIPD in budget planning. Apart from that, there is a distribution of responsibilities according to the sections, however, due to the habit of inputting independently, the process of inputting data into the SIPD is less effective because during the process there are situations where there are operators from different sub-sections experiencing problems during the data input process but the delivery The solution is carried out at different times because the two sub-sections input data at different times.

From the description of the research results, it can be seen that there are variables that have been implemented well and there are also variables that have not been implemented well. However, the Bandung City DPRD Secretariat is trying to overcome the obstacles that occur during the implementation of SIPD in the Budget Planning Process at the Bandung City DPRD Secretariat, such as holding meetings and discussions which are attended by all sections involved in the budgeting process. That way, employees can hold discussions and exchange information starting from the budget planning process to implementation. If there are employees who experience difficulties, other employees can help and provide solutions that can be done to overcome them.

## 4 Conclusion

SIPD implementation is carried out based on Minister of Home Affairs Regulation Number 70 of 2019 concerning Regional Government Information Systems and Minister of Home Affairs Regulation Number 77 of 2022 concerning Technical Guidelines for Regional Financial Management. Since the beginning of 2023, the Ministry of Home Affairs has issued a circular to all OPDs that the implementation of regional financial management starting from planning, budgeting, administration, to accounting reporting and regional financial accountability is carried out through microservice-based SIPD-RI. This change causes all OPDs including the Bandung City DPRD Secretariat to adapt and study SIPD-RI as soon as possible because this information system will be used for budget planning for 2024.

The form of communication carried out by the Bandung City DPRD Secretariat is only carried out through socialization which can only be participated in by representatives, causing delays in the delivery of information. The solution taken to deal with these delays was by holding meeting discussions and evaluations which were attended by employees who were SIPD operators from all departments. This aims to determine the progress of each section during regional financial management and also to find out how much the budget is realized because budget realization influences the success or failure of regional financial management.

The resources in this case are employees assigned to be SIPD operators at the Bandung City DPRD Secretariat who have certain requirements or qualifications such as having an understanding of technology because the use of SIPD can only be done through technological devices, understanding numbers or budgets, and having an understanding of the cycle. regional financial management because budget planning is a stage of regional financial management.

The disposition and attitude of implementers in implementing budget planning through SIPD are addressed well. This is because the change in system to SIPD-RI means operators have to learn what is different between the new system and the previous system. This change was responded to well, where there was a change in inputting more detailed and detailed data. Operators actually feel that this change makes them more focused and obedient in their administration.

The Bandung City DPRD Secretariat does not have a Standard Operating Procedure (SOP) related to budget planning through SIPD. The absence of SOPs causes policy implementers, namely employees who are SIPD operators, to use other sources of information such as statutory regulations, guidebooks and the internet.

It is recommended that there be training or outreach activities that can be participated in by employees assigned as SIPD operators to input data into SIPD properly and appropriately. In this way, the implementation of data input can run more efficiently because there is no need to convey the information again. There is a need to immediately create Standard Operating Procedures (SOP) related to SIPD implementation to create clarity and consistency in the implementation of regional government budget planning. Making this SOP can be done simultaneously with conveying information via the official website or social media as a form of embodiment of the principle of transparency in regional financial management. Innovation continues to be carried out to improve performance and overcome obstacles faced so that budget planning through SIPD can be carried out optimally because with good budget

planning, good results will be achieved, namely achieving budget realization in accordance with the established plans.

## References

- [1] Datareportal, "Digital In Indonesia." Accessed: Sep. 15, 2023. [Online]. Available: <https://datareportal.com/digital-in-indonesia>
- [2] R. R. Choerunnisa and R. Rosinta, "Implementasi Program Kartu Identitas Anak (KIA) Melalui Penggunaan Sistem Informasi Administrasi Kependudukan (SIAK) di Pemerintah Kota Cimahi," *JURIKOM (Jurnal Riset Komputer)*, vol. 8, no. 6, pp. 429–438, 2021.
- [3] A. Rusdiana and N. Nasihudin, "Sistem Informasi Manajemen Pendidikan Tinggi: Kajian Konsep, Kebijakan dan Implementasi," 2016.
- [4] A. Ariyani and S. Maghfiroh, "Faktor-faktor yang memengaruhi kinerja pegawai pengguna sistem informasi pemerintahan daerah (SIPD) di Kabupaten Brebes," *Jurnal Pendidikan Tambusai*, vol. 6, no. 2, pp. 15022–15038, 2022.
- [5] Rusti Dian, "Presiden Jokowi Minta Kementerian Stop Membuat Aplikasi Demi Optimalkan DPI. Begini Tanggapan Menpan," Jun. 15, 2023.
- [6] P. dan P. K. P. S. Badan Perencanaan Pembangunan Daerah, *Peran Sistem Informasi Pembangunan Daerah dalam Perencanaan Pembangunan*. Pesisir Selatan, 2019.
- [7] D. Alfani and J. Nasution, "Implementasi Sistem Informasi Pemerintahan Daerah (SIPD) pada Dinas Perindustrian dan Perdagangan Provinsi Sumatera Utara," *Jurnal Pendidikan Tambusai*, vol. 6, no. 1, pp. 4036–4043, 2022.
- [8] R. R. Choerunnisa and R. Rosinta, "Kualitas Pelayanan Jemput Bola bagi Warga Disabilitas di Dinas Kependudukan dan Pencatatan Sipil Kota Cimahi," *Jurnal Wacana Kinerja: Kajian Praktis-Akademis Kinerja Dan Administrasi Pelayanan Publik*, vol. 26, no. 1, pp. 73–92, 2023.
- [9] A. B. Karundeng, J. E. Kaawoan, and S. E. Pangemanan, "Implementasi Kebijakan Sistem Informasi Pemerintahan Daerah (Sipd) Di Badan Perencanaan Pembangunan Penelitian Dan Pengembangan Daerah Kabupaten Kepulauan Siau Tagulandang Biaro," *GOVERNANCE*, vol. 1, no. 2, 2021.
- [10] W. A. Ratag, A. G. Kumenaung, and D. S. M. Engka, "Pengaruh Perencanaan Anggaran Terhadap Penyerapan Anggaran Di Lingkungan Iniversitas Sam Ratulangi," *Jurnal Pembangunan Ekonomi dan Keuangan Daerah*, vol. 20, no. 3, pp. 78–91, 2021.
- [11] J. W. Creswell and J. D. Creswell, *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications, 2017.
- [12] N. Mustari, "Pemahaman kebijakan publik: formulasi, implementasi dan evaluasi kebijakan publik," *Kebijakan Publik Deliberatif*, vol. 1, p. 286, 2015.
- [13] G. C. Edwards III, "Implementing Public Policy, Congressional Quarterly Inc," *United States of America. Alfabeta*, 1980.