

## ARTICLE

# Governance Through Electronic-Based Information System by Papua Provincial Government

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## OPEN ACCESS

**Citation:** Adi Suhendra. Governance Through Electronic-Based Information System by Papua Provincial Government. *Ijori Journal* Vol. 2 No. 3 (2022): 48-58.  
<https://doi.org/10.52000/ijori.v2i3.65>

e-ISSN : 2775-7641

Accepted: November 30<sup>th</sup>, 2022

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**Abstract:** This research is about regional development efforts through governance with electronic-based information systems in Papua Province, namely Papua One Data Integration (PAITUA), Papua Spatial Management Information System (SIMTARU), Information System for Official Travel Orders (SPPD) Papua Provincial Government and Presence Information System and TPP. Papua Innovation One Data Integration (PAITUA) is a systematic and structured regional governance policy to produce data that is accurate, up-to-date, integrated, accountable, easy to access, can be shared between regional apparatuses, central agencies and other agencies through compliance with data standards, metadata, data interoperability and use of reference code and master data. Papua Spatial Management Information System Innovation (SIMTARU) is an open source application that is part of the Spatial-Based Information Management System (SMIS). The combination of modern cartographic technology with participatory methods in the form of data layers and permits or maps in several categories is used to monitor all activities related to spatial planning in Papua Province. Innovation of Information System for Service Travel Orders (SPPD) for the Government of Papua Province is a web-based information system that is equipped with a set of computers that can be accessed into a data communication network where the server is located at the Papua Communication and Informatics Office and can be accessed online. Presence and TPP Information System innovations are digital attendance that are connected to the Additional Employee Income (TPP) application in order to apply discipline to enter and leave the office on time for the state civil apparatus (ASN). This study uses a qualitative approach research method. As for data collection with literature review techniques. Literature review is a systematic examination of critical scientific literature in analyzing, evaluating, and synthesizing research findings, theory, and practice. Literature review provides an overview of the development of a particular topic. The result of the Papua One Data Integration (PAITUA) innovation is that data and information are available that are complete, accurate, up-to-date, integrated, accountable and easily accessible and shared between Regional Work Units and Central Agencies as a basis for planning, implementing, evaluating and controlling development areas. The innovation of the Papua Spatial Management Information System (SIMTARU) is the availability of a Web-GIS-based spatial information system that provides information data and produces a decision support system in implementing spatial planning. The result of the innovation of the Official Travel Order Information System (SPPD) for the Provincial Government of Papua is the availability of a Web-based Electronic Business Travel Order Information System (e-SPPD) which is equipped with a set of computers that can be accessed into a data communication network with servers at the Papua Kominfo Service and can be accessed by online. The result of the innovation of the Presence Information System and TPP is that digital attendance is available which is connected to the Additional Employee Income (TPP) application. The aim is to make TPP payments more focused and refer to employee

attendance and apply discipline to enter and leave the office on time for the state civil apparatus (ASN).

**Keywords:** Innovation, Governance, Data, Electronics

## 1. Preliminary

This research is a regional development effort through governance with an electronic-based information system in Papua Province, namely Papua One Data Integration (PAITUA), Papua Spatial Management Information System (SIMTARU), Information System for Official Travel Orders (SPPD) of the Papua Provincial Government and the Presence Information and TPP. Advances in information technology have brought great demands to the public for the government as a service provider to be more open, effective and efficient in carrying out tasks, as well as easy access to information about government. The government is required to adapt to technological developments so as not to be left behind (Atthahara, 2018). The benefits of scientific and technological advances are part of the dynamics of people's lives that touch various sectors, including governance, which is demanded to be better and of better quality. To encourage the government to implement good governance, e-government is used. E-government is an effort to develop electronic-based governance. Planning is a very basic thing in the implementation of regional development with proper and quality planning so that regional development goals can be achieved. Appropriate and quality development planning is the key to the success of development on a national scale as well as regional development as well as in the Province of Papua. In order to achieve quality regional development planning, it is very necessary to have data support that is complete, valid, and constantly updated. Data is one proof of accountability to the public or society in the implementation of national and regional development. Therefore it becomes a necessity that regional development plans to be implemented must be prepared based on data (evidence planning).

The problem faced by the Province of Papua in providing and using data in the development planning process is the limited availability of data and information that is accurate with the current situation (up to date), there are still differences in data such as: on population numbers between BPS and Dukcapil, data that supposed to be interconnected to be

separated and difficult to access as well as weak coordination and data synchronization in the various Regional Work Units (SKPD). In relation to these problems, in order to improve the quality of regional development planning which is supported by complete, valid and up-to-date data and information to support the implementation of development in Papua Province, action changes are needed that can strengthen coordination, synchronization and collaboration in the provision of data and information to support regional development planning. An important change made by the Regional Development Planning Agency of Papua Province through the Data Center Technical Implementation Unit and Development Analysis is "Data Synergy and Collaboration through "PAITUA" namely Papua One Data Integration (Papua Province Regional Innovation Report 1, 2022). Utilization of this information technology makes it easy for an information system to manage and present information, so that competitive advantage can be achieved (Pandia, 2015). Information technology capability can be a factor that influences the excellence and performance of information systems so that the use of information technology can increase the effectiveness, efficiency, transparency and accountability of system administrators. (Sidiq & Astutik, 2017). The preparation of the regional spatial planning (RTRW) which has become the regional government's five-year agenda is the obligation of the regional government to create a spatial information system that is supported by complete data. It all started with the problems faced by the Province of Papua about five years ago when data on spatial planning were still scattered everywhere and were not neatly arranged. In line with the Papua Province Regional Regulation Number 23 of 2013 concerning the 2013-2033 Papua Province Spatial Plan and law no. 14 of 2008 concerning information disclosure, the Papua Spatial Management Information System (SIMTARU) was created (Papua Province Regional Innovation Report 2, 2022).

As for the others in the letter administration system, it is one of the parts needed in an agency environment because there are many important documents and data in it, so it must be managed properly. In agencies there are many factors that need attention and fast support in their management in order to achieve operational goals. Many documents require new methods of storing and managing them. Especially

if the administration handled is an agency with a large scope. One of the documents handled by the Provincial Government of Papua is Issuance of Official Travel Orders (SPPD). In general, SPPD submissions are made to the administration. After that, every letter submitted must be known and approved by the relevant supervisor. It is this superior who determines whether a business trip is approved or not. However, the SPPD management process is still carried out conventionally and does not yet have an information system for its management. So it is necessary to carry out reforms in all fields within the Papua Provincial Government including in preparing SPPD financial administration inside and out by creating an Electronic Service Travel Order Information System (e-SPPD) for the Papua Provincial government based on a web (Papua Province Regional Innovation Report 3, 2022). On the other hand, government activities in staffing, according to the Assistant for the Economy and People's Welfare of the Papua Regional Secretary, Noak Kapisa ensured that the application of digital attendance was able to accurately calculate the number of attendance of state civil servants. The application of digital attendance aims to make TPP payments more focused and refers to employee attendance. This absence is very positive and able to minimize fraud for naughty and lazy employees. Especially now that Papua has adopted a new format in the payment of additional income benefits. Even if there is an agency that wants to implement facial recognition attendance to assess discipline in TPP payments, it is much better and more accurate so that it can be controlled. There are already rules and Governor Regulations that every digital attendance is connected to TPP where discipline is 50% and performance is 50% accompanied by filling in work activities that can be done electronically. However, only the main regional work unit (SKPD) has digital attendance installed. Meanwhile, the Regional Technical Implementation Unit (UPTD) has not been fully facilitated. To overcome this problem the Papua Communication and Information Service (Kominfo) ensures that all regional work units (SKPD) within the provincial government have digital attendance installed connected to the TPP application or known as Additional Employee Income. Meanwhile, the Regional Technical Implementation Unit (UPTD) has not been fully facilitated. To overcome this problem the Papua Communication and Information Service (Kominfo) ensures that all regional work units (SKPD) within the provincial government have digital attendance installed connected to the TPP application or known as

Additional Employee Income. Meanwhile, the Regional Technical Implementation Unit (UPTD) has not been fully facilitated. To overcome this problem the Papua Communication and Information Service (Kominfo) ensures that all regional work units (SKPD) within the provincial government have digital attendance installed connected to the TPP application or known as Additional Employee Income. (Papua Province Regional Innovation Report 4, 2022).

The purpose of this research is to describe shaperegional development efforts through governance with electronic-based information systems in Papua Province, namely Papua One Data Integration (PAITUA), Papua Spatial Management Information System (SIMTARU), Information System for Official Travel Orders (SPPD) Papua Provincial Government and Presence Information System and TPP. The locus of this research focuses on Papuan innovation One Data Integration (PAITUA), namely data and information that is complete, accurate, up-to-date, integrated, accountable and easily accessible and shared between Regional Work Units and Central Agencies as a basis for planning, implementing, evaluating and control of regional development. Then the Papua Spatial Management Information System (SIMTARU), namely a Web-GIS-based spatial information system that provides information data and produces a decision support system (decision support system) in implementing spatial planning. Information System for Official Travel Orders (SPPD) for the Government of Papua Province, namely the Web-based Electronic Service Travel Order Information System (e-SPPD) which is equipped with a set of computers accessible into a data communication network. Presence Information System and TPP, namely digital attendance that is connected to the Additional Employee Income (TPP) application. Information System for Official Travel Orders (SPPD) for the Government of Papua Province, namely the Web-based Electronic Service Travel Order Information System (e-SPPD) which is equipped with a set of computers accessible into a data communication network. Presence Information System and TPP, namely digital attendance that is connected to the Additional Employee Income (TPP) application. Information System for Official Travel Orders (SPPD) for the Government of Papua Province, namely the Web-based Electronic Service Travel Order Information System (e-SPPD) which is equipped with a set of computers accessible into a data communication network. Presence Information System and TPP, namely digital

attendance that is connected to the Additional Employee Income (TPP) application.

So far there have been quite a number of studies that have reviewed the use of electronic-based systems both in government and non-government such as research from (Wandikbo & Sitokdana, 2019) about Information System Strategic Planning at the Semarang Binterbusih Foundation Using Ward And Peppard. This research discusses the Semarang Binterbusih Foundation which is a non-profit organization engaged in education, coaching and special training for Papuan children in the Java and Bali regions. In carrying out the program the Binterbusih Foundation experienced various problems, namely administrative management, data management of scholarship recipients, reporting, financial management, asset management, HR management was still carried out manually inadequate network infrastructure, had internet and computer networks but paid little attention to security aspects, not yet have information system applications, IT human resources are still limited and do not yet have an IS/IT strategic plan. Therefore, research was conducted to develop an Information Systems Strategic plan using the Ward and Peppard approach. The results of this research are to recommend the development of several Information System (SI) applications, namely: IS Scholarship Management, IS Archiving and Assets, IS Finance and Payroll IS Accounting, IS Executive, Website and IS Monitoring Evaluation of Scholarship Recipients. The application is recommended to be developed in stages over 4 years according to the organization's master plan.

Then another research from (Karim & Muhid, 2019) regarding Geographical Information Systems for River Basin Management (DAS) in East Kalimantan Province Based on Websites. Watershed management is important in environmental preservation. Dissemination of information on watersheds that have not been maximized can slow down the development of the watershed. The reason is that it is difficult to collect watershed data, so we need an information system that can be used to manage watershed data. The system created is a website-based geographic information system for watershed management in East Kalimantan Province. The results of this study can provide information to users about the location of the river network in the DAS and its tributaries in East Kalimantan Province along with their descriptions. The method used in this study is the System Development Life Cycle (SDLC) with the waterfall model. Based on

the test results the system can provide the right information to the user. The system can display map information in the form of webgis and documents. There are other studies from (Yobi & Sitokdana, 2022) on Enterprise Architecture Planning Using the Enterprise Architecture Planning Method Case Study: Office of the Papuan People's Council Secretariat. An organization requires the use of information technology to support its business processes and strategic plans. One of the organizations that requires the use of information technology is the Secretariat of the Papuan People's Council. However, in carrying out its duties the MRP Secretariat has not made maximum use of information technology so that the data it has is still stored manually (paper based), so an information technology development was created using the Enterprise Architecture Planning method. This method is used to define the current state of the organization and design the right enterprise architecture to achieve the organization's business goals. This study produced three recommendations consisting of 9 data entities, 4 applications, and technology architecture planning for the MRP secretariat office.

As for other research from (Jaya & Vitia, 2021) regarding Designing an Application for Official Travel Orders Using Microsoft Visual Basic.Net at the Sintuk Toboh Gadang Sub-District Office, Padang Pariaman Regency. Data processing of Official Travel Orders at the Sintuk Toboh Gadang Sub-District Office still uses Microsoft Word and Excel applications. Employees have to retype the same data because there is no database as a place to store data. Thus causing a large opportunity for word writing errors, especially typos of daily money on receipts. A lot of paper is wasted because of wrong typing data. The treasurer must open all SPJ files (Accountability Letters) and retype the entire list of business trips into the official travel recap report form. This causes frequent delays in submitting official travel recap reports to the Inspectorate and BPK. The result of this research is to design and implement an SPPD (business travel order) processing application based on Microsoft Visual Basic.Net and MySQL. With this application, it will provide convenience and speed in processing data because it already has a system for processing data. Especially for making official travel recap reports that can be printed and submitted on time. Even so, the existing studies emphasize more, including: First, on the Ward and Peppard approach system which consisting of environmental analysis using SWOT, Value Chain, compiling an application portfolio

using the Mcfarlan Strategic grid. Second, the use of a Web-based Geographic Information System (GIS) specifically for Watershed Management (DAS). Third, the use of information technology with the Enterprise Architecture Planning method for architectural planning. Fourth, the design of the Official Travel Warrant Application using windows forms such as Microsoft Visual Basic.Net and MySQL software as a data processor for Official Travel Orders. While this research emphasizes more on the governance system in Papua Province through the innovation of Papua One Data Integration (PAITUA), the Papua Spatial Management Information System (SIMTARU), the Information System for Official Travel Orders (SPPD) of the Papua Provincial Government as well as the Presence Information System and TPP. This research is also considered important and relevant because it looks at the condition of the public service information system in Papua Province.

## 2. Research Methods

This study uses a qualitative approach research method. The data collection was carried out using a literature review technique. According to (Efron & Ravid, 2018) Literature review is a systematic examination of critical scientific literature in analyzing, evaluating, and synthesizing research findings, theory, and practice. Literature review will provide an overview of the development of a particular topic. The preparation of scientific literature involves several stages of the process including finding relevant literature, evaluating literature review sources, identifying themes, gaps between theory and field conditions if any, making an outline structure and compiling a literature review. (Cahyono et al., 2019). This research was carried out by regional development efforts through governance with an electronic-based information system in Papua Province, namely Papua One Data Integration (PAITUA), Papua Spatial Management Information System (SIMTARU), Official Travel Order Information System (SPPD) Papua Provincial Government as well as Presence and TPP Information Systems. Data collection was also carried out by tracing various sources which were then processed and described in narrative form according to the data needs. The data used comes from reports, journals, books, scientific articles and literature reviews which contain the concepts studied.

## 3. Results and Discussion

### A. Policy Implementation in Governance

In principle, the government carries out three main tasks, namely administering government, carrying out development and providing public services. The state is obliged to be present to serve every citizen and resident to fulfill the basic rights and needs of society within the framework of public services as mandated by the 1945 Constitution of the Republic of Indonesia. Good governance is the basis for administering government and carrying out its functions. public service by the government (Wibawa, 2019). Good governance must be based on data or evidence and strengthen control over development implementation. The main factor that encourages and accelerates the realization of good governance is the availability of quality data and information so as to ensure the creation of quality development planning and implementation for the welfare of society. This is as mandated by the Minister of Home Affairs Regulation Number 70 of 2019 concerning Regional Government Information Systems (SIPD) regarding the importance of Provincial Governments and Regency or City Governments forming regional development data and information forums in realizing One Indonesian Data to meet the need for quality data as a reference in regional development planning. According to Constitution Republic of Indonesia Number 25 of 2004 concerning the National Development Planning System explains that data that has been processed to be used to obtain an interpretation of a fact is called information. Followed by Law No Republic of Indonesia Number 23 of 2014 concerning Regional Government also mandates that the preparation of regional development planning documents must be based on data and information managed in the regional development information system. With good data, it will be possible to project the conditions to be aspired to, performance targets can be set as a benchmark for the implementation of development in accordance with the periodization. In planning and implementing development, basic data or a more complete database is needed in the implementation of development in the regions so that each stage of development can be based on more factual data. Meanwhile, Presidential Regulation of the Republic of Indonesia Number 39 of 2019 concerning One Indonesian Data is a policy related to governance of government data that is accurate, up-to-date, integrated and accountable as well as easily accessible and shared between Central Agencies and Regional Agencies. The Presidential Decree explains that data generated by Central Agencies and Regional Agencies can be used as a basis

for supporting development planning, implementation, evaluation and control.

In addition, to encourage openness and transparency of data so as to create data-based planning and formulation of development policies and support the national statistical system in accordance with laws and regulations. This is in line with Law of the Republic of Indonesia Number 23 of 2014 concerning Regional Government, Law of the Republic of Indonesia Number 25 of 2004 concerning the National Development Planning System, and Law of the Republic of Indonesia Number 14 of 2008 concerning Public Information Disclosure. Regarding the implementation of One Data Indonesia in Papua, a Coordination Meeting for the Implementation of One Data Indonesia in Papua Province has also been held. The implementation of the One Data Indonesia Forum in Papua Province is that with Papua One Data Integration (PAITUA) it can be the basis for organizing coordination and communication so that an understanding is created in integrating data between sectoral agencies in order to build One Data Indonesia in Papua Province. Apart from that, at the same time the Papuan Information System (SIO Papua) is socialized, which is a tool for providing data from villages to sectoral agencies at the provincial level. The aim of Regional Innovation is to develop a Web-GIS-based Spatial Information System for Papua Province, which is the implementation of Law of the Republic of Indonesia Number 26 of 2007 concerning Spatial Planning, Government Regulation of the Republic of Indonesia Number 15 of 2010 concerning Implementation of Spatial Planning and Law of the Republic of Indonesia Number 14 of 2008 concerning Public Information Disclosure. Providing information data and technical directions to local governments for decision-making in the implementation of spatial planning to produce a decision support system in implementing spatial planning. In addition, based on Presidential Instruction (Inpres) Number 3 of 2003 concerning national policies and strategies for e-Government development, the background is the spirit of creating a government that is clean, transparent and able to respond to demands for change. The Web-Based Electronic Service Travel Order Information System (e-SPPD) for the Papua Provincial Government has the concept of computing and various uses to improve the performance of the management of an activity and to become attractive and convenient. As well as The presence and TPP information system based on digital attendance is connected to the

Additional Employee Income (TPP) application so that it is more focused and disciplined when entering and leaving the office for state civil servants.

## **B. Electronic-Based Information System Innovation**

Papua Innovation One Data Integration (PAITUA) is a systematic and structured Regional governance policy to produce data that is accurate, up-to-date, integrated, accountable and easily accessible and usable between regional apparatuses, central agencies and other agencies through compliance with data standards, metadata, data interoperability, and using reference code and master data. Adapun PAITUA is a portal that contains development data, which consists of geospatial data and spatial data at the Provincial and Regency/City levels and to accommodate it, the One Data Forum was formed as a means of communication and coordination for Data Trustees, Data Guardians, and Supporting Walidata. The PAITUA Portal is a medium for sharing data at the regional level which can be accessed through the use of information and communication technology. PAITUA's innovation can realize the availability of complete, valid and up-to-date data to support regional development in coordination, synchronization and collaboration of data collection and processing. The application of PAITUA which is supported by the Papua Pu Data information system or e-PapuaPuData is a solution to the low availability of data in supporting regional development planning. The benefits of PAITUA's innovation include: First, improving organizational performance. Second, quality regional development planning according to regional development problems and issues. Third, the level of public trust in the government is increasing. Fourth, implementation of development can answer the needs and problems of society. Fifth, information on development results and other information data is easily accessible to the public and supports public accountability. Every development plan must be based on data and information built into a system called the Regional Government Information System (SIPD). Regional Governments are required to provide information consisting of regional development information and regional financial information. For this reason, One Data Indonesia in Papua Province, data that is up to date and of good quality is a must. Data is needed to answer the challenges of implementing development for Indigenous Papuans within the framework of affirmative policy through special autonomy which is better in terms of control. Data from

the village needs to be available in a valid and quality manner so that it can be used to improve the quality of services for Indigenous Papuans in the education, health, people's economy and basic infrastructure sectors.



Figure 1. Official Website

<https://pusdalisbang.papua.go.id/papupadata/>

Spatial Management Information System Innovation (SIMTARU) is an Open Source application that is part of the Spatial-Based Information Management System (SMIS). Presentation of spatial information is a combination of modern cartographic technology with participatory methods. There are various types of data in the form of layer data and permits/maps which are divided into several categories. There are various data from both districts, cities and provinces and will continue to be developed based on the needs of One Map One Data Papua. This application is specifically used to monitor all activities related to spatial planning in Papua Province. SIMTARU was made with the aim of facilitating the management of spatial data, especially spatial planning. SIMTARU was created as a supporter for the preparation of regional spatial planning (RTRW) which has become the regional government's five-year agenda. SIMTARU began to be popularized by increasing the capacity of the human resources who manage it. Several tools such as existing and new permits will be proposed. A special room is provided for managing data and one room for validating data by the data guardian. So that data or maps are legal for distribution as well as information media for planners and decision makers in order to obtain raw data, as a means of accelerating the spatial use licensing system for regional investments and other interests. SIMTARU is a guideline for using space. SIMTARU contains not only the RTRW but also the strategic environmental assessment (KLHS) and the medium term development plan (RPJM). SIMTARU can be accessed by potential investors who can open a special permits menu where they can see the desired

location and check whether the location is problematic or not and in accordance with the spatial plan. Meanwhile, non-governmental organizations (NGOs) can carry out participatory mapping through SIMTARU and can disseminate it to the community. The benefits derived from these innovations include: First, standardization of data and spatial information to facilitate alignment with other data related to provincial and district/city RTRW spatial data. Second, standardization of standard guidelines so that the implementation of data management and services can run effectively and efficiently. Third, standardization of the use and distribution of formulas, blanks, and documents in standard operating procedures for each data governance activity to facilitate reporting monitoring. Fourth, standardization of administrative systems including data storage activities and a documentation system for data management activities as a reference. Fifth, standardization for data validation activities in order to obtain valid and accountable data. Six, as a forum for network nodes and dissemination of Provincial and City District Spatial Plans.



Figure 2. Official Website

<https://simtaru.papua.go.id/>

Innovation of the Electronic Official Travel Order Information System (e-SPPD) application system is a web-based application that is equipped with a set of computers accessible into a data communication network. The server is located at the Papua Kominfo Service and can be accessed online. The purpose of making a web-based SPPD application is to create good and transparent governance. So it is necessary to carry out reforms in all areas within the scope of the Provincial Government of Papua, including preparing SPPD financial administration within and outside the region. In each SKPD in the environment, the electronic SPPD application helps in facilitating reporting and making it in each agency so that it can be accepted and implemented throughout the Regional Apparatus Organizations (OPD). The purpose of this regional

innovation is more specifically in facilitating reporting and making administrative data related to Official Travel Orders in each agency. The benefits obtained are

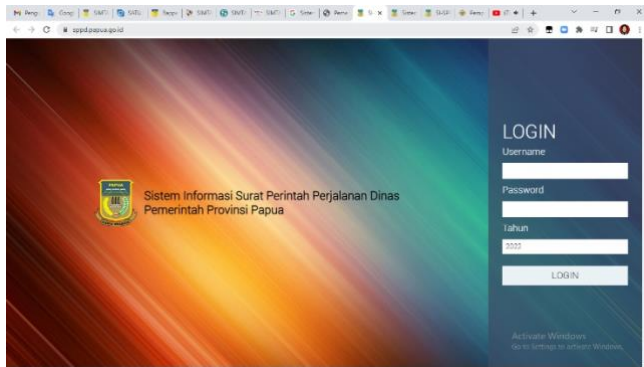
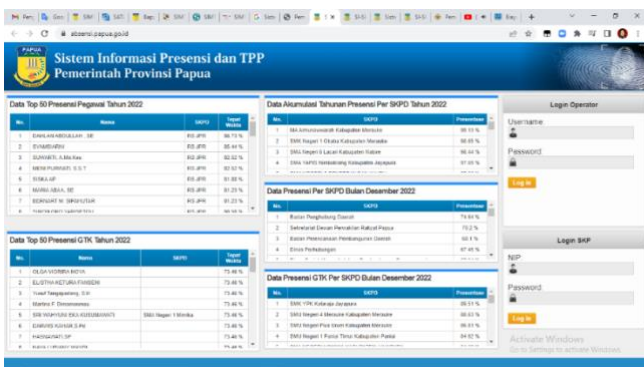


Figure 3. Website Resmi <https://sppd.papua.go.id/>

being able to realize good and transparent governance as well as the results of better governance innovations. Through the Web-Based SPPD application, all data is collected centralized and controlled and transparent automation.

The Innovation Presence and TPP Information System is a digital attendance system that is connected to the Additional Employee Income (TPP) application in order to apply discipline to entering and leaving the office on time for state civil servants (ASN). The Papua Communication and Information Service (Kominfo) ensures that all regional work units (SKPD) within the provincial government have digital attendance installed connected to the Additional Employee Income Application (TPP). Thus, in the TPP granting system, it is carried out online/web/application that has been determined. This digital attendance is in the context of implementing the discipline of entering and leaving the office on time for the state civil apparatus (ASN). Digital attendance is able to accurately calculate the number of attendance of state civil servants. The application of digital attendance aims to make TPP payments more focused and refers to employee attendance. The goals of these innovations include



improving the quality of public services and the discipline of ASN performance, ensuring the accuracy of data and the welfare of civil servants and civil servants,

Figure 4. Official Website <https://absensi.papua.go.id/>

### C. Linkages Between Electronic-Based Information System Innovations

System integrationsingle data information is a system that is formed by combining several existing systems into one unit that supports each other. Integrated information system service management becomes a benchmark for government performance so that the public can directly assess government performance based on the quality of public services received, the impact is directly felt by the community and the success of building public service performance in a professional manner. Information system integration is one of the key concepts of a Management Information system. Sharing systems can be interconnected with one another in various ways according to their needs. The flow of information between systems is very useful when the data in one system's files is also needed by other systems. or the output of one system becomes input for other systems. Realizing the importance of quality data for development, the Regional Development Planning Agency (BAPPEDA) of Papua Province through the Data Center Technical Implementation Unit and Development Analysis (PUSDALISBANG) is trying to develop a program called Papua Integrated One Data. Movement innovation developed with the aim of increasing synergy in data collection and processing in the Province of Papua through optimizing the coordination and collaboration of the Papua data forum. If seen, electronic-based information system innovation, namely The Regional Development Planning Agency (BAPPEDA) of Papua Province through the Technical Implementation Unit for Data Center and Development Analysis (PUSDALISBANG) is trying to develop a program called Papua Integrated One Data. Movement innovation developed with the aim of increasing synergy in data collection and processing in the Province of Papua through optimizing the coordination and collaboration of the Papua data forum. If seen, electronic-based information system innovation, namely The Regional Development Planning Agency (BAPPEDA) of Papua Province through the Technical Implementation Unit for Data Center and Development Analysis (PUSDALISBANG) is trying to develop a program called Papua Integrated One Data. Movement innovation developed with the aim of



increasing synergy in data collection and processing in the Province of Papua through optimizing the coordination and collaboration of the Papua data forum. If seen, electronic-based information system innovation, namely Papua One Data Integration (PAITUA), the Papua Spatial Management Information System (SIMTARU), the Information System for Official Travel Orders (SPPD) for the Government of the Province of Papua as well as the Presence Information System and TPP are related to each other in governance. An overview of the linkages of information system innovation can be seen in the following sketch.

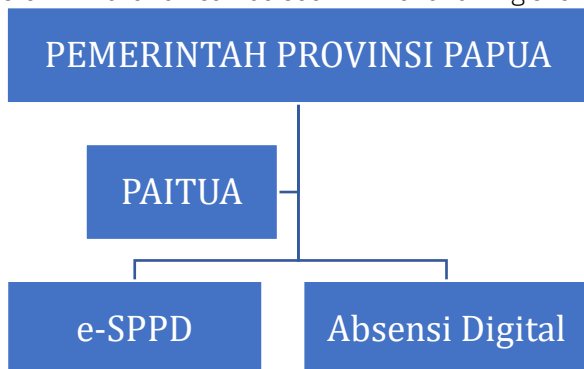


Figure 5. Information System Innovation Linkage Sketch

Therefore, information system on one data in Papua is interrelated and is urgently needed to address development implementation challenges. This is especially for the Orang Asli Papua (OAP) within the framework of the Special Autonomy (Otsus) policy in force in Papua Province so that it is much better in terms of implementation and control. For this reason, valid and accurate data from the village to the central and district or city regional apparatus must be available because it is used to improve the quality of services for OAP in the education, health, people's economy, and basic infrastructure sectors. Obtaining complete data and information is needed by every information user. Whether or not the decisions made by decision makers are very dependent on the information obtained.

#### 4. Conclusion

The benefits of scientific and technological advances are part of the dynamics of people's lives that touch various sectors, including governance, which is demanded to be better and of better quality. To encourage the government to implement good governance, e-government is used. Forms of regional development efforts through governance with an electronic-based information system in Papua Province, namely Papua One Data Integration

(PAITUA), Papua Spatial Management Information System (SIMTARU), Information System for Official Travel Orders (SPPD) for the Government of Papua Province as well as Presence and TPP Information Systems. Papua Innovation One Data Integration (PAITUA) is a regional governance policy that is systematic and structured to produce data that is accurate, up-to-date, integrated, accountable, easy to access, can be shared between regional apparatuses, central agencies and other agencies through compliance with data standards, metadata, data interoperability and use of reference codes and master data. Papua Spatial Management Information System Innovation (SIMTARU) is an open source application that is part of the Spatial-Based Information Management System (SMIS). The combination of modern cartographic technology with participatory methods in the form of data layers and permits or maps in several categories is used to monitor all activities related to spatial planning in Papua Province. Innovation of Information System for Service Travel Orders (SPPD) for the Government of Papua Province is a web-based information system that is equipped with a set of computers that can be accessed into a data communication network where the server is located at the Papua Communication and Informatics Office and can be accessed online. Presence and TPP Information System innovations are digital attendance that are connected to the Additional Employee Income (TPP) application in order to apply discipline to entering and leaving the office on time for the state civil apparatus (ASN). This study uses a qualitative approach research method. As for data collection with literature review techniques. Literature review is a systematic examination of critical scientific literature in analyzing, evaluating, and synthesizing research findings, theory, and practice. Literature review provides an overview of the development of a particular topic. The result of the Papua One Data Integration (PAITUA) innovation is that data and information are available that are complete, accurate, up-to-date, integrated, accountable and easily accessible and shared between Regional Work Units and Central Agencies as a basis for planning, implementing, evaluating and controlling development area. The innovation of the Papua Spatial Management Information System (SIMTARU) is the availability of a Web-GIS-based spatial information system that provides information data and produces a decision support system in implementing spatial planning. The result of the innovation of the Official Travel Order Information System (SPPD) for the Provincial

Government of Papua is the availability of a Web-based Electronic Business Travel Order Information System (e-SPPD) which is equipped with a set of computers that can be accessed into a data communication network with servers at the Papua Kominfo Service and can be accessed by online. The result of the innovation of the Presence Information System and TPP is that digital attendance is available which is connected to the Additional Employee Income (TPP) application. The aim is to make TPP payments more focused and refer to employee attendance and apply discipline to entering and leaving the office on time for the state civil apparatus (ASN). The result of the innovation of the Presence Information System and TPP is that digital attendance is available which is connected to the Additional Employee Income (TPP) application. The aim is to make TPP payments more focused and refer to employee attendance and apply discipline to entering and leaving the office on time for the state civil apparatus (ASN). The result of the innovation of the Presence Information System and TPP is that digital attendance is available which is connected to the Additional Employee Income (TPP) application. The aim is to make TPP payments more focused and refer to employee attendance and apply discipline to entering and leaving the office on time for the state civil apparatus (ASN).

## 5. Acknowledgments

The researcher would like to thank those who contributed to the writing of this journal, so that the research could be carried out as best as possible.

## 6. Bibliography

- Atthahara, H. (2018). E-Government-Based Public Service Innovation: A Case Study of the Ogan Lopian Service Application. *Indonesiana Politics Journal* VOL.3(1), 66–77.
- Cahyono, EA, Sutomo, & Harsono, A. (2019). Literature Review: Guidelines for Writing and Compilation. *Journal of Nursing*, 12.
- Efron, SE, & Ravid, R. (2018). *Writing the Literature Review A Practical Guide*. Guilford Publications.
- Febrian, RA (2018). Regional Innovation From a Regulatory, Conceptual, and Empirical Perspective (Review of Article 386 of Law Number 23 of 2014 concerning Regional Government). *Journal of Government Studies: Journal of Government, Social and Politics*, 4(1), 48-61. <https://absensi.papua.go.id/>
- <https://bappeda.papua.go.id/berita/satu-data-indonesia-di-provinsi-papua>
- <https://pusdalisbang.papua.go.id/papuapudata/beranda/>
- <https://simtaru.papua.go.id/>
- <https://sppd.papua.go.id/>
- Jaya, EA, Febriyani, I., & Vitia, R. (2021). Designing an Official Travel Order Application Using Microsoft Visual Basic. Net At Sintuk Toboh Gadang District Office, Padang Pariaman Regency. *Journal of Science and Technology: Journal of Science and Industrial Technology Applications*, 21(2), 190-198.
- Kamaluddin, S. (2019). Good Governance (Good Governance) at the Okhika District Office, Gunung Bintang Regency. *Papua Review: Journal of Administrative Science and Governance Science*, 3(1), 222-228.
- Karim, SK, & Muhid, B. (2019, November). Geographical Information System for Management of Watersheds (Das) in East Kalimantan Province Based on a Website. In *Proceedings of the National Seminar on Technology, Innovation and Application in the Tropical Environment* (Vol. 2, No. 1, pp. 51-59).
- Kurniawan, RC (2017). Local Government Public Service Quality Innovation. *FIAT JUSTISIA: Journal of Law*, 10(3), 569–586. <https://doi.org/10.25041/fiatjustisia.v10no3.794>
- Regional Innovation ReportPapua Province 1. 2022. Pages 1-5.
- Regional Innovation ReportPapua Province 2. 2022. Pages 1-4.
- Regional Innovation ReportPapua Province 3. 2022. Pages 1-4.
- Regional Innovation ReportPapua Province 4. 2022. Pages 1-4.
- Muharam, RS, & Melawati, F. (2019). Public Service Innovation in Facing the 4.0 Industrial Revolution Era in the City of Bandung. *Decision: Journal of Public Administration*, 1(01), 39. <https://doi.org/10.23969/decision.v1i01.1401>
- Pandia, M. (2015). Utilization of Information Technology in Improving Company Financial Performance. *METHODIKA: Journal of Informatics Engineering and Information Systems*, 1(1), 27-30.
- Regulation of the President of the Republic of Indonesia Number 39 of 2019 concerning One Indonesian Data

- Minister of Home Affairs Regulation Number 70 of 2019 concerning Regional Government Information Systems
- Government Regulation Number 96 of 2012 concerning Public Services
- Republic of Indonesia Government Regulation Number 15 of 2010 concerning Implementation of Spatial Planning
- Purwoko, S., Musoddag, MA, & Purwandari, R. (2019). Identification of the Utilization of Geographic Information Systems (GIS) with a Risk Management Approach as an Alternative to Waste Management Innovation. *Semnas BAPPEDA Central Java Province*, 249–256
- Saksono, H. BRIDA: The Urgency of Formation and Its Strategic Position as a Solution to Development Problems and Increasing Regional Government Performance. *Captain: Journal of Government Science*, 20(2), 178-196.
- Sidiq, A., & Astutik, EP (2017). Analysis of Information Technology Capability on SME Business Performance with Customer Orientation as an Intervening Variable (Study on Manufacturing Sector SMEs in the Greater Solo Region). *Media Economics and Management*, 32(1).
- Suhendra, A., & Hartopo, A. (2022). Tourism Innovation: Sawahlunto City Government's Efforts in Developing Competitiveness and New Tourism Destinations. *International Journal Of Science Hub and Innovation*, 1(1), 11-15.
- Suhendra, A. (2021). Electronic Licensing as a Solution to Licensing Process Problems in Siak and Karo District. *International Journal of Regional Innovation*, 1(3), 1-7.  
<https://doi.org/10.52000/ijori.v1i3.19f>
- Suhendra, A. (2021). Improving the Quality of Public Services with Map Innovation. *Journal of Innovation Studies*, 1(2), 62–69.  
<https://doi.org/10.52000/jsi.v1i2.33>
- Suhendra, A., Radianto, I., Setia, A. (2019) Central, J., Rural, I., Social, I., ... Policy, I. (nd). *Social Interventions Of Regional Governments In Building Rural Innovation In Hulu Sungai Selatan Regency*, South Kalimantan Province.
- Law of the Republic of Indonesia Number 25 of 2004 concerning the National Development Planning System
- Law of the Republic of Indonesia Number 23 of 2014 concerning Regional Government
- Law of the Republic of Indonesia Number 14 of 2008 concerning Public Information Disclosure
- Law of the Republic of Indonesia Number 26 of 2007 concerning Spatial Planning
- Law of the Republic of Indonesia Number 25 of 2004 concerning the National Development Planning System
- Wandikbo, D., & Sitokdana, MN (2019). Information System Strategic Planning at the Semarang Binterbusih Foundation Using Ward and Peppard. *SENIATI Proceedings*, 61-69.
- Wardani, AK (2019). The Urgency of Service Innovation in the Field of Public Administration in the Disruption Era. *Dynamics: Scientific Journal of Public Administration*, 6(2), 30–35.
- Wibawa, KCS (2019). The Urgency of Information Disclosure in Public Services as an Effort to Realize Good Governance. *Administrative Law and Governance Journal*, 2(2), 218-234.
- Yobi, WD (2022). Enterprise Architecture Planning Using the Enterprise Architecture Planning Method Case Study: Office of the Papuan People's Council Secretariat. *JATISI (Journal of Informatics Engineering and Information Systems)*, 9(1), 97-09.