DESIGN OF ENTERPRISE ARCHITECTURE FOR SMARTVILLAGE IN SUMUR BANDUNG SUB-DISTRICT (CASE STUDY: GOVERNANCE DIMENSION)

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ABSTRAK

Smartvillage adalah desa yang inovatif dalam pemanfaatan teknologi informasi untuk meningkatkan kualitas hidup, efisiensi, dan daya saing dalam aspek ekonomi, sosial, dan lingkungan. Kecamatan Sumur Bandung dapat menerapkan konsep smart village untuk menyelesaikan permasalahan mereka. Kecamatan Sumur Bandung merupakan salah satu dari 30 kecamatan yang ada di Kota Bandung. Kecamatan Sumur Bandung memiliki Seksi Pemerintahan yang berfungsi melaksanakan tugas pemerintahan di wilayah kecamatan. Salah satu tugasnya adalah bertanggung jawab atas pelayanan administrasi kependudukan. Untuk pelayanan administrasi kependudukan di kecamatan Sumur Bandung masih menggunakan sistem manual yang mengharuskan masyarakat datang ke kecamatan untuk melaksanakan administrasi kependudukan. Oleh karena itu, perlu diterapkan smart village dalam dimensi governance yang meliputi re-design business process pelayanan administrasi kependudukan dengan menggunakan sistem informasi dan teknologi terkini. Penggunaan teknologi ini juga perlu diselaraskan dengan rencana dan strategi kecamatan Sumur Bandung. Enterprise Architecture adalah alat yang digunakan untuk menyinkronkan kebutuhan bisnis dengan kebutuhan teknologi. Desainnya membutuhkan kerangka kerja TOGAF ADM 9.2, yang digunakan sebagai panduan saat membuat arsitektur Enterprise Architecture. Metode penelitian yang digunakan adalah studi literatur. Hasil penelitian ini berupa artefak sebagai arsitektur umum. Hasil ini diharapkan dapat berguna dan bermanfaat bagi Kecamatan Sumur Bandung khususnya di bagian pelayanan administrasi kependudukan, ataupun menjadi referensi bagi peneliti lainnya serta wawasan bagi pembaca.

Kata Kunci: Enterprise Architecture, Kecamatan Sumur Bandung, Seksi Pemerintahan, Smartvillage, TOGAF ADM 9.2

ABSTRACT

Smart village is one that is innovative in its use of information technology to improve quality of life, efficiency, and competitiveness in economic, social, and environmental aspects. Sumur Bandung sub-district can implement the smart village concept to intelligently solve their problems. Sumur Bandung sub-district is one of 30 sub-districts in the city of Bandung. Sumur Bandung sub-district has a Government Section which functions to carry out government duties in the sub-district. One of his duties is to be responsible for population administration services. For population administration services in Sumur Bandung sub-district still use a manual system that requires people to come to the sub-district to carry out population administration. As a result, it is necessary to implement a smart village in governance dimension that includes redesigning business processes for population administration services to use the latest information systems and technology. The use of this technology also needs to be aligned with the plan and strategy of Sumur Bandung sub-district. Enterprise architecture is a tool used to synchronize business needs with technology needs. Its design requires the TOGAF ADM 9.2 framework, which is used as a guide while creating enterprise architecture. The research method used is literature study. The results of this study are artifacts as general architecture. These results are expected to be useful and beneficial for Sumur Bandung sub-district, especially in the population administration service section, or become a reference for other researchers as well as insight for readers.

Keywords: Enterprise Architecture, Government Section, Smartvillage, Sumur Bandung sub-district, TOGAF ADM 9.2

I. INTRODUCTION

S martvillage derivative concept of a smart city. One of the differences is in the location of the implementation, if the smart city is implemented in the city, the smart village is implemented at the village level. Smart village adopts a system from smartcity, it has the same goal as providing solutions to rural problems, such as problems of poverty, health, and education. Smart village is an innovation of a sustainable planning approach at the village level that promotes knowledge-based development through the continuous learning of human resources as an integrative part of village resource development, particularly in the development of the rural areas as part of a regional system inside the national development master plan [1]. The purpose of the smart village is the realization of empowerment, institutional strengthening, and improving community welfare through the use of information technology [2].

As a sub-district under the auspices of the Bandung. Sumur Bandung sub-district is located in the center of the Bandung city government, and it also has a very important strategic role in supporting the administration of Bandung. Sumur Bandung sub-district also adopted the Bandung vision namely "Terwujudnya Kota Bandung Yang Unggul, Nyaman, Sejahtera, dan Agamis". Then, for the mission from Sumur Bandung sub-district, it adopted the mission of the city of Bandung number 2, namely "Mewujudkan Tata Kelola Pemerintahan yang Efektif, Efisien dan Melayani". As a guide in carrying out all activities in the district, Sumur Bandung District has plans and strategies for the 2018-2023 period. In the guideline, several problems in the sub-district are mentioned. In governance dimension the problem is in public service aspect, one of which is in the government service section of Sumur Bandung sub-district. However, the quality of public services remains the orientation of governance in Sumur Bandung sub-district. So, the management of public services needs to make changes to bureaucratic professionalism and emphasize more efficiency and effectiveness of the bureaucracy, through structuring work systems and procedures. This needs to be improved because according to mission number 2 the city of Bandung which has the goal of implementing excellent public services and increasing public satisfaction with public services. So, those were some of the problems that occurred in Sumur Bandung sub-district.

For this reason, to support smart villages implementation in Sumur Bandung sub-district, it requires enterprise architecture design. Enterprise architecture describes a plan to develop a system or a set of systems (Osvalds, 2001). Enterprise architecture is the discipline that deals with the enterprise's resources, it is a conceptual blueprint that specifies an organization's structure and operations. It also necessary to design information architecture that includes four domains consisting of business, data, applications, and technology or enterprise architecture design. The design of enterprise architecture is made to be the basis for implementing all ICT (Information and CommunicationTechnology) business processes, knowing business needs and organizational information, supporting the migration of system updates, facilitating migration in future conditions, and supporting business goals. This research uses the TOGAF framework because it can produce an enterprise system architecture design that will be implemented in Sumur Bandung sub-district. So in this study the author will design an enterprise architecture in Sumur Bandung sub-district using the TOGAF framework. Furthermore, expectations with the creation of enterprise architecture is can improve performance in providing service in administration population at Sumur Bandung sub-district.

II. RESEARCH METHOD

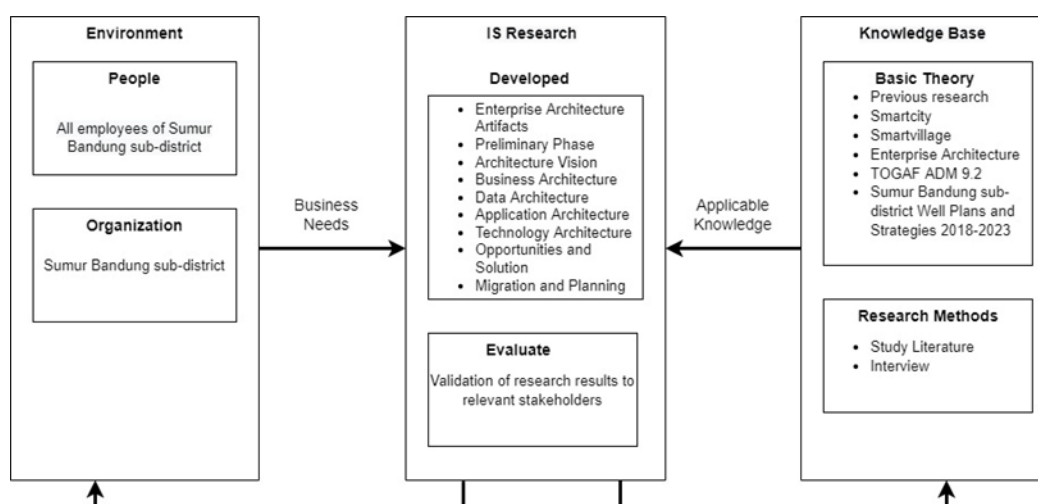### A. *Systematic Problem Solving*

Figure 1 Conceptual Model

Can be seen in figure 1, Conceptual model is a model that logically represents a flow to solve a problem and is made up of three components found in research activity. The first element describes the related environment and the problems faced. This environment consists of all employees in Sumur Bandung sub-district. Meanwhile, the

organization contains the research object of Sumur Bandung sub-district. The next element is information systems research. This element covers Enterprise Architecture artifacts and evaluation. The artifacts contained in this Information Systems Research have been adapted to the framework and phases discussed. Meanwhile, the evaluation will be carried out to ensure the suitability of the research with the needs of the Sumur Bandung sub-district.

The last element of the Conceptual Model which contains the basic theory used and also the method used in this research. The theoretical basis includes smart city, smart village, EA, TOGAF ADM 9.2, Sumur Bandung sub-district Well Plan and Strategies 2018-2023. The method used in this research is literature study and interviews.

B. Collecting Data

This research was conducted directly to Sumur Bandung sub-district so as to obtain primary data by conducting interviews with the Head of the General Sub-Section for Data and Information, Frida Nurcahyani, SE., MM, Head of Government Section, Dra. Hj. Siti Rohmah, M.Si, and Head of Economics and Development Section, Rachmat Firmansyah, S.Ap. These 3 resource persons were chosen as one of the research mechanisms for data validation. The data collected for this research is the problems that occur and the existing conditions in Sumur Bandung sub-district. One-hour interviews were also conducted with each resource person in Sumur Bandung sub-district. This technique is done by giving questions to three employees to get a better picture of the problems that usually occur. The secondary data in this study are The *TOGAF® Standard, Version 9.2* [3] which can be seen in table I

TABLE I
SECONDARY DATA

No	Data Name	Description
1	Dokumen The TOGAF Standard, Version 9.2 (The Open Group, 2018)	The TOGAF standard is a framework for designing an Enterprise Architecture that includes a thorough process and a collection of supporting tools.

C. Enterprise Architecture

Enterprise architecture is the discipline that deals with the enterprise's resources. It is a conceptual blueprint that specifies an organization's structure and operations. Enterprise architecture (EA) is defined as the customers, suppliers, and partners are all part of a company's basic organization, as are the ideas that influence its design. Thus, Enterprise architecture is an essential instrument for ensuring information management compliance, consistency, and efficiency [4]. The EA framework includes meta-models for EA description, as well as techniques for EA design, development, and reference models that serve as EA design and development plans. In most cases, architecture in the context of information systems focuses on IT-related objects like IT procedures, IT platforms, and IT strategies. A better method in designated information system architecture is for EA to consider business-related artifacts such as organizational objectives, services, and business procedures, which should include both IT and business-related artifacts.
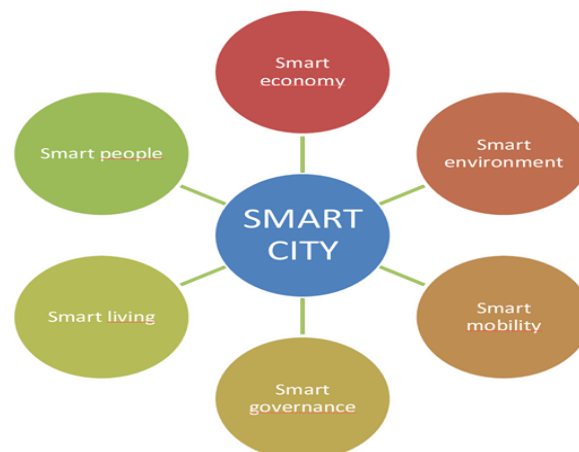
D. Smart City

Figure 2 Smart City Indicator

Can be seen in figure 2 is smart city indicator. Smart city is an innovation of sustainable planning approach at the city level that promotes knowledge-based development through the continuous learning of human resources as an integrative part of urban resource development, especially in encouraging urban built up area as a part of urban spatial system in the context of national development planning system[1]. A smart city combines information and communication technology (ICT) to increase operational efficiency, share information with the public, and enhance government service and citizen welfare. The main goal of a smart city is to use smart technologies and data analysis to optimize city functions and increase economic growth while also increasing people quality of life. According to Boyd Cohen, a smart city has 6 dimensions, namely:

1. Smart people have a role in the aspects of creativity and social capital. A city is supposed to have human capital that has received a good education both formally and informally and manifests itself in innovative individuals or communities.
2. Smart economy has a role in the aspects of innovation and competition. Smart cities are expected to have a high level of economic and financial well-being, with high per capita income and good economic growth.
3. Smart mobility has a role in the aspects of transportation and infrastructure. The city is expected to have a system in operation that allows needs to be met with minimal movement and as quickly as possible.
4. Smart governance has a role in aspects of empowerment and participation. The city is expected to have a government that complies to the principles of law, humanity, justice, democracy, participation, transparency, professionalism, and accountability, as well as the effectiveness and efficiency of policies.
5. Smart environment has aspects on the environment. A smart city is a dream city that gives comfort, resource sustainability, and beauty itself to people either now and in the future
6. Smart living has an aspect of quality of life. A good quality of life is expected in a city, which includes the availability of essentials, security, safety, convenience, and life security. Before the realization of a smart city, it appears that smart living is the final thing that must be accomplished.

E. Smartvillage

Smart Village is a concept that adopts the components or indicators of the Smart City concept but on a smaller scale to realize better governance and services to its citizens. Smart village is a village-level innovation in sustainable planning that promotes knowledge-based development as an integral aspect of village resource development, particularly in supporting rural areas growth as part of a regional system in the context of national development planning [1]. A Smart Village concept can be used to overcome various problems that occur in villages and sub-districts. By adopting the Smart City component, there is no doubt that excellent human resources, clean and transparent government, and an ideal social environment will emerge from the Smart Village implementation.

Smartvillage have been developed in several countries, one of which is France. In the Bress and Bretton rural areas, France will promote cooperation between urban and rural villages for fundamental services such as economic development, social inclusion, health culture, and environmental energy resources. Carhe Hospital, a local hospital in France, used the city's remote service and mobile MRI remote service to avoid the abolition of obstetrics and gynecology, and built a business model to aid the city's sustainable smart village district axis by supplying bio-wood.
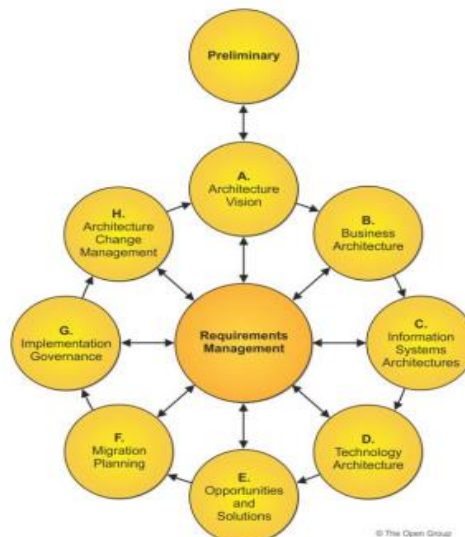
F. TOGAF ADM

Figure 3 TOGAF ADM Phase

TABLE II
TOGAF ADM PHASE

No	Phase	Description
1	Preliminary Phase	Prepare the organization for TOGAF architectural projects that are successful. Carry out the necessary preparation and initiation tasks for the creation of an Architecture Capability, such as customizing the TOGAF framework, choosing tools, and defining Architecture Principles.
2	Requirements Management	Ensure that every stage of a TOGAF project is based on and validates business requirements. Requirements are discovered, stored, and supplied into and out of the ADM phases that deal with, address, and prioritize requirements.
3	Phase A: Architecture Vision	Set a TOGAF project's scope, limitations, and expectations. Create a vision for architecture. Determine who the stakeholders are. Create the Statement of Architecture Work after validating the business context. Obtain permissions.
4	Phase B: Business Architecture Phase C: Information Systems Architectures Phase D: Technology Architecture	Develop architectures in four domains: 1. Business 2. Information Systems – Application 3. Information Systems – Data 4. Technology In each case, develop the Baseline and Target Architecture and analyze gaps.
5	Phase E: Opportunities and Solutions	Perform initial implementation planning and the identification of delivery vehicles for the building blocks identified in the previous phases. Determine whether an incremental approach is necessary, and if so, create Transition Architectures.
6	Phase F: Migration Planning	Develop a detailed Implementation and Migration Plan for moving from the Baseline to the Target Architecture.
7	Phase G: Implementation Governance	Provide architectural oversight for the implementation. Prepare and issue Architecture Contracts. Ascertain that the implementation project follows the architecture's guidelines.
8	Phase H: Architecture Change Management	To ensure that the architecture responds to the needs of the enterprise and maximizes business value, provide continuous monitoring and a change management approach.

III. ANALYSIS AND RESULT

A. *Preliminary phase*

The preliminary phase is the stage of preparation and activities that must be prepared. The output of the preliminary phase is the principle catalog. The catalog describes the principles needed by organizations to run business processes ranging from business, data, and applications to technology, which can be used to create enterprise architecture designs. Principle Catalog can be seen in table III

TABLE III
PRINCIPLE CATALOG

No	Architecture	Principle	Description
1	Business Architecture	Service quality improvement	Improve service to the community to create service satisfaction so that business goals are achieved
		Information publication	Publish information to the public in a transparent and understandable manner
		Realizing good governance	Realizing good governance through capacity building of government officials and community institutions
		Business alignment with IT	Every activity in Sumur Bandung sub-district is assisted by using information technology as needed
2	Data Architecture	Data is an asset	All data and information in Sumur Bandung sub-district need to be protected for value
		Data integration	Data can be connected to each other to avoid data redundancy and help business processes in Sumur Bandung sub-district
		Data is shared	Data is utilized and distributed according to its function
		Data security	Ensure the confidentiality of data and information and can be accessed by the authorized party
		Data valid	Completeness of data in Sumur Bandung sub-district must be in accordance with existing completeness and standards
		Sharing data	Data can be used and distributed according to its use to support business processes
		Back up database automatic	Avoid damage and data loss
3	Application Architecutre	Application avalaibility	Guarantee the application is always available and can be used at any time by the user

		Application usability	The application is easy to use and functional
		Application integration	Applications must be connected to each other to make it easier and help performance in Sumur Bandung sub-district
		Application security	Application security is required to maintain the confidentiality of Sumur Bandung sub-district data and information
		Application flexibility	Application can be used on various platforms, and can be modified if there are changes from the process that occur
4	Technology Architecture	Technology infrastructure security	The technology used in Sumur Bandung sub-district must be safe from internal and external threats
		Technology efficiency	The technology used must match the function and budget of Sumur Bandung sub-district in order to create efficiency
		Periodic maintenance	Maintenance for existing technology on a regular basis, so as not to experience damage
		Realtime Use of Technology	The use of technology must be able to match the capacity of data usage

B. Architecture Vision

Architecture vision is a phase that describes the initial phase of architectural development, which includes information regarding the identification of the scope and stakeholders. Value Chain can be seen in figure 4

Figure 4 Value Chain

Solution Concept Diagram is a diagram illustrating the orientation of the solution being considered to meet the architectural objectives. The Solution Concept Diagram embodies the main objectives, requirements, and constraints for engagement. Solution Concept Diagram can be seen in figure 5
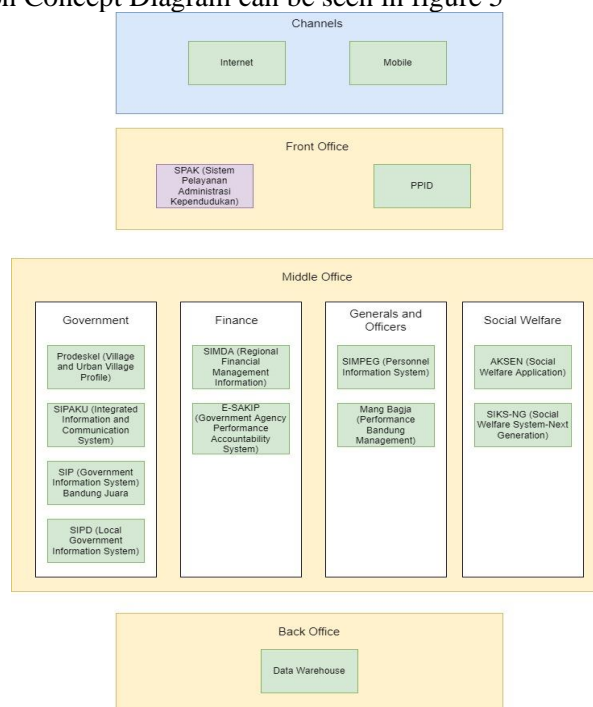

Figure 5 Solution Concept Diagram

C. Business Architecture

Business Architecture explains the organization's needs in carrying out its business functions to achieve the target. This phase defines the business strategy, functional, processes, and key business process information. One of the output artifacts that will be created is Business Architecture Requirement, Functional Decomposition Diagram, and Role Catalog. Business Architecture Requirement can be seen in table iv

TABLE IV
BUSINESS ARCHITECTURE REQUIREMENT

No	Requirement
1	Implementing Enterprise Architecture at Sumur Bandung sub-district in government section to help business processes
2	Carry out excellent public services in terms of population administration
3	Designing business processes related to the population administration system
4	There is an online E-KTP service process
5	There is an online family card service process
6	There is an online heirs letter service process
7	Able to perform community services related to population administration optimally

Functional Decomposition Diagram describe the relationship between the organization's business functions and business processes owned by Sumur Bandung sub-district. In the sub-district there are several main activities, namely community empowerment activities, management of government activities, maintenance of infrastructure and facilities, maintenance of public peace and orders, carry out community services. Figure 6 is Functional Decomposition Diagram
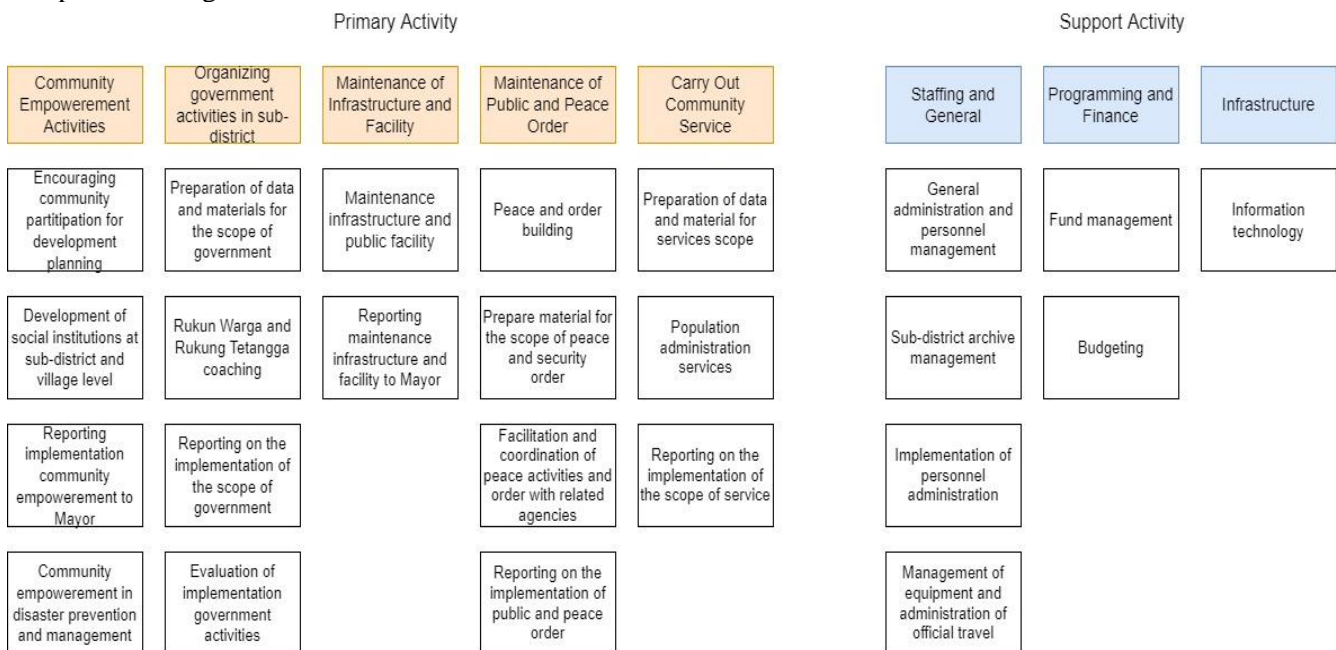

Figure 6 Functional Decomposition Diagram

Role catalog is used to define the roles and responsibilities of stakeholders in carrying out the business activities of an organization. The role catalog is compiled based on Bandung City Regulation Number 1407 of 2016. Role Catalog can be seen in table v.

TABLE V
ROLE CATALOG

No	Unit	Main Task	Function Description
1	Sub-district Head	Carry out part of the government authority given by the Mayor to Sub-district Head to handle some regional autonomy affairs.	a. Coordinating community empowerment b. Coordinating public peace and order c. Coordinating the implementation and enforcement of laws and regulations d. Coordinating the maintenance of public service infrastructure and facilities e. Fostering sub-district administration in their working areas.

2	Sub-district Secretary	Carry out some of the tasks of the sub-district in the secretarial field	a. Implementation of the preparation of sub-district activity program plans b. Implementation of sub-district secretarial administration services c. Implementation of coordinating the preparation of plans, programs, evaluation and reporting of sub-district and sub-district activities D. Implementation of monitoring, evaluation, reporting and administrative control of secretarial and sub-district activities E. Carrying out other tasks assigned by the sub-district head in accordance with their main duties and functions.
3	Sub-section of general personnel and information data	Some of the tasks of the sub-district secretariat in the general and staffing	a. Preparation of scope management plan and program materials general administration and staffing; b. Management of general administration and staffing which includes management of official documents, arrangement of district archives, sub-district household administration, management equipment and administration of official travel, as well as the implementation of officialdom administration c. Reporting on activities in the scope of general administration and staffing.
4	Program and Finance Sub-Section	Carry out some of the tasks of the sub-district secretariat in the field of finance and programs	a. Preparation of administrative management plans and programs sub-district finances and work programs b. The implementation of financial administration management includes the preparation of materials for the preparation of budget plans, coordination of budget preparation, coordination of financial management and control and preparation of sub-district financial reports d. Coordination of reporting on the scope of management activities financial administration and sub-district work programs.
5	Government Section	Carry out some of the tasks of the sub-district in the field of government	a. Preparation of data and materials within the scope of government b. The development of Rukun Warga and Rukun Tentangga c. Land administration services d. Coaching the administration of Kelurahan government e. District data and information services f. Population administration services g. Facilitation and coordination of government activities with related agencies h. Reporting on the implementation of the scope of government.
6	Section for Peace and Welfare	Carry out some of the tasks of the sub-district in the field of peace and order	a. Preparation of data and material materials the scope of peace and order b. Building peace and order; c. Building community protection potential; d. Community empowerment in prevention and disaster management; e. Facilitation and coordination of peace activities and order with the relevant Agency; and f. Reporting the implementation of the scope of peace and order.
7	Section of Education and Society	Carry out some of the tasks of the sub-district in the field of education and society	a. Preparation of data and material for the scope of education and society b. Inventory of potential in the field of formal and informal education c. Development of social institutions at the level District and Village d. Facilitating religious development, family resilience, participation and empowerment of women and the younger generation; e. Facilitating and coordinating activities in the field of education and community with related agencies
8	Section of Social Welfare	Carry out some of the tasks of the sub-district in the fields of social welfare development programs	a. Prepare for the provision of assistance and services as well as other social guidance b. Carry out training and development of employment / labor c. Facilitating the implementation of the public health insurance program d. Carry out the development of family planning services and social assistance;
9	Section of Economy, Development	Carry out some of the tasks of the sub-district in the fields of economy, development,	a. Preparation of data and materials of economic scope, development b. Facilitating the development of cooperatives, small and medium enterprises.

			c. Inventory of community economic potential and development
			d. Facilitating the construction of physical facilities and infrastructure for public facilities and social facilities
10	Lurah	Carry out some of the government affairs which are the regional authority delegated by the Mayor to Lurah	a. Implementation of village government activities
			b. Community empowerment, economy and people's welfare
			c. Society service
			d. The maintenance of peace and public order;
			e. Maintenance of infrastructure, public service facilities and the environment
			f. Development of social institutions.

D. Information System Architecture – Data Architecture

Data architecture and application architecture are the two primary information system architectures. While Application Architecture looks at and develops application architecture aims and proposals, Data Architecture develops targets and suggestions for data architecture. Based on the Business Architecture phase's analysis of the administrative population in Sumur Bandung sub-district, this phase develops information system solutions. Application/Data Matrix can be seen in table vi

TABLE VI
APPLICATION/DATA MATRIX

Application	Description	Entity	Type
SPAK (Population Administration Service System) Application			
E-KTP	This application is used by the community when they want to make an E-KTP, it is used when making a new E-KTP or when they lose an E-KTP	Community	Master Data
		Sub-district staff	Master Data
		Sub-district head	Master Data
		Operator	Master Data
		Family Card	Transactional Data
		Letter Invitation	Transactional Data
		Birth Certificate	Transactional Data
		Cover Letter from Kelurahan	Transactional Data
Family Card	This application is used by the community when they want to make a family card, used when making a new family card or when losing a family card, adding names to family cards, deleting names from family cards (due to death or divorce).	Community	Master Data
		Sub-district staff	Master Data
		Sub-district head	Master Data
		Operator	Master Data
		Family Card	Transactional Data
		KTP	Transactional Data
		Divorce Letter	Transactional Data
		Death Certificate	Transactional Data
		Marriage Certificate	Transactional Data
		Birth Certificate	Transactional Data
		Cover Letter from Kelurahan	Transactional Data
Heirs Certificate	This application is used by the community when they want to make an heir letter, it is used when making an heir letter due to death or divorce	Community	Master Data
		Sub-district staff	Master Data
		Sub-district head	Master Data
		Operator	Master Data
		KTP	Transactional Data
		Family Card	Transactional Data
		Divorce Letter	Transactional Data
		Death Certificate	Transactional Data
		Cover Letter from Kelurahan	Transactional Data
Prodeskel (Village and Urban Village Profile)			
Input Data Prodeskel	Application used to input data per family card, per RT and RW. If the sub-district only sees the data, it is input by the Kelurahan, the function of the sub-district is only monitoring and supervising	Sub-district head	Master Data
		Sub-district staff	Master Data
		KTP	Transactional Data
		Family Card	Transactional Data

Data Dissemination Diagram are used to illustrate the relationships between data entities, business services, and application components. This diagram focuses on describing the relationship between business services and physical applications and data entities. Data Dissemination Diagram can be seen in figure 7
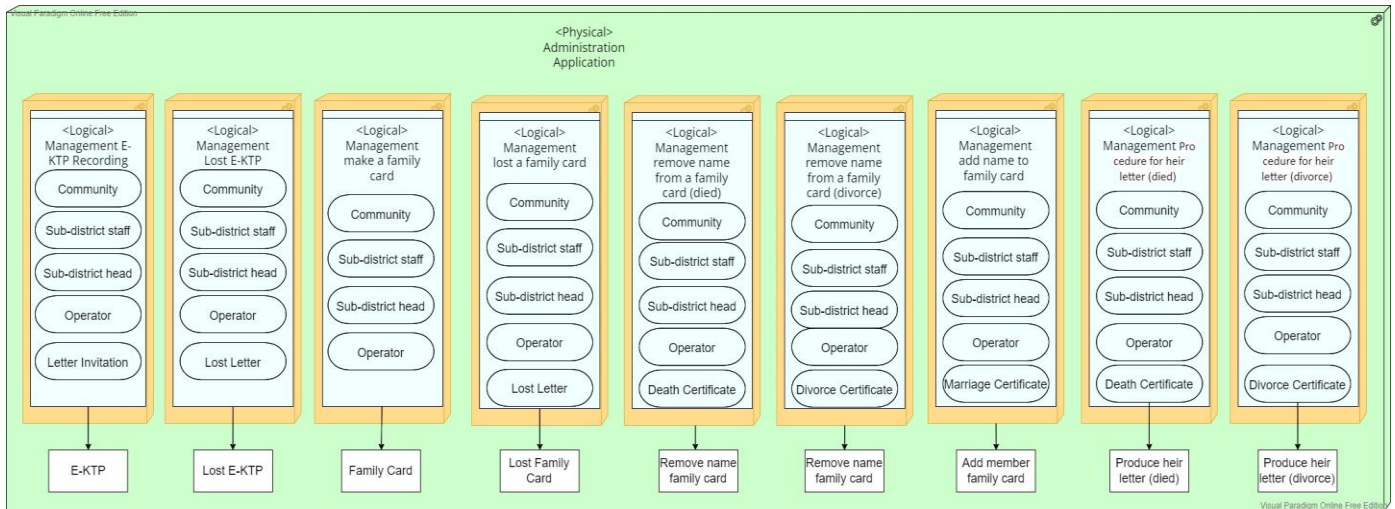
Figure 7 Data Dissemination Diagram

E. Information System Architecture – Application Architecture

Data architecture and application architecture are the two primary information system architectures. While Application Architecture looks at and develops application architecture aims and proposals, Data Architecture develops targets and suggestions for data architecture. Based on the Business Architecture phase's analysis of the administrative population in Sumur Bandung sub-district, this phase develops information system solutions. Application/Data Matrix can be seen in table vii.

TALE VII
APPLICATION PORTFOLIO CATALOG

No	Physical Application	Logical Application	Description
		Existing	
1	Prodeskel (Village and Urban Village Profile)	Input Data Prodeskel	Application used to input data per family card, per RT and RW. If the sub-district only sees the data, it is input by the Kelurahan, the function of the sub-district is only monitoring and supervising. Village and Kelurahan Profile important information which includes data on villages and kelurahan such as population and some roles of the existence of a sector that has the potential to be developed.
		Target	
2	SPAK (Population Administration Service System)	E-KTP	An application that is useful for the community to carry out administrative needs such as making ID cards, With this application, people no longer need to come to the sub-district, because almost all processes use the system
		Family Card	This application is used by the community when they want to make a family card, used when making a new family card or when losing a family card, adding names to family cards, deleting names from family cards (due to death or divorce).
		Heirs Certificate	This application is used by the community when they want to make an heir letter, it is used when making an heir letter due to death or divorce

Application/Organization Matrix is a matrix that describes the relationship between application components and organizational units related to population administration in Sumur Bandung Sub District. Application/Organization Matrix can be seen in table viii

TALE VIII
APPLICATION/ORGANIZATION MATRIX

Organizational Unit	Community	Sub-district staff	Sub-district head	Kelurahan	Operator
Application Component					
SPAK					
E-KTP	V	V	V		V
Family Card	V	V	V		V
Heirs Letter	V	V	V		V
Prodeskel					
Input Data Prodeskel			V	V	

IV. CONCLUSION

The application of smart village in governance dimension with Enterprise Architecture approach based on the problems that occurred in Sumur Bandung sub-district to increase IKM (Community Satisfaction Index) at the end of the 2023 period. This research is focused on increasing community satisfaction. One of them is by improving services to the community. The population administration service is the author's main concern, because there is still a lack of a system to support the needs of the community when carrying out population administration.

The design of the enterprise architecture is carried out using the TOGAF ADM framework which begins with an approach to the Preliminary Phase and Architecture Vision phase then proceeds to the design of Business architecture, Data Architecture, Application architecture which aims to produce a blueprint containing the results of the analysis of existing conditions and recommendations that can be used as a reference for the government function at Sumur Bandung Sub District.

By creating a system that can be used by the community, so that people do not need to come to the sub-district to carry out administrative activities such as making E-KTPs, family cards or heirs' letters. Using the SPAK application (Population Administration Service System) which will be integrated with Prodeskel as an existing application in the sub-district, it is expected to increase service satisfaction to the community

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