

Enterprise Architecture Implementation for Regional Tax Information Systems Using the Zachman Framework

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ARTICLE INFO	ABSTRACT
Keywords: Regional Tax, Information System, Zachman Framework Received: Dec 11, 2024 Accepted: Feb 20, 2025 Published: Feb 28, 2025	An effective and efficient information system in managing regional taxes is the key to increasing transparency, efficiency and service to taxpayers. In this context, this study aims to identify relevant perspectives in local tax management and analyze the appropriate use of technology to develop an effective information system. This study uses the Zachman Framework approach. The results show that the use of technologies such as databases, cloud computing, web-based applications, and system integration has the potential to increase efficiency and transparency in local tax management. However, it must be acknowledged that the implementation of this technology also has challenges such as implementation costs and the need for adequate technical expertise. In terms of development prospects, the use of appropriate information and technology systems can improve efficiency, transparency, and service in local tax management. However, further research and development is needed to overcome the challenges and maximize the potential that exists. This research provides valuable insights about the development of local tax information systems and the appropriate use of technology. The implication is increasing the efficiency of local tax management and better service to taxpayers. Overall, this research makes an important contribution to the development of local tax information systems and the use of technology in a wider context.

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1. INTRODUCTION

Local taxes are an important source of revenue for local governments in financing various development programs and public services. Local tax revenue can be used to build infrastructure, provide health facilities, education, transportation, and improve the quality of life of the community. The collection and management of accurate, integrated, and reliable local tax data is very important for the success of local tax management (Simanjuntak, Darwiyanto, & Wisudiawan, 2019).

However, many local tax information systems are still not optimal in collecting and processing data. Some of the obstacles that are often faced are the lack of data integration between related agencies, the lack of use of information technology, and the low awareness and participation of taxpayers. This can cause financial losses for local governments and reduce the quality of service for the community (Zamani, 2019).

Effective and efficient local tax management is a challenge for local governments because it involves many different aspects and stakeholders. The complex process of collecting, processing and monitoring tax data requires a reliable and integrated information system. Without a good information system, local tax management can be inefficient, error-prone, and difficult to track (Slameto, Utami, & Pangera, 2017).

In order to improve the effectiveness and efficiency of local tax management, an information system

is needed that can assist in collecting, managing, and utilizing tax data better. A good information system will enable local governments to have better visibility of tax potential, speed up administrative processes, increase taxpayer compliance, and improve services to the community (Assa'diyah, Gumilang, & Mulyana, n.d.).

Integrated and accurate tax data is essential for tax policy sustainability and development. With an integrated local tax information system, local governments can efficiently monitor and analyze data, identify tax trends, and make more informed decisions. This will assist local governments in designing more effective and sustainable tax policies (Irwan & Muslih, 2021).

The implementation of information technology in local tax information systems also provides benefits in terms of operational efficiency. The process of data collection and tax calculation can be automated, reducing the time and effort required. In addition, information technology also allows easy and fast access to tax information, both for tax officials and taxpayers (Riswandi, Sembiring, & Erfina, 2021).

From a financial perspective, a good local tax information system will help local governments optimize tax revenue. By having accurate and integrated data, local governments can identify untapped tax potential, improve the collection process, and monitor taxpayer compliance. This will have an impact on increasing local revenues and finances (Lavivah, 2022).

An integrated local tax information system also contributes to improving the quality of service to the community. With an efficient information system, local governments can provide faster, more accurate, and transparent services related to administration and taxation. The public will feel better served and have higher trust in the local government (Monata Sembiring, Fajar, & SMK, 2019).

Good local tax data management also plays an important role in supporting local government transparency and accountability. With a structured and integrated tax information system, local governments can easily track and report tax-related information to stakeholders, including taxpayers and audit institutions. This will increase public trust in local governments and maintain the integrity of the tax system (Indrawan, n.d.).

In the digital era, local tax information systems can also play a role in driving local government digital transformation. With the proper adoption of information technology, local governments can optimize the use of tax data for policy analysis, leverage artificial intelligence (AI) for potential violation detection, and improve electronic interaction between tax officers and taxpayers. This will bring positive changes in local tax management and provide long-term benefits to the community and local government (Sudrajat, 2014; Zachman, 2003).

The implementation of the Zachman Framework in the design of local tax information systems can assist local governments in improving effective, efficient, integrated and reliable tax management. The Zachman Framework provides a systematic framework for identifying and integrating different perspectives in the design of local tax information systems, thus enabling better tax management in accordance with the needs and objectives of local governments.

2. METHOD

The research methodology in this paper uses a case study with a qualitative approach, which focuses on the implementation of the Zachman Framework in local tax information systems. The qualitative approach was chosen because it emphasizes in-depth understanding and analysis of the use of this framework in a complex context, especially in government systems (Creswell & Poth, 2018). This allows researchers to explore more comprehensive information from various perspectives, including the technical and non-technical needs of stakeholders (Yin, 2018).

Data collection was conducted through literature study and observation. Literature study was conducted by reviewing various literatures on Zachman Framework and local tax information system. Meanwhile, observations were made directly to tax management activities in the field, so that

researchers can see how the system runs and how needs and challenges arise in practice. The combination of these two methods provides a strong and relevant information base for analysis (Merriam & Tisdell, 2016).

Fig 1. Zachman Framework Matrix Framework

	What (Data)	How (Function)	Where (Locations)	Who (People)	When (Time)	Why (Motivation)
Scope (contextual) Planner	List of things important to the business	List of processes that the business performs	List of locations in which the business operates	List of organizations important to the business	List of events/cycles important to the business	List of business goals/strategies
Enterprise Model (conceptual) Business Owner	e.g. Semantic Model	e.g. Business Process Model	e.g. Business Logistics System	e.g. Workflow Model	e.g. Master Schedule	e.g. Business Plan
System Model (logical) Designer	e.g. Logical Data Model	e.g. Application Architecture	e.g. Distributed System Architecture	e.g. Human Interface Architecture	e.g. Process Structure	e.g. Business Rule Model
Technology Model (physical) Implementer	e.g. Physical Data Model	e.g. System Design	e.g. Technology Architecture	e.g. Presentation Architecture	e.g. Control Structure	e.g. Rule Design
Detailed Representation (out-of-context) Subcontractor	e.g. Data Definition	e.g. Program	e.g. Network Architecture	e.g. Security Architecture	e.g. Timing Definition	e.g. Rule Definition
Functioning System	e.g. Data	e.g. Function	e.g. Network	e.g. Organization	e.g. Schedule	e.g. Strategy

The Zachman Framework is an architectural framework that is widely used for the development of integrated information systems. Developed by John Zachman and formalized by the Zachman Institute for Framework Advancement (ZIFA), the framework consists of six perspectives and six aspects that form a matrix (Zachman Institute for Framework Advancement, 2008). The perspectives include planners, owners, designers, builders, implementers, and participants, while the aspects include data, functions, networks, people, time, and motivation (Bernanda et al., 2020; Aswar et al., 2023). This combination enables a thorough analysis of the system from multiple perspectives.

In the development of a local tax information system, each perspective in the Zachman Framework contributes to the design of a system that meets stakeholder needs. The planner and owner perspectives set the context and business model, while designers and builders are in charge of translating these needs into technical designs. Implementers and participants ensure that the system is built and used in accordance with the organization's goals. With the support of columns that address "what", "how", "where", "who", "when", and "why", the system is designed to be structured and effective (Aslam et al., 2023; Rizki et al., 2023).

Through the application of the Zachman Framework, the process of designing local tax information systems becomes more systematic and easily understood by all related parties. This framework helps bridge the communication between planners, technicians, and end users, so that the developed system is more responsive to the real needs in the field. Thus, the Zachman Framework becomes a strategic tool to achieve integration, efficiency, and accountability in local tax management (Hasdiansa & Hasbiah, 2024).

3. RESULTS AND DISCUSSION

After the data is collected, the next step is to present the problem in the Zachman framework to produce the required system. First, the problem map is obtained and organized in the form of a Zachman matrix framework. Then, each row and column in the matrix is described in detail, resulting in a Zachman matrix from the presentation of the problem that has been done. This process will help map the needs of the enterprise and determine the appropriate conceptual model and information system model.

3.1. Discussion into Zachman Framework Table**3.1.1. Planner Perspective**

In local tax management, the data perspective (What) focuses on the information needed to support the entire taxation process. The data includes the identity of the taxpayer, the types of taxes imposed, the amount of tax to be paid, and other important information such as due dates and payment history. This information is the main basis for making decisions and implementing tax administration processes accurately.

The process perspective (How) highlights the various activities that must be carried out in the local tax management system. This process includes stages ranging from taxpayer registration, data recording, verification, determination of tax obligations, to the payment and reporting process. Each of these activities is designed to support work efficiency and taxpayer compliance with applicable regulations.

In terms of location (Where), local tax management is carried out in various places that have an important role, such as tax service offices, data centers, and payment locations such as banks or electronic payment channels. The existence of these locations allows taxation services to be carried out in a dispersed manner and reach the community at large, making it easier to access services.

The people perspective (Who) maps who are the parties involved in this system. The main stakeholders include the local government as the manager and responsible for the system, taxpayers as service users, and third parties such as banks or payment institutions that assist the transaction process. In addition, the general public also plays a role as supervisors and beneficiaries of tax management transparency.

Finally, the time (When) and motivation (Why) perspectives explain when and why the tax system is implemented. In terms of time, this includes service schedules, reporting periods, and tax payment deadlines that must be adhered to. In terms of motivation, the main objectives of local tax management are to increase local revenue, improve the quality of public services, and encourage public awareness and compliance in fulfilling tax obligations.

3.1.2. Owner's Perspective

From the owner's perspective in the Zachman Framework, the data aspect (What) emphasizes the importance of identifying relevant data entities in the local tax information system. The system owner must understand the relationship between data entities, such as between taxpayers, tax types, and payment history, and ensure that the data is managed efficiently. The selection of the right database technology is also a major consideration so that the system can run optimally and reliably in storing and processing data on an ongoing basis.

The process aspect (How) relates to a thorough understanding of the business functions that must be carried out by the system. Local tax information system owners are responsible for ensuring that every process in tax management, from registration to reporting, is properly reflected in the system. These processes must be aligned with the vision, mission, and strategic goals of the local government, and be able to improve the overall effectiveness of tax management.

In the location aspect (Where), attention is paid to the distribution of information and process interactions between locations in the tax management environment. System owners must understand how information flows between various points such as tax service offices, data centers, and banks as payment points. The information system designed must be able to support communication across locations efficiently and ensure integration between work units so that services can be carried out without geographical barriers.

The Who aspect underscores the importance of understanding the roles of the stakeholders involved, be it the local government as the system manager, taxpayers as the main users, as well as third parties such as banks and the general public. The system owner must ensure that all these parties have clear access and roles in the information system, and create effective interaction mechanisms to improve collaboration and transparency in local tax management.

Finally, the aspects of time (When) and motivation (Why) play an important role in supporting the success of the information system. In terms of time, the owner must be able to identify and manage payment cycles and service schedules appropriately, including providing automatic reminder features to users. In terms of motivation, the owner must set strategic goals for the system, such as increasing tax revenue, service quality, and taxpayer compliance. The designed system must be able to present information that supports the achievement of these goals and provides added value to all stakeholders involved.

3.1.3. Designer Perspective

From the designer's perspective in the Zachman Framework, the data aspect (What) requires designing data structures that are efficient, accurate, and easy to manage. Local tax information system designers must develop the right database schema, model entities and relationships between data, and establish data storage and retrieval strategies that support optimal system performance. This design becomes the main foundation in ensuring tax data can be accessed and utilized consistently.

The process aspect (How) emphasizes the importance of designing the workflow and business functions that will be carried out in the information system. Designers are responsible for determining how interactions between processes take place, as well as developing data validation and control mechanisms so that processes run according to the rules and do not cause inconsistencies. This process design must be able to describe the reality on the ground and remain flexible to policy changes.

In the location aspect (Where), the designer's role is to design network infrastructure and systems that support distributed local tax management. This includes planning connectivity between locations such as service offices, data centers, and payment institutions, as well as ensuring that the system is able to run safely and stably. Integration between locations and protection against network threats become an important part of this stage.

The Who aspect of the designer's perspective focuses on designing a user interface that is intuitive and suits the characteristics of different types of users. Designers must understand the needs of local governments, taxpayers, and other third parties, and translate them into a system that is easy to use, informative, and supports work efficiency. User experience is a crucial aspect in determining the success of system adoption.

Finally, the time (When) and motivation (Why) aspects encourage designers to pay attention to the scheduling aspects and strategic goals of the system. In terms of time, it is necessary to design the management of process schedules, tax payment periods, and automatic reminder or notification features. In terms of motivation, designers must ensure that the system is able to provide accurate reports, useful analysis, and relevant information that supports the achievement of goals such as increased compliance and efficiency of tax management.

3.1.4. Builder Perspective

In the builder perspective of the Zachman Framework, the data aspect (What) focuses on the actual implementation of the data structure that has been previously designed by the designer. Local tax information system builders are responsible for creating databases, building tables, establishing relationships between entities, and specifying the necessary attributes. In addition, they are also responsible for maintaining data integrity and ensuring that the data stored in the system remains secure and consistent with operational needs.

The process aspect (How) covers the development of the business functions that underlie the running of the system. Here, the builders will write the program code, implement the business logic, and integrate the various components to work synergistically. They also carry out functional testing to ensure that each process runs as intended, without errors, and is able to respond reliably to user needs.

In the location aspect (Where), the focus is on building the technical infrastructure that supports the information system. Builders are responsible for building or configuring servers, setting up communication networks between systems, and implementing adequate security protocols. This

infrastructure must support the operational needs of various locations, such as tax offices, banks, and data centers, and ensure the smooth exchange of information between them.

The Who aspect focuses on implementing the user interface that has been designed so that the system can be used easily and efficiently. The builder will develop a graphical interface that conforms to the UI/UX design, and ensure smooth connectivity between the user interface and the business logic behind it. The goal is to create an intuitive user experience for all stakeholders, both from the government and the public side.

3.1.5. Builder Perspective

From the implementer's perspective in the Zachman Framework, the data aspect (What) emphasizes the implementer's responsibility in managing the data used in the local tax information system. They play a role in collecting, updating and storing data accurately, while ensuring that data integrity and security are maintained. In the event of data damage or loss, implementers must also be able to recover data according to established procedures.

The process aspect (How) relates to the implementation of business activities or functions that have been designed and implemented in the system. Implementers carry out various procedures such as taxpayer registration, payment processing, and tax data processing by following applicable operational standards. Efficiency and accuracy of process implementation are the main focus so that the system runs optimally and does not cause service barriers.

In the location aspect (Where), implementers work within a predetermined environment and network, including tax service offices, financial institutions, and data centers. They ensure the interaction between the various locations runs smoothly, by maintaining connectivity and overseeing the security aspects of the network used in data management and tax services.

The Who aspect highlights the importance of the implementer's interaction with various stakeholders, such as local governments, communities, taxpayers, and banks. Implementers must be able to provide excellent service, respond to questions and complaints professionally, and maintain effective communication to support the overall success of local tax management.

Finally, the time (When) and motivation (Why) aspects underscore the importance of good time management and goal orientation. Implementers are tasked with ensuring that all processes take place on time, including service schedules and payment deadlines. They also play an active role in supporting the achievement of strategic goals such as increasing tax revenue, service quality, and taxpayer compliance, by making these motivations a guideline in carrying out their daily tasks.

3.1.6. Participant Perspective

In the participant perspective of the Zachman Framework, the data aspect (What) indicates that participants of the local tax information system act as active users who interact directly with the data in the system. They can access information such as tax status, payment history, or update personal data. In addition, participants also contribute by providing new data, such as financial reports or submitting data changes, according to the needs of the system.

The process aspect (How) describes the involvement of participants in carrying out the functions that have been facilitated by the system. They can register as taxpayers, report income, and pay taxes online through predetermined procedures. This interaction takes place in a structured manner, with participants following the flow and instructions in the information system that has been designed for convenience and efficiency.

From the aspect of location (Where), participants access the system through various media provided, such as the official web portal, tax application, or directly to the tax service office. They can also connect with other physical locations that support the payment and reporting process, such as banks or authorized payment centers. This flexible access allows participants to manage their tax obligations more easily from various locations.

The Who aspect emphasizes that participants include various individuals or entities involved in the tax process, including individual taxpayers, business owners, tax officers, or other third parties. They not only use the system but also communicate and interact with other actors in the tax ecosystem to fulfill their obligations appropriately.

Finally, in terms of time (When) and motivation (Why), participants must follow the applicable schedules and deadlines, such as the deadline for tax reporting and payment. The system will help by providing automatic notifications or reminders. Participants' main motivations include compliance with tax rules, a desire to avoid fines, or participation in government programs. Therefore, a good information system needs to support these motivations by providing access, transparency, and convenience in the tax process.

Table 1. Zachman Framework on Local Tax Information System

Perspective	What is	How	Where	Who	When	Why
Planner	identify relevant data entities, relationships between those entities,	activities such as taxpayer registration, tax payment, tax data processing, etc.	includes tax service offices, banks or payment points, and tax data centers.	includes local governments, taxpayers, banks or payment points, and the general public.	includes tax payment periods, tax service schedules, and so on.	increase tax revenues, improve the quality of tax services, and increase taxpayer compliance.
Owner	design efficient and accurate data structures	determine the functions or business processes that must be carried out by the system	understands the locations or networks where processes and information interact, such as tax service offices, etc.	takes into account the stakeholders involved in local tax management.	identifying the time or timeframes involved, such as tax payment periods and tax service schedules	increase tax revenues, improve the quality of services, and more
Designer	They will build databases, tables, relations, and attributes according to the design	design workflows, interactions between processes, and data control and validation mechanisms	considers the connectivity, network security, and integration needs between the locations or systems involved.	designs intuitive and effective user interfaces.	designing schedules, scheduling tasks, and managing time in local tax information systems	ensure that information systems provide relevant information, accurate reports, and analysis that support decision making
Builder	collect, update, and store tax data accurately. Implementers are also	develop business logic, write program code, and integrate existing	builds the communication networks, and security systems needed to	creates displays or user interfaces in accordance with the	implementing schedules, scheduling tasks, and managing time in local tax	develop appropriate reports, data analysis tools, and other features

	responsible for maintaining data integrity.	functions into the system	support operations	design prepared by the designer.	information systems.	needed to achieve objectives.
Executor	can search for information such as about their tax status, and view payment history.	run these processes according to predetermined procedures, such as taxpayer registration, etc.	interacts with locations related to local tax management, such as tax service offices, banks, or data centers	interacts with local governments, taxpayers, banks, and the general public.	ensuring that tax payment processes, tax service schedules, and other deadlines are executed in a timely manner	contribute to achieving objectives such as increasing tax revenues, improving the quality of services, and more
Participants	identify relevant data entities, relationships between those entities,	perform activities such as registering as a taxpayer, reporting income, or paying taxes online.	accesses the system through web applications, official tax websites, or through the nearest tax service office.	includes personal taxpayers, business owners, tax officers, or third parties involved in the tax process.	complying with tax payment deadlines, carrying out certain actions in certain periods, or following predetermined tax service schedules.	meet tax obligations, avoid sanctions or fines, or benefit from government programs funded by taxes.

3.2. Systems and Technology

In developing the Local Tax Information System, there are various systems and technologies that can be utilized to support the effectiveness and efficiency of the system as a whole. First of all, in terms of infrastructure, the use of servers and networks is an important foundation. The server can be a physical server, which is a hardware device dedicated exclusively to running the system. Alternatively, the use of virtual servers allows multiple servers to run simultaneously on a single physical machine through virtualization technology. In addition, a cloud computing-based approach is a flexible and scalable option, as it allows the management of server and network resources as needed without having to rely on local infrastructure.

Furthermore, in the software application component, there are various programming languages and database management systems that can be used. Languages such as Java, C#, and Python are popularly used in application development due to their portability, ease of use, and extensive community and library support. For data management, database management systems such as MySQL, PostgreSQL, or Oracle Database are used, which are capable of storing and managing tax data in a secure and structured manner. In addition, the use of frameworks such as Laravel (PHP), Spring (Java), and Django (Python) facilitates the development process by providing ready-to-use working structures and features.

The user interface also plays an important role in the tax information system. User interface development can be done with web programming languages such as HTML, CSS, and JavaScript which form the basis of the system's appearance and interactivity. To create a more dynamic and responsive interface, frameworks such as React or Angular can be used that allow the development of modern and user-friendly UI components.

Information security aspects should not be overlooked in systems that handle sensitive data such as tax information. Technologies such as AES (Advanced Encryption Standard) are used to encrypt data to maintain confidentiality when stored and transmitted. TLS (Transport Layer Security) ensures secure network communications, while firewalls monitor and filter network traffic to prevent unauthorized access. In addition, digital certificates are used to guarantee the identity of the parties involved in communication, and intrusion detection systems work to detect suspicious activity that could indicate a security threat.

Finally, to support interoperability, local tax information systems need to be able to integrate with other systems. This is possible through the use of APIs (Application Programming Interface) that provide standardized interfaces for communication between systems. In addition, protocol-based web services such as SOAP or REST can be used to support cross-platform exchange of data and functionality, both with other government systems and with relevant external parties.

The selection of technology in the development of the Local Tax Information System must consider various aspects, such as the specific needs of users, the scale and complexity of the project, the availability of resources, as well as security and sustainability factors. Therefore, in-depth needs analysis and consultation with technology experts are essential to ensure that the system built is able to meet the objectives and provide maximum benefits for local tax management.

3.3. Data Architecture

Data Architecture is an approach used to plan, organize, and manage data in an organization in a structured and coordinated manner. The following is a data architecture table on the local tax information system:

Table 2. Data Architecture of Local Tax Information System

Entity	Description
Taxpayer	Data about taxpayers, including Taxpayer Identification Number (NPWP), Name, Address, Phone Number, and Business Category.
Tax Object	Information about the tax object owned by the taxpayer, such as Object Name, Object Address, Land Area, Building Area, and Tax Object Sale Value.
Tax Type	Data on the type of tax applied, including Tax Type Code, Tax Type Name, and Tax Rate Percentage.
Tax Amount	Information on the amount of tax to be paid, including Bill Number, Bill Date, Tax Value, and Payment Status.
Payment Due	Data on the due date of tax payments, including Due Date and Remarks.
Payment Transaction	Records of tax payment transactions made by taxpayers, including Transaction Number, Transaction Date, Payment Amount, and Payment Method.
Tax Office	Information on local tax service offices, including Office Name, Address, Phone Number, and Working Hours.

Bank	Data on banks used for tax payments, including Bank Name, Account Number, and Branch Office Address.
Tax Data Center	Centralized tax data storage, including Server, Database, and Database Management System.

The table above includes the main entities involved in the data architecture of the local tax information system. Each entity has relevant attributes to contain the information needed in local tax management.

3.4. When: Time or schedule of the information system

Application architecture is an approach used to plan, design, and manage software applications within an organization in a structured and coordinated manner. Enterprise application architecture aims to create a framework that allows applications to interact, communicate, and operate efficiently, scalably, and securely in a complex environment. The following is an application architecture table on the local tax information system:

Table 3. Application Architecture for Local Tax Information System

Application Components	Description
Web Application	A web-based application that provides a user interface to access and manage local tax-related information.
Mobile Application	A mobile application that allows taxpayers to access information and make tax payments via mobile devices.
Registration Module	A module that allows taxpayers to register themselves and their tax objects.
Payment Module	A module that facilitates online tax payments through various available payment methods.
Data Processing Module	Modules responsible for tax data processing, including processing of taxpayer data, tax objects, and calculation of tax amounts.
Reporting Module	A module that provides the ability to generate reports and documents related to local taxes, such as payment reports, bills, and tax certificates.
Notification Module	Modules that send notifications to taxpayers regarding payment due dates, new bills, and other tax-related information.
Integration Module	Modules responsible for integrating the local tax information system with external systems, such as financial and bank systems.
Security Module	A module that protects tax data and transactions by applying layers of security, user authentication, and data encryption.

The table above includes the main components in the application architecture of the local tax information system. Each component has a specific role in managing various aspects of the application,

such as registration, payment, data processing, reporting, notification, integration with external systems, and security.

The main focus is on local tax management and the importance of good planning. By highlighting the complexities involved in local tax management and explaining several approaches such as the Planner Perspective, which consists of Data, Process, Location, People, Time, and Motivation Perspectives, it can provide a comprehensive understanding. The difference with previous research focuses more on the use of Zachman Framework in designing system architecture for local financial budgeting.

Nonetheless, this research and previous research provide useful understanding and make a significant contribution to system development and regional financial management.

4. CONCLUSIONS

From the research results and previous analysis and interpretation, it can be concluded that the Zachman Framework is able to see each component of the organization from various points of view such as the Planner, Owner, Designer, Builder, Implementer, and User perspectives in the development of local tax information systems. The results also provide a comprehensive understanding of the aspects involved in local tax management, such as data, processes, locations, people, time, and motivation. Meanwhile, the previous journal focused on designing the architecture of the local financial budgeting management system and using the Zachman Framework.

Local tax management is a complex matter and requires good planning. In the development of local tax information systems, planning initialization is a crucial first step. This stage involves a deep understanding of the needs, objectives and stakeholders involved. In this regard, the identification of the perspectives discussed will help guide effective planning.

The prospect of developing the results of this research is to increase efficiency and transparency in local tax management. By using an integrated information system and appropriate technology, the process of registration, payment, and processing of tax data can be improved. In addition, the use of technology can also improve the quality of tax services to taxpayers. However, further development is needed to address challenges that may arise, such as data security, technical compliance, and technology adoption by all stakeholders.

Overall, the development of local tax information systems and the appropriate use of technology have great potential to improve efficiency, transparency, and service in local tax management. However, further research and development is needed to overcome the challenges and optimize the potential.

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