

# Application of 36 Cell Zachman Framework for Integrated Spatial Planning Tax On Dinas Pendapatan Daerah Kota Palembang

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## *Abstract*

*Dinas Pendapatan Daerah Kota Palembang is a government agency engaged in taxes that want to develop spatial taxes integrated the manual be computerized, with the application of this control arrangement of the location of a region into a strategy for the utilization of resources and the protection and prevention of negative impact on a region to optimize the performance of these fields and to improve process control and increase the speed, capability, monitoring in real-time, so expect all the needs of both data, human resources and infrastructure that supports the passage of the information system can be obtained for planned. In the application of this Framework Zachman researchers describe in detail the columns and rows that are in the matrix by filling the Zachman Framework cell 36 which is in the Zachman Framework with an ordered matrix where each cell will be charging cell reference. The strategy is expected by the Dinas Pendapatan Daerah Kota Palembang can implement plans as expected.*

**Keywords :** *Spatial, Taxes, Zachman Framework*

## 1 INTRODUCTION

Information and communication technologies are growing at this time gives a lot of options and convenience for companies and institutions pemerintahan in improving their performance and provide the best service for the community. Of the many benefits to be provided by technology is a business process that runs in real time. One technology that can realize maximum business processes in terms of services and quality products with efficient use of an information system. With this information system the company can carry out its activities effectively and efficiently [1].

Dinas Pendapatan Daerah Kota Palembang far in regulating the control of a region on setting the tax still done conventionally perceived to be effective and optimal where the community and the Dinas Pendapatan Daerah Kota Palembang trouble knowing restriction area, as well as the specifications of the information structuring of local taxes the city of Palembang in uptodate. In the search for tax information society should go directly to the

Department of Revenue Palembang, then part of the information will be looking for a big book of lists and data regarding the restriction area and specifications regarding tax rates and regulations concerning taxes.

With this shortage of researchers interested in applying a method that can facilitate in an architectural planning Zachman Framework is a method in which these methods can provide enterprise architecture planning to portray the development plan of a system or set of systems [2][2]. Zachman Framework is used to create the structure, classification and documentation of artifacts (models, diagrams, documents) relating to the management and development of enterprise information systems, serves as a tool for understanding of enterprise architecture [3][3].

Zachman framework is structured logic for classifying and organizing the types of documents, design or model that represents a company [4][4]. Zachman Framework provides a framework for thinking about the direction, goals, objectives and requirements of the electric company's business described in perspective Planner (contextual level) [5][5]. In application of the Zachman Framework should describe in detail the columns and rows that are in Zachman matrix by filling the existing cells in the matrix Zachman with sequences where each cell will become a reference charging the cell next viewpoint [6][6]. By applying the method Zachman Framework is expected to make a profit for designing a enterprise architecture optimally as supporting the exchange of data and information, which improves the performance of the organization in the achievement of organizational goals [7][7], Analysis and design can be used as a basis for the development of the information system [8][8] which can later be used in the implementation phase system of spatial taxes on Dinas Pendapatan Daerah Kota Palembang, so as to increase and decrease the time in the area of tax limitation memanaajemen in Palembang more effectively.

Based on the above background and the authors make a draft of the spatial mapping of tax entitled Implementation of 36 Cell Zachman Framework for Integrated Spatial Planning Tax On Revenue Service Palembang.

The aim of the research at the Dinas Pendapatan Daerah Kota Palembang is to make spatial planning draft unified tax on Dinas Pendapatan Daerah Kota Palembang using Zachman Framework which will produce a structured system design architecture.

The benefits of this research are as follows : 1) Designing the structure of a system, database , network , and hardware that can be used to facilitate the spatial planning of integrated tax in Dinas Pendapatan Daerah Kota Palembang, 2) Meimplementasikan Zachman Framework for designing and modeling spatial integrated tax in Dinas Pendapatan Daerah Kota Palembang, 3) Can be used as a reference in the development of an integrated spatial planning tax for Dinas Pendapatan Daerah Kota Palembang.

## 2 RESEARCH METHODOLOGY

The research method used in the study is the methodology of Enterprise Architecture Planning (EAP) is a method used to build an information architecture [12], EAP is a method of data quality planning approach oriented to business needs and how the implementation of the architecture is done in such a way in an attempt to support the rotation of the wheel business and the achievement of the content and organization of information systems: 1) Initiation Planning. Things to do at this stage is defining the scope and objectives of planning, 2) Business Modeling. Things to do at this stage is the identification of targets and strategy

achievement, 3) Systems and Technology Today. Things to do at this stage is to conduct assessment of the systems and technology, 4) Data Architecture. Things are done at this stage of the business object identification, object definition through review of support materials, relation definition using the ERD, 5) Application Architecture. To define the applications to be built and described in the form of application architecture, 6) Architecture Technology. The definition of technology architecture is the definition of the technology, and 7) Migration Implementation Plan. This stage is intended to define the steps of application development and the estimated resources required.

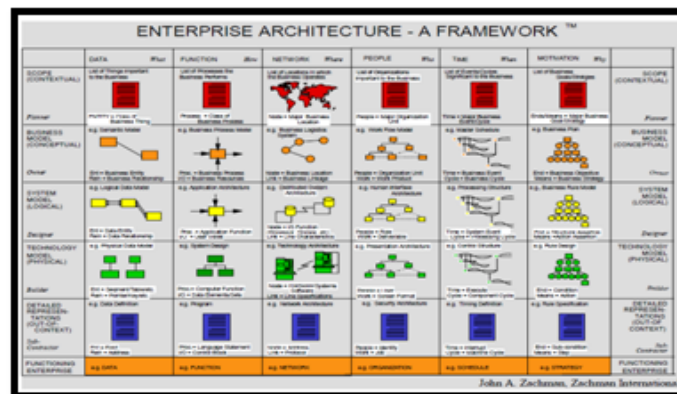


Figure 1: The Zachman Enterprise Architecture

Zachman framework issued by the Institute Zachman Framework For Advancement (ZIFA) in 1987 as the brainchild of John Zachman. John Zachman publishes different approaches to system development [6]. Zachman is an architectural framework with six levels that start with a conceptual level to the detail design and construction of a system [13]. Another important aspect is the clear definition and distinction of the three architectures, namely: data architecture, architecture processes (applications), and network architecture (technology). Here is part of the Zachman Framework: 1) Perspective Planning (Objective / Scope) : establish the context, background, and destination, 2) Perspective owner (Business Models / Owner's View) : set non-perceptual models of enterprise, 3) Perspective Designers (System Model / Designer's View) : set the system information model and bridge owners' desirable and things that can be realized technically and physically, 4) Perspective builder (Technology Model / Builder's View) : sets used in overseeing the technical and physical implementation, 5) Perspectives subcontractors (Detailed Representations / Out of Context View): assign roles and reference for the responsible parties to undertake the construction of information systems, and 6) Functional Perspective (Functioning Enterprise / Functioning System) : represents the user's perspective and a concrete manifestation of implementation results.

### 3 RESULTS AND DISCUSSION

After analyzing and designing the system, the results achieved by the authors is a Modeling Spatial Integrated Tax On Revenue Service to facilitate Palembang City Regional Revenue Office in the conduct of tax data processing.

<i>Abstraksi/ Perspektif</i>	<i>Data What</i>	<i>Function How</i>	<i>Network Where</i>	<i>People Who</i>	<i>Time When</i>	<i>Motivation Why</i>
<i>Planner / conceptual (scope)</i>	Data Land and Building Tax Taxpayer data IT space Service Room HR data	The process of tax assessment, tax payment , data archiving taxpayer	Part determination , information and services , billing , filing , Secretary of the Head of Department and Head of Department	Head of Department , Determination , information , billing , archiving , Secretary Head of Department and Society	Data Input Tax Determination , Billing Data Validation , Data Input taxpayer , Archiving and Taxpayers	Vision and mission
<i>Owner / conceptual (Business Model)</i>	Flowmap and Usecase System	Physical and Flow Activity Diagram	Network design Determination Section , Information and Services , Billing and Archiving	Programmer, Designer, Administrator, Operator	Time Schedule Project Development	Reason Procurement Information System
<i>Designer / (System Model)</i>	Entity Relation Diagram Bisnis (ERD)	Sequence, detailed, Use case	Network Design Proposed Regional Revenue Office of Palembang	Application Interface Design Manual	Details System Model Design Schedule	Rules In Making Model
<i>Builder (Technology Model)</i>	Relationships Between Tables	Process Application Usage	Location and Technology That Built	Application Interface overview	Details Schedule Application Design	Rules in Making Design
<i>Detailed Representation (Sub-Contractor)</i>	Table Algorithm Development	Algorithms Reporting Process	Network Router Configuration Settings	Each algorithm Configuring Application Access Users	Coding Process Schedule details required	Rules - seal the document in the process of coding
<i>Functioning System (Perspektif Pengguna)</i>	Sample Data Data Land and Building Tax Taxpayer data IT space Service Room HR data	Data processing Data Determination of Tax Billing Data Validation , Data Input taxpayer , Archiving and Taxpayers	Computer browser Internet Network	Head of Department , Determination , information , billing , archiving , Secretary Head of Department and Society	Time and implementasiSchedule design process , design	SOP Use of Information Systems Applications

Figure 2: Results Matrix Spatial Integrated Tax With Zachaman Framework Framework

## 4 CONCLUSION

Based on the results of the study authors conducted at the Dinas Pendapatan Daerah Kota Palembang and discussions conducted by the authors, it can be concluded that: The preparation of the document which defines the organization as full a useful thing , which the organization defining the data obtained from interviews and analysis organization. Document Enterprise Architecture can be used by system developers to develop a computerized system required by the Dinas Pendapatan Daerah Kota Palembang to improve the effectiveness and efficiency of its performance. In the column that has not been implemented is related to the Components and Functioning systems that exist throughout the column Zachman Framework. The columns associated with system implementation / creation of applications that can be used by the Department of Revenue Palembang as a system that covers all activities of the Dinas Pendapatan Daerah Kota Palembang in full as business flow described in column How section Enterprise Model. From the conclusions that have been raised , then the author would like to give you some suggestions that will serve as a useful input for all of us , especially for the Dinas Pendapatan Daerah Kota Palembang. To support the success of the new system, the authors suggest the following: 1) To produce quality as expected of the company, all parties concerned in Palembang City Regional Revenue Office shall cooperate with the follow of the system has been made of Enterprise Architecture Zachman Framework, 2) Improving the security in terms of security systems to prevent misuse of data in the Dinas Pendapatan Daerah Kota Palembang, and 3) It is expected that further employees or staff Revenue Service Palembang were trained to run these systems make it easier to use.

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