Enterprise Architecture Planning Design Using Zachman Framework on TIX.ID Application

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ARTICLE INFO	ABSTRACT
Keywords: Enterprise architecture design; Zachman framework. **Received:** 25 Juli 2023 **Accepted:** 23 Agu 2023 **Published:** 31 Agu 2023	The process of implementing the Zachman framework in a company is a strategy for developing and managing the company. Start-up companies like TIX.ID also apply this strategy to analyze and organize. The process of identifying using the zachman framework implementation in the application company TIX.ID, which is a service company, provides a real space for companies to be able to assess the right strategy for developing corporate architecture related to important matters concerning the running of the company. This implementation makes it easy for companies to make the right utilization of resources and decision-making processes for efficiency and effectiveness in the digital services industry. Not only for companies, the benefits of implementing the Zachman framework can be felt directly by users who feel the success of the application in providing comfort for the services provided.

1. INTRODUCTION

Technology as one of the solutions in solving problems in human activities and conditions today, no wonder innovation continues and continues to develop technology. Companies are now widely using technology in the ease of managing the company (Schumacher et al., 2016). Therefore, the process of implementing technology in the company is being intensively carried out with the aim of time efficiency and more effective performance. Current technology, especially in the field of information, is being intensively applied in human daily life. Human daily activities are now easier, for example with the development of innovations in the sophistication of smart mobile phone technology that is designed simply but is able to answer all the challenges that exist (Dove et al., 2017). Technological development innovations that make it easier for this community are currently very much utilized in the form of applications.

TIX ID application technology was created to answer the challenges of problems in the system of purchasing movie tickets directly. The problem that occurs in reality is when people have difficulty in buying movie tickets in theaters such as queuing too long, slow service, and not knowing the showtimes of films that are uncertain. This finally made TIX ID present. TIX ID is a movie theater service application in buying movie ticket purchase services.

Companies today carry out the identification process in the enterprise architecture to be able to group data and processes, the Zachman framework is applied as a convenience for companies to be able to manage company information. This application is of course also carried out by the TIX.ID application company as a movie ticket provider service in theaters.

TIX.ID as a service provider application certainly has supporters to run the company. Especially in the field of technology owned, this company requires an organized arrangement which of course helps

the company to manage its assets which makes it easy to identify as well. This has an impact on the quality of the company both on products and services to consumers. (Wijoyo & Marpaung, 2019).
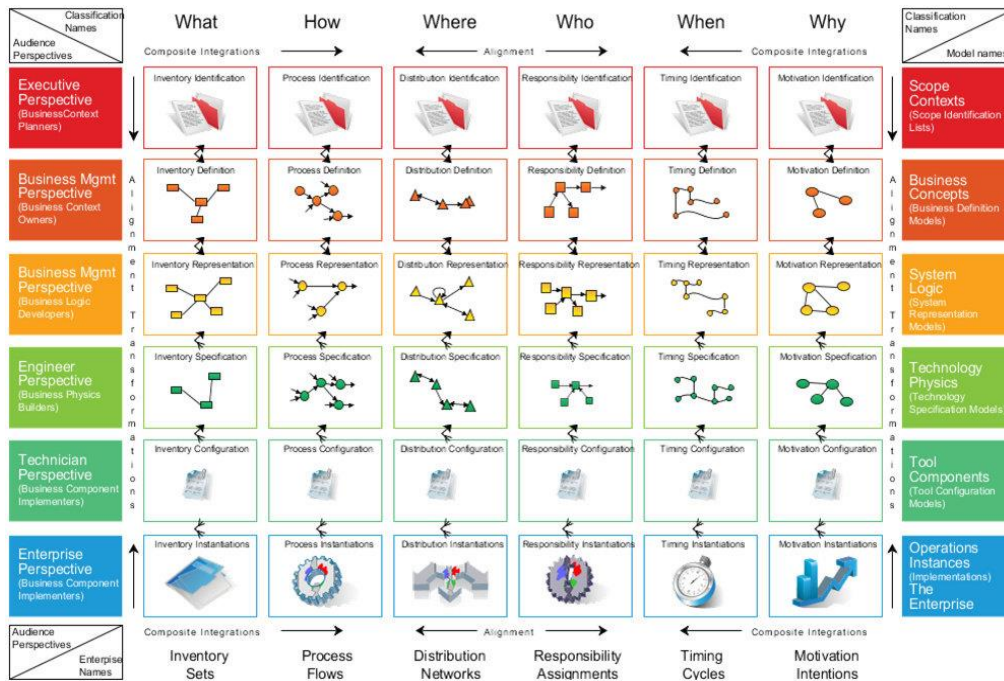

Figure 1. Zachman Framework

The Zachman Framework is a framework used to organise an understanding of an organisation and the information systems used by that organisation. This framework consists of six perspectives namely Who, What, Where, When, Why and How (Irfanto & Fernandes, 2014). The application of the Zachman Framework to a startup application such as TIX.ID can help to holistically understand the business and technology requirements needed to build the application.

In implementing the Zachman Framework at TIX.ID, what needs to be done is to identify business and technology needs from each perspective of the Zachman Framework, then build an information system based on the identification results. This can help TIX.ID to ensure that the applications built can meet user needs and have an efficient and integrated system.

2. METHOD

In making this discussion we conducted research in the form of a literature review. We conducted a literature review both online through reviewing journal references from previous research in accordance with related themes. The previous research literature review was carried out in relation to how the use of cinema ticket sales applications, this found that there were many people who used this application.

This research also examines the literature of companies that already have experience in using the Zachman framework method in their companies and provides some results. The process of identifying the architecture owned by several companies is also considered which provides sufficient information regarding its application, especially in its use in the TIX.ID company, where there is an application architecture, data architecture, and technology architecture owned.

Data collection of systems and technologies owned by the TIX.ID company which ultimately provides results from the relationship of responsibilities and functions of the Zachman framework implementation in the company. Furthermore, we also conduct a qualitative method process by taking

data based on the results of direct interviews with several people who have experience in using this application. After conducting the interview process we also carry out the evaluation stage of the results of the interview data that has been received and translated into discussions and conclusions.

3. RESULTS AND DISCUSSION

Similar to online cinema ticketing app M-TIX, TIX ID is one of the Indonesian apps that offers a new experience in buying cinema tickets, with a total of 5 million users on the play store. However, TIX ID still has a much larger user base than other similar apps such as CGV Cinemas, which has 1 million users, Cinepolis Indonesia, which has 1 million users, and BookMyShow, which has 500,000 users.

Users can find out what films are playing, schedules, and news about various films and actors on TIX ID in addition to buying tickets (Aya, 2018). In terms of payment, TIX ID is different from other similar apps. DANA digital wallet, which can be topped up with a minimum of Rp 10,000, is used as a payment method in TIX ID. In addition, the DANA digital wallet balance in TIX ID can be used in other DANA-affiliated services including Bukalapak, Lazada, and Google Play. It can be noticed how TIX.ID uses the Zachman Framework to carry out its responsibilities and achieve its goal as an internet-based digital platform for cinema ticket buyers.

3.1. What: The business data

At TIX.ID, the information needed is ticket information, flight schedule information and cinema film information. Cinema is an entertainment location that has a lot of interest also developed in the millennial environment. One of the places that people in metropolitan areas visit to relax after a day or weeks of activities is the cinema. Nowadays, there are cinema entertainment venues everywhere, and sometimes, everyone is crowded. Cinema managers are starting to use information technology to perform various business functions as information technology becomes more sophisticated. This activity can be done using a laptop or computer connected to a wired internet network or a mobile phone connected to the same provider network that allows wireless internet access.

PT Nusantara Sejahtera Raya, the management company of Cinema 21, Cinema XXI, and Premiere in several cities in Indonesia, was inspired by this phenomenon to provide convenient and safe services for its customers through online ticket sales. Tickets can be purchased through its official website, www.21cineplex.com, or by using the TIX.ID app service. If the need for access to these services is met, customers of TIX.ID's remote transaction service can purchase cinema tickets without having to queue and from any location (Fauzan & Sujana, 2022).

Users of the TIX.ID app can easily, quickly, and safely book cinema tickets while learning more about the latest movies. The fundamental difference between TIX.ID and other apps from similar service providers is the payment method that uses DANA balance. Users have the option to add the DANA app payment method, which can be topped up with a minimum of Rp10,000 and is free of top-up fees if users use certain banks. In addition, users of other services, such as BBM, Ramayana, and bukalapak, which clearly allow payment through the DANA balance application, can use the DANA balance found in the TIX.ID application (Foeh et al., 2022). Consumer interest in using the TIX.ID cinema ticket purchase application in Indonesia is influenced by several factors. Perceived benefits, perceived security, perceived trust, and perceived risk are some of them.

3.2. Who: APK user actor

In TIX.ID, the main actors involved are the customers or users of the app, ticket sales agents, and ticket booking service providers such as airlines and cinemas. Customers may be interested in purchasing tickets online for various reasons, including the ease of obtaining them and the availability of purchasing at any time. Users who benefit from time constraints when making bookings show how

flexible and effective buying tickets online can be. Customers can transfer funds using an automated teller machine (ATM) to make payments as part of a time-efficient process.

In addition, research was also conducted to find out how satisfied TIX ID users are with their experience using this service. The data for this study comes from Google Playstore 2022. This information reveals that each item has been evaluated. From this Google Playstore source, it can be seen that online ticket reservation service companies with the highest ratings are companies that have good service quality and can increase customer satisfaction. The results of the assessment data taken from customers are collected and accumulated so that they can form a ranking.

This information leads to the conclusion that the final score is determined by the evaluations of the TIX.ID app found in the Google Play Store review column. Therefore, the amount of satisfaction felt by the app users will increase in direct proportion to the company's rating.

Table 1. TIX.ID User Satisfaction Level Data

No.	Company name	App Downloader	Rating provider	Rating
1	Tix.id	5.000.000	341.969	4,7
2	CGV	1.000.000	25.603	4,5
3	Cinema21	5.000.000	34.787	4,5

Based on the data presentation in the table above, the TIX ID app is able to occupy the top position with a rating of 4.7 from users. A total of 341,969 users out of 5,000,000 app downloaders gave the Cinema 21 app a 4.5 rating, followed by 34,787 users out of 5,000,000 app downloaders who gave the CGV Indonesia app a 4.5 rating, and 25,603 users out of 1,000,000 app downloaders who gave the CGV Indonesia app a 4.5 rating, which placed it in third place. This shows that among comparable apps, such as other apps for booking cinema tickets, the TIX ID app offers the highest level of service.

3.3. Where: TIX.ID website

Applications at TIX.ID run online through the website and mobile app. The film business in Indonesia is growing along with the development of information technology in Indonesia. This is in line with the statement of Mr Ricky Pesik, Deputy Head of the Creative Economy Agency, who stated that Indonesia is experiencing a sharp increase in the number of cinema-goers. Not a few people or business people are utilising the growth of the film industry in Indonesia to create business opportunities. One such opportunity is the expansion and development of online cinema ticket sales applications, which make it easier to book cinema tickets. One of them is PT Nusantara Elang Sejahtera which developed an online cinema ticketing service application called Tix Id.

3.4. When: Time or schedule of the information system

In TIX.ID, the time required is the time for ticket booking, flight departure time and film showtime. The TIX.ID application is a service provided specifically to access information on films, cinema showtimes, and other entertainment. In addition, you can also book cinema tickets on this application without having to come directly and queue at the ticket sales counter at the cinema. This is very helpful, especially if you want to book a film ticket that is very crowded, so you don't have to join the queue crowd anymore.

TIX.ID is an online service application that offers easy access to information and ticket purchases anywhere and anytime. So the operational schedule is unlimited, you can access it 24 hours a day. Tix Id's operational hours are unlimited and can be done at any time while still connected to the internet network. So, don't worry if you want to check the film showtimes at midnight or early morning, including ticket booking.

3.5. Why: Purpose

At TIX.ID, the main goal is to provide convenience and comfort in booking tickets online. Cinplex 21 is one of the cinema operators in Indonesia that has created an online ticketing service using this internet-based technology. This is done by using its cinema network, especially Cinema XXI. The main objective of this web-based ticketing business, TIX.id, is to offer convenience and effectiveness to customers when they want to buy tickets for a film show. The remote ticketing service called TIX.id allows clients to purchase tickets without having to queue and from any location.

3.6. How: Technology or infrastructure

At TIX.ID, the technology used is a web and mobile platform, a database for storing information, and an online payment system. The desire of the community to obtain convenience in carrying out daily activities encourages the rapid advancement of technology. Like the internet, where the fact that cannot be rejected is that almost everything can be obtained with (Hutahean & Purba, 2016). With technological advances using the internet such as mobile commerce, it allows a person to obtain information and make transactions freely without being limited by space and time.

TIX ID is a smartphone software that allows users to purchase cinema tickets online. Where customers can buy cinema tickets whenever they want, wherever, without having to queue. A third party, DANA, a digital money concept integrated with many sizable applications, such as Bukalapak and Ramayana, has integrated the idea of purchasing cinema tickets. With various cinemas spread across several locations in Indonesia, TIX ID has emerged as one of the most advanced entertainment apps this year. More than five million users have downloaded TIX ID since it first became available on the Apps Store or Google Play Store on 21 March 2018.

Effective Data Management: The TIX.ID app involves managing complex data, including user data, event data, ticket data, and more. Using the Zachman Framework, startups can systematically identify all types of data involved, understand the relationships between data entities, and design efficient database structures.

Efficient Team Coordination: In application development, different roles and teams are involved, such as software developers, business analysts and product managers. The Zachman Framework can help in coordinating team activities by providing clear guidelines on the roles and responsibilities of each party, as well as ensuring all aspects of the application are properly covered.

The analysis results related to the implementation of Zachman Framework on TIX.ID are in accordance with several studies conducted by Vukšić et al. (2013), Juhás et al. (2013), Seifi et al. (2017), Metzger & Pohl (2014), Parmar (2014) where the development and management of their applications are structured, well-documented, and in accordance with business and user needs. This helps startups to achieve their goals more effectively and face challenges that may arise more readily.

4. CONCLUSIONS

Based on the analysis and discussion conducted using the Zachman Framework methodology, enterprise architecture is needed so that businesses have a standardised information architecture and is useful as a foundation for information system development. This is done by defining the current enterprise and seeing how to make it more structured and integrated with IT development. In this TIX.ID application company, we have analysed through the results of the implementation of the Zachman framework, where through this application the TIX.ID application has an important role in providing information related to movie showtimes at the cinema, the availability of audience seats, and what films are currently showing at the cinema. Of course, this is the information needed by prospective customers or prospective moviegoers who want to buy tickets.

Not only that, the application of the Zachman framework provides an easy access to the company to be able to identify the advantages and disadvantages that occur based on the specifications of the services provided and available in this company. So that it makes it easier for company officials to carry out the process of making a decision in the company. The results of the implementation of the Zachman framework have succeeded in helping identify data, processes, and services that exist in companies that become effective and efficient corporate architecture so that the optimisation of resources owned can achieve the vision and mission of the company and be able to compete with similar companies out there.

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