Business Process Analysis of Ticket Sales Accounting Information System at PT Taman Rekreasi Sengkaling UMM

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ABSTRACT

In this study, the main objective of the study was to design a ticket sales accounting information system at PT. Taman Rekreasi Sengkaling UMM. With this system, companies can more easily plan and control the company's ticket sales activities so they can obtain higher-quality accounting information. The system design method uses the Rapid Application Development (RAD) model. There are four stages of research. The first is the problem analysis stage. At this stage, interview data and questionnaires were collected to obtain information related to company problems. Then the second stage is the stage of presenting data using the matrix and Business Process Management Notation (BPMN) model. The third stage is the design stage of an Android-based ticket sales accounting information system that is made based on company needs. And the last is the conclusion formulation stage with evaluation using the Business Process Improvement (BPI) framework. Based on the research results, it can be seen that the application of a ticket sales accounting information system that has been designed has benefits for simplifying processes, saving cycle time, preventing errors, increasing standardization, and large-scale improvements with company process automation. These results are expected to contribute to the scientific development of accounting information systems and their application in the industrial world.

KEYWORDS: Process Business; Accounting Information System; Ticket Sales; PT. Taman Rekreasi Sengkaling UMM

INTRODUCTION

An accounting information system is a collection of information that can produce financial information needed for decision-makers. This system is tasked with processing data and transactions so that it can be useful for planning, controlling, and operating a business (Krismiaji, 2020). The duties of an accounting information system are to collect transactions and other data and then input them into the system. Then process the stored transaction data for future use, generate the necessary information by producing reports or enabling stakeholders to view the reports directly on the computer and the final task is to produce accurate and reliable information by controlling the entire process in such a way. The information system is a certain way to provide the information needed by the organization to operate in a successful way and for business organizations in a profitable way (Wahyono, 2004:17). Information systems can be an organized combination of people, hardware, software, communication networks, and data resources that collect, transform and disseminate information within an organization (O'brien. 2010:4). Accounting information systems have been widely used in managing transactions in various fields, for example in the tourism sector, transaction management in offices, banking, and other fields.

Through an accounting information system, companies can carry out the company's daily business activities, as well as assign responsibilities under the authority given to each employee and other internal company parties, so that the company's business activities can run well and company goals can be achieved. This is important to do, because, in practice in the field, employees and decision-makers are the main actors in running the company's accounting system, so accountability for each given authority is important to implement. The company's operational activities, in which buying and selling transactions occur, have various transaction processes, ranging from transaction processes that involve many parties and take a long time, to simple and short transaction processes. Accounting information systems, these activities categorize five business process cycles, namely the revenue cycle, the expenditure cycle, the production and conversion cycle, the human resources or payroll cycle, and the financing cycle (Romney, 2016:9).

PT. Taman Rekreasi Sengkaling UMM is one of the companies engaged in tourism services in the form of recreational parks. The system that is currently running at PT. Taman Rekreasi Sengkaling UMM in data processing is still conventional where ticket sales data collection is done by recording in a book or Microsoft Excel so that there are often difficulties in searching and there is no data back-up so that if something happens loss, all existing information cannot be known clearly and in detail and when making reports takes quite a long time, then an efficient and

effective information system is needed to support the bookkeeping of ticket sales.

The obstacle that is often faced is customers who have to come to the company's location to order tickets because currently the PT. Taman Rekreasi Sengkaling UMM only serves ticket sales on the spot and via WhatsApp chat, making it difficult for customers, especially those who are far from the company because the order is not only from the city. and Malang Regency alone but there are those from outside Malang City and Regency. The main problem in this research is the process of ordering tour packages which is still done manually where customers have to come directly to the PT. Taman Rekreasi Sengkaling UMM to order tour packages, making it difficult for customers who are far from tourist locations, especially those from out of town. There is no website regarding ordering PT. Taman Rekreasi Sengkaling UMM tour packages online.

Another obstacle is when searching for ordering data, because ordering data is not stored in a database but is still in the form of files stored in an archive, the process of searching for ordering data takes a lot of time because you have to search one by one the ordering files in the archive, which can result in delays in the company's business processes. The existence of differences in recording in the process of entering data into the system causes accountability by human resources where these human resources must be involved in the process of calculating the receipt of ticket sales. Currently, the PT. Taman Rekreasi Sengkaling UMM still uses the manual method in selling tickets so it is possible for some ticket sales notes to be tucked away or even lost which causes a difference in nominal value between the cash book and the proof of transaction.

Based on this analysis, it can be identified that several main factors cause problems regarding the lack of quality accounting information systems at PT. Taman Rekreasi Sengkaling UMM, namely business processes, human resources, and documentation or archiving. These factors should be controlled more easily when the company has an information system implemented in the company's operations. PT. Taman Rekreasi Sengkaling UMM can develop an accounting information system to improve the quality of the company's financial management. With the system, all information will be centralized in one database, making it easier to synchronize and extract more complete information (Kot et al, 2019).

Business Process

The business process is a series of instruments to organize an activity and to improve understanding of the interrelationships of an activity. According to Weske (2007), a business process consists of a series of activities carried out in coordination with the business and technical environment. These series of activities together realize the business strategy. A business process is usually enforced within an organization, but can also interact with business processes carried out by other organizations. Sparx System (2004) states that a business process must have (1) clear objectives, (2) input, (3) output, (4) use of resources, (5) have many activities in several stages, (6) can affect more than one unit in the organization, and (7) can create value or value for consumers.
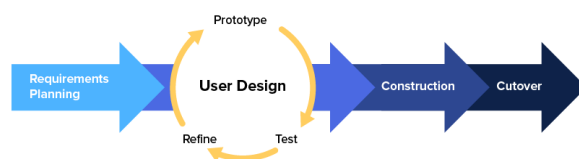
Business Process Model and Notation (BPMN)

According to Bizagi (2011), BPMN is a graphical notation that describes the logic of the steps in a business process. This notation has been specifically designed to coordinate the sequence of processes that flow between participants or actors in different activities. BPMN can be used as a tool to design a business process and identify potential problems in business processes. BPMN can also be used as a technique or tool to enable participants as implementers of business processes to communicate, correctly, and efficiently (Hamidin and Maniah 2017). Ismanto, Hidayah, & Charisma, (2020) explained that BPMN is a standard modeling diagram to describe business processes that provide a graphical notation for carrying out business processes. BPMN is designed not only to be easy to use and understand but also to have the ability to model complex business processes and is specifically designed with web services in mind. BPMN provides notations that can be easily understood by all business users, including business analysts who create initial drafts of processes to technical developers who are responsible for implementing the technology used to carry out these processes (Dewi, Indahyanti, and Hari, 2012).

METHOD

Systematic research was carried out in several stages, namely identifying existing problems related to the weaknesses of recording sales using Excel. Then identify the basic needs of the user and adjust the user's needs, after being approved by the user identify policies and design a system model. This policy is tailored to the needs of the company, which is related to the sales accounting information system. Starting to do a manual system design that is adjusted to the system operating procedures (SOP) owned by the user. The system analysis and design process is not only carried out by following the system development cycle but also equipped with adequate techniques and tools to support the processes carried out in each phase of the existing system development. In designing a system that is tailored to the needs of the company. The system design here is in the form of making modules that are under the sales accounting information system on an Android basis. Making this prototype adjusts to the needs of tourism companies.

This study aims to integrate the accounting information system of PT. Taman Rekreasi Sengkaling UMM. This research procedure adapts the RAD (Rapid Application Development) development model which consists of four stages which include (requirements planning), system design and prototype design, system development (construction), and finally implementation and evaluation (cutover) (Wijaya, 2021). In the RAD method, the flow of information for system development will be based on several aspects such as business process control information, actors who play a role in the business process, where the information flow goes, and the desired data modeling (Sunardi et al., 2020). The sequence of stages of the RAD method can be seen in the following figure:

Source: Wijaya (2021)
Figure 1 RAD Method Flowchart
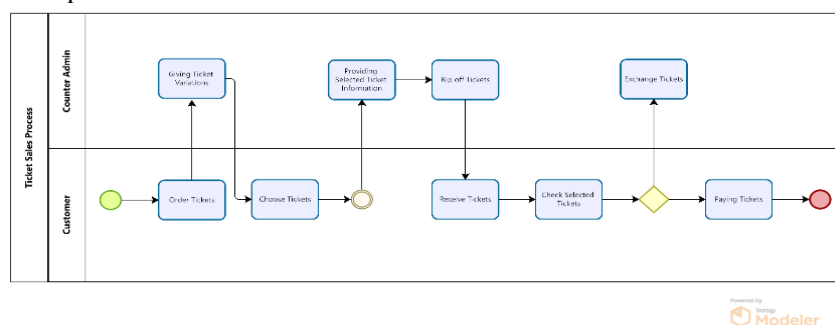
RESULTS
Analysis results

Sales process business analysis at PT. Taman Rekreasi Sengkaling UMM Analysis of the sales business process at PT. Taman Rekreasi Sengkaling UMM itself previously had pricing for its products. Every time there is an offer from a buyer, the counter admin must be able to calculate the price submitted by the buyer. If it is considered profitable and there is a price agreement between the general manager and the new buyer, then the product will be supplied. The company does not have a credit sales business process.

When a customer comes to buy a ticket, it is done directly at the counter. Then the price that has been agreed then submitted to the customer. Prices that have been accumulated at the counter and new marketing are handed over to the customer. Ticket sales at PT. Taman Rekreasi Sengkaling UMM is only sold manually, that is, the customer has to come to the counter. Every day customers of PT. Taman Rekreasi Sengkaling UMM can buy tickets provided by tourism on the spot. If conditions are crowded it will take time to queue. Furthermore, the counter inside the PT. Taman Rekreasi Sengkaling UMM provides 3 variations of tickets to customers, namely weekday tickets, weekend tickets, and canal tickets. After that, the customer can choose the ticket according to what he wants.

In the process of waiting, the customer usually takes a little longer because of the counters of the PT. Taman Rekreasi Sengkaling UMM needs to calculate the number of tickets needed and calculate how much the customer has to pay manually. After the customer waits for the process, the customer will receive a ticket that is given by the counter. Then the customer checks the ticket that has been selected, if an error occurs the customer will exchange tickets or refund at the counter. If no error occurs, the customer can pay for the ticket either in cash or using a debit card. Archives of tickets will be submitted to the marketing department as sales records.

Based on these details, for a more detailed description of the ticket sales business process in the following figure:

Source: Processed Data (2023)
Figure 2 Current Sales Process Business (As Is Model)

The ticket sales business process carried out by the company currently has many weaknesses. As explained in the background of the previous problem, the reporting process which is still based on a people-to-people manual causes high risks that occur during the reporting process. Some of the results of the analysis that we can describe from the ticket sales process and activities are as follows.

1. Ordering Tickets

The first process that is carried out by the customer is queuing, if the customer comes in long or long, especially during weekend holidays, semester holidays, and year-end holidays, the condition of the recreation park counters will be congested. If many customers come, the counter will receive many ticket orders from each customer.

2. Give a variety of tickets

The counter admin provides variations in ticket prices to customers. There are 3 variations of tickets owned by recreational parks, namely weekday tickets, weekend tickets, and canal tickets. Tickets offered by the admin counter already have the right price. At this point, the counter admin usually has difficulty following up one by one when every customer asks about the various variations of the tickets being sold.

3. Choose Tickets

After the ticket admin provides ticket variations, the next step is the customer will choose the selected ticket. When the customer chooses a ticket, the time needed in this process is quite long because the customer who comes still has to ask the counter

admin about what facilities will be obtained for the ticket. Tickets that have been selected will be given to the admin counter.

4. Informing the Agreed Ticket

Tickets that have been selected will be accumulated by the admin counter. If the selected ticket is appropriate, the counter admin will provide information to the customer so that errors do not occur. The total number of tickets that have been matched is recalculated.

5. Rip off Tickets

Next, the ticket tearing process then calculates the total ticket chosen by the customer. This manual ticket tearing has weaknesses or is ineffective. This is because the counter needs to synchronize ticket sales that are sold one by one for each incoming sale. Ticket sales data and information is divided into several very limited categories. The sales proceeds from tickets are very at risk of being lost or misused. This is of course very risky in the calculation process because the counter must make personal compensation to cover the shortage of ticket sales.

6. Receiving Tickets

If the counter admin has finished tearing up the ticket that is under the number of customer orders, the next step is to give the ticket to the customer. The customer will receive the ticket according to the agreed wishes.

7. Check Selected Tickets

Before making a payment, the customer must check the selected ticket. Because in this process errors often occur. To minimize the existence of these errors, the customer must check the ticket received from the counter.

8. Exchanging Tickets

If an error occurs in ordering a ticket, the customer may exchange a ticket or refund. Usually, customers who make refunds have not left the counter. So that the counter admin can check the ticket again.

9. Paying for Tickets

The final process is ticket payment. Ticket payments can be made in cash or using a debit card. After making a ticket payment, the customer will get a ticket. Process complete.

The explanation above shows that ticket sales in general by PT. Taman Rekreasi Sengkaling UMM is currently in a managerial perspective to be inefficient. Company management cannot directly control ticket sales. Processing only relies on one door and the process flow cannot be monitored directly. Even though an effective and efficient business process is one of the company's key strengths to realize the company's vision more optimally (Prokopenko et al., 2020).

The proposed business model for the new ticket sales process will increase the activity of using the accounting information system. By using an accounting information system, the sales process will be more effective and efficient. Figure 3 shows the modeling of business processes with the help of a sales information system at PT. Taman Rekreasi Sengkaling UMM to improve the quality of the sales process. The explanation of the proposed business process is as follows.
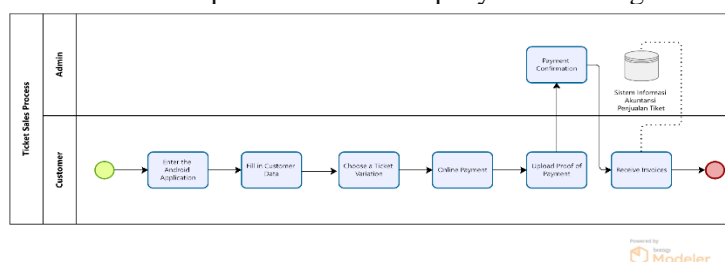
1. The first activity begins with the customer entering the Android-based application for PT. Taman Rekreasi Sengkaling UMM to choose what ticket the customer wants with a choice of 3 variations provided in the official Android-based application for PT. Taman Rekreasi Sengkaling UMM.

2. Then the customer makes an online payment with a choice of transaction methods in the form of a credit card, scan, or debit card according to the customer's choice.

3. If the payment has been made, the next process is that the customer must upload proof of payment. In the Android application, there is a menu for uploading proof of payment to verify that the customer has made an online payment.

4. After uploading proof of payment online, the admin will confirm payment then the admin can immediately process ticket orders that have been selected by customers who have been uploaded in the system.

5. And the last process is that the customer gets information in the form of an invoice from the ticket order made. This information can be seen in the invoice menu display. Furthermore, the filing process can be done automatically in the company's accounting information system database.

Source: Processed Data (2023)
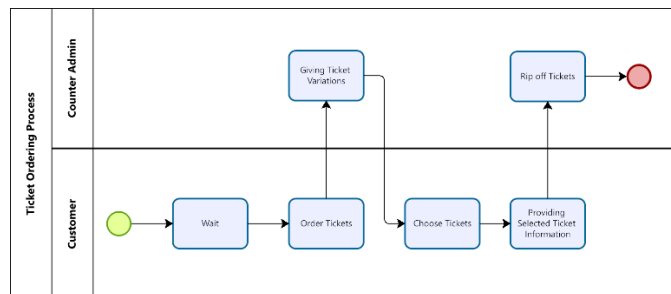**Figure 3 Proposed Sales Process Business Improvements (To Be Model)**

Comparison between the process of ordering tickets before the implementation of the ticket sales accounting information system (as-is model) and after the implementation of the ticket sales accounting information system (to-be model). From this comparison, it can be concluded that some of the results of the analysis are as follows. First, in the as-is model, there are five activities needed from the beginning of the process to the end of the output process. Meanwhile, in the to-be model, there are only two activities needed to get the same output for the ticket ordering process from the customer to the admin counter of the company. Simplification of this activity is proof of increasing the effectiveness and efficiency of the process of receiving sales data

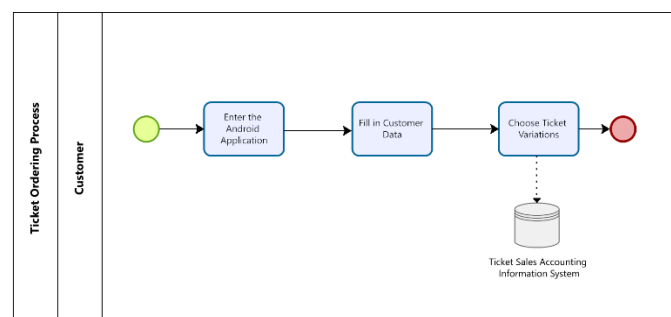through the implementation of this ticket sales accounting information system.

Second, on the as-is model, the total time required from the first activity to the process output is 25 minutes. While in the to-be model, the total time needed in the ticket ordering process is only 5 minutes, in the activity of inputting ticket sales orders in the system. From this explanation, there is a 20-minute processing time difference. This value indicates that the implementation of new business processes can minimize faster processing times, thereby increasing the effectiveness and efficiency of business processes.

Source: Processed Data (2023)
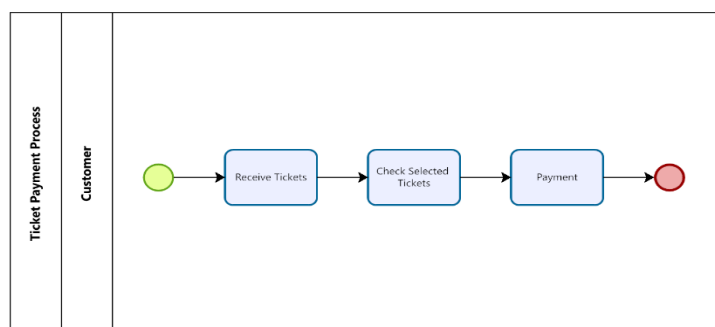**Figure 4 Ticket Ordering Process (as-is-model)**

Source: Processed Data (2023)
Figure 5 Ticket Ordering Process (to-be-model)

Comparative analysis between business processes before the implementation of the ticket sales accounting information system and after the implementation of the ticket sales accounting system is as follows. First, from the amount of activity. In the as-is model, there are three activities required in the ticket payment process from the customer's department. Meanwhile, the to-be model only requires two activities to complete the ticket payment process from the customer to the admin counter of the company. So, it can be conclu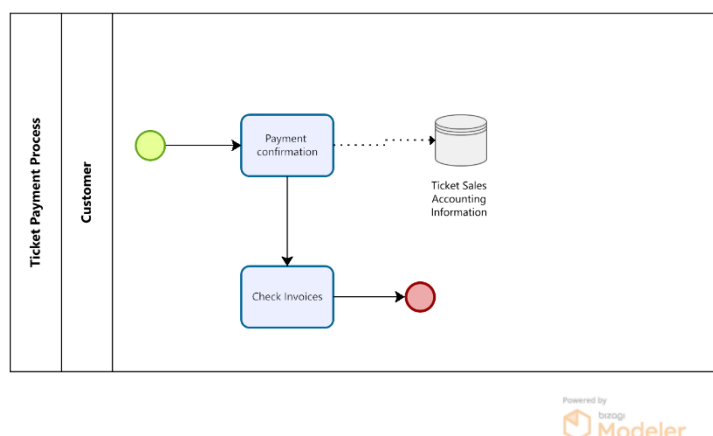ded that the use of ticket sales accounting information systems in this process can reduce one activity that does not provide value to the output of the process.

Second, from the as-is model processing time analysis, it takes a total of 10 minutes to complete the ticket payment process flow from the customer to the admin of the company's counter. Meanwhile, in the to-be business process model, the time needed to process sales data is 3 minutes. The 7-minute difference between the as-is model and the to-be model shows an increase in effectiveness in terms of processing time.

Source: Processed Data (2023)
Figure 6 Ticket Payment Process (as-is-model)

Source: Processed Data (2023)

Figure 7 Ticket Payment Process (to-be-model)

Overall, with two measures, namely the time and activity of implementing a ticket sales accounting information system in the ticket payment business process, it simplifies activities by one activity and accelerates processing time to more than 7 minutes. This means that the application of a ticket sales accounting information system in the ticket payment process can increase productivity by more than 5 minutes. This gives the conclusion that the implementation of ticket sales accounting information systems in the ticket payment business process at PT. Taman Rekreasi Sengkaling UMM shows the results of increasing effectiveness and efficiency.

DISCUSSION

The proposed ticket sales business process provides many improvements to the effectiveness and efficiency of the company's business processes. Among them first, saving time in the ticket sales process. The process of ordering tickets on the spot takes a very long time, in contrast to ordering tickets in the picture above which can cut processing time much faster. Reduced ticket sales time indicates an improvement in the company's business processes (Sugiyama & Schmidt, 2014). Process one possible time-saving output will have a domino effect on the optimization of subsequent processes sequentially. This will be a good improvement for the company considering the economic principle of the company to get the maximum profit with the smallest sacrifice (Pratama, Muwidha, et al., 2021).

The proposed new business model also results in a more systematic increase in online ticket booking. The company's management has access to an accounting information system that can directly control ticket sales activities online through websites and Android-based applications. Data control is important considering that financial data contains crucial information that must be managed by management (Al-Dmour et al., 2018). Errors in data management can be fatal for the company. Such as the potential for errors in retrieving the required data, communication failures between departments, and leakage of important data outside the company. So that by using an accounting information system, company management can monitor the entry and exit of company financial data more accurately.

Lastly, by using an accounting information system as described in this model, all company databases are in the same facility. So that there are no errors in storing and searching for financial data that may be lost as in the previous process. The database on the system has an important role in optimizing the company's financial data archiving process. By ensuring the process of archiving financial data goes well, it can improve the company's internal control (T. et al., 2012). This good internal control system functions to properly manage and control company risks to create healthy and safe operating activities. Having an electronic database that is directly connected to the company's accounting information system can be a means for management in exercising more optimal control.

In the end, the business modeling of the ticket sales process described in the figure above can improve company management to make more optimal strategic decision-making. This is because the financial and economic information generated from this business model is of higher quality. So that company management can more easily process company financial data. With the proposed business model, company management gets relevant company financial information with real-time access to the company's financial system. This is important considering that financial information is one of the most crucial information to influence future management policies (Al-Dalabih, 2018).

CONCLUSION

The ticket sales accounting information system at PT. Taman Rekreasi Sengkaling UMM was carried out through the sales department, cashier, and finance department. In the ticket sales accounting information system at PT. Taman Rekreasi Sengkaling UMM has weaknesses that arise due to the manual recording process which causes the possibility that transactions are not recorded and ordering data is not stored in the database but is still in the form of files stored in archives, so the process of searching for customer data requires a lot of time because you

have to search for one order file at a time. one in the archives so that it can result in delays in the company's business processes.

Daily activities at PT. Taman Rekreasi Sengkaling UMM is well organized. However, optimization is needed to increase company profits, so we need a Ticket Sales Accounting Information System at PT. Taman Rekreasi Sengkaling UMM in the form of an Android-based website and application, because Android-based websites and applications are easy to update and integrate. In addition to minimizing errors and faster obtaining data for decision-making.

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