DESIGN APPLICATION OF REVENUE HOTEL MANAGEMENT USING COMMON SIZE METHOD

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ABSTRACT

Currently, the business in the hospitality sector is very mushrooming, especially in big cities. The problem faced by the author is that there are still many hospitality businesses that carry out transactions and record them manually. Common Size is a comparison of each change in items with total assets or total liabilities or total turnover (sales). With this comparison, an increase or decrease in each event will be seen. Hotel is a form of building, symbol, company or accommodation business entity that provides lodging services, food and beverage providers as well as other service facilities where all services are intended for the general public, whether those who stay overnight at the hotel or those who only use certain facilities. owned by the hotel. The purpose of this study is to create an application for hotel room rental income using the common size method. The result of this study is that the application can make a trend report on room rental income, so that it can be used as hotel management in terms of decision making. Good decision making will have an impact on the stability of business actors.

Keywords: *Applications, Trends, Revenue, Common Size.*

1. INTRODUCTION

Currently, computer technology is developing very quickly. Almost all the world of work uses technology in making daily reports. Companies or agencies that still carry out reporting activities manually will certainly hamper the speed and accuracy of reporting. The management needs the accuracy and speed of reports, making it easier for decision making. With the rapid development of technology, the business world and the industrial world do not want to be out of date. Business actors are competing to invest in technology. Investments in technology are carried out so that company activities can run in accordance with the company's vision and mission. The use of technology will enable companies to compete with competitors. Very tight business competition makes business actors carry out development strategies in the technology sector.

One technology that is developing so rapidly is computerized accounting technology. The use of computerized accounting technology is very beneficial for business actors in order to accelerate their business processes, thus they will be able to compete in the business or industrial world, so that company profitability can always be maintained and even increased.

One of the business fields that really need computerized accounting technology is a business in the hospitality sector. Hotel is a business that is engaged in hotel accommodation services that offers a variety of products and facilities, including: renting rooms, meeting rooms, auditoriums, and restaurants. The increasing number of hotels, both star hotels and economy class hotels, makes hotel owners not want to providing the best facilities, one of which is by using computerized accounting technology. Some hotels in Cirebon City currently do not have a computerized system that facilitates the room rental income analysis process starting from the receptionist section and ending at the finance manager. The author is interested in making a web-based application about the recapitulation report of room rental service income using the common size method.

This study aims to design a computerized accounting application using the common size method, which can recapitulate room rental income per period. It is hoped that this application can provide answers for business actors in the hotel sector who still do not have a computerized accounting application. From the author's observations, the use of the common size method is only used to

analyze the company's financial statements. While the application that the author made is an application that can provide accounting information to hotel business owners in terms of room rental income per period, they do not have to wait for the financial statements to be presented. Thus, preventive or curative actions on the rise / fall of room rental income can be addressed at any time.

Hotels that carry out their activities manually will create a bad image from the guests who stay, because the impression is less professional. By making accounting computerization applications using the common size method, at least it can help business actor in carrying out computerized transactions or recordings. Although this application is not perfect, at least the application that the author makes can answer the obstacles faced by hotel business owners who still use the manual method in making hotel income reports.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Common size analysis is an analysis of financial statements using the income statement and company balance sheet. To use the common size analysis, each item of assets and liabilities will be divided by the total assets expressed as a percentage. Then the percentage report that has been obtained will be compared with the company's percentage report for the period before or after it or compared with the percentage report of other companies. There are several objectives of common size analysis as follows: 1) To know the percentage of investment in each asset or in liabilities. 2) Knowing the capital structure. 3) Knowing the composition of costs to sales.

The hotel business sector is one of the businesses that has prospects, if the business sector is managed properly. One way is to use technology in the hospitality business.

Several previous studies that analyzed reports using the common size method, including: (1) Trisa Inna Fitriyani and Zulkarnain Zulkarnain (2020) in 'Analysis of Common Size and Financial Ratios of Companies in the Consumer Goods Industry Sector on the IDX' have limitations on the number of ratios used in analysis. This study only uses a small number of types of financial ratios. (2) In calculating profit and loss using Common Size, profit and loss items are divided by total net sales (Binti Ulvatus Sa'adah, Bayu Wijayantini & Haris Hermawan, 2018), (3) Calculation of comprehensive income statement using common size analysis, it was concluded that the financial performance in the income statement of Bank Kalsel for the 2016-2019 period, namely the net profit of Bank Kalsel in 2016-2019 was unsatisfactory because in 2017-2018 it experienced a decline which was influenced by operating profit and profit before tax which decreased (Bella Puspita Rininda, Marliza Noor Hayatie & Muhammad Said, 2021), (4) Measuring the financial performance of Indosat and telecommunications companies, an evaluation must be carried out on all costs incurred so that the company is able to pay off its debts (Mohammad Harisudin, Gandung Satriyono & Nursamsu, 2018). (5) Financial performance at PT Asuransi Jiwasraya after a common size analysis was carried out was quite good (Billy Monok, Jhonny Montolulu & Henny S Tarore, 2018), (6) According to Mhd Agum Nurochman, 2018 in the 'common size statement analysis to assess financial performance at PT. Garuda Madju Cipta', the selection of common size analysis because this method can provide a clear picture of the company's financial performance condition, (7) to improve company performance, it can be done by increasing the ratio performance, namely by controlling in the field of sales, reducing administrative and sales costs (Shinta Anastasya and Cholis Hidayati, 2019), (8) Ratna Kurnia Sari, 2021 said that it is better for PT. BRI Syariah, Tbk. carry out an analysis of its financial performance to find out how much progress has been achieved in that period. (9) Setyo Dwi Prakosa, 2018 in 'analysis of financial statements in assessing the financial performance of public companies in the cement sub-sector industry at PT. BEI'. it is said that the company is quite effective in using inventory management and receivables management, (10) Banks should pay more attention to their financial performance so that bank management can see and assess their financial performance in 1 period,

(Bella Puspita Rininda, Marliza Noor Hayatie & Muhammada Said, 2021), (11) Jeshica Khoirunnisa Amalia, 2021 in 'analysis of financial statements to assess the financial performance of PT. Mandom Indonesia, Tbk for the 2014-2019 period, said that the conditions that must be evaluated are inventory turnover and company profitability, where the company has not been able to make cost savings, resulting in a decrease in net profit.

From 11 previous studies, common size analysis was used to measure the performance of financial statements and their analysis. The novelty that the author did using the common size method this time was where performance analysis could be carried out at any time, not having to wait for the completion of financial reports, so company management can always take preventive actions in order to improve company performance. This research is expected to provide convenience for business actors in the hotel sector who do not yet have applications in the field of computerized accounting, so that they can compete with other hotels that have previously used technology in the field of computerized accounting.

The application is designed on the basis that there are still some hotels that still use the manual method in making transactions with hotel guests. This method is certainly not very professional considering the massive technological developments in various business sectors. In addition, the manual methods used by business actors are very risky for fraud committed by employees. Fraud committed by employees will result in losses for business actors, especially in the hospitality sector. One of the reasons for making computerized applications for business actors is to ensure that company assets can develop and can be maintained properly. Employee integrity will be created by itself, because they are not easy to commit fraud at work.

The use of the common size method in analyzing the performance of a company can facilitate management in evaluating the performance of its employees. Thus management can make decisions on the data generated by using the common size method. This will create a work culture that is created by itself, because each employee will carry out his duties and responsibilities properly and with discipline. Another reason the author uses the common size method is that this method can provide an overview of the percentage of each number that appears in each report. This percentage makes it easier for business actors to analyze the report. Because basically the leadership of an organization requires data or reports that are accurate at all times. There is a saying that 'who controls the data, he will rule the world'. The data presented by the common size method can answer the maxim.

Based on existing experience if a company leader does not control the data, then it will be detrimental to the leadership itself. How can the leader evaluate employee performance, if he does not control company data. There are many ways for a leader to master data, one of which is by utilizing technology and information. The application that the author makes can at least answer the obstacles faced by company leaders.

3. Research methodology

Research methodology is very necessary in a study to assist the implementation of research in obtaining the necessary data.

The research methodology used is as follows:

3.1. Field Research

Field research is a data collection methodology by observing directly the object under study. The data collection techniques that the compilers use are as follows:

- a. Interview, is the method used to obtain the necessary data by way of direct question and answer with the relevant department to process the data that has been done to answer the above problems.

3.2. Literature Research

Literature research is a method of collecting data by looking for information through books as a reference medium.

3.3. Research Stage

The method used in developing this final project is the waterfall method. The reason for using this method is because the waterfall method takes a systematic and sequential approach in building a system. The process of the waterfall method is that the workmanship of a system is carried out sequentially. The resulting system will be of good quality, because its implementation is gradual so that it is not focused on a certain stage. The stages of the waterfall method are:

Figure 1. Waterfall Method

Description :

The waterfall method means one type of application development model and is included in the classic life cycle, which emphasizes successive and systematic stages. For the development model, it can be analogous to a waterfall, where each stage is carried out sequentially from top to bottom. This model is also included in software development which is somewhat less iterative and flexible. Because, the process that leads to one direction only like a waterfall.

1. Needs Analysis

At this stage, the author goes through it by analyzing the needs of users, analyzing the software and hardware needed in system development and other needs in making databases. Analysis of hardware requirements on this system is a laptop with the following specifications Acer Aspire 4372Z, Pentium T4400 processor, 4GB DDR2 RAM. Analysis of software requirements that help build this system, namely Windows XP Operating System, XAMPP version 1.7.3, Visual Studio Code version 1.44.0, PHP programming language, Mozilla Firefox 74.0.1 and MySQL.

2. System Design

The next stage is designing the system. This stage is made before the coding stage. The purpose of this stage is to provide an overview of what will be done and how it will look. This stage fulfills all usage needs according to the results analyzed such as the design of the display system development application trend of room rental income using the common size hotel method, and helps define the overall system architecture. The documentation produced from this system design stage includes flowmap design, context diagrams, Data Flow Diagrams (DFD), Entity Relationship Diagrams (ERD), and interface design.

3. Writing Program Code (Coding)

Like humans, computers also have ways of communicating. The language used by computers is not human language, but code or machine language. The structure of machine language is very simple because it only consists of two numbers, namely the digits 0 and 1. This is commonly called binary form.

Activities at this stage are coding the system. Writing program code is the stage of translating the system design that has been made into commands that are understood by the computer using a programming language. This stage is a real stage in working on a system. In this system the programming language used is PHP and MySQL database.

4. Program Testing (Testing)

Testing is carried out to ensure that the software created is in accordance with the system design that has been designed and all functions can be used properly without any errors.

Software testing is the process of executing a program or application with the intention of finding bugs in the software being created. It can also be expressed as the process of validating and verifying that a software program or application or product: Meet the business and technical requirements of the guided design and development, works as expected, can be implemented with the same characteristics.

5. Program Maintenance (Operation and Maintenance)

This stage is the last stage in the waterfall method. The system can be implemented, maintenance includes correction of various errors that were not found in the previous stages, improvements to the implementation and development of system units, as well as program maintenance. System maintenance can be done by an administrator to improve the quality of the system for the better.

The benefits of software maintenance are to ensure compliance with software technical functionality requirements, ensure compliance with managerial needs regarding schedules and budgets, can improve software efficiency as well as maintenance activities. Software maintenance is divided into several categories according to Lientz and Swanson, namely adaptive, corrective and perfective maintenance. The following is an explanation of the three components of the software maintenance category:

- 5.1. Adaptive maintenance includes all necessary changes as a consequence of changes in the environment in which the system operates, such as changes to the operating system, hardware, DBMS, computer network or so on.
- 5.2. Corrective Maintenance includes any changes made to remove actual defects or gaps in the software system.
- 5.3. Perspective Maintenance includes any changes initiated by a user request.

4. Results and discussions

4.1. Web Page Display

4.1.1. User Login Display Form

The login form features the Grand Dian Hotel logo at the top. Below the logo, there are two input fields: 'Username:' and 'Password:'. Each field has a corresponding text input box. At the bottom of the form is a red 'Login' button.

Figure 2. User Login Form

Description of Figure 2. :

The login form in Figure 4.1 is the form used by the user to enter the application according to their access rights. This form consists of a username, password and login button. Here is the explanation:

1. Username is filled with the name of the application user that has been registered in the user table.
2. Password is the password from the username in order to enter the application.
3. The login button is used by the user when he wants to display the main menu, but the username and password must be filled in according to the data in the user table.

The user login form is created by taking preventive actions, namely this login can only be accessed by users who have access to the authority. Username and password at least once a month to be changed immediately, so that they cannot be used by irresponsible people.

4.1.2. Receptionist's Web Page Display

The receptionist's web page has a dark header bar. On the left is the Grand Dian logo, in the center is the word 'RECEPTIONIST', and on the right are links: 'Home', 'Check In', 'Data Tamu', and 'Logout'. Below the header is the Grand Dian Hotel logo. The main heading is 'Welcome To Grand Dian Boutique Hotel Cirebon'. Below this is a paragraph of text describing the hotel's amenities. Underneath is the section 'PILIHAN KAMAR' (Room Selection), which contains three columns. Each column has a title and a corresponding image of a hotel room: 'Moderate Twin' with a twin bed, 'Moderate Double' with a double bed, and 'Superior' with a double bed and a view.

Figure 3. Main Menu Receptionist

Description of picture 3. :

The Receptionist Main Menu in Figure 4.2 is the menu used by the Receptionist to display the menus contained in the Receptionist user:

1. Home Menu
2. Guest Check-in Menu
3. Guest Data Menu
4. Logout

4.1.2. Guest Data Menu

No.Transaksi	Nama Tamu	Jenis Kelamin	Nik	No.Telpon	Tanggal	Jenis Kamar	Lama Menginap	Keterangan	Opsi
200501	Angger Satrio	Laki-Laki	357402206980003	0895600147251	2020-05-01	2	2	Sudah Dibayar	Edit Hapus Cetak
200502	Iwan Setiawan	Laki-Laki	3574020206980003	081229659944	2020-05-01	1	1	Sudah Dibayar	Edit Hapus Cetak
200503	Mitha Ridawati	Perempuan	34047510391008	08527777664444	2020-05-01	4	1	Sudah Dibayar	Edit Hapus Cetak
200504	Desi Ningrum	Perempuan	140104510593003	081321120049	2020-05-02	1	2	Sudah Dibayar	Edit Hapus Cetak

Figure 4. Guest Data Menu

The Guest Data menu in Figure 4. is used to display hotel guest data. Consists of search button, add guest data button, edit button, delete button, print button, transaction number, guest name, gender, NIK, phone number, date, room type, length of stay, description and options.

Information:

1. Data search button is used to search guest data based on guest transaction number.
2. The add data button is used to add new checkin guest data into the guest table and payment table.
3. The edit button in the options column is used to change or edit guest data and is displayed in the guest table.
4. The delete button in the options column is used to delete guest data.

One of the advantages of this guest data menu is that it can provide discount facilities for guests who have stayed at least 5 times. This facility was created in order to provide a means of promotion for guests who have stayed at the hotel, considering that there are so many businesses in the hospitality sector. With this discount facility, management hopes that hotel guests who are given a discount will provide information to their relatives or friends to stay at this hotel.

4.1.3. Payment Data Menu

FINANCE MANAGER
Home Data Pendapatan Analisis Pendapatan Logout

Data Pendapatan Sewa Kamar

Dari Tanggal :
 Sampai Tanggal :
Can Reset

Periode 2020-05-01 s/d 2020-05-31

No Transaksi	Tanggal	Jenis Kamar	Lama Menginap	Total
200502	2020-05-01	Moderate Twin	1	Rp.600,000,-
200504	2020-05-02	Moderate Twin	2	Rp.1,200,000,-
200510	2020-05-03	Moderate Twin	1	Rp.600,000,-
200512	2020-05-04	Moderate Twin	1	Rp.600,000,-
200517	2020-05-08	Moderate Twin	3	Rp.1,800,000,-
200518	2020-05-08	Moderate Twin	2	Rp.1,200,000,-

Figure 5. Payment Data Menu

The Payment Data menu in Figure 5. is used to display hotel room rental payment data, which can be accessed per period each month. There is a search button, reset button, transaction no, date, room type, length of stay, total. The purpose of making a menu with 'type of room' using the common size method is to find out which type of room is the most productive or vice versa. Thus the hotel management can make decisions on the productivity of each type of room.

If there is a type of room that is less attractive to hotel guests, the hotel owner can make a decision, for example by providing a special discount on the type of room that is less desirable. By evaluating the use of this common size method, the productivity of hotel room rentals will always be maintained.

4.1.4. Income Common Size Analysis Menu

Analisis Common Size Pendapatan Kamar Tamu

Dari Tanggal : Sampai Tanggal :

Periode 2020-05-01 s/d 2020-05-31

Tanggal	Moderate Twin	Moderate Double	Superior	Deluxe Double	Junior Suite	Total
	Rp.600.000	Rp.700.000	Rp.850.000	Rp.1.200.000	Rp.1.500.000	
2020-05-01	Rp.600.000	Rp.1.400.000	Rp.0	Rp.1.200.000	Rp.0	Rp.3.200.000
2020-05-02	Rp.1.200.000	Rp.2.800.000	Rp.1.700.000	Rp.0	Rp.0	Rp.5.700.000
2020-05-03	Rp.600.000	Rp.0	Rp.0	Rp.0	Rp.3.000.000	Rp.3.600.000
2020-05-04	Rp.600.000	Rp.700.000	Rp.0	Rp.0	Rp.0	Rp.1.300.000

Figure 6. Income Common Size Analysis Menu

The Common Size Income Analysis menu in Figure 6. is used to display room income analysis data in the form of a percentage using the common size method with a period of one month. This menu consists of search button, reset button, print button, date, room type, total, grand total and common size percentage.

4.1.5. Menu Trends Guest Room Income Per 3 Months

FINANCE MANAGER

[Home](#) | [Data Pendapatan](#) | [Analisis Pendapatan](#) | [Logout](#)

Trend Pendapatan Kamar Tamu Per 3 Bulan Menggunakan Metode Common Size

Jenis Kamar	Mei	%	Juni	%	Juli	%
Moderate Twin	Rp.13.200.000		Rp.9.600.000		Rp.10.800.000	
Moderate Double	Rp.13.200.000		Rp.8.400.000		Rp.9.800.000	
Superior	Rp.20.400.000		Rp.10.200.000		Rp.14.450.000	
Deluxe Double	Rp.18.000.000		Rp.14.400.000		Rp.15.600.000	
Junior Suite	Rp.18.000.000		Rp.12.000.000		Rp.13.500.000	
TOTAL	Rp.81.500.000	41%	Rp.54.600.000	27%	Rp.64.150.000	32%
GRAND TOTAL	Rp.200.250.000					

Figure 7. Menu of Guest Room Income Trends Per 3 Months

Menu Trend of Guest Room Income Per 3 Months in Figure 7 is used to display trend data for room income per 3 months using the common size method.

This report on the trend of room rental income per 3 months is made as data for evaluating hotel performance in the last 3 months. With this quarterly data, it makes it easier for hotel management to make decisions or evaluate.

5. Conclusion

Hotel performance analysis using the common size method that the author made, can provide an overview of hotel room rental income per room type and per period. So, hotel management can make improvements at any time so that sea room revenue can increase according to the set targets. With a quarterly room rental income trend report, it makes it easier for management to make decisions. This application can at least provide solutions to business actors in the hotel sector who are currently still conducting transactions manually. The results of making room revenue applications using the common size method, which is a computerized accounting application created to help business people in the hotel sector who still carry out their activities manually.

The common size method is more widely used to analyze company financial statements. However, the application that the author makes can provide analysis or preventive action, because this application can monitor performance at any time. So hotel management doesn't have to wait long to make a decision.

Limitation and study forward

This study has limitations, namely, the application made has not been integrated into the preparation of financial reports such as the Income Statement, Balance Sheet and Statement of Changes in Capital. In the future, if this application is developed, it should be able to access the financial statements mentioned above. Although the application that the author makes still has limitations, the author believes that this application is very useful for business people in the hospitality sector. The author always thinks positively about the limitations of this research, because even though it has limitations, the application that the author makes is the result of his work or thoughts on the basis of manual activities when conducting transactions in the hotel business sector.

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