Evaluation of Internal Control Design and Implementation of Revenue Cycle: Case Study on Hotel ABC

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Abstract: The hospitality industry in Indonesia continues to grow along with the increase popularity of tourism sector in Indonesia. This caused the hospitality industry to become competitive. Therefore the hotel must be able to manage the overall source of income to be able to create a stable profit stream. For this reason, supervision of internal control is needed. With good internal control, the hotel can avoid threats in carrying out its operational activities. This study aims to evaluate the design and implementation of the internal control system in the revenue cycle. The method in this research is descriptive analysis in the form of the case study. The data obtained through observation, interview and analysis on the company internal documents. The results show that there were weaknesses in Hotel ABC’s internal control design, where giving discounts, room pricing, complimentary rooms are not monitored properly, and there are some sales recording procedures that are done manually that had an impact on company's profits. Therefore this study provides recommendations for improvements of internal control activities that will address those issues.

1 INTRODUCTION

Hospitality industry in Indonesia shows a significant increase in the recent years. Based on data from the Central Bureau of Statistics, the number of star-rated hotel accommodations in Indonesia in 2016 increased 8.6% compared to 2015, while the number of non-star hotel accommodations in 2016 also increased 1.8% compared to 2015. The hospitality industry continues to grow along with the increasing popularity of tourism sector in Indonesia, e-tourism created new phenomena related to hotel sales. Among them is the creation of new distribution channels to increase hotel room sales. These include OTA sales, social media, events and conference organizers, all of which aim to provide more options in room sales (Stangl et al., 2016 in Xu et al., 2017).

This caused the hospitality industry to become competitive. Therefore, hotels must be able to manage their overall source of income better than competitors, in order to create a stable profit stream by investing in sources of income that provide the greatest income and also maintain integrity in carrying out pricing strategies to achieve business and financial goals that established (Green & Lemono, 2012 in Dolasinski et al., 2018).

Hotel ABC has been actively running its operations since 2011. The main source of income including:
1. Room sales
2. Sales of F & B (restaurant and banquet)
3. Spa package sales
4. Playground ticket sales

Where the percentage of each sales unit against total income is described as in table 1.

<table>
<thead>
<tr>
<th>Year</th>
<th>Room</th>
<th>F&amp;B</th>
<th>Spa</th>
<th>Playground</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>31%</td>
<td>60%</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>2016</td>
<td>30%</td>
<td>57%</td>
<td>3%</td>
<td>10%</td>
</tr>
<tr>
<td>2015</td>
<td>27%</td>
<td>64%</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>2014</td>
<td>27%</td>
<td>52%</td>
<td>1%</td>
<td>19%</td>
</tr>
</tbody>
</table>

According to the table above, it can be seen that Hotel ABC's biggest income currently comes from F & B sales, while the sales of rooms at ABC Hotels which should be the main source of income for the hospitality business has not yet given maximum results.
In a study conducted by Russo, 1991 in Morgan (2018) it was found that hotel revenue was created from (1) pricing for each room and type of room, and (2) changes in room occupancy. There are two indicators in measuring the performance of hotel room sales. The first indicator is Average Room Rate (ARR) = Total room income / Total rooms sold and second indicator Revenue per Room Available (RevPar) = Total room income / Total rooms available, where ideally the number of ARRs = RevPar which indicates that the occupancy rate reaches 100%. Following are the ABC Hotel ARR and RevPar calculations:

<table>
<thead>
<tr>
<th></th>
<th>ARR</th>
<th>RevPar</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>313,342.92</td>
<td>107,100.61</td>
</tr>
<tr>
<td>2016</td>
<td>337,841.50</td>
<td>106,926.84</td>
</tr>
<tr>
<td>2015</td>
<td>309,688.96</td>
<td>143,231.14</td>
</tr>
<tr>
<td>2014</td>
<td>333,301.26</td>
<td>123,754.76</td>
</tr>
<tr>
<td>2013</td>
<td>388,231.32</td>
<td>138,055.06</td>
</tr>
</tbody>
</table>

According to the table 2, it appears that RevPAR Hotel ABC for the past 5 years is far below its ARR which indicates that the sales performance of hotel rooms is not good.

Hotel ABC continues to make various efforts to increase the potential of room sales, including by cooperating with OTA, providing monthly promos, and giving discounts for group stays. In its implementation, problems arise, especially in terms of price discounting and the provision of complimentary rooms carried out by the marketing department that are not according to the rules created by management.

Barry, Yayla, Papastathis in Yemer (2017) explained that poor income performance is a result of the low quality of service, absence of a system that creates long-term relationships with customers, and results from weak internal controls. Therefore there is a management tool that can control and supervise the income from each hotel source of income.

The quality of internal controls can be assessed by reviewing the design and implementation through the COSO Integrated Framework. COSO Integrated Framework. Therefore, the components of the COSO framework must be implemented and enabled so that the internal control system can run optimally. This is the background of the author to raise the title "Evaluation of Design and Implementation of Internal Control in the Revenue Cycle (Case Study on ABC Hotels)"

2 LITERATURE REVIEW

2.1 Internal Control

According to the Institute of Internal Auditors (2016) internal control is a process that is influenced by the board of directors, management and other personnel of the company designed to provide reasonable trust regarding the achievement of objectives of operational activities, reporting and compliance.

2.1.1 Internal Control According to COSO

Internal control according to COSO Internal Control - Integrated Framework 2013 has three categories of objectives: operations, reporting and compliance and consists of five components of internal control: Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring Activities.

This integrated COSO 2013 internal control framework, as in figure 1, views each component of internal control as appropriate and relevant for the entire company, therefore stipulating that all components must be present and functioning simultaneously in an integrated system.

2.2 Accounting Information Systems

Romney and Steinbart (2017) explain that accounting information systems are systems that collect, record, store and process data to produce information for decision making. This includes people, procedures, instructions, data, software, information technology infrastructure and internal controls and system security.

Romney and Steinbart (2017) added that a well-designed accounting information system could create values for companies by improving quality and
reducing production costs due to increased efficiency and effectiveness in conducting operational activities.

2.2.1 System Documentation Technique

The design of a system needs to be documented to explain how the system works. In his book, Romney and Steinbart (2017) explain there are several methods for documenting a system:

1. Data flow diagram (DFD) that displays graphically the origin of the data, data flow, data transformation process, data storage and final destination data.

2. A flowchart that displays graphically a system, where there are 2 (two) types of flowcharts, including document flowchart to describe a system graphically related to the flow of documents and information between divisions or departments responsible and flowchart programs to show logical operational sequences when the computer runs a program.

3. Business process diagrams that will make graphical descriptions related to the business processes of an entity. Some of the symbols used to make DFD and flowcharts are as follows:

2.3 Revenue

According to IAI in PSAK 23 Paragraph 7: Revenue, revenue is defined as gross inflows of economic benefits arising from the entity's normal activities during a period if the inflows result in an increase in equity that does not originate from the contribution of investors. In this case, recognized revenue does not include amounts that are billed for the benefit of third parties, such as value added tax or sales tax. In the hospitality industry, the revenue received is mostly related to the sale of services. Paragraph 20 of PSAK 23 states that the requirement for recognition of service sales revenue is if the transaction results related to the sale of such services can be estimated reliably with reference to the level of transaction settlement at the end of the reporting period.

2.4 Definition of Revenue Cycle

Romney and Steinbart (2017) define the revenue cycle as a series of business activities and repetitive data processing operations related to the supply of goods and services to customers and collect payments for those sales.

3 RESEARCH METHODOLOGY

3.1 Research Methods

This research is a case study research that uses an evaluation method with a descriptive qualitative approach. Denzin and Lincoln, 2004 in Sri Wahyuni (2015) say qualitative research is a multi-focus method, involving an interpretive, naturalistic approach to the subject matter. This method was chosen with the consideration that the purpose of this study is to explore a process and phenomena that occur in the field and then draw conclusions from the phenomena that occur.

3.2 Case Selection

This study selects cases originating from the income cycle. This is based on the consideration that the income post always receives special attention from the management because it affects the business continuity of an entity. Therefore, the authors assess that this study can have a positive impact on the object of research, Hotel ABC.

3.3 Unit Analysis

This research will be conducted with a case study approach on one object of research. The object of research chosen was Hotel ABC, an entity engaged in hospitality. The selection of ABC Hotels as a place to conduct research because, in general, there is limited access to hotel financial information. This study will conduct observations on Hotel ABC, with the consideration that Hotel ABC has problems in its internal control which affect the overall revenue of the hotel.

3.3.1 Overview of Hotel ABC

ABC Hotel stands on 4.3 hectares of land consisting of 47 villas with 4 room types, spa, restaurant, multifunctional room and playground. The ABC hotel carries the concept of a private villa with a touch of traditional furniture with a wooden stage house feel that describes the authentic characteristics of West Kalimantan.

Hotel ABC's revenue comes from 4 (four) main activities, including revenues from hotel sales, revenues from food and beverages sales, spa sales, and playground ticket sales. Below will be described the business processes of the four activities listed below:
a. Hotel room sales
Guests make hotel room reservations through a variety of booking options (walk in, online travel agents, marketing). The reservation will automatically enter the ABC Hotel reservation system and guests will get proof of reservation in the form reservation form. At check in Front Office (FO) will request proof of reservation to be matched with Reservation Form. After the check-in process is complete, the FO will provide the room key, access card, and breakfast coupons to guests.
At check out, the room key is handed over to the front office and housekeeping will check the room to check the furniture condition again. If everything is safe, then the check-out process can continue.

b. Food and beverages sales
Visitors make orders, which will be inputted to the system, at the time of payment, the cashier will print bills and visitors will make payments.

c. Spa sales
Visitors do maintenance with a spa package that has been selected, which will be inputted to the system, at the time of payment, the cashier will print the bill and the visitor will make a payment.

d. Playground ticket sales
Visitors make a purchase for a playground ticket, the number of tickets sold will be input to the system, at the time of payment, the cashier will print the bill and the visitor will make a payment.

3.4 Data Collection Techniques
The data used in this study consisted of primary data and secondary data.

1. Primary data
Primary data is obtained directly from Hotel ABC during the data collection process. This primary data includes:
   a. Data from interviews
      Interviews were conducted with the ABC division of finance and sales division.
   b. Internal documentation obtained from Hotel ABC is as follows:
      • Hotel ABC sales report
      • Organizational structure
      • SOP

2. Secondary Data
Secondary data obtained from publicly published data, including legislation and other data related to the company's operations.

3.5 Analysis Methods
This study uses data obtained to analyze accounting information systems and internal control practices in the income cycle at ABC Hotels. The analysis will produce information on the comparison of internal control practices with existing formal procedures. The results of interviews, observation and analysis of the company's internal documents will produce an overview of current operational activities and the design of system development which can be the basis for the preparation of a framework for accounting information systems and internal controls.

4 RESEARCH RESULTS

4.1 Analysis of Control Activities
In the Hotel ABC revenue cycle, there are several external parties that interact with the system, including guests, banks, management and accounting information systems owned by Hotel ABC. Each type of sales will be discussed in the revenue cycle at ABC Hotels, including hotel room sales, food and beverages sales, spa sales and playground ticket sales.

4.1.1 Hotel Room Sales
These internal control activities are grouped based on the business processes found in the Hotel ABC learning cycle, namely the order process, service delivery process, billing process, and the process of receiving money.
This study finds weaknesses include:

1. Pricing, discounts and complementary rooms are still done manually. This causes the risk of the billed value not to be in accordance with the value that should be billed in accordance with the room price set by the company and causes the risk of rising occupancy without an increase in revenue which will further reduce RevPAR. Based on the results of interviews with senior marketing, this is because there are no rules that explicitly determine the maximum discount and complementary rooms so that the marketing division provides a large discount and a number
of complementary rooms so that group guests want to hold an event at the ABC Hotel.

2. Lack of control activities in the billing process. Especially for guests from government agencies. Based on the results of interviews with financial staff, this was due to government agencies contributing large margins to ABC hotel sales as a whole, so Hotel ABC decided not to be too aggressive in billing.

Based on the analysis above, this study will re-describe the business activities of selling hotel rooms with the addition of internal control activities. This is done to facilitate Hotel ABC in implementing the proposed improvements from this research that are related to business processes and operational activities of ABC Hotels. The following are proposed hotel room sales flowcharts, as in figure 2 and figure 3, which are divided into 2 main activities:

- **Check In Process**
- **Check Out Process**

Based on the analysis above, this study will re-describe the business activities of food and beverages sales with the addition of internal control activities referring to the weaknesses above. This was done to facilitate Hotel ABC in implementing the proposed improvements from this research that were linked to the business processes and operational activities of the ABC Hotel. The proposed flowchart is described as follows:

![Figure 2: Proposed Flowchart for check in process.](image)

![Figure 3: Proposed Flowchart for check out process.](image)

**Figure 4: Proposed Flowchart for Food and Beverages Sales.**

### 4.1.2 Food and Beverages Sales

These internal control activities are grouped based on the business processes found in the Hotel ABC: the order process, service delivery process, the billing process, and the process of receiving money.

It is known that the control activities in food and beverages sales are running quite well, but there are still some control activities that have not been implemented which have resulted in weaknesses:

1. Non-strict supervision related to existing raw material inventories.
2. Recording of visitor payment methods is still done manually, so there is a possibility of recording errors that may result in possible billing errors.

### 4.1.3 Spa Sales

These internal control activities are grouped based on business processes found in the Hotel ABC revenue cycle: the order process, service delivery process, billing process, and the process of receiving money.

Based on analysis it is known that the weakness of control activities in sales is caused by the existing control activities that have not been adequately designed through adjusting the internal procedures of the ABC Hotel. These disadvantages include:
1. Lack of supervision on spa package booking activities and supervision of spa supplies so as to enable potential fraud committed by therapists.
2. Recording of visitor payment methods is still done manually, so there is a possibility of recording errors that may result in possible billing errors.

Based on the analysis above, this study will describe the spa sales business activities with the addition of internal control activities. This was done to facilitate Hotel ABC in implementing the proposed improvements from this research that were linked to the business processes and operational activities of the ABC Hotel. The following figure 5 is the proposed flowchart described as follows:

**Figure 5: Proposed Flowchart Spa Package Sales.**

### 4.1.4 Playground Ticket Sales

These internal control activities are grouped based on the business processes found in the Hotel ABC: the order process, service delivery process, the billing process, and the process of receiving money.

Based on the results of observations in the field and interviews with informants during the study, it was found that not all internal control activities were implemented. There are still a number of control activities that have not been implemented which have resulted in weaknesses, including recording the method of selling a playground ticket and recording payments is still done manually, so that the error of recording and fraud is possible.

Based on the analysis above, this study will describe the playground sales business activities with the addition of internal control. This was done to facilitate Hotel ABC in implementing the proposed improvements from this research that were linked to the business processes and operational activities of the ABC Hotel. The proposed flowchart is as follows:

**Figure 6: Proposed Flowchart Playground Ticket Sales.**

### 5 CONCLUSIONS AND SUGGESTIONS

#### 5.1 Conclusions

This research was conducted to analyze internal control activities in the ABC Hotel revenue cycle. When viewed from the analysis of control activities carried out, it can be concluded that:

a. At current hotel room sales pricing, discounting and complementary rooms made by marketing are carried out with minimum supervision from the General Manager, this causes a difference between occupancy and revenue levels. This can be seen from the calculation of ARR and RevPar for the past 5 years.

b. At the sales of food and beverages, spa and playground recording the sales transaction method and payment method are still done manually.

#### 5.2 Suggestions

Based on the results of the analysis of internal control on Hotel ABC and identification of existing weaknesses, this study provides suggestions:

**For Hotel ABC:**

1. Improvement of control activities starting from the improvement of sales recording procedures, especially for recording procedures that are still
running manually, pricing procedures, giving discounts, complementary rooms and billing procedures.

2. In the long term, considering the expected volume of transactions that will increase, it is necessary to consider improving or developing the accounting information system that currently implemented.

For Academics and Future Research:

Future research is expected to broaden the scope of research not only for the revenue cycle but also expand the scope of the entire business cycle of the company.

REFERENCES

Addey, Josephine Nana Ama. (2012). An assessment of internal control system on the image of the hospitality industry in Royal Mac-Dic Hotel and Capital View Hotel: http://hdl.handle.net/123456789/4833
Badan Pusat Statistik (2017), (online), (https://bps.go.id)
Cheng, Qiang and Goh, Beng Wee and Kim (January 16, 2017). Internal Control and Operational Efficiency. Contemporary Accounting Research