Analysis of Food Cost Control during the Covid-19 Pandemic

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Abstract

**Purpose:** The purpose of this research is to determine control of the cost of food (food cost) at a 4-star hotel in Seminyak, Bali, and to identify the causes of differences the percentage of food cost between the actual cost and the standard cost during the Covid-19 pandemic.

**Research methods:** This research used two methods of data analysis. Quantitative method is by calculating the percentage of standard cost and actual cost and then compare them. Qualitative descriptive method is by providing reviews or interpretations of data and information obtained and then comparing them with theories of inventory management including: procedures for purchasing, receiving, storing, and releasing raw materials.

**Results and discussion:** The controlling food costs in January 2020 to April 2021 has not been carried out properly in terms of the price of goods, which is very unstable and this is very influential in making costs. The percentage difference between actual food cost and standard food cost at this hotel during that period partially exceeded the standard set by management. This happened because of the conditions from the Covid-19 pandemic which made the sales unstable and food cost control not optimal.

**Implication:** Prevention of the difference between actual food costs and standard food costs at the hotel was carried out in several ways, including: checking the condition of raw materials, using food distributors, and controlling the use of raw materials.

**Keywords:** hotel, cost control, food cost, Covid-19 pandemic.
INTRODUCTION

Tourism is one of the largest foreign exchange-producing industries in Indonesia according to the Ministry of Tourism and Creative Economy in 2018. Because of that, competition in this business world increasingly fierce, which makes the value of the company increase. But at this time the world is hit by the Covid-19 pandemic which give a huge impact for the tourism industry in Indonesia. The Head of the Indonesian Hotel and Restaurant Association (PHRI) stated that there were 1642 hotels throughout Indonesia that closed due to Covid-19 pandemic and 281 of them are hotels in Bali. With the closure of the hotel, industry and tourism will lose revenue up to tens of trillions of what he said at a press conference in April 2020. The tourism industry, especially those engaged in the hospitality sector, are required to have careful planning to meet the various needs of guests staying, even during a pandemic. At a hotel restaurant that sells food and beverages, it is managed by the food and beverage department which is in charge of selling and producing food. To maximize revenue on food and beverage sales, the hotel must make efficient management of food and beverage production so it is necessary to supervise and control by a cost control division to maximize the revenue in food and beverage sales.

The cost of food is one thing that needs to be considered before determining the selling price, the cost of food consists of all the costs of materials used in the production process. The cost of food ingredients consists of standard food costs and actual food costs. With the standard costs that have been set by management, it is expected that the costs incurred are in accordance with those that have been standardized. However, in its application in companies, there are often deviations between standard costs and actual costs. Efforts can be made to measure the efficiency of controlling food & beverage costs in setting standard food costs. Controlling is one of the important functions that must be carried out by everyone in running a business. Control is a supervisory action accompanied by straightening actions (corrective) (Harahap, 2011: 89).

Costs are sacrifices of economic resources measured in units of money, which have occurred, will occur or are likely to occur for certain purposes (Mulyadi, 2012: 8). This is the benchmark for the success of a food cost control. The percentage of standard food for a restaurant in a hotel set by the Indonesian Cost Controller Association ranges from; for food costs, 30% to 40% of total food sales revenue. This
research was carried out in Vila Lumbung Hotel, i.e. a 4-star hotel located in Seminyak, Kuta Utara, Badung, Bali. The management of the hotel sets the standard food cost at 33% to 34%, and the standard beverage cost 27% in determining this percentage is determined by looking at the amount of employee salary expenses (payrolls) and profit on food and beverage sales. If there is an increase in the percentage of actual food cost and actual beverage cost, it is necessary to investigate the expansion so that a solution can be given.

Based on interviews with cost control and Finance Control staff at the Vila Lumbung Hotel, they explained that during the Covid-19 pandemic, food prices were unstable and had not yet reached the food cost standard that had been targeted by management at the Vila Lumbung Hotel. The Vila Lumbung Hotel management has a tolerance limit of 1% difference. If the actual cost of food exceeds 1% of the cost of standard food under normal conditions, it means that food sales are not running as efficiently as planned or there is a waste that reduces profits. The differences that occur need to be analyze to find out the cause, then corrective actions can be taken and the right strategy to overcome these problems during the current pandemic can be found. To strengthen the opinion that have been written and as a basis for argumentation in reviewing the problem so that reliable answers are obtained, an in-depth theoretical basis and research findings in the field are needed. There are several concepts related to this research which will be described in the following description.

Running a business requires costs to be incurred so that the company is able to have a quality. The cost itself is a sacrifice value to obtain goods and services that are useful for the future or have benefits beyond one accounting period measured in units of money (Uhise et al., 2018: 622). Cost control is a systematic effort in setting implementation standards with planning objectives, feedback information systems, comparing actual implementation with planning, determining and regulating deviations and making corrections in accordance with the predetermined plan, so that goals are achieved effectively and efficiently in the use of costs (Kusminaini, 2016: 19), Control is a systematic effort by management to achieve goals efficiently and effectively (Siregar, 2013: 8) The analysis of the difference in the cost of raw materials is the difference in costs caused by the difference between the actual cost of raw materials and the cost of standard raw materials (Halim, 2011).

Cost accounting is a field of accounting that studies how to record, measure, and report the cost information used. Besides, cost accounting also discusses the determination of the cost of the "product" produced and sold to the customer as well as to the market, as well as for the inventory of products to be sold (Bustami, et al, 2010: 04). Cost is the cash or cash equivalent value sacrificed to obtain goods or services that are expected
to provide current or future benefits for the organization (Mowen & Hansen, 2013: 47). for now and in the future, which is measured in units of money. Cost is the sacrifice of economic resources to obtain goods or services that are expected to provide benefits for now or in the future (Siregar, 2014: 23).

Cost classification is generally classified according to the objectives to be achieved from the cost information that will be presented by the management. Therefore, the classification of costs depends on what these costs are classified. For different purposes, different classification methods are needed. So that cost accounting is also known as the concept of "different costs for different purposes". The cost of food is the total cost of food ingredients used to produce a type of food that will be served to guests (Utthavi, 2017: 158) determining the cost of food is very important to observe because the cost of food is all food ingredients used to produce a type of food (Wiyasha, 2014: 10), The calculation to find the cost of food (Percentage Food Cost) (Wiyasha, 2014: 94).

In calculating the cost of food, it will be divided into two parts, namely actual food cost and standard food cost. Actual food cost are costs that are actually incurred to make a product or finance an activity Standard Cost. Standard costs are costs determined in advance, which is the amount of costs that should be incurred to make a product or finance certain activities under the assumption of certain economic conditions, efficiency and other factors, while standard costs can be achieved if no materials are wasted during the process, there are optimum efficiency and following all established standards (Budiyasa et al., 2018: 137).

The standard size is used by management as a benchmark to keep the cost of food in accordance with the predetermined one. To be able to determine the standard food cost (cost of raw food) is obtained from a standard recipe where it is stated that on the card the standard food recipe is listed the selling price and the percentage of the cost of food. (Utthavi et al., 2017: 158). To be able to control the cost of food, standard measures are needed. These standard sizes are usually referred to as standards. According to (Garrison et al., 2013: 2), Control of production costs is one part of the internal steps that the company can take in an effort to improve its efficiency. In controlling production costs, it is necessary to have a benchmark. One of the benchmarks that can be used is the standard cost (Fajril, 2012: 1). Cost deviation is the actual cost of the standard cost called the difference or variance (Mulyadi, 2014: 395) The variance is the difference between the amount based on actual results and the budgeted amount. If actual costs exceed standard costs, the variance is unfavorable to profit. If standard costs exceed actual costs, then the variance is favorable, because it has a favorable impact on profits (Horngren et al., 2012).
RESEARCH METHODS

This research was conducted in the Accounting Department at Vila Lumbung Hotel. Object of research in this study is the control of Food Costs during the COVID-19 pandemic at the Vila Lumbung Hotel using financial reports from the Vila Lumbung Hotel in the period January 2020 to April 2021, that is the reconciliation report. This study emphasizes on controlling food costs by comparing standard food costs with actual food costs carried out by cost control. Research variables are basically everything in any form determined by the researcher to be studied so that information is obtained about it, then conclusions are drawn.

Data collection is the part used to estimate the results of a research. Data collection was carried out with the aim of obtaining the information needed to achieve the research objectives. The interview technique used in this research is a guided free interview technique where the interviewer will prepare an outline guide to questions to the respondent. In this research, the interview technique has the benefit of obtaining more information about food costs at Vila Lumbung Hotel. In this research was conducted by doing observation directly the objects and sources of research data at the Vila Lumbung Hotel, exactly in Accounting Department of the Cost Controller section. The documentation data obtained were in the form of documents and notes related to research and the subject matter, such as studying related documents in cost controller journals.

Data analysis techniques are the methods used by the author in processing a data so that the solution can be found to solve the problems. The following explanation is a data analysis technique. Data analysis techniques used in this research are percentage food cost and variance food cost.

\[
\text{Percentage Food Cost} = \frac{\text{Cost of Food}}{\text{Net Food Sales}} \times 100\%
\]

Percentage food cost is the value of the comparison between food cost and food sales contained in each accounting period in the form of a percentage. The food cost variance is the difference between the amount based on actual results and the budgeted amount. If actual costs exceed standard costs, the variance is unfavorable to profit. If standard costs exceed actual costs, the variance is favorable, because it has a favorable impact on profit.
Variance of the food cost reconciliation elements is the difference between each element in the food cost reconciliation which is calculated by comparing the actual elements and the elements that have been determined.

\[
\text{Variance element of food cost reconciliation} = \text{actual element of food cost} - \text{standard element of food cost}
\]

Percentage Variance is a comparison to express the ratio of the difference between each element in a food cost reconciliation and is expressed in percentage form.

\[
\text{Percentage Variance} = \frac{\text{Variance Food Cost}}{\text{Standard Food Cost}} \times 100\%
\]

RESULTS AND DISCUSSION

The following are the food costs and food sales obtained by Vila Lumbung Hotel during the period January 2020 to April 2021. In the table it can be seen that from January 2020 to April 2021 food costs were very volatile during the Covid-19 pandemic.

In the table, it can also be found the percentage of food costs for that period in a way like the example in the January period.

Percentage of food cost on January 2020:

\[
\text{Percentage food cost} = \frac{\text{Cost of food}}{\text{Net Food Sales}} \times 100\%
\]

\[
= \frac{\text{Rp. 124,809,063}}{\text{Rp. 391,736,422}} \times 100\%
\]

\[
= 31.9\%
\]

From the above calculation, it can be stated that the percentage of food cost in January 2020 is 31.9%. Then the percentage of the next month is done with the same calculation.

In the reconciliation report table, it can also be seen that the comparison between standard and actual costs can be found like the example in the January period:

Variance food cost in Januari 2020 = \text{Rp. 124,809,063} - \text{Rp. 121,209,670} = \text{Rp. 3,599,393}
From the above calculation, it can be stated that the variance of food cost in January 2020 is Rp. 3,599,393. Then the variance of the next month is done with the same calculation.

In the results of interview with Mr. Made Sumardika as Cost Control, Mr. Agung Ananta as Chief Accountant, and Mr. Putu Sudana as Finance Control at Hotel Villa Lumbung and in its implementation which the author saw when conducting research.

Food cost control at Hotel Villa Lumbung is by meeting the standards set by the hotel management both in terms of purchasing, storing, processing and releasing goods so that good food cost control can occur. The following are some of the stages to be considered in controlling food costs.

**Supplier Selection**

In purchasing goods, it is very important to make supplier selection, the goal is to get the right supplier so that it can reduce costs in purchasing goods and services, if the wrong supplier selection can be detrimental both in terms of quality and price so that the selection of existing suppliers is carried out through several processes such as:

(a) Conduct a market survey by purchasing, cost controller and chief to find out the market price of each food ingredient so that can compare the purchase price of the ingredient that is not more expensive than the existing market price so that the costs used to make a menu will be cheaper. (b) Make a negotiation of price by purchasing to the supplier by asking a price list from the supplier. The price list is sent to the cost controller.
controller to be compared and decide on the supplier based on the lowest price quote for each food ingredient.

In selecting suppliers through a market survey, Vila Lumbung Hotel determines several factors that must be considered before choosing a supplier, such as: (a) Price, in the sense that the price offered by the supplier is the lowest price. (b) Quality and standards of raw materials, where raw materials offered by suppliers must have good quality and standards. (c) Quantity, in the sense that the suitability of the quantity of goods on the purchase order with delivery. (d) The food delivery process is determined based on the timing and quality of the delivery of raw materials.

Executing the Contract

After the supplier selection stage, the hotel management with the supplier establishes a contract system which is usually carried out every certain period of time. This is done to maintain the purchasing process, especially the procurement of perishable foodstuffs. This contract system is also used for goods that must be purchased in large quantities and in a relatively long time and the price will not change during the contract period without the consent of both parties.

Control of Orders and Purchases of Food and Beverage Ingredients to Suppliers

![Flowchart showing the stages of ordering and purchasing groceries at Vila Lumbung Hotel](Source: Wahyudi, 2021)

From the figure above, the ordering and purchasing stages start from the section that requires goods to fill out the request form and then it will be submitted to the bar manager then the bar manager submits it to the purchasing department, then the purchasing department will order it to the supplier according to the request form.
The goods that have been ordered will arrive at a predetermined time, when the data items will be received by the receiving department and will be stored in the warehouse by the storekeeper and then for retrieval using store requisition.

In purchasing food and beverage ingredients, the purchasing department only explains the general criteria for the food and beverage ingredients ordered. The purchasing department does not explain in detail the criteria or specifications for food ingredients ordered to suppliers and even depends on the existing inventory at the supplier. This is because the kitchen does not explain the standard purchase specification, which can be used as a guide in ordering food ingredients to suit the menu needs. This results in the presence of food ingredients purchased that do not meet the required criteria. Purchasing low-quality food and beverage ingredients will result in the production division, namely the kitchen and bar section, to produce lower-quality food and beverages than has been determined by management.

**Raw Material Preparation Control Procedure**

The control phase of raw material preparation starts from ordering from the purchasing department to the supplier, after that the goods delivered by the supplier are received by the receiving department and then handed over to the storekeeper to be arranged according to the type of goods in the store. At this stage the control of the cost of food has been running quite well, namely the purchasing department has ordered according to requests from other departments, then the goods received have been checked according to the standards that have been set, then the storekeeper organizes the goods that come according to their type in the goods storage warehouse. At the planning stage, standard measures have been determined that are used as a guide to evaluate the achievement of actual food costs. The pre-determined standard sizes are standard cost (standard cost), standard recipe (standard recipe), standard dose for each type of food offered in restaurants has included the percentage of food cost that must be achieved.

From the description above, it can be seen that the ordering, purchasing and processing systems set by management as an effort to control food costs from the procedural aspect have not run optimally during the covid-19 pandemic. This is addressed by several things, namely the ordering aspect where in situations like this many suppliers do not accept the credit system, this causes the hotel to be constrained in managing cash flow during the Covid-19 condition because the income from the hotel is significantly reduced and the stock of materials What is needed in the food production process at the hotel must always be available. In the storage aspect, because in a pandemic situation like this the tourism industry is experiencing difficulties
so that it has an impact on the absence of tourists staying or just shopping at hotels so that the materials stored in the store are rotten or have passed the expiration period which is not feasible to be processed for use on sale.

Comparison of standard costs with actual food costs is a tool in measuring costs that have occurred in a company whether it has reached the standard or is less than the standard itself. Comparison of the percentage of costs needs to be compared with the costs that have been incurred so that they remain at a predetermined standard so that these costs can be maintained and monitored for each expenditure. This is necessary in managing costs so that they can achieve common goals. Each hotel has a cost control in charge of supervising and controlling the costs incurred by the hotel. Of all costs incurred by hotels, food & beverage costs are one of the most important costs to be monitored and controlled by hotels, to control these expenses, cost control makes cost planning.

At the end of the month or the end of the accounting period, a cost control and storekeeper will carry out an inventory of the items in each store and outlet in the hotel and the remaining items and the value is calculated, then this value becomes the basis for making a reconciliation report, the report on the reconciliation report is the end of the cost control report activities for the period.

| Bulan | Tahun | Actual Food Cost | Revenue | Standar Cost | Variance | Actual Food Cost | Standar Food Cost | Variance |
|-------|-------|------------------|---------|--------------|----------|-----------------|------------------|----------|
| Januari | 2020 | 124,809,063 | 391,738,422 | 121,209,670 | 3,599,393 | 31.9% | 31.0% | 0.9% |
| Februari | 2020 | 98,428,300 | 308,973,837 | 116,202,527 | 17,773,957 | 31.9% | 31.0% | -5.3% |
| Maret | 2020 | 66,115,407 | 147,097,769 | 119,385,685 | 53,270,278 | 44.9% | 31.0% | -15.6% |
| April | 2020 | - | - | 139,860,832 | 139,860,832 | 0.0% | 31.2% | -100.0% |
| Mei | 2020 | 124,098 | 373,620 | 127,622,627 | 127,498,529 | 33.2% | 31.0% | -2.0% |
| Juni | 2020 | 289,678 | 570,986 | 141,838,141 | 141,548,463 | 50.7% | 31.1% | -49.6% |
| Juli | 2020 | 96,798 | 208,971 | 142,754,616 | 142,657,818 | 46.3% | 31.0% | -99.9% |
| Agustus | 2021 | 379,139 | 734,987 | 412,934,616 | 412,837,318 | 34.1% | 31.0% | -99.9% |
| September | 2021 | 161,530 | 485,919 | 134,046,585 | 133,885,055 | 33.2% | 31.0% | -99.9% |
| Oktober | 2021 | 4,886,879 | 13,036,625 | 139,114,374 | 134,227,495 | 37.5% | 31.0% | -96.5% |
| November | 2021 | 1,174,050 | 3,202,501 | 133,723,417 | 132,549,367 | 36.7% | 31.0% | -99.1% |
| Desember | 2021 | 5,293,211 | 14,570,531 | 142,754,616 | 142,657,818 | 46.3% | 31.0% | -99.9% |
| Januari | 2021 | 5,293,211 | 14,570,531 | 142,754,616 | 142,657,818 | 46.3% | 31.0% | -99.9% |
| Februari | 2021 | 2,104,514 | 5,116,532 | 142,754,616 | 142,657,818 | 46.3% | 31.0% | -99.9% |
| Maret | 2021 | 3,723,509 | 7,244,651 | 141,838,141 | 141,548,463 | 50.7% | 31.1% | -49.6% |
| April | 2021 | 3,791,393 | 6,966,428 | 15,117,314 | 11,325,921 | 56.6% | 34.0% | -74.9% |
| Total/Rata-rata | 2021 | 314,983,042 | 909,551,526 | 1,649,712,474 | 1,334,729,432 | 37.8% | 32.1% | -78.0% |

(Source: Reconciliation report in Vila Lumbung Hotel, 2021).
In Table 1, it can be seen that the occurrence of a very significant comparison between standard food costs and actual food costs from January 2020 to April 2021 at the Vila Lumbung Hotel can be seen that the percentage of food costs in the period January 2020 to April 2021, is very volatile with many percentages of food costs that exceed the provisions agreed upon by the management, which is 33%. up to 34% this happened then the value of the difference between the actual food cost and the standard food cost (variance) was very high, especially in March 2020 to December 2020 this is due to the high standard of food cost, the value of this standard food cost is based on sales in the previous year the value was agreed upon by management and mutually agreed upon by management at the beginning of the year but due to the situation during the Covid-19 pandemic as it is now with fluctuating tourism conditions with declining sales due to the pandemic.

Strategies to reduce the difference between the actual food cost and the standard food cost at Vila Lumbung Hotel can be pursued by several of them. One of the causes of the difference between actual and standard food costs is damage to raw materials caused by many factors, such as storage that is not up to standard or due to the expiration date of the raw materials. Therefore, a store keeper must know about raw materials and have complete records with the expiration date and period, which is very necessary to avoid purchasing the same item over and over again due to damaged food stocks.

The use of food distributors has several benefits such as offering low prices, saving time in the delivery of ordered food ingredients, and providing good quality ingredients. Therefore, collaborating with distributors will be able to reduce food costs. Reducing food costs can be started by controlling the efficient use of raw materials. This is very closely related to the food and beverage product section, such as how to cut and peel ingredients which have an impact on operational costs. The creation of an effective and efficient use of raw materials will be able to reduce food costs at the hotel.

CONCLUSION

Food cost control at the hotel in the period January 2020 to April 2021 as a whole has not been carried out properly in terms of the price of goods. It is unstable and this is very influential in making the cost itself, so that it can make the cost of the food become the high level of supplier selection is not only focused on the lowest price but also considers other factors such as quality of goods and on time delivery of goods offered.

The percentage difference between actual food cost and standard food cost at Vila Lumbung Hotel in the period of January 2020 to April 2021 partially exceeds the
standard set by management. This happened because of the conditions from the Covid-19 pandemic which made sales unstable and food cost control was not optimal. Actual food has a lower value than standard food that has been determined beyond the company's tolerance limit. The main factor that causes the difference and the percentage of food costs is not appropriate, namely the Covid-19 pandemic which makes marketing targets do not go according to plan. As well as other factors, namely damage to the raw materials to be processed and unstable prices from suppliers, making the cost of food fluctuating.

Prevention of discrepancies between actual food costs and standard food costs at Vila Lumbung Hotel is carried out in several ways, including: checking the condition of raw materials, using food distributors, and controlling the use of raw materials.

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