

EFFICIENCY IN THE PURCHASE OF FOOD AND BEVERAGES IN OPERATION OF STAR HOTELS IN BALI

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ABSTRACT

The research aims to calculate efficiency in the purchase of food and beverages in star hotels in Bali. Ten five stars hotels receiving award as the best hotel from Trivadesor in 2016 are chosen as research sample. Data are collected through questionnaire given to purchasing department. Data are analyzed using descriptive statistical analysis and economical order quantity (EOQ) analysis. Research result indicates that the system and process for the purchase of food & beverage in stars hotels in Bali covered contract system for purchasing of perishable foods such as vegetables; daily or monthly system to give freedom to hotels to buy required goods; standing order was used to order certain types of foods supplied by certain supplier; and cash purchase was used to buy food or beverages in small amount. The purchasing process in the hotel uses contract system and the level of efficiency could be improved using EOQ in purchasing. The purchasing of budgeted food and beverages will facilitate the purchase operation; however, it will be better if it includes the existing economic approach calculation in order to increase hotel's performance. The use of EOQ method could reduce storage cost at the hotels. In the future, hotels should put more attention on such cost as storage cost and cost of order.

Keywords: efficiency, purchasing, food and beverages, star hotels.

INTRODUCTION

Efficiency is one of the performance measures to be achieved by a company since it is related to the cost incurred. In globalization era, all companies want to be able to greatly reduce cost yet higher value of benefit. Efficiency has measure of success rated based on the amount of source or cost to achieve goals from activities conducted. Several things can be done by a company to have cost efficiency, namely: performing production cost efficiency and determining standard cost. Through production cost efficiency, cost incurred by the company for production process should be thoroughly planned and well controlled.

Efficiency as an ability of a business unit to achieve goals and is always related to organization goals to be achieved by a company (Maulana, 1997). A

department related to cost efficiency in a hotel is purchasing department. The department is responsible for gaining information on goods, determining supplier for procurement of goods and issuing purchasing orders to selected supplier. Purchasing system is a transaction activity conducted by a company to fulfill the need for product or raw material from a supplier (Galloway *et al*, 2000). Galloway *et al* (2000) stated that “The role of purchasing function is to make materials and parts of the right quality, and quantity available for use by operations at the right time and at the right place.” Purchasing is a department handling purchasing. The department is one of features of a company especially those companies in accommodation sector.

Result of survey in ten best hotels according to Tripadvesor in the first semester of 2016 is presented in Table 1.

Table 1.
The average value of the Purchase of Foods and Beverages
Five Star Hotels period of January – June 2016

No	Month	Average Purchase of Food (Rp)	Average Purchase of Beverage (Rp)
1	January	315,941,806.00	67,386,462.00
2	February	334,757,397.00	102,243,427.00
3	March	499,225,006.00	216,269,161.00
4	April	589,721,789.64	143,529,247.00
5	May	478,691,070.31	152,904,078.00
6	June	563,705,244.81	176,192,637.00

Source: Processed data, 2016.

Based on Table 1 it can be explained that the amount of purchase conducted in one semester of 2016 for food and beverages was fluctuated. In April the purchase was very high for food and in June for beverages. The condition indicates that the purchase of food and beverages was differed. It means that the increase in the purchase of food did not accompany by the increase in the purchase of beverages. It is an interesting condition since food and beverages usually go along in the application in a restaurant of a hotel; therefore, it is necessary to observe whether the hotels have efficiency in purchasing cost. Level of efficiency is also needed to determine the hotels strategy (Farooq, 2014; Alison *et al*, 2004; Abel and Alfred, 2010).

To give solution for issues in the ten sample hotels in this study, an appropriate data and analysis are needed. For this study, data were collected through

questionnaires distributed to purchasing department as well as interview on unclear system and expenses.

Based on initial data presented above, several problems are described as follow: (a) How is the food and beverages' purchasing system in star hotels in Bali? (b) How is the achievement of efficiency level by star hotels in Bali? Based on these problems, solutions were expected on system to be implemented and efficiency level achieved during the first semester of the purchase of food and beverages in 2016.

THEORETICAL STUDY

The purchase of goods by a company is based on financial ability of the company as well as the readiness of existing facilities such as adequate and qualified warehouse (Suarsana, 2007). According to Suarsana (2007), there are various purchasing systems generally applied by purchasing department in a hotel. The first system is contract system. It is a system to purchase groceries, especially certain perishable foods such as vegetables and fruits as well as seasonal foods, using a contract agreement. The contract is conducted with one or more partners and it stresses the quality, quantity and price of the goods. Prior to the issuance of the contract, purchasing department conducts selection with authorization of related superior and agreement has been achieved by both sides, hotel and its partner. The period of contract is varied for perishable food; it can be three or six months. Terms of payment, however, is monthly (one month credit). If at any point, market price is increased and one of the suppliers is unable to fulfill the hotel's order for several days or week, hotel will look for a substitute for the supplier that is considered as resign and inconsistent.

The second system is daily and monthly system. In daily and monthly system, a company or hotel has freedom and discretion to purchase goods from various suppliers or supermarkets. Through this system, a hotel will need no analysis on the performance of various suppliers to be selected. They just go to any nearest supermarkets, shops or traditional markets that give the lowest price and pay in cash or credit. The procedure, however, is the same, which is by looking for information on which shops or supermarkets or markets that has good quality yet cheapest price. Nevertheless, the system has some limitations or risks, such as when there is a sudden and high fluctuation in price increase, often times supplier or the shop intentionally do not meet the hotel's order to avoid loss.

Cash purchase of goods (cash and carry) is the third purchasing system. In this system, purchasing department in a hotel prepare a small amount of cash known as petty cash. Petty cash is used to buy goods for hotel operation, especially sudden request of groceries from the kitchen that hard to fulfill by the supplier partner. The system is used to buy food and beverages in small amount. It is conducted when warehouse or kitchen is running out groceries for their immediate need. Cash purchase is also conducted in supermarket or shop near the hotel because the goods are going to be used immediately.

Standing order is the third system. The system is one of purchasing system used to order certain type of foods supplied by certain supplier (Abel and Alfred, 2010). The type of food purchased using this system is dairy product such as fresh milk, pastry product, yoghurt, ice cream as well as eggs and so on. Standing order is prevailed any time as long as no written or official notice issued regarding the change in the order from the hotel. The change, in this case, is conducted by Executive Chef since he/she is the one who understand on what type of foods that will use standing order system.

According to Susantun (2000) efficiency is a ratio of input to output related to the achievement of maximum output with a number of input. If the output ratio is high, the efficiency is high. Economical order quantity is one of ways to calculate efficiency level (Ria, 2012; Abel dan Alfred, 2010).

RESEARCH METHODS

The research was conducted in ten best star hotels according to Trivadesor in 2016. Data were collected through a questionnaire consisted of variables of monthly average expense of purchasing, fixed cost and variable cost in period of January 2016 to June 2016. In addition, interview was conducted to gain information uncovered in questionnaire response. Data collected were analyzed using descriptive statistical analysis and EOQ analysis. Research respondents were purchasing managers.

RESULT AND DISCUSSION

Food and Beverages Purchasing System

Every hotel has different purchasing system or process based on their financial ability as well as readiness of existing facilities such as adequate and qualified

warehouse. Due to the large amount of foods and beverages needed in their operation, hotel needs appropriate purchasing system and process for goods procurement. Therefore, hotels used four purchasing systems to support their food and beverages' needs, as follow:

1. Contract system

Contract system is used to purchase certain types of food especially perishable foods such as vegetables and fruits as well as seasonal foods. The contract is conducted with one or more partners and it stresses the quality, quantity and price of the goods. Prior to the issuance of the contract, purchasing department conducts selection with authorization from related superior and agreement has been achieved by both sides, hotel and its partner. The period of contract is varied for perishable food; it can be three or six months. Terms of payment, however, is monthly (one month credit). If at any point, market price is increased and one of the suppliers is unable to fulfill the hotel's order for several days or week, hotel will look for the substitute of the partner that is considered as resign and inconsistent.

2. Daily and Monthly System

In daily and monthly system, a company or hotel has freedom and discretion to purchase goods from various suppliers or supermarkets. Through this system, a hotel will need no analysis on the performance of various suppliers to be selected. They just go to any nearest supermarkets, shops or traditional markets that give the lowest price and pay in cash or credit. The procedure, however, is the same, which is by looking for information on which shops or supermarkets or markets that has good quality yet cheapest price. Nevertheless, the system has some limitations or risks, such as when there is a sudden and high fluctuation in price increase, often times supplier or the shop intentionally do not meet the hotel's order to avoid loss.

3. Cash and Carry

In this system, purchasing department in a hotel prepare a small amount of cash known as petty cash. Petty cash is used to buy goods for hotel operation, especially sudden request of groceries from the kitchen that hard to fulfill by the supplier partner. The system is used to buy foods and beverages in small amount. It is conducted when warehouse or kitchen is running out groceries for their immediate

need. Cash purchase is also conducted in supermarkets or shops near the hotel because the goods are going to be used or processed immediately.

4. Standing Order

Standing order is one of purchasing system used to order certain type of foods supplied by certain supplier (Abel and Alfred, 2010). The type of food is dairy product such as fresh milk, pastry product, yoghurt, ice cream as well as eggs and so on. Standing order is prevailed any time as long as no written or official notice issued regarding the change in the order from the hotel. The change, in this case, is conducted by Executive Chef since he/she is the one who understand on what type of foods that will use standing order system.

Efficiency of Purchase of Food & Beverage in Hotel

1. Cost of Order

Cost of order is cost incurred for goods procurement from order until the goods are arrived. Regarding cost of order, hotel had detail calculation. The cost is influenced by staffs' wage, phone and electricity bills, and cost incurred for order request. Since there was no calculation, authors calculated based on the existing theory and the components are presented in the Table 2.

Table 2
Average Cost of Goods Order

No.	Components of cost of order	Cost of Goods Order
1	Wage	Rp 2,106
2	Phone bill	Rp 750
3	Papers	Rp 500
4	Printer ribbons	Rp 311
5	Computer	Rp 88
6	Printer	Rp119

Source: Data of the Hotels (processed data), 2016.

Based on Table 2 it is known that costs in Hotel consisted of wage for order staffs and cost to order and creating order request. The cost incurred for one order of good to one distributor was obtained from staff wage of Rp. 2,106. However, the calculation of cost was mostly from estimation obtained from interview with purchasing department especially with staff who ordered the goods without detail calculation for each component. The calculation of cost of order was fixed for each

good since it was not affected by the amount of goods or type and quality of goods ordered but by the number of components influencing order process such as the number of labors or resources used. Frequency of order was influenced by frequency of order needed in one period. The higher the frequency of order, the higher the cost of good order incurred. It is similar to previous research by Tauvicky Andry (2012) that in order to minimize cost of order per period is by ordering in bulk thus the frequency of order is smaller; however, it needs to consider other costs incurred such as storage cost.

2. Cost of Beverages Storage

Cost of storage is cost incurred to store goods. The cost is obtained from the amount of value contained in goods. The cost consisted of cost of storage facilities (depreciation of building and tools), cost of building insurance, obsolescence cost, and other costs influencing the storage of the goods. The calculation of storage cost is differed to those of cost of goods order. Storage cost will be a variable cost since it is influenced by the value or the good price. Since there was no data basing the calculation of storage cost of foods and beverages, the researchers gained the data merely from in-depth interview with one of informants who served as purchasing manager. Based on the information and assumption of 40% of the price, following was the example of the calculation. Tomato Rosso Pizza Dens of 5 kg had high storage cost of Rp. 52,000 since the unit price of the good was Rp. 130,000. Whereas, a unit price of Fresh Milk of Rp. 14,740 would have storage cost of Rp. 5,896. Based on the calculation, it could be explained that the amount of storage cost was varied for each good. The more expensive the goods, the more expensive the storage cost, and vice versa. The amount of storage cost was also influenced by the amount of goods stored. The larger the quantity of goods stored, the more expensive the storage cost incurred, and vice versa. Storage cost and cost of order was inversely proportional. This was the reason for considering cost of order and storage cost in determining the amount of order to achieve efficient and interconnected amount of order and purchasing frequency. One way to do it was using EOQ (Economic Order Quantity).

3. Comparison of the Amount of Goods Order, Order Frequency and EOQ

The difference in the amount of order for each purchase and order frequency of stationary using EOQ method and method used by the hotels is described in the following table.

Table 3
Comparison of Cost of Order Calculation based on EOQ and Hotel

No.	Name of Goods	The Amount of Order (EOQ)	The Amount of Order (Hotel)	Frequency of Purchase/ Order (EOQ)	Frequency of Purchase/ Order (Hotel)
1	Coffee Powder in Plastic Package of 250 Gr	17 Unit	60 Unit	14 Kali	4 Kali
2	Tomato Rosso Pizza Denso 5 Kg	2 Unit	8 Unit	12 Kali	3 Kali
3	Whole Peeled Tomatoes Chopped Valfrutta	4 unit	12 unit	9 kali	3 Kali
4	Fresh Milk	24 Unit	72 Unit	18 Kali	6 Kali
5	F.F Potatoes	7 Unit	24 Unit	14 Unit	4 Kali

Source: Processed data, 2016.

There were differences in terms of the amount of order between EOQ calculation method and method used by the hotels. It can be seen in Table 3 that based on EOQ method the frequency of order or purchase was higher but the amount of order was smaller and it was vice versa for the calculation of the hotel. Certain hotels in Bali conducted bulk order and smaller frequency of purchase. It can be explained that using the calculation method used by the hotels cost of order incurred was smaller than storage cost since cost of order is a fixed cost therefore the amount of goods ordered to a distributor will be fixed. Whereas, in calculation using EOQ method, the cost incurred for storage was smaller since the amount of storage depended on the cost of the good price; therefore, the smaller the amount of good ordered the smaller the storage cost incurred. Based on efficiency, EOQ was more efficient in terms of the amount of order and more economical in terms of

storage cost. On the other hand, hotels' calculation was more efficient in storage cost. However, considering inventory and procurement costs, EOQ calculation method was more efficient than those of hotels' calculation. The purpose of calculating the amount of order was to maximizing the difference between income and cost. Thus, the result of EOQ calculation indicated the cost to be incurred for more efficient goods inventory and procurement.

CONCLUSION

System and process for the purchase of food & beverage in stars hotels in Bali were: contract system for purchasing of perishable foods such as vegetables; daily or monthly system to give freedom to hotels to buy required goods; standing order was used to order certain types of foods supplied by certain supplier; and cash purchase was used to buy food or beverages in small amount. The purchasing process was conducted based on flow determined by each company but it did not significantly deviate from general theory.

Efficiency level for the purchase of food and beverage in star hotels in Bali was calculated using detailed EOQ (Economic Order Quantity) method started from cost of order, storage cost, and other costs using the amount of goods ordered in each order and frequency of goods order during procurement. The result of the calculation was inversely proportional to goods procurement calculated by the hotels. The amount of order calculated by EOQ was smaller than those calculated by the hotels. Calculation using EOQ method would bring efficiency to the costs incurred for goods inventory and procurement and it is more efficient than calculation using methods used by the hotels.

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