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THE ROLE OF ACCOUNTING IN THE IMPROVEMENT OF COSTS IN HOTEL BUSINESSES' SUSTAINABILITY REPORT

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Abstract

Businesses that are part of society have to fulfill their social and environmental responsibilities while continuing their lives. Financial accounting, which deals only with the financial aspects of business operations, is insufficient to achieve the benefits expected from the reporting. In addition, financial reports are supported sustainability reports and to ensure that quality information is generated that will enable managers to make the right decisions. Sustainability reports are being requested by information users since hotel businesses are intimately involved in both the physical and social environment. The sustainability report, which can be perceived as a change process has economic, social and environmental dimensions. Sustainability reports provide accountable support for the production of some information. For example, target costing, total quality management, product life cycle use cost reduction and improvement in sustainability reports. Aim of the study determine how to calculate the cost items used in corporate sustainability reporting, how to use the cost management techniques in the calculation and how to show the costs of the report. For this purpose, in the study, the standard costs and the actual costs of the cost items that the hotel management aimed to save were compared and the new cost estimation proposal for the savings aimed to reach with the target costing technique depending on the differences. Document analysis was carried out in the study. The sustainability report, financial reports and quality control reports from a hotel business have been examined in detail. As a result of the study, it was revealed that the savings offered in the sustainability report were more only for Show and that these savings had to be made according to reasonable cost improvements.

Key words: Sustainability reporting, Target costing, Cost control, Strategic cost management.

Introduction

By means of accounting, which is one of the basic measurement systems in business life, it is possible to understand and evaluate the business activities and results (Mook, 2006, 282). Business continuity, which is a generally accepted basic accounting concept, implies that business activities will be maintained without being limited to owners or owners' lives. In order to evaluate the sustainability of the business, investors want to look at the financial data as well as non-financial data when making investment decisions (Gençoğlu and Aytaç, 2016). While the aim of traditional accounting is to produce the information about the formation of the resources of an business, the manner in which these resources are used, the increase and decrease of these resources as a result of the operations

of the organization and the financial situation of the organization, the purpose of sustainable accounting structure is to measure the sustainability performance of the business, to produce information that will contribute to the decision-making process of senior management (Tarakçıoğlu Altınay, 2016). Corporate sustainability is the approach of sustainability approach at business level. Corporate sustainable reporting is a comprehensive and integrated form of corporate reporting, which has become a focus by regulatory regulators, sectorial boards and organizations, consulting firms and research institutions (Herzig and Schaltegger, 2006, 151). In social and environmental accounting, it is an important requirement for the business to report not only financial information, but also the reporting of non-financial information concerning the group defined as related to the financial report (Yanık and Türker, 2012). The companies do not only care of the products they sell, their profitability ratios or their shares in the stock market, but also come to the forefront how sensitive they are to the society and to the environment in which they operate (Kağnıcıoğlu, 2010). Social responsibility reports are reports that provide financial and non-financial information to internal and non-business stakeholders in the annual reports or separate reports showing the dimensions of the economic, environmental and social activities of the business (Başar and Başar, 2006).

Sustainability reporting, it is that corporate governance in this context has clearly become a topic on which companies have started to offer information, and thus strive to increase transparency and accountability (Kolk, 2008). Businesses should consider sustainability reporting practices as a long-term benefit provider. Businesses contribute to social economic value in the long run by creating social and environmental value. Non-financial performance measures described in the scope of sustainability reporting are described as indicators of development and forecasting of future financial results (Ballou, Heitger and Farmer, 2005, 69). Businesses should give equal importance to environmental, social and financial issues while carrying out their activities. With the sustainability reporting, businesses demonstrate the environmental, economic and social impacts of their activities. Sustainability accounting and reporting are the culmination of accounting (Özsözgün Çalışkan, 2012). The reason is that it conceptually emphasizes accounting for the ecosystem and society, and that it also takes care of more traditional issues such as eco-justice and efficiency and proactivity (Schaltegger et al, 2006). Hotel businesses also use changing reporting techniques. Due to the changing tourist profiles and the increase in conscious consumers, hotel businesses share their sustainability reports to their consumers and information providers as well as financial reports. Sustainability reports should include economic information as well. The financial reports and consumption data of the business are effective in obtaining the economic data. In this context aim of the study determine how to calculate the cost items used in corporate sustainability reporting, how to use the cost management techniques in the calculation and how to show the costs of the report.

Methodology

In this study, document analysis was conducted to determine how cost items used in sustainability reporting are calculated, how cost management techniques are used in calculation, and how costs are shown in the report. The sustainability report, financial reports and quality control reports obtained from a hotel business were examined in detail. Variance analysis was performed on the data obtained from the reports. Standard costs contribute to the company's expectations. Variances help managers in planning and control decisions. This analysis enables managers to focus more on situations that occur outside expectations (such as the sale of a service pack below expectations). Since flexible budgets are arranged for different operating volumes, it allows comparison of budget figures and realized cost figures for the volume of activity. Thus, if there are deviations between the results and budgeted results, corrective measures can be taken by examining these deviations and causes. This process is called "variance analysis". Variance analysis; the amount of the deviation, the source of the deviation and the reasons of deviation are made to reveal (Akdoğan, 1995). Variances are generally

used in performance evaluation. (Horngren, 2009: 216). A benefit of deviation analysis is that it highlights individual aspects of performance. However, if any performance measure (for example, a labour productivity deviation or a consumer rating report) is considered on its own, this may cause performance to appear in a particular direction.

In the study, the real data of a five-star hotel was utilized in order to examine the budget, standard cost and achievement measurement dimension of hotel businesses. The data used in the study were prepared at the beginning of the relevant month by the Central Bank of Turkey, US Dollar sales rate and the missing data were estimated. In order to facilitate the clarity of the study, only electricity costs were taken from the cost items and the focus was on June and August.

Findings

The occupancy status of the hotel between the periods 2015-2017 is shown in Table 1.

Table 1. Realized Accommodation and Full Number of Rooms: 2015-2017

Year Month	Number of Person Occupied (Person)			Number of Room occupied (Room)		
	2015	2016	2017	2015	2016	2017
March	72	280	310	32	110	120
April	5,016	1,958	2,405	2,181	819	1,018
May	17,309	18,789	21,106	5,958	6,774	7,705
June	37,270	29,037	56,679	11,444	9,430	17,909
July	61,356	49,626	59,999	17,981	1,739	18,096
August	60,641	47,865	58,349	18,026	15,417	18,198
September	42,225	31,843	47,980	14,680	11,060	17,354

The data of the hotel covers the seven-month period of three years. The hotel follows the data in Turkish Lira. The hotel compiles the consumption and cost data set to prepare sustainability reporting. The hotel prepares sustainability and quality reporting by focusing on eight cost items.

Depending on the demand, the entity expects production inputs to be calculated at the beginning of the period on both quantity and cost basis. The electricity input of the business taken as an example and the electricity consumption estimates for 2015, 2016 and 2017 are shown in Table 2 on kilowatt-hour (kWh) basis. Even when there are no customers, hotels must face some costs. In the season opening of the properties, the hotel has to face many fixed costs in order to provide the desired quality service to the customers. For example, garden and hotel lighting costs are not directly related to whether or not the customer is available. If the hotel operates at a capacity of 10%, it should face the cost if it carries out its activities with 100% capacity. However, fixed costs remain constant over a certain range of activities. This is shown in Table 2. Fixed costs have a significant effect on the profitability of the business. In order to achieve profit targets, enterprises must meet their fixed costs.

Activities to ensure customer satisfaction are generally associated with variable costs. In order to calculate the average room and person performance in Table 2, total variable consumption must be calculated at first. For this calculation, total consumption is determined by subtracting the constant consumption from the total consumption in Table 2. After estimating the amount values of the sustainability report, cost data is prepared based on these amounts. Estimated and actual electricity

fixed and total costs for the hotel are given in Table 3. If the fixed costs are deducted from the total costs, the result is accepted as total variable cost.

Table 2. Estimated Electricity Consumption (kWh)

Year Month	Estimated Consumption (kWh)			Electricity Consumption (kWh)			Fixed Amount			Average Performance (kWh/Room)			Average Performance (kWh/Person)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
March	206,473	97,144	100,264	204,000	89,000	91,600	77.3	74.0	72.2	34.3	29.1	27.9			
April	518,861	190,256	312,180	326,000	114,000	232,000	88.4	93.1	78.8	38.4	38.9	33.3			
May	704,904	644,074	726,128	520,000	435,000	493,500	31.0	30.9	30.2	10.7	11.1	11.0			
June	954,497	874,833	1,096,417	600,000	583,000	555,000	31.0	30.9	30.2	9.5	10.1	9.6			
July	1,317,765	1,289,263	1,380,815	760,000	803,000	834,000	31.0	30.9	30.2	9.1	9.8	9.1			
August	1,397,636	1,328,188	1,349,777	838,000	852,000	800,000	31.0	30.9	30.2	9.2	9.9	9.4			
September	1,186,391	1,007,908	981,060	732,000	666,000	457,000	31.0	30.9	30.2	10.8	10.7	10.9			
Grand Total	6,286,527	5,431,666	5,946,641	3,980,000	3,542,000	3,463,100									

Table 3. Estimated and Actual Electricity Costs

Electricity: (\$)		Estimated			Actual		
		2015	2016	2017	2015	2016	2017
Total Cost	June	96,491	84,522	97,788	96,520	84,522	98,154
	August	142,771	126,550	119,512	142,748	126,550	119,335
Total Fixed Cost	June	60,654	56,326	49,500	59,846	56,423	50,035
	August	85,603	81,179	70,833	84,377	81,303	70,833
Cost per Room (\$/room)	June	3.13	2.99	2.70	3.20	2.98	2.69
	August	3.17	2.94	2.68	3.24	2.93	2.67
Cost per Person (\$/person)	June	0.96	0.97	0.85	0.98	0.97	0.85
	August	0,94	0,95	0,83	0.96	0.95	0.83

Costs incurred and recognized when carrying out their operations are referred to as actual costs. Actual costs are costs that can be proven by a document. For example, the hotel's electricity consumption and costs are the result of a bill generated after use. The bill is a proof document. Accounting records are made based on the bill information and can be used as accounting data. Table 4 shows the average performance per room and per person on electricity consumption and consumption levels between 2015-2017. Actual electricity cost data and cost-based room and average performance per person are given in Table 3.

Table 4. Actual Electricity Consumption and Performances

Year Month	Actual Consumption (kWh)			Electricity Consumption Amount (kWh)			Average Performance (kWh/Room)			Average Performance (kWh/Person)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
March	202,773	91,204	112,384	200,300	82,000	103,900	77.3	83.7	70.7	34.3	32.9	27.4
April	522,510	195,306	313,324	324,000	119,000	244,000	91.0	93.2	68.1	39.6	39.0	28.8
May	703,934	652,084	726,837	515,000	443,500	495,000	31.7	30.8	30.1	10.9	11.1	11.0
June	954,790	874,833	1,100,519	592,000	584,000	561,000	31.7	30.8	30.1	9.7	10.0	9.5
July	1,319,314	1,298,263	1,382,790	750,000	813,500	838,100	31.7	30.8	30.1	9.3	9.8	9.1
August	1,397,409	1,328,188	1,347,779	826,000	853,300	800,000	31.7	30.8	30.1	9.4	9.9	9.4
September	1,184,391	1,007,908	975,090	719,000	667,200	452,000	31.7	30.8	30.1	11.0	10.7	10.9
Grand Total	6,285,121	5,447,786	5,958,723	3,926,300	3,562,500	3,494,000						

Variance analysis and Performance Measurement

In the study, deviation analysis for the hotel is presented with both consumption and cost dimensions. In addition, performance deviation can be calculated on room and person basis depending on electricity consumption. In Table 9, both the total consumption deviation of the hotel and the average performance deviation are given. The total consumption deviation is calculated from the estimated consumption values in Table 2 (e.g. 954,497 kWh for June 2015) by subtracting the actual consumption values in Table 4 (e.g. 954,790 kWh for June 2015) (e.g. -293 kWh for June 2015). Performance deviations are calculated in the same way.

These deviations are examined; while the total deviation of consumption is 1,406 kWh in 2015, it can be concluded that in 2016 and 2017, electricity consumption is higher than the estimates, or that there is no accurate estimation. However, when electricity consumption in rooms and persons is examined, it is determined that 2017 is a more successful year than in other years.

Table 5. Consumption Variance Analysis

Year Month	Total Consumption Deviation (kWh)			Average Performance Deviation (kWh/room)			Average Performance Deviation (kWh/person)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
March	+3,700	+5,940	-12,120	0.00	-9.64	+1.50	0.00	-3.79	+0.58
April	-3,649	-5,050	-1,144	-2.59	-0.06	+10.66	-1.13	-0.03	+4.51
May	+970	-8,010	-709	-0.68	+0.07	+0.10	-0.23	+0.03	+0.04
June	-293	0	-4,102	-0.72	+0.11	+0.11	-0.22	+0.03	+0.03
July	-1,549	-9,000	-1,975	-0.64	+0.10	+0.12	-0.19	+0.03	+0.04
August	+227	0	+1,998	-0.65	+0.08	+0.11	-0.19	+0.03	+0.03
September	+2,000	0	+5,970	-0.75	+0.11	+0.06	-0.26	+0.04	+0.02
Grand Total	+1,406	-16,120	-12,082	-6.04	-9.23	+12.66	-2.22	-3.66	+5.26

The negative deviation that started in 2015 continued in March and April 2016 as well. The main reason for the negative performance of kwh / room and kwh / person in 2016 is the negative deviation in March 2016. 2017 is a more successful year than the other years. It is seen that the main reason for the significant increase in kwh / room performance in 2017 was due to April. It was concluded that the size of the positive deviation in April was due to the shortage in the number of full rooms realized rather than consumption.

Table 6. Cost Variance Analysis

Year Month	Total Cost Deviation (\$)			Cost Deviation per Room (\$/Oda)			Cost Deviation per Person (\$/kişi)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
March	+413.0	+608.0	-937.0	0.000	-0.986	+0.116	0.000	-0.387	+0.045
April	-392.5	-511.5	-89.6	-0.279	-0.006	+0.835	-0.121	-0.003	-0.354
May	+103.6	-779.5	-57.5	-0.072	+0.007	+0.008	-0.025	+0.003	+0.003
June	-29.6	0.0	-365.9	-0.073	+0.010	+0.009	-0.022	+0.003	+0.003
July	-169.9	-877.6	-173.3	-0.070	+0.009	+0.010	-0.021	+0.003	+0.003
August	+23.2	0.0	+176.9	-0.067	+0.008	+0.010	-0.020	+0.003	+0.003
September	+190.1	0.0	+544.6	-0.071	+0.010	+0.005	-0.025	+0.004	+0.002
Grand Total	+137.9	-1,560.6	-901.8	-0.632	-0.948	+0.994	-0.234	-0.375	+0.413

Electricity cost deviation analysis for the hotel in general is shown in Table 6. When the total cost deviations are examined in Table 6; It is observed that the deviations in the March and April months of the tourism period started to affect the overall total. It is understood that the hotel has not been able to determine the electricity consumption and costs in the correct periods or to make accurate predictions about these periods. When Table 5 is compared with Table 6, it is seen that positive and negative deviations are similar.

Conclusion

When the sustainability reports of hotels in Turkey are examined, it is observed that they declined to give information about the environmental cost of their reports. In addition to this, the percentage or the amount of change in the environmental elements is included in the years. In order for the sustainability reports of the hotels to reach the required value, information on cost and performance values should be included and even integrated reports should be prepared.

In the study, when the deviations in the hotel are investigated, it is observed that the deviations are similar (positive / negative) in months. Similarly, consumption and cost deviations are similar in years. In addition, when the cost-based performance results are analysed, it is seen that there has been an improvement from 2015 to 2017.

Supporting the deviations of the hotel in general will help the managers to make more meaningful decisions. When the deviation of the segmental consumption in August 2017 is examined, it is observed that the hotel management takes measures in the kitchen and technical service departments. However, in August 2017, a negative deviation of 8.289 kWh in the human resources department unexpectedly revealed that the positive deviation hampered the growth. Costs are created in the cost centres of the enterprise. Considering the cost controls separately from the cost centres of the enterprise, analysing the whole enterprise based on the whole, eliminates the significance of the cost control. The fact that the cost centre managers are not responsible for the costs they will use means that they are removed from the targets of the enterprise. Uncontrolled costs also lead to uncontrolled managers. Concealed costs and concealed administrator failures are spread over the entire cost centre of the enterprise. This leads to the loss of the meaning of the planning, budget and control process, and the inefficient time and cost increase. Segment reporting enables the management of the causes of a negative deviation to be investigated quickly by the management and the necessary measures are taken urgently and the necessary reward, incentive and plan update of the department managers are provided.

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