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4 July 2009

Online at <https://mpra.ub.uni-muenchen.de/25459/>

MPRA Paper No. 25459, posted 28 Sep 2010 02:54 UTC

COST-BASED MANAGEMENT AND DECISION MAKING IN GREEK LUXURY HOTELS

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The use of cost accounting systems by hotel businesses is improving the quality of decision making. The development of theories on costing, combined with advances in information technology, has improved the theoretical capabilities of such systems. However, two questions remain largely unanswered: a) whether these theories lead to tangible improvements; and b) what are the variables that drive the success of cost accounting systems. Our research shows that hotel managers need to be convinced about the use and performance benefits of such systems in the decision making process.

Keywords: *Cost Accounting, Decision Making, Luxury Hotels, Greece*

INTRODUCTION

Managers everywhere make decisions based on accurate and timely information related to the internal and external environment of their organizations. While gathering external information depends on the quality of the overall state of the economy (accounting for transparency, administration, reliability, etc.) in which a firm and its competitors operate, managing internal information flows varies from one company to another. Regardless of its type, every internal reporting system of every firm depends on accounting channels of reporting, namely on managerial accounting. Managerial Accounting (which includes Cost-based Management, Budgeting and Budgetary Control) is concerned with the estimation of expenses and investments that a firm is willing to make in order to achieve its business goals, improve control procedures and foster monitoring of its financial status. Using the right costing system (Full Absorption Costing, Marginal Costing, Activity-based Costing - ABC,



Standard Costing), combined with the right IT support can significantly improve the information flows to the directors of a firm. The effectiveness of such a system is reflected on the soundness of business decisions made by the firm's executives and is measured by the performance targets of the firm. As company needs grow and company sizes expand, demands on reporting (and its support functions) are multiplying. In this context, commercially-available information systems allow companies to customize them based on their internal needs, so that they can play a key role in making strategic and tactical decisions while boosting the overall image of the firm in the eyes of internal and external stakeholders.

A field that is of particular interest for studying managerial accounting systems in the service sector is tourism, and especially hotels. Costing of hotel products (part of service costing) aims at controlling costs (in order to reduce them while improving quality) and using them for making strategic and tactical decisions. Although manufacturing is the usual field for developing and applying theories of managerial accounting, the peculiarities and special circumstances of hotels require more than just a simple adaptation of existing theories. During the last few decades, in parallel to the growth and expansion of the hotel sector, there was an expansion in the range of offered services, with a corresponding distortion in the boundaries between business functions (Rowe, 1993; Field, 2008).

Modern hotels, especially luxury hotels, do not simply offer lodging, food and beverage services; they provide an extended range of services, many of which are offered by non-hotel companies (e.g. conference facilities, spa, golf courses, etc.). In addition, a hotel is a place where offering services to third parties coincides with customer consumption. The number and peculiarities of such activities further complicate the cost cost/return equation and the making of relevant business decisions. The cost/return approach per individual activity is not applicable anymore, because in certain cases there are 'points of attraction' that do not generate net gains but they instead lead to revenues from related activities. In other cases, there is lack of necessary capabilities for performing multiple activities (Hemmington and King, 2000). At the same time, tourist packages, especially the all-inclusive ones, make cost considerations even more difficult as a host of other issues emerge, such as taxation (Bekiaris and Pinakoulaki, 2006).

The need for cost-based management of hotels is this obvious and is already well documented (Sharma, 2002; Mongiello and Harris, 2006; Mia and Patiarb, 2001; Harris and Brown, 1998), as the use of a cost system would reveal a firm's strengths and weaknesses, allow economies

of scale, improve pricing strategies and define the relationships that link capital, labour and materials. However, there are relatively few research findings on the adoption of costing systems by hotel accountants and managers. This article investigates the perceptions of hotel accountants and managers on how cost-based management and decision making are linked within hotel operations. The focus of our research was the luxury hotel sector in Greece – a mature destination with a variety of characteristics (Strong seasonality, family-owned hotels, small number of publicly traded hotel businesses, etc.). In Greece, despite the fact that tourism is a key industry and a significant revenue source for the state, there is no Greek Uniform System of Accounts for Hotels (GUSAH), as one could find in countries like the UK (“A standard system of accounts for hotels”, published by the National Economic Development Council) or the United States (Uniform System of Accounts for the lodging industry, published in 1996). Accounting for hotels in Greece follows the Greek Uniform System of Accounts (GUSA), which is based on the Italian and French Systems of Accounts. GUSA includes an optional group of accounts for monitoring costs.

This article is structured as follows: first, there is a brief presentation of the cost definition process in a hotel business, placing emphasis on the peculiarities of the sector and the offered goods and services. Next, there is an analysis of research findings of various international research efforts related to cost-based management of hotels. In the last part of this article, there is a detailed description and analysis of research findings from an extensive survey of luxury hotels in Greece.

BRIEF PRESENTATION OF THE COST DEFINITION PROCESS IN A HOTEL BUSINESS

Costing records and presents financial and non-financial information related to the acquisition and consumption of resources by a financial unit. It provides relevant information to both financial accounting and managerial accounting (Hornegren et al, 1997; Hilton et al, 2000). Costing in a hotel business is comprised of a set of concepts and techniques that aim to alleviate the gathering, analysis and use of historical costs and other cost categories for use in the decision making process (Fay et al, 1976).

Hotel executives need accurate and timely information regarding their costs, as would their manufacturing counterparts. However, due to differences in the nature of activities and services offered by hotels (including idle costs, range of offered services, geographical distribution

of hotels that belong to a hotel chain, cost structure, etc.), several costing systems used by manufacturing firms are not suitable for use in the hotel sector (Jones and Lockwood, 1995; Harris, 1992 and 1995).

According to Pellinen (2003), there are no extensive references in the international research literature on the use of costing by tourism businesses, and especially hotels. In contrast, Harris and Brown (1998) claim that over the last few years, there is significant research interest in costing an managerial accounting issues in the hotel sector. This difference of opinions may be attributed to the lack of applying new costing and managerial accounting practices in the tourism sector. According to Potter and Schmidgall (1999), managerial accounting in the hotel sector is attracting serious research interest.

The cost identification process for different types of tourism products and services is similar to that followed by manufacturing firms as well as by firms in other sectors.

An indicative list of tourism products is as follows:

- Lodging service.
- Food service and beverages services.
- Telecommunications service.
- Laundry service.
- Swimming pool service/ sea sports services
- Safe deposit service.
- Fax/Computer facilities services.
- Secretarial services.
- Transportation service (to and from airports, ports, etc.)
- Health services (spa, thalassotherapy, massage, etc.)
- Art/Cultural services/ Sightseeing service.
- Other services.

The cost structure of tourism firms is based on their administrative structure which is reflected on their corresponding organigrams. For every organizational unit, there is a corresponding set of profit centres, cost centres, investment centres and other centres of accountability.

The basic cost subcategories or basic cost centres of a hotel business are the following:

- Hotel's Operational Function
- Marketing and Sales function
- Financial and Administration function
- Financial Function

Every basic function or cost subcategory is further divided into sub-functions or cost centres, e.g. hotel's operational function, tourism product development, etc.

More specifically, every hotel unit is comprised of Divisions and Departments that correspond to the unit's cost centers.

Based on the cost structure of a hotel unit, itemized expenses are distributed and allocated to the functions responsible for incurring the corresponding operational costs. The cost of support functions is allocated to the main support centres in order to generate the total cost of the main centres. Support functions are administratively part of the Production function (i.e. of the hotel's operational function). Support cost functions produce outcomes that contribute to the main cost centres of a hotel.

Hotel businesses share a key characteristic in terms of the products/services they offer: the latter are consumed on the day of or during production time, thus creating revenues for the department or costs for the cost centre to which they belong. Hence, every operational department acts as both a cost centre and a profit centre. Costs are therefore linked to corresponding revenues that are created from the consumption of a product or service that is developed or offered by each operational unit. If we further add the cost of the Marketing function, the total figure leads to the definition of Gross Income. The latter encompasses the profitability and productivity aspects of both a department and the service line or tourism product it offers.

REVIEW OF COSTING SYSTEMS LITERATURE

Research findings in the UK (Drury et al, 1993), the United States (Green and Amenkhienan, 1992), Australia (Blaney and Joye, 1990) and Belgium (Kerremans et al, 1991) reached a common conclusion: direct costs account for 75% of total production costs, while the remaining 25% is attributed to indirect costs. Drury (1993) found that 13% of those surveyed indicated that indirect costs amount to 12% of total production costs while 19% of the sample said that indirect costs correspond to more than 37% of total production cost. Most hotels have a large fixed costs component (Kotas, 1997, Brignal et al, 1991), corresponding to almost three quarters of total costs. For example, fixed costs for rooms (mostly comprised of salaries and related personnel costs) correspond to 15-20% of sales revenues, while variable costs are much lower (mostly comprised of laundry costs, internal supplies costs, etc.). Fixed costs for food and beverage services are high and include salaries and related personnel costs. The related variable costs are also high and include energy costs.

High fixed costs result in high gross margins, implying that any increases in total revenue will result in significant growth of a hotel's net income (Kotas, 1982).

In a survey conducted by Brignall et al. (1991), researchers observed hotel chain operations and defined certain practical guidelines for costing. They concluded that hotels are using the profit margin ratio more than the profit contribution ratio. In addition, cost management of hotels is based on cost centres that are defined in terms of hotel departments and functions.

In another survey conducted by Hyvonen (2005), researchers surveyed corporate attitudes towards managerial accounting systems on a sample of 132 of the most advanced Finnish companies (drawn from the forestry, basic materials and electronics sectors). The systems were graded based on their offered benefits and the results were compared against survey findings drawn in Australia by (Chenhall and Langfield – Smith, 1998). Marginal Costing is used by 94% of the surveyed businesses, followed by Full Absorption Costing (86%) and Activity-based Costing (86%). These results reinforce the findings of Lukka and Granlund (1996) who observed that Marginal Costing is dominant within Finnish firms. According to Laitinen (1995), there are three different classes of Finnish businesses that have adopted or are currently adopting ABC, with corresponding percentages of 39%, 26.7% and 39.3%.

Virtanen et al (1996) claim that none of the 12 Finnish firms they observed practiced Activity Management, as they prefer other costing methods and techniques. According to Malmi (1999), the adoption rate of ABC among Finnish firms is close to 12.7%.

In a follow up survey, Brignall (1997) assumes that Standard Costing by service sector firms, like hotels, is less adopted when compared against manufacturing firms. Nevertheless, he believes that applying Standard Costing to standard services can provide real benefits to hotel owners. The most important issue for service sector firms is maximizing dynamic operational parameters, thus resulting in better cost control.

The three most popular practices embraced by the majority of Finnish firms are (Hyvonen, 2005):

- Profitability of products per profit centre
- Budgeting for cost control
- Marginal Accounting.

Activity-based Costing is not widely used, while Target Costing has low adoption rates. In terms of the future plans of Finnish firms, Hyvonen (2005) indicates the following targets:

- Pay more attention to the analysis of profitability per product

- Conduct surveys on customer satisfaction
- Budgeting for monitoring inter-departmental and cross-firm cooperation
- Activity-based Costing
- Benchmarking
- Team working across the firm
- Balanced scorecard

In a survey conducted by Pellinen (2003) on six tourism businesses, the researcher observed that Variable Costing is used by the majority of the surveyed hotels. This is due to the fact that only indirect costs could be attributed directly to products, as the sources of these costs can be objectively measured based on consumption of goods or services.

In the following table, we present the levels of adoption of costing systems in Australia and Japan, as researched by Wijewardana and DeZoysa (1999):

Table 1. Adoption rates of costing systems in Australia and Japan

Costing System	Australia %	Japan %
Real Cost	31	48
Standard Costing	69	31
Full Costing	30	27
Marginal Costing	17	20

We observe that Standard Costing is the most popular costing system in Australia. Real Cost tops the list in Japan, with a percentage of 48%.

According to research findings by (Venieris et al, 2003), it is worth noting that the level of adoption of Activity-based Costing by Greek service sector firms is 44.7%; this is higher than the percentage of service firms using Full Absorption (39.5%). Activity-based Costing is also highly popular among commercial firms (37%). The results of our survey are closer to surveys on Finnish firms: Lukka and Granlund (1996) report an adoption rate of 6% while Rautajoki (1995) reports that 10% of surveyed firms were using ABC. In addition, surveys on US firms indicated low levels of adoption for ABC: 17%, according to Groot (1999), or 24.4%, according to Frey & Gordon (1999). In another survey conducted in Canada, Armitage and Nicholson (1993) showed that only 14% of the sampled firms have adopted ABC within some function/department.

EMPIRICAL RESEARCH

Survey Parameters

This research was conducted during the months of February, March and April of 2006. The survey population was comprised of the all luxury hotels in Greece (i.e. those with a five-star rating, as defined by the Greek legislation, which refers to the adoption of the international star-rating system by Greek hotels). In order to collect the corresponding data, we used the hotel database on the website of the Greek Hotel Chamber. We chose to observe the Greek luxury hotels because they better conform to the requirements of our research:

- they have better accounting department operations
- they have recognized the need for better cost control, due to their sales volume and growth potential.
- They may also use more than one costing system.

The sampling method we used was cataloguing/census-based, as we requested data from the whole target population of 155 Greek luxury hotels. The total population size was 155 Greek luxury hotels (as of the end 2005) and the sample size of respondents was 72. In order to ensure reliable and high quality results, we initially surveyed five luxury hotels. Based on the outcomes of this pilot phase, as well as on our review of relevant international literature and on extensive discussions with personnel from the pilot phase hotels, our survey questionnaire was recalibrated in order to better reflect the goals of our research.

Presentation of Research Findings

Based on the aforementioned international surveys, our research aimed at collecting data for analyzing the following issues on cost practices of Greek luxury hotels:

1. adoption of different types of costing systems
2. handling of particular issues in the costing process of hotel operations
3. presentation of hotel personnel opinions related to their satisfaction from using their costing system, as well as from using the law-enforced CMA (Cost Monitoring Accounts) system
4. presentation of additional needs for cost control and decision making, as stated by hotel personnel.

Effectiveness of pricing methods based on marginal cost

A key question aimed at exploring the opinions of hotel personnel about the effectiveness of the Marginal Costing system. Surveyed personnel could grade the system on a 5-grade Likert scale, with values ranging from 'inadequate' to 'very good'.

According to our findings, 31.9% of respondents graded the system as 'average', while 43.1% gave it a grade of 'good'; this is explained by the nature of hotel operations.

Table 2. How effective do you consider the Marginal Costing System?

	Frequency	Percent	Valid Percent	Cumulative Percent
Inadequate	2	2.8	2.8	2.8
Below Average	11	15.3	15.3	18.1
Average	23	31.9	31.9	50.0
Good	31	43.1	43.1	93.1
Very Good	5	6.9	6.9	100.0
Total	72	100.0	100.0	

Marginal Costing is used by hotels for cost structure and pricing reasons. Direct costs of hotels comprise the largest part of their total production costs. In addition, according to Kloock and Schiller (1997), Marginal Costing is mostly used for short-term planning, whereas Activity-based Costing is the preferred costing method for long-term, strategic planning. Our survey results match those of international surveys that show Marginal Accounting is the most popular accounting system used by hotels (Hyvonen, 2005; Lukka and Granlund, 1996; Drury, 1995).

Standard Cost

With regards to Standard Costs recording, we asked that respondents choose a sentence that better reflects their opinion on the difficulty of recording Standard Costs.

By studying the responses, we concluded that the majority of respondents (41.7%) believe that it is possible to record standard costs but that is a difficult process to be maintained by a business. On the contrary, 17 of the 58 hotel personnel that answered this question believe that standard costing enforces high productivity levels that are difficult to sustain.

In seasonal businesses, like hotels, that exhibit special characteristics in the structure of both their fixed and variable costs, it is not surprising to find that the adoption of standard costing may create more problems than it solves. According to Brignall (1997), Standard Costing for service firms, like hotels, is rare due to their low level of activity during certain periods in a year.

Know-how and usage of ABC

The questions referring to Activity-based Costing were: a) “Are you aware of Activity-based costing?” and b) “Do you use Activity-based Costing?” We combined the analysis of these two questions in order to reach conclusions about hotels that are aware of the ABC system and choose not to use it. Answers to these questions were provided by all surveyed hotels.

According to the data we collected, 51 hotel managers of the surveyed hotels (70.8%) were aware of Activity-based Costing but only 14 of them actually use it, thus resulting in an adoption rate of 19.4%. In addition, 20 hotels (27.7%) declared that they were neither aware nor were users of Activity-based Costing.

The results of our survey are in contrast to the very positive levels of Activity-based Costing adoption reported by (Venieris et al, 2003). According to their functions, it is worth noting that the level of usage of Activity-based Costing by service sector firms is 44.7% - this is above the percentage of service firms that use Standard Costing (39.5%).

User’s Satisfaction from Accounting Costing System

A modern Managerial Accounting Information System is a reporting system for providing the management of the firm with specialized financial reports as well as information deemed necessary for decision making, such as budgets, deviations from norms and responsibilities (Hall, 1998).

Management Control Systems include all techniques and mechanisms used by businesses for achieving stated goals and strategies

(Cunningham, 1992). These systems pertain to either administrative activities (such as costing, budgeting and budgetary control) or to issues related to the behaviour and performance of personnel.

One of the most important tools for measuring corporate performance is Managerial Accounting and its applications. Through proper Managerial Accounting applications, corporate performance can be measured through either stock prices and financial ratios of a firm or the use of advanced performance measurement techniques, such as the balanced scorecard (Kennerley, 2001; Rom et al, 2007). In terms of MAIS, a firm must observe the cost-benefit profile of their adoption and implementation. This is because, on the one hand, the MAIS end-users are the company personnel itself and user-friendliness should be a key implementation parameter; on the other hand, MAIS must include costing and budgeting tools that are important for cost control and decision making. The goals of an operating unit for costing are linked to MAIS goals (Varvakis, 2003):

- Increased accuracy in recording corporate performance.
- Exercising pricing strategies.
- Control of production effectiveness.
- Pinpointing of activity levels where the company achieves optimal cost.

Taking into consideration the variety and special characteristics of luxury hotel services, we investigated the level of satisfaction of hotel personnel by the data provided by the Accounting-Costing system of a hotel. Surveyed firms were asked to grade their satisfaction on a 5-grade Likert scale, with values ranging from “Somewhat dissatisfied” to “Very satisfied”. It is worth noting that the majority of respondents (54.2%) were neither satisfied nor dissatisfied from existing MAIS, while the percentage of respondents that were highly satisfied by their Accounting-Costing system is very low.

We received answers to this question from all surveyed firms and our findings are as follows:

Table 3. Satisfaction level regarding the accounting-costing MAIS of a firm

	Frequency	Percent	Valid Percent	Cumulative Percent
Somewhat dissatisfied	13	18.1	18.1	18.1
Neither satisfied nor dissatisfied	39	54.2	54.2	72.2
Somewhat satisfied	13	18.1	18.1	90.3
Very satisfied	7	9.7	9.7	100.0
Total	72	100.0	100.0	

Implementation of Cost Monitoring Accounts

As we have already mentioned, Greek Uniform System of Accounts (GUSA) includes an optional group of accounts for monitoring costs like the one used in the French System of Accounts. The System of Cost Monitoring Accounts (CMA) was introduced in 1980, under the title Analytical Accounting, as part of the GUSA. CMA is concerned with the identification of: a) costs related to basic organizational functions and cost centers; b) costs of goods per category and type; c) mixed results per category and type of stock sold; and d) accounting monitoring of stock per category, type, volume and value.

We briefly mention that CMA is concerned with allocation of stock, expenses (such as salaries, rents, taxes, etc.), revenues and results to the bearers of costs, revenues, income and results.

We thus aimed at measuring the number of hotels that have implemented CMA through their IT systems. We explored the relationship between the following questions: “Are you following CMA rules in your firm?” and “Is there an IT support system for CMA?” The percentage of responses was 98.6% of the total number of surveyed firms.

Based on aggregate results, 30 out of 71 hotel units follow CMA rules, but 22 of them do not have a corresponding IT support system. This intensifies the need for better and more complete communication of financial information to hotel management as the lack of such IT systems complicates the handling of the multiplicity of accounting costing parameters on a hotel’s operations. The majority of the surveyed firms (41; 57.7%) do not follow CMA rules.

Exploring hotel personnel opinions on the suitability of CMA

We also investigated the link between the following questions: “Are you using the CMA?” and “Is the law-enforced CMA system appropriate?” The analysis of responses on these questions is based on the outcome of the previous questions that indicated a negative attitude by hotel management towards the adoption of CMA rules. We received 71 responses on these questions (98.6% of sample size).

Based on these responses, which are summarized in the following table, only 14 hotels believe that the current law-enforced CMA system is appropriate; 9 hotels actually use it while the remaining 5 do not. It is worth noting that 57 hotels believe that the CMA system is problematic, even though 21 of them actually use it. The analysis that follows emphasizes the requirement of firms, and especially hotels, for amendments and improvements of the current CMA system, which does not fully address the special circumstances of firms and may require changes in the timing and enforcement of the Full Absorption.

Table 4

		“Is the law-enforced CMA system appropriate?”		
Are you using the CMA system?		Yes	No	Total
	Yes	9	21	30
	No	5	36	41
Total		14	57	71

Suitability of the CMA system and necessity for GUSAH

In order to reinforce the hotel’s arguments about the inadequacies of the CMA system, we cross-analyzed the following questions: “Do you consider the development of Greek Uniform System of Accounts for Hotels (GUSAH) a necessity?” and “Is the law-enforced CMA system appropriate?” We received answers from all the surveyed firms.

Based on the findings on these questions that are shown on the following table, it is worth noting that 51 hotels (70.8%) believe that the development of a GUSAH is a necessity, while stating that the law-

enforced CMA system is inappropriate. Only 6 hotels (8.3%) gave totally negative feedback.

This analysis emphasizes the requirement of firms, and especially of hotel units, for amendments and improvements of the current CMA system, which does not fully address the special circumstances of firms and may require changes in the timing and enforcement of the Full Costing system.

Correlation of questions “Do you consider the development of GUSAH a necessity?” and “Is the law-enforced CMA system appropriate?”

Table 5

		“Is the law-enforced CMA system appropriate?”		Total
		Yes	No	
“Do you consider the development of GUSAH a necessity?”				
	Yes	8	51	59
	No	6	7	13
Total		14	58	72

Costing and time-based allocation of idle costs of hotels

The cost of low-activity characterizes seasonal sectors, and especially the hotel sector. We investigated how hotels handle this issue through the following questions: “Should costing include idle costs?” and “How do you allocate idle costs in your hotel?” We received answers from 100% of surveyed firms.

In our sample, 54 out of 72 hotel units (75%) believe that costing should include idle costs. In terms of cost allocation, 44 of them (81.4%) allocate costs on a 12-month basis, while 10 hotels allocate costs on a 10-month basis of hotel activity. Only 18 businesses indicated that costing should not include idle costs, even though 14 of them allocate such costs

on a 12-month basis and 4 hotels allocate such costs on the period they are actually active and operating.

Productivity/Performance per customer class parameters and importance of performance monitoring in the decision making process

The relevant questions were the following: “Are you monitoring productivity/performance per customer class parameters? For example, per country of origin, tourist package, etc.” and “Do you believe that such costing criteria are useful in decision making?”

Based on responses we gathered, only 17 hotels are monitoring performance per customer class parameters and consider it an important costing criterion that is useful in decision making. In contrast, 52.7% of respondents do not monitor performance per customer class parameters, as they do not believe that such action will provide them with information that can be useful in decision making.

Correlation of questions “Are you monitoring productivity/performance per customer class parameters? For example, per country of origin, tourist package, etc.” and “Do you believe that such costing criteria are useful in decision making?”

Table 6

		“Do you believe that such costing criteria are useful in decision making?”		Total
“Are you monitoring productivity/performance per customer class parameters? For example, per country of origin, tourist package, etc.”		Yes	No	
	Yes	17	0	17
	No	17	38	55
Total		34	38	72

CONCLUSIONS

Given the importance of the hotel sector in the global economy, it is necessary to apply management control systems in hotel businesses. Hotel managers should monitor the external business environment in order to define appropriate and effective strategies. Decision making should be based on Managerial Accounting tools, including costing, budgeting and budgetary control tools. Separating hotel operations into multiple parts and identifying costs for each part is a way to analyze information on the performance, profitability and overall financial status of a hotel. Using the appropriate costing system (Full Absorption Costing, Marginal Costing, Activity-based Costing, and Standard Costing) will result in proper identification of costs and profitability of hotel units. In addition, hotel management control systems should contribute to the use of budgets as forecasting tools, the recording of business environment effects on a hotel's operations and the planning and control (Sharma, 2002). Organizations and businesses that compete in an economic environment of new product/service development are more open to adopting new managerial practices, which are usually endorsed by higher management aiming at improving processes and information flows (Gosselin, 1997).

In Greece, the majority of hotels are family-owned. Even hotel chains do not fully follow modern costing practices, as shown by our survey results. An exception to this rule is publicly-traded luxury hotels (there were three such hotel businesses at the time of our survey).

Summarizing the key findings of our survey, it is worth noting the following:

- Greek luxury hotels that use costing tools allocate costs per profit centres and per cost centres; they do not allocate costs per customer class, stay or room type. Only 12.2% of surveyed hotels allocate costs per customer class. This is because such a cost allocation is predicated on Activity-based Costing that is used only by 19.4% of the surveyed hotels.
- A key finding was that 54.2% of surveyed hotels were neither satisfied nor dissatisfied by their accounting-costing MIS. This proves: a) the lack of awareness among hotel personnel about the benefits that a modern IT system can offer, and b) the negative attitude towards using modern costing methods that demand support by IT systems.
- Regarding the need for GUSAH, responses are very positive (70.8% of surveyed hotels). In contrast, hotel personnel are negative towards the CMA System (79.1%). We believe that this

gap (which is observed despite the fact that both offer standardization) is attributed to the difficulty in complying with the high demands imposed by CMA and to the lack of proper support by IT systems.

As described earlier, the main goal of costing is the accurate recording and allocation of costs to goods, services and customers. With the use of managerial accounting tools, these elements will improve the quality of information flows used for decision making. The decision making process is alleviated when all data used in the process are based on accurate, complete, flexible, relative, simple, double-checked, accessible, secure, reliable, timely and value-based information (O' Connor, Martinsons, 2006). The use of MAIS in the hotel sector is deemed necessary as they will minimize costs related to the allocation and transfer of information and knowledge to and from end users. This further entails timely and continuous data feedbacks to the system and its users, as well as establishing auditing and monitoring processes for the system.

We believe that this study is part of a broader future research effort which will investigate the use of budgeting and budgetary controls by hotels, based on costing studies for hotels. If all the tools of managerial accounting are deployed within hotels settings and are monitored by modern MAIS, hotel managers will have more complete, timely and accurate consultation on: a) cost behaviours; and b) decision making for both short-term and long-term planning.

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SUBMITTED: JUNE 2009

REVISION SUBMITTED: AUGUST 2009

ACCEPTED: SEPTEMBER 2009

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