ABSTRACT

Management accounting (MA) techniques have evolved in the recent years in the various companies. We have studied the MA techniques that are currently being used by different types of hotels. The sample includes 61 hotels, which were analyzed between 2010 and 2012. MA is a tool incorporated in the daily management practices of Portuguese hotels. However, we verified that the hotels have different behaviors in this area, which entailed a comprehensive study on the causes of this diversity. We applied the contingency theory to explain our findings, because this theory is based on the premise that the MA techniques are not used equally by all organizations.

Keywords: Management Accounting, USALI, Contingency Theory, Lodging Industry, Portuguese Hotels.

INTRODUCTION

MA supports hotels to improve their performance, thus becoming relevant to study MA adopted by them, particularly which instruments and techniques. It is important the use of MA information to allow the optimization of the decision making processes by hotel managers, due to the fact of them facing a big competition (Downie, 1997). Some authors suggest that MA techniques are different among companies from different industries (Downie, 1997; Williams & Seaman, 2001; Rowe et al. 2008), presenting some arguments that cause this diversity: product life-cycle, structure of costs, technology and production, intensity of competition, uncertainty and price flexibility, competitive strategies and organizational designs.

This study consists on update of our another paper (Gomes et al, 2011) with the objective of characterizing MA in the Portuguese hotel enterprises, identifying the techniques adopted, the deepness of their use, the degree of satisfaction of management with these techniques and their adequacy for the decision-making process, understand the extent to which the industry adopts and use the Uniform System of Accounts for the Lodging Industry (USALI). We have also the expectation of identify the factors that influence the behavior of the hotels in their practices of MA. We have kept the contingency theory to explain the behavior of hotels managers in this subject, because we believe that this theory, which has been applied successfully in several accounting studies, indicates the right way to achieve our goals. The present research project as selected as object of the study, the Portuguese hotels. The sample includes 61 hotels, which were analyzed in the years 2010, 2011 and 2012.

LITERATURE

According to Harris & Brown (1998), the hotels offer products with significantly different characteristics, if we compare with others kinds of business activities. However, the lodging industry must observe the MA techniques in other industries, and then should adapt to the specific needs of hospitality activities.
products. This economic activity is characterized by having a great volatility in demand and fixed costs structure, perishable goods, high competition and a great diversity of services due to the heterogeneity of clients (Downie, 1997; Mia & Patiar, 2001). As a consequence of several specificities of the hotels, the information required by managers to make decisions is different from other industries (Mia & Patiar, 2001). The MA techniques have an important role in the decision making process (Oliveira et al., 2008; Zounta & Bekiaris, 2009). Downie (1997) refers several decisions related with accounting information, for example, the compilation of marketing plan needs a financial budget. Hotels have two sources of information: market research and accounting information. The ideal is that this information could be aligned and coordinated thus supporting the managers (Downie, 1997). The organizations make decisions based on information provided. MA can satisfy this need.

There is a growing desire to understand the practice of MA in hotels (Harris & Brown, 1998; Pavlatos & Paggios, 2009). It has been found a difference between theory and practice of MA. The contemporary techniques are very developed in theoretical terms but contrasting they have a relatively reduced adoption within companies (Jones, 2008). According to Fowler (2010), it doesn’t mean that the contemporary techniques are irrelevant, because in several cases they are not adopted due their high costs of implementation. The MA techniques, according Ferreira (2002) may be divided into traditional and contemporary (Table 1).

<table>
<thead>
<tr>
<th>Traditional techniques</th>
<th>Contemporary techniques</th>
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<tr>
<td>Budgeting;</td>
<td>Return on investment;</td>
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<td>Budget deviation analysis;</td>
<td>Activity-based budget;</td>
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<td>Product costing;</td>
<td>Strategic Planning;</td>
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<td>Product profitability;</td>
<td>Tableau de bord;</td>
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<td>Activity-based costing;</td>
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<td>Benchmarking;</td>
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<td>Economic Value Added;</td>
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<td>Product life cycle costing;</td>
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<td>Target costing.</td>
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Source: adapted from Ferreira (2002).

In Portugal, Gomes (2007) analyzed the MA techniques used by industries in different sectors, where the lodging industry was also represented. The mostly used traditional MA techniques were Budgeting, Tableau de Bord and Return on investment. The contemporary techniques are less used, though having some relevance the Balanced Scorecard, Activity-based budgeting, Activity-based costing, Target costing and Benchmarking. Pavlatos & Paggios (2008) made a research in Greece, concerning the accounting techniques adopted by hotel units. They concluded that traditional techniques are widely used when compared to the contemporary techniques less widespread. Gomes et al. (2011) reached the same conclusion regarding the Portuguese hotels.

Budgeting and Budget deviation analysis are the commonly wide technique used by hotels (Phillips, 1996; Jones, 2008; Pavlatos & Paggios, 2008; Uyar & Bilgins, 2011; Urquidi, 2013). Cruz (2007) concludes that budgets are a valid tool to the budgeting control process within a hotel, thus remarks that budgets used in hotels have some specific aspects when compared to the budgets elaborated to other industries. The budgets should not be rigid but flexible. A budget committee and a budget manual are common for Turkish hotels. These hotels use Budget deviation analysis for evaluating performance and providing information. The main objectives are to find out the problems and a timely cost control (Uyar & Bilgins, 2011). Urquidi (2013) say that some hotels in Spain use this technique. Product costing is very important in a managerial accounting information system of a hotel (Zounta e Bekiaris, 2009). The main goal of costing is the accurate recording and allocation of costs to products, services and customers. The Greek luxury hotels use the costing product, but they only allocate costs to profit and cost centers. Urquidi (2013) say that some hotels in Spain use this technique. Strategic Planning is widely mentioned in the field of hotel management (Phillips, 1996). He remarks that the Strategic Planning existent in hotels is quite incomplete since it is commonly an expansion of the financial budget with less emphasis on strategic issues. According to Cruz (2007), planning is an essential tool for their management and budgets are a part of the process. Activity-based budget have a good influence in the management of hotels like activity-based costing (Cruz, 2007). It is more relevant the use of Activity-based costing than the traditional cost center approach, if the hotel is using the customer profitability analysis (Downie, 1997). Vaugh et al. (2010) refer that activity-based costing was implemented with success in a kitchen in a Las Vegas casino, which
allowed understand a hotel’s cost structure. Balanced Scorecard has several of measures (financial and non-
financial). The hotel modern performance system should be multidimensional (Sainaghi et al., 2013). Customer
profitability analysis has a positive influence in the management of hotels (Cruz, 2007). It should
be more developed (Donn, 1997). By using this technique, hotels can determine the profit contribution of
clients. The last three MA techniques are used by some hotels in Spain (Urquidi, 2013). Benchmarking is a
common accounting technique due to the internationalization of hotel chains operations, allowing the
comparison among different hotels business units (Cruz, 2007). Lee and Kim (2009) analyzed if the
Economic Value Added technique influenced the market profitability for the hotel industry, but found out
that this technique was not a good way to measure this.

As a conceptual framework USALI is generalized in the world, particularly among multinational
hotel chains. However, Faria (2007) presents that less than a half of hotels use the USALI. Pavlatos &
Paggios (2007) found few national hotels utilizing de USALI in Greece. Gomes et al. (2011) concluded that
there are evidences of a progressive knowledge and use of this framework by Portuguese hotels to support
the information processing.

In the literature there may be found several studies that refer the determinants that make one
company adopt for some MA techniques, supported by the theory of contingency. The contingency theory
is based on the premise that the MA techniques are not used equally by all organizations (Haldma & Laats,
2002; Urquidi, 2013). The contingency theory explains the relationship between the environment and the
techniques used for achieving the objectives of a hotel (Urquidi, 2013). These techniques depend upon the
specific characteristics of an organization, like as organizational context and structure. The contingency
theory helps to explain the impact of factors in MA. Zounta & Bekiaris (2009) argued that hotel managers
should monitor the external environment, before implementing an information system. Several authors use
this theory when examined divers factors (Haldma & Laats, 2002; Cadez & Guilding, 2008; Urquidi, 2013).
According to Hayes (1977), there are three subgroups factors that influence the organization management,
such as internal factors, interdependency factors and environment factors. Haldma & Laats (2002)
subdivided into two general groups: external and internal factors. The internal factors are organizational
aspects, technology and strategy. Uyar & Bilgin (2011) refer that the differences in MA were attributable to
hotels sizes, complexity of operations, uncertainties, coordination and communication among departments.

The fact of company being in a highly competitive market (Tayles & Walley, 1997; Urquidi
2013), organizational variables such as communication, coordination, decentralization and formalization
(Luft & Shields, 2003) and business strategy and market orientation (Cadez & Guilding, 2008; Urquidi,
2013) influence MA techniques adopted by companies worldwide. The environmental uncertainties have
been associate with the need of a wide data (financial or not). So, Oliveira et al. (2008) and Urquidi (2013)
mention that competition, plays an important role in influencing the introduction of new accounting
techniques in the industry. Sharma (2002) argued that a turbulent and a competitive environment imply a
greater use of MA techniques. A competitive organization is more open to adopting contemporary MA
techniques (Zounta & Bekiaris, 2009).

According to Adler (2011) and Urquidi (2013), the strategy, used by a hotel, influences the MA
techniques. Acquaah (2013) argued that there is a link between MA and business strategies. MA should
support the strategy. If a hotel adopts the strategy of leadership in costs, it will be more important the
calculation of product cost and the implementation of information systems that help in the calculation and
control of product cost (budgeting, budget deviation analysis and product costing). If a hotel adopts the
strategy of differentiation, it will be more important the new products and markets. They want to know the
client needs. So, it will be chosen the balanced scorecard and the customer profitability analysis. We can
say that the techniques vary according to the goals defined for MA (Urquidi, 2013). The strategy of
leadership in costs needs a diagnostic control system, whereas the strategy of differentiation needs an
interactive control system, because encourages innovativeness (Acquaah, 2013). The firm size (measured
through sales volume or number of employees) is also a factor that influences the MA techniques in a
company (Cadez & Guilding, 2008; Adler, 2011; McManus, 2013). Cadez & Guilding (2008) refer that a
large company implies an increase of complexity and sophistication in MA techniques. Such as, there are a positive association between the size of a company and the use of strategic MA.

**Hypotheses**

According to the literature, we found that the traditional MA techniques have a higher utilization compared to contemporary MA techniques. The main objective of MA technique is the decision making process for the most companies. There are studies that refer several determinants supported by the theory of contingency that influence the MA from a hotel. In this study we opted to analyze the competitive environment, the levels of competition, the strategy and the size of the hotel. In the light of these conclusions, we developed the following hypotheses:

- **H1**: The use of traditional MA techniques is higher than the use of contemporary MA techniques in lodging industry.
- **H2**: The main objective of MA is the decision making process.
- **H3**: Less than fifty percent of hotels use the USALI.
- **H4**: The hotels that are in a competitive environment are those that use more the MA techniques.
- **H5**: The hotels with more levels of competition are those that use more the MA techniques.
- **H6**: The use of a strategy of differentiation is significantly related to the use of the following techniques: balanced scorecard and customer profitability analysis.
- **H7**: The use of a strategy of leadership in costs is significantly related to the use of the following techniques: budgeting, budget deviation analysis and product costing.
- **H8**: The size of the hotel significantly influences the use of MA techniques.

**METHODOLOGY**

According to Yin (2009), it was decided to adopt the method of questionnaire through of personal interviews. The data was processed using SPSS (Statistics Packages for Social Sciences). In order to characterize the MA at the Portuguese lodging industry we utilized the univariate analysis. The relationships defined in the hypotheses were tested by univariate and bivariate analysis, for example, we have utilized: mean, mode, Spearman’s Rho and Mann-Whitney test. According to Pestana & Gageiro (2008), Spearman’s Rho measures the intensity of the relation among variables, and is commonly used to describe the relation among two ordinal variables or one ordinal and other scale variable. Due to the fact that this coefficient is not sensitive to asymmetric distributions, it does not require normal populations.

**FINDINGS AND DATA ANALYSIS**

In this study were analyzed 61 Portuguese hotels from different categories. From these, 17 belong to national chains, 2 are subsidiaries of multinational hotel chains. The annual turnover ranges from 16,000€ to 60,000,000€. We used the Porter’s competitive forces model (Porter, 1985) to analyze the five competitive forces and we added a sixth factor the influence of the Government, in order to understand the relative influence of each force in affecting the industry. We conclude that the power of buyers is the strongest force, with a mean of 5.48, followed by the rivalry among existing competitors. Concerning the intensity of competitors within the industry, this is more evident in terms of the price, being the mode 7 “very high”. Of the 61 inquiries, 78.7% (48) have implemented and use MA. The 13 units that do not use this practice are small hotels and work a long time ago. The users of MA have a greater power of “rivalry among existing competitors”, “threat of new entrants”, “suppliers”, “buyers” and “government”. The intensity of the competition is greater in the users at price, labor force and promotion. The hotels that use MA are included in environment more heterogeneous relatively to customers, competitors and market.

As previously discussed, MA has a vast scope of techniques, some of which are considered to be traditional MA techniques. From these, the ones that are most used by inquiries are Budgeting, Budget deviation analysis and Strategic Planning, with 81.3%, 68.7% and 69.3% respectively. This corroborates
with what is described in the literature review. Concerning the contemporary MA techniques, the results are opposed to the previous ones, because all the techniques have a score below the null value. So, we have found that the H1 is not rejected. The traditional MA techniques are more used than contemporary techniques. Both the mean and the mode are higher in the traditional techniques. The hotels use MA mainly with the purpose of supporting their decision making process and the budgeting process too. So, we can say that the H2 is not rejected. The process of decision making is priority.

Concerning the use of USALI, we observe that only 27.9% of the hotels use. All hotels, that use USALI, have got implemented MA. So, the H3 is not rejected, because less than a half uses USALI. We have chosen the Mann-Whitney test, where we defined the following hypothesis: H0: The distribution of turnover is the same across the two groups of hotels (that used or not USALI); Ha: The distribution of turnover is different across the two groups of hotels (that used or not USALI). We rejected the H0 with a significance of 1%. We found that smaller hotels don’t use USALI.

When analyzing Spearman’s Rho of the MA techniques with variables that characterize the competitiveness within the industry (Porter’s competitive forces), we found some moderate associations thus the correlation coefficient is between -0.456 and 0.433. This correlation is positive with Suppliers, Buyers, Threat of new entrants, Power of substitutes so we can conclude that generically, the hotels that use the MA techniques are the ones who recognize to face a bigger competition. However, we have a correlation negative with the government, in other words, if the government has a bargaining power, the hotels use less the MA techniques. So, the H4 is not rejected, because based on Porter’s competitive forces model (Porter, 1985), we can say that four forces (Threat of new entrants, Power of suppliers, Power of buyers and Power of substitutes) influence positively the use of MA techniques significantly. When analyzing Spearman’s Rho of the MA techniques with variables that characterize the levels of competition (Price, Labor force, Buying of goods and Promotion), we found some moderate positive associations thus the correlation coefficient is between 0.287 and 0.47. So we can conclude that generically, the hotels that use the MA techniques are the ones who face high levels of competition. So, the H5 is not rejected, because the levels of competition influence positively and significantly the use of MA techniques. Budgeting and Budget variation analysis are the techniques which highlights a higher level of association with labor force and promotion competition.

If we compare the mean of use from balanced scorecard and customer profitability analysis in the hotels that have a strategy of differentiation and those that have a strategy of leadership, we verify a greater use of these techniques by hotels that have adopted the strategy of differentiation. However, we have a nominal variable that characterizes the strategy of the hotel and several ordinal variables that characterize the use of MA techniques. So, we have chosen the Mann-Whitney test, where we defined the following hypothesis: Ho: The distribution of use of balanced scorecard/customer profitability analysis is the same across the categories of strategy. Ha: The distribution use of balanced scorecard/customer profitability analysis is different across the categories of strategy. We rejected the H0 with a significance of 5% for the balanced scorecard. We not rejected the H0 for the customer profitability analysis. We found that hotels with differentiation strategy use more the balanced scorecard. Thus, H6 is not rejected for customer profitability analysis. If we compare the mean of use from budgeting, budget deviation analysis and product costing in the hotels that have a strategy of differentiation and those that have a strategy of leadership, we verify a greater use of these techniques by hotels that have adopted the strategy of differentiation. According to the budgeting/budget deviation analysis/product costing is the same across the categories of strategy. Ha: The distribution use of budgeting/budget deviation analysis/product costing is different across the categories of strategy. We only reject the H0 with a significance of 1% for the budgeting. We not rejected the H0 for the budget deviation analysis and product costing. We found that hotels with differentiation strategy use more the budgeting. Thus, H7 is rejected. We cannot confirm what said Urquidi (2013). In Portuguese hotels with differentiation strategy there is a more common use of MA techniques, but only is significant for balanced scorecard and budgeting. The annual sales turnover could also be a variable that influences the use of MA techniques. We decided to analyze the intensity of the relation between the adoption of MA techniques and annual sales turnover through Spearman’s Rho. The coefficients that have been found are all positive, and we can confirm that the hotels with higher annual
sales turnover adopt a large number of MA techniques. Note that one MA techniques have significant coefficients, bigger than 0.5 (Budget deviation analysis). The H8 is not rejected, because some MA techniques are correlated with the turnover of the hotel.

CONCLUSIONS

Management accounting (MA) techniques have evolved in the recent years in the various hotels. It is important the use of MA information to allow the optimization of the decision making processes by hotel managers, due to the fact of them facing different kinds of competition. The Portuguese hotel managers believe in that, because most of the hotels that have answered our inquiry use MA techniques, with the main purpose of providing information to decision making process. The traditional MA techniques are used frequently (Strategic planning, Budgeting, Budget deviation analysis), what corroborates with several authors cited in the literature. In the hotels that were subject to this study, there is a mismatch between theory and practice of MA, because some of the contemporary techniques are not known and thus not adopted by the hotels. This fact confirms the conclusions of Jones (2008). Nevertheless, the contemporary MA techniques frequently more adopted by the hotels are the ones more present in the literature (Activity based costing and Activity based budgeting). In Portugal, there is a weak use of USALI. It is not fully expanded yet across the hotels. It is more used in the large hotels.

We have tested several hypotheses, where we found some drivers of adoption of MA in lodging industry. By using Spearman’s Rho we verified that there is a moderate association between variables that characterize the competition within the sector and the degree of adoption MA techniques. Based on Porter’s competitive forces model (Porter, 1985), we can say that four forces (Threat of new entrants, Power of suppliers, Power of buyers and Power of substitutes) influence positively the use of MA techniques significantly. When analyzing Spearman’s Rho of the MA techniques with variables that characterize the levels of competition (Price, Labor force, Buying of goods and Promotion), we found some moderate positive associations. So we can conclude that generically, the hotels that use the MA techniques are the ones who face high levels of competition. Having that present, we confirm that competitiveness within the industry as a positive influence the MA techniques adopted by hotels, an idea previously transmitted by Tayles and Walley (1997).

We compared the use of balanced scorecard, customer profitability analysis, budgeting, budget deviation analysis and product costing in the hotels that have a strategy of differentiation and those that have a strategy of leadership. We verified a greater use of these techniques by hotels that have adopted the strategy of differentiation, but only are significant for balanced scorecard and budgeting. So, we cannot corroborate with Urquidi (2013). The size of the hotel (annual sales turnover) significantly influences the use of MA techniques, on this account some MA techniques are correlated with the turnover of the hotel. In conclusion, competition, strategies of business and annual sales turnover influence the adoption of MA techniques at hotels.

Managerial Implications

It is clear from this investigation that management accounting is very important to hotel managers, because it is a source of information for their decision making. However, the managers must optimize the process by choosing MA techniques according to external and internal determinants that characterize the hotel. This study could also help academic institutions to define their research orientation.

Limitations and future research

This study was done for three years, so our answers are not in the same cyclical period. We studied a few determinants, but according with the contingency theory there are more factors that can influence the management accounting techniques. So, in a future research, we will develop the study through the organizational and cultural variables.
REFERENCES


