

MANAGEMENT ACCOUNTING PRACTICES IN HOSPITALITY AND SERVICE ENTERPRISES: A COMPARATIVE RESEARCH

Mohinder Chand*, Ankush Ambardar**

Abstract *This paper compares the use of management accounting practices in hospitality and service enterprises operating in India, using data obtained from a survey among 100 hospitality and 100 service enterprises. Our main aim is to identify the significant management accounting practices used in the sample respondents and to investigate whether management accounting practices differ significantly between hospitality and service enterprises, and whether these differences can be explained by differences in terms of demographic characteristics. The findings of study identified most important management accounting practices in the sample Indian hospitality and service enterprises. This research found significant differences in the application of management accounting practices among the Indian hospitality and service enterprises. The results indicate that there is no significant relationship between management accounting practices variables and respondents' characteristics. Finally, this study contributed to the current knowledge in management accounting practices in hospitality and service industry.*

Keyword: *Enterprises, Management Accounting, Hospitality, Service, India.*

INTRODUCTION

Globalization along with several advancements in technology has substantially transformed the environment in which businesses operate (Chand, 2009). In fact, advancement in production and service techniques has transformed the liking and disliking of the customers. Today, businesses are more competitive not only globally but also at national and regional levels. As a result, it is now even more critical that business enterprises in India have appropriate management accounting systems in place such that these enterprises may compete effectively in this changing environment. Despite being of recent origin, management accounting remains a bit of a poor in the context of practice and research in developing countries such as India. However, recently the subject has shown significant importance in terms of competitiveness and efficiency (Islam and Kantor, 2005; Ghosh and Chan, 1997). Sulaiman et al., (2004) compared management accounting practices between two nations and stated that traditional management accounting practices were widely used in India and Singapore. They suggested that new management accounting techniques have been more relevant to companies that take a more strategic focus to business, and thus were more effective for global competitiveness. However, very little is known about management accounting practices and their use in tourism and hotel enterprises

(Pellinen, 2003). Most of the researches in management accounting have traditionally focused on accounting systems of large manufacturing companies (Duck, 1971; Jones, 1998; and Burgess, 1996). In addition, most accounting researchers interested in service enterprises have conducted their research in non profit, public sector organizations (Olson et al., 1998). There is no question about the importance of the above mentioned surveys in accounting, but the number of studies on management accounting of other profit seeking organization than auditing firms has remained very limited (Brignall et al., 1991; Sharma, 2002). Harris and Brown, (1998), and Potter and Schmidgall, (1999) believe that little innovation has occurred in management accounting practices and there are many issues that deserve research attention in hospitality enterprises.

The enormous changes during the last ten years in service operations and information technology have dramatically affected the environment of management accounting practices in hospitality enterprises. Also recent research has introduced new measuring and reporting concepts that, in turn, have created an expanded role of management accounting in service organisations especially hospitality enterprises. These developments required that more exploratory studies should be conducted in the area of management accounting in comparative nature.

* Professor, Department of Tourism and Hotel Management, Kurukshetra University, Kurukshetra, Haryana, India.
Email: mohinderchand@rediffmail.com

** Assistant Professor Department of Tourism and Hotel Management, Kurukshetra University, Kurukshetra, Haryana, India.
Email: ankushambardar@rediffmail.com

In most developing countries, hospitality and service enterprises constitute the bulk of the industrial base and contribute significantly to their balance of payment, regional development, employment, and GDP (Chand, 2009). India has nearly one million such enterprises, which account for almost 30 percent of industrial output and 50 percent of India's total exports (Ministry of Finance (India), 2011). It is the most important employment-generating sector and is an effective tool for promotion of balanced regional development. These account for 50% of private sector employment and 30–40% of value-addition in service sector. It produces a diverse range of products both for domestic and foreign tourists. Being such a dominant sector makes the industry a useful research site for this investigation.

In light of the above, the objective of this study is to identify the significant management accounting practices used in the sample respondents and to investigate whether management accounting practices differ significantly between hospitality and service enterprises and whether these differences can be explained by differences in terms of demographic characteristics.

THEORETICAL CONSIDERATIONS AND HYPOTHESIS DEVELOPMENT

During the recent past numerous studies have been appeared in the field of management literature to explore the application of management accounting practices in different countries (Chand and Dahiya, 2010; King Robyn et al., 2010; Yeshmin Farjana and Fowzia Rehana, 2010 and Maliah Bt. Sulaiman et al., 2004). In other words, these studies have identified some of the management accounting practices in a broader sense which are widely used globally. However, most of the study in relation to management accounting techniques conducted in world is on manufacturing firms as the concept of management accounting has emerged in manufacturing organizations. Now researchers and academicians are trying to pay attention on the hospitality and service business firms as management accounting plays the critical role in creating a competitive advantage for the organizations (Chand and Dahiya, 2010; King Robyn et al., 2010; Yeshmin Farjana and Fowzia Rehana, 2010). Joshi (2001) examined the management accounting practices in a sample of 60 large and medium size manufacturing companies in India. The findings reveal that the adoption rate in India for traditional management accounting practices was higher than for the recently developed techniques. Yeshmin Farjana and Das Sumon (2009) revealed that the financial institutions used budgetary control analysis and variance analysis to measure their performance among the fourteen management accounting techniques. Narasimhan and Thampy (2002) designed activity-based costing system for ascertaining service cost for different customers with a case study of two

branches of a large Indian private sector bank. The use of activity-based cost information in benchmarking, branch network restructuring, business process outsourcing, and identification of value-added and non-value added activity has been argued.

Collier and Gregory (1995) highlighted the role of management accounting in the provision of information in the development of strategic plans as well as for monitoring the market and competitors' price structure and costs. Similarly, Mia and Patiar, (2001) opined management accounting can assist tourism and hospitality organizations in making decisions relating to sales promotion, pricing, and profitability. Further, Lowry (1990) stated that the characteristics of service firms differ from those of manufacturers on a number of criteria including average number of employees. The accounting implications of these circumstances may include reappraisal of the behavioural assumptions of management accounting; the roles of budgets; appropriate budget use styles; the utility of management accounting in ambiguous situations; and qualitative research into organizational contexts.

LeBruto et al. (1997) stressed that cost volume profit analysis appears to be a practice that is strongly used by manufacturing companies in the food business. Further, Ittner and Larcker (2002) pointed out that management accounting practices as a variety of methods specially considered for businesses so as to support the organisation's infrastructure and accounting processes. Management accounting practices can include budgeting, performance evaluation, information for decision-making; and strategic analyses are some of the methods used among many others. Similarly, Abdel-Kader and Luther's (2006) analysis of the accounting practices used suggests that the management accounting systems employed in many food and drinks companies are not particularly sophisticated. Taking the industry as a whole, there is little evidence of management accounting directly connected with 'value creation'. There are, however, indications that increased use may be expected of techniques relating to cost of quality information, non-financial measures relating to employees, and analysis of competitors' strengths and weaknesses.

Anderson and Lanen (1999) presented a broad overview of changes in management accounting practices in India after economic reforms. They suggested that increased competition, an increased level of delegation in strategic processes and increased internationalization were main factors affecting changes in management accounting practices of Indian firms in 1991. Similarly, Maliah Bt. Sulaiman et al. (2004) examined the extent to which traditional and contemporary management accounting tools are being used in four Asian countries: Singapore, Malaysia, China, and India. They suggested that to succeed in the present dynamic business environment, tools or strategies such as JIT, ABC, TQM,

process re-engineering, life cycle assessment, and target costing would greatly enhance the ability of corporations to meet global competition. Further, Liaqat Ali (2006) pointed out that there is a lack of knowledge concerning the current state of management accounting practices in developing countries like India. It is argued that due to cultural factors, Indian manufacturing companies are slow in adopting new management accounting practices. The study found that 'overall profitability' and 'cost reduction' are the major priorities for management accounting in Indian companies.

Chand and Dahiya (2010) investigated and report the importance and usage of management accounting techniques in Indian SMHEs, and to identify the major barriers that are experienced by Indian SMEs in the hospitality industry in their efforts to implement management accounting techniques in their businesses. They suggested that management accounting techniques have a great impact on different firms' aspects especially on cost reduction and quality improvement. Further results indicate the major obstacles for application of management accounting techniques in Indian SMHEs relating to ownership and size characteristics and extensive high cost. Interestingly, however, there is an active interest in hospitality management and more specifically there is a lot of research in cost and management accounting practices of hotels and tourism enterprises (Harris and Brown, 1998). Potter and Schmidgall (1999) believed that little innovation has occurred in hospitality management accounting practices and there are many issues that deserve research attention. King Robyn et al. (2010) presents evidence linking primary healthcare business characteristics, budgeting practices, and business performance. Based on a sample of 144 responses, a survey of members of the Australian Association of Practice Managers (AAPM) identified contingency-based research is useful for predicting a business's budgeting practices. Yeshmin Farjana and Fowzia Rehana (2010) have made a comparative analysis in a study where the result has focused on the variability of management accounting practice in manufacturing and service industries. The study has revealed that ratio analysis, budgetary control, CVP analysis, variance analysis, and fund flow analysis are using frequently in managerial functions. Further, studies on the application of management accounting techniques have been conducted both in tourism management research and accounting research. These studies cover various aspects of hospitality industry such as restaurants (Ahrerns and Chapman, 2002), passenger transportation (Dent, 1991) and hotels (Sharma, 2002). Harris and Brown, (1998) stated that most of the studies have focused on hotels sector and other sectors of the industry have been overlooked.

Many authors have conducted studies on management accounting in hospitality industry (Chand and Lal, 2008; Burgess, 1996; Gipson, 2002; Garrison and Noreen, 2000; Potter and Schmidgall, 1999; Jones, 1998; DeFranco, 1997;

Pickup, 1985; Mia and Patier, 2001; Brander and McDonnell, 1995; Atkinson and Brander Brown, 2001; Harris and Mongiello, 2001; Lamminmaki, 2008). However, most of the studies were of a particular organisation and were not of comparative nature. In fact, today's business environment is more complex and interdependent. Thus, present research has been conducted to avoid this gap and focus on hospitality and service enterprises in India.

HYPOTHESES

The study provides three hypotheses in order to achieve objectives:

H1: There is a set of common management accounting practices that is of most importance.

H2: There are significant differences in management accounting practices between hospitality and service enterprises.

H3: There is a positive association between the control variables (demographic) and use of management accounting techniques.

RESEARCH METHODOLOGY

Sample and Data

Data were collected using mail questionnaires. The questionnaires were addressed to owners/ managers of 420 Indian business enterprises (hospitality and services) of which 200 (47.62 %) returned the questionnaires (Table 1). The data were analysed using SPSS. The questionnaire was tested for reliability and internal consistency using Cronbach α . This test calculates the reliability coefficient (α) if one variable is removed from the original set of variables in the questionnaire. This test helps to determine the set of variables with high reliability based on the α coefficient above 0.80.

Measures

Management accounting Practices: We used existence of 25 management accounting practices (see first column of Table 2) measured on a Likert-type 5-point scale ranging from 1 = never 5 = very often in case of usage and 3-point scale (1 = not important, 2 = moderately important, 3 = important) for importance. For the classification of the management accounting practices we followed the methodologies of Chand and Dahiya ((2010).

RESULTS AND DISCUSSION

Table 1: Distribution of Sample According to Demographic Characteristics (N=200)

| | Hospitality enterprises (N=100) | | Services enterprises (N=100) | |
|--------------------------------|---------------------------------|------------|------------------------------|------------|
| | Frequency | Percentage | Frequency | Percentage |
| Age (in years) | | | | |
| ≤ 5 | 10 | 10.00 | 15 | 15.00 |
| 6 – 10 | 30 | 30.00 | 48 | 48.00 |
| 11 – 15 | 30 | 30.00 | 25 | 25.00 |
| 16 – 20 | 18 | 18.00 | 12 | 12.00 |
| ≥ 21 | 12 | 12.00 | --- | --- |
| Capital (in million Rs) | | | | |
| ≤ 10 | 15 | 15.00 | 25 | 25.00 |
| 11 – 30 | 33 | 33.00 | 50 | 50.00 |
| 31 – 50 | 25 | 25.00 | 20 | 20.00 |
| 51 – 70 | 15 | 15.00 | 05 | 5.00 |
| ≥ 71 | 12 | 12.00 | ---- | --- |
| Employees (numbers) | | | | |
| ≤ 100 | 25 | 25.00 | 28 | 28.00 |
| 101 – 300 | 30 | 30.00 | 48 | 48.00 |
| 301 – 500 | 30 | 30.00 | 24 | 24.00 |
| 501 – 700 | 10 | 10.00 | 00 | 00 |
| ≥ 701 | 5 | 5.00 | --- | --- |
| Sales (millions Rs.) | | | | |
| Less than 1 million | 20 | 20.00 | 20 | 20.00 |
| 1-5 million | 40 | 40.00 | 45 | 45.00 |
| 5-10 million | 25 | 25.00 | 30 | 30.00 |
| Above 10 million | 15 | 15.00 | 5 | 5.00 |

*Sources: Primary Data Collected by the Authors

Table 1 presents the distribution of the sample organisations according to the controls used in the study. The vast majority of respondents were in the age group 6-15 years. With respect to the size of the organisation, 66% of the sample organisations were rather medium organisations with less than 50 million Rs in operating capital, and 59% of the sample respondents were also medium organisations with less than 300 employees.

In order to assess the set of management accounting practices in the Indian enterprises that is of most importance, or in other words to be able to test H1, a confirmatory factor analysis with varimax rotation on the 25 individual management accounting practices was performed categorised into the five groups of 'costing system', 'budgeting system', 'performance evaluation', 'information for decision making', and 'strategic analyses'. The Kaiser-Meyer-Olkin test of sphericity and the Bartlett's test of adequacy provided support for the factor analysis. Furthermore, the requirements followed in this study were the following: eigenvalues > 1, cut-off points >

0.40, cross-loadings > 0.10, and Cronbach's alpha > 0.70.

Table 2 presents the results from exploratory principal components factor analyses with varimax rotation on the 25 individual management accounting technique items categorised into five groups. The management accounting technique items were factored into five factors explaining from 52.00 to 85.00 percent of total variation. The first factor (management accounting practices) we label as 'costing system' (CS) that comprises ABC costing, operating costing, use of both incremental and non-incremental costs and regression and or learning curve technique. The second factor 'budgeting system' (BS) comprises budgeting for planning, budgeting for cost control, activity based costing, flexible budgeting, and zero-based budgeting. The third factor 'performance evaluation' (PE) consists of financial performance measures, performance measures related to customers, performance measures related to employee, performance measures related to operation, economic value added and benchmarks. The fourth factor 'information for

Table 2: Factor Analysis Results for the Management Accounting Practices Items

| | Factor Loading | Explained Variation (per cent) | Eigen Values | Cronbach alpha | Mean |
|--|----------------|--------------------------------|--------------|----------------|------|
| 1. Costing System (CS) | | 83.12 | 2.70 | 0.84 | |
| • ABC costing | 0.85 | | | | 3.65 |
| • Operating costing | 0.82 | | | | 2.79 |
| • Use of both Incremental and non-incremental costs | 0.79 | | | | 2.70 |
| • Regression and or learning curve technique | 0.69 | | | | 2.65 |
| 2. Budgeting System (BS) | | 83.50 | 2.47 | 0.87 | |
| • for Planning | 0.82 | | | | 3.85 |
| • for cost control | 0.79 | | | | 3.79 |
| • Activity based costing | 0.81 | | | | 3.80 |
| • Flexible budgeting | 0.77 | | | | 2.60 |
| • Zero-based budgeting | 0.78 | | | | 2.75 |
| 3. Performance Evaluation(PE) | | 80.10 | 2.49 | | 0.80 |
| • Financial measure(s) | 0.66 | | | | 2.86 |
| • Financial measure(s) related to customers | 0.80 | | | | 3.80 |
| • Financial measure(s) related to operation | 0.85 | | | | 3.75 |
| • Financial measure(s) related to employee | 0.82 | | | | 3.72 |
| • Economic value added | 0.70 | | | | 2.70 |
| • Benchmarks | 0.69 | | | | 3.60 |
| 4 Information for decision making (ID) | | 79.70 | 1.76 | | 0.81 |
| • CVP analysis | 0.68 | | | | 2.60 |
| • Product profitability analysis | 0.66 | | | | 3.62 |
| • Customer profitability analysis | 0.66 | | | | 2.56 |
| • Discounting cash flow for investment evaluation | 0.74 | | | 3.76 | |
| • Non-discounting cash flow for investment evaluation | 0.72 | | | | 3.74 |
| 5. Strategic analysis (SA) | | 80.20 | 1.78 | | 0.80 |
| • Long range forecasting | 0.65 | | | | 2.45 |
| • product life cycle analysis | 0.61 | | | | 3.55 |
| • Industry analysis | 0.60 | | | | 2.60 |
| • SWOT analysis | 0.62 | | | | 3.62 |
| • Integration with supplier's or customers' value chains | 0.52 | | | | 3.52 |

*Sources: Primary Data Collected by the Authors

decision making' (ID) comprises CVP analysis, product profitability analysis, customer profitability analysis, discounting cash flow for investment evaluation and non-discounting cash flow for investment evaluation. Finally, the fifth factor 'strategic analysis' comprises long range forecasting, product life cycle analysis, industry analysis, SWOT analysis, and integration with suppliers' or customers' value chains.

Summarising the findings shown in Table 2, it may be said that the set of ABC costing, budgeting for planning, budgeting for control, activity based costing, financial measure to operation, profitability analysis, discounting cash flow for investment evaluation, SWOT analysis, financial measure(s) related to employee, integration with suppliers' or customers' value chains may constitute the most important management accounting practices in the Indian enterprises. In light of these results H1 may be accepted, supporting that there is a set of management accounting practices in the

Indian enterprises that is of most importance. These results may be similar with the findings of Chand and Dahiya (2010).

Table 3 presents the t-test result comparing perceived management accounting practices in the hospitality and service enterprises. Mean comparison yielded a few significant differences and they were in the hypothesized direction. In most of the cases of service enterprises obtained higher mean score compared to its counterpart. In the rest of the cases the mean differences were not significant although service enterprises had always an edge over the hospitality enterprises. Analysis of the data suggests that the management accounting practices in the sample respondents were, on the whole, not well-founded. Most respondents were able to provide reasoned justification for the practices that they employed. The findings also provide needed implementation guidelines to practitioners for effective management accounting practices implementation and gives possible reasons to explain some cases of service and hospitality enterprises where the perceived benefits fell short of expectations. Thus, results indicated that service enterprises will be rated higher than hospitality enterprises on management accounting practices.

In light of these results we may reject H2; supporting that there are significant differences in management accounting practices between service and hospitality enterprises.

In order to assess the relationship between some of the controls (or demographic variables) and management accounting practices, or in other words to be able to test Hypothesis 3, multivariate was performed. The results of this analysis are summarised in Table 4. The results provide the following picture. First, for the management accounting practices (MAP) in hospitality enterprise effect is negative and statistically significant (see column [1]). This result can be interpreted as supportive evidence for the fact that service enterprises use MAP significantly less often than hospitality enterprise do. This finding supports the hypothesis on the relationship between the level of development and the choice of the MAP as discussed in this paper. This result holds even if we include control variables for size, age, number of employee and capital (column [2]). Moreover, the results show that the choice for the CS is also determined by the size of the firm and the age of the respondents; both variables have a negative and statistically significant coefficient. This means that hospitality enterprises use the CS method less often than service enterprises do.

Further, table 4 shows that the hospitality enterprises effect for the capital is positive and significant, which indicates that the BS is used more often by hospitality enterprises than by service enterprises (column [3]). Note, however, that the coefficient is only significant at the 10 percent confidence level. If we introduce the control variables in the model, the capital effect is still positive, yet it becomes insignificant

(column [4]). This suggests that the choice for the BS may not really be different between both the respondents.

This finding is perhaps somewhat surprising in the light of the hypothesis on the all management accounting practices as discussed, based on which we might have expected that service enterprises are more regular users of management accounting practices than hospitality are. On the other hand, combined with the findings with respect to the use of the AMAV, these findings may make sense. It might be the case that in recent years hospitality enterprises have been substituting their management accounting practices to edge over the rivers.

The results partially supported H3, that there is a positive association between the enterprise characteristics and the adoption of management accounting practices.

CONCLUSIONS AND SUGGESTIONS

The scope of this paper was three-fold purpose; first, to explore the significant management accounting practices used in the sample respondents and to investigate whether management accounting practices differ significantly between hospitality and service enterprises and whether these differences can be explained by differences in terms of demographic characteristics.

The study showed that respondents perceived that the management accounting practices employed within these enterprises were very effective and contributed to the success of the organisation. It was also found that the management accounting practices were consistent and standardised across the group.

The findings of study identified most important management accounting practices in the sample Indian hospitality and service enterprises such as ABC costing, budgeting for planning, budgeting for control, activity based costing, financial measure to operation, profitability analysis, discounting cash flow for investment evaluation, SWOT analysis, financial measure(s) related to employee, Integration with suppliers' or customers' value chains.

The results indicated significant differences between hospitality and service enterprises. These findings are in the hypothesized direction. In most of the cases of service enterprises obtained higher mean score compared to its counterpart. In the rest of the cases the mean differences were not significant although service enterprises had always an edge over the hospitality enterprises. Analysis of the data suggests that the management accounting practices in the sample respondents were, on the whole, not well-founded. Most respondents were able to provide reasoned justification for the practices that they employed. The findings also provide needed implementation guidelines to practitioners for effective management accounting practices

Table 3: Comparative Statistics of Management Accounting Practices in Sample Respondents

| Management Accounting Practices | Hospitality Enterprises | | Service Enterprises | | | |
|---|-------------------------|------|---------------------|------|--------|------|
| | Mean | SD | Mean | SD | T-test | P |
| ABC costing | | | | | 2.20 | 0.02 |
| Operating costing | 4.10 | 0.64 | 3.10 | 0.70 | 1.31 | 0.17 |
| Use of both incremental and non-incremental costs | 3.42 | 0.72 | 3.11 | 0.68 | 1.10 | 0.03 |
| Regression and or learning curve technique | 3.05 | 0.79 | 2.35 | 0.72 | 1.51 | 0.11 |
| Flexible budgeting | 3.14 | 0.79 | 3.00 | 0.75 | 1.42 | 0.01 |
| Budgeting for planning | 3.20 | 0.73 | 2.14 | 0.77 | 1.11 | 0.23 |
| Budgeting for cost control | 3.00 | 0.75 | 3.20 | 0.75 | | |
| Activity-based costing | | | | | 1.43 | 0.14 |
| Zero-based budgeting | 3.38 | 0.70 | 1.61 | 0.79 | 1.51 | 0.11 |
| Financial measure(s) | 3.40 | 0.71 | 1.68 | 0.77 | 0.35 | 0.72 |
| Financial measure(s) related to customers | 3.36 | 0.70 | 2.64 | 0.75 | 1.06 | 0.29 |
| Financial measure(s) related to operation | 3.96 | 0.77 | 2.70 | 0.74 | | |
| Financial measure(s) related to employee | 3.09 | 0.75 | 3.13 | 0.77 | 0.22 | 0.82 |
| Economic value added | 3.40 | 0.71 | 2.11 | 0.85 | 0.26 | 0.79 |
| Benchmarks | 2.45 | 0.66 | 2.93 | 0.72 | 0.38 | 0.71 |
| CVP analysis | 3.10 | 0.72 | 3.75 | 0.70 | 0.72 | 0.45 |
| Product profitability analysis | 2.18 | 0.79 | 2.42 | 0.70 | | |
| Customer profitability analysis | 2.10 | 0.80 | 2.62 | 0.69 | 1.31 | 0.01 |
| Discounting cash flow for investment evaluation | 2.95 | 0.73 | 2.61 | 0.70 | 1.81 | 0.07 |
| Non-discounting cash flow for investment evaluation | 3.90 | 0.66 | 2.51 | 0.76 | 1.29 | 0.19 |
| Long range forecasting | 3.30 | 0.74 | 2.85 | 0.79 | 0.94 | 0.34 |
| Product life cycle analysis | 3.93 | 0.80 | 2.66 | 0.80 | | |
| Management accounting for Industry analysis | | | | | 2.08 | 0.03 |
| SWOT analysis | 3.92 | 0.79 | 2.62 | 0.71 | 1.12 | 0.24 |
| Accounting Integration with supplier's or customers' value chains | 3.70 | 0.72 | 2.18 | 0.70 | 1.03 | 0.30 |

*Sources: Primary Data Collected by the Authors

Table 4: Determinants of the Use of Management Accounting: Multivariate Analysis

| | [1] | [2] | [3] | [4] | [5] | [6] |
|-------------------------|------------------|-----------------|-----------------|---------------|------------------|--------------|
| Constant | 2.0401*** | 2.890*** | 1.036*** | 1.585* | -2.001*** | 0.121 |
| | (3.20) | (3.05) | (2.90) | (1.80) | (-3.20) | (0.04) |
| Hospitality enterprises | -3.260*** | -2.394*** | 1.043* | 0.817 | 2.015*** | 2.450*** |
| | (-4.00) | (-3.61) | (1.77) | (1.32) | (4.10) | (3.68) |
| Service enterprises | -2.370** | -1.102** | | -0.590 | | -0.880 |
| | (-3.710) | (-2.010) | | (-1.00) | | (-1.75) |
| No. of employee | | 0.525 | | -0.523 | | -1.326*** |
| | | (0.93) | | (-0.83) | | (-2.81) |
| Age | | -1.312** | | -0.391 | | -0.674 |
| | | (-2.15) | | (-0.54) | | (-1.15) |
| Capital | | 0.155 | | 0.598 | | -0.948 |
| | | (0.27) | | (1.09) | | (1.53) |
| Number of observations | 25 | 25 | 25 | 25 | 25 | 25 |
| R2 | 0.15 | 0.20 | 0.18 | 0.21 | 0.19 | 0.22 |

Note: All models presented in this table are estimated using the logic estimation method. The variables used in the analysis are defined as follows: Costing system = CS; Budgeting system = BS; Performance Evaluation = PE; Information for decision making, ID and Strategic analysis = SA; all management accounting variables = AMAV.

The figures between brackets are t-test statistics. *, **, *** are significance levels of 10, 5 or 1 percent respectively. The R2 is an analogue to the R2 reported for regular OLS regression models.

implementation and gives possible reasons to explain some cases of service and hospitality enterprises where the perceived benefits fell short of expectations.

This research found significant differences in the application of management accounting practices among the Indian hospitality and service enterprises. The results indicate that there is no significant relationship between management accounting practices variables and respondents' characteristics. In some cases this is leading to the development of a more integrated strategic approach to the usage of management accounting practices. However, this research is only indicative, much remains to be examined. The research has suggested that management accounting practices may play a more prominent role in the bundling of organisational performance.

This study contributed to the current knowledge in management accounting practices in hospitality and service industry. It has provided additional insights into areas relating to factors influencing the adoption of management accounting techniques. Future research should consider incorporating other important variables that have been omitted from other studies and are likely to influence the adoption of management accounting techniques in comparative context.

REFERENCES

- Abdel-Kader, M. & Luther, R. (2006). Management accounting practices in the British food and drinks industry. *British Food Journal*, 108(5), 336-357.
- Ahrerns, T. & Chapman, C. (2002). The structure of legitimate performance measures and management: Day to day contests of accountability in a UK restaurant chain. *Management Accounting Research*, 13(2), 151-171.
- Ali, L. (2006). Applications of contemporary management accounting techniques in Indian industry: An empirical study, (Unpublished PhD thesis). Faculty of Business Management and Commerce, Punjab University, Chandigarh.
- Anderson, S. W. & Lanen, W. N. (1999). Economic transition, strategy and the evolution of management accounting practices: The case of India. *Accounting, Organisation and Society*, 23(5/6), 79-412.
- Atkinson, Á., Banker, R., Kaplan, R. & Young, M. (2001). *Management Accounting*. New Jersey Prentice Hall.
- Brander, B. J. & Mc Donnell, B. (1995). The balance score-card: Short-term guest or long term resident? *International Journal of Contemporary Hospitality Management*, 7(2), 7-11.
- Brignall, T., Fitzgerald, L., Silvestro, R. & Johnson, R. (1991). Product costing in service organizations. *Management Accounting Research*, 2(2), 227-248.
- Burgess, C. L. (1996). A profile of hotel financial controller in the UK, United States and Hong Kong. *International Journal of Hospitality Management*, 15(1), 19-28.
- Chand, M. & Dahiya, A. (2010). Application of management accounting techniques in Indian small and medium hospitality enterprises: An empirical study. *International Journal Entrepreneurship and Small Business*, 11(1), 25-41.

- Chand, M. & Lal, H. (2008). Human resource accounting: An implication for managerial decisions in Indian hotel industry. *International Journal of Hospitality and Tourism Systems*, 1(1), 88-92.
- Chand, M. (2009). *Managing Hospitality Operation*. New Delhi: Anmol Publications.
- Collier, P. & Gregory, A. (1995). Strategic management accounting: UK hotels sector case study. *International Journal of Contemporary Hospitality Management*, 7(1), 16-21.
- DeFranco, A. (1997). The importance and use of financial forecasting and budgeting at the departmental level in the hotel industry as perceived by hotel controllers. *Hospitality Research Journal*, 20(3), 99-110.
- Dent, J. F. (1991). Accounting and organizational cultures: A field study of the emergence of a new organizational reality. *Accounting, Organization and Society*, 16(8), 705-732.
- Duck, R. E. V. (1971). The use of management accounting techniques in industry. *Journal of Management Studies*, 8(3), 355-359.
- Farjana, Y. & Fowzia, R. (2010). Management accounting Practices: A comparative analysis of manufacturing and service industries. *Journal of Centre for Socio-Economic Research, ASA University Bangladesh Review*, 4(1).
- Garrison, R. & Noreen, E. (2000). *Management Accounting*. Chicago: Mc-Graw Hill Higher Education.
- Ghosh, B. & Chan, Y. (1997). Management accounting in Singapore- Well in place? *Managerial Auditing Journal*, 12(1), 16-18.
- Gipson, D. (2002). On property hotel financial controllers: A discourse analysis approach to characterizing behavioural role. *Hospitality Management*, 21(1), 5-23.
- Harris, P. & Brown, B. (1998). Research and development in hospitality accounting and financial management. *Hospitality Management*, 17(1), 161-181.
- Harris, P. & Mongiello, M. (2001). Key performance indicators in European hotel properties: General managers' choices and company profiles. *International Journal of Contemporary Hospitality Management*, 13(3), 120-127.
- Islam, M. & Kantor, J. (2005). The development of quality management accounting in China. *Managerial Auditing Journal*, 20(7), 707-724.
- Ittner, C. & Larcker, D. (2002). Empirical managerial accounting research: Are we just describing management accounting practice? *European Accounting Review*, 11(4), 787-794.
- Jones, T. (1998). UK hotel operators' use of budgetary procedures. *International Journal of Contemporary Hospitality Management*, 10(3), 96-100.
- Joshi, P. L. (2001). The international diffusion of new management accounting practices: The case of India original research article. *Journal of International Accounting, Auditing and Taxation*, 10(1), 85-109.
- Lamminmaki, D. (2008). Accounting and the management of outsourcing: An empirical study in the hotel industry. *Management Accounting Research*, 19(2), 163-181.
- LeBruto, S., Ashley, R. & Quain, W. (1997). Using the contribution margin aspects of menu engineering to enhance financial results. *International Journal of Contemporary Hospitality Management*, 9(4), 161-167.
- Lowry, J. F. (1990). Management accounting and service industries: An exploratory account of historical and current economic contexts. *Abacus*, 26(2), 159-184.
- Mia, L. & Patier, A. (2001). The use of management accounting systems in hotels: An exploratory study. *Hospitality Management*, 20(2), 111-128.
- Ministry of Finance. (2011). *The Gazette of India, PART 1 - Section 1*. New Delhi.
- Narasimhan, M. S. & Thampy, A. (2002). Activity based costing in banking service: A case study of a large Indian private sector bank. *Prajnan*, 31(2), 95-110.
- Olson, O., Guthrie, J. & Humphrey, P. (1998). *Global Warning! Debating International Developments in New Public Financial Management*. Oslo, Cappalen: Akademisk Forlag.
- Pellinen, J. (2003). Making price decisions in tourism enterprises. *Hospitality Management*, 22(3), 217-235.
- Pickup, I. (1985). Budgetary control within the hotel industry. *International Journal of Contemporary Hospitality Management*, 4(4), 149-155.
- Potter, G. & Schmidgall, R. (1999). Hospitality management accounting: Current problems and future opportunities. *Hospitality Management*, 18(5), 387-400.
- Robyn, K., Clarkson, M. P. & Wallace, S. (2010). Budgeting practices and performance in small healthcare businesses. *Management Accounting Research*, 21(1), 40-55.
- Sulaiman, M. B. et al. (2004). Management accounting practices in selected Asian countries: A review of the literature. *Managerial Auditing Journal*, 19(4), 493-508.
- Sharma, D. (2002). The differential effect of environmental dimensionality, size, and structure on budget system characteristics in hotels. *Management Accounting Research*, 13(1), 101-130.
- Sulaiman, M., Ahmad, N. N. & Alwi, N. (2004). Management accounting practices in selected Asian countries: A review of the literature. *Managerial Auditing Journal*, 19(4), 493-508.
- Yeshmin Farjana and Das Sumon (2009). Management accounting techniques: appraisal of managerial performance of the financial institutions in Bangladesh. *Institute of Chartered Secretaries and Managers of Bangladesh (ICSMB)*, 9(3).