A STUDY OF HOTEL MANAGEMENT FINANCIAL COMPETENCIES WITH THE FOCUS ON REVENUE AND COST MANAGEMENT

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A STUDY OF HOTEL MANAGEMENT FINANCIAL COMPETENCIES WITH THE FOCUS ON REVENUE AND COST MANAGEMENT (150 pp.)

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The objective of this research is to investigate the core financial analytical competencies that hospitality managers must possess. Similar measurement was employed in both the industry practitioners' and the educators' survey, as the aim was to explore the importance and use of revenue and cost management competencies among manager participants and compare the findings with those obtained from the educators' survey. The results of this study showed that cost control, followed by revenue management, budgeting, forecasting, pricing, and asset management, are the essential financial competencies of hotel managers. The perception gap was found between hospitality managers and educators on the importance of these financial competencies. The findings of this study could provide suggestions for hospitality education and industry training programs.

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CHAPTER Ⅰ

INTRODUCTION

With the rapid growth of the hospitality industry, the competency of hospitality operators has increased in importance. The current perception is that the training and education qualified hospitality employees received thus far is inadequate for the complexities of their roles (Harkison, Poulston, & Kim, 2011). In response to this discrepancy between education and job requirements in hospitality, many studies have been conducted to identify the desired attributes of hospitality graduates and employees (Beck, Knutson, Cha, & Kim, 2011; Gibson, 2004; Harper, Brown, & Irvine, 2005; Harkison, et al., 2011; Kay & Moncarz, 2004; Littlejohn & Watson, 2004; Raybould & Wilkins, 2005). Industry professionals agree that in the past, human resource-related skills were the most emphasized competencies for hospitality managers (Birdir & Pearson, 2000; Spencer & Spencer, 1993; Tas, Labrecque, & Clayton, 1996). However, current research advocates that knowledge of finance, marketing, and information technology is becoming increasingly important due to the changes in the industry demands and characteristics (Kay & Moncarz, 2004). According to Gursoy, Raham, and Swanger (2012), revenue and asset management competencies have recently received considerable attention because hotels are attempting to "use improved technique to maximize revenue, minimize cost and increase the return on their assets" (p. 40), thereby consequently optimizing their financial performance.

Although a wealth of research investigated the desired competencies of hospitality employees, few studies have examined the need for financial competencies, in particular being able to use analytical skills for revenue and cost management.

The Need for Training in Financial Competencies

Financial activities in the hospitality industry are performed by staff at all levels, from front-line employees and supervisors to top management (Schmidgall, 2012). These financial activities can range from recording transactions and creating a variety of financial reports to data interpretation and strategic planning (Scapens & Jayazeri, 2003). Financial information has been used to create effective monitoring and controlling tools in the hotel organizational structure, as each department manager is responsible for financial control in his/her specific area. Their department-level data is subsequently reported to financial department that supervises the entire enterprise. Mia and Patiar (2001) indicated that both hotel general management and department managers frequently use financial information to evaluate sales, promotion, product and service prices, and the profitability of operating departments. However, empirical evidence suggests that the training and competencies of these managers may not be adequate to effectively execute the increasingly complex financial activities (Burgess, 2007a).

Revenue management (RM) plays a key role in financial activities (Brotherton &Wood, 2008). Revenue strategies manage “customer behaviors at the individual level via optimizing price and availability of constrained resource to maximize profits”

(Anderson & Xie, 2010, p. 53). Cross, Higbie, and Cross (2009) stressed that, in recent years, leading management companies have expanded their RM team by recruiting hundreds of employees, which is a substantial increase compared to only several staff members working in RM a decade ago. Many lodging companies have created RM positions that include, among others, revenue analysts, revenue managers, and revenue directors (Beck et al., 2011). The RM positions require that candidates are capable of evaluating operating performance through financial data, such as RevPAR (revenue per available room), ADR (average daily rate), and occupancy rates (Singh, Kline, Ma, & Beals, 2012). Thus, the lodging industry demands trained, competent individuals, who can execute the RM system, and master the practices of forecasting, channel distribution management, pricing management, and property management (Beck et al., 2011).

Currently, financial department employees in the hospitality industry are mostly hired from business administration majors due to a lack of hospitality major graduates that possess the required level and range of skills (Gibson, 2004). Lodging professionals, according to Kay and Moncarz (2004), "should recruit entry-level managers who have graduated from hospitality programs with a strong financial management curriculum to ensure their managerial advancement and the firms' long-term profitability and growth" (p. 295). Chung (2000) conducted a study among Korean universities, examining the contribution of hotel management curriculum to graduates' career success in the hotel industry. The findings revealed that both general and hotel business administration courses related to finance and accounting were important areas of study, as these helped cultivate required competencies in the hotel industry and enhanced career success. Finance, accounting, and food and beverage cost control were particularly associated with the acquisition of management analysis skills needed by hotel managers. Finance is becoming increasingly important and is one of the essential areas all managers in the hotel business must master to perform their duties successfully (Burgess, 2007b). Kay and Moncarz (2004) conducted a study, aiming to identify the financial competencies successful manager in the lodging industry must possess. The authors suggested that financial management skills are a strong indicator of career success and important for obtaining higher compensation. Middle-level managers with the ability to understand financial techniques, such as budget planning, operational analyses, and forecasting techniques, were shown to have a greater chance of promotion than their less financially competent colleagues. This and many other studies in this field conform that there is a growing need to develop financial and accounting abilities among hospitality industry employees (Burgess, 2007a; Burgess, 2007b; Gibson, 2004; Harris & Brander Brown, 1998). While the need for training in the hospitality industry is acknowledged, the necessity of possessing the financial capability has not been fully explored. This study aims to fill this research gap by identifying major financial competencies required by the hospitality industry and further exploring the need for proper training in this area.

Financial Analytical Skills

Financial competencies refer to both finance and accounting functions (Zutter & Gitman, 2011). According to Hales (2011), “explaining revenue and expense, comparing actual results to budgets and forecasts, and making adjustment to improve operations” are among financial skills an individual must possess in order to be financially competent (p. 8). Singh et al. (2012) suggested that “reading and analyzing financial statements, capital expenditure analysis, forecasting and budgeting” are the predominant financial skills for a successful hotel manager (p. 335). Financial managers perform cost and profit control via cash management, RM, capital management, financial planning, cost accounting, and financial accounting (Zutter & Gitman, 2011).

RM is a major financial competency for a hospitality business, as RM practitioners are typically assigned duties related to both financial and managerial accounting (Downie, 1997; Kimes, 2010). A revenue manager performs accounting practices, such as forecasting the average daily rate (ADR), and making budgets based on the overall yield (Mattimoe & Seal, 2011). Both of these functions are overseen by hotel controllers, who analyze pricing and results of RM by accounting procedures (Hayes & Miller, 2011). According to Burgess and Bryant (2001), financial information facilitates revenue decisions for profit optimization, and incorporates a cost-centered approach, instead of pure revenue optimization. This approach ensures that operation teams can utilize such financial information to incorporate the costs into their sales growth. In this context, managerial accounting techniques support operation teams in evaluating cost when making revenue and pricing decisions (Pellinen, 2003), such as forecasting and cost-based pricing.

Researchers consider financial analysis as a predominant financial skill, as it allows practitioners to "separate the management of monetary affairs of a business into parts for individual study" (Hales, 2011, p. 2-3). According to Wikipedia, analytical skill is defined as "the ability to visualize, articulate, and solve both complex and simple problems and concepts and make decisions that are sensible based on available information" ("Analytical skill," 2014, "Definition, " para. 1). Heneman (1999) posited that "strategy, work design, measurement, statistics, finance, marketing, multicultural skills, information systems, decision making, and problem solving" are the key analytical skills (p. 133). Financial analytical skills have been the primary requirement for graduation in multiple programs, such as operation management, marketing, accounting, and MBA, as the aim is to develop students' general analytical skills as well as their ability to utilize analytic software, database analysis, and business problem analysis in order to address the problem at hand (Banai & Tulimieri, 2013; Kanagh & Drennan, 2008; Schlee & Harich, 2010). Hurst (2013) summarized the important financial analytical skills that hospitality students need to learn: "evaluating past performance by interpretation and analysis of last years' sales data," "conducting market research regarding forecasted trends and economic factors for the next season," "interpreting and analyzing target markets," and "preparing budget plans" (p. 37). Kimes (2010) found that financial analytical skills were necessary for future revenue managers in performing RM activities, such as using analytic forecasting techniques and pricing tools.

Numerous researchers agree that financial analytical skills are critical to hospitality students' career success, as their possession will ensure that they are valued by hospitality employers (Millar, Mao, & Moreo, 2008; Phelan & Mills, 2010; Raybould & Wilkins, 2005; Singh, et al., 2012). Given the scarcity and high demand of analytical talents within the industry, it is important to identify the disparity between the industry needs and academic preparation. This would ensure that those aspiring to work in hospitality are adequately trained before entering workplace, allowing them to perform their duties well and generating substantial savings in employee training.

The Perception Discrepancies Between Industry and Academia

In recognition of the gap between hospitality industry needs and academic curricula preparing future employees for their roles, many researchers have recently conducted studies that compare industry-required competencies and academic training (Chung, 2000; Collin, 2002; Harris & Zhao, 2004; Raybould & Wilkins, 2005). Most have concluded that there is a distinction between what the industry perceives as required skills and students' perceptions. Harraway and Barker (2005) conducted a study that examined the existing discrepancies between the education received at university and the practice in the workplace by surveying students in economics, finance, and marketing study programs. The findings revealed that most participating graduates were insufficiently prepared in analytical skills, including statistics, linear models, software and power analysis, etc. This is in line with the view of many industry practitioners, who frequently complain that students are "over qualified but under experienced" (Raybould & Wilkins, 2005, p 211). Collin (2002) conducted a similar study and concluded that, as graduates were not aware of the discrepancies between their skills and job requirements, many expected to enter into management positions after graduation. This is unrealistic, as employers consider new graduates far from capable of handling management roles. Raybould and Wilkins (2005) indicated that most hospitality program graduates "commence employment in operational roles, even high achieving students are recruited to join operational training" before they begin management training (p. 212). The deficiencies in university education, resulting from poor curriculum design, are seen as the main reason for the misalignments between graduates' preparedness for the workplace and industry demands (Raybould &Wilkins, 2005). While multitude of studies have discussed the general competency divergence between the scope and content of hospitality education and the industry requirements, to date, no study has examined the perception gap that focuses solely on financial competency (e.g., Barrie, 2006; Harkison et al., 2011; Raybould & Wilkins, 2005; Tsai, Goh, Huffman, &Wu, 2006). However, given that finance is becoming an increasingly important aspect of many hospitality roles, it is necessary to specify the critical financial activities in hospitality operation and compare them to the training the new industry entrants possess in order to identify the gaps.

Critical Financial Activities Needed in the Hospitality Industry

The growing demand for hospitality employees with competitive financial competencies has prompted the need to identify critical financial activities that contribute to profit optimization. Hospitality staff can improve operating efficiencies by both maximizing revenues and minimizing costs (Singh & Schmidgall, 2005). Thus, it is essential for hospitality practitioners to understand the functions of revenue and cost management-related financial activities in the day-to-day business operations. Previous studies have suggested that RM, forecasting and budgeting, pricing, costing, and asset management are the core financial activities needed to maximize gross operation profit (Beck et al., 2011; Burgess, 2007a; Jauhari, 2006; Riley, 2005).

Hayes and Miller (2011) defined RM as “the application of disciplined tactics that predict buyer response to prices, optimize product availability, and yield the greatest business income” (p. 122). Empirical evidence suggests that the use of RM systems can dramatically increase the revenue of hospitality businesses (El Gayar et al., 2011). The lodging industry adapted RM from airline’s yield management in the 1990s because they faced the similar issues of balancing demand and supply (Hanks, Cross, & Noland, 1992). Marriott improved its revenues by $25–$35 million after implementing a RM system (Lieberman, 2003). While RM has long been recognized as valuable, its implementation increased following the tragic events of 9/11, which significantly reduced travel demand and thus volume of hotel bookings. In response, many hotel operators implemented dynamic pricing strategies to attract customers and compete for market share during tough economic times (Enz, Canina, & Lomanno. 2009). Many would agree that RM helped the hospitality and tourism industry recover from the recessions caused by the terrorist attack and the subsequent economic crisis.

The hospitality business is unique in nature, as it operates with relatively fixed capacity, while having to respond to elastic demands, perishable inventory, complex cost structures, and variable customer segmentations (Cross, 1997a). Selling perishable products is a major revenue risk. However, RM can significantly minimize the loss from unsold products, as the supply and demand can be more closely aligned, reducing unnecessary orders and thus waste (Choi & Mattila, 2004). RM helps hotel companies increase revenue by 2 to 5 percent through dynamitic pricing strategies (Choi & Kimes, 2002).

Cross et al. (2009) noted that current lodging firms recognize that the benefits of RM exceed simply managing room inventory. In their view, RM assists hotel controllers in understanding “the elastic demand of different customer segments, the appropriate channel mix, and the timely manner to customers’ response” (p. 61). Owing to its effectiveness, RM is being integrated into all aspects of hotel management, marketing, and operating strategies. As the use of RM increased, academic interest in exploring its utility grew, whereby many authors started to explore the RM activities in the hospitality industry (e.g., Aghazadeh, 2007). However, there is evident paucity of studies that have examined the competencies hospitality employees need to possess in order to perform RM activities successfully.

RM system consists of dynamic methods to forecast demand, allocate perishable assets across rate structures, and determine pricing strategy based on different customer segmentations (Baker & Collier, 2003). Therefore, as pricing and forecasting are key drivers of RM systems, it is useful to consider the example provided by Steed and Gu (2005), who estimated that, "in a 500-room hotel with 70 percent occupancy, a poor pricing decision that leads to annual average daily rate (ADR) reduction of $1, would generate an annual loss of $127,750" (p. 369). This clearly indicates that correctly implemented price optimization has the potential to dramatically increase revenue by responding to market demand conditions in a timely and cost-effective manner (Cross et al., 2009). While there are many ways to attempt price optimization, there is a consensus that service and product prices should match customers' value perception. If the price of a product exceeds its perceived value, customers are unlikely to be willing to buy it (Cross, 1997a). Overpricing is, thereby, possibly "driving customers away and losing in sales volumes what is gained in high prices" (Pellinen, 2003, p. 221). Beck et al. (2011) advocated that developing pricing strategies should be the focus for future revenue managers.

Forecasting is an indispensable financial tool for achieving revenue optimization. Within the hotel industry, where the aim is to increase the revenue, forecasting activities focus on accurately estimating the uncertain demand and matching that demand to room rate and availability (Chen & Kachani, 2007). Financial forecasts and budgets could help hotel managers predict sales levels, enhance the control of operating expenses, and avoid shortfalls in RM (Schmidgall & DeFranco, 1998). Budgeting is frequently used as a tool for planning and internal control in a wide range of industries and is essential for hotel management. Wu, Boateng, and Drury (2007) noted that budgeting practices for cost control, as well as profit, sales, and production budgeting, would significantly benefit business operations.

As most hospitality functions involve highly fixed costs and complex variable costs, cost management significantly affects the profitability of the hospitality business. Generally, cost management focuses primarily on operating expenses and capital expenditure. It is essential for hospitality operators to understand both types of costs and their applications, because about 90% of their revenue is used to cover these costs and expenses (Schmidgall, 2012). According to average statistics from multiple industries, 1% improvement in variable costs will improve profits by 7.8%, and 1% improvement in fixed costs will improve profits by 2.3% (Phillips, 2005). Cost allocation processes also help hospitality managers better understand the relationship between departments, as they promote the efficient allocation of resources (Hesford & Potter, 2010). Thus, using the manufacturing cost model in the hospitality industry is somewhat outdated and might lead to ineffective decisions

(Hicks, 2005). Hospitality managers need to improve costing techniques when making decisions.

Over the years, in many hotels, the ownership structure has become increasingly complex. Consequently, the daily operations are run by managers, rather than the owners, who rarely take active responsibility for the oversight of their business. Thus, as hotel employees, the managers are required to run the hospitality business with asset management tools, with the aim of achieving positive financial performance, driven by the need to increase the return on the owners' investment (Anson, 2012). However, given that the combination of capital expenditures, repairs, and maintenance takes up 8.5 to 9.8% of revenue in hotels (Brooke & Denton, 2007), operating managers have an incentive to capitalize as much expenses as possible, because they are only responsible for operating expenses (Denton, 1998). With the debate ongoing, capital expenditure management becomes a challenging issue for hotel managers. A capital expenditure control provides guidelines regarding how to classify an expense as either an operating expense or a capital purchase. Being able to manage this important function would minimize the conflict between property owners and management companies (Schmidgall, Damitio, & Singh, 1997). Given that this is often a contentious issue, there is a growing need for dedicated hotel asset managers who can act as intermediaries between the operating and investment parties by making the decisions for capital investment, renovations, and operational policies (Hospitality Assets Management Association, 2013; Singh et al., 2012).

Research Objectives

Over the last twenty years, the number of studies focusing on financial management in the hospitality industry has dramatically increased (Jang & Park, 2011). However, the topics of these studies have been limited to strengthening the financial competencies and training needs in this industry. Thus, only limited work has been conducted on identifying the financial training gap between the needs of the industry managers and what the hospitality educators are providing. The primary objective of this study is to review the subject areas in financial management; thus, to identify the essential financial competencies required by the hospitality industry. Secondly, this study will explore the perception gap on financial competencies between hospitality managers and educators. Thirdly, based on the findings, the aim is to offer suggestions that might be helpful in modifying hospitality program curricula in order to increase hospitality students' career success. It is believed that, through recognizing essential financial competencies demanded by the hospitality industry, educators could provide up-to-date hospitality education to meet the needs of the industry in term of preparing students' career success. The findings may also help strengthen staffing management and improve analytical skills of the hospitality employees at all levels through training programs specifically targeting the identified knowledge gaps. Additionally, this research will benefit students by clarifying their career goals and matching them with the skills they must acquire, as well as helping them develop competencies that are needed for their future career.

CHAPTER Ⅱ

LITERATURE REVIEW

Competencies Required of Hospitality Managers

Employers seek college graduates with a range of competencies, including "interpersonal skills, teamwork, communication, and problem solving skills" (Spowart, 2011, p. 170). Subhash (2012) defined competencies as "the critical knowledge, skills, abilities, and personal characteristics necessary for superior performance" (p. 37). According to Jordon and Jones (1997), knowledge can be viewed as a flow of information, "including technical expertise, problem-solving capabilities, creativity and managerial skills" (cited in Scott, 2006, p. 3). While knowledge, in the general sense, refers to the information one has retained, and the ability to relate it to the new data, as well as utilize it to address problems and make decisions, in the specific context of the hospitality industry, it could include understanding security protocols, laws and regulations, operating standards, etc. Skills, on the other hand, pertain to proficiencies acquired from training or experience including communication, analyzing data, information management, teamwork, etc. (Petkovski, 2012; Raybould &Wilkins, 2006). Similarly, ability is defined as capacity for performing effective actions in concrete situations by integrating available knowledge and skills (Kurschus & Pilinkiene, 2012). Competencies enable employees to act more effectively in a certain position (Dessler, 2009). Therefore, identifying the core competencies is an integral part of career development in the hospitality industry.

General Competency Models

Competency models provide useful information for hospitality education (Chung-Herrera, Enz, & Lankau, 2003), as they help evaluate employees' competitive performance and identify gap that need to be addressed (Lucia & Lepsinger, 1999). Spencer and Spencer (1993) developed a managerial competency model for superior performance with a "clearly visible part," referred to as knowledge and skills (depicted on the top), and a "hidden part" with personal conception, personal characteristics, and motivation (Figure 1). This model identifies hidden competencies as essential for an individual to optimally utilize the knowledge and skills acquired, while recognizing that behavior also plays a role in this complex mechanism (Kurschus & Pilinkiene, 2012). Chung- Herrera et al. (2003) identified 99 lodging behavioral competencies, grouping them into six categories, namely, "communication, critical thinking, interpersonal skills, leadership, self-management, and strategic positioning" (p. 21). They provided a comprehensive industry-wide competency model, allowing individual lodging organizations to extract specific content and build their own models, based on their specific needs and objectives. In a similar effort, Testa and Sipe (2012) developed a service-leadership competency model for hospitality and tourism industry containing 100 specific behavior components based on "business," "people," and "self" clusters. However, while all the aforementioned models are comprehensive and undeniably useful, they provide limited focus on financial competencies. Keonigsfeld, Kim, Cha, Perdue, and Cichy (2012) developed a competency model for club managers, which classified competences into four domains: administrative and technical, conceptual-creative, interpersonal, and leadership. While 58 competency items were included in the model, only four finance and accounting-related competencies were identified under the administrative and technical category. These were compensation, financing capital projects, cash flow and budgeting, and audit procedures. Clearly, none of the available competency models focusing on financial skills are sufficient for the hospitality industry.

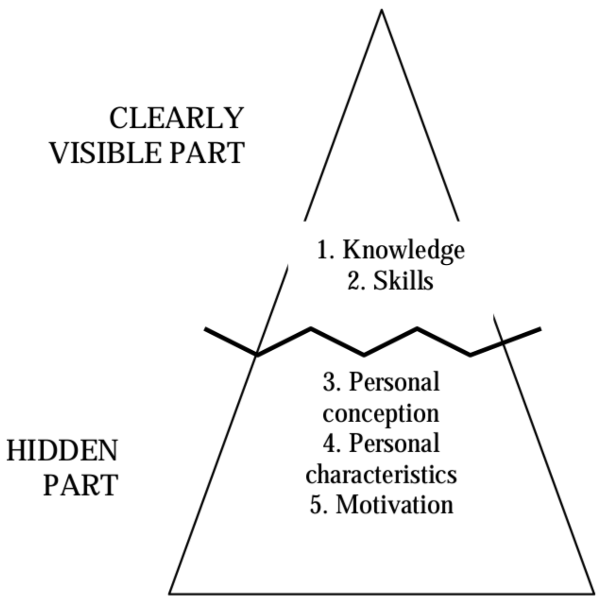

Figure 1. Competence at Work: Model for Superior Performance

Financial Competencies Required of Hospitality Managers

Both industry professionals and program administrators agree that financial management and accounting are important competencies for hospitality management graduates (Koenigsfeld et al., 2012; Kay & Moncarz, 2007; Su, Miller, & Shanklin, 1997). In a hotel, financial skills are “mandatory” competencies of managers, whose main task is to strengthen management performance of the premises they are in charge of (Gibson, 2004). In line with the above, Ashley et al. (1995) ranked financial skills as the third most important competency for achieving career success in the hospitality industry. Given that this assertion was made nearly two decades ago, it is even more applicable now, owing to the recent economic crisis, which put great pressure on hospitality industry.

Given the complexity of hospitality operations, financial management requires participation of employees from all levels, including front-line associates, junior management (e.g., reservation manager), middle management (e.g., front office manager), and top management (e.g., resident manager) (Rutherford & O’Fallon, 2011). Burgess (2007a) investigated the perceptions of financial controllers regarding whether hotel managers have sufficient financial skills to manage their businesses effectively. The findings revealed a strong need for managers with developed financial skills, owing to the prevalent view that departmental and general managers typically lack these much-needed financial skills to monitor revenues and costs. Jones (2008b) claimed that more extensive financial training should be offered to non-financial managers as well, especially to those at lower levels of management, because these managers tend to lack budget control competency.

Hein and Riegel's (2011) study noted that hotel managers need financial competencies, such as cost control, budgeting and accounting, financial data analysis, and property resource utilization. Jauhari (2006) summarized previous research in this field, concluding that operational budgeting, financial analysis, forecasting, revenue management, and asset management are desirable financial competencies for successful hospitality management. The aim of this study is to explore and identify the core financial competencies in the hospitality industry. Therefore, a review of hospitality competencies articles was conducted and the most popular financial content areas are identifies and discussed below. The findings are also summarized in Table 1.

Table 1

Core Financial Competencies Discussed in Previous Research

Years	Journal	Authors	Focus	Financial competencies
1990	HRJ	Damitio &Schmidgall	To examine how important managerial skills are to hotel managers	Budgeting, pricing, accounting, financial analysis
1995	CHQ	Ashley et al.	To detail the strategy used by hospitality programs to respond to changing industry requirements	Executing financial activities
1995	HRJ	Muller & Campbell	To investigate skills required of restaurant supervisors	Executing financial activities
1997	JHTE	Su et al.	To determine the importance of accreditation curriculum standards for hospitality programs	Executing financial activities
2001	IJHM	Mia & Patiar	To investigate the use of management accounting by managers in luxury hotels	Interpreting financial information
2004	IJHM	Gibson	To discover desirable attributes of hotel controllers	Executing financial activities

Table 1 continued

Years	Journal	Authors	Focus	Financial competencies
2004	CHQ	Kay & Moncarz	To examine the effects of KSAs on managers' lodging success	Interpreting financial information, budgeting, forecasting, cost control, cash management, RM, capital investment
2005	IJCHM	Riley	To reflect the changes have taken place in the food and beverage management	Accounting, cost control
2006	IJCHM	Jauhari	To examine the links between industry requirements and hospitality management education provisions	Budgeting, financial analysis, forecasting, RM and asset management
2007a	IJCHM	Burgess	To investigate whether hotel managers have sufficient financial skills to manage their areas	Executing financial activities, RM, cost control
2007b	IJHM	Burgess	To discuss whether hotel financial controllers should or should not be skilled and qualified	Finance, accounting, food & beverage cost control
2008b	IJHM	Jones	To explore which aspects of hotel budgetary practice that can be improved	Budgeting
2009	CHQ	Cross et al.	To trace the renaissance of RM	RM
2009	IJCHM	Oak & Schmidgall	To understand the changes in budgetary controls at clubs	Budgeting
2011	JHRHT	Beck et al.	To develop a profile for lodging revenue managers	RM, forecasting, pricing, asset management
2011	JHFM	Hein & Riegel	To investigate hospitality professionals' perceptions on the importance of financial and accounting curriculums	cost control, budgeting and accounting, financial data analysis, property resource utilization
2011	IJCHM	Koenigsfeld et al.	To examine important and frequently used managerial competencies for club managers	Budgeting, analyzing accounting information, financial analysis, cash management
2012	CHQ	Singh et al.	To evaluate the role of hotel asset managers	Asset management, capital expenditure analysis, monitoring financial performance
2012	IJHM	Koenigsfeld et al.	To develop a valid model for managerial competencies that can be applied to club managers	Compensation, capital management, auditing, cash management, budgeting

Note: JHRHT =Journal of Human Resources in Hospitality & Tourism, IJHM = International Journal of Hospitality Management, IJCHM = International Journal of Contemporary Hospitality Management, HRJ = Hospitality Research Journal, JHFM = The Journal of Hospitality Financial Management, CHQ = Cornell Hospitality Quarterly, and JHTE = Journal of Hospitality & Tourism Education

In the 1990s, with the exception for the study conducted by Damitio and Schmidgall (1990), most research in this field merely emphasized the need for hospitality practitioners to be able to execute financial activities, without any attempts to identify the specific financial areas in which these individuals should be trained and educated. By the 2000s, researchers gradually began to recognize the need to actually identify the specific financial competencies required in the hospitality industry. This led to a body of research on topics such as “revenue management” and “asset management”, which emerged during this decade. These literature sources frequently discussed RM, pricing, forecasting, cost control, budgeting, and asset management, as recognized key financial competencies in the hospitality industry.

Financial competencies are incorporated in every aspect of the hospitality business. In the lodging industry, Damitio and Schmidgall (1990) conducted a survey to measure the significance of managerial accounting skills in hotel management from hotel managers’ and controllers’ perspectives. The results revealed that essential accounting techniques, such as budgeting, variance analysis (e.g., analysis of the difference between budgetary and actual cost), income accounting, pricing, and financial planning, were perceived as important to hotel managers. In the food service industry, Muller and Campbell (1995) considered financial competency as one of the most important managerial skills. Food and beverage managers need accounting skills because they have to make decisions about purchasing, receiving, issuing, storing, and pricing food and liquor (Riley, 2005). In the club industry, Koenigsfeld, Youn, Perdue, and Woods (2011) posited that the ability to plan and implement club operating budgets, and promote the use of computers in club accounting and finance are the essential managerial competencies. Specifically, when these competencies were ranked by importance to the club managers, the ability to use accounting information was rated the highest, followed by the ability to manage cash, categorize revenue and expense, review financial statements, evaluate financial projects, identify factors influencing compensation, utilize capital budgeting models, and analyze financial ratios.

The growing demand to use RM in the hospitality industry generated a need to train individuals who can execute this system (Beck et al., 2011; Cross et al., 2009). Beck et al. (2011) aimed to identify the important activities for revenue managers' success, and to determine areas of training needed to develop knowledgeable and capable RM professionals. The findings indicated that developing effective revenue strategies and analyzing trends (e.g., determining the viability of both short- and long-term booking, and matching group and transient market needs) were important to the revenue managers' success. In addition, revenue managers need to know how to manage property RM systems and complete reports for related departments. These competencies are not only required of revenue managers, but also other department managers. For example, as a core process of RM, forecasting requires the involvement of different departments, not just those responsible for financial and revenue management. Similarly, the year-ahead forecast should include input from the sales director's forecast of group reservations, the front office manager's forecast of room occupancy, and input from the controller and general manager's team (Cross, 1997a). Regardless of the departments they are working in, these practitioners need to communicate and cooperate with their colleagues, and optimally utilize the financial information in order to achieve the company's financial goals.

The Divergence Between the Hospitality Industry and Education

Due to the growing complexities of the roles in the hospitality industry, there is increasing disparity between the financial competencies the staff must possess and the knowledge the educational institutions impart on their students. Empirical evidence suggests that few hospitality managers acquired their managerial skills directly from their formal education (Vujic, Becic, & Crnjar, 2008). Tsai et al. (2006) conducted a study to explore the perception gap between educators and industry professionals regarding the important management competencies in the hospitality industry. The findings revealed that the development of hospitality curricula is not in synch with the industry expectations. In particular, while educators tended to focus on administrative and technical skills, the industry practitioners cited interpersonal skills as the first priority (Tsai et al., 2006). While graduates entering hospitality industry need to possess industry-ready skills, most universities "are more likely to emphasize critical thinking skills within the context of a vocation" (Harkison et al., 2011, p. 378). Hospitality management courses are often designed by administrators and educators, who not only have discrepant views of the important subjects and topics to be taught, but these are also incongruent with the views held by industry employers (Ricci, 2005).

The vocational nature of hospitality management requires practical skills, which, along with many other job-related competencies, are insufficiently embedded into the course curricula (Barrie, 2006). According to Jauhari (2006), hospitality education places the greatest emphasis on operational training (e.g., cooking and food delivery), often at the expense of the development of financial competencies. Harris and Zhao (2004) noted that the gaps between industry and academia can only be reduced if the curriculum changes are initiated via a discussion among students, faculty, and industry. However, given the discrepancy between academic and practical perspective, it is difficult for educators to design appropriate curricula to meet employers' expectations (Bennis, 2005). Thus, it is necessary for academics and practitioners to reach an agreement by exploring significant financial competencies and arriving at the set of skills that the institutions can impart on their students, which would also make them effective employees in the industry.

Developing Financial Competencies in a Hospitality Program

Academic institutions are responsible for "shaping competencies of future managers" and "developing curricula of programs that support the nature of competency in an industry" (Jauhari, 2006, p. 129). Educators are responsible for ensuring that qualified graduates leave universities armed with skills and competences that correspond to those required by the hospitality industry (Ruetzler, Taylor, Reynolds, & Baker, 2011). Mayburry (2010) suggested aligning hospitality program curriculum with financial skills, by ensuring that the students acquire the ability to "(1) read and analyze financial statement and budgets; and (2) demonstrate specific hospitality industry accounting skills" (p. 85). Further, the author presented the following objectives for hospitality students' financial and accounting class:

> (a) demonstrating how revenue and expenses are accounted for in hospitality operations; (b) valuing the considerations involved in property, equipment, and other non-current asset accounting; (c) demonstrating knowledge of the significant elements of payroll accounting; (d) analyzing the use of department statements or schedules; (e) analyzing hotel income statement; (f) analyzing statement of cash flows; (g) identifying the types and purposes of interim and annual reports, including the role of an audit service; (h) demonstrating the process of budgeting expenses and the elements that must be considered; (i) Judging the use of various models to forecast the sales for hospitality operations; (j) demonstrating knowledge of the use of master, flexible, and capital budgets; (k) applying variance analysis techniques; and (l) analyzing several important types of managerial decisions in order to make the best choice (p.85-86).

Guided by the need to better understand the range of financial competencies that should be taught as a part of the hospitality education, this research investigated the financial curricula offered in the top 15 hospitality programs in the United States (Park, Phillips, Canter, & Abbott, 2011). A list of the core financial courses provided in these programs is summarized in Table 2. The findings suggested that, in lower-level courses (for freshman and sophomore students), most hospitality programs provide financial accounting as the fundamental financial knowledge entry-level class. The objective is to teach students to read and analyze the information on financial statements. Some programs also include managerial accounting as a lower-level course, whereby the students learn how to make decisions for organizations by interpreting and measuring accounting information. In upper-level courses (for junior and senior students), most programs provide managerial accounting, cost control, hospitality asset management, RM, and hospitality finance, aiming to foster specific financial competencies in students in preparation for their future careers. Cost control and asset management courses are mainly offered to equip students with the ability to trace costs, set budgets, and assess capital investment. Similarly, RM courses aim to develop the students' capabilities to capture revenue opportunity, select best forecast models, and obtain price optimization. Finally, hospitality finance courses provide the students with the essential skills required to perform internal control, financial planning, risk management, cash flow control, etc. It is evident that these subjects can equip hospitality students to function successfully as managers in the hospitality industry.

Table 2

Core Financial Courses of the Top 15 Hospitality Program in the US

School	Core Financial Courses	
	Lower Level	Upper Level
1. Cornell University	Financial Accounting, Managerial Accounting, Finance	Principle of Hospitality Real Estate, Fundamental of Financial Planning, Hospitality Asset Management
2. Pennsylvania State University	Hospitality Financial Accounting, Hospitality Managerial Accounting	Financial Management in Hospitality Operations , Hospitality Real Estate, Revenue Management
3. University of Nevada, Las Vegas	Introduction to Financial Accounting	Hospitality Accounting, Hospitality Finance, Hospitality cost control
4. Purdue University	Financial Accounting for the Service Industry, Managerial Accounting and Financial Management in Hospitality Operations	
5. Virginia Tech		Financial Management and Cost Control for Hospitality Organization
6. University of Central Florida	Hospitality Industry Financial Accounting	Hospitality Industry Managerial Accounting, Hospitality Industry Finance
7. Washington State University	Financial Accounting	Finance
8. Temple University		Financial Issues in Tourism and Hospitality
9. Kansas State University	Accounting for Business Operations	Cost Control in hospitality Operations, Principles of Finance
10. Michigan State University		Hospitality Managerial Accounting, Hospitality Finance, Hospitality Business Real Estate Development
11. Oklahoma State University	Introduction to Hospitality Accounting	Lodging property management, Hospitality Cost Control, Revenue Management in Hospitality Operation
12. Iowa State University	Financial Accounting	Hospitality Operations Cost Controls
13. University of South Carolina	Functional Accounting	Hospitality Financial Management
14. University of Florida	Introduction to Financial Accounting, Introduction to Managerial Accounting	Revenue Resource Management
15. University of Huston		Spa Administration &Forecasting, Hospitality Managerial Accounting, Hospitality Cost Control

Core Financial Subject Areas in the Hospitality Industry

To fully explore the essential financial competencies in the hospitality industry, it is necessary to understand the core financial components in hospitality operations.

Core Financial Subject Areas

The financial subject areas in academic research were reviewed by Park et al. (2011), who listed top hospitality journals as an indication of the main interests in this area: International Journal of Hospitality Management, International Journal of Contemporary Hospitality Management, Cornell Hospitality Quarterly, and Journal of Hospitality &Tourism Research. This review identified the most popular financial subject areas in the hospitality research by comparing the number of articles on each financial topic. The authors identified 210 articles on financial management, RM, and cost management, which were narrowed down by searching for “financial,” “revenue management,” and “cost” in titles, keywords, and abstracts and only retaining articles published in 2004-2013. Table 3 presents the number of articles on each financial topic published in these four hospitality journals respectively and indicates that the six most discussed financial subject areas (the term “competencies” and “subject areas” will be used interchangeably) in the covered period were RM, price, forecasting, budgeting, costing, and asset management, which accounted for 89% of the reviewed financial articles. Other financial topics, such as cash flows, investment, lease accounting, bankruptcy, and debt management were also discussed often, but in a general business-oriented sense; therefore, these were not included in this research.

Table 3

Number of financial articles published in Core Hospitality Journals

Table 3 continued

Journals	IJHM	IJCHM	CHQ	JHTR	Total	Percentage
RM	12	5	33	5	55	26%
Price	25	3	10	13	51	24%
Forecast	2	4	4	0	10	5%
Budgeting	4	4	1	1	10	5%
Cost	20	9	4	6	39	19%
Asset	7	5	6	2	20	10%
Other	3	7	5	7	22	11%
Total	73	37	66	34	210	100%

Note: 1. "Others" include cash flow, investment, lease accounting, bankruptcy, and debt management. 2. IJHM = International Journal of Hospitality Management; IJCHM = International Journal of Contemporary Hospitality Management; CHQ = Cornell Hospitality Quarterly; JHTR = Journal of Hospitality &Tourism Research; RM = Revenue Management.

In addition to journal articles, a review of hospitality financial textbooks was conducted as a part of this study, in order to broaden the scope of the review and assess the educational interest in this field (Cote, 2007; Dittmer & Keefe, 2006; Dopson, 2011; Dopson & Hayes, 2009; Jagels, 2007; Hales, 2011; Hayes & Miller, 2011; Schmidgall & Damitio, 2006; Schmidgall, 2012; Weygandt, Kieso, Kimmel, & DeFranco, 2009). For this purpose, the search was narrowed to the textbooks published by Pearson, McGraw-Hill Education, and Wiley, as these are the three major higher education textbook publishers in the field of hospitality. Finally, the publications of American Hotel & Lodging Educational Institution were also included in the search, as this was the best measure of what literature is available for students in this field. Only ten hospitality financial textbooks published in the past decade (2004-2013) were found, as summarized in Table 4. As can be seen, over 60% textbooks cover RM, forecasting and budgeting, pricing, cost control, and asset management as specific financial subject areas.

Table 4

The Six Financial Subjects Covered in the Core Financial Textbooks.

	Textbooks	RM	Forecasting	Pricing	Costing	Budgeting	Asset Management
1	Accounting and Financial Analysis in the Hospitality	√	√	√	√	√	√
2	Accounting for Hospitality Managers	√	√	√	√	√	√
3	Food and Beverage Cost Control	√	√	√	√	√	
4	Hospitality Financial Accounting					√	√
5	Hospitality Industry Financial Accounting					√	√
6	Hospitality Management Accounting			√	√	√	√
7	Hospitality Industry Managerial Accounting	√	√	√	√	√	√
8	Introduction to Revenue Management for the Hospitality Industry: Principle and Practices for the Real World	√	√	√			√
9	Managerial Accounting for the Hospitality Industry	√	√	√	√	√	√
10	Principle of Food, Beverage and Labor Cost Controls			√	√	√	
Total number of books that contains each subject		6	6	8	7	9	8
Percentage of overall 10 textbooks reviewed		60%	60%	80%	70%	90%	80%

Note: "√" means the textbook contains the subject.

In summary, a thorough review of hospitality journal articles and textbooks revealed that *RM, pricing, forecasting, cost control, budgeting, and asset management* are the required financial competencies for hospitality employees, from the academic perspective. However, given that this may not represent the practitioners' view, this study will aim to identify the discrepancies between the two in order to offer some guidelines for future educational practices in the field of hospitality.

Financial Subject Areas under Revenue and Cost Competencies

A major goal of any business, and thus implicitly hospitality business, is profit optimization, defined as maximizing contributions from "total revenue minus total incremental cost from sales" (Phillips, 2005, p. 38). Burgess and Bryant (2001) argued that, while a large body of research on RM exists, as it focuses on maximizing sales revenue while ignoring cost management, it fails to offer guidelines or strategies for achieving profit optimization. Cost management helps managers reduce excessive costs and avoid wasting resources (Dittmer & Keefe, 2006). Thus, fostering financial competencies of hospitality employees should focus on both maximizing revenue and reducing cost (Tsai, Pan, & Lee, 2010). These pre-identified financial competencies areas were better justified in the following paragraphs.

Revenue Competencies

In this study, the pre-identified revenue competencies were group into three subject areas namely RM, pricing management, and forecasting. RM is commonly utilized in the hospitality industry as a profit-maximizing pricing technique, in particular in relation to perishable products (Shy, 2008). Owing to the widespread acceptance and practice of RM in the hospitality industry, managerial attention has focused on pricing, demand forecasting, inventory allocation, overbooking, and implementation issues (Choi, 2006). Upchurch, Ellis, and Seo (2004) identified price management tactics and supply-demand forecasting as the basic elements of RM in the lodging industry.

Revenue Management

RM provides assistance with the core issues of product, supply, demand, and pricing (Cross, 1997a). Economists defined RM as a means of effective allocation that maximizes economic wealth through dynamic forecasts of customers' activities (Cross, 1997a). In a hospitality business, Choi and Cho (2000) referred to hotel RM as a collection of room pricing strategies that can be applied to generate the seasonal demand and capacity management, whereby the constraints are incorporated into the profit maximizing scenarios. The hotel business is unable to adjust inventory supply over a short time because of the nature of capacity constraints and seasonal demand characteristics (Choi & Cho, 2000). Thus, RM was developed to address these problems by correctly allocating hotel rooms according to different price ranges.

RM originated from yield management, which is typically understood as a tool that can help an organization sell the right inventory to the right customer, at the right time and for the right price (Choi & Kimes, 2002; Kimes, 2004). However, according to industry professionals, as it is not a customer-driven strategy, yield management is no longer an effective pricing technique. This important drawback is thus offset by RM, as its scope is much broader (Hayes & Miller, 2011). For that reason, RM is commonly used by other hospitality sectors, such as restaurants, golf courts, cruises, and spas, as these industries are also subject to constrained and perishable capacity. Restaurant operators can use RM to manage meal duration and offer different menu prices at different times during the day and for different days of the week (Kimes, 2004). Unlike hotel guests, restaurant and golf customers view most demand-based pricing as acceptable, but find dynamic prices unacceptable (Kimes, 2003). Helsel and Cullen (2006) stated that the main advantage of RM is in that it deals with "segmentation, demand forecasting, revenue strategy, operational forecasting, interdepartmental integration, strategic pricing, inventory control strategies, and internal performance analysis" (cited in Tony & Poon, 2012, p.508). This is particularly important in the hotel industry, as it faces uncertain customer demand, while having to accommodate different customer preferences and commodity prices. Thus, RM researchers have developed probability models or forecasting methods that can respond to that uncertainty (Padhi & Aggarwal, 2011). Moreover, it is increasingly important that RM can incorporate customers' buying behaviors and price elasticity in order to charge the right price to each customer (Milla & Shoemaker, 2008). For example, Cross et al. (2009) proposed a "customer-centric" approach to RM, which applies "demand-forecasting capabilities to create an integrated demand planning cycle" in the long-term. Tony and Poon

(2012) defined customer-centric RM as “setting aside inventory to accommodate certain loyal customer segment” (p. 508).

One of the challenges the hotel managers must overcome is deciding whether to favor group reservations or individual guests. Noone and Hultberg (2011) cited two reasons for this challenging decision:

> First, hotels must forecast the relative value of the group business, as compared to other, potentially higher paying groups or to transient guests who book nearer to the time of arrival. Second, once a group’s reservation is accepted, hotels have to forecast room block utilization to ensure that rooms will be filled or released for sale to transient guests (p. 408).

Some of the studies in this field focused on RM for transient customers, as they occupy a large market and thus bring significant revenue to the hotels. However, other researchers argue that group RM should get the same attention as transient RM, as it also generates a substantial portion of revenue for hotels (Choi, 2006; Noone & Hultberg, 2011; Schwartz & Cohen, 2003; Cross et al., 2009). Based on this premise, models were developed to evaluate group profitability and improve group forecast accuracy. In order to optimize revenue, revenue managers require demand forecasts at the micro-market level to be as accurate as possible, and save products for the most valuable customers (Cross, 1997a).

An RM system applies basic economic principles to pricing and controlling room inventory by executing two main functions—forecasting and optimization (El

Gayar et al., 2011). While, according to Phillips (2005), accurate forecasting provides hoteliers clear insight of market trends and demand elasticity, revenue optimization can be defined as "charging premium prices when demand is high and lowering prices to stimulate demand when demand is low" (Heo & Lee, 2011, p.243). The goal of revenue optimization can be seen in a much more general sense as the ability "to provide the right price for every product to every customer segment through every channel" (Phillips, 2005, p. 26). With the wide adoption of RM, revenue optimization has become a core competency in the hospitality industry (Phillips, 2005).

Given the complexities associated with revenue management, is necessary for both industry and academia to understand the specific job responsibilities of revenue managers and the skills these individuals must possess. When looking for qualified candidates to fit RM positions, hospitality leaders must carefully assess the revenue managers' job responsibilities. This ability to match the right candidates to the available positions would be greatly facilitated by ensuring that educators design comprehensive hospitality curriculum that addresses the core competences of revenue managers and other related personnel. In order to identify the most common job responsibilities of hotel revenue managers, an internet search was conducted as a part of the present study, using "hotel revenue manager job description" as the search string. Google returned about 800,000 results related to this topic. According to the job descriptions found on some of these sites, core revenue manager's job duties include setting optimal room rates, forecasting room revenue for a certain period, predicting market trends, balancing group and transient customers' demand, controlling room inventory, assisting the marketing department in positioning customers, coordinating with third-party websites, analyzing financial reports, and managing reservations. Therefore, from the hospitality industry's perspective, revenue managers act as coordinators for the financial and marketing department.

Pricing Management

As a major subset of revenue competencies, pricing management aims to determine an optimal room rate for revenue optimization (Enz et al., 2009; Baker & Collier, 2003; Phillips, 2005; van der Rest & Harris, 2008). Dynamic pricing strategy aids hotels in optimally meeting their customers' price sensitivities, as well as helping them to maximize revenue and maintain competitiveness (Cross, 1997a). Price is a major determinant of a hospitality establishment's profitability, as effective pricing contributes to "the long-term success of firms as overpricing can lead to lost market share, and under-pricing to lost revenues" (Danziger, Israeli, & Bekerman, 2006, p.130). However, while high prices may result in low occupancy, lower prices may also be an issue, as they "degrade the perceived quality of products" (Schmidgall, 2012, p. 364). Managerial pricing decisions are inherently risky and uncertain, as they rely on many variables and their outcomes cannot be forecast with certainty. Consequently, the possible revenue outcomes are varied and have to be carefully considered under each scenario (van der Rest & Harris, 2008).

According to Mattimoe and Seal (2011), pricing in the hotel industry is influenced by cost and customers from both accounting and marketing perspective. However, firms utilize some pricing techniques—such as cost-based pricing, target-return pricing, value-based pricing, and competitor based-pricing—because they are relative easy to implement, rather than most optimal (Danziger et al., 2006). The cost-based pricing approach assumes that every $1000 of investment into each room would yield an additional $1 charge for the room rate (Schmidgall, 2012). The target-return pricing, on the other hand, requires that the price is set in a way that allows the owner to achieve a target profit or target return on investment (ROI) (Steed & Gu, 2005). According to value-based pricing, setting price should be based on customers' perceived value created by products or services (Chang, 2008). Finally, under competitor-based pricing, the price is determined based on competitors' pricing strategies (Sato & Sawaki, 2013). While each of these techniques has advantages, with the exception of value-based pricing, they all ignore the customers' evaluation of the product value. In order to mitigate this shortcoming, some researchers suggest that pricing strategies should take into account customers' perception of intangible assets (e.g., star rating, brand information). Thus, Cross and Dixit (2005) recommended "customer-centric pricing," which sets price based on the customers' willingness to pay, and segments customers by price sensitivity in order to maximize revenues. According to Rohlfs and Kimes (2007), customers typically perceive non-blended hotel room rate presentation format (i.e., first night rate is $120, second night rate is $100) as more acceptable than the blended rate format (i.e., average two-night rate is $ 110).

Most extant studies in this field tend to discuss pricing strategies from a marketing perspective, without much consideration of revenue optimization. This is a major shortcoming, as revenue optimization aims to adjust room rates in accordance with the actual market forces in order to yield the greatest business profit (Hayes & Miller, 2011). Thus, in order to address this gap in the current research, the present study focuses on pricing competency needed for revenue optimization. Hotel managers must understand price elasticity and price their room rates according to different distribution channels, as well as consider the impact of different pricing strategies on different target markets (Kimes, 2003). Van der Rest and Harris (2008) suggested that “any change in room price is only worthwhile when it is supported by an appropriate elasticity of demand” (p. 177). In other words, when a discount is applied, the elasticity of demand must compensate for this shortfall in order to enhance revenue. Van der Rest and Harris (2008) noted that a hospitality operation with higher variable cost (e.g., labor cost) would gain more profit from a discount, compared to an operation with higher fixed costs (e.g., facility maintenance and utility costs). Enz et al. (2009), on the other hand, advised raising room rates relative to competitive hotels because it could boost revenues, as a higher RevPAR would fully compensate for the loss in occupancy. Given the complexities of price and capacity management, capable hotel managers must have knowledge of different pricing techniques and the ability to determine right price strategies.

Forecasting

Forecasting is a main subcategory of revenue competencies, as it predicts customer demand in order to allocate perishable assets across different room rate structures (Weather, Kimes, & Scott, 2001; Baker & Collier, 2003). Forecasting systems are commonly used as a revenue optimization technique that estimates future demand based on historical data (e.g. daily arrivals or rooms sold) and current reservations activity provided by the reservations system (El Gayar et al., 2011). Leading firms “implemented optimization systems to predict transient demand, optimized the rate classes offered, and impose length of stay controls” (Cross et al., 2009, p. 65). The revenue forecasting “provides information to managers about occupancy levels, daily average rate, and sales estimates” (Aghazadeh, 2007, p. 34). By optimally utilizing the forecasting tools and the data they generate, a hotel can potentially increase revenue by matching demand to the room availability (Chen & Kachani, 2007). Accurate forecasts have a positive effect on hotel RM, and help hotels make better decisions in “staffing, purchasing, and budgeting” (Weatherford & Kimes, 2003, p 402). Cross et al. (2009) emphasized that, by careful consideration of forecasts and budget constraints, managers could substantially enhance hotel revenue.

While forecasting has a wide variety of implications, most research in this field has focused on forecast methods and accuracy of their findings. The forecasting methods and techniques vary across departments. For example, hotel room occupancy forecasts are based on expected units of sales, while food and beverage forecasts should be based on the expected number of guests, and the resources required for hosting banquets can be estimated via previous year's revenues (Schmdgall & DeFranco, 1998). Broadly speaking, there are two types of hotel demand forecasting methods—Time Series Analysis and Econometric Modeling (Tony & Poon, 2012). Song, Wong, and Chon (2003) described the Time Series Analysis as a technique that extrapolates historic demand trends into the future by assuming that the events repeat over time and the variables remain constant. The Econometric Model, on the other hand, uses econometric theory to assess customer behaviors and estimate demand elasticity (Tony & Poon, 2012). Time Series Analysis is commonly used to develop easy and cost-efficient forecasting methods (Cranage, 2003; Chen & Kachani, 2007). Lee (1990) categorized time series forecasting methods into three types: historical booking models, advanced booking models, and combined models. Historical booking models only incorporate the "final number of rooms or arrivals on a particular stay night," while advanced booking models focus on "the recorded reservations over time for a particular stay night," and combined models use "either regression or a weighted average of historical data and reservation data to develop forecasts" and are thus most accurate (Weatherford & Kimes, 2003, p. 402). Researchers use Time Series Analysis to capture seasonality in order to ensure that sufficient staff and supplies are available during the busiest periods, such as spring break, summer, and Labor Day weekend (Aghazadeh, 2007).

Forecast accuracy has a significant effect on revenue optimization. Lee (1990) reported that, based on the empirical evidence, a forecast accuracy increase of 10% in the airline industry would contribute to 0.5-3.0% increase in revenues. Without an accurate forecast, the room rate and availability may be highly inaccurate (Weatherford & Kimes, 2003). Numerous researchers have conducted studies aimed at evaluating forecast models in terms of their accuracy and utility in various sectors (Brumelle & Walczak, 2003; Chen & Kachani, 2007; El Gayar et al., 2011; Frenchtling, 2012; Talluri & Van Ryzin, 2006; Weatherford & Kimes, 2003). In the context of hotel industry, the ultimate goal of a forecast is to accurately predict the demand distribution for each night, for each rate, and for each length of stay (Chen & Kachani, 2007). For example, “hotels impose a two-night minimum length of stay on a $99 rate, but a three-night minimum stay on a $79 rate, this strategy requires forecasts by rate and length of stay” (Kimes, 2003, p. 136). Weatherford et al. (2001) found that, at the beginning of the 21st century, most major hotels used linear programming models that required detailed forecasts by day of arrival, length of stay, and rate category. Kimes (1999) addressed the accuracy of group forecasts and found that “the forecasting error at one month before arrival was 35 percent and was 15 percent on the day of arrival” (p. 136). Weatherford and Kimes (2003) compared various forecasting models and suggested that exponential smoothing, moving average, and pickup models were the most stable forecasting models available at the time, since these models could improve the forecast accuracy of rate category and length of stay. The Exponential Smoothing Model involves recent data and "generates better short run prediction" (Simionescu, 2012, p. 96). Similarly, the Moving Average Method predicts the next period demand based on historical moving averages, which is more relevant than using only the most recent occupancy data (Hatchett, Brorsen, & Anderson, 2010). The Pickup Model, on the other hand, depends on reservations "picked up" (referring to the actually honored bookings) data to estimate the final occupancy (Talluri & Van Ryzin, 2006). Hospitality managers are required to have the skills to operate these forecasting software tools and analyze the market tends based on historical data (Cranage, 2003). However, as the technology advances rapidly and the software and the available models change, this requires both the educators and the hotel management to continually keep abreast of the latest offers and adjust the training offered accordingly.

Cost Competencies

The pre-identified cost competencies were also grouped into three subject areas, namely cost control, budgeting, and asset management. It is important to acknowledge that maximizing revenues does not equate to maximizing profit, which is largely dependent on cost control (Cross, 1997b). For the capital-intensive aspect and complex cost structure of the hospitality industry, managers require qualitative cost information for monitoring and controlling costs (Pavlatos & Paggios, 2009).

Budgeting and asset management are recognized as two essential tools for cost control, and are thus particularly valuable in controlling operational expenses and capital expenditure, respectively. Effective budgeting plans help managers to be aware of potential problems and avoid unnecessary costs (Steed & Gu, 2009). Empirical evidence indicates that hospitality employees with financial knowledge in budget planning are more competitive in promotion (Kay & Moncarz, 2004). Jang and Park (2011) performed content analysis on hospitality finance research published during the past two decades, concluding that the implementation of asset management to deal with fixed-cost intensive structure in the hospitality industry has become a major stream of hospitality finance research. Asset management assists hotel managers in effectively making capital budget decisions, controlling costs, and assessing risk (Rogers, 2013).

Cost Control

Jauhari (2006) presented cost control as one of the most critical factors contributing to the hotel industry's growth. Cost control is involved in every step of hospitality operations, including "purchasing, receiving, storing, issuing, preparing food and beverage, as well as training and scheduling personnel" (Dittmer & Keefe, 2006, p. 46). Hospitality operators seek cost-effective approaches to increase revenue and expand sales (Ku, Wu, & Lin, 2011). At the strategic level, cost control supports decision-making, as the aim is to align the firm's cost structure with the actual expenditure, as well as evaluate the strategic efficiency of the organization

(Anderson, 2006). According to Pizzini (2006), at the functional level, cost management systems can (1) provide detailed and accurate cost information about individual activities; (2) allocate cost according to behaviors; (3) frequently report cost information to support management decisions; and (4) analyze variances between budget and actual outcomes. Hesford and Potter (2010) added that "the cost allocation process helps managers better understand the relationships between departments and thus promote the efficient use of resources" (p. 504). Cost information is also an important indicator for pricing determinations (Pellinen, 2003). For example, cost-volume-pricing is a commonly used cost-based pricing technique that sets prices at the level that can cover fixed and variable costs, provided that a certain sales volume is achieved (Danziger et al., 2006).

The traditional cost accounting systems originated from manufacturing firms "with the emphasis on volume and productivity" (Brander Brown & Atkinson, 2001, p.136). However, this approach led to ineffective decision-making in the hospitality industry's operations (Kotas, 1997). Traditional cost accounting cannot accurately trace and allocate costs incurred in hotels and other hospitality venues, as these operations are inherently made more complex due to the diversified cost structure, fixed capacity, perishable products, labor and capital intensity, and elastic demand (Brignall, 1997). Therefore, the hospitality industry requires a more flexible cost management approach to deal with its unique nature.

To simplify the cost allocation process, current cost accounting systems in the hospitality industry disaggregate direct cost to various revenue generating departments, and assign indirect costs to cost centers (Karadag & Kim, 2006), even though this approach may result in potential inaccuracies. Hospitality properties treat room and food & beverage departments as revenue producing departments. Other departments, such as administrative and general, marketing, finance, human resources, property operation, maintenance, and security, are considered cost or support centers (Hesford & Potter, 2010; Karadag & Kim, 2006). For example, the food & beverage cost has often been inaccurately calculated as "revenue minus direct material expense, despite significant labor and overhead expense involved" (p. 504). Thus, a large percentage of hospitality operational cost, such as labor cost, utilities, indirect operating expenses, maintenance, and fixed costs, are undistributed to operating expense (Bell, 2002). Given these shortcomings in the current approach, it is necessary for hospitality operators to adopt novel strategies to allocate a greater proportion of incurred costs to the revenue producing departments.

In order to optimize restaurant operations, researchers recommend implementing an activity based costing ("ABC"), as a cost-effective tool that reflects real production processes, especially in establishing a menu item price (Raab & Mayer, 2007; Anderson, 2006; Salem-Mhamdia & Ghadhab, 2012). The ABC method is able to trace the overhead costs to end-products based on diversified cost divers (i.e., direct labor hours) (Raab, Mary, & Shoemaker, 2010). In an earlier study, Raab and Mayer (2003) found that restaurant managers were increasingly adapting to the ABC method as a tool to assign wages and salaries to individual items on the menu and for implementing labor cost controls. However, the indifference of top-management, resistance from employees, and the complex nature of ABC often result in difficulties when implementing this immensely valuable tool (Cohen, Venieris, & Kaimenaki 2005).

Cost-volume-profit ("CVP") analysis is another cost ontrol technique commonly used in the hospitality industry (Dittmer & Keefe, 2006). CVP analysis is also referred to as a "breakeven analysis," described by managers as "a set of analytical tools used to determine the revenue required at any desired profit level" (Schmidgall, 2012, p. 164). CVP analysis aids hospitality operators in evaluating cost alternatives when making efficient decisions (Brotherton &Wood, 2008). Therefore, successful hospitality controllers have to understand both the cost analysis techniques (e.g., CVP) and cost allocated methods (e.g., ABC) in order to manage the revenue optimally and make accurate budget allocation.

Budgeting

Budgeting is a critical cost management competency. Schmidgall and Defranco (1998) stated that the major difference between budgeting and forecasting is that the former is considered a form of strategic planning that typically covers a longer time period than the latter focuses on. Hotels commonly use twelve months as a budgetary period and reforecast monthly and quarterly (Uyar & Bilgin, 2011). Majority of hoteliers prepare budgets because these affect the financial operation of a lodging property (Oak & Schmidgall, 2009; Schmidgall & Defranco, 1998; Uyar & Bilgin, 2011). The key budgeting functions assist in monitoring and controlling, measuring and comparing performance, and facilitating planning (Jones, 2008a; Oak & Schmidgall, 2009). According to Wu et al. (2007), accurate budget practices (e.g., cost, profit, sales, and production budgeting) are robust control tools that benefit the organization. Hospitality properties achieve high operation efficiency by adopting sophisticated budgeting practices (Haktanir & Harris, 2005). A majority of hotels compare the variance between the previous year’s actual results and the budget figures to evaluate their performance and assist in creating more accurate budgets for the current year (Uyar & Bilgin, 2011). Managers are additionally motivated to accomplish the budgeting process correctly, as their commissions depend on meeting the budgetary goals (Oak & Schmidgall, 2009). Schmidgall and DeFranco (1998) found that 64% of hotel managers used “sales or net income as the financial goal; and the remaining used other measures such as revenue per available room (RevPAR), gross operating profit, occupancy rate, etc.” (p. 47).

Budgeting practices are usually conducted in two broad categories—operational budgets and the capital budgets. Operational budgets coordinate activities and ensure the availability of resources, and are used mainly for cost control (Schmidgall & DeFranco, 1998). In the context of hospitality industry, they typically incorporate a detailed operating plan by profit centers (e.g., rooms, food & beverage service, and telephone utilization), sources of various costs that arise within service centers (e.g., marketing, accounting, and human resources) (Karadag, 2006). Schmidgall (2012) summarized six reasons for using an operating budget: (1) to examine alternatives before taking action, (2) to provide a comparison benchmark, (3) to apply long-term strategic planning, (4) to motivate all levels of management, (5) to provide a "channel of communications" to lower level managers, and (6) to enable managers to set prices basing on estimating future expense (p. 447). It is widely recognized that more effective budgets yield more desirable benefits. Capital budgeting is the other budgeting category and is critical to the hospitality industry because the majority of operating assets are fixed and long-term in nature. Capital budgeting refers to the process of determining which fixed assets should be purchased and the amount that should be spent on those assets (Schmidgall, 2012). Capital budgets can help plan the "purchase of long-term equipment" to cut operating costs and increase sales, and to provide for "other long-term operating needs" (Hales, 2011).

There is an ongoing discussion on finding the ways derive greater benefits from the budgeting process. Numerous researchers have expressed concerns about traditional approaches to budgeting and have thus proposed better techniques and approaches (e.g., activity-based budgeting and zero-based budgeting) and other alternatives that extend beyond budgeting approaches (Atkinson & Brander Brown, 2001). Activity-based budgeting uses cost drivers to allocate overhead cost to each individual activity (Libby & Lindsay, 2007). This method helps controllers to recognize the cost-driven activities and to ensure that these costs are avoided, or at least minimized. Zero-based budgeting, on the other hand, uses current data for budgeting forecasts, as opposed to the traditional budgeting, which uses historical performance as reference (Libby & Lindsay, 2007). Beyond-budgeting techniques have introduced significant changes into the traditional management style by empowering the bottom management team in direct contact with the customers to make decisions pertaining to the realm of their operational duties (Uyar, 2009). Jones (2008a) conducted a study on this issue, revealing that the bottom-up budgeting approaches used by hotels, whereby each individual department's budget contributes to the overall budgeting process, are popular because this distribution of responsibility "encourages increased ownership and commitment from lower level managers to the budget" (p. 433). In line with the above, research has shown that, when this approach is implemented in a private country club, it ensures that the general manager, controllers, department managers, and committee heads are all jointly responsible for budget planning, which increases the likelihood of the success of the entire operation (Oak & Schmidgall, 2009). Hence, the hospitality industry demands employees who are capable of making budgets regardless of which positions they hold.

Asset Management

Asset management plays an important role in cost management competencies. Currently, hospitality venues tend to shift their business strategies to less capital-intensive operations by adopting management contracts and franchising (Sohn, Tang, & Jang, 2013). Operating managers working within these businesses are responsible for managing property assets by monitoring the physical assets' life cycles (from their purchase, through utilization, amortization, and maintenance, to eventual disposal), as correct pricing of these components helps to achieve a positive asset return, and thus stay cost-effective, while minimizing investment risk (Rogers, 2013). However, as many of these tasks are increasingly outsourced to external management companies, the conflict between property owners and operating managers has intensified. Owners have an incentive to classify as many transactions as possible as revenue expenses instead of capital expenditures, as this reduces current income, and thus payable taxes (Schmidgall et al., 1997). On the other hand, operating managers, who are often paid based on their performance, tend to capitalize as much expenditure as possible, in order to avoid operation expenses and maximize the factors on which their performance is measured (Kim, Dalbor, & Feinstein, 2007). Denton (1998) defined three negative effects of excess capitalizing as: "(1) the owner's tax liabilities will increase when less maintenance expense are recognized; (2) the major improvement is ignored when operators make low-priority renovations; and (3) the management company may defer charges to accumulate large expenditures for capitalizing" (p. 31).

Authors of a number of studies developed methods that could be implemented to mitigate the conflicts of interest between owners and operating managers. According to Kim et al. (2007), incremental proportion of stock ownership by managers provides an incentive to avoid the potential conflicts and enhance management performance. In a similar study, Tuner and Guilding (2010) compared the existing measures of hotel operator fee determinations, reporting that return on investment (ROI) and residual income (RI) are appropriate performance measures, as they motivate managers to reach the performance thresholds the owners are satisfied with, thus minimizing the potential for conflict.

As hospitality business operations are, to a large extent, supported by physical assets, the choice between classifying an expense as an operating maintenance expense or a capital expenditure can be a challenge (Hesford & Potter, 2010). Operating expenses are incurred through typical running of a business and include such items as payroll, maintenance, transportation, depreciation, etc. (Hales, 2011). Capital expenditures, on the other hand, are recognized as assets when they are invested into increasing or improving operating capacity (Brooke & Denton, 2007). Some expenses, such as those incurred by purchasing land, buildings, and most equipment, are easily classified as capital expenditures. Other transactions, however, are difficult to classify (Schmidgall, 2012). For example, when a hotel installs new lamps in the lobby, it is difficult to determine whether the cost of the lamps as an operating expense or a capital expenditure. It could be an operating expense because lamp replacement is a repair and maintenance action, while it could also be capital expenditure, given that lamps are physical assets. To specifically explain the application of the capitalization criteria, Schmidgall et al. (1997) conducted a study to investigate the capital expenditure classification criteria adapted by lodging companies. The findings revealed that hotel controllers would typically recognize capital expenditures based on whether the purchase that exceeds a certain dollar amount, or is a part of renovations, or extends the useful life of existing assets. Therefore, the author concluded that hospitality operators need knowledge on capital expenditure criteria to effectively manage property assets.

The revenue and cost management competencies sets discussed above are the focus of this study, and will be subsequently examined by hotel managers.

CHAPTER Ⅲ

METHODOLOGY

This chapter first discusses the study rational and its research objectives, after which the research questions are presented. Then the chapter provides details on the selection of participants, the sampling procedures, and the data collection instrument. Finally, the chapter describes the pilot test used to validate the data collection instrument, as well as the data analyses employed in this research.

Study Rationale

The rapid expansion of the hospitality industry has increased the demand for qualified employees (Mayburry, 2010). However, there is a perceived discrepancy between the views of hospitality educators and those of industry operators regarding the key hospitality business competencies industry entrants must possess when applying for the positions. Thus, the knowledge students acquire in hospitality programs does not match industry needs (Vujic et al., 2008). Because of the capital intensive and complex cost structure in the hospitality business, revenue and cost management competencies are required at every level of operation (Jauhari, 2006). The hospitality industry demands staffs that possess well-honed RM skills to deal with perishable inventory and maximize revenues (Gregory & Beck, 2006). Moreover, hospitality establishments increasingly require staff that can demonstrate cost control knowledge, as they are responsible for minimizing cost and maintaining operational efficiency (Ku et al., 2011). For these reasons, financial training has become a necessity in the hospitality industry.

Current industry demands imply that the operator should have analytical skills to collect useful information and systemize it to support decisions (Raybould & Wilkins, 2006). In order to design practical hospitality program curricula with a balanced emphasis on analytical and technical skills, educators need to identify the core financial competencies demanded by the industry. It is also necessary for hospitality practitioners to understand the activities and required skill sets that would enable managers to perform business duties and responsibilities effectively, and meet the financial goals of the organization.

Numerous studies have been conducted with the aim of identifying the desired competencies of a hospitality employee (e.g. Chung- Herrera et al., 2003; Keonigsfeld et al., 2012; Testa & Sipe, 2012). However, most studies focusing on financial aspects of the hospitality industry operations are limited in their investigation of core revenue and cost subject areas, and very few researchers have attempted to integrate a detailed list of financial revenue and cost management competencies. The aim of this work is to identify the main financial skills and help educators incorporate these identified expectations into the hospitality curricula in order to better prepare their students for the career in the industry and ensure their long-term success.

Research Objectives

The initial objective of this study is to explore the importance of the pre-identified financial competencies. Secondly, this study aims to examine other general competencies needed by hotel managers except financial competencies. Thirdly, this study will explore the perception gap between hospitality practitioners and educators regarding these competencies. Finally, the study will offer insights that might be helpful in modifying hospitality program curricula. These revised curricula will potentially enhance hospitality students' competency level, as it will arm them with the analytical and financial skills most relevant for the industry and prepare them for career success in their chosen field. The research questions that guided this exploratory study are as follows:

1. What types of hotel positions need financial competencies related to the subcategories of revenue or cost competencies?

2. What factors will be extracted from the pre-identified financial competencies?

3. Which financial competencies are rated highly in terms of their importance and use by hospitality industry managers?

3.1. What types of revenue competencies are deemed important by the hotel managers?

3.2. What types of cost competencies are deemed important by the hotel managers?

4. Which general competencies (except financial competencies) are rated highly in terms of their importance and training contents?

5. Do the background differences (e.g., education, work hours, and current position) affect managers' choice of financial competencies?

6. What factors will interfere with educators' decision to teach financial competencies in their classes?

7. Does a perception gap exist between managers and educators on the importance of financial competencies?

7.1. What types of revenue competencies are deemed important by the hospitality educators?

7.2. What types of cost competencies are deemed important by the hospitality educators?

7.3. What are the similarities and discrepancies between the perceptions of managers and educators regarding revenue and cost management competencies?

8. Do the background differences (e.g., teaching experience, employment status, and gender) affect educators' choice of financial competencies?

Human Subjects Review

The researcher in this study completed the human subjects training and was certified by Kent State University (KSU). The KSU Human Subjects Review Board reviewed and approved the proposal application for this study on December 5th, 2013. The research was approved under Exemption-2, under minimal risk criteria.

Surveys Design

The survey instrument was developed based on a thorough review of the literature related to financial subject areas and competencies in the hospitality industry (see Table 1 and Table 3). The financial subject areas covered in hospitality financial textbooks are also incorporated into the questionnaire items (Hales, 2011; Moncarz & Portocarrero, 2004; Schmidgall, 2012). The survey consisted of three parts. Part I is comprised of background and demographic information, such as gender, age, degree, major, property type, property size, job position, job responsibilities/description, and experience in the hospitality industry. Part II is comprised of questions that require the respondents to rate the importance of financial competencies that were identified in the literature review. The participants were asked to assign a level of importance to each of the financial competencies using a 5-point Likert-type scale anchored at 1 = least important, and 5 = Most important. Similarly, respondents were asked to report about their use of financial competences, frequency is indicated on a 5-point Likert-type scale, anchored at 1 = Least frequently, and 5 = most frequently.

This study intends to investigate revenue competencies and focus on three subjects areas: RM, pricing, and forecasting. The corresponding items were mainly adapted from Gregory and Beck's (2006) study on revenue managers' core activities and training (e.g., skills to interpret market trends, and ability to match group and transient market needs). A few more items (e.g., knowledge in competitor pricing technique, ability to control room inventory, and skills to operate forecast software) were added, based on the literature review, to reflect specific competencies related to each subject area (e.g., Aghazadeh, 2007; Beck, et al., 2011; Burgess & Bryant, 2001;

Chen & Kachani, 2007; Steed & Gu, 2009).

This study also intends to investigate cost management competencies and focus on three subjects areas: cost control, budgeting, and asset management. The items included in the survey were adopted from the literature review (e.g., ability to accurately trace and allocate cost, ability to use budgets to apply long-term strategic planning, knowledge in break-even analysis, and knowledge in capitalizing criteria) (e.g., Burgess, 2007b; Hicks, 2005; Harris & Brander Brown, 1998; Hesford & Potter, 2010; Singh et al, 2012; Uyar & Bilgin, 2011). These competencies consisted of costing methods, operational and capital budgets, operational and capital expenses, and asset management items. In terms of other general competencies, the items included in the survey are mainly adopted from Landman's (2010) study regarding basic skills hotel managers must possess.

The question items are structured based on Birdir and Pearson's (2000) research on a chef's competencies, following the basic components of competency—knowledge, skills, and abilities (KSAs) (Subhash, 2012). For example, question items are designed as "knowledge in capitalizing criteria," "skill in operating forecasting software," and "ability to analyze financial statements." Part III consisted of open-ended questions that asked the participants to provide details on their revenue and cost management background and experiences.

Prior to distributing the survey, a pre-testing stage included in-depth expert interviews with eight hospitality executives, including general managers, directors of sales, and front office managers. These managers were selected because they were directly in charge of revenue and cost management (Cross et al., 2009; Mia & Patiar, 2001). The results of the interviews were used to modify the final survey, whereby some statements were revised, and two new items suggested by the participants were added, namely “ability to analyze Profit & Loss statements” and “ability to negotiate corporate rates”. Once the survey format was finalized, a pilot study was conducted with three participants from each group (practitioners and educators) to examine the feasibility of the survey.

Sample and Data Collection

Data was collected via hard-copy and web-based questionnaires. Hard-copy questionnaires were distributed to industry managers and were either hand-delivered or mailed to their respective addresses using postage services. The participants included top hotel management (e.g., hotel general managers, directors of sales, financial managers, and front desk/reservation managers, food and beverage managers, controllers, or others with revenue responsibility) of hotels in northeastern Ohio all of which were rated with at least three stars. The full service hotels were chosen due to their multiple hierarchical levels that offered an opportunity to study financial competencies required by top level management. Before the survey instruments were distributed, hotel general managers were contacted via e-mail to gain their permission to conduct the study and invite their staff to take part. While the hotel contact information was collected from the hotel website, the front desk was contacted to verify the participant's contact information. The confidential issues were addressed and the managers were informed that their participation in this research study would be entirely voluntary. Thus, only the managers that agreed to voluntarily participate were asked to return the completed survey by mail.

In addition, educators in hospitality management programs in the U.S. were invited to take part in the survey in order to obtain their views on the phenomenon under investigation. Hospitality educators' contact information was sourced from the faculty directory of each university website. The invitation and Qualtrics online survey links were sent via e-mail to offer the opportunity for educators to complete the online survey.

Data Analysis

This research used SPSS (Statistical Package for the Social Science) to analyze the collected data. Cronbach's alpha was calculated to measure the internal consistency reliability of the scales. Four types of data analysis were performed in this study with the aim of answering the research questions. First, factor analysis was used to analyze interrelationship among variables, and extracted the items into a smaller set of interpretable factors (Research Question 2). Second, descriptive statistics, including frequency, percentage, mean, and standard deviation, were calculated to summarize the basic features of the sample and the measures (Research Question 3, 4, 6, 7.1, and 7.2). Second, ranking was applied on the competency scale based on mean scores to identify which content areas were important (Research

Question 3, 4, 6, 7.1, and 7.2). Third, a series *t*-test was conducted to examine the variances between industry professionals and educators (Research Question 7.3). Fourth, one-way ANOVA was employed to evaluate the background and demographic variances (industry experience, current position, property size, property type, degree, major, gender, and age) on the competency scales (Research Question 5 and 8). The data collected from open-ended questions was coded and categorized, in order to answer Research Question 1.

Chapter Ⅵ

RESULTS

In the last decade, managerial competencies have been updated to include financial analytical competencies; however, the implications of this change are underexplored in research and practice (Kay & Moncarz, 2004). Thus, in order to fill this gap in the extant knowledge, this study explored the essential financial and analytical skills the managers working in the hospitality industry must possess. Thus, in the present study, input was sought from both industry and academic professionals, enabling identification of the perception gaps between the two groups.

To accomplish these research objectives, data was collected through surveys, which were distributed to hotel managers and hospitality educators via mail and online links, respectively. In order to ensure sufficient participation, 250 hardcopy surveys were sent by mail to 35 hotels in major cities in northeast Ohio (including Cleveland, Columbus, and Akron). The remaining surveys were incomplete and were thus excluded from data analysis. Of these, 83 were completed and usable, corresponding to a response rate of 33.6%. In addition, 400 hospitality educators were contacted by e-mail, whereby the contact information was sourced from 25 university websites and CHRIE's publication in the U.S. regarding to faculty directory. This initiative resulted in 128 collected surveys, of which 112 were completed and usable, corresponding to a 32% response rate. Although the mode of distribution was not the same, both industry managers and educators completed an identical survey, and were asked to rate the importance of revenue and cost management competencies on a 5-point Likert-type scale, with 1 corresponding to “not at all important” and 5 to “extremely important.”

Measure Quality

All the scales employed in the survey had relatively high internal consistency, as the alpha coefficients pertaining to the items ranged from 0.80 to 0.99, which is well above the recommended level of 0.7 (Nunnally, 1978). Regarding to industry survey, Cronbach’s coefficient alpha for six scales was 0.99 for importance of revenue competencies, 0.99 for use of revenue competencies, 0.87 for importance of cost competencies, 0.94 for use of cost competencies, 0.80 for importance of general competencies, and 0.80 for importance of commonly sought skills. Regarding to educator’s survey, Cronbach’s coefficient alpha for five scales was 0.88 for factors that interfere with the decision to teach financial subject areas, 0.98 for importance of revenue competencies, 0.98 for leaning objectives covered for revenue competencies, 0.97 for importance of cost competencies, and 0.96 for leaning objectives covered for cost competencies.

Findings of Industry Practitioner Surveys

The results of industry surveys were discussed in the following paragraphs.

Demographics

The demographics of industry participants are shown in Table 5. As can be seen from the data, the participants work in a wide range of positions, including general manager (22.9%, *n* = 19), assistant general manager (15.7%, *n* = 13), front desk manager (15.7%, *n* = 13), director of marketing/sales (13.3%, *n* = 11), and food & beverage manager (8.4%, *n* = 7). Approximately half of the participants (51.2%, *n* = 41) have been responsible for RM or cost control for over 5 years and 54.3% have bachelor's degree. Most of the respondents graduated from hospitality management (43.1%, *n* = 28) and business management (16.9%, *n* = 11) programs.

Table 5

Demographics Characteristics of Industry Participants

Trait	Frequency (N=83)	Percentage (%)
Title		
General Manager	19	22.9
Assistant General Manager	13	15.7
Revenue Manager	1	1.2
Director of Marketing/Sales	11	13.3
Reservation Manager	2	2.4
F&B Manager	7	8.4
Front Desk Manager	13	15.7
Housekeeping Manager	3	3.6
Director of Finance	3	3.6
Others	11	13.3
Rooms of Hotel		
1-150	28	33.7
151-300	34	41.0
Over 300	21	25.3
Hotel Organization		
Corporate Owned and Managed	15	18.1
Franchising Property	51	61.4
Member of Referral Group	1	1.2
Independent Property	3	3.6
Franchisor with Management Contract	4	4.8
Contacted Management Company	9	10.8
Reporting Relationship		
General Manager	48	57.8
Assistant General Manager	7	8.4
Regional Office	13	15.0
Operation Manager	6	7.2
Others	9	10.8
Years Working in Hotels		
1-10	38	45.8
11-20	27	32.5
Over 20	18	21.7

Table 5 continued

Trait	Frequency (N=83)	Percentage (%)
Years of Working on Revenue Management or		
Cost Control	39	48.8
1-5	19	23.7
6-10	22	27.5
Over 10		
Working Hours per Week		
40-45	15	18.1
45-50	40	48.2
Over 50	28	33.7
Age		
21-30	26	33.8
31-40	23	29.9
41-50	16	20.8
Over 50	12	15.6
Education Degree		
Associate Degree	17	21.0
Bachelor’s Degree	44	54.3
Master’s Degree	1	1.2
Some College but no Degree	13	16.0
Other	6	6.2
Major		
Hospitality Management	28	43.1
Business Management	11	16.9
Accounting	5	7.7
Human Resource	1	1.5
Culinary	2	3.1
Engineering	2	3.1
Other	16	24.6

The responses to Research Question 1 (what types of hotel positions need competencies related to revenue and cost management) were coded and categorized in Table 6. According to the data, in hotels, 14.1% of the positions are relevant to revenue, 32.3% are relevant to cost, and 53.5% are relevant to both revenue and cost. More specifically, 93.5% of the general managers and 73.9% of the assistant general managers indicated that revenue and cost management are an integral part of their job responsibility. About half of the front desk managers (*n* = 15, 60%), sales managers (*n* = 16, 56%), food & beverage manager (*n* = 15, 50%), and operations managers (*n*

= 8, 44%) took care of both revenue and cost, while 83.3% of banquet managers were in charge of cost management. Cost management was also a responsibility of housekeeping managers, financial directors, and engineering managers.

Table 6

Descriptions of Hotel Job Positions and Responsibilities

Positions	Total count	Revenue		Cost		Revenue and Cost	
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
GM	31	0	0.0%	2	6.5%	29	93.5%
AGM	23	2	8.7%	4	17.4%	17	73.9%
Front desk manager	25	4	16.0%	6	24.0%	15	60.0%
F & B manager	30	2	6.7%	13	43.3%	15	50.0%
Sales manager	25	10	40.0%	1	4.0%	14	56.0%
Operation manager	18	2	11.0%	8	44.0%	8	44.4%
Banquet manager	6	0	0.0%	5	83.3%	1	16.7%
Housekeeping manager	5	0	0.0%	5	100.0%	0	0.0%
Engineer manager	5	0	0.0%	5	100.0%	0	0.0%
Financial director	2	0	0.0%	2	100.0%	0	0.0%
Controller	3	0	0.0%	2	66.7%	1	33.3%
Sales	5	4	80.0%	4	20.0%	0	0.0%
Front desk agent	3	1	33.3%	1	33.3%	1	33.3%
Engineer	2	0	0.0%	2	100.0%	0	0.0%
Others	15	3	20.0%	7	46.7%	5	33.3%
Total	198	28	14.1%	64	32.3%	106	53.5%

Note: GM = general manager, AGM = assistant general manager.

Factor Analysis

Exploratory factor analysis was employed to extract financial competencies examined in the industry surveys (Research Question 2). The factors were extracted via varimax rotation, and Principle Component Analysis produced six factors for revenue and cost management competencies (as shown in Table 7 and Table 8). In terms of the revenue competencies, as shown in Table 7, the results indicated that the 27 attributes could be assigned to two factors only, namely Factor 1: ability to develop and execute revenue strategies (17 items) and Factor 2: ability to develop and execute pricing strategies (10 items). They respectively explained 42.3% and 38.3% of the variance in the data.

Table 7

Factor Analysis of Importance of Revenue Competencies from Industry's Surveys

Factor	Factor loadings	Eigen value	% of variance
Factor 1: Ability to develop and execute revenue strategies (N=17)		11.41	42.3
Ability to work closely with DOS on short-term and long-term pricing	.82		
Ability to make accurate forecasting	.82		
Ability to design strategies to maximize revenue from a rate and occupancy respective	.81		
Ability to negotiate corporate rates	.81		
Ability to read and analyze financial statements	.79		
Ability to analyze and identify trends using yield and forecast reports	.77		
Ability to analyze market data	.75		
Ability to match group and transient market needs with the hotel needs	.75		
Skills to interpret market trends as they relate to the property	.74		
Knowledge in time series forecasting models	.74		
Ability to manage group block activities	.72		
Ability to perform dynamic pricing strategies	.72		
Ability to forecast sales	.69		
Ability to develop working relationship with all third-party market managers	.65		
Skills in operating forecasting software	.62		
Knowledge in value-based pricing technique	.62		
Ability to work closely with IT sales managers to determine volume account production/pricing new	.55		
Factor 2: Ability to develop and execute pricing strategies (N=10)		10.35	38.3
Knowledge in target return pricing technique	.87		
Knowledge in cost-based pricing technique	.85		
Ability to set price according to different distribution channels	.83		
Knowledge in customer-centric pricing technique	.81		
Knowledge in competitor pricing technique	.81		

Table 7 continued

Factor	Factor loadings	Eigen value	% of variance
Ability to set price according to different customer segmentations	.80		
Ability to set price according to elasticity of demand	.78		
Ability to forecast transient demand	.72		
Ability to manage/monitor internet system to maintain consistency with property strategies	.68		
Ability to control room inventory	.65		

As shown in Table 8, the results pertaining to cost competencies suggested that 24 attributes could be grouped into four factors, labeled as Factor 1: ability to collect cost information and prepare and implement budgeting (8 items), Factor 2: ability to analyze cost information for decision-making (8items), Factor 3: ability to control cost in each activity of operations (5 items), and Factor 4: ability to perform operational budgeting (3 items). These factors explained 25.4%, 23.9%, 18.1%, and 12.1% of the variance in the data, respectively.

Table 8

Factor Analysis of Importance of Cost Competencies from Industry's Surveys

Factor	Factor loadings	Eigen value	% of variance
Factor 1: Ability to collect cost information and prepare and implement budgeting (N=8)		6.08	25.4
Ability to accurately trace and allocate cost	.80		
Ability to provide detailed cost information about individual activity	.78		
Ability to frequently report cost information for decision-making	.75		
Ability to evaluate variance between budgetary figures and actual results	.75		
Ability to perform sales budgeting	.72		
Ability to perform production budgeting	.71		
Ability to perform profit budgeting	.66		
Ability to perform capital budgeting practice	.62		

Table 8 continued

Factor	Factor loadings	Eigen value	% of variance
Factor 2: Ability to analyze cost information for decision-making (N=8)		5.73	23.9
Knowledge in break-even analysis	.78		
Ability to analyze Profit & Loss statements	.74		
Ability to use budgets to apply long-term strategic planning	.73		
Ability to properly recognize operating expenses	.72		
Ability to use budgets as a communication channel for all levels of management	.72		
Ability to use budgets to examine alternatives before actions take place	.69		
Ability to properly recognize maintenance expenses	.66		
Knowledge in capitalizing criteria	.53		
Factor 3: Ability to control cost in each activity of operations (N=5)		4.33	18.1
Ability to monitor and control cost in storing	.84		
Ability to monitor and control cost in preparing food & beverages	.82		
Ability to monitor and control cost in receiving	.73		
Ability to monitor and control cost in recruiting and scheduling personnel	.72		
Knowledge in activity based costing (ABC) technique	.55		
Factor 4: Ability to perform operational budgeting(N=3)		2.90	12.1
Ability to perform operational budgeting	.79		
Ability to perform expense budgeting	.74		
Ability to monitor and control cost in purchasing	.64		

Descriptive Statistics

The aim of the Research Question 3 was to identify the financial competencies that hotel managers deem important. The 5-point Likert-type scale was created to examine 27 revenue competency items and 24 cost competency items (ranging from 1 = least important to 5 = most important). Cronbach's coefficient alpha for six financial competencies factors was 0.98 for ability to develop and execute revenue strategies, 0.97 for ability to develop and execute pricing strategies, 0.93 for ability to collect cost information and prepare and implement budgeting, 0.95 for ability to analyze cost information for decision-making (8items), 0.90 for ability to control cost in each activity of operations, and 0.88 for ability to perform operational budgeting (3 items). The mean rankings of the importance of six financial factors are shown in Table 9. The factor of ability to perform operational budgeting (*M* = 4.26) was rated highest.

Table 9

Mean Rankings of the Importance of Six Financial Factors

Factors	Mean	SD	Cronbach's Alpha
Ability to perform operational budgeting (3 items)	4.26	0.91	0.88
Ability to collect cost information and prepare budgeting (8 items)	4.11	0.91	0.93
Ability to analyze cost information (8 items)	4.04	0.98	0.95
Ability to design revenue strategies (17 items)	3.94	1.15	0.98
Ability to design pricing strategies (10 items)	3.81	1.28	0.97
Ability to control cost in each activity of operations (5 items)	3.80	1.15	0.90

The mean rankings pertaining to the importance of revenue competencies and their frequency of use are shown in Table 10 and Table 11, respectively (Research Question 3.1). According to the data, industry practitioners considered "ability to negotiate corporate rates" (*M* = 4.21, *SD* = 1.41) the most important revenue competency, followed by "ability to make accurate forecasting" (*M* = 4.16, *SD* = 1.41), "ability to work closely with DOS on short-term and long-term pricing"(*M* = 4.14, *SD* =1.42), "ability to read and analyze financial statements" (*M* = 4.13, *SD* =1.49), and "ability to design strategies to maximize revenue from a rate and occupancy perspective"(*M* =4.09, *SD* = 1.39). These competencies belonged to the factor of ability to design revenue strategies and were seen as essential for analyzing historical data and predicting market trends. On the other end, "ability to work closely with IT sales managers to determine volume account production/pricing new account" (*M* = 3.5, *SD* = 1.54) and "skills in operating forecasting software" (*M* = 3.56. *SD* = 1.51) were rated as the least important.

Table 10

Mean Rankings of Items under the Question of Importance of Revenue Competencies from Industry's Surveys

Items	Mean	SD
Ability to negotiate corporate rates	4.21	1.41
Ability to make accurate forecasting	4.16	1.41
Ability to work closely with DOS on short-term and long-term pricing	4.14	1.42
Ability to read and analyze financial statements	4.13	1.49
Ability to design strategies to maximize revenue from a rate and occupancy respective	4.09	1.39
Ability to match group and transient market needs with the hotel needs	4.07	1.39
Ability to perform dynamic pricing strategies	4.07	1.41
Ability to analyze market data	4.04	1.30
Ability to manage group block activities	4.04	1.39
Ability to control room inventory	4.04	1.56
Ability to forecast sales	4.04	1.48
Ability to analyze and identify trends using yield and forecast reports	4.03	1.40
Skills to interpret market trends as they relate to the property	4.02	1.39
Knowledge in time series forecasting models	4.02	1.45
Ability to set price according to elasticity of demand	3.95	1.48
Ability to forecast transient demand	3.93	1.52
Knowledge in competitor pricing technique	3.91	1.48
Ability to set price according to different customer segmentations	3.87	1.47
Knowledge in value-based pricing technique	3.84	1.50
Knowledge in customer-centric pricing technique	3.81	1.50

Table 10 continued

Items	Mean	SD
Ability to set price according to different distribution channels	3.80	1.55
Ability to manage/monitor internet system to maintain consistency with property strategies	3.74	1.47
Knowledge in cost-based pricing technique	3.71	1.51
Ability to develop working relationship with all third-party market managers	3.68	1.52
Knowledge in target return pricing technique	3.61	1.55
Skills in operating forecasting software	3.56	1.51
Ability to work closely with IT sales managers to determine volume account production/pricing new account	3.50	1.54

Revenue competencies were also rated by the industry participants in terms of use frequency on a 5-point Likert-type scale ranging from 1 (least frequently) to 5 (most frequently), “ability to manage group block activity” (M = 3.92, SD = 1.47) and “knowledge in time series forecasting model” (M = 3.91, SD = 1.54) increased their ranking considerably, up from ninth to fourth and from fourteenth to fifth place, respectively (see Table 11).

Table 11

Mean Rankings of Items under the Question of Use Frequency of Revenue Competencies from Industry’s Survey

Items	Mean	SD
Ability to negotiate corporate rates	4.04	1.57
Ability to make accurate forecasting	4.01	1.49
Ability to read and analyze financial statements	3.96	1.54
Ability to manage group block activities	3.92	1.47
Knowledge in time series forecasting models	3.91	1.54
Ability to work closely with DOS on short-term and long-term pricing	3.89	1.57
Ability to design strategies to maximize revenue from a rate and occupancy respective	3.89	1.48
Ability to match group and transient market needs with the hotel needs	3.86	1.47

Table 11 continued

Items	Mean	SD
Ability to forecast sales	3.85	1.59
Skills to interpret market trends as they relate to the property	3.82	1.49
Ability to control room inventory	3.82	1.62
Ability to analyze and identify trends using yield and forecast reports	3.80	1.48
Ability to forecast transient demand	3.80	1.61
Ability to perform dynamic pricing strategies	3.79	1.52
Ability to analyze market data	3.78	1.49
Ability to set price according to elasticity of demand	3.75	1.54
Knowledge in competitor pricing technique	3.73	1.56
Ability to set price according to different customer segmentations	3.70	1.56
Ability to set price according to different distribution channels	3.63	1.57
Knowledge in value-based pricing technique	3.61	1.50
Knowledge in customer-centric pricing technique	3.60	1.57
Knowledge in cost-based pricing technique	3.59	1.58
Ability to develop working relationship with all third-party market managers	3.58	1.61
Ability to manage/monitor internet system to maintain consistency with property strategies	3.47	1.54
Knowledge in target return pricing technique	3.44	1.60
Skills in operating forecasting software	3.42	1.61
Ability to work closely with IT sales managers to determine volume account production/pricing new account	3.33	1.65

Research Question 3.2 aimed to identify the cost competencies that are deemed most important (see Table 12) and are most frequently used (see Table 13) by hospitality managers. The study participants were first asked to rate the importance of 24 cost control competency items on a 5-point Likert-type scale. Manager participants rated "ability to frequently report cost information for decision-making" (M = 4.39, SD = 1.05) and "ability to evaluate variance between budgetary figures and actual results" (M = 4.39, SD = 1.07) as the most important cost control competencies. These competencies belong to the factor of ability to collect cost information and prepare budgeting and enable the managers to analyze and compare substantial information to support decision-making in controlling operational expenses. At the other end of the spectrum was "knowledge in activity based costing (ABC) technique" (*M* = 3.4, *SD* =1.57), which was perceived the least important.

Table 12

Mean Rankings of Items under the Question of Importance of Cost Competencies from Industry's surveys

Items	Mean	SD
Ability to frequently report cost information for decision-making	4.39	1.05
Ability to evaluate variance between budgetary figures and actual results	4.39	1.07
Ability to perform operational budgeting	4.37	1.11
Ability to properly recognize operating expenses	4.36	1.06
Ability to monitor and control cost in purchasing	4.34	1.15
Ability to perform expense budgeting	4.33	1.15
Ability to accurately trace and allocate cost	4.31	1.10
Ability to use budgets to examine alternatives before actions take place	4.28	1.15
Ability to use budgets to apply long-term strategic planning	4.28	1.15
Ability to provide detailed cost information about individual activity	4.16	1.16
Ability to perform profit budgeting	4.14	1.20
Ability to properly recognize maintenance expenses	4.13	1.28
Ability to monitor and control cost in recruiting and scheduling personnel	4.10	1.48
Ability to perform production budgeting	4.10	1.23
Ability to monitor and control cost in receiving	4.09	1.38
Ability to use budgets as a communication channel for all levels of management	4.09	1.28
Ability to analyze Profit & Loss statements	4.07	1.26
Ability to perform sales budgeting	4.07	1.18
Ability to perform capital budget practice	4.04	1.33
Knowledge in break-even analysis	3.95	1.26
Ability to monitor and control cost in preparing food & beverages	3.90	1.53
Ability to monitor and control cost in storing	3.81	1.45

Table 12 continued

Items	Mean	SD
Knowledge in capitalizing criteria	3.81	1.47
Knowledge in activity based costing (ABC) technique	3.40	1.57

Manager participants were asked to rate the same cost competencies in the context of frequency of use on a 5-point Likert-type scale. The mean rankings pertaining to the frequency of use of the cost competencies were shown in Table 13. As can be seen, the cost management items that were perceived as most important were also the most frequently used competencies, albeit ranked in slightly different order. The item of ability to monitor and control cost in purchasing moved three places in the ranking, up from fifth to second. In addition, the item of ability to evaluate variance between budgetary figures and actual results was ranked the second in importance but was moved to the fourth place in use frequency.

Table 13

Mean Rankings of Items under the Question of Use Frequency of Cost Competencies from Industry' Surveys

Items	Mean	SD
Ability to frequently report cost information for decision-making	4.61	1.16
Ability to monitor and control cost in purchasing	4.20	1.17
Ability to properly recognize operating expenses	4.20	1.10
Ability to evaluate variance between budgetary figures and actual results	4.14	1.23
Ability to perform operational budgeting	4.10	1.20
Ability to accurately trace and allocate cost	4.08	1.18
Ability to perform expense budgeting	4.07	1.15
Ability to use budgets to examine alternatives before actions take place	4.02	1.23

Table 13 continued

Items	Mean	SD
Ability to use budgets to apply long-term strategic planning	4.01	1.19
Ability to provide detailed cost information about individual activity	3.95	1.20
Ability to properly recognize maintenance expenses	3.93	1.33
Ability to use budgets as a communication channel for all levels of management	3.91	1.32
Ability to perform production budgeting	3.91	1.32
Ability to monitor and control cost in recruiting and scheduling personnel	3.89	1.48
Ability to perform profit budgeting	3.89	1.35
Ability to monitor and control cost in receiving	3.87	1.46
Ability to analyze Profit & Loss statements	3.75	1.37
Ability to perform sales budgeting	3.74	1.37
Ability to monitor and control cost in preparing food & beverages	3.71	1.59
Ability to perform capital budget practice	3.66	1.44
Knowledge in break-even analysis	3.62	1.34
Knowledge in capitalizing criteria	3.59	1.49
Ability to monitor and control cost in storing	3.57	1.47
Knowledge in activity based costing (ABC) technique	3.14	1.54

The respondents were also asked to choose top five general competencies from a list of 30 items (Research Question 4). As shown in Table 14, the participating industry professionals selected “communication” (n = 75, 90.36%), “problem-solving” (n = 65, 78.31%), “leadership/taking charge” (n = 61, 73.49%), “attention to details” (n = 60, 72.29%), and “manage others” (n = 72, 29%) as the most important general competencies.

Table 14

Descriptive Statistics of General Competencies

Table 14 continued

Items	Frequency (N=83)	Percentage (%)	Mean of Importance	SD
Communication	75	90.36	4.83	.44
Problem-solving	65	78.31	4.74	.51
Leadership/taking charge	61	73.49	4.75	.67
Attention to details	60	72.29	4.78	.52
Manage Others	60	72.29	4.63	.71

Next, the participants were asked to rank eight commonly sought (management) skills in terms of their importance and levels of training. Hotel managers indicated that "economic insight" (*M* = 4.36, *SD* =.80) was the most relevant, followed by "analytical skills" (*M* = 4.29, *SD* = .88), and "determined strategist" (*M* = 4.28, *SD* = .85) (see Table 15). However, as the mean scores pertaining to the training received in these areas are lower than the ones indicating their perceived importance, the managers clearly do not receive adequate training that would match the relevance of these skills.

Table 15

Descriptive Statistics of Commonly Sought Skills for Industry Surveys

Items	Mean of Importance	SD	Mean of Training	SD	Mean of Skill level	SD
Economical insight	4.36	0.80	3.60	1.16	3.84	0.84
Analytical skills	4.29	0.88	3.72	1.19	4.03	0.82
Determined strategist	4.28	0.85	3.78	1.08	4.09	0.85
Technologically savvy	3.98	1.03	3.70	1.12	3.90	0.94
Spreadsheet master	3.57	1.12	3.23	1.29	3.69	1.09
Reader digest	3.53	0.96	3.15	1.06	3.60	0.90
Math magician	3.50	1.31	3.36	1.28	3.71	1.12
Internet geek	3.30	1.10	3.03	1.15	3.52	1.15

ANOVA

One-way ANOVA was employed to establish whether managers' demographic background influenced their choice of financial competencies (Research Question 5). The findings revealed no statistically significant differences in managers' work departments (p = .53) and education (p = *.50*). Significantly differences were found with respect to managers' title regarding the importance of revenue competencies (p = .01) and cost competencies (p = .04). However, Post hoc tests were not performed because at least one group has fewer than two cases. Statistically significant difference was found with respect to the work hours per week (i.e., 40-44, 45-49, 50 and over) regarding the importance of cost competencies, F (2, 81) = 4.18, p = .019. LSD test was subsequently performed to reveal the source of this difference, and the results were shown in Table 16. As can be seen, the responses provided by the industry managers who worked 40-44 hours (M = 3.00) significantly differed from those provided by their peers that worked 45-49 hours (M = 4.00, p < .05) and 50 hours and over (M = 4.22, p < .05).

Table 16

ANOVA Results of Working Hours Differences on Importance of Cost Competencies to Industry Managers

	df	***SS***	***MS***	***F***	***p***
Between groups	2	7.42	3.71	4.18	.019*
Within groups	81	71.89	.89		
Total	83	79.31			

Note: *p < .05

Findings of Educator Surveys

As previously noted, similar measurement was employed in both the educators' and the industry practitioners' survey, as the aim was to explore the importance and use of revenue and cost competencies among manager participants and compare the findings with those obtained from the educators' survey.

Demographics

The demographic information pertaining to the educator participants was shown in Table 17. As can be seen, 35.7% (*n* = 40) and 27.7% (*n* = 37) of the educators that responded to the survey have experience in teaching lodging and foodservice, respectively, while the remaining respondents specialize in other hospitality areas (e.g., 10.7% teach tourism, and 6.3% event planning). In addition, when asked about their financial background, 56% of the participants had prior experience in teaching forecasting (*n* = 56) and 52.9% in pricing (*n* = 54), while 50% previously taught budgeting (*n* = 49), and 48% cost control (*n* = 48). However, relatively small number of participants taught RM (36%, *n* = 35), and asset management (17.7%, *n* = 17). It is noteworthy that 80.5% (*n* = 70) of the respondents believed that these courses were suitable for successfully instructing students about financial and analytical skills related to revenue and cost control, while the remaining 19.5% (*n* = 17) felt the opposite.

Table 17

Demographics Characteristics of Educator Participants

Table 17 continued

Trait	Frequency(N=112)	Percentage (%)
Gender		
Male	73	70.2
Female	31	29.8
Age		
26-35	7	7.4
36-45	22	23.2
46-55	27	28.4
56-65	28	29.4
Over 65	11	11.6
Current academic status		
Full professor	19	18.3
Associate professor	28	26.9
Assistant professor	26	25.0
Instructor	26	25.0
Other	5	4.8
Employment status		
Full-time	96	93.2
Part-time	7	6.8
Education		
Bachelor's degree	8	7.6
Master's degree	21	20.0
Doctoral degree	76	72.4
Years of teaching in HM program		
1-5	19	18.3
6-10	26	25.0
11-15	14	13.5
16-20	16	15.3
21-25	14	13.5
Over 25	15	14.4
Teaching experiences		
Lodging	40	35.7
Foodservice	31	27.7
Clubs	5	4.5
Resorts	6	5.4
Tourism	12	10.7
Event Planning	7	6.3
Others	49	43.8
Teaching experiences in six subjects		
RM	36	35.0
Pricing	54	52.9
Forecasting	56	56.0
Cost control	48	48.0
Budgeting	49	50.0
Asset management	17	17.7

Descriptive Statistics

Educators were asked about their teaching background associated with six subject areas under revenue and cost competencies (i.e., RM, pricing, forecasting, cost control, budgeting, and asset management), and the corresponding results were shown in Table 18. As can be seen from the tables, a significant number of respondents taught a standalone course on RM (52.8%, *n* = 19) or cost control (76.1%, *n* = 35). The remaining four subjects of interest for the present study were mostly integrated into other courses, namely pricing (72.2%, *n* = 39), forecasting (78.9%, *n* = 45), budgeting (83%, *n* = 39), and asset management (76.5%, *n* = 13). In addition, the findings revealed that 30.7% (*n* = 19) of the forecasting courses taught were offered in lower undergraduate divisions, while 64.5% (*n* = 40) pricing-related courses were offered in upper undergraduate divisions, and 33.3% (*n* = 7) asset management courses were offered at graduate level. The majority of courses involving cost control (91.5%, *n* = 43), budgeting (94.7%, *n* = 36), and asset management (75%, *n* = 9) were required courses. These findings imply that these six financial subjects are considered important to impart on hospitality students. However, as they are mostly offered to junior and senior students, it appears that the content is deemed sufficiently complex to require substantial background knowledge in order for the students to be able to master it.

Table 18

Summary of Courses Characteristics

Table 18 continued

Subjects	Standing alone course	Incorporated in other courses	Lower undergraduate level	Upper undergraduate level	Graduate level	Required course	Elective course
Revenue management	52.8% (n=19)	47.2% (n=17)	20.9% (n=9)	67.5% (n=29)	11.6% (n=5)	74.3% (n=26)	25.7% (n=9)
Pricing	27.8% (n=15)	72.2% (n=39)	19.4% (n=12)	64.5% (n=40)	16.1% (n=10)	81.8% (n=36)	18.2% (n=8)
Forecasting	21.1% (n=12)	78.9% (n=45)	30.7% (n=19)	52.3% (n=33)	16.2% (n=10)	86.4% (n=38)	13.6% (n=6)
Cost control	76.1% (n=35)	23.9% (n=11)	26.4% (n=14)	69.8% (n=37)	3.8% (n=2)	91.5% (n=43)	8.5% (n=4)
Budgeting	17% (n=8)	83% (n=39)	28.3% (n=17)	58.3% (n=35)	13.4% (n=8)	94.7% (n=36)	5.3% (n=2)
Asset management	23.5% (n=4)	76.5% (n=13)	19.1% (n=4)	47.6% (n=10)	33.3% (n=7)	75% (n=9)	25% (n=3)

Research Question 6 asked educators to rate the factors that interfere with their decision to teach financial subjects in hospitality management programs by using a 5-point Likert-type scale (ranging from 1 = most likely to interfere to 5 = least likely to interfere). As seen in Table 19, factor 1 "limited spaces/flexibility in current curriculum" (M = 2.94, SD = 1.33) was found to be the most likely factor to interfere with educators' decision to teach financial subjects. On the other hand, factor 13 "personality" (M = 4.12, SD = 1.06) was found to have the least influence on the educators' decision to teach financial subjects.

Table 19

Mean Rankings of Items under "Factors Interfere with Your Decision to Teach Financial Subjects"

Table 19 continued

Factors (F)		Mean	SD
F1	Limited space/flexibility in current curriculum	2.94	1.33
F3	Students' lack of background knowledge/It's too advanced	3.28	1.35
F2	Teaching load	3.28	1.24
F10	No previous training or background in this area	3.59	1.38
F6	Students can pick up knowledge from other classes or from their industry internship	3.69	1.23
F11	Difficulty in finding supporting materials	3.77	1.26
F5	It is not a popular class	3.77	1.23
F9	Lack of confidence in teaching the subjects	3.83	1.21
F4	It is not well-received by students which may affect my teaching evaluation	3.85	1.17
F7	Not sure about industry's expectations	3.96	1.13
F8	Lack of administrative support	4.00	1.10
F12	Not sure which subjects are important	4.09	0.91
F13	Personality	4.12	1.06

In order to explore the importance hospitality educators' assign to ensuring that their students develop financial competencies, the study participants were first asked to rate the importance of revenue competencies on a 5-point Likert-type scale (Research Question 7.1). The mean ranking results of the importance of revenue competencies and its relevance as a learning objective are given in Table 20 and Table 21, respectively. As can be seen, educator participants considered "ability to read and analyze financial statements" (*M* = 4.44, *SD* = .73) the most important revenue competency, followed by "ability to analyze market data" (*M* = 4.36, *SD* = .72), "ability to analyze and identify trends using yield and forecasting reports" (*M* = 4.14, *SD* = 1.01), "skills to interpret market trends as they relate to the property"(*M* = 4.11, *SD* = 1.09), and "ability to forecast sales" (*M* = 4.11, *SD* = 1.41). On the other hand, "ability to develop working relationship with all third-party market managers" (*M* = 3.31, *SD* = 1.16), "ability to work closely with IT sales managers to determine volume account production/pricing new account" (*M* = 3.31, *SD* = 1.14), "skills in operating forecasting software" (*M* = 3.42, *SD* = 1.25), "ability to manage group block activities"(*M* = 3.42, *SD* =1.02), and "ability to negotiate corporate rates" (*M* = 3.50, *SD* = 1.02) were considered the least important revenue competencies.

Table 20

Mean Rankings of Items under the Questions of Importance of Revenue Competencies from Educators' surveys

Items	Mean	SD
Ability to read and analyze financial statements	4.44	0.73
Ability to analyze market data	4.36	0.72
Ability to analyze and identify trends using yield and forecast reports	4.14	1.01
Skills to interpret market trends as they relate to the property	4.11	1.09
Ability to forecast sales	4.11	1.41
Ability to make accurate forecasting	4.08	1.22
Ability to design strategies to maximize revenue from a rate and occupancy respective	4.00	1.21
Knowledge in time series forecasting models	3.94	1.09
Ability to set price according to different customer segmentations	3.86	1.19
Ability to set price according to elasticity of demand	3.83	1.20
Knowledge in value-based pricing technique	3.83	1.13
Knowledge in competitor pricing technique	3.83	1.02
Ability to control room inventory	3.81	1.21
Knowledge in cost-based pricing technique	3.81	1.21
Ability to work closely with DOS on short-term and long-term pricing	3.78	1.01
Ability to perform dynamic pricing strategies	3.78	1.22

Table 20 continued

Items	Mean	SD
Ability to match group and transient market needs with the hotel needs	3.75	1.20
Ability to forecast transient demand	3.72	1.34
Ability to set price according to different distribution channels	3.69	1.00
Knowledge in target return pricing technique	3.64	1.22
Knowledge in customer-centric pricing technique	3.61	1.35
Skills in operating forecasting software	3.56	1.15
Ability to negotiate corporate rates	3.5	1.02
Ability to manage group block activities	3.42	1.20
Ability to manage/monitor internet system to maintain consistency with property strategies	3.42	1.25
Ability to work closely with IT sales managers to determine volume account production/pricing new account	3.31	1.14
Ability to develop working relationship with all third-party market managers	3.31	1.16

It should be noted that the revenue competency items that were rated as the most important were also the most frequently discussed competencies in participating educators' classes, except that the item of ability to make accurate forecasting which was in the third place is replaced by the item of ability to analyze and identify trends using yield and forecast reports. These competencies are developed based on a range of data analysis skills, including collecting customer data, systemizing data, interpreting data, and consequently predicting customer behaviors.

Table 21

Mean Rankings of Items under the Question of Learning Objective of Revenue Competency from Educators' Surveys

Items	Mean	SD
Ability to read and analyze financial statements	4.48	0.62
Ability to analyze market data	4.03	0.87
Ability to make accurate forecasting	3.94	1.26

Table 21 continued

Items	Mean	SD
Skills to interpret market trends as they relate to the property	3.90	1.22
Ability to forecast sales	3.90	1.35
Ability to analyze and identify trends using yield and forecast reports	3.81	1.37
Knowledge in time series forecasting models	3.81	1.25
Ability to set price according to different customer segmentations	3.77	1.30
Ability to design strategies to maximize revenue from a rate and occupancy respective	3.74	1.29
Ability to forecast transient demand	3.74	1.31
Ability to perform dynamic pricing strategies	3.61	1.23
Ability to set price according to elasticity of demand	3.61	1.28
Ability to set price according to different distribution channels	3.58	1.33
Knowledge in competitor pricing technique	3.58	1.17
Ability to match group and transient market needs with the hotel needs	3.52	1.24
Knowledge in cost-based pricing technique	3.52	1.26
Ability to control room inventory	3.48	1.43
Knowledge in value-based pricing technique	3.45	1.36
Knowledge in customer-centric pricing technique	3.35	1.40
Ability to work closely with DOS on short-term and long-term pricing	3.32	1.13
Ability to manage/monitor internet system to maintain consistency with property strategies	3.23	1.20
Knowledge in target return pricing technique	3.23	1.30
Ability to manage group block activities	3.19	1.27
Ability to develop working relationship with all third-party market managers	3.03	1.22
Ability to negotiate corporate rates	2.97	1.14
Skills in operating forecasting software	2.94	1.34
Ability to work closely with IT sales managers to determine volume account production/pricing new account	2.90	1.27

As a follow-up Research Question 7.2, educator participants were asked to rate the importance of cost competency items. The mean rankings of these items can be seen in Table 22. The five items viewed as the most important cost control competencies were “knowledge in break-even analysis” (*M* = 4.24, *SD* = .87), “ability to analyze Profit & Loss statements” (*M* = 4.22, *SD* = 1.05), “ability to perform expense budgeting” (*M* = 4.20, *SD* = .96), “ability to perform profit budgeting” (*M* = 4.20, *SD* = .88), and “ability to perform operational budgeting” (*M* = 4.18, *SD* = .87).

These competencies indicated student's ability to prepare budgeting and compare budgets with the actual results. At the other end of the spectrum, "knowledge in activity based costing techniques" (*M* = 3.34, *SD* = 1.11) was rated the least important, followed by "knowledge in capitalizing criteria" (*M* = 3.40, *SD* = 1.06), and "ability to perform capital budget practice" (*M* = 3.50, *SD* = 1.05).

Table 22

Mean Rankings of Items under the Question of Importance of Cost Competencies from Educators' Surveys

Items	Mean	SD
Knowledge in break-even analysis	4.24	0.87
Ability to analyze Profit & Loss statements	4.22	1.05
Ability to perform expense budgeting	4.20	0.96
Ability to perform profit budgeting	4.20	0.88
Ability to perform operational budgeting	4.18	0.87
Ability to monitor and control cost in preparing food & beverages	4.14	0.94
Ability to properly recognize operating expenses	4.14	0.88
Ability to accurately trace and allocate cost	4.12	0.98
Ability to use budgets to examine alternatives before actions take place	4.06	0.81
Ability to use budgets to apply long-term strategic planning	4.02	1.00
Ability to evaluate variance between budgetary figures and actual results	4.02	0.97
Ability to frequently report cost information for decision-making	4.00	0.94
Ability to monitor and control cost in purchasing	3.98	0.84
Ability to perform sales budgeting	3.96	0.92
Ability to provide detailed cost information about individual activity	3.94	1.01
Ability to monitor and control cost in receiving	3.90	0.97
Ability to use budgets as a communication channel for all levels of management	3.86	0.94
Ability to perform production budgeting	3.82	0.94
Ability to monitor and control cost in storing	3.80	1.03
Ability to monitor and control cost in recruiting and scheduling personnel	3.76	1.06
Ability to properly recognize maintenance expenses	3.74	0.85
Ability to perform capital budget practice	3.50	1.05
Knowledge in capitalizing criteria	3.40	1.06
Knowledge in activity based costing (ABC) technique	3.34	1.11

Educator participants were asked to rate the same cost control competencies in the context of frequency with which they incorporated these subjects in their classes. As shown in Table 23, “ability to evaluate variances between budgetary figures and actual results” (*M* = 4.04, *SD* =.98) increased its ranking significantly in terms of learning objectives compared to its importance, as did “ability to recognize operating expenses”(*M* = 4.07, *SD* =.97).

Table 23

Mean Rankings of Items under the Question of Learning Objective of Cost Competencies from Educators' Surveys

Items	Mean	SD
Ability to analyze Profit & Loss statements	4.33	0.87
Knowledge in break-even analysis	4.15	0.96
Ability to properly recognize operating expenses	4.07	0.97
Ability to evaluate variance between budgetary figures and actual results	4.04	0.98
Ability to monitor and control cost in preparing food & beverages	4.00	1.11
Ability to frequently report cost information for decision-making	3.98	0.97
Ability to perform expense budgeting	3.98	1.06
Ability to perform profit budgeting	3.93	1.04
Ability to perform operational budgeting	3.89	0.92
Ability to monitor and control cost in purchasing	3.87	1.00
Ability to provide detailed cost information about individual activity	3.83	1.06
Ability to accurately trace and allocate cost	3.80	1.02
Ability to use budgets to examine alternatives before actions take place	3.80	0.88
Ability to perform sales budgeting	3.80	1.14
Ability to monitor and control cost in receiving	3.78	1.07
Ability to use budgets to apply long-term strategic planning	3.76	1.01
Ability to use budgets as a communication channel for all levels of management	3.72	0.98
Ability to monitor and control cost in storing	3.61	1.14
Ability to monitor and control cost in recruiting and scheduling personnel	3.61	1.14
Ability to properly recognize maintenance expenses	3.57	1.00
Ability to perform production budgeting	3.57	1.18
Knowledge in capitalizing criteria	3.35	1.07
Ability to perform capital budget practice	3.33	1.11
Knowledge in activity based costing (ABC) technique	3.00	1.22

Comparison between Academic and Industry Groups

Research Question 7.3 measured the similarities and discrepancies between the perceptions of educators and practitioners regarding financial competencies the managers working in the lodging industry must possess. The *t*-test was conducted to compare the results pertaining to the two groups of participants. As seen in Table 24, significant difference was found in the ratings of cost control importance (t = 1.45, p < .05), as the industry managers (M = 4.12) reported higher mean scores than educators (M = 3.90) did.

Table 24

The t-test Results of the Difference on Academic and Industry Groups

Measures	**Variables**	**Mean**	**t**	**Sig. (2-tailed)**
Cost Control Importance	Educators	3.90	1.45	.008*
	Managers	4.12		

Research Question 8 aimed to ascertain whether the participating educators' background (i.e., gender, age, education, employment status, and teaching experience) affected their choice of financial competencies/activities (e.g., importance of cost control and revenue competencies).

ANOVA

One-way ANOVA was employed to compare the backgrounds of the participating educators. The findings revealed no statistically significant differences in educators' education (p = .71), age (p = .31), and teaching experience (p = .54). While significantly differences were found with respect to educators' teaching areas regarding the importance of cost competencies (*p* = .02), group with only one case are ignored in computing the test of homogeneity of variances.

Independent Samples *t*-test

The *t*-test was conducted to examine the effect of gender and employment status on the responses the educator participants provided, and the results were shown in Table 25. The respondents' gender was found to significantly affect the mean scores pertaining to the cost control importance ($t = -2.93$, $p < .05$), whereby female respondents ($M = 4.35$) reported higher mean scores than their male counterparts did ($M = 3.73$). The employment type was also found to significantly affect the ratings of RM importance ($t = 2.67$, $p < .05$), as full-time faculty ($M = 3.84$) reported higher mean scores than did their part-time colleagues ($M = 1.74$).

Table 25

The t-test Results of the Difference on Faculty's Genders and Employment Status

Measures	**Variables**	**Mean**	**t**	**Sig. (2-tailed)**
Cost Control Importance	Male	3.73	-2.93	.005*
	Female	4.35		
RM Importance	Full-time	3.84	2.67	.011*
	Part-time	1.74		

Note: *$p < .05$

Chapter V

DISCUSSION

As in any business sector, financial success and profit optimization are the primary goals of hotel operations (Gursoy & Swanger, 2007). Thus, in order to compete in the constantly changing hospitality environment, hotel managers must be able to increase revenue by reducing costs without compromising efficiency and quality of service (Choi & Mattila, 2004; Schmidgall, 2012). According to Davenport (2006), financial analytical skills are crucial in this effort, as they help managers to “better understand the drivers of financial performance by collecting, analyzing, and acting” on financial data (p. 5). Hurst (2013) agreed with the above, adding that these skills assist managers to identify the strategies that could improve financial performance. Specifically, they are used to assess revenues and costs generated in hotel operations, and consequently obtain profit optimization (Hales, 2011).

In a hotel, having employees that possess financial competencies ensures the successful growth of the organization (Millar, Mao, & Moreo, 2008; Singh et al., 2012). For the management team, this competitive environment demands that decision-making be based on sound analysis of financial benefits, risks, and constraints (Kavanagh & Drennan, 2008). Irrespective of the department hotel managers work in, their financial responsibilities include some aspects of revenue and cost management (Cross et al., 2009). Thus, all hospitality employees should be equipped with knowledge and skills that help them perform their duties more effectively. For management staff, this includes revenue and cost management competencies. The findings of this study indicated that hotel managers within more work hours rated higher on the importance of cost competencies. In this context, managers who carried heavy working load have more commitment in workplace and are fully aware of the job responsibilities (Umbach, 2007).

Although the demand for employees with financial competencies has increased dramatically in recent decades, hospitality graduates entering the workplace still lack financial and analytical skills and aptitudes (Burgess, 2007a). The imperfect hospitality curriculum design likely plays a role in this mismatch between job requirements and graduate preparedness (Gibson, 2004). This disparity between the hospitality industry needs and academic training is widely recognized (Raybould & Wilkins, 2005). However, without focused attempts to identify the key financial competencies required by the hospitality industry, hospitality education may find it difficult to keep up with the evolution and development of this sector.

Several authors have demonstrated that the demand for employees who possess financial competencies in the hospitality industry was artificially inflated (Kimes, 2010; Millar et al., 2008). The present study thus aimed to re-examine the currently recognized industry requirements and re-evaluate their relevance, while identifying the financial analytical competencies the industry practitioners deem most important for the hospitality entrants to master in order to progress to management positions. Thus, the findings this study has yielded will likely contribute to the hospitality curriculum design and industry training programs. Both the hospitality educators and industry practitioners need to aggressively promote financial training pertaining RM and cost control. This study may also be useful to the hospitality students and industry entrants as, by clarifying the management competencies they need to refine and acquire, it will help them build realistic expectations of the scope of their academic training, as well as their future careers.

Core Financial Competencies from Industry's Perspective

In line with the first main research objective that was to identify the essential financial analytical competencies by hospitality managers, the revenue and cost management competency sets were examined by industry managers that took part in this study, allowing them to endorse the financial competencies they deemed the most important. The results were better justified in the following paragraphs.

Revenue Competencies

In terms of revenue competencies, the findings revealed that managers rated factor "ability to design revenue strategies" (*M* = 3.94) as important, followed by ability to design pricing strategies (*M* = 3.81).

Ability to develop and execute revenue strategies. According to the findings, the industry managers identified the ability to negotiate corporate rates (*M* = 4.21) as the primary revenue competency. As business travelers are less flexible in their schedules than leisure travelers are, their demand is more predictable and less influenced by the small change in room rates (Vinod, 2004). In some case, the revenue results from the guarantee use of a certain amount of guest rooms by the contracted groups, whether they use the rooms or not, would help add to the hotel's bottom line (personal interview). Therefore, optimizing corporate rates will ensure considerable amount of profit for the hotel business. Although corporate whose employees frequently travel for business purpose demand volume discounts, hotel managers need to be aware that bundling is an advantageous attribute for negotiating corporate rates (Toh, Peterson, & Foster, 2007). According to the findings reported by Kimes (1999), group bookings (M = 4.04) are another important source of hotel revenue. This finding was later confirmed by Choi (2006), who revealed that, when the transient customer demand is weak, group business tends to increase the occupancy rates by filling unoccupied rooms. Although group businesses always come along with a certain discount, the volumes of the rooms that they book are able to generate much more revenue which may in a way to cover the loss from group discount. Hence, develop optimal room rates for these groups will bring stable profit for hotels and maintain long-term growth.

When hotel managers were asked to identify key inputs into their short- and long-term strategies, they indicated that the ability to work closely with sales department was essential (M = 4.14). In their view, optimizing revenue strategies requires collaboration of sales, front office, and accounting departments. However, empirical evidence suggests that interdepartmental communication may be an issue due to the insufficient RM knowledge among the relevant employees (Lieberman 2003; Noone & Hultberg, 2011). Effective revenue strategies are based on the joint efforts of all departments, whereby profit goals are provided by the general managers, financial analysis by the accounting department, market trends by the sales departments, and the sales and occupancy reports by the front office. This type of interdepartmental collaboration ensures successful implementation of RM and generates the highest profits for the organization (Siguaw, Kimes, & Gassenheimer, 2003).

The managers that took part in this study indicated that the ability to read and analyze financial statements (*M* = 4.13) is a core revenue competency. Financial analytical skills aid managers in interpreting the financial reports and identifying the most important aspects to work on (Hales, 2011). Currently, most RM practitioners use hotel database to evaluate hotel performance and make financial and budgetary decisions (Cross et al., 2009). Similarly, by performing the yield analysis and generating forecasting reports, hotel managers can predict market trends and design optimal revenue strategies (Padhi & Aggarwal, 2011).

Industry managers that took part in this study posited that the ability to produce accurate forecasts (*M* = 4.16) was highly important in the hotel operations. Accurate forecasting assists hotel managers in properly adjusting their room prices, especially “when the internet and electronic booking system have created more demand uncertainty” (Chen, Chang, & Langelett, 2014, p. 146). According to the current literature, the time series is still the most popular forecast model (Cranage, 2003; Chen & Kachani, 2007). Forecasting has complex and multifaceted applications (Ellero & Pellegrini, 2013). Thus, hotel managers lacking practical forecasting and demand analysis skills are unable to set competitive prices and boost revenue.

As an important aspect of forecasting, accurate sales forecasting (*M* = 4.04) assists hotel managers in recognizing and reacting to every revenue-generating opportunity. Sales forecasting is based on previous years' revenue, along with a subjective input provided by the hotel executives (Schmidgall & DeFranco, 2007). It is essential, as it drives the key decisions hotel managers must make, such as sales promotion, scheduling personnel, purchasing supplies, resource allocation, and improvement of hotel's capacity (Chang, Liu, & Fan, 2009).

Transient customer demand forecasting (*M* = 3.93) is another focus of hotel forecasting practice. However, its accuracy is limited due to the difficulty in predicting the demand fluctuations resulting from seasonality, competitor actions, and economic trends (Zeni, 2001). Precise transient customer demand forecasting assists in effective allocation of hotel room inventory, which can thus be sold at a higher price (Phillips, 2005). In contrast, when inaccurate, transient demand forecasting will increase the likelihood of losing profit due to unoccupied rooms (Cranage, 2003).

Ability to develop and execute pricing strategies. When asked to identify the key pricing competencies hospitality employees must possess, hotel managers rated the ability to perform dynamic pricing strategies (*M* = 4.07) the highest. Dynamic pricing strategies enable the hotels to adjust their room rates in a timely manner, in response to the market changes, whether caused by the competitors, customer demand, or economic trends. However, as Chen and Chang (2012) have cautioned, changing prices too frequently tends to reduce the profitability of hotels. The managers' survey findings further indicated that most respondents believed that revenue optimization was achieved through a mixture of room rates via different distribution channels, or on the basis of customer segmentation and seasonal demand (Enz et al., 2009). The ability to monitor room rates on third-party websites (e.g., expeida and priceline) was deemed as a new revenue competency for hotel managers, because online room booking gradually become an effective distribution channels for hotel business and are well-recognized by customers (personal interview). Booking websites are open to a larger market with more customer segmentations than each individual hotel. Therefore, booking websites provide more revenue possibility and help hotels save advertise expenses to expand their markets.

The competitor pricing strategy (*M* = 3.91) was considered the second primary pricing strategy in hotel business. Owing to the frequent utilization of competitor pricing strategy, hotel managers need the ability to understand competitor sets and analyze Smith Travel Accommodations Reports (STAR). In particular, mastering the index analysis of RevPAR, ADR, and occupancy will allow the managers to compare various industry standards and benchmark their own property's performance.

Competitor sets analysis identifies market shares of the key competitors, thus revealing the company's strengths and weaknesses (Sato & Sawaki, 2013). By comparing their performance with that of their main competitors, hotels can evaluate their past performance and identify the aspects that could be improved in the future (Steed & Gu, 2009). Owing to the price transparency of room rates on travel booking websites, hotel managers must respond timely to the price changes of competitor hotels and offer more competitive room rates to attract customers (personal interview). The ability to analyze competitor sets is highly relevant in hotel operations and providing training in this area to the key staff is essential.

The industry survey further revealed that hotel managers often utilize the value-based pricing techniques (M = 3.84) to determine room rates. Empirical evidence suggests that the perceived value that hotels offer to their customers is another determinant of room rates. Hotels often offer a range of services—such as free breakfast, internet, and parking—to attract a wide range of customers and increase occupancy. These services increase the value of hotel guest rooms and motivate customers to pay higher price for their stay (Chang, 2008). On the other hand, customer-centric pricing techniques (M = 3.81) are viewed moderately important by hotel managers, as they take consideration of customers' price sensitivities and willingness to pay (Cross & Dixit, 2005). Some of the study participants indicated, however, that they are sometimes ignored in current hotel operations. The respondents further asserted that, in most hotels, cost-based pricing

(*M* = 3.59) and target return pricing techniques (*M* = 3.44) are presently insufficiently used. Cost-based pricing is used to set the general price (full price), while target return pricing technique is utilized to adjust prices based on specific occasion, aimed at achieving optimal profit margin (Steed & Gu, 2005). However, as these pricing techniques typically ignore different customers' price sensitivities, they are less flexible when responding to fluctuating demand (Vinod, 2004). The hotel market must cater for various customer segmentations by offering a range of room rates, as this strategy will lead to greater revenue potential.

Cost Competencies

In terms of cost competencies, the findings revealed that managers rated factor "ability to perform operational budgeting" (*M* = 4.26) as extremely important, followed by "ability to collect cost information and prepare budgeting" (*M* = 4.11), "ability to analyze cost information" (*M* = 4.04), and "ability to control cost in each activity of operations" (*M* = 3.80).

Ability to perform operational budgeting. In hotel managers' view, hospitality students would benefit from gaining more extensive knowledge and skills in operational budgeting (*M* = 4.37), especially in expense budgeting (*M* = 4.33). Expense budgeting ensures that available funds are spent on the key operational processes, in particular those that generate revenue (Schmidgall, 2011). It also assists managers in identifying unnecessary costs, and allows them to better allocate resources and enhance internal control (Uyar, 2009). Moreover, it is necessary for hotel managers to develop the ability to use expense budgeting to control cost of purchasing process (*M* = 4.34) (Dittmer & Keefe, 2006). According to Mackenzie, Cheung, and Law (2011), poor purchasing control results in greater food costs for hotels. Even in luxury hotels, purchasing departments are responsible for managing and controlling the purchasing expenses as much as possible (Olaore & Adebisi, 2013). In smaller hotels that offer limited services, it is not always practical to have a designated purchasing department. In such cases, each individual department head is authorized to purchase the necessary supplies, which must meet company's established budgets, standards, and policies. However, as Kothari and Roehl (2007) pointed out, when top managers evaluate procurement options and make expense budgeting , they consider cost rather than the product price, while "the operational cost involved in the procurement and maintenance of the products throughout its life cycle" are taken into account as well (p. 887).

Ability to collect cost information and prepare and implement budgeting. When asked to identify the factors essential for performing their duties effectively, industry practitioners indicated that detailed cost information helps managers make right decisions. Thus, the ability to frequently report cost information is the most important cost management competency (*M* = 4.39). Pizzini (2006) noted that "the ability to supply the cost detail is favorably associated with the measures of financial performance, including operating margin, cash flow, and administrative expense" (p. 265). According to the view of one industry professional that took part in a personal interview, "details and pennies make a difference." Hotel managers are able to provide cost-effective operational strategies by seeking and utilizing the information relevant to the cost control process (Ku et al., 2011).

In addition, hotel managers that took part in this study agreed that being able to make accurate and feasible budgets is an essential financial analytical skill, especially making profit (*M* = 4.14), sales budgeting (*M* = 4.07), and capital budgeting (*M* = 4.04). Sales budgeting, focuses on the sales expectations with respect to room numbers and prices, while profit budgeting estimates the earnings based on the sales budgets (Jones, 2008a). Both sales and profit budgets are used to establish reasonable financial goals for the organization via analyzing economic conditions, competitors' strategies, associated sales expenses, and hotel capacity (Aghazadeh, 2007). Moreover, hotel managers that took part in the survey considered the ability to perform capital budgeting practice necessary for managing hotel properties effectively. Given that the hospitality operations require significant amount of fixed costs, the knowledge in capital budgeting analysis helps the managers in using the facilities effectively, while reducing capital costs (Rogers, 2013).

Ability to analyze cost information for decision-making. The hotel managers also consider the ability to recognize operating expenses (*M* = 4.36) an essential cost management competency. Although empirical evidence indicates that the adoption of RM generates the greatest revenue for hotels, *Trends in the Hotel Industry* disclosed that "total operating expenses for the average U.S. hotel in the survey sample increased by 3.3 percent in 2012" (cited in Woodworth, Mandelbaum, & McDade, 2014, p. 6). This, in turn, led to the decline in the hotel business profitability. Typically, hotel operating expenses include administrative and energy costs, franchising fees, and marketing and maintenance expenses (Schmidgall, 2012). The operating expense analysis assists hotel executives in clearly understanding where the expenses originated from and which operational processes should be eliminated in order to reduce costs (Hales, 2011). Thus, it is evident that hotel industry urgently needs to improve hotel managers' ability to analyze cost information. In respect to the capital expenditure analysis, according to one study participant, while understanding capitalizing criteria (*M* = 3.81) is important, it is not required for all management positions, as it typically governed by the specific policy determined by the property owners.

The surveyed hotel managers also noted that developing the ability to use budgets as a communication channel (*M* = 4.09) is essential for managers at all levels within the organization. As every department head involved in the cost control process has the budgeting responsibility, having the necessary skills to do so is of paramount importance (Oak & Schmidgall, 2009). One of the respondents, who is a general manager in a mid-sized franchised hotel, indicated that he is in charge of distributing budgets to all individual department managers at the beginning of the month, which he analyzes the feedback budgeting information in the middle of the month. Budgeting analyses ensure that the operating costs are effectively managed, as all hospitality operators are aware of the steps to be taken if inventories are out of line. More specifically, in a hotel, the new industry entrants need to know how to calculate the expected expenses, as well as how much revenue each occupied room generates (Steed & Gu, 2009). Being able to do so accurately reduce the costs associated with the revenue expansion.

In addition, the hotel managers shared the view that hospitality graduates need the ability to review P&L statements (*M* = 4.07). As P&L statements summarize the changes in revenue and cost for a certain period, being able to utilize them effectively aids the managers in comparing the budgetary figures with the actual results. This, in turn, allows them to see if budgets are met for revenue or specific sales goals (Dittmer & Keefe, 2006). Most importantly, through analyzing P&L statements, the causes and effects of any specific concerns are also exposed (Hales, 2011).

Ability to control cost in each activity of operations. The findings further revealed that managers need to monitor and control cost in every step of hotel operations. In this context, the participants focused mostly on "recruiting and scheduling personnel" (*M* = 4.10) processes (Dittmer & Keefe, 2006). Operational expenses are increased when staff turnover rate is high, which is common in the hospitality industry. This not only increases time and effort associated with recruitment, but also results in diminished productivity (Nadiri & Tanova, 2010). The tangible cost of turnover occurs in "advertisement of recruiting, orientation, and training," while the employee's poor performance prior to the departure, such as "poor commitment, corrosive leadership, and role conflict" incur intangible costs (Davidson, Timo, & Wang, 2010, p. 454). Thus, every effort must be made to reduce these costs by, for example, making suitable arrangements for training and scheduling personnel. According to one of the respondents, labor cost budgeting and analytics assist hotel management by applying labor models and cost scheduling, which is frequently used by the lower level of management. Especially during the slow business season, cutting unnecessary labor hours helps hotel business go through the tough time. Labor models are also useful in this initiative, as they are based on the work divisions and customer service levels, which are used to determine optimal labor hours and productivity, as well as assign tasks and wages to employees fairly and objectively (Choi, Hwang, & Park, 2009).

General Competencies and Commonly Sought Skills of Hotel Managers

While exploring the financial analytical competencies of hotel managers was the main objective of this study, it also aimed to re-examine some general competencies and commonly sought skills that serve as the basis of financial analytical competencies for top management. General competencies pertain to the hotel managers' analytical insights into financial activities and rationales behind the business decisions (Watkins, 2012).

General Competencies

The findings this study yielded revealed the five most important general competencies from hotel managers' standpoint. Firstly, industry managers indicated that having excellent communication skills is essential for hotel managers' success, as 80% of their daily job was completed via interpersonal communication (Wood & King, 2010). Hospitality managers spend most of their time communicating with their subordinates, in order to "motivate their employees, give directives, and even discipline them at times" (Lolli, 2013, p. 295). Communication is also a crucial channel for gathering and processing information utilized in financial analysis. Problem solving was recognized as the second most important general competency of hotel managers. Problem solving skills enable the managers to analyze, synthesize, and evaluate financial information, which helps them make crucial decisions (Snyder & Snyder, 2008). Problem solving is also frequently used when responding to customers' feedback, and can assist in improving their satisfaction (Park & Allen, 2013). Leadership was the third general competency the hotel managers deemed essential. While excellent leaders "bound the crew as a performing unit, help the crew come to terms with its tasks, and establish basic norms of conduct for the team," dysfunctional leadership is unable to perform these functions (Hackman &Wageman, 2007, p. 45). Successful leadership motivates all employees to achieve their potential, while incompetent leadership leads to suboptimal performance (Lim & Boger, 2005). Analytical skills assist hotel leaders in interpreting and anticipating employee's performance via "recognizing patterns, pushing through ambiguity, and seeking new insights" (Schoemaker, Krupp, & Howland, 2013, p. 132). Thus, owing to its potential to detect merits and threats of business activities, financial analysis can significantly enhance managers' leadership skills. Following from this, it is not surprising that attention to detail ranked as the fourth most important general competency. Hotel managers recognize the need to focus on every detail in hotel operations, because "small details make big differences" (Bolton, Gustafsson, McColl-Kennedy, Sirianni, & David, 2014, p. 253). For those responsible for financial management in particular, the greater the detail in the financial information reported, the more likely it is that any issues will be revealed. Finally, managing others was rated as the fifth most important general competency. In this respect, the respondents recognized that successful leaders are those that utilize their power to influence and motivate employees to work to their maximum potential in order to meet the organizational goals. This is also important in the context of other competencies, such as aptitude for financial analysis, as it is commonly performed as a joint effort, which requires coordinating and managing resources and labor. In addition, employees' job performance is recorded and demonstrated via financial statements. Thus, by demonstrating the ability to manage others, managers increase their promotion potential (Hill, McCall, Raelin, Conger, & Mintzberg, 2004).

Commonly Sought Skills

When the hotel managers were asked to identify the most commonly sought skills in hospitality industry, the ability to follow economic trends was deemed the most important. According to Wang and Wang (2009), while the constantly changing economic situations create pressure on hospitality organizations, they also revitalize the organization and innovate hospitality operations by introducing the demand for new strategies. For example, RM was developed in response economic recession and was since proven successful in practice (Cross et al., 2009). RM is based on the key economic principles, allowing those that adopt it to control room inventory and set room prices by, for example, increasing prices when demand is high and vice versa (Steed & Gu, 2005). Thus, being able to keep up with economic trends is necessary for hotel managers to make right decisions. This requires analytical skills, which were viewed as extremely important by the hotel managers that took part in the survey. Analytical skills allow hotel managers to handle the overwhelming data and quantitative information (Raybould & Wilkins, 2006). These skills are particularly useful to the hotel managers when they compile and analyze market reports, forecast customer demand, and interpret complex financial spreadsheets. Analytical skills are particularly valuable in solving problems, which are inevitable in any business (Kavanagh & Drennan, 2008). Strategy planning is the third most important commonly sought skill, according to the surveyed hotel managers, and is particularly useful when making long-term pricing strategies for hotel operations. As it is applied throughout the entire organization, from top management to frontline employees, it is deemed a necessity for industry entrants (Okumus &Wong, 2007).

Perception Gap Between Hospitality Managers and Educators on Financial Competencies

Overall, although the general and financial competencies are deemed essential for hotel managers, the study results show that the training received by managers is inadequate to allow them to develop these competencies at a satisfactory level. Thus, the obvious implication of this finding for hospitality education is the need to match the learning objectives covered in the curricula with the industry needs (Dopson & Tas, 2004). In order to assist in this effort, the revenue and cost management competency sets explored in the survey of hospitality practitioners were also examined by hospitality educators. This directly addressed the third research objective concerning the perception gap between hospitality managers and educators regarding revenue and cost management competencies.

The Divergence between Managers and Educators

With regards to revenue competencies, gaps were found between the managers' and educators' perceptions pertaining to two items. First, according to hotel managers, the ability to negotiate corporate rates is the highest priority for a successful career in the hospitality industry. Thus, it was surprising to find that many educators failed to recognize the significance of incorporating this area in the content they taught. Although educators emphasized the significance of analyzing market data and interpreting market trends, they did not seem to be aware that corporate business brings a stable source of customers and helps hotel managers in predicting market trends (Vinod, 2004). Hotels that do not obtain corporate business at an optimal price will lose substantial profit (Toh et al., 2007). Second, hotel managers perceived the ability work with the sales department for pricing strategies as extremely important, while educators placed less emphasis on this specific item. All processes involved in running a hotel strive towards identical financial goals. Thus, the interdepartmental collaboration will drive more positive financial performance (King & Burgess, 2006). In this case, the successful negotiation of corporate rates depends on the interdepartmental collaboration within the hotel, with the sales department providing the key input. Effective price strategies can only be designed and implemented through collaboration among sales professionals, hotel executives, and frontline departments. Therefore, hospitality educators need to ensure that their students begin their careers with the knowledge and skills required for work with the sales department, and are capable of negotiating corporate rates.

In terms of cost competencies, the most notable difference between the educators' and industry practitioners' perceptions was found in the cost control procedures. While hotel managers tended to focus on monitoring and controlling costs associated with "purchasing" and "recruiting and scheduling personnel" processes, educators put less emphasis on these two activities. In contrast to the views of their industry counterparts who found the ability to monitor and control cost in preparing food and beverages not particularly important, educators rated this as an important competency. According to one participant that took part in a personal interview, the food and beverage costs accounted for about 30% of the hotel restaurant's anticipated revenue. However, in order to accurately measure and forecast food and beverage costs, managers must be able to price the menus based on the ingredients, in order to maximize the revenue while offering services at a fair price. Still, food and beverage costs are a relatively small part of the hotel operations compared to other costs, such as capital expenditure and maintenance (Schmidgall, 2012). Rational capital improvements ensure that hotel properties maintain the present revenue potential or generate greater profit (Bader & Lababedi, 2007). In line with this, the ability to perform capital budgeting was valued highly by hotel managers, while it received rather less attention from the surveyed educators. Capital budgeting is used by hotel managers to identify the projects likely to generate most return on the investment (Turner & Guilding, 2010). Hotel managers stressed the importance of recognizing maintenance expenses as well, while educators put less emphasis on this activity. Owing to the capital-intensive nature of the hotel industry, considerable funds are allocated to the maintenance of property assets, as the repairs and replacements are required in hotels all the time (Schmidgall, 2011). Thus, managers that tend to defer repairs, and consequently incur greater maintenance cost later on, adversely affect the hotel's cash flow (Bader & Lababedi, 2007).

In addition, from the educators' perspective, break-even analysis was very useful, in particular when adopted in pricing the breakfast and transportation services, and calculating the number of occupied rooms required for covering the costs (Brotherton & Wood, 2008). However, while the educators assigned it the highest importance, it was judged by the industry professionals as only moderately important.

Given the dynamic pricing strategies adopted by hotel operations, the industry professionals posited that break-even analysis is inaccurate in predicting break-even room occupancy, as it is based on the assumption that the room price is constant (Wang, Hung, & Shang, 2006). Although the surveyed hospitality educators recognized the need for teaching cost management as a part of the study programs, they could not identify the essential cost subject areas.

The Congruence between Managers and Educators

Hospitality managers and educators agreed that the ability to read and analyze financial statements is a core financial analytical competency. Financial statements are the basis of hotel business analysis, as they enable managers to evaluate potential business opportunities, monitor internal performance, compare prices and services with those the competitors offer, and detect investment risks (Palepu & Healy, 2007). The two groups also agreed that being able to make accurate forecasting and feasible budgets are essential financial analytical competencies. Forecasting is the core analytic process that assists hotel managers in making pricing decisions and allocating room inventory (Beck et al., 2011). According to the sales and demand forecasting, income and expense budgets are developed, allowing the managers to make marketing plans, purchase supplies, and schedule personnel (Oak & Schmidgall, 2009). Finally, the surveyed industry managers and educators agreed that the knowledge in ABC technique was least important when compared to other cost management competencies. This costing method is infrequently used in the hospitality industry, even though it was strongly recommended by previous research (e.g., Anderson, 2006; Raab & Mayer, 2007; Salem-Mhamdia & Ghadhab, 2012). Both groups agreed that the ABC approach is rarely utilized because it is complex and inconvenient, while incurring high employee training costs (Kaplan & Anderson, 2007).

Factors Interfered with Educators' Decisions to Teach Financial Subjects

Once the perception gap between managers and educators was identified, to the study focus shifted to offering suggestions that might be helpful in modifying hospitality program curricula. The educators' survey results revealed that, even though the participants found the financial competencies important, they believed that incorporating them into hospitality courses would be a challenge.

It is widely acknowledged that the teaching decision is a complex activity (Gun, 2014). According to the educators' responses, "limited space in current curriculum" was the main factor that interfered with their decisions to teach financial subjects, because "instructors often have a great deal of content to cover in a short time period" (Snyder & Snyder, 2008, p. 93). In fact, about 20% of the instruction time is dedicated to completing administrative tasks and disciplining students (Peña-López, 2009). Therefore, more efficient time utilization would enable educators to cover more valuable subjects in their lectures. Secondly, some educators in hospitality programs are not willing to teach financial subjects in their class, as they believe that their students lack the required background knowledge. This view is supported by the findings of Gun's (2014) study, which revealed that teaching decisions depend on teachers' evaluation of the knowledge students possess. According to Gursoy and Swanger (2005), hospitality students focus mainly on acquiring the knowledge of service operations, while ignoring the business-oriented knowledge, especially in financial areas. Thus, it is difficult for hospitality faculty to impart financial subjects on students that do not recognize their relevance for their future careers. The study revealed that teaching decisions are also influenced by "teaching load." As stated by Griffth, Massey, and Atkinson (2013), teachers are held accountable by professional standards and must follow certain guidelines. According to the surveyed educators, some institutions fail to provide appropriate balance between their teaching obligations and research interests, which results in less flexibility when making teaching decisions. This is particularly true for junior scholars, who are under the greatest pressure to demonstrate research achievements, which may compromise their teaching quality (Bennis & O'Toole, 2005).

Empirical evidence suggests that teaching decisions are also linked to the teachers' perceptions of the subjects (Grill & Hoffman, 2009). This is in line with the current study findings, which showed that, while many educators were "not sure which subjects are important," this hardly influenced their decision to teach financial subjects. It is of even greater importance to note the noticeable disparities between educators' and industry professionals' views of the importance of financial subjects. Clearly, hospitality educators are unaware of the industry expectations.

The results of this study also indicated that the type of employment affected the importance the faculty assigned to RM, as full-time faculty (*M* = 3.84) rated this competency much higher than the part-time faculty (*M* = 1.74) did. This implies that educators with higher teaching load have better understanding on the importance of learning objectives in RM (Umbach, 2007). However, it is also likely that part-time faculties may not teach the subjects they are specialized in, which causes them to have difficulty in recognizing the core content they need to cover in class (Jaeger & Eagan, 2009). This study also revealed some gender differences, as female educators (*M* = 4.35) assigned greater importance to the cost control competencies than their male colleagues (*M* = 3.73) did. Moreover, female educators are also more likely to incorporate learning objectives into classes, which benefits students (Peña-López, 2009). In particular, female educators imparted more cost control knowledge on students to meet industry' needs.

Managerial Implications

The successful growth of hotel business is supported by the talent management team (Schoemaker, Krupp, & Howland, 2013). The financial competencies identified in this study could be integrated into the establishment of a strong management team through hiring, training, and promoting competent employees, thus ensuring continued success of the hospitality industry (Barron, 2008). As indicated in the findings, 93.5% surveyed general managers have job responsibilities related to revenue and cost management. Thus, middle-level mangers with revenue and cost management competencies have a greater chance to step into high-level management position. The ability to analyze financial statements ensures that managers have a full overview of hotel operations with respect to revenue and cost management. Similarly, cost information analysis allows managers to improve business cost efficiency and boost profits, while operational budgeting aims to eliminate costs by providing detailed cost information pertaining to every aspect of hotel operations. In addition, managers need to improve their ability to generate revenues by expanding corporate business, offering dynamic room prices based on accurate forecasting, and match group and transient market needs with the hotel capacity.

The hotel managers' survey results indicated that, while the participants found financial competencies (e.g., ability to perform profit budgeting, ability to perform dynamic pricing strategies, and ability to analyze market data) important, they did not utilize them frequently. This discrepancy between perceptions and actions might be due to the limited and inadequate training, making it difficult to equip hospitality employees with the necessary financial competencies. In order to keep their employees "on the cutting edge and highly competitive" (Harris & Zhao, 2004, p. 434), hotel executives need to create specialized training in budgeting, pricing strategy, and market analysis. Moreover, managers must be offered general training in managerial competencies, such as communication, analytical skills, and leadership.

Educational Implications

When educational institutions are evaluating the academic success, they measure their achievements "almost solely by the rigor of their scientific research instead of the competence of their graduates or how well their faculties understand important drivers of business performance" (Bennis & O'Toole, 2005, p. 98). The findings this study yielded suggest that faculty should continuously participate in professional programs provided by their institutions. In addition, educators should keep up with industry trends via managers' guest lectures or professional co-op opportunities, as industry experience helps faculties to fully understand the industry's needs and significantly improves their teaching practice (Peña-López, 2009).

Developing financial analytical skills among hospitality graduates deserves more attention from academic educators and hospitality programs. More than two decades ago, Goodman and Sprague (1991) already noted that hospitality programs needed to enrich their curricula through inclusion of financial operations. However, hospitality programs still tend to focus on the service-oriented courses due to the unique attributes of the hospitality industry. Gursoy and Swanger (2005) thus recommended that curricula be expanded to include a greater choice of business management courses. As top managers in the hospitality industry are indistinguishable from other business executives, they need to master general managerial competencies, such as spreadsheet analysis, leadership, and strategic planning. Industry practice will support students, allowing them to master these competencies. Therefore, hospitality programs could provide "career-oriented courses" and internship programs to create more opportunities for students to interact with industry professionals (Chuang, 2011).

Limitations

As any research of this nature, the present study was also affected by several limitations. First, given the limited sample size, the reported findings may not fully reflect the views of other hospitality industry professionals and academic staff. Moreover, as these two groups were unequally represented, the comparison between their findings is somewhat unreliable. Second, as the study included a rather narrow range of hotel locations, hotel types, and management positions, the choice of respondents can introduce bias into the reported results. Third, the items included in the competencies scales were mostly based on those identified in the literature review; thus, the author's subjective perceptions could further bias the findings. In particular, the financial competencies included in the instruments might be incomplete, as they are limited to revenue and cost management competencies. Fourth, as the questionnaires were rather long, the time required for their completion might have caused participants to feel fatigued and introduce inaccuracies in their responses. Thus, it is highly recommended that further studies in this field address these shortcomings.

Suggestions for Future Research

Future research needs to broaden the scope of hospitality financial areas to identify additional competencies for establishing more advanced and inclusive financial competency model. Financial analytics competencies are particularly worthy of further investigation, as published sources of pertinent information in the field of hospitality are limited. This study identified financial competencies that are applicable for a hotel as a whole. However, given the specific and unique needs of each individual department, further investigation needs to focus on financial competencies required by every hotel department or operational unit.

Once the financial competency model is improved, further research might be conducted to investigate the optimal assessment method to establish whether the hospitality graduates and employees possess these financial analytical competencies. When hotel managers need to hire a new employee or recommend a new leader, they need a range of norms and approaches that can help identify the most competent candidate (Barron, 2008).

While this study compared the perceptions held by hospitality managers and educators, the survey instrument it utilized for data collection could also be used to explore students' perceptions on the importance of financial competencies, as this will help better identify their needs with respect to training and education. Educators are responsible for narrowing the gap between students' career expectation and the reality in the workplace (Chuang & Dellmann-Jenkins, 2010; Ruetzler, Taylor, Reynolds, & Baker, 2011). Thus, further research could investigate how well students have been prepared to perform the duties assigned to them when they gain employment in hospitality industry. If lack of skills and training is revealed, it will help educators address the weakness of hospitality education.

APPENDIXES

APPENDIX A

CONSENT FORM FOR MANAGERS

Appendix A

Consent Form for Managers

Dear Hotel Manager,

I am conducting a research project to better understand the financial competencies essential for hotel managers. The data you provide can help identify key competencies needed to be an effective manager. Completing the survey should take approximately 10 minutes.

Your participation in this study is voluntary and anonymous. There are no anticipated risks in completing this survey. **Your answers will not be reviewed by anyone but the researcher at Kent State University, and individual responses will be kept completely confidential**. Your response is vital to the success of this study.

If you have any questions or concerns about this research, please contact Yang Yuan at 330.310.9967, or Ning-Kuang Chuang at 330.672.2303. This project has been approved by the Kent State University Institutional Review Board. If you have any questions about your rights as a research participant or complaints about the research, you may call the IRB at 330.672.2704.

Thank you for your time and assistance. It is much appreciated.

Sincerely,

Yang Yuan	Ning-Kuang Chuang
Graduate Student	Associate Professor
Hospitality and Tourism Management	Hospitality and Tourism Management
Kent State University	Kent State University
yyuan4@kent.edu	nchuang@kent.edu

Consent Statement and Signature

I have read this consent form and have had the opportunity to have my questions answered to my satisfaction. I voluntarily agree to participate in this study. I understand that a copy of this consent will be provided to me for future reference.

______________________________ ____________________

Signature **Date**

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