

Costs Allocation Practices and Operations Management in the Hotels Industry: Evidence from UAE

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This paper aims to provide an understanding of costs allocation practices and problems in the UAE hotels Industry. It introduces Results Based Costing (RBC) as an alternative cost allocation method to reduce costs allocation problems and potentially, introduce positive organizational change. This paper presents a qualitative research study and an explanatory case the Sharjah Palace Hotel (SPH) in the United Arab Emirates (UAE). Data has been drawn from multiple sources including interviews, observations, documents and archival records, and triangulated to present a comprehensive picture of cost allocation practice in the organization. The study also used a survey of cost allocation methods to evaluate the introduction of results based costing. The study concludes that the problems of costs allocation arise in a reasonable way in many practical situations where people decide to work together to save costs. Cost allocation practices take into account the strategic aspects of cost allocation situations. The findings showed that while hotels in the UAE operate in a very competitive environment, there was little evidence of accurate allocation indirect costs, instead combined costs are allocated to operating revenue. Accounting research into the cost accounting system and its processes is much needed. RBC system as a center of accounting and management merits greater attention by researchers. Practitioners in this way can better design and implement costing systems that build on past knowledge and learning. This study thus presents itself as the first study about RBC currently available in the hotels and hospitality industry. It also represents one of the very few referred studies of the Results Based Accounting in the accounting research and hospitality literature globally.



Key words: *Costs Allocation, Costs Practices, Operations Management, RBC, Hotels, UAE.*

Introduction

Nowadays, most hospitality businesses in hotels, motels, food service, and beverage operations are using accounting systems to record, report, and analyze the effectiveness of internal operations and costs allocation process (Maelah and Ibrahim 2007, Cannavacciuolo et al. 2015, Patiar 2016). One must learn basic accounting concepts to understand not only the necessary information needed as input to an accounting system but also the output of information the system is capable of providing. Knowing what an average check is for a food service operation is one thing, but knowing how it is determined gives a greater insight as to how it can be changed. This simple analogy rings true for the great majority of developed ratios, percentages, units, and dollar values that can be generated through accounting analysis (Jagels and Coltman 2007, Maelah and Ibrahim 2007, Cannavacciuolo *et al.* 2015, Patiar 2016).

Cost allocation problems emerge in many real life situations just like hotels industry, where individuals with their reasons, decide to work together (Tijs and Driessen 1986, Patiar and Mia 2008, Patiar *et al.* 2012, Patiar 2016). In these circumstances, the problem arises how to divide among the participants the common costs (and implicitly the cost savings) which result from the cooperation. There is a whole literature on this subject motions ignore the strategic aspects of such situations. The main question of this study is: What is the best cost allocation method? The choice of a method depends on the particular situation where such a cost allocation problem appears, the ideas of the participants on costing systems, the difficulty of understanding and calculating a cost allocation proposal and many other points. It is a task of accounting theorists to design for classes of cost allocation hinders some cost allocation systems and to describe the properties of such methods. The properties can reverse ethical, economic or political aspects (Patiar and Mia 2008, Patiar *et al.* 2012, Patiar 2016).

The differences of cost allocation methods can then be based on properties, which the methods own or fail to possess. For example, the ability to understand or to calculate, play a role in practice. The cost allocation problem is equivalent with the problem in social choice theory to find a suitable benefit function or social choice rule. It is also comparable with the problem of choosing a suitable numerical test in statistics. In specific cost allocation situations, persons involved or judge has to decide which method is most suitable for their principles. They have to put priorities on the list of suitable properties for the cost allocation method. If one wants a method with too many properties, then difficulties arise just as in social choice theory. The main purpose of this paper is to introduce a new cost allocation



system, for solving of cost allocation problems and to research the properties of this new method. It will turn out that some separable cost allocation methods (Patiar and Mia 2008, Patiar *et al.* 2012, Patiar 2016).

The paper is structured as follows. Section 2 explains costs allocation practices and problems. Section 3 presents theoretical framework and the rationale for study. Section 4 explains RBC Application in UAE Hotels Environment, and Section 5 recognizes the significance of RBC in hotels industry. Section 6 shows research methodology. In section 7, the analysis and results have been discussed. This concluded by discussion and conclusions.

Costs Allocation Practices and Problems

Many scholars differentiate between the two general practices of allocation costs: joint costs and common costs. They also debate that there are two-stage allocation strategy that can be used (Johnson and Kaplan 1987, Altbach and Knight 2007, Manakul 2007, Altbach *et al.* 2009), that could be represented. According to Burch (1994) and Alsharari and Lasyoud (2019), there is no obstacle if all cost items could be directly outlined to each cost center, so precisely calculating the cost of product and profitability would be very simple. However, in modern organizations, overhead costs are becoming huge, and these might arrive at more than half of total manufacturing costs (Burch 1994). This creates great issues in attempting to calculate the real cost of products that should be divided up by some means.

Johnson and Kaplan (1987) affirms that overhead costs were become large, frequently plant-wide, overhead pools. The overhead pools were then allocated to cost centers by different methods (Johnson and Kaplan, 1987). Many organizations simply select allocation for all costs directly to cost centers based on predicted direct labor hours or units of money (Johnson and Kaplan, 1987). Johnson and Kaplan (1987: 191) assert that "the problems introduced by a direct labour-based overhead allocation scheme have gone largely overlooked by academic accountants (Lasyoud and Alsharari, 2017). The problems that emerge with direct labor allocation systems cannot be depicted by simple, one-product examples". Even though those problems exist, many organizations prefer to use direct labor hours as a single way of allocation of overhead costs; the reason behind that is a process that supports managers to move away from a labor intensive operation (Ngok and Guo 2008). In other words, the attention is on reducing direct labor costs and not on accurately cutting overhead costs (*ibid.*). As a result, costs are an important component of an organization's profitability. However, the contrast between successful and unsuccessful companies is usually focused on the ability to plan and control costs (Alsharari 2013; Alsharari et al (2015); Alsharari 2016a,b; 2017a,b). Drury (1990) declares that students have been informed to choose an allocation base which carries the closest relationship to the overhead costs acquired. Drury (1990) and Vollmer (1996) review textbooks that have related to cost accounting during four decades

(Almasarwah et al, 2018; Alsharari and Abousamra, 2019). Therefore, Vollmer agrees with Johnson and Kaplan that those textbooks had maintained developing product costs for financial statements reasons. "Management accounting teaching and management accounting textbooks stress that escapable costs represent the applicable costs which should be used for product decisions"(Drury 1990). There are two-stage cost allocation procedures. The first stage uses an innovative basis, for example, the number of employees, square footage, etc. (Vollmer 1996). At the second stage, labor or machine time was the basis for allocating indirect costs to products (Vollmer 1996). Vollmer (1996) proclaims that none of the textbooks justify using a plant-wide rate. The textbooks considered the key to reducing overhead cost distortions was the homogeneous department. Drury (1990: 125) confirms that "overhead allocations are taught to explain which bases are befitting for stock valuation purposes to meet the requirements of external financial reporting."

Theoretical Framework and Rationale for Study

There is a growing body of cost accounting literature implying that when market competition builds up, organizations tend to accept more accurate means of allocating indirect costs to decrease waste and remain competitive (Maelah and Ibrahim 2007). There is some evidence of RBC related research in the manufacturing industry, healthcare and financial institutions (Cannavacciuolo *et al.* 2015), considering a similar level of evidence in the tourism and hospitality industry is absent, despite this industry's increasingly aggressive market and its growing social and economic emphasis reported in the literature (Maelah and Ibrahim 2007, Cannavacciuolo et al. 2015, Patiar 2016).

Adoption of ABC in developed countries, mainly the UK and the USA, has however not fulfilled early expectations. Adoption rates internationally peaked at around 20-30% of various surveys' respondents, with 10-20% of respondents rejecting the whole notion even in its early manifestations in the early 1990s (Alsharari and Abougamos, 2017; Alsharari and Youssef, 2017). By the mid 2000 period, the percentage of companies` adopting ABC had declined, the proportion of businesses rejecting its adoption had increased, and a larger proportion of businesses declared they would not consider it (Innes et al. 2000, Cotton et al. 2003, Raab et al. 2007, Langfield-Smith 2008). While the reasons for this trend remain unclear, one recurring theme has been the perceived cost and complexity of installing and implementing such a system (Pollock and Bono 2013). In Australia, research has shown up some unique features of adoption, namely that ABM practices are more widely employed than overseas, with up to 86% of business units surveyed claiming such use (Baird et al. 2004).

The implementation of ABC confirms the practice variance between the institutional logics and situated logics as evident in different companies (Alsharari, 2016a,b,c). While ABC

implementation does not automatically transfer the institutional logic of action inscribed in the software into the practices of the adopting organization (Ferreira and Otley 2009, Cuganesan et al. 2012; Alsharari 2020). Research has demonstrated that this is because the logic inscribed in the ABC can conflict with the existing structures, institutions, and practices, that is, with the legacy institutional logic, of the adopting organization (Parker et al. 2008). The significant variances have been faced in the implementation of ABC, so that:

“Over the past 15 years, activity-based costing has enabled managers to see that not all revenue is good revenue and not all customers are profitable customers. Unfortunately, the difficulties of implementing and maintaining traditional ABC systems have prevented them from being adopted on any significant scale” (Kaplan and Anderson 2004:138).

In this way, an ABC implementation as other traditional costing systems has been proven as practice variance in the unit of analysis, and as a conflict between ABC inscribed institutional logic and situated logic that is embedded in the existing practices in such organization. As a result, many researchers claim that there is a need for more accurate information about the organizational activities, as old management accounting systems especially ABC are unable to provide that analytical information to decision-makers (Johnson and Kaplan 1987, Cooper 1988, Cooper and Kaplan 1992, Drury et al. 1993, Drury and Tayles 2006). The requirement manner aids managers to make right decisions about product cost, design, pricing, marketing, and mix, performance evaluation and encourages continual operating improvement and growth. Such observations raise the question of the underlying agenda and orientation of RBC design and management, to which the RBC system and practices now turn, as a main component of results based accounting (Alsharari and Al-Shboul, 2019; Al-Shboul and Alsharari, 2018; Alsharari and Alhmoud, 2007; 2019).

Geller and Schmidgall (1997) argue that there is a need to change indirect costs to various products and services using a suitable and agreed basis. For instance, a case study, which enforced an RBC system of indirect costs allocation to a hotel's food and beverage operations, provided detailed financial information related to each outlet's performance and urged management to meddle to make improvements. Similarly, there is also evidence of indirect cost allocation in the restaurant sector. Raab and Mayer (2009) found that while several restaurant managers were mindful of the importance of allocating indirect costs to dishes to regulate accurate prices, one establishment applied RBC to comprehend its indirect cost structure better. Further, Raab et al. (2007) used the new costing technique to a sum of small restaurants where labor costs and other key overheads were cut to individual dishes, furnishing managers with convenient and accurate cost information to resolve dish selling prices. Thus, this technique helped reduce dissolution and improve profits (Alsharari, 2018a,b; Alsharari et al, 2019; Alsharari, 2019a,b,c,d).

In addition, hotel product and service orders, production, delivery and usage involve short lead times with higher duty interdependency than in the manufacturing industry. Also, finished goods in the manufacturing industry can usually be reserved and sold at a later date so, at the very least, a certain fraction of the total cost can be recovered. In contrast, hotel products and services are highly decaying, and demand for them changes. As a result, the need for indirect cost allocation in the hotel industry is considered to be high. Given that there is limited RBC related research in the hotel industry background and the issues correlated with the transferability of results from other industries, it is acceptable to conduct this research in hotels. This line of argument is backed by several researchers (McGhan and Porter 1997, Patiar and Mia 2009), hence, by contributing to fill the current gap in the RBC related research in the hotel industry.

RBC Application in UAE Hotels Environment

Hotel Industry and Market Competition

Hotels managers believe that the effect of market competition when opposed businesses begin to offer identical products and services with a view to exceeding them regarding increasing their share of the current market and sales revenue (Patiar and Mia 2008). Moreover, hotels are influenced by development in the market, such as seasonality (Mattila and Choi 2006), and increased supply of or decreased demand for hotel rooms, because of social, economical or political interventions (Mattila and Mount 2003). Under these situations, managers need to use a detailed and accurate information to allocate resources, to settle competitive prices and offer customers value for money (Pavlatos 2011, Chen 2013, Chen and Tung 2014). Research indicates that intense market competition creates a competitive hazard and decreases product life cycles, increases the number of rivals in the marketplace and outcome in declined revenue and profitability. To conquer such threats, managers are obliged to increase their actual product range, arrange new distribution route which affects the customer supply chain, puncture into new markets and target products to specific customer sections (Porter, 1980). Furthermore, it is possible to manage a competitive problem by offering keener prices than industry rivals (Pavlatos 2011, Chen 2013, Chen and Tung 2014, Patiar 2016).

Hospitality researchers have realized the high levels of competition in the hotel industry (Patiar and Mia 2008, Patiar *et al.* 2012, Patiar 2016) and some debate that even in a relatively stable environment, hotels are affected by seasonality (Mattila *et al.* 2002). Hence, these external environmental forces can influence demand for hotel products and services, since many hotels may be going after fewer visitors (*ibid.*).

Hotels management is a requiring task, as these hotels behave in a competitive environment and are subject to a high level of complexity due to massive capital investment, seasonality;

the labor accelerated nature of hotel products and services and the brief production and consumption cycle. Indeed, the problem of costs management and profitability adds to the complexity of managing hotels (Patiar and Mia 2008, Patiar *et al.* 2012, Patiar 2016). Under these situations, hotel managers' perception of cost behavior is crucial to accurately determine the usefulness of offering different products and services, focusing on a particular cost allocation base and developing appropriate strategies to achieve desired goals (Rivero and Emblemsvåg 2007).

Current Cost Allocation Practices in the Hotels Industry

Despite the need for detailed cost information, the hotel industry greatly depends on the traditional costing system. This system suggests organizing accounting records by departments and allocating only the direct costs of products and services, with the remaining indirect (overhead) costs (i.e., depreciation, rent, energy, insurance, administration and general and marketing) being distributed to the hotel's total income. However, a major limitation of the traditional costing system is that it fails to help managers in identifying the definite expense of operating a particular department, determining final product and service prices and achieving profitability. These limitations restrict managers in making decisions such as whether to retain or expand certain products and services, and ways to compete on price (Raab *et al.* 2007, Lee *et al.* 2010, Patiar 2016).

The inadequacy of traditional costing system, as well as ABC in determining accurate costs for each department, decreases product and services costing to guesswork. Given that market forces set the price of a product or service in an aggressive market, accurate cost assurance is needed to assess profitability (Rivero and Emblemsvåg 2007, Patiar and Mia 2008, Patiar 2016). Under the traditional costing system, costs may be estimated mistakenly, resulting in inappropriate decisions, such as the promotion of cross-subsidization or contributing less profitable products or services. Due to the non-allocation of indirect costs to products, services and or departments, the traditional costing system may make it difficult for managers to establish a realistic selling price. Setting inaccurate selling prices for products and services has long-term significance, such as loss of opportunities and competitive advantage (Cooper 1988, Cooper and Kaplan 1991, 1992). This study considers that applications of RBC are one-way to overcome the shortcomings of the traditional costing system and ABC together.

Call for Change in the Existing Hotel Costing System

Harrison *et al.* (2014) and Banker *et al.* (1993) reveal that to deal with a highly competitive environment; businesses commence a careful re-evaluation of their costing systems. However, such recognition is not currently evident in the hotel industry, even though the industry is of increasing competition and the capacity of indirect costs in hotels has fiercely

risen due to technology developments (Banker *et al.* 1993, Enz and Potter 1998). Additionally, Harrison *et al.* (2014) and Banker *et al.* (1993) link raises in indirect costs with an increased range of products and services offered. Of course, providing a wider range of products and services heightened operational complexity requiring additional support services. Harrison *et al.* (2014) add that in today's competitive environment, it is problematic to reduce the range of products and services because hotels have to attract different market segments and raise capacity. Therefore, the continuity of hotel businesses in competitive environments desires managers to update their costing systems toward cloud options (see, Alsharari, 2020; Alsharari *et al.* 2020, and Abousamra *et al.* 2020).

The Significance of RBC in Hotels Industry

More Recently, Alsharari (2016) proposes that Results Based Costing (RBC) system classifies particular action and production costs; it can give the hotels managers to establish the reason for the costs arising and focuses on significant costs related to hotels operations. RBC offers hotels managers an opportunity to productively manage and understand activities and strategies rather than simply aiming to reduce costs. Indeed, RBC helps in accurate analysis and allocation of overhead costs for hotels products and services, and departments, and inspires greater accountability and profitability for results (Alsharari 2016, Kocakulah *et al.* 2016). This paper proposes that RBC should be applied in the hotel industry for following four reasons. First, hotels engage in a competitive market, and face declining product life cycles and growing market sensitivity (Rolfe 1992, Alsharari 2016).

According to Lynn (1994) product strategies that offer customers, an assortment of products and services provide better value for money than rivals and are one way to deal with the competitive threat. Notwithstanding, the formulation and exertion of effective product strategies requires an accurate approximation and overseeing of product attributed-costs. This can be achieved through a fair allocation of indirect costs based on RBC. Second, through the facilitation of indirect cost allocations, RBC presents managers with detailed cost information, permitting them to market their products and services competitively. Maelah and Ibrahim (2007) and Pavlatos (2011) argue that cost information is important in strategic decision-making for costing products and monitoring performance over time. Hotels managers can use precise cost information to position their organization appropriately within the competitive market, which is crucial to preserve the product and service attribute the hotel offers. Hence, achieving a cost advantage over competitors is support for such positioning (Bromwich and Bhimani 1994). Third, given that the hotel industry faces excessive competition, hotels are forced to contribute higher quality products and services to lower costs. Implementing RBC is one way for a business to identify unnecessary costs and eliminate wastage without sacrificing quality (Innes and Mitchell 1995, Chen *et al.* 2013, Alsharari 2016).

RBC helps to achieve a fair costs allocation to support operating departments, and improves a profit-making process by planning and managing all costs during the production and delivery of products and services (Cooper 1988, Cooper and Kaplan 1991, 1992). By focusing on results and cost drivers, RBC highlights changes which could be necessary about expenditure plans, production processes, and management of activities (Cannavacciuolo *et al.* 2015). An organization's ability to abandon non-value adding activities can result in increased efficiency followed by improved profitability. RBC leads to efficiency enhancements through reduction, elimination, and sharing of activities (Alsharari 2016). Fourth, the application of RBC supports cost monitoring and improves the likelihood of achieving organizational objectives. For instance, application of RBC improves individual managers' perception of the costs incurred in their departments and raises their responsibility for controlling costs. Accurate cost allocations using RBC also allows managers to carry out 'what if' types of analyses, i.e., how different product costs would alter future pricing decisions (Alsharari 2016).

RBC system thus emerges as an alternative unit of analysis to ABC and other traditional cost systems, by focusing on 'Results' instead of 'Activities.' This innovative model enables organizations as well as hotels to link products and services back to their mission value and costs. This allows better investment decisions and costs management about the results orientation. Since RBC is based on connecting standard costs with performance, it makes sense to compare the cost of the service or benefit. It is one of the main challenges of reporting on achieved results. It seeks to shift attention away from activities to communicating significant results that the program or project has obtained at the organizational output and outcome levels (Alsharari 2016). The decision-making and reporting process along with RBC usually takes place after a series of organizational actions such as setting strategic objectives, keeping objectives in mind while allocating resources, managing programs to achieve results, measuring performance, and reporting results. These actions help the hotel to determine its progress towards its desired ends (Wholey 1999, OCA 2002, Ortiz *et al.* 2004).

RBC system requires a particular type of information or cost drivers such as direct labor hours and units produced, to be of value. It starts from the input data that product costs and other information are determined according to followed methodology. The results obtained in RBC system are used in different ways than ABC system. As RBC system can provide information to help minimize waste and cost reduction, at the same time it is not wasteful in itself. In other words, the resources required to design, implement and maintain RBC system will be less than the benefit derived from the use of the system as usage cost of ABC. It has been developed for tracking spending and activities of hotels with the results they are trying to achieve. It is a way to recast planning, budgeting, management, and reporting in direct relation to what organization wants (or is expected) to accomplish (Alsharari 2016).



Research Methodology

This study presents a case study of the Sharjah Palace Hotel (SPH), which has strategic location between Sharjah and Dubai in the UAE. SPH is located on Al Taawun Street, overlooking the Mamzar Lagoons, Just a short walk to the main commercial and shopping district, Sharjah Expo, Al Taawun Mall and the lagoon beach. It has 6km distance from Dubai International Airport and 20km from Sharjah International Airport. It has elegantly designed to provide hotel services and facilities that exceed customers' expectations, tastefully appointed 153 deluxe rooms including 51 executive suites offering deluxe Four Star comforts and benefits. The SPH vision is "The Ultimate Traditional Arabic Hospitality," and the mission is "we would be privileged & delighted to accommodate our guests & provide them with an Eat, drink and relax at the onsite restaurant."

SPH thus is a business class four-star hotel with full capacity for 155 rooms. It features a rooftop swimming pool, a sauna, and a fully equipped gym. It has a unique restaurant, which offers a varied buffet of European, Chinese, Arabic, Indian and Far Eastern cuisine, steaks and seafood. La Fontana serves coffee and hot drinks in a relaxing lounge area. It also provides spacious rooms with flat-screen TVs and air conditioning. All of the SPH rooms have an en-suite bathroom with a hairdryer. Guests can relax in the hotel's sauna or play pool in the Generations Club. A hot tub and massage treatments services are also available to soothe your muscles after a long day. It is also rated for the best value in Sharjah. Guests are getting more for their money when compared to other hotels in the market.

The information about existing costing system in SPH was collected through interviews with 20 employees including CEO and CFO. The interviews focused on the current cost allocation and application of RBC as an alternative costing system, which looked to identify the current cost allocation trains in SPH food and beverage department. To determine the current level of RBC applications in the SPH, the employees were first asked if the hotel cuts direct costs to proper food and beverage outlets. The author has directed interviews at two different points in time. The interviews were digitally recorded and deciphered verbatim. Each interview lasted between 40 to 50 min. Two levels of coding helped conduct the analysis of the empirical data. First, a line by line analysis identifying keywords usually in a deponent (verb or 'doing' format) followed by a second level of coding, which contained the codes into a higher order concept. Quotes from the interviews are provided and distinguished from the normal discussion.

Analysis and Results

Standard Costing System in SPH

Unlike manufacturing organizations, service organizations primarily hotels do not produce a physical product. This is no reason, however, not to apply RBC to hotel costing operations. The logical method of implementing RBC in a hotel costing operations is first to understand that the various services provided are the product of the hotel. Therefore, the hotel products of a costing department might be foods and beverages, inventory, and purchases and sales. The hotel can next gather cost information on various support functions such as hotel maintenance, catering and general administration and allocate these according to the cost drivers and results that cause them to vary (Snyder and Davenport 2013). Similarly, the Sharjah Palace Hotel (SPH) currently uses standard costing system where analysis is made regarding standard cost (consumption), and actual cost (recipe) can be processed and generated. Standard consumption is based on recipe details. Actual cost is arrived based on consumption at cost centers. Under this system, various costing reports can be issued, such as Cost Center Report, Cost Center Consumption Report, Group Consumption Month Range, etc. The following figure recognizes the Standard vs. Actual costs comparison and report.

Figure 1. Standard vs. Actual Costs Comparison



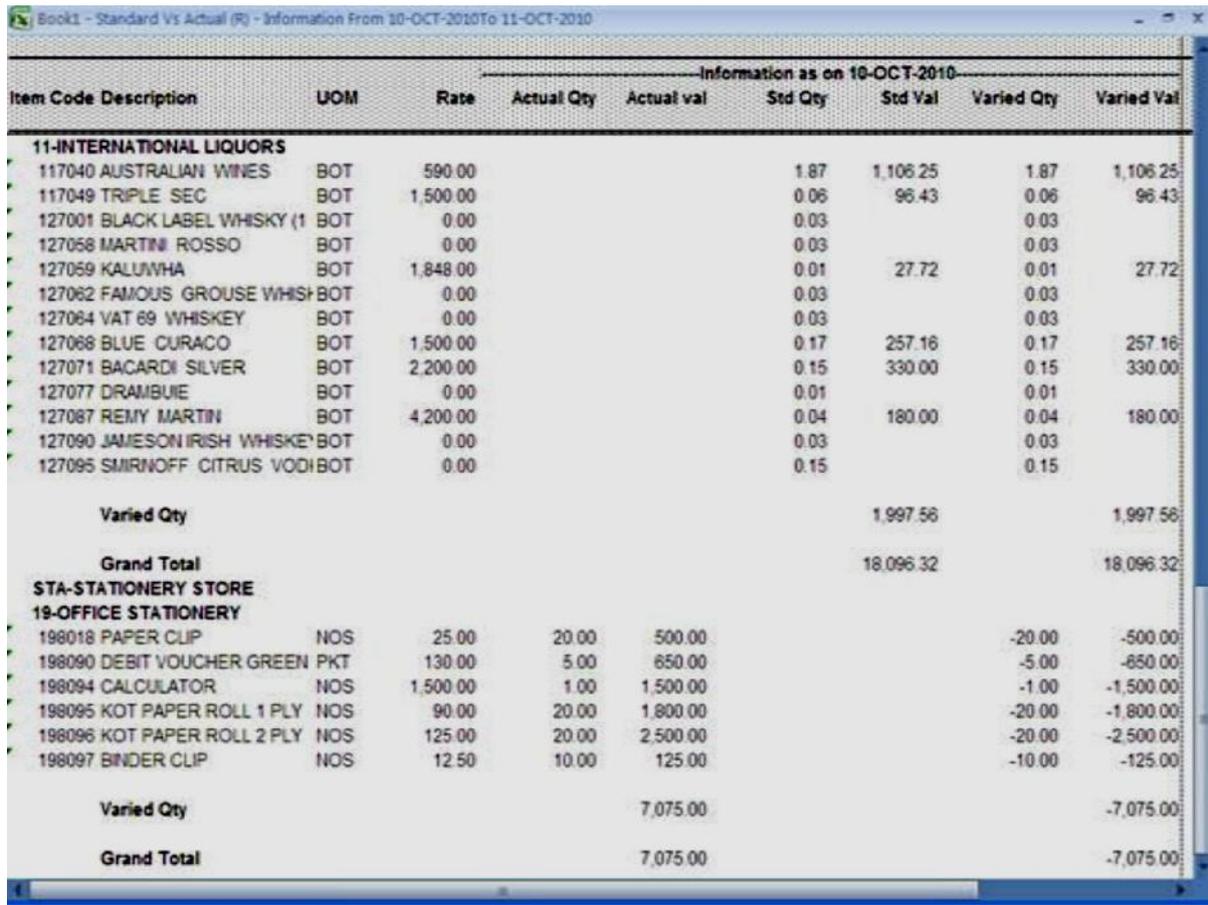
Standard Vs Actual (R) V6.0.0				
From Date	10-OCT-2012	To Date	11-OCT-2012	
<input checked="" type="radio"/> Item Range		<input type="radio"/> Group Range		
From	230001	Beef Bones		
To	66121325	Engenius Eub9801 DUALWireless N 30		
<input checked="" type="radio"/> Print Quantity in Stock UOM				
<input type="radio"/> Print Quantity in Conversion UOM				
<input checked="" type="radio"/> 80 Column		<input type="radio"/> 132 Column		
<input type="checkbox"/> Actual details are arrived w.r.t kitchen stock				
Terminate Process		Ok	Panel	Exit

Source: SPH Costing Dep.

CFO in SPH explained that,

The steps to issue Standard vs. Actual report is as follows (see figure 2): 1. Enter the date range. 2. Select the Item Range or Group Range and enter the respective ranges in the form and to fields. 3. Choose if you want the report to be printed in Stock wise UOM / Conversion wise UOM or both. 4. Choose if you want the details to be printed on an 80 column or 132 column formats.

Figure 2. Standard Vs. Actual Costs Comparison Report



Item Code	Description	UOM	Rate	Actual Qty	Actual val	Std Qty	Std Val	Varied Qty	Varied Val
11-INTERNATIONAL LIQUORS									
117040	AUSTRALIAN WINES	BOT	590.00			1.87	1,106.25	1.87	1,106.25
117049	TRIPLE SEC	BOT	1,500.00			0.06	96.43	0.06	96.43
127001	BLACK LABEL WHISKY (1	BOT	0.00			0.03		0.03	
127058	MARTINI ROSSO	BOT	0.00			0.03		0.03	
127059	KALUWHA	BOT	1,848.00			0.01	27.72	0.01	27.72
127062	FAMOUS GROUSE WHISKY	BOT	0.00			0.03		0.03	
127064	VAT 69 WHISKEY	BOT	0.00			0.03		0.03	
127068	BLUE CURACO	BOT	1,500.00			0.17	257.16	0.17	257.16
127071	BACARDI SILVER	BOT	2,200.00			0.15	330.00	0.15	330.00
127077	DRAMBUIE	BOT	0.00			0.01		0.01	
127087	REMY MARTIN	BOT	4,200.00			0.04	180.00	0.04	180.00
127090	JAMESON IRISH WHISKEY	BOT	0.00			0.03		0.03	
127095	SMIRNOFF CITRUS VODKA	BOT	0.00			0.15		0.15	
Varied Qty							1,997.56		1,997.56
Grand Total							18,096.32		18,096.32
19-OFFICE STATIONERY									
198018	PAPER CLIP	NOS	25.00	20.00	500.00			-20.00	-500.00
198090	DEBIT VOUCHER GREEN	PKT	130.00	5.00	650.00			-5.00	-650.00
198094	CALCULATOR	NOS	1,500.00	1.00	1,500.00			-1.00	-1,500.00
198095	KOT PAPER ROLL 1 PLY	NOS	90.00	20.00	1,800.00			-20.00	-1,800.00
198096	KOT PAPER ROLL 2 PLY	NOS	125.00	20.00	2,500.00			-20.00	-2,500.00
198097	BINDER CLIP	NOS	12.50	10.00	125.00			-10.00	-125.00
Varied Qty					7,075.00				-7,075.00
Grand Total					7,075.00				-7,075.00

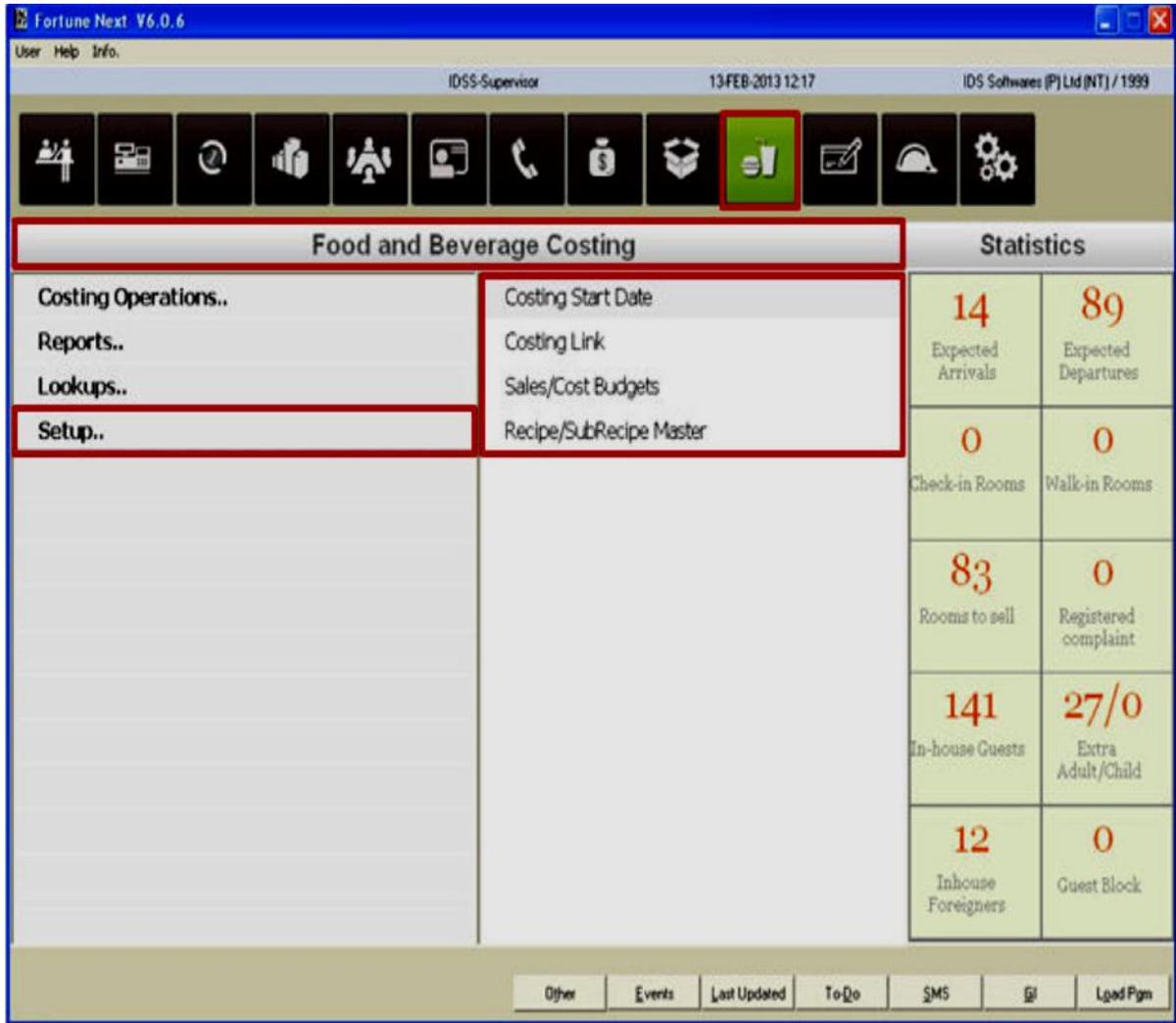
Source: SPH Costing Dep.

The Head of Cost Department stated that,

The Food & Beverage (F&B) Costing module explains the various cost drivers that are necessary for the F&B Costing module to work efficiently and in connection with other modules. One of these modules is the Costing Start Date, which is a mandatory parameter as shown in figure 3. This is used to enter the date for activating the food and beverage costing module. Based on the date specified here, the Sales and Consumption details will be extracted from the Point of Sales and Materials Management modules to the Food and Beverage module for generation of Sales and Cost MIS Reports. It is recommended that only when both the Point of Sale and Materials Management modules are operational, the Costing Start

Date should be specified; else, the MIS reports will not be generated due to insufficient details.

Figure 3. Food and Beverage Costing in SPH



Source: SPH Costing Dep.

CEO of SPH clarified that,

The standard costing system in SPH connects between restaurants, Kitchen; Cost Centers is a mandatory parameter definition; which is used for linking cost centers with the supplying kitchen to enable the sales and consumption, figures in the food, and beverage cost reports to be accumulated and arrived accordingly. The definition is based on the cost types such as liquor, smoke, soft drinks, and food. Multiple Cost Centers can be linked to a single kitchen. A provision for Sales Tag is provided for identification of Revenue and NonRevenue Outlets in the Cost Reports. All sales/cost values in the Cost Reports will be reflected based on Kitchens. The following figure shows the costs relationships based standard costing system.

Figure 4. Costs Relationships based Standard Costing System

Link Res. - CC - Kit V6.0.0						
Cost Type Food						
Restaurant		Cost Center		Kitchen		
Res. Code	Res. Name	Cost Code	Cost Name	Kitchen	Kitchen Name	Sales Tag
ARB	Gold Club (Arena Bar)	4	Arena Bar	MKT	Main Kitchen	Yes
BAL	Balcony	5	Balcony	MKT	Main Kitchen	Yes
BAN	Function	10	Functions	MKT	Main Kitchen	Yes
CTY	Arena (HH)	4	Arena Bar	MKT	Main Kitchen	Yes
DJB	DJ Balcony	31	DJ Balcony	MKT	Main Kitchen	Yes
FNC	Functions	10	Functions	MKT	Main Kitchen	Yes
GCB	The Gold Club	3	Gold Club	MKT	Main Kitchen	Yes
GCH	Gold Club (HH)	29	Gold Club H	MKT	Main Kitchen	Yes
PLZ	Palazzo	2	Palazzo	MKT	Main Kitchen	Yes
RMS	Room Service	9	Room Service	MKT	Main Kitchen	Yes
SBL	Gold Club (Small Balcony)	6	Small Balcony	MKT	Main Kitchen	Yes

Link Item - Kitchen						
Res. Code:	Link By:	From:	To:	Tag Kitchen / Bar:		
ARB	Group Code	4	26	Arena Bar		
		Bar Food	Snacks			
Display: <input checked="" type="radio"/> All <input type="radio"/> Un Tagged <input type="radio"/> Tagged						

Group Code	Group Name	Item Code	Item Name	Kitchen Code	Kitchen Name
4	Bar Food	1	Spaghetti Bolognese	MKT	Main Kitchen
4	Bar Food	2	Beef Blast (Bar)	MKT	Main Kitchen
4	Bar Food	3	Chilli dip with Garlic Bread	MKT	Main Kitchen
4	Bar Food	4	Hawaiian Pizza	MKT	Main Kitchen
4	Bar Food	5	The Subway	MKT	Main Kitchen
4	Bar Food	6	Bacon, Lettuce, tomato sandwich (Bar)	MKT	Main Kitchen
4	Bar Food	7	Chicken Burger	MKT	Main Kitchen
4	Bar Food	8	Four Seasons Pizza	MKT	Main Kitchen
4	Bar Food	9	Vegetarian Curry	MKT	Main Kitchen
4	Bar Food	10	Goan Fish	MKT	Main Kitchen
4	Bar Food	11	Chicken Roll	MKT	Main Kitchen

User	IDS	Last Updated	12-FEB-2013 15:31
F1 -Select Kitchen / F5 - Delete Kitchen / F4 - Delete Both			
<input type="button" value="Details"/> <input type="button" value="Save"/> <input type="button" value="Ok"/> <input type="button" value="Cancel"/> <input type="button" value="Exit"/>			

Source: SPH Costing Dep.

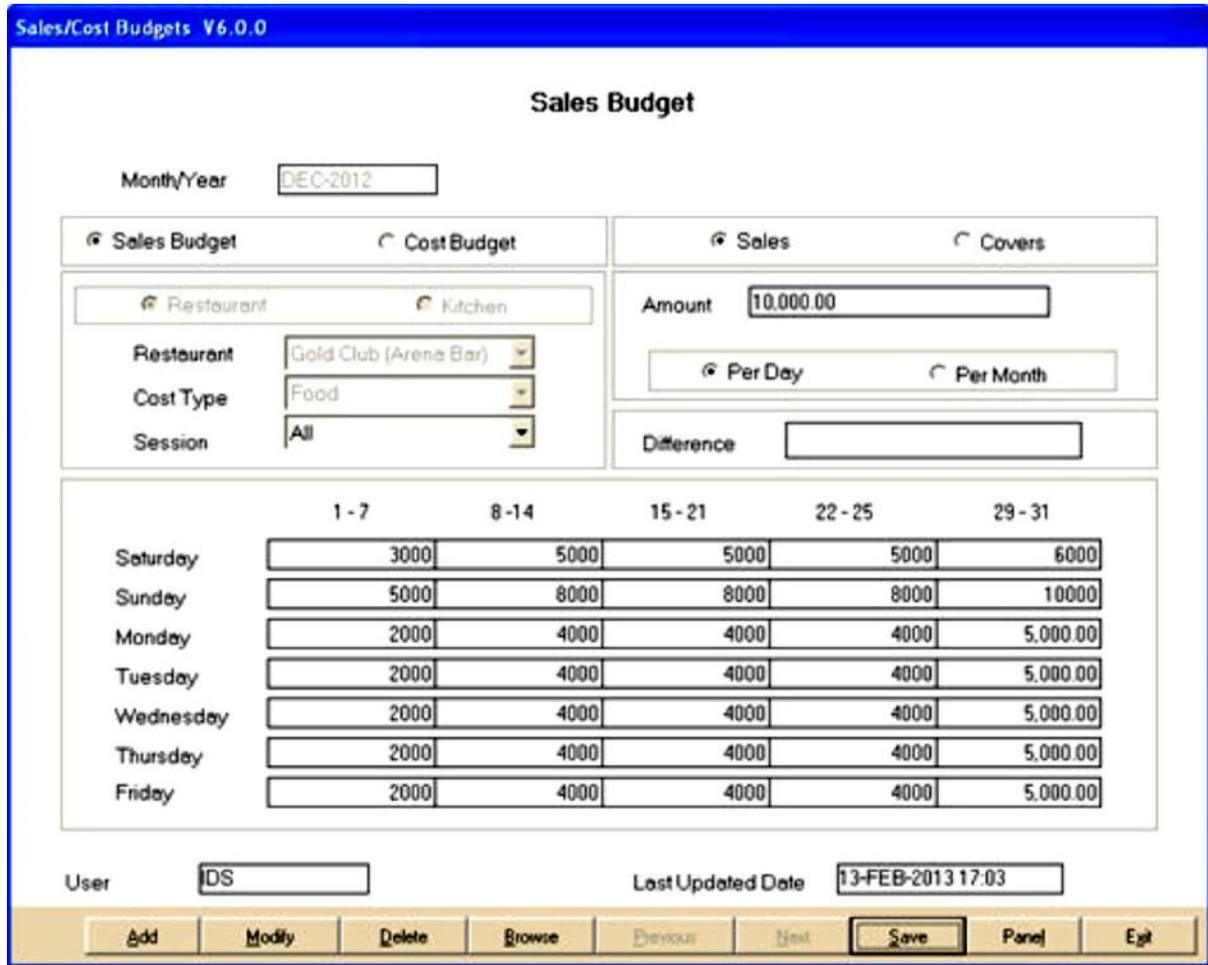
The above situation has been inflated for illustration, but it represents what can happen when the enthusiasm for spreading the responsibility for costs goes beyond the bounds of what is managerially useful or reasonable. The central problem in determining the costs of hotel services is deciding how indirect costs should be assigned to the total costs of the services. The process of making the decision is referred to in the accounting literature as cost allocation, and, as a general rule, it requires three steps (Snyder and Davenport 2013): (1) Select a cost objective to which indirect costs will be allocated. A cost objective is anything within an organization for which a separate measurement of costs is required. Costs are an

important component of record keeping in organizations, but they are not collected for their sake. Costs are gathered and evaluated for the purpose of guiding managerial decisions. Therefore, costs need to be “about” something. This “something” is the cost objective and may be the running of a reference desk, an online search performed for a customer, setting up a LAN, or any other activity of managerial interest. Cost objectives may be activities over which a manager has control, but control is not a necessary characteristic of a cost objective (Shank and Govindarajan 1992, Horngren *et al.* 2002, Schoute 2009, Snyder and Davenport 2013); (2) Collect the range of indirect costs (typically known as a costs pool) that are associated with a particular cost objective. Direct costs are those costs that can be traced to a distinct cost objective. However, organizations also have indirect costs, sometimes known as overhead, which is common to a variety of cost objectives and cannot be easily and directly tied to any single one. Administrative costs are a typical example of indirect costs. The labor and material costs necessary to undertake these tasks are seldom connected directly to running the system since an administrative office usually performs these functions for the entire organization, but it is also clear that the system cannot operate without them. Similar examples of overhead costs might be janitor salaries, cleaning supplies, building repairs, etc. (Shank and Govindarajan 1992, Horngren *et al.* 2002, Schoute 2009, Snyder and Davenport 2013); (3) Select some method for connecting the costs in (2) with the objective in (1). Since cost data are usually messy and difficult to work with, making a valuable connection between indirect costs and products or services often requires estimating indirect cost usage based on one or more independent variables, known as allocation bases. A common base for allocating overhead costs is direct labor hours, with the underlying assumption that labor hours are a reasonable indicator of other costs that are incurred. The process appears simple in principle; however, as we can see from the above situation, allocation requires more than the algorithmic application of costs to activities (Shank and Govindarajan 1992, Horngren *et al.* 2002, Schoute 2009, Snyder and Davenport 2013). Accordingly, Sales Budgets Head in SPH explained that,

The Sales Budget can be considered as the best allocation option, which is used for defining the sales budget for restaurant or kitchen, to later analyze the variance in sales and cost reports. The sales budget as in figure 5 should be determined for given month/year and can also be predefined for future months. Budgets can be specified session wise and for all Cost Types, i.e., Food, Liquor, Soft Drinks, Smokes and Tobacco (Smokes). The Cost Budget option is used to define cost budgets for all cost types, i.e., food, liquor, tobacco, soft drinks, etc. Budget is defined regarding percentage based on kitchen and restaurant for reflection of budget and actual figures in cost reports. The Actual Cost (Consumption) is calculated based on the value of all Items issued directly to the Cost Centers or from the Store. This is reflected in the Cost Reports along with the Actual Cost Percentage and the Budgeted Percentage. If the Actual Cost Percentage calculated is greater than the Budgeted Percentage,

then the Variance will reflect as minus and if the Actual Cost Percentage calculated is lesser than the Budgeted Percentage, then the Variance will reflect as the plus.

Figure 5. Sales Budget in SPH



Sales Budget

Month/Year: DEC-2012

Sales Budget Cost Budget

Restaurant Kitchen

Restaurant: Gold Club (Arena Bar)

Cost Type: Food

Session: All

Amount: 10,000.00

Per Day Per Month

Difference:

	1 - 7	8 - 14	15 - 21	22 - 25	29 - 31
Saturday	3000	5000	5000	5000	6000
Sunday	5000	8000	8000	8000	10000
Monday	2000	4000	4000	4000	5,000.00
Tuesday	2000	4000	4000	4000	5,000.00
Wednesday	2000	4000	4000	4000	5,000.00
Thursday	2000	4000	4000	4000	5,000.00
Friday	2000	4000	4000	4000	5,000.00

User: DS Last Updated Date: 13-FEB-2013 17:03

Buttons: Add, Modify, Delete, Browse, Previous, Next, Save, Panel, Exit

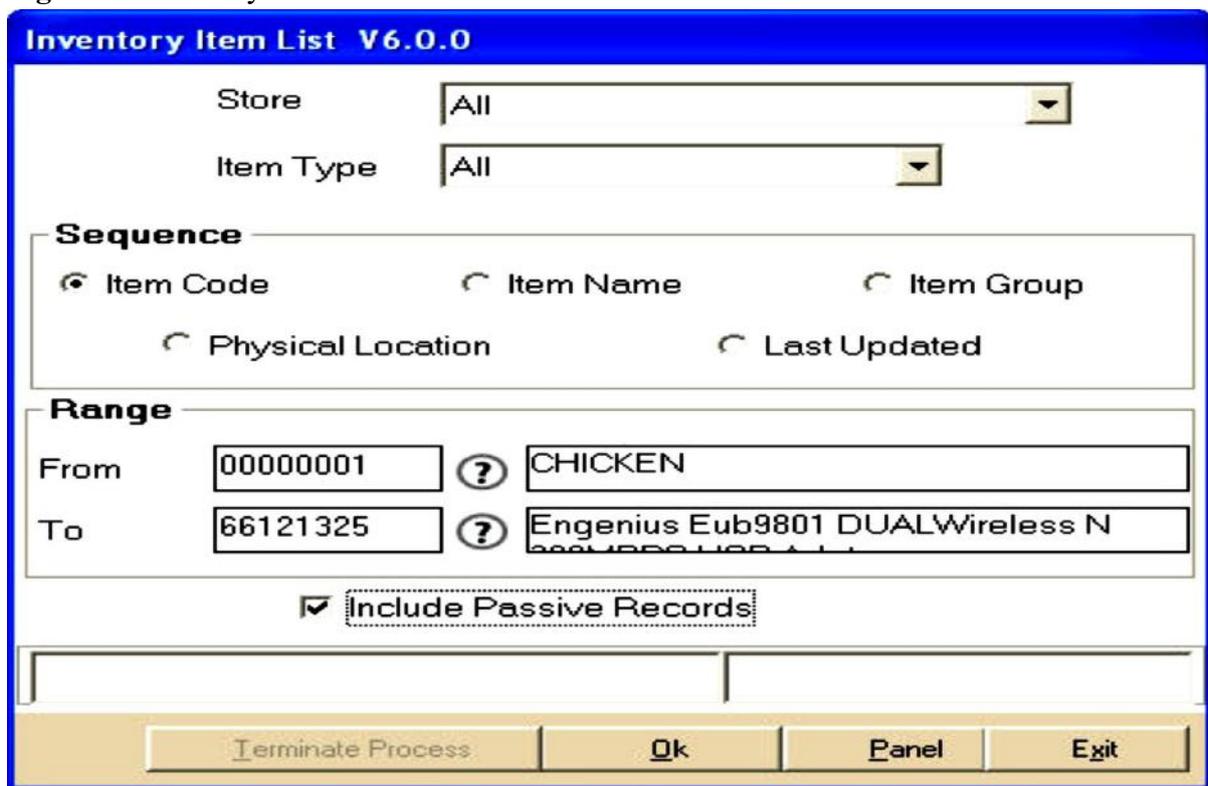
Source: SPH Costing Dep.

The hotel purchasing inventory or producing it for resale will not expect to sell all items available during an accounting period. A hotel and restaurant operations will always maintain a minimum food and beverage inventory to take care of current daily and near-future business operations. At the end of an accounting period, the cost of inventory sold is identified as an expense described as the cost of sales. Ending inventory not sold will continue to be classified as an asset and not expensed. The cost of sales represents the cost of goods sold. It is determined easily: Know the beginning inventory, add inventory purchases, and deduct inventory not sold (Jagels and Coltman 2007). SPH management consists of two separate but related parts: room-inventory management and pricing. The inventory-management process deals with how different types of rooms are to be allocated to demand. The pricing procedure

is more concerned with the best prices to charge in various situations (Ramdeen *et al.* 2007). In this regards, inventory and store manager stated that,

In the SPH, we control our inventory based on inventory item list (see figure 6). Accordingly, we can generate details of items entered in the Inventory Items. We also can generate the list of all or specific stores and on item type which is optional. The information processed here can be based on the sequence of Item Code/Name/Group/Physical Location/Last Updated.

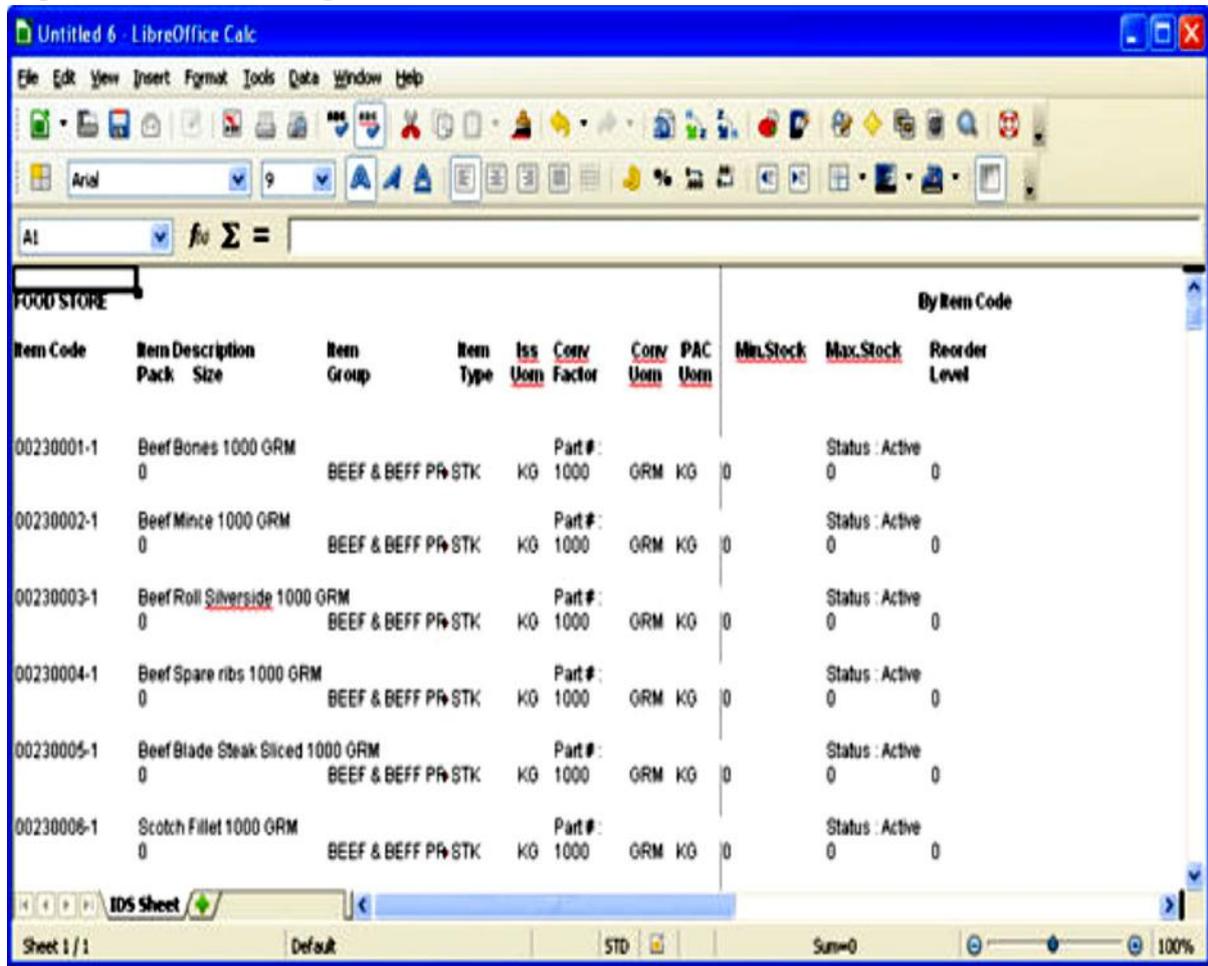
Figure 6. Inventory Item List



Source: SPH Costing Dep.

Inventory and store manager added that, Based on the inventory item list, we can generate different reports at all stores. For example, to issue the food store report, the following procedures can be considered. 1. Select the Store from the list provided. 2. Choose the type of Item from the list. 3. Select a sequence type based on which you want to display the Item list and enter the particular details. 4. Choose the checkbox to include Passive records in the report. The report will be generated in the following format (see figure 7).

Figure 7. Food Store Report



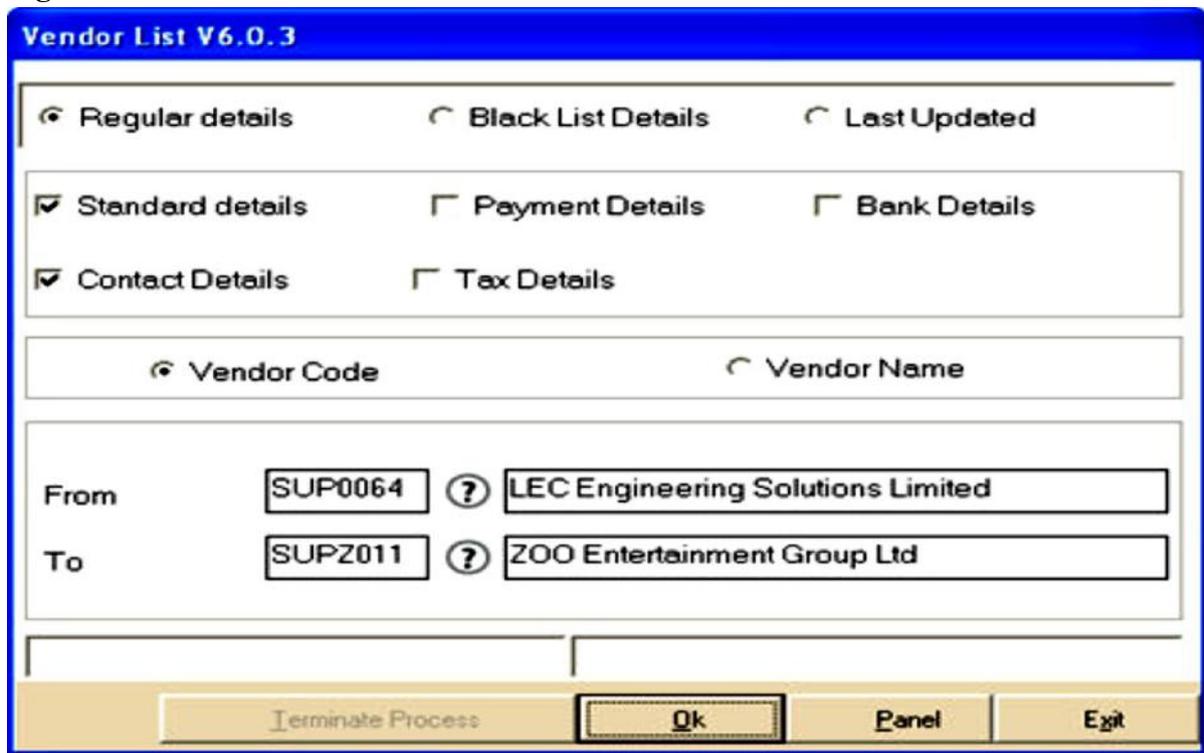
Item Code	Item Description	Item Group	Item Type	Iss Uom	Conv Factor	Conv Uom	PAC Uom	Min.Stock	Max.Stock	Reorder Level
00230001-1	Beef Bones 1000 GRM	BEEF & BEFF PR STK		KG	1000	GRM	KG	0	0	0
00230002-1	Beef Mince 1000 GRM	BEEF & BEFF PR STK		KG	1000	GRM	KG	0	0	0
00230003-1	Beef Roll Silverside 1000 GRM	BEEF & BEFF PR STK		KG	1000	GRM	KG	0	0	0
00230004-1	Beef Spare ribs 1000 GRM	BEEF & BEFF PR STK		KG	1000	GRM	KG	0	0	0
00230005-1	Beef Blade Steak Sliced 1000 GRM	BEEF & BEFF PR STK		KG	1000	GRM	KG	0	0	0
00230006-1	Scotch Fillet 1000 GRM	BEEF & BEFF PR STK		KG	1000	GRM	KG	0	0	0

Source: SPH Costing Dep.

In this vein, Bowen and Shoemaker (1998) found that frequent customers spend more on food and beverage than non-frequent customers. Measuring service quality and customer satisfaction are critical to a hotel profitability and competitive advantage. Most hotel restaurants have a substantial amount of repeat businesses component (Bowen and Shoemaker 1998, Chakrapani 1998). The hotel has a significant amount of repeat sales. Consequently, the business worth of a customer about the average dollar value of the restaurant check could be high if viewed from a cumulative perspective. Also, a single customer can produce a steady flow of cash for a restaurant over an extended period (Ramdeen *et al.* 2007). Purchasing Manger stated that,

In SPH, we maintained two important records: customers list and vendor list. For example, vendor list is to view the list of vendors based on regular details/blacklisted details or last updated details. The employees have the option to search the vendor details based on Vendor Code or Vendor Name as per the following figure.

Figure 8. Vendor List



Source: SPH Costing Dep.

Consequently, costs allocation system should have two primary results: better economic decisions and a higher level of managerial motivation (Snyder and Davenport 2013). In the first situation, management pursues to better understand the “true” costs of a particular product or service. The result of better economic knowledge should be better decision making or pricing concerning services. In the second situation, another result of allocation should be to encourage lower-level managers to behave in ways that further the aims of the organization (as outlined in the planning of upper management). The cost allocation literature expects that there will be significant overlap between the two results. The best financial management should formulate a cost construction that results in optimal decision-making and encourages all levels of management to make decisions that are optimal from the organizational perspective. However, not all costs allocation methods can produce these decision-making effects (Anshelevich *et al.* 2008, Snyder and Davenport 2013). In the RBC system, the hotel managers can make decisions to cut allocated costs that do not reinforce better productivity in their departments.

Application of RBC System in SPH

RBC’s application in SPH reflects two main influences: results based management (RBM) and cost allocation management. RBC system as introduced by Alsharari (2016) shares

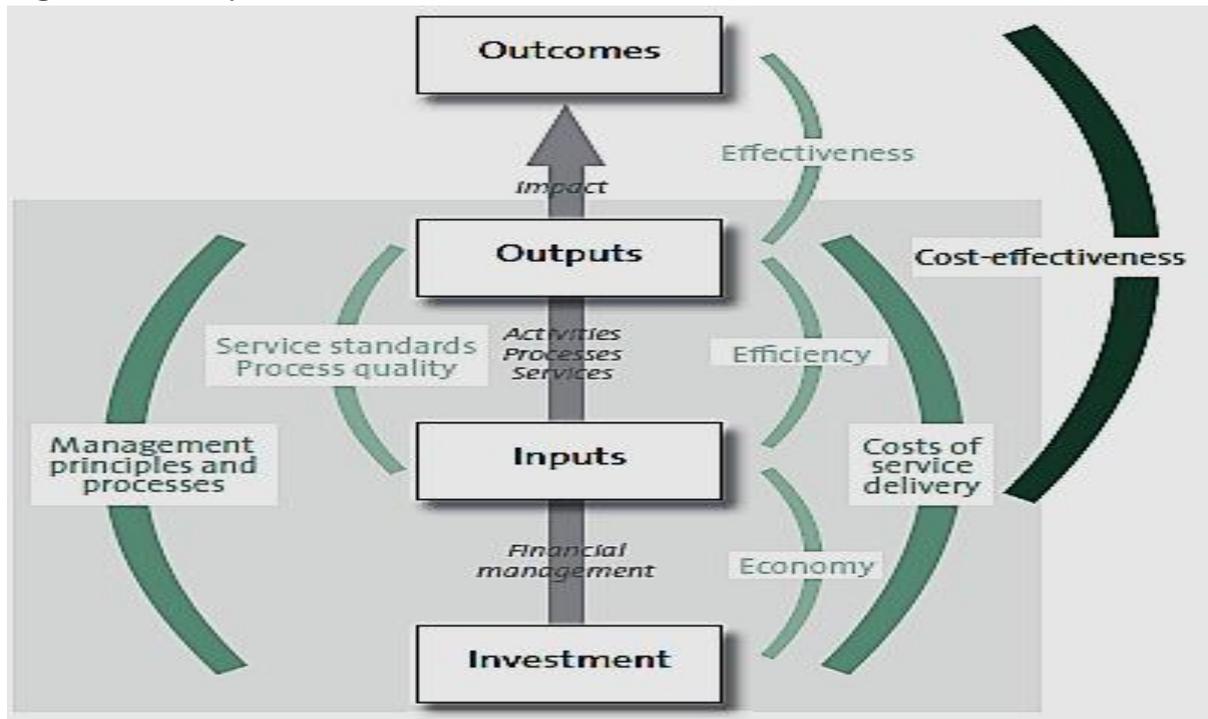
common ideas and orientations with its predecessors ABC, ABM, and RBM. All three have tended to be adopted by organizations having very strong outcomes orientations. ABC and ABM have managed to prosper better in organizations with competitive performance cultures that are particularly focused on securing cost reductions and cost efficiencies. RBC shares the same focus, arguably inherited from RBM philosophies. Interestingly, the experience of implementing ABC and ABM may provide forewarnings for RBC system (Alsharari 2016). RBC system by focusing on growth to improve organizational performance has some advantages over cost-cutting measures based ABC. First, growth based RBC system has no upper limit, whereas with cost reductions based ABC; organizations are constrained by what they spend. Second, growth based RBC excites and invigorates a workforce. Focusing on cost may be demoralizing and discouraging to organizational employees, especially when they are let go and processes are reengineered. Growth based RBC offers new ideas and creative approaches to old problems. Third, growth has a positive impact over a longer term than does cost cutting, the benefits of which tend to be short term (Alsharari 2016).

RBC system thus emerges as a rather more complex cost management and accountability development that may have first appeared. This study set out to ascertain the primary strategic agenda underpinning the RBC development and has found it to be predominantly a cost management plan. This has become evident through the conclusions regarding the study's two supporting research questions. In response to the first research question, cost management has indeed emerged as the dominant focus. This has become manifest via RBC unit of analysis -sponsored cost reductions, results orientation, and productivity design strategies. This agenda has clearly been center stage in both RBC implementation process as a new unit of analysis. On the second research question concerning any persistent undercurrent of RBM philosophy, the latter has clearly been at the heart of the RBC intent. It bears close similarities to the management accounting concepts. This has indeed been acknowledged directly in the contemporary accounting research literature on system design and management as well as implicitly within RBA literature discourse of the present day (Alsharari 2016).

RBC system emerges as an alternative unit of analysis to ABC as well as other traditional costing systems, by focusing on 'Results' and 'outcomes' instead of 'Activities' (see figure 9). This innovative model enables organizations to link products and services back to their mission value and costs. This allows better investment decisions and costs management about the results orientation. Since RBC is based on connecting standard costs with performance, it makes sense to compare the cost of the service or benefit. It is one of the main challenges of reporting on achieved results. It seeks to shift attention away from activities to communicating significant results that the program or project has made at the organizational output and outcome levels. The decision-making and reporting process along with RBC usually takes place after a series of corporate actions such as setting strategic objectives,

keeping objectives in mind while allocating resources, managing programs to achieve results, measuring performance, and reporting results. These actions help the organization to determine its progress towards its desired ends (Wholey 1999, OCA 2002, Ortiz *et al.* 2004, Alsharari 2016).

Figure 9. RBC System



Source: Alsharari (2016)

RBC requires a particular type of information or cost drivers such as direct labor hours and units produced, to be of value. It starts from the input data that product costs and other information are determined according to followed methodology. The results obtained in RBC system are used in different ways than ABC system. As RBC system can provide information to help minimize waste and cost reduction, at the same time it is not wasteful in itself. In other words, the resources required to design, implement and maintain RBC system will be less than the benefit derived from the use of the system as usage cost of ABC. It has been developed for tracking spending and activities of organizations concerning the results they are trying to achieve. It is a way to recast planning, budgeting, management, and reporting in direct relation to what organization wants (or is expected) to accomplish. The ideas behind RBC (like RBA) are necessary approach; to identify the needs an organization is trying to address; to develop an overall plan (mission, goals, objectives, and strategies) for addressing those needs; to come up with policies, programs, and services to meet those needs; to organize and implement budgeting, accounting, and management systems that support the strategies, goals, and objectives laid out in the overall plan; and finally, to develop and track cost and performance data that allow the organization to measure its progress in reaching its

goals and objectives, and changing (or modifying) strategies, programs, policies, management systems, or budgets when necessary (Alsharari 2016).

The results of the survey used in SPH about the application of RBC system has summarized in the following table. It recognizes that the employees' perceptions percentage of RBC's advantages and disadvantages in SPH.

Table 1: Employees' Perceptions Percentage of RBC's Advantages and Disadvantages.

Advantages of RBC use in SPH	%	Disadvantages of RBC use in SPH	%
Results Orientation and costs management	95	Put further pressure on financial resources	40
Reduce costs allocation problems and improve accuracy of products and service costs	95	Involve in far too many small costs	30
Help to identify where the problem lies	90	Constrain benchmarking with competitors	45
Increase accountability	100	Require significant amount of time	30
Assist in making effective decisions	100	Create conflict with principles of responsibility accounting	40
Ensure effective use of major resource (materials and labor)	95	Compel to loose its customer focus	40
Help in appraising performance	90	Result in probable conflict among managers and departments	35
Seem like a rigorous management practice	90	Produce possible operational disharmony	35

The above table recognizes that the most significant advantages of the application of RBC were increased the accountability and assist in making effective decisions. The percentage of reduce costs allocation problems and improve the accuracy of products and service costs was 95%, which reflects the accuracy of RBC in costs allocation. At the same time, results Orientation and costs management have achieved the same result, which are the main assumptions of RBC system. On the other hand, the most disadvantages were required significant amount of time and involved in far too many small costs. However, these disadvantages are related to management issues, not to technical problems. However, RBC system can be considered as a rigorous management practice and helps to improve the strategic planning and budgeting.

Discussion and Conclusions

The cost accounting literature also suggests that the hospitality industry leans towards historical information contained in financial reports for planning and control purposes (Enz and Potter 1998, Mia and Patiar 2001, Ebimobowei and Binaebi 2013). The results from this study are consistent with the literature in that most employees in SPH appeared to be preoccupied with historical data despite the rather highly competitive market faced by their hotels. Although the results indicate that most employees in SPH perceived their market competition as high, the relevant literature has proposed that competitive market environments would encourage hotels to control costs cautiously, and therefore adopt modern cost control mechanisms like RBC. However, the findings from this study support the literature. It was found that most of the costs allocation methods in SPH still use the traditional costing system to allocate indirect costs to supporting, and operating departments. The results revealed that instead, indirect costs (e.g. general and administration, human resources, and marketing, etc.) shaped a large part of the total costs of running the SPH. Those costs were then deducted from the hotel's aggregated revenues earned by its different operating departments. In fact, SPH did not even allocate direct material and labor costs to their proper food and beverage outlets (i.e. coffee shop, and specialty restaurant). They combined revenues from various food and beverage outlets and deducted the direct costs (e.g. cost of food ingredients, beverages, and some direct labor) to arrive at the food and beverage department's contribution income (Chen *et al.* 2013, Alsharari 2016, Patiar 2016).

However, when the market is highly competitive, it is important for managers to accurately assess the profitability of various food and beverage outlets and operating departments. This is because each food and beverage outlet significantly differ regarding style of cuisine, menu, atmosphere, level of service and prices charged volume of sales generated, cost structures and the market mix. Such wide variations between the various food and beverage outlets within one department make it essential to allocate direct as well as indirect costs to each outlet. According to Cannavacciuolo *et al.* (2015) and Chen *et al.* (2013), accurate cost allocations allow effective cost control, since the costing departments can be held responsible for the costs they incur and accountability is emphasized, which leads to cost control. Thus, RBC cost allocations enable managers to determine accurate profitability's for each outlet and to assess and streamline future strategies for poor performing stores (Cannavacciuolo *et al.* 2015, Alsharari 2016, Patiar 2016).

Although most SPH employees felt RBC was beneficial for cost control, costs allocation and better decision-making. Since most of the controllers were qualified accountants, had relevant work experiences in other industries, perceived high market competition and were part of the hotel's executive management team, one would expect them to be in a stronger position to instigate changes to the traditional accounting practices used in the hotel industry. However,



bringing in any accounting change (concerning new systems) requires the initiative and full support of the general managers. In the hotel industry, general managers tend to have a traditional outlook in managing the business (Maier 2011, Torres and Adler 2012, Kensbock *et al.* 2013).

Such a background does not encourage a culture of change, and this is perhaps one of the reasons, why there has been a lack of support for the SPH management to try innovative accounting systems. This study reconfirmed the findings that there had been little or no change in their cost allocation practices in the SPH. Instead, they tend to utilize short-term strategies to maximize room sales, however, perhaps in the current competitive environment, such policies will be difficult to maintain in the long-term. These findings are consistent with other hospitality researchers that the use of advanced costing systems in hotel and hospitality industry is very low (Raab *et al.* 2007, Raab *et al.* 2009, Kostakis *et al.* 2011, Ebimobowei and Binaebi 2013) despite improvements in the business performance have been reported in the literature (Innes and Mitchell 1995, Cannavacciuolo *et al.* 2015, Alsharari 2016, Patiar 2016).

The conclusions are likely to be reflective of the situation in SPH as a large luxury hotel in UAE and internationally. Moreover, this international hotel brand tends to follow standardized cost and management practices, irrespective of the location of the hotel. This practice was clearly evident from the discussions with the employees during interviews and is also supported by (Raab *et al.* 2007, Patiar and Mia 2008, Raab *et al.* 2009, Kostakis *et al.* 2011, Ebimobowei and Binaebi 2013). Finally, this paper claims that expected capacity of SPH, because it represents how resources are allocated when they are in demand, accounts for a functional basis for cost allocation. Cost is allocated, not based on actual use, but based on the expectation of use, which is much easier to manage, and again reflects the statistical nature of the sharing that the hotel already provides.

The primary benefit of using RBC is more accurate costing. Advocates of RBC contend that most organizations have a poor idea of the actual costs of providing products or services. In most organizations, direct labor has declined as a primary input for production and the volume of indirect costs has grown. Product and service costs based on a simple allocation basis are already distorted. Further, the distortions caused by simple allocation bases will produce even greater distortions as increasing automation reduces the level of direct labor. Any organization that relies on such inaccurate cost information will evaluate the use of its resources incorrectly and inevitably make poor investment and pricing decisions. Another benefit of RBC is likely to be better managerial decisions. As managers become aware of the true costs of their departments and their consumption of services, they can make choices that make better use of limited organizational resources.



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