

# Management Accounting in the Hospitality Industry: Taiwan Hotel Case Studies

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**Keywords:** Management Accounting tools, Hospitality, Hotel Industry, Competitive Market, RevPAR

**Abstract:** The enormous changes during the last ten years in service operations and information technology have dramatically affected the environment of management accounting practices in the hospitality industry. The objective of this study is to investigate the management accounting practices of medium and large-sized hotel businesses in Taiwan. Five in-depth interviews of the Chief Financial Officers (CFOs) and senior accounting managers in carefully selected hotels were conducted. The interviews were taken towards the end of 2018. They focused on how management accounting tools/systems are implemented, including obtaining information concerning cost structure analysis and measures of financial and non-financial performance of the selected hotels. The five hotels are unique and representative of 3 – 5 star hotels in Taiwan. The hotels chosen for the interviews represented three hypothetical operational situations: normal operation, a temporary closure, and a permanent shut down. The information obtained from the interviews proved to be helpful in better understanding what management accounting information essential for decision are. This is especially for the sustainability of specialty hotels in a highly competitive environment.

## 1 INTRODUCTION

*Hospitality* is a general term that refers to a segment of the service industry that includes hotels, restaurants, entertainment, sporting events, cruises and other tourism-related services. The hospitality industry is essential not only to societies as a whole, but also to a country's economy as well as customers and employees.

The hospitality industry generates revenue for local economies directly when tourists spend money on hotels, restaurants and entertainment venues. It also helps economies of countries indirectly due to tourist spending on retail goods, foods, souvenirs and crafts. Besides, tourism can stimulate the demand for services such as tour guides, translators, and operators, restaurants and entertainment services, and infrastructures such as airports, roads and public transportation.

Also important are the jobs created by the industry. World Travel and Tourism Council recently published an article detailing the economic impact of the tourism industry. In 2017 the hospitality industry accounted for 313 million jobs worldwide. This translates to 9.9% of total employment and 20% of all global net jobs created

in the past decade (World Travel & Tourism Council, 2018). Hospitality also supports jobs in the arts and culture industries, helping theaters and arts festivals to thrive.

The hotel sector is another major beneficiary. In the United States, for example, there has been a significant rise in occupancy rates. Using statistics from Smith Travel Research (STR), Sheel (2017) reports that the year-to-date occupancy increased 0.6% to 67.4%, relative to 66.9% for the same period in 2016. The year-to-date average daily rate, or ADR (September), grew 2.0% to \$127.14.

In IHG Annual Report and Form 20-F 2018 mentioned that in 2018, the global hotel industry is a USD525bn industry. The 54% of rooms are affiliated with a global or regional chain, up from 50% in 2012, and 46% are unaffiliated or independent hotels. The top five hotel groups namely IHG, Marriott, Hilton, Wyndham and Accor, account for 25% of market share, rising from 19% in 2012, and 58% of the global development pipeline of hotels in planning or under construction.

In a fragmented market, competitor pressures among the leading brands are intensifying as all of the major players pursue growth strategies through business acquisitions, organic growth and

diversification. In the digital era, consumer decisions about where to stay and how to book hotels has become a significant development. Hotel companies must compete and try to survive in this increasingly competitive environment by using online travel intermediaries including peer-to-peer home rental companies and serviced apartments.

There are several metrics for measuring hotel industry performance. RevPAR is an important indicator of the value guests ascribe to a given hotel, brand or market and increases when guests stay more often or pay higher rates. Rooms supply is also significant because it is reflective of the attractiveness of investing in the hotel industry and is influenced by the assumed profitability of a brand or market. Driven by strong economic fundamentals, the global hotel industry has seen growth in both RevPAR and rooms supply over the past decade. It also plays a vital role economically, accounting for every 1 in 10 jobs around the world (IHG, 2018, p. 8).

The hospitality industry is growing worldwide. However, there are variations among countries. Several researchers who studied hospitality industry focused on the country context. For example, Jeffrey, Barden, Buckley, and Hubbard (2002) studied the hotel industry in England; Min & Min, 1997; Tsai, Song, and Wong (2009) studied in U.K. hotel market; Briciu, Scorte and Mester (2013) investigated the hospitality industry in Bihor County, Romania; El-Shishini (2017) examined the relationship between contextual variables and the use of management accounting techniques in hotels industry in Bahrain; Pavlatos (2011) conducted research on 85 leading hotels in Greece; Makrigiannakis and Soteriades (2015) investigated 48 four and five-star hotels in Greece; Yu and Huimin (2007) analyzes and compares Chinese hotel financial performances; Shieh (2012) using 68 international tourist hotels in Taiwan from 1997 to 2006 as samples of the study, are among many others.

This present paper reports on a research project that focused on the Taiwan hotel industry. Taiwan has a dynamic capitalist-type economy with a semi-presidential government. The country enjoys strong growth sustained by the dynamism of the entire region, a population with high purchasing power, and an economy focused on technology. From the statistics, Taiwan has one of the lowest fertility rates in the world, which portends a looming labor shortage soon. In an attempt to counter this, new Taiwan regulations provide preferential tax incentives to foreign professionals employed in

Taiwan. The goal is aimed at improving the overall environment for recruiting and attracting professionals from other countries.

There are major drawbacks, however, for conducting business in Taiwan, the main one being the lack of direct communication with China, and another is a very limited domestic market. Nonetheless, Taiwan is ranked very high because of the ease of doing business and its strategic geographical location which serves as an entryway to China and the ASEAN markets. Despite these drawbacks, with modern infrastructure and innovation capabilities, Taiwan is an attractive destination for investors (Market Entry, 2018).

Despite the conflict between the China and Taiwan, the Peoples' Republic of China (PRC) is still the largest market for Taiwan businesses. However, in 2018 the number of Chinese visitors has dropped dramatically by 37.9%: from 974,000 to 605,000. Based on Market Entry (2018), the number represents the lowest number since 2012. Decreasing numbers of PRC visitors and tour groups have caused the industry to focus on regional source markets to partially offset this trend. In the long-term, Taiwan needs more innovation in its tourism sector in order to capture higher-rated foreign independent travelers (Voellm, 2017). Fulcoo was somewhat pessimistic when he concluded that the hospitality industry in Taiwan may not be expected to return to normal or rise again soon (2018).

## 2 LITERATURE REVIEW

The hospitality industry has been undergoing tremendous changes and disruptions over the last two decades. New challenges as well as new opportunities makes the hospitality industry attractive. New trends that have reshaped the hospitality industry especially in hotel business are such as virtual communities by which social networks have had a profound impact on customers; sharing economy like Airbnb represents a major disruption in the hotel industry; and online travel agents. These are a few new trends among several others that have an impact on hotel industry and they are making the competitive landscape even tougher than ever (Masset and Weisskopf, 2019). This contributes to the result that not all hotels have been successful in this new trends. Some hotels are successful even though in the highly competitive environment, while others are bankrupt and close down and make the end of their hospitality businesses. The questions rise to both practitioners

and scholars what makes for a successful hotel? The research article by Jeffrey, Barden, Buckley, and Hubbard (2002) give insights into hotel management. They had followed 15 years of hotel occupancy analysis in England. Using time-series analyses of daily and monthly occupancy rates in different samples of hotels in England for over 15 years, the result reveals consistent temporal components of occupancy performance. These differentiate hotels in terms of overall occupancy levels, seasonality, length of a season, trend and within-week variations. They concluded that the components are related to the characteristics of hotels and their management (Jeffrey, Barden, Buckley and Hubbard, 2002).

The hospitality industry experienced a dynamic growth. Challenges facing not only the global crisis but also market changes, consumer behavior and technological trends. With an increasing role of the hospitality industry to the economy of the country, research on hospitality has been conducted worldwide. The aim of the studies in this field may differ depending on each research initiative; however, the ultimate goals of such research contribute to improve and sustain the hospitality industry. This will indirectly and relatively impact the economy of the countries or region. Accounting, the language of business, is therefore required to keep up with changes made to each particular area or industry, hospitality is no exception. The more sophisticated the businesses environment is, the increasing role of accounting, especially on management accounting, to meet the demand of management becomes.

In a situation where the competitiveness between hotels is increasing, hotel managers increase the focus on improving their performance as it can become their advantage. With competitive benchmarking these improvements must be identified and made by the hotel management (Min & Min, 1997; Tsai, Song, and Wong, 2009). The key managerial competencies required and the importance of hospitality experience of hotel financial controllers are studied. Data from a longitudinal study of the hotel financial controllers have been analyzed. The same authors gathered information using a content analysis of job advertisements, a survey of U.K. hotel financial controllers and interviews with key financial managers in Burgess (2017) research. The findings show that although there are many similarities with the generic accounting profession, the hotel finance role is unique. Their experience, combining with hospitality management competencies can support

operational managers. Their understanding of the complexity of the operation, in a dynamic and perishable environment, enables hotel financial controllers to act, on behalf of stakeholders, as business advisors to other managers, thereby enhancing profitability (Burgess, 2017).

Briciu, Scorte and Mester (2013) investigated the hospitality industry in Bihor County, Romania regarding the impact of accounting information on the managerial decision. They conclude that 65.93% of their surveyed managers believe that the accounting information is very useful in decision making, compared to 62.63% believe in financial accounting. The most important factor influencing the quality of management decision is the lack of cost calculation system (88%) and the subjectivity of the accountants (78%).

El-Shishini (2017) examined the relationship between contextual variables and the use of management accounting techniques in hotels industry in Bahrain. He believes that the size of the hotel, the intensity of competition and the quality level of the hotel have a positive effect on the use of management accounting techniques. He explored these assumptions through the distribution of the questionnaires to the 37 hotels in Bahrain and found that benchmarking, absorption costing, budgeting for organizational activities, in ranking order, are the most use by the hotel managers, while activity-based costing (ABC), activity-based management (ABM), and long-range forecasting are the least used by the hotel managers. He concluded that traditional management accounting techniques were widely used at hotels more than the recent management accounting techniques. Also, his result indicated that the intensity of competition has a significant positive relationship with the use of management accounting techniques, while the size and quality level of the hotel does not have any relation with the use of management accounting techniques. Part of this finding, is contradict to the conclusion made by Fathi, Dozdahiri (2015), which the authors stated that advanced technologies are implemented in hotels to lower their expenses. The same authors used ABC implementation as a focus of their study and concluded that organizational, technological, individual and environmental factors influence on ABC implementation in the hotel industry. Pavlatos (2011) conducted research on 85 leading hotels in Greece regarding the impact of strategic management accounting and cost structure on ABC system. The same author found that the adoption of ABC system is positively associated with the extent of use of strategic management accounting

techniques and with the cost structure while size of the hotel has no relation to the adoption of ABC system. In other words, no matter what size the hotel is, the ABC system can be adopted. This finding, again, contradicts with a result of Poldrugovac, Tekavcic and Jankovic (2016) as they found that there is a significant relationship between sizes and hotel efficiency.

Management accounting is also studied in Greek hotels. The majority of Greek hotels operate on a seasonal basis for about six to seven months per year. As a result, prices are heavily discounted and contribution margins are low (Makrigiannakis and Soteriades, 2015). The authors investigated 48 four and five-star hotels in Greek and found that size and sales mix structure have a positive impact on the number of operational departments' analyses of contribution margins. In other words, hotels with a high sales volume are more sensitive to calculation accuracy of profit sensitivity analyses and thus make extensive use of cost information for pricing.

Not only the studies conducted in developed countries, a developing country such as China is also in the pace of changes. Current development of the hotel industry in China, particularly the rapid growth of Chinese hotel brands and international hotel companies, is also concerned. The challenges facing hotel financial management in China and the rapid globalization of hotel development and operation and financial performance are the concern of researchers. The article by Yu and Huimin (2007) analyzes and compares hotel financial performances managed by international hotel companies, Chinese hotel management companies, and Chinese independently-managed hotels. They provided recommendations for improving hotel financial reporting and management for China's hotel industry (Yu & Huimin, 2007). The link between cost efficiency and financial performance as it pertains to the hotel industry is studied by Shieh (2012). This study employs the data envelopment analysis approach to estimate cost efficiency and uses three traditional financial indicators—the ratio of net operating profit before taxes, the ratio of earnings before taxes, and return on assets before taxes—to measure financial performance. Using 68 international tourist hotels in Taiwan from 1997 to 2006 as samples of the study, the significant finding indicates that cost efficiency is insignificantly associated with the financial performance regardless of the financial performance variable used (Shieh, 2012).

The optimal occupancy rate, operational, and profitability efficiency of Taiwan's international

tourist hotels are studied by Chiu and Huang (2011). They stated in their research that high performance in operational effectiveness does not necessarily ensure high profitability. The same study shows that increasing sales is not the best way to improve performance, actually better to decrease the occupancy rate to enhance operational and profitability efficiencies. Evidence from the same authors concluded that the inconsistent occupancy rate targets can be remedied through an empirical model (Chiu & Huang, 2011).

Of course, both financial and non-financial performance is of the management concerns. Recent research on non-financial performance measurement in Cape Town, South Africa hotel industry is studied by Mjongwana and Kamala (2018). They found that their 100 responding hotels use non-financial performance measurement to improve the hotel operation. Customer-oriented measures were the most frequently used by the small and medium-sized hotels in Cape Town – sales growth percentage, and occupancy levels, guest satisfaction (with the results of means of 4.77, 4.73, and 4.67 out of 5, respectively). These non-financial performance measurements provide businesses with feed-forward information and are used for improving profitability, productivity and effectiveness as well as improving decision making (Mjongwana and Kamala, 2018).

The past literature gave heed on how the hotel management use management accounting tools to support their management decision. Due to a different environment, different economic context, competitive environment, technological advancement, country development and culture, a country context is commonly used as a subject of the study. In this study, in-depth investigation of the use of management accounting tools in Taiwan hotel industry is studied. Like other hospitality industries in other countries, Taiwan is facing great competitive challenges. Taiwan tourism is an essential component of Taiwan's economy, as well as a significant source of foreign exchange revenues, contributing 9.3% of the country's GDP (Mordor Intelligence, 2018). The political issue between Taiwan and mainland China that plays a vital role in Taiwan hotel industry development. This article does not touch on this topic instead on the management accounting tools being used by the management of Taiwan hotels.

This paper discusses Taiwan hotel industry, the research method used for data collection, the definition of critical terms regarding complexity and findings of this research and conclusion and suggestion in this order. The questions that will be



addressed in this present paper are i) how is management accounting implemented in the Taiwan hotel industry?; ii) how advanced of technological-based implemented in Taiwan hotel industry, especially on complex hotels; iii) what are the revenue and cost structures of the Taiwan hotels; iv) what management accounting tools are being used by the hotel executives in Taiwan?

The argument makes in this paper is the level of management accounting tools used by the hotel management depends on the “*complexity*” of the hotels. The more complex either on the type of the hotels as chain hotels, the multiple locations of the hotels, the luxuries of the hotels which normally classified by the number of stars, the more sophisticated of management accounting tools would have been used by the hotel management. The hotels with such complexity will use more often and sophisticated or advanced level of management accounting tools to help in decision making. The level of complexity of the hotels that the more complex they are, the full range of management accounting tools will be sought for by management of the hotels. The proposition makes in this paper does not directly relate to the size of the hotels. However, there is a tendency that the larger hotels will possibly use more often and more advanced in management accounting tools due to the rising level of issues to solve, and in the same time, larger hotels would have a financial capacity to invest in management systems to assist in their businesses.

### 3 METHOD

Much of the previous research surveyed in the previous section did not use in-depth interviews, while most of the researchers used questionnaires. Thus, the findings of those earlier studies may be, to some extent, less reliable due to such obstacles such as questionnaire bias, including the way individual questions were designed, and in the way the questionnaires were administered. Additionally, there may have been unanticipated communication barriers between the investigator and the respondents. Another perceived flaw in the previous research related to the use of a predetermined list of responses, rather than the use of open-ended approaches (Choi and Pak, 2005). To overcome these issues, this present study used an in-depth interview method to investigate and to understand more deeply management accounting practices in the hotel industry.

As the study aimed to gain knowledge from those directly involved in the selection and management of accounting tools, this present study focused on five leading hotels in Taipei, the capital city of Taiwan. The five were selected because of their unique qualities and were representative of 3 – 5 star hotels. Permission to carry out this study was negotiated beforehand by an exchange of written and verbal communication. In each case the Chief Financial Officers (CFOs) agreed to collaborate.

Intensive individual in-depth interviews of the CFOs of the five hotels in Taipei were conducted during November – December 2018. The interviews were carried out mostly in English while certain questions and responses needed an interpreter. The interpreter worked in parallel with the researcher to ensure understanding and accuracy of the exchanges. Each of the in-depth interviews took place at the respective hotel venues and were between 1.5 – 2.0 hours in length.

An interview protocol was used to ensure consistency among the interviews, and thus increase the reliability of the findings. Most of the questions were open-ended. After each interview, the recorded data were then transcribed and reviewed. Patterns or themes among the participants were identified and grouped. The data from the interview was labelled ‘Case 1’, ‘Case 2’, and so on. The finding will be presented according size – the number of hotel rooms – beginning with the smallest and ending with the largest.

### 4 FINDINGS

#### 4.1 The Characteristics of the Selected Hotels in Taiwan

The degree of complexity is the extent of variability in the business environment. Awang, Ishak, Radzi and Taha (2008) define the degree of environmental complexity of the hotel industry according to 6 dimensions: 1) geographic concentration of competitors; 2) geographic concentration of industry sales; 3) geographic concentration of labor availability; 4) level of products/services differentiation; 5) geographic concentration of customers; and 6) technological diversity used in the industry.

The level of complexity of the hotel industry also affects hotel classification. For example, one classification system is based on size, star, location/clientele, ownership, level of services. The Institute of Hotel Management Bhubaneswar,

Ministry of Tourism, Government of India (2017), for example, uses a classification system based on size (small, medium, large, very large); on Star (1 star up to 5 stars); on location (downtown hotel, suburban hotel, resort hotel, airport hotel, motel, floatels and hotels); on clientele (business or commercial hotels, transient hotels, boutique hotels, residential hotels, suite hotels, bed & breakfast hotels, casino hotels, conference centres, and green hotel); on ownership (independent hotels, chains, management contracts, franchise, referral groups, time-share hotels, condominium); on level of services (upper-market which are luxury, world-class services hotels; mid-market; budget/economy hotels).

In this study, the level of complexity has three levels: highly complex, complex, and less complex. The level of complexity is determined by the combination of at least three of the following: 1) number of stars, 2) size according to the number of rooms, 3) the number of employees, and 4) ownership. Table 1 shows the classification of complexity used in this present study.

Table 1: Complexity classification

Levels of complexity	Star	Room	Employee	Ownership	Level of services
Highly complex	4 – 5	Over 400	Over 500	Chains, management contracts, franchises	Upper-market
Complex	3 – 4	Over 100	Over 300	Chains, management contracts, franchises	Upper-mid-market
Less complex	2 – 1	Less than 100	Less than 300	Independent hotels	Mid-market – Budget economy

Source: Compiled by the author

In this study, two of the five case studies are classified as ‘complex’ hotels and the other three are ‘highly complex’. The specific features of each of hotel classifications are shown in Table 2.

**Case 1**

The “Case 1” hotel was established in 1998 and has been operational for 20 years. Being a small luxury four-star hotel, it can provide high quality service. It features a famous restaurant - the steakhouse, which was recommended by Michelin. Even though the hotel is quite small it boast a high standard of service quality, and it is that which attracts its customer-base.

**Case 2**

The "Case 2" hotel has been operating for 39 years (since 1979) as a family business. The ownership has now been transferred to the second generation. The current Chief Executive Officer (CEO, a family

member, has an overseas education from the United States of America and has lived there for more than 20 years.

**Case 3**

The Case 3 hotel was established in 1999. It is a large five-star hotel, under the Tourism Group of Taiwan, and is located in a business area of Taipei. The Group also operates other hotels as well as a theme park and property residences. This hotel has been financially supported by its group. In April 2018, the hotel announced that it would close on 31 December 2018. Its occupancy rate was 70% in 2017, with an average daily room rate of NT\$6,387 (US\$209).

**Case 4**

The Case 4 hotel is a franchised luxury hotel under the IHG (InterContinental Hotels Group PLC) group. The IHG business model predominantly franchises its brands and manages hotels on behalf of third-party hotel owners. The hotel in Taipei is a five-star hotel and has been in operation for more than 20 years. It is a large hotel with over 500 rooms and more than 1,000 employees. It is a highly complex hotel.

**Case 5**

The ‘Case5” hotel was incorporated in 1962. It was Taiwan’s first international standard luxury hotel in Taipei’s city center, and in 1982 it was listed on the Taiwan Stock Exchange. It is generally regarded as one of Taiwan’s most respected and successful companies. The company operates in two other locations in Taiwan: Kaohsiung (1981) and Hsinchu (2001). The company is owned by a group of families. The owner of the Case 5 hotel is also the CEO of the hotel. In addition to being an international-standard luxury hotel in Taiwan, it has become a ‘hallmark of residential luxury and gracious Taiwanese hospitality, while continuing to create new hospitality brands and services’. The Case 5 hotel in Taipei is especially well-known for its Michelin chef and restaurant, a steak house, and a five-star bakery.

Table 2: Characteristics of the five hotels

	Case 1	Case 2	Case 3	Case 4	Case 5
Complexity classification	Complex	Complex	Highly complex	Highly complex	Highly complex
Years of establishment until 2019	21	40	20	More than 20	55
Size	Small	Medium	Large	Large	Large
Stars	****	***	*****	*****	****
Number of Rooms	96	287	288	540	1,020
Number of Employees	300	200	500	1,000	1,200
Number of Products/Services	1 Hotel in 1 location Taipei	1 Hotel in 1 location Taipei	1 Hotel under a business group Taipei	1 Hotel under IHG Brand Taipei	3 Hotel Locations under the same brand Taipei Kaohsiung Hsinchu
Room rental	✓	✓	✓	✓	✓
Restaurants & Bakery & Cafeteria	✓	✓	✓	✓	✓
Shops	✓	✓	✓	✓	✓
Total Revenue (TWD Million)	700	330	1,300	Approximate 2,000	1,700
Total Assets (TWD Million)	4000	700	n.a.	n.a.	11,255.171
% Profit to total revenue	17.5	5%	Loss	n.a.	25.81%
Ownership structure	Family Business	Family Business	Listed Company + Family Business	Listed Company + Family Business	Listed Company + Family Business
Interview date	20 December 2018	7 November 2018	18 December 2018	21 December 2018	6 December 2018
Remarks		Temporarily close and will be reopening soon	Permanently close down the business on 31 December 2018		

Source: Compiled by the author

#### 4.2 Trust of the President, the Chief Executive Officer (CEO) towards the Chief Financial Officer (CFO) Who Controls Management Accounting Implementation

For an independent and small to medium-sized hotel, the implementation of management accounting processes is likely to be different from a dependent/branded and large hotel. For a small hotel like Case 1 and also being a family business, trust between the management and the owner of the hotel is very important either in terms of management or implementing new accounting and managerial systems. For a medium-sized hotel like Case 2, the trust between the two parties is the key to implementing management accounting. In this

particular Case 2 hotel, the CFO is not new but has had considerable experience in hotel management. The CFO had been working with the prior president of the hotel for more than 15 years. With the CFO's background of working as an auditor in a big accounting firm in the past, the CFO has great experience in both hotel management and accounting, auditing and management. The CFO had earned trust from both previous and current presidents and has made a significant contributions toward management changes and newly implemented management accounting practices. The CFO has received positive support from both prior and current presidents on the implementation of new management accounting reports, for example. From the interview, the issue of the trust

was asked. The response from the Case 2 CFO is as follows.

Regarding the support received from the president and the CEO of the hotel, I received a great support from them. The previous president is a bit conservative, however, the current president who is also the CEO gave me a great support regarding issues such as new implementation of accounting report as previously there was little reports produced from accounting department.

(Excerpt from the interview on 7 November 2018 with the respondent Case 2 Hotel)

The CFO was asked to rate the level of support on a scale of 1 (lowest) to 10 (highest). The level of 9 point scale was the feedback as referring to the support received. However, staff cooperation is also a key to the success of the implementation. When new management accounting tools were firstly introduced, the CFO required further and detailed information from the accounting department, as well as from others.

The initial resistance from the related stakeholders was rather high. I assumed it was really high if you asked me, probably at the 9-point scale out of 10. However with the high support and encouragement from the president and the CEO, plus with thorough explanations from me and my staff about the benefits or advantages from having such required information. The resistance from the staff gradually reduced and at the current stage, the resistance is considerably low probably 3-point scale (from the CFO's own assessment).

(Excerpt from the interview on 7 November 2018 with the respondent Case 2 Hotel)

This data comes from CFO of a small/medium-sized hotel with one owner. While in larger hotels, the trust among executive management is managed through the controlling system. Case 4, being a chain hotel, and Case 5, being a listed company in the stock exchange, the management and controlling system for large hotels is very clear and decentralization of responsibility among several departments of the Hotel. The CEO supports the transparent synergy, whereas the CFO is the main

person in charge of the management accounting practices of the Hotel.

The hotel uses the controlling system such as the contracts with suppliers, the management controlling system through each department. Staff at the accounting department work hard to keep up the reports required by executives. Meetings between executives of the hotels and accounting department are conducted regularly. Due to the fact that a hotel is in a fast speeding industry, meetings are done in a weekly basis.

(Excerpt from the interview on 21 December 2018 with the respondent Case 4 Hotel)

The accounting department of the hotel is a large department and consist of many accounting senior, middle, and junior staff. With the high requirement on financial information – both on financial accounting and managerial accounting, accounting information for routine reports is conducted in a professional manners, while quite often that managerial accounting information is requested by the executives, but most of the time they are on request.

(Excerpt from the interview on 6 December 2018 with the respondent Case 5 Hotel)

For small hotels, the support from top management is one of the crucial factors to the success of new management accounting implementation and new controlling initiatives. To implement a new management system, implementing a follow-up system, planning and controlling system, the support from the president or the CEO and the collective hard works of the CFO and accountants are believed to be the main factors leading to success. In a larger hotel, the management accounting system is set and there are control mechanisms.

### 4.3 Implementation of a Technological Business Model

Sustainability in a highly competitive hotel business environment requires effective business strategies and tools. Technology, such as an online booking system, including checking-in and check-out are



typical in the modern-day hotel industry. However, small hotels may still be reluctant to adopt such time-saving and cost-saving tools. Larger hotels are more likely to have such supporting tools in place while small hotels may not. Data from the interview with the CFO of the Case 2 hotel revealed adopting such technology would hurt an important customer base, namely Japan. Such a tool would be unfamiliar to that segment. Hence the old system which relied on long-term relationships with travel agencies continued. However, the new CEO dramatically changed the business model as revealed in the following excerpt from the interview.

Under the modern management of the new CEO, instead of relying more on a long-term relationship with travel agencies, the new CEO has started a business via an online travel agency (OTA) such as Agoda, booking.com, TripAdvisor, Priceline, Liberty Holidays, Expedia and Hotel.com. With the new media platform the hotel attracted a broader range of customers from all over the world. Even though the primary customers are still from Japan (50%), customer diversification has varied since the new media platform was adopted. The second group is Mainland China customers, and the third is local Taiwanese customers.

(Excerpt from the interview on 7 November 2018 with the respondent Case 2 Hotel)

After the implementation of OTA, sales revenue increased by about 15%. While this practice appeared to be rather new for small hotels, it was quite usual in larger hotels where major management decisions in terms of technology adoption and implementation are normally a headoffice decision.

#### 4.4 Revenue and Cost Structures

In the hotel industry, RevPAR and KPI are standard performance metrics. They provide important financial information within a specific period. Management can assess such data as room occupancy and the price of the average room. However, RevPAR alone, may not be the only metric which needs to be used. For example, it could be the case that a hotel may have a low RevPAR but at the same time having many rooms which would yield higher revenues. Therefore, a hotel manager often

considers it together with average daily rate and occupancy rate as performance measures. All the hotels, of course, seek to increase the average daily rate by focusing on pricing strategies, including upselling, cross-sale promotions, and complimentary offers such as free spa and dining service in the hotel, while an overall economy is an additional significant factor in price setting.

Cost classifications for hotels could be fixed costs and variable costs. They could be labelled as direct costs and indirect costs. The cost structure of hotels varies. For example, in the Case 2 hotel, the direct cost was the cost of goods/services sold with an average of 56% of the hotel revenue, while the indirect cost was about 20%. However, the most profitable department was in the rental department, which earned the highest contribution margin, while the restaurant department did not do so well as the rental department. In Case 5, the hotel's restaurant earned a major international award. Some 60% of the total hotel revenue came from that restaurant compared to 40% from the room rental division.

The RevPAR of Case 5 was set at NTD 4,500 per day (room rate of NTD 5,000 multiplied by 90% of occupancy rate). The restaurant revenue last year (2017) was NTD 1,200 million where the fixed costs were 30%, and the variable costs were 40% of revenue. As a result, the margin for the restaurant was about 30% of its income. What follows are statements from the respondent:

For the room revenue, the hotel reported its revenue last year of NTD 500 million, with the fixed cost of 30% and variable cost of 10%, leaving the hotel margin from this revenue at about 60% of its revenue. The profit margin of room revenue was 60%, while that of the restaurant was 30%. The profit margin of room revenue was double of the restaurant revenue. This is due to the cost structures of the Hotel, where room revenue the cost is more on fixed, while the restaurants are more on both variables (40%) and fixed (30%).

(Excerpt from the interview on 6 December 2018 with the respondent Case 5 Hotel)

#### 4.5 Implementing Management Accounting Practices

The accounting department regularly prepares financial statements – basically the monthly income

statement. While other reports from each profit department are prepared on a fortnight basis. The contribution margin income statements are prepared by each profit department and are monitored by the CFO and CEO in the meeting normally held twice a month for planning and decision making purposes. The contribution margin income statement shows all variable expenses deducted from sales and arrives at a contribution margin. Fixed expenses are then subtracted to arrive at the net profit or loss for the period. The amounts remaining can be used to cover fixed costs and contribute to operating profit. Variance reports, budgeting reports, break-even-point reports, together with RevPAR, are normally reported on a regular basis.

Despite the highly competitive environment for the hospitality industry, complex accounting tools are not commonly used as in case of Case 2 hotel management. Basic and less complicated management accounting reports are more commonly used. Complex accounting reports such as balanced scorecard, activity-based costing, total quality management report, lean or just in time report are not practiced in that hotel.

There are other types of reports which are less complicated and which seem to be more practical for small specialized hotel such as the Case 2 hotel. For example, total quality management (TQM) which is commonly used in many industries, including, but not limited to, manufacturing, banking and finance, and medicine. It focuses on developing a work culture that emphasizes customer satisfaction. All members of the organization participate in improving processes, products, and services. The goal is to achieve continual improvement of business operations.

The Case 2 hotel strives to ensure allemployees work toward common goals of improving service quality, as well as improving the procedures that are already in place. Particular emphasis is put on fact-based decision making, and using performance metrics to monitor progress. High levels of organizational communication are encouraged to maintaining employee involvement and morale. The CFO did not recognize the term 'Total Quality Management (TQM)', however from the interview, all the process that the hotel practiced are those embodied in the TQM concept, but in a simplified version. And, the CFO's office requires less time consuming and less complicated reports. More information comes from the interview.

For instance, the hotel has adopted the system known as Hotel Housekeeping Standard Procedures and Standard

Operating Procedure (SOP). The housekeepers need to execute cleaning and maintenance tasks at various places in the hotel based on the set standards. The housekeeping staff can contribute to retaining guest satisfaction as well as to generate new guests willing to repeat their visits to the hotel. This will bring in more revenue to the hotel. What the hotel performs towards guest satisfaction and works productivity together, is an integral part of total quality control. The second example is on supply chain management. Due to the restaurant and cafeteria departments, ingredients supplying to the Hotel are from contracted suppliers. The hotel goals when it comes to food and beverage services is to provide the top quality food and beverages. All cuisines and bakery are in-house produced. The hotel keeps a 10-day delivery contract with its food suppliers. With the software assisting in the control stock and inventory, the urgent purchase can be made. The hotel has at least three potential suppliers at a time. If one does not qualify either due to price, quality, quantity, or delivery schedule, the next potential supplier can replace such purchasing orders.

(Excerpt from the interview on 7 November 2018 with the respondent Case 2 Hotel)

The concept of 'just in time (JIT) and lean' has often been employed in the manufacturing industry; however, to the hotel industry, perhaps some justification may be needed. The Hotel has implemented the JIT and lean system by having a lot size of ingredients such as food, to be delivered, and a lead time (10 days in this case) that is adjusted to consumption. These practices are similar to those used in the manufacturing industry, but less complicated.

As a standard practice, the accounting department prepares the financial statements – basically the income statement on a monthly basis. In the Case 5 hotel, accounting software is used. The operational accounting software – Oracle, Infrasy (*Infrasy's Gourmate software for all Food and Beverage Sectors in the hotel*), and the Taiwan Accounting System (ALL NEW GL) are being used. As an example, Infrasy software can integrate with external systems such as hotel property

management systems, membership systems, catering software, as well as accounting and inventory management systems. The software can switch ordering modes (fine dining / fast food) in real-time. With the aid of accounting software, it usually takes three business days to prepare and complete the financial statements. The segment reports prepared using the contribution income statement format. Variance reports, budgeting reports, break-even-point reports, together with RevPAR, are reported regularly.

The CEO of the Case 5 hotel initiated the activity-based costing (ABC) system some three years ago. Each year, in the executive meeting, the topic of the cost drivers is the topic of discussion. Information on the cost drivers is collected and presented for discussion. Every department is represented at this meeting and a decision is reached as to which are the best cost drivers for their cost allocation. There were 28 cost drivers in 2018. Examples of the main cost drivers are:

1. CEO expense → Budget revenue (TWD)
2. Human Resource expense → Employee number
3. MIS expense → Equipment quantity
4. Purchase expense → % Working hours
5. Banquet expense → Banquet revenue (TWD)

The cost allocation using ABC was about NT\$ 300.00 million, which was 70% of total expenses. The problem that the Case 2 Hotel experienced in implementing ABC was an argument about the cost drivers being used and allocated to the expenses of related departments. Several departments tried to negotiate about which costs would be allocated to them.

Oracle Hospitality (OPERA Cloud Services) is an enterprise platform for hotel operations and distribution. It offers comprehensive, next-generation capabilities hotels can use to enhance guest experiences and improve operating efficiency. It creates a platform for a hotel property-management system and point-of-sale system. It manages the hotel, food and beverage operations. Integrated Oracle Hospitality hotel solutions increase operating efficiency and enable better guest experiences for independent hotels and hotel chains.

The top accounting programs used in the hotel industry today are i) FreshBooks, ii) Sage Intact, iii) Inn-Flow, iv) Hotelogix, and v) M3AS software. To supply quality materials to the hotel, the hotel involves over 1,000 suppliers throughout the world. The contracts with suppliers are renegotiated every

three months, based on quality and quantity considerations.

#### 4.6 Role of Accounting Tools in Senior Management Hotel Decision Making

Management accounting plays a significant role in decision making. In the Case 2 hotel, which is classified as a small hotel, management accounting alone may not play a very large role without senior management support. The CEO has taken the initiative to make the hotel a five-star hotel and to change it into a Green Building Hotel in the near future. At the time of the interview (end of 2018), the hotel was in a transitioning mode and would be in less than a year temporarily closed. The interviewee commented:

In this transitioning period, management accounting tools are used due to the high demand for decision making. The need for management accounting tools such as the report on costs during the period of pausing the business, the budget for new investment, the break-even point, the budget on reopening the business, the budget on wages to keep permanent staff, the comparative sources of finance report and many more. These reports in a normal situation may not be highly required.

(Excerpt from the interview on 7 November 2018 with the respondent Case 2 Hotel)

The situation on the importance of management accounting reports is also found in the interview with the Case 3 hotel interviewee. Due to a deficit, the management made the decision to close down the hotel. The interview took place just ten days before its closing. Prior to that several reports had been required from both the CFO and CEO for making what was considered to be a very serious decision. Interestingly the decision to close down the business became a revenue-producing decision. Together with the marketing department, the hotel management launched an attractive room sales promotion for customers who booked rooms prior to December 31 (the last check out time was the afternoon of 31 December).

This date coincided with the last date of operation after which all the furniture and hotel decorations would be removed. In such a case,

accounting information was essential. The rooms were sold out right away and the hotel was able to derive substantial revenue at the last minute. The interviewee stated:

The selling price of the rooms on 31 December 2018 was set considering the salvage value of the items in the guest rooms. The Accounting department and the Sales department were consulted in regard to the price of the rooms to be sold on this occasion. This revenue will be considered a plus income to the hotel. These selling last day rooms are actually a selling gimmick of the hotel.

(Excerpt from the interview on 18 December 2018 with the respondent Case 3 Hotel)

The interviewee was asked about the managerial accounting information that was provided to the hotel executives. Since the rent on the property is so high, the revenue generated from the hotel business was insufficient. What were the facts that led to the decision to close the property? The interviewee explained:

The hotel executives were informed all along regarding the deficits of the hotel. However, the executives believed that they could overcome this situation by either generating more income or negotiating with the landlord. However, generating new income could not outweigh the high expense on rent. The executives had tried to keep the hotel in business for so many years. Every year was just topping up on the existing loss.

(Excerpt from the interview on 18 December 2018 with the respondent Case 3 Hotel)

#### 4.7 Financial and Non-financial Performance of the Hotels

Hotel management personnel routinely concern themselves with financial performance measurements. Most use financial ratios such as return on assets (ROA), the return on equity (ROE), percentage of the cost of goods sold to total revenue, profit margin ratio, and net operating profit ratio. Unlike financial performance measures, non-financial performance measurements (NFPMs) provide the hotel with feed-forward information, a

future-oriented measure. These are more relevant for planning purposes and day-to-day operations.

Hotels have used non-financial measurements to provide a closer link to long-term organizational strategies, while financial performance measures generally focus on annual or short-term performance against accounting standards. NFPMs are also progressive with regard to meeting and exceeding customers' expectations as well as gaining and maintaining a competitive advantage over competitors. As mentioned by Micheli and Manzoni (2010) non-financial performance measurements are more critical to decisions that affect profitability and other long-term strategic goals. Hotels also have used several measures based on customer perspectives such as.

- Guest complaints on employee helpfulness, on facilities, on services standards and other types of complaints
- Guest satisfaction surveys via online travel agencies
- Percentage of sales growth on a monthly period, quarterly period, and annually
- Room occupancy percentages
- Number of repeat customers
- Market share percentage

For the internal business operation, hotels also use non-financial performance measurements such as

- Ability to adjust, rectify, and respond to guest's complaints/requests
- Response time to guest requests
- Hotel supplies meeting the hotel purchasing standards (time, quality, quantity, price)
- Training hours of the staff (for example, training staff on work attitudes, how to deal with customer complaints, restaurant management, hospitality administration and catering)

The CFO of the Case 2 hotel discussed the issue of customer satisfaction:

Customer satisfaction is one of the main non-financial indicators hotel management uses to monitor performance. For example, the hotel has set the customer satisfaction score at least 8.5 from 10 point-scale which the survey done via the online travel agencies. Furthermore, the hotel will take consideration of the customer complaints



thoughtfully. The hotel has strategically tied the employee's benefit or bonuses to customer satisfaction. The hotel has differentiated its strategy by building customer experience as the culture of the hotel. The bonuses to employees who receive complaints and who do not show improvement will be deducted according to the hotel's criteria.

(Excerpt from the interview on 7 November 2018 with the respondent Case 2 Hotel)

Case 2 interviewee stressed that the effort to personalize the services to its customer will build, retain and increase a strong relationship. Other hotel financial managers also emphasized customer relationships. This is especially true in the case of the leading luxury hotel with its long history in the hospitality industry. Valuing long-term customers is important.

## 5 CONCLUSIONS AND SUGGESTIONS

The hotel industry is facing the challenge of reducing its costs significantly and to structure an efficient internal process if it is to compete successfully in a competitive market. Hotels in Taiwan are no exception. Management accounting reports are therefore of great importance to hotel managers on a day-to-day and long-term basis. There are a variety of factors which influence the usage of management accounting practices in the hotel industry. From the interviews, the main factors can be categorized under three (3) labels.

Firstly, size. The size of the company is positively associated with management accounting sophistication used by the hotels. Small hotels tend to rely on trust between the owner/shareholder and CFO, while larger hotels would set up a controlling system by which management accounting reports are put in place for management.

Secondly, sophistication. Modern-day tools are sophisticated and require highly skilled personnel. They may consider to be able to implement activity-based costing, and balanced scorecards, for example. These implementations due to the complication when implementing require to have strong support from the high levels of management.

And, thirdly, complexity. The hospitality industry, specifically hotels, is able to survive in

today's highly competitive market, must adopt and make use of management tools for making routine decisions, and for the continuous management of many critical operations. This research learned that some hotels are still not generally using very sophisticated management accounting practices. Most of the hotels used tools relate to cost determination and for controlling purposes.

The interview data revealed that many sophisticated practices were not being used. Among these are the following: the lean method in warehouse management, reduction of movement of housekeeping, supply chain management software, just-in-time, and real-time information reports. These tools were rarely mentioned by interviewees. When compared to the manufacturing industry, for example, where such sophisticated tools are common, hotels continue using rather simple management accounting practices. Even though the hotel business is highly competitive, and becoming more so, there seems to be a reluctance to consider implementing practices which would improve the precision of key decisions and increase sustainability. Particularly owners of smaller hotels are urged to consider adding more complex management accounting tools to their operations. Consumers are changing, too. Millennials are increasingly looking for unique and authentic experiences. They are today's 'baby boomers'. They have money and time to travel, and they increasingly expect technology to aid, inform and enrich their travels. Several new 'smart' applications now available include intuitive booking apps, chatbots, and mobile check-in/check-out. Today's and future hotel customers expect technology to be integrated into many areas of the travel experience. To meet this trend, the ability of hotel companies to work in partnership with technology providers has become increasingly important. Hotel owners and investors should take note.

In addition, another feature of today's world has to do with data generation, storage and use. Cloud storage has further changed the game, giving accommodation providers, such as hotels, easy access to diverse real-time data. Such data enables a more personalized and efficient service. Operationally it allows providers to use data to tailor guest experiences faster and create a more personalized relationship with them. With this trend comes a growing responsibility to handle data responsibly, respecting consumer preferences and rights.

Due to an increasing demand for branded experiences, owners and investors are advised to



consider the merits of affiliating with a branded hotel chain. The recent addition of multiple new brands by big-branded players illustrates the level of capacity in the hotel market. There is little doubt that hotels need to have personnel who can assist decision making in all levels of the hotel business.

It is hoped that this study fills a gap in the literature by using an in-depth research methodology that focused on how management accounting tools and practices are being accepted and being implemented. Of course, other aspects should be further explored, too. The interaction of Information Technology (IT) and contemporary management accounting systems is an emerging research area. Financial issues regarding hotel performance could be further explored. Another important topic for research could be identifying factors that affect the improvement of hotel financial performance, for example exploring the relationship between Accounting Information Systems (AIS) user satisfaction and activity-based costing(ABC) use with respect to hotel financial performance, lean management in the hotel industry, and sustainability reporting of the hotel industry.

## ACKNOWLEDGMENT

The author would like to thank the Ministry of Foreign Affairs of the Republic of China (Taiwan) for the support through the 2018 Taiwan Fellowship Program (MOFATF201800090). In that connect, thanks to Professor Hsuan-Lien Chu from Department of Accountancy, College of Business, National Taipei University. It was he who hosted this Taiwan Fellowship Program. Also, to Assistant Professor SheChih Chiu who accompanied the author and assisted in the interviews as interpreter. Finally, special thanks to the CFOs and senior financial managers of the five hotels for their cooperation and for providing such a wide range of rich and insightful information.

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