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MANAGEMENT ACCOUNTING PRACTICES IN HOTELS IN NIGERIA

UNIVERSITY OF ALGARVE

FACULTY OF ECONOMICS

2020

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Dissertation

Master in Tourism Organizations Management

Work made under the supervision of:

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UNIVERSITY OF ALGARVE

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2020

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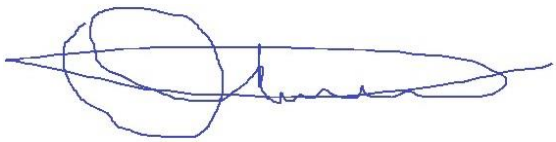
Declaration

I declare to be the author of this work, which is unique and unprecedented. Authors and works consulted are properly cited in the text and are in the listing of references included.



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Adeyemo Taiwo Ibrahim

ACKNOWLEDGEMENTS

I give Almighty Allah all the glory for bestowing upon me His favour, and strength to complete this project, which I believe is a major step towards realizing my destiny. I dedicate my deepest and special appreciation to my family for their support and encouragement throughout the period of my studies for MSc.

Most importantly, I sincerely wish to acknowledge the support from my supervisor Prof. Ana Rita Faria, without whom I could not have gone this far with my project work. You have been my inspiration as I hurdled all the obstacles in the completion of this research work. I could not have imagined having better advisor and mentor for my Master in Tourism Organizations Management. Also, special thanks to Prof. Juan Correia, for his professional advice towards completing this research work.

Finally, I wish to thank everyone else, whose names I cannot mention due to space, for his or her contribution to the success of this project. May Almighty Allah bless you all.

ABSTRACT

This study investigates the state of management accounting (MA) in hotels in Nigeria. It analyses the level of adoption and benefits derived from a broad set of traditional and contemporary MA techniques and seeks to ascertain their relevance to the decision making process. The use of the Uniform System of Account for the Lodging Industry (USALI), is also investigated. Finally, the study tries to find if there are any significant differences between MA techniques adopters and non-adopters.

This study is motivated by a lack of research on MA in hotels located in Nigeria. Data was collected through a questionnaire comprising mainly closed-ended questions.

The findings of the study reveal that USALI adoption rate is quite satisfactory and that the decision to adopt the USALI was made mainly by the financial executive/controller. The main reason reported by non-adopters for rejecting the USALI is the satisfaction with the current accounting system. Traditional MA techniques, such as budgeting for controlling cost, budgeting for coordinating activities of the various parts of the organization and product profitability analysis, were found to be more widely adopted than recently developed MA tools. The results also indicate that the use of MA techniques at hotels is positively associated with hotel size, intensity of competition and cost structure.

This study contributes significantly to the literature on the usage of MA techniques by filling a gap in the literature. It also provides invaluable insights on the usage of these tools, which might benefit hotel management, researchers, and others.

Keywords: *Management Accounting Systems, USALI, Hotel, Decision Making, Nigeria.*

Resumo

Este estudo investiga a adoção de técnicas de contabilidade de gestão nos hotéis da Nigéria. Analisa o nível de adoção e os benefícios derivados de um amplo conjunto de técnicas de Contabilidade de Gestão (CG) tradicionais e contemporâneas e procura verificar qual a sua relevância para o processo de tomada de decisão. O estudo procura igualmente averiguar a utilização do *Uniform System of Accounts for the Lodging Industry* (USALI), a norma contabilística desenvolvida especificamente para a indústria hoteleira nos Estados Unidos da América há mais de 90 anos. Finalmente, o estudo procura identificar diferenças entre os hotéis que adotam as técnicas de MA e os que não as adotam.

O estudo é motivado pela escassez de investigação em CG nos hotéis localizados na Nigéria. Ao contrário de estudos anteriores realizados neste país (Mohammed, 2013, avaliou o papel que a definição de metas orçamentais desempenha para a medição de um desempenho eficaz na indústria hoteleira nigeriana) que examinam o uso de técnicas de contabilidade de gestão isoladamente, o presente estudo examina o uso de várias técnicas tradicionais e contemporâneas em simultâneo.

Os dados foram recolhidos através de um questionário composto essencialmente por perguntas fechadas. De um universo superior a 10.000 hotéis, selecionou-se uma amostra de 200 hotéis utilizando o Técnica de Amostragem representativa tendo sido inquiridos hotéis de diversas categorias e dimensão localizados nas seis áreas geopolíticas da Nigéria (Centro-Norte, Nordeste, Noroeste, Sudeste, Sul-Sul e Sudoeste). Dos 200 questionários entregues "em mão" obtiveram-se 103 questionários preenchidos.

Os dados obtidos foram analisados no SPSS e as ferramentas estatísticas utilizadas foram frequências, gráficos, média aritmética, análise estatística bivariada e multivariada.

Os resultados revelam que, no tocante à intensidade da competição, a maioria dos inquiridos considera a competição por preço extremamente intensa seguida da competição por mão-de-obra qualificada. Constatou-se que os hotéis não utilizam *softwares* de Contabilidade de Gestão sofisticados, para além do *software* de contabilidade normal. Quase três quartos possuem o mesmo suporte informático para a contabilidade financeira e para a contabilidade de gestão. No que diz respeito à organização da contabilidade interna, este

estudo revela que mais de um terço dos sistemas foram organizados por uma empresa de consultoria de gestão (31%); 27% resultam de decisões tomadas por outros recursos internos do hotel / grupo.

No que diz respeito à adoção de ferramentas de contabilidade de custos, os resultados revelam que o custeio padrão é a técnica mais adotada, por 35% dos hotéis, seguido do custeio variável (33%). O custo baseado em atividades (ABC) ainda assim é adotado por 32% dos hotéis da Nigéria.

Quanto à taxa de adoção do USALI, é satisfatória, rondando os 28%. Cerca de 1% nunca ouviu falar do mesmo. A decisão de adotar o USALI foi tomada principalmente pelo executivo / *controller* financeiro. No que toca à categoria, nenhum dos hotéis de duas e três estrelas adota o USALI. Quase todos os hotéis de cinco estrelas adotam o sistema uniforme, enquanto a proporção de hotéis de quatro estrelas que o adotam é muito menor. O principal motivo apontado pelos hotéis que não adotam o USALI é a satisfação com o atual sistema contabilístico. Técnicas tradicionais de CG como o orçamento para controle de custos, orçamento para coordenar as várias partes da organização e a análise de rendibilidade do produto, são mais amplamente utilizadas do que as ferramentas de CG recentemente desenvolvidas. No entanto, técnicas de CG contemporâneas, como a análise de rendibilidade de clientes (CPA), o *benchmarking* e o *Balanced Scorecard* (BSC) também são utilizadas, concluindo-se que os hotéis da Nigéria utilizam mais as técnicas tradicionais, como reportado noutros estudos sobre o setor hoteleiro.

Os inquiridos entendem que as práticas de MA permitem à gestão a obtenção de informações relevantes sobretudo para a tomada de decisão e para suportar o processo orçamental. Relativamente aos benefícios derivados das diversas técnicas, a análise de rendibilidade do cliente surge em primeiro lugar, o orçamento para o planeamento das operações anuais em segundo lugar, a análise de rendibilidade de produto, em terceiro lugar, e o orçamento para planeamento a longo prazo e para controle de custos em quarto e quinto lugar, respetivamente. Benefícios relativamente moderados foram relatados em relação ao *balanced scorecard* e à análise dos pontos fortes e fracos dos concorrentes. Quanto às técnicas orçamento baseado nas atividades (ABB) e resultado residual, apresentam benefícios reduzidos para os inquiridos. Estes resultados sugerem que as técnicas tradicionais de MA

parecem proporcionar benefícios mais elevados, comparativamente às ferramentas contemporâneas de Contabilidade de Gestão.

A teoria da contingência, que estabelece que não existe um sistema de contabilidade ideal que se aplique igualmente a todas as organizações, foi usada para examinar a relação entre diversas variáveis contextuais e a adoção de técnicas de contabilidade de gestão; os resultados indicam que o uso de técnicas de MA nos hotéis está positivamente associado à dimensão do hotel, à intensidade da concorrência e à estrutura de custos.

Além disso, este estudo revelou existirem diferenças estatisticamente significativas entre os hotéis que adotam e os que não adotam o ABC e o ABB, quanto ao volume de vendas. No entanto, não se observaram diferenças estatisticamente significativas entre os adotantes e não adotantes do *balanced scorecard*, os adotantes e não adotantes do *benchmarking*, os adotantes e não adotantes da análise de rendibilidade de clientes e os adotantes e não adotantes da análise custo-volume-resultado.

Este estudo contribui de forma significativa para a literatura de Contabilidade de Gestão. É o primeiro estudo a investigar o estado da contabilidade de gestão nos hotéis da Nigéria. Portanto, preenche uma lacuna ao nível do conhecimento, investigando de forma exaustiva algumas técnicas de contabilidade de gestão essenciais para a sobrevivência e êxito dos hotéis. Além disso, fornece uma visão única sobre o uso de ferramentas de contabilidade gestão no contexto da Nigéria, evidenciado a finalidade para a qual são usadas, a eficácia percebida das ferramentas e os benefícios derivados do uso dessas ferramentas. Atendendo a que estudos anteriores, maioritariamente realizados noutros países, evidenciaram os benefícios da utilização destas ferramentas pelos hotéis, este estudo fornece uma evidência empírica única no contexto de um país diferente, nomeadamente a Nigéria, sobre o estado da arte da sua utilização. Por conseguinte, também fornece informações preciosas sobre o uso destas ferramentas no setor hoteleiro, podendo ser útil para a gestão dos hotéis, investidores, formuladores de políticas, investigadores e outros.

Palavras-chave: *Sistemas de Contabilidade de Gestão, USALI, Hotéis, Tomada de Decisão,* Nigéria.

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ABBREVIATIONS LIST

ABB	Activity-Based Budgeting
ABC	Activity-based Costing
BSC	Balanced Scorecard
CIMA	Chartered Institute of Management Accountants
CPA	Customer Profitability Analysis
EVA	Economic Value Added
GAAP	Generally Accepted Accounting Principles
GDP	Gross Domestic Product
IRC	Internal Revenue Cost
MA	Management Accounting
MAS	Management Accounting Systems
MICE	Meetings, Incentives, Conferences and Events
NFPM	Non-Financial Performance Measures
PEST	Political Economic Socio-Cultural and Technological Analysis
PEU	Perceived Environmental Uncertainty
PMS	Performance Measurement Systems
ROI	Return on Investment
SMA	Strategic Management Accounting
SWOT	Strengths Weaknesses Opportunities and Threats Analysis
UOE	Undistributed Operating Expenses
US	United States
USALI	Uniform System of Accounts for the Lodging Industry
ZBB	Zero-Based Budgeting.

CHAPTER ONE

1 INTRODUCTION

In the recent past, the hotel and tourism industry in Nigeria has registered a significant growth in terms of visitor arrivals, foreign exchange earnings, and development of new hospitality establishments in various parts of the country (NBS,2017). This growth can be attributed to a number of factors, including competition from emerging tourist destinations, internal competition within Nigeria, and improved communication that enables customers to obtain information conveniently. Consequently, operators in the hotel industry have to maintain the quality of services and products in order to remain competitive. In this context, management accounting systems play an important role as tools to achieve this operational objective.

For decades, hotel management accounting (MA) has received considerable attention from researchers and has been considered the backbone or engine room for hotel success because it provides valuable information concerning segments and the entire organization. According to Pavlatos and Paggios (2009), there is a growing desire to understand the practice of MA in hotels, because MA techniques have an important role in the decision-making process (Oliveira, Silva, Carina, Campelo & Silva, 2008).

MA practice in the hotel business has been a topic of research interest in many countries. Paiva, Reis and Lourenço (2016) reviewed the literature published between 2005 and 2015 on hotel management and accounting in hospitality journals in the SCImago Journal and Country Rank indicator. They found that most of the empirical studies came from European countries (26 studies). The large majority of these studies were conducted in Spain, Portugal, Slovenia and Scotland. The second main geographic area for studies is Asia with seventeen articles published, followed by Africa with four studies. America (US) and Oceania (Australia) are far behind Europe with three and one empirical studies, respectively.

Based on the above quoted literature reviewed by Paiva *et al*. (2016) we can conclude that there is limited research on the state of MA in hotels in Africa and, more specifically, in Nigeria. The most populous country in Africa, Nigeria has more than ten thousand hotels that practice some of the higher rates in the world. Enoch (2015) examined the effect of MA

reports on the development of the hotels in Nigeria and concluded that MA reports have a significant relationship with the development experienced by hotels. Joshua and Mohammed (2013) assessed the role that budget target setting plays in effective performance measurement in the Nigerian hotel industry and found that the budget target setting procedure in hotels located in Kaduna state is not well articulated and, therefore, lacks a clear focus.

The use of MA practices in hotels in Nigeria, namely the investigation on the adoption of the most recently developed MA techniques has not been ascertained yet. In addition, and as far as it is known, none of the existing hospitality literature published till date was able to report the level of acceptance and the usage of Uniform System of Accounts for the Lodging Industry (USALI), amongst the hotels in Nigeria. The USALI is a specific accounting standard and financial reporting system for the lodging business. It was set up with the aim of providing accounting information for the internal results of the hotels, that can be compared externally. This system is the first successfully organized approach for the introduction of a unique responsibility accounting in the hotel industry as well as in other branches (USALI-first successfully organized form of responsibility accounting). This approach built in standards of reporting results in the internal activities of the hotel, this is a specific approach to promote the overall process of harmonization of accounting in practice (Kosarkoska & Mircheska, 2012).

Based on the above discussion, this work seeks to examine the state of MA practices in hotels in Nigeria so that it might be of benefit for hotel management, investors, policy makers, researchers and others. Additionally, factors (e.g. size, cost structure, and level of competition) that may influence the adoption of MA techniques will be identified. Contingency theory will be used because it looks at certain influential factors (e.g. technology, environment, organization size, structure, strategy, culture) that will assist management to decide on the appropriate MAS.

1.2 OBJECTIVES OF THE STUDY

This research aims to achieve the following objectives:

1. To investigate the level of adoption of contemporary and traditional MA techniques in hotels located in Nigeria.

2. To ascertain their relevance to the decision making process.
3. To examine the level of adoption of the Uniform System of Accounts for the Lodging Industry (USALI) by hotels in Nigeria.
4. To identify factors (*e.g.* size, cost structure, and level of competition) that influence the adoption of MA techniques.

1.3 RESEARCH QUESTIONS

The investigation will try to answer the following questions:

1. Do hotels in Nigeria use MA techniques?
2. What types of MA techniques do hotels use?
3. To what extent is MA being used as an instrument to support the formulation and implementation of strategies?
4. What is the level of adoption of the USALI in hotels in Nigeria?
5. Which factors influence MA techniques adoption in hotels in Nigeria?

1.4. ORGANIZATION OF THE STUDY

This study is structured as follows: Chapter one gives a general description of the study and discusses the importance of adopting proper MA system in today's modern economy. The main research questions are presented in this chapter. Chapter two is dedicated to literature review and discusses the concepts under study, focusing in the hospital industry and in the need for MA in the industry. The USALI is also examined here. Finally, it reviews several empirical studies on MA practices in the hotel sector and presents their findings. Chapter three– Methodology – presents the methodology followed in the present study. This chapter discusses the theoretical foundations of the research, the research design, describes the population and the sample, the method of data collection and the data analysis. Chapter four is dedicated to the data analysis, results and Interpretation. The data gathered from primary research will be analyzed and the main findings will be presented. Chapter five contains the summary, conclusions and presents recommendations.

CHAPTER TWO

2. LITERATURE REVIEW

This chapter presents a review of the literature on the concepts under study. The first section is dedicated to the hospitality industry, presenting the definition and the classification of hotels, as wells as the importance of the hotel industry. In the second section the hotel market in Nigeria is analyzed. The last section reviews the literature on MA and its use in the hotel industry. The types and use of MA techniques and the USALI in the hotel sector will also be examined.

2.1 The Hospitality Industry

The hospitality industry is made up of businesses that provide accommodation, food and beverage and meetings to tourists, travelers and local residents (Pizam, 2009). The term hospitality is derived from the Latin word “hopes” which means host, guest, or stranger (Lewis, 2000; Bhatia, 2002). It may also be referred to as “good caring”. In modern-day society, hospitality has become a commercialized experience. The guest pays for the goods and services they consume via a bill (Page, 2007).

The hospitality industry is one of the world’s largest and most important industries. In the United States (US) alone it directly and indirectly generates millions of jobs, with billions of dollars in economic contributions, which benefit large segments of society, as well as the federal, state, and local governments (Goeldner & Ritchie 2009). Madanoglu, Moreo and Leong (2003) also stressed that almost 90% of the US labor force are employed in the service industries, many of whom work in the various hospitality sectors.

The hospitality sector in Europe is an important contributor to the European economy, through its impact on employment, growth and tax contributions. It directly employs 10.2m people in Europe (EYGM, 2013). The sector provides jobs across the skills spectrum: from the highly qualified, to low-skilled and “breakthrough” jobs for those just entering or re-entering the labor market. Indeed, a study carried out by EIM (Small Business Research and Consultancy) in November 1999 for the hospitality sector showed that the hotel and restaurant sector is the most important provider of “first jobs”.

2.1.1 Definition and Classification of Hotel

A hotel is an establishment of a permanent nature, which consists of four or more bedrooms, and offers bed and breakfast on a short term contract, providing certain minimum standards. There is no universally accepted definition of what constitutes 'a hotel.' The most common definition, by the World Tourism Organization (WTO), refers that the category of 'hotels and similar establishments':

... are typified as being arranged in rooms, in number exceeding a specified minimum; as coming under a common management; as providing certain services, including room service, daily bed making and cleaning of sanitary facilities; as grouped in classes and categories according to their facilities and services provided. (WTO, 1994)

Hotels may be classified in many different ways, for different purposes, in different countries. In fact, a hotel may be described in terms of :

(a) Location: Urban, Suburban, Rural, Island, Airport, Resort, Tourism Centre (near attractions), and Business Centre.

(b) Form of ownership: independently owned, Hotel chain, Franchise.

(c) Facilities: Boating, Golf, Conventions, Ski, Condominiums, Business Centres, Cable Television, in house movies, and Room Service Menu.

(d) Type of client: Business, Community, Tourist, Traveller, Holiday maker, and Family.

(e) Standard: First class luxury, Good, Medium, and Small (less than 50 beds)

(f) Star rating: 1, 2, 3, 4, 5 stars

(g) Size, according to the number of beds or bedrooms.

A hotel may fit into more than one category. The diversity and changing patterns of hotel use often make precise classification difficult, and new forms of accommodation are being introduced to cater for specific needs, for example, holiday villas, condominiums, time-share. Hotel classification is done according to the service quality that a hotel renders to its guests and the suitability of their facilities (WTO, 2008). Minazzi (2010) found that the inconsistency of defining hotel classification is attributed to the nature and diversity in the hotel

accommodation industry and differs from country to country. Due to the changes in technology, guests are turning from traditional hotel classification and are now relying on new electronic media classification as a tool to gather information about the hotel. Friedlander (2014) found that star rating and industry classification such as luxury, good or medium hotels are irrelevant and insignificant to today customers' when selecting a hotel, hence some hotels find no value in chasing star classification.

There have been fundamental changes in the demand for hospitality accommodation during the past two decades (Pizam, 2010). These have been in response to general socio-economic trends, in particular:

- Increasing prosperity and/or increased leisure time in developed economies (e.g. the introduction of the 35 hours working week in France in the 1990s has impacted directly on the demand for hospitality, as customers are taking short break holidays starting on a Thursday evening).
- Changes in the structure of family life (e.g. dual careers, smaller families holidaying together).
- Increasing urbanization.
- The transition from an industrial society to an information society.

By market segment, there have been major changes in the demand for hospitality accommodation. International business travel has developed into one of the most profitable market niches, especially with the development of the Meetings, Incentives, Conferences and Events (MICE) markets. Research has correlated the demand for hotel accommodation with the rise in the service sector in national economies (Todd & Mather, 2001). One of the most significant changes in recent years has been the demand for 'mass customization' and for personalization, with business guests turning to boutique hotels in preference to the standardized product offered by the chains. There is also evidence of increasing demand from clients for environmentally respectful hotels, especially among clients emanating from Scandinavian countries and Germany (Pizam 2010).

2.1.2 Importance of the Hotel Industry

Hotels are important globally as they provide the facilities for recreation and entertainment, meeting and conferences and business transmission. The hotel industry is part of a wider

activity that in recent years has becoming increasingly important in the economy of many countries – tourism (Faria, 2012). The American Hotel & Lodging Association (AHLA, 2015) reported that there were more jobs and higher wages in hospitality industry. In 2014 the industry added more than 30,000 new hotel jobs and more than 100,000 new travel-related jobs, resulting in an increase of over $12 billion in travel-related wages and salaries, up six percent. The pace of hotel development remains robust: the total number of properties grew from some 52,000 properties to 53,432 properties; and rooms grew from some 4.8 million rooms to 4,978,705 rooms, in just one year. The industry also provides billions of dollars to communities across the country. Just this year, hotels generated $141.5 billion in business travel tax revenue, which is up $6.5 billion from last year.

Similarly, a new Europe-wide study by Ernst & Young (EY) (2017), has reached similar conclusions that the hospitality sector in Europe is an important contributor to the European economy, through its impact on employment, growth and tax contributions. It directly employs 10.2m people. Turnover across the hospitality sector is over €1.0tn, equal to approximately 8.1% of total economic output, with gross value added in the sector (the contribution it makes to economic growth) of more than €460bn, or 3.7% of GDP.[1]

2.2 The Hotel Market in Nigeria

The Federal Republic of Nigeria, commonly referred to as Nigeria, is a federal republic in West Africa, bordering Benin in the west, Chad and Cameroon in the east, and Niger in the north. Its coast in the south lies on the Gulf of Guinea in the Atlantic Ocean. It comprises 36 states and the Federal Capital Territory, where the capital, Abuja is located. Nigeria is often referred to as the "Giant of Africa", owing to its large population and economy. With approximately 186 million inhabitants, Nigeria is the most populous country in Africa and the seventh most populous country in the world. Nigeria has one of the largest populations of youth in the world. As of 2018, Nigeria is the world's 23rd largest economy, worth more than $500 billion and $1 trillion in terms of nominal GDP and purchasing power parity respectively. Nigeria's tourism landscape is extremely rich and beautiful for global tourist attraction; the

[1] Gross Value Added (GVA) can be said to be the value of all final goods and services produced by all sectors of the economy. It is one of the ways to calculate a country's national income.

weather, climate, vegetation, quality airspace, sunshine, beautiful scenery, the rock, falls, captivating beaches, historical relics, rich cultural diversity, friendly peoples and wildlife are Nigeria's tourism assets. This makes Nigeria a leading tourism paradise in Africa.

There is a general consensus about the lack of reliable statistics and market information about the industry (Bankole, 2002; UNWTO, 2006). The Nigeria Tourism Development Corporation (NTDC), a regulatory body for the tourism and hospitality sector, also has incomplete statistics for the number of hotels in Nigeria (Nwosu, 2016). This presents a window of opportunity for researchers in academia, industry and government to build and consolidate a robust information database for the sector. Available data from hotels.ng (accessed 13/04/2018), an online travel agency in Nigeria, estimates that there are 10,217 hotels in Nigeria spread around 1,787 cities. No estimate of the number of rooms was provided. There is also no verification regarding the classification of these hotels. Lagos State, the commercial center of the country, has the largest hotel market, followed by Abuja, the political capital and seat of government. Delta State, home to the oil-rich region has the third highest number of hotels.

The existence of the first commercial hotels dates back to 1942 with the Grand Hotel and the Bristol Hotel (Flint, 1983). Other notable hotels in the 1950s were the Victoria Beach Hotel, Victoria Hotel (The Nashua Telegraph, 1960), the Savoy and Olympic Hotels (Whiteman, 2012). The first half of the post-independence period from 1960 to 1965 was marked by rapid developments in inter-regional travel for business, education and politics. This led to the emergence across major cities of government-owned hotels such as the Hotel Presidential in Port Harcourt and Enugu in 1963 (National Bureau of Statistics, 2015) and the Premier Hotel in Ibadan in 1966. In 1979 and 1993 only three international hotel chains existed in the country: the Eko Hotel, a private development established in 1976, initially branded a Holiday Inn (Corporate Nigeria, 2010), the first international hotel brand to operate in the Nigerian market; Ikeja Hotels PLC entered into a management contract with ITT Sheraton to bring the Sheraton brand to Lagos Mainland in 1985; and the Hilton established in Abuja, the Federal Capital Territory in 1987 through a government-initiative headed by the National Insurance Corporation of Nigeria (NICON) and the Swiss Noga Hotel Group (Proshare Nigeria, 2015). Several other government hotels emerged during the oil boom era in the 1970s like the Festac

77 Hotel in Lagos, the Durbar Hotel in Kaduna and the three Gateway Hotels in Ogun State in 1979 (National Bureau of Statistics, 2015).

The Victoria Hotel was purchased by the government during this period and renamed Federal Palace Hotel (Traveller's Network, 2011). It is suggested that these government-operated hotels were not always able to deliver acceptable levels of service (UNWTO, 2006) which eventually led to the privatization of several of them. Together with a series of private-sector investments, the number of refurbished and new-build hotels in the Nigerian market increased dramatically. From three international brands in 1985, there are now 15 chains with 45 branded hotels and 23 independent hotel brands in full operation across the country including the Sheraton, Four Points by Sheraton, Hilton, Radisson Blu, Swiss International, Le Meridien, InterContinental, Best Western, Southern Sun and Sun International (Nwosu, 2016). Marriott has also registered a presence in Nigeria with the 2014 acquisition of the Protea brand (Marriott International, 2014). A few national hotel brands like Rockview and Chelsea complement a growing number of independent boutique and family-run hotels across the country.

The Oxford Business Group (2015) reports that room rates in Nigeria are some of the highest in the world. Standard room rates in international hotels could range from US$275 to as high as US$500. Criticisms have been levelled at hotel operators for charging rates that do not always justify the quality of the offerings. Hotel operators on the other hand consider themselves justified as government levies and poor infrastructure necessarily increase development and operating costs, sometimes by as much as 30 per cent of total revenue (UNWTO, 2006, p. 9).

The Hospitality/Tourism Industry in Nigeria contributed about 4.8% to Nigeria's Gross Domestic Product in 2016. This was disclosed by Africa's number one hotel booking online portal, Jumia Travel in its 2017 report and outlook for Nigeria. Giving further insight into the report, Kushal Dutta the Managing Director of Jumia Travel, Nigeria in his presentation said the industry also employed about 1.6% of Nigerians in the year 2016. Highlighting the key developments, Dutta noted that in terms of travel contributions to the GDP, foreign spending accounted for 3% while domestic spending took the bulk of 97%. Assessing growth in the Hospitality Industry, the Jumia report showed that about 9,000 new hotels emerged in the previous year, with competitive price rates across the country. It was also observed from the

report, that while there was increase in domestic travels, activities for corporate travelers declined in the country for year 2016. Dutta identified Infrastructure and the current Forex regime in the country, as the challenges the Hospitality/Tourism Industry faced in 2016, which in various way impacted the sector.

2.3 Management Accounting and Its Use in the Hotel Industry

2.3.1 Definition of Management Accounting

The Chartered Institute of MA (CIMA, 2009) defines MA as the application of accounting knowledge and skill in the preparation and presentation of accounting information in such a way as to assist management in the creation of policy and in day to day operation of a business entity. Lucey (2003) suggested that MA is an integral part of management concerned with identifying, presenting and interpreting information, formulating strategy, planning and controlling activities, decision making, optimizing the use of resources, disclosure to shareholder and others external to the entity, disclosure to employees as well as safe guarding the assets of the entity. MA entails the analysis of quantitative and qualitative information so as to assist managers in formulation of business strategy, forecast, identification of risk, and proffers business solutions (Enoch, 2015).

Horngren, Datar and Rajan (2013) explained that MA helps managers to measure, analyze and report financial and non-financial information in making decisions to fulfill the goals of an organization. A similar definition is provided by Atkinson, Kaplan, Matsumara and Young (2012), for whom MA is the process of supplying managers and employees in an organization with relevant information, both financial (cost of producing a product, cost of delivering a service and cost of performing an activity or business process) and non-financial (measures related to customer satisfaction and loyalty, process quality and timeliness, innovation and employee motivation) for making decision, allocating resources, and monitoring, evaluating and rewarding performance.

Hilton and Platt (2011) stated that MA is the process of identifying, measuring, analyzing, interpreting and communicating information in pursuit of organization's goals. Garrison, Noreen and Brewer (2011) placed an emphasis as to what extent the MA information can help managers to perform their functions. These authors argued that MA

information helps managers to develop, communicate, and implement strategy. They also mention the use of MA information to coordinate product design, production and marketing decisions and to evaluate the overall company's operating performance including their employees, which is agreed and matched to Carter's (2007) perspectives, that MA information and other reports do not have to follow a set of principles or rules required by different government agencies. The key questions are always (1) how will this information help managers do their jobs better?; and (2) do the benefits of producing this information exceed the costs? Through these, managers can successfully run their businesses.

2.3.2 Usefulness of Management Accounting in the Hotel Industry

MA is used internally to a business and consists of a selection of methods and techniques that can be used to monitor and improve the profitability of a hospitality business (Pizam, 2010). It is important that the use of MA information allows the optimization of the decision making processes by hotel managers, since hotels face enormous competition (Downie, 1997). There is a growing desire to understand the practice of MA in hotels (Downie, 1997), because MA techniques have an important role in the decision making process (Oliveira et al., 2008). MA techniques have evolved in order to respond to the increasing challenges imposed by the management and the competitive economy (Santos *et al.*, 2010).

Penpichcha and Nitirojntanad (2016) investigate the MA practices of medium and large-sized hotel business in Thailand. The findings showed that MA is a tool incorporated in the daily management practices of hotels in Thailand. Pavlatos and Paggios (2009) conducted an empirical survey via questionnaire in the Greek hospitality industry on a sample of 85 leading hotels. They found that the adoption rates of MA techniques were quite satisfactory.

There is a general perception that MA provides relevant information for making decisions, both internally or externally and on a long term or short-term basis. Wu, Boateng and Drury (2007) hold that effective decision making is the most important key factor in today's rapid and changing competitive environment. The decision support analysis can be divided into short term and long-term analysis. Abdel-Kader and Luther (2006) argued that for regular or short-term decisions management accountants can use cost volume-profit (CVP) analysis, product profitability analysis, customer profitability analysis, and stock control models. For longer-term capital investment decisions management accountants can produce

and review accounting rates of return and payback periods as well as complex signals based on discounted cash flow.

In competitive environments, managers require timely and accurate cost accounting information in order to calculate true costs, so that correct product and service prices can be established (Chen & Wang, 2013, Kocakulah, 2007). The main goal of any cost management system is to offer timely, accurate, reliable, and convenient information for the management. By using this cost information, resources could be used in an efficient and productive in order to produce goods or services. Furthermore, the competitive dimension of the company could be improved by cost and profitability.

The hotel industry operates in a competitive environment (Patiar, Davidson, Wang 2012, Patiar & Mia, 2008), and its products and services have some unique characteristics (i.e., perishability, intangibility and seasonality) (Mia & Patiar, 2001). These features increase the degree of complexity in managerial decision making. However, such complexities can be effectively managed by implementing appropriate strategies which require decision makers (i.e., managers) to obtain customized, detailed and timely cost information (Kostakis, Boskou & Palisidis, 2011, Raab, Shoemaker & Mayer, 2007).

According to Horngren et al. (1997) cost accounting is about measuring and reporting financial and nonfinancial information related to the organization's acquisition or consumption of its resources. It offers information for both financial and MA. According to (Rhoads & Rosenblatt, 1976), it is designed to facilitate the accumulation, analysis, and utilization of historical and projected per unit cost for use in management decision making; and this is applicable in the hospitality service industries. Pavlatos and Paggios (2009) state that more hotel enterprises are utilizing cost management systems for decision making.

However, there is an ongoing debate about the usefulness of techniques such as traditional budgeting, although its extensive use by hotels is highly acknowledged. While proponents state that it is well in place and, therefore, should continue to be utilized, opponents claim that it should be eliminated altogether, or transformed into new budgeting approaches such as better budgeting and beyond budgeting approaches (Libby & Lindsay, 2007; Uyar, 2009). Although, these approaches have different solutions, they share many of the concerns of traditional budgeting (Jones, 2008b). Despite this recent debate over budgeting, evidence suggests that 'traditional budgeting' is still very much alive in industry,

and it will continue to be important in the future with organizations reporting a commitment to continue the annual budgeting process (Jones, 2008b). The important point is that there is a need to make the budgeting process more effective to derive most the desired benefits.

Emmanuel, Otley and Merchant (1990) noted that performance evaluation was an important function of MA. Performance evaluation provides information for managers to support the achievement of their organization 's strategic objectives (Jusoh & Parnell, 2008). Hall (2008) argued that in recent years organizations have sought to develop more comprehensive Performance Measurement Systems (PMS) to provide managers and employees with information to assist in managing their operations. Kaplan and Norton (1992) argued that in the current dynamic environment, organizations' survival is dependent upon their use of comprehensive (incorporating both financial and non-financial indicators) performance evaluation, which incorporates multiple performance indicators.

However, the literature indicates that in general both financial and non-financial measures are used to measure performance (Demirbag, Tatoglu, Tekinkus & Zaim, 2006). Financial measures such as Return on Investment (ROI) and profit measures are extensively used in most countries. Research demonstrating this includes Abdel-Kader and Luther (2006) study, in the UK; Gomes, Yasin and Lisboa (2004) and Faria *et al*. (2017) study in, Portugal; and Abdel-Maksoud, Asada and Nakagawa (2008), in Japan. For example, Faria *et al*. (2017) findings show that hotels make extensive use of short run, financial performance measures (e.g. comparison of actual versus budgeted figures); however, hotels also place a high emphasis on non-financial measures, from the other BSC perspectives (customer, internal business processes and learning and growth). The performance evaluations solely based on financial measures can have an undesirable influence on managers' behavior (Kaplan & Norton, 1996). For example, if the hotel manager's performance is judged by the ROI, he/she may choose to ignore factors that do not affect ROI in the short-term, although, these factors could be important for long-term business decisions.

Unlike financial performance measures, non-financial performance measures (NFPM's) provide businesses with feed-forward information that is future oriented and thus more relevant for planning purposes (Guilding, 2014). NFPMs are also progressive with regard to meeting and exceeding customers' expectations as well as gaining and maintaining a competitive advantage over competitors. Thus, they are critical in achieving profitability and

other long-term strategic goals (Micheli & Manzoni, 2010). Non-financial indicators can also capture critical non-financial and industry-specific performance indicators. In the hotel industry, these include bed occupancy levels, customer satisfaction surveys completed by customers, guest evaluations of employees' helpfulness, guest evaluations of design, facility renovations and maintenance. Some other examples include: number of repeat customers, number of complaints, and guest evaluation of extra benefits gained such as relaxation, exercise, and refreshments. Such non-financial measures are the real drivers of value within modern businesses that make their future performance predictable (Phillips & Louvieris, 2010; Bongani, 2013).

Bromwich (1990) defined strategic management accounting (SMA) as the provision and analysis of financial information on the firm's product markets and competitors' costs and cost structures and the monitoring of the enterprise's strategies and those of its competitors in these markets over a number of periods. Drury (1994) argued that conventional MA does not provide the financial information required to monitor existing strategies or support strategy formulation. SMA seeks to remedy this situation by providing the financial analysis to support the formulation of successful competitive advantages (Drury, 1994).

According to Tillmann (2003), SMA has a broad external focus, not only on competitors, but also on the competitive environment. It significantly departs from the traditional practice of MA towards a strategic innovation outside the norms, combining management, accounting and marketing within a strategic management framework (Drury, 2002; Roslender & Hart, 2003, 2010). Simmonds (1981) believed that SMA stands on its own feat to operate as a unique and complete technique that should be embraced by management accountants. It stands as a foundation for making business decisions that would improve or positively affect the performance of firms through a better competitive advantage over competitors (Aziz, 2012). According to Roslender and Hart (2010), combining strategy, management and accounting as a single concept makes it possible to identify a new and quite different conception of SMA, one that is arguably insightful and provides accounting information in support of the strategic management process. Tillmann (2003) described SMA as being about the use of MA systems in supporting strategic decision-making.

Collier and Gregory (1995), assessed the use of SMA through case studies at six major UK hotel groups. The results demonstrate that the accounting function in hotel groups is

becoming increasingly involved in SMA, both in planning and in *adhoc* exercises on the market conditions and competitor analysis. The widespread adoption of SMA is consistent with the open and relatively homogeneous nature of the industry and the high degree of competitiveness among the hotel groups in the market.

2.3.3 Types of Management Accounting Techniques

MA techniques, according to Ferreira (2002a), may be divided into traditional and contemporary (Table 2.1).

Table 2.1 – Traditional versus Contemporary MA techniques

Traditional Techniques	Contemporary Techniques
• Budgeting • Budget deviation analysis • Product costing • Product profitability • Return on investment • Sales break-even • Strategic Planning • Tableau de bord.	• Activity-based budget • Activity-based costing • Balanced Scorecard • Benchmarking • Customer profitability analysis • Economic Value Added • Product life cycle costing • Target costing.

Source: Santos *et al.*, 2011**.**

The traditional techniques comprise budgeting, budget deviation analysis, Product costing, product profitability, return on investment, sales break-even, strategic planning, and tableau de bord (Santos *et al*., 2011). A research conducted in Greece by Pavlatos and Paggios (2008) reported that budgeting and budget deviation analysis, Product costing techniques and Product profitability analysis are the most widely used MA techniques in hotels

The contemporary techniques comprise Activity-based budget, Activity-based costing, Balanced Scorecard, Benchmarking, Customer profitability analysis, Economic Value Added, Product life cycle costing and Target costing (Santos *et al.*, 2011). Abdel-Kader and Luther (2006) suggest that the most notable innovative MA techniques are activity based techniques and the balanced scorecard. Pavlatos and Paggios (2008) reported that the most widely used contemporary accounting techniques in hotels are Customer profitability analysis, and with

moderate usage, Economic Value Added (EVA). Activity-based costing, target costing, balanced scorecard, benchmarking, activity-based budget and product life cycle costing techniques are least used.

Traditional MA practices, such as cost variance analysis and profit-based performance measures, focus on concerns internal to the organization and are financially oriented. In contrast, more contemporary MA techniques combine both financial and non-financial information and take an explicit strategic focus (Chenhall & Langfield-Smith, 1998). The relevance of traditional cost accounting practices in current competitive and complex environments is questionable (Cooper and Kaplan, 1991, Mitchell, 1994, Maelah and Ibrahim, 2007).

Ittner and Larcker (1997) suggest that the distinction between 'traditional' and 'modern' MA practices can be illustrated by reference to cost control techniques. Cost accounting is a central method in MA, and traditionally, management accountants' principal technique was variance analysis, which is a systematic approach to the comparison of the actual and budgeted costs of the raw materials and labor used during a production period. While some form of variance analysis is still used by most manufacturing firms, it nowadays tends to be used in conjunction with innovative techniques such as life cycle cost analysis and activity-based costing, which are designed with specific aspects of the modern business environment in mind. Lifecycle costing recognizes that managers' ability to influence the cost of manufacturing a product is at its greatest when the product is still at the design stage of its product lifecycle (i.e., before the design has been finalised and production commenced), since small changes to the product design may lead to significant savings in the cost of manufacturing the product. Activity-based costing (ABC) recognizes that, in modern factories, most manufacturing costs are determined by the amount of 'activities' (e.g., the number of production runs per month, and the amount of production equipment idle time) and that the key to effective cost control is therefore optimizing the efficiency of these activities.

In Portugal, Gomes, C. (2007) analyzed accounting techniques used by industries in different sectors, where the lodging industry was also represented. The most used traditional accounting techniques are Budgeting, Budgeting deviation analysis, Tableau de Bord and ROI. According to their findings, 66.7% of 35 hotels from different categories and regions from Portugal were using budget deviation analysis, mainly for the purpose of supporting their

decision making process and the budgeting process too. The Greek hotels used more traditional MA techniques than contemporary MA techniques (Pavlatos and Paggion, 2008). Philips (1996) and Jones (2008) found that budgeting and budget deviation analysis are the most used MA techniques in the lodging industry.

According to Fowler (2010), the organizations give more importance to traditional MA techniques than to contemporary MA techniques. It doesn't mean that contemporary techniques are irrelevant; usually they are not adopted due to their high implementation costs. Sulaiman, Ahmad and Alwi (2004) examined the extent to which traditional and contemporary MA tools are being used in four Asian countries: Singapore, Malaysia, China and India. Overall, the evidence suggests that the use of contemporary MA tools is lacking in those countries. The use of traditional MA techniques, such as budgeting, remains strong. Chenhall and Langfield-Smith (1998) surveyed the Australian manufacturing firms found that traditional MA techniques were more widely adopted than recently developed techniques. In this study, published two decades ago, the respondents showed an intention to pay greater attention to newer techniques in the future.

Contemporary MA practices enable managers to make better decisions and provide an integrating perspective to the management strategy with useful and relevant information (Sleihat, Al-Nimer & Almahamid, 2012). Yazdifar and Tsamenyi (2005) stated that there was a flurry of books and articles aimed at developing the new (advanced) MA techniques. Waweru, Hoque & Uliana (2005) mentioned that the recent MA literature suggests that the environment in which MA is practiced certainly appears to have changed with advances in information technology, highly competitive environments, economic recession.

2.3.4 Use of Management Accounting Techniques in the Hotel Sector

This section reviews and presents the findings of studies on MA techniques usage, giving special emphasis to its adoption in the hotel sector.

2.3.4.1 Traditional Management Accounting Techniques

2.3.4.1 .1 Budgeting

Empirical studies demonstrate that budgeting continues to be one of the most important and widely used planning and control tools (Abdel-Kader & Luther, 2006; Uyar,

2009). Horngren *et al.* (2006) define budget as the quantitative expression of a proposed plan of action by management for a specified period and an aid to coordinating what needs to be done to implement that plan. Blumentritt (2006) posits budgeting as "the process of allocating an organization's financial resources to its units, activities and investments".

Organizations use budgets for various reasons. Among the most prominent benefits of budgeting are forecasting the future, assisting in profit maximization, providing the management a means of communication, performance evaluation, calculating rewards, motivating employees, controlling performance by investigating variances, pricing decisions and control (Joshi, Al-Mudhaki & Bremser 2003; Cruz, 2007; Oak & Schmidgall, 2009; Ramadhan, 2009;).

Wu *et al.* (2007) investigated the implementation of 40 MA practices in China and found that ownership type affects the adoption of MA practices. Moreover, budgeting practices (i.e. budgeting for cost control, profit budgeting, sales budgeting and production budgeting) are perceived to be highly beneficial to the organizations. Szychta (2002) conducted a survey on 60 Polish enterprises, and found that short-term budgeting, in the form of master budgets and budgets for individual responsibility centers, is the most widely used method of accounting.

In the hospitality industry, some empirical studies have been conducted about budgeting practices as well. Jones (1998, 2008a) conducted two surveys in the UK. Both surveys indicate that the key reasons organizations produce budgets are to aid control, evaluate performance, and aid planning. Budgets are viewed as the main performance indicator in hotel organizations. According to the findings of Schmidgall and DeFranco (1998), all surveyed hotels use an operations budget. The majority of the respondents declared that the operations budget is used for budgetary control. Budgets are primarily used as standards for comparison to actual performance figures and as a planning tool. At the majority of hotels, interdepartmental effort is generally used to prepare budgets. Guilding (2003) examined budgeting implications for hotels operating under management contracts. The study reveals that in the hotel industry, budgeting is mainly used for control purposes, while extensive use is also made for planning. Furthermore, the use of budgets for communication may correlate with company size. In some cases, budgets are used for more than one purpose.

The great majority of sizeable hotels budget their operations at least in the short term. On the other hand, a number of studies report that hotels doing so in the long term represent less than 50% of the total. Collier and Gregory (1995) revealed that hotel managers feel that any forecast going further than a year is inevitably subjective. It might be assumed that sales instability in the hotel industry is the main reason for the relatively low use of long-term budgeting. While zero-based budgeting is used in many US hotels, it is not so popular in Scandinavia (Schmidgall, Borchgrevink, & Zahl-Begnum, 1996). This technique is mainly used in the supporting departments, in order to control cost centers. Budgeting preparation-time varies between three and five months and usually implies the collaboration of many different hotel departments, with the financial office taking the leading role. Larger hotel chains with several management levels may require longer preparation periods.

Pavlatos and Paggios (2009) surveyed Greek hotels on the adoption of 30 MA practices including budgeting practices. In this study, budgeting practices were found to be widely adopted. Moreover, the majority of the Greek hotels use budgets for planning annual operations (98.8%), controlling cost (91.8%), coordinating activities of the various parts of the organization (80%), and evaluating the performance of managers (64.7%). Uyar and Bilgin (2011) surveyed Turkish hotels in the Antalya region which is the most prominent tourism center of the country. The results indicate that having a budget committee and budget manual are common for Turkish hotels. Secondly, participative budgeting is advocated within the industry. Furthermore, budget period seems dynamic, because hotels state that they revise budgets and make periodic reporting within the budget period. Profitability and cost control are the primary reasons in budget preparation.

Faria *et al.* (2019) found that in the hotels located in Algarve (Portugal) budgets are widely adopted; however, they are mainly produced for the short term. The primary reasons for preparing budgets are performance evaluation, target setting, control and short-term planning. Few hotels use zero-base budgeting and there is also little use of flexible budgeting. Finally, budgets are viewed as one of the main performance indicators.

2.3.4.1.2 Budget Deviation Analysis

When it comes to performance management, a business owner's secret weapon is a budget deviation analysis. It allows the business owner to quickly compare and assess actual performance against projections on a line-by-line basis to reveal if there are any differences

(deviations) and where. The first piece of a solid budget deviation analysis begins with a profit and loss forecast. A strong profit and loss forecast will typically be made on a per month basis and extend over a one-year period. Urquidi and Ripoll (2013) state that some hotels in Spain use this technique for the purpose of supporting their decision making process.

2.3.4.1.3 Product Costing

Product cost refers to the costs used to create a product. These costs include direct labor, direct materials, consumable production supplies and factory overhead. Product cost can also be considered the cost of the labor required to deliver a service to a customer. Many firms use product costing information to value inventory for financial reporting purposes.

In the eighties decade of the last century, Johnson and Kaplan (1987) argued that MA information had become of secondary importance in comparison to financial accounting information. This was due to the necessity of producing financial accounts to satisfy statutory and accounting standard requirements. As a result, they argued that product-related decisions were being taken using product cost information suitable only for financial accounting purposes. Bailey (1991), Drury and Tayles (2000) found that product cost information tended to be prepared on a similar basis to financial accounting information.

Brierley, Cowton and Drury (2001) report the findings of a pilot survey into how product costs are calculated and how they are used in decision making in the manufacturing industry in the UK. The survey examines how many accounting systems firms use, blanket overhead rates in product costing; the bases used to calculate overhead rates; the application of product costs in decision making; and profitability maps. The results show that a variety of methods are used to calculate product costs and that they are used to a significant extent in decision making.

2.3.4.1.4 Product Profitability

Product Profitability is the amount of profit that a particular product or service makes in a particular period. The product profitability consists of revenue from the product and the amount it costs to make a sale. Knowing the profitability of a product also allows comparing different products. For example, if one product is more profitable than another product, the firm could shift the production to the most profitable product.

Product profitability, simply defined, is the difference between the revenues earned from, and the total costs associated with, a product over a specified period of time. Product profitability analysis requires that all relevant costs are traced to products and then matched to their corresponding revenues. Such analysis can then inform a wide range of management decisions such as product pricing and product portfolio analysis.

The classical product profitability reporting implies that managers are capable of taking specific product decisions (pricing, promotion) on individual products without affecting other products. Even though it is widely known that, very often, individual products have some degrees of interdependence, the traditional analysis tends to neglect the effect of decision-making on one product over other products. Only in the extreme case of 'joint production processes', in which all products must be produced together in a fixed proportion, are the interdependencies considered and individual products profit analysis is considered useless for decision-making (Harris & Mongiello, 2006). The hospitality industry is manly a service industry; that's why these two techniques have no application.

2.3.4.1.5 Return on Investment (ROI)

Return on Investment (ROI) can be defined as a performance measure used to quantify and evaluate the efficiency of an investment or to compare efficiency among different investments. In other words, ROI is a popular financial metric for evaluating the financial consequences of investments and actions.

Jang and Yu (2002) examined the performance of commercial hotels and casino hotels in the United States from 1994 to 1998. The findings reveal that the type of hotel company has no relationship with performance and that casino hotel companies show higher effectiveness in using assets to generate revenue. In addition, debt ratio has a close relationship with the return from operations, particularly from commercial hotel operations.

Newell and Seabrook (2006) reported the findings of a survey of major hotel investors and hotel owners/operators in Australia regarding the factors influencing hotel investment decision-making. They found that the main factors influencing hotel investment decision-making were financial and location factors. These were followed by economic, diversification and relationship factors. These findings reveal three levels of importance in the factors influencing hotel investment decision-making.

2.3.4.1.6 Sales Break-Even

Break-even is the point at which the revenue produced by operations is equal to the cost of the resources consumed in producing it. The value of this management tool is that it enables the operator to determine the products and services that must be sold to cover a predetermined level of cost (Lesure, 1983). Downie (1997) refers that the Break-even analysis should be more developed, as well as the Customer profitability analysis per market segment.

2.3.4.1.7 Strategic Planning

Strategic Planning consists in[...] the devising and formulation of organisational level plans which set the broad and flexible objectives, strategies and policies of a business, driving the organization towards its vision of the future (Stonhouse & Pemberton, 2002).

Strategic planning involves determining the organization's long-term goals and making decisions based on methods for achieving these goals that have already been predicted. In other words, strategic planning is the organized and systematic process for making fundamental decisions and establishing plans which set the orientation of organizational activities within the legal framework. The scheduling for the strategic planning process depends on the nature, organizational needs, and immediate external environment and it might be carried out once or even twice a year in a series of gradual steps by considering mission, vision, values, environmental scan, goals, strategies, responsibilities, time lines, budgets, etc. In other words, if an organization operates in a stable market for many years, then planning might be carried out once a year and only in certain parts (Bagheri, 2016).

The strategic planning process is a way of including factors and techniques in a systemic way to achieve specified tasks; it includes the establishment of clear objectives and the necessary processes to achieve them (O'Regan & Ghobadian, 2002). Strategic planning is considered as an essential tool of management in an organisation, and aims to provide direction and to ensure that the appropriate resources are available at a suitable place and time for the pursuit of its objectives. Strategic planning views strategic decision making as a logical process, in which strategy is formulated through rational analysis of the firm, its performance and the external environment. The strategy is then communicated to the organization and implemented down through successive organizational layers (Andres, 2000). The benefits of strategic planning (Koufopoulos & Morgan, 1994) can be summarized as:

enhancing co-ordination; controlling by reviewing performance and progress toward objectives; identifying and exploiting future marketing opportunities; enhancing internal communication between personnel; encouraging personnel in a favorable attitude to change; and improving the corporate performance of companies (e.g. bringing together all business unit strategies within an overall corporate strategy).

Jehad, Aldehayyat, Khattab, Abdel Al & Anchor (2011) conducted a questionnaire survey in order to understand the use of strategic planning tools and techniques by hotels in Jordan and the nature of its relationship with managers' views of the strategic planning process. The main findings of this research are that the Jordanian hotels engage in the strategic planning process by using a number of techniques (Financial analysis for own business, strengths weaknesses opportunities and threats (SWOT) analysis, political economic socio-cultural and technological (PEST) analysis and Porter's five forces. The use of strategic planning tools and techniques relates more to the size of hotel and less to age and ownership type. There is a positive relationship between the use of strategic planning techniques and the size of the hotel. The managers of these hotels have generally positive attitudes towards the strategic planning process. The managers who believe in the benefits of strategic planning engage more in the practice of it.

Phillips and Moutinho (1999) assert that in the hotel sector, the use of strategic plans and techniques increase the company effectiveness. Furthermore, Athiyaman and Robertson (1995) found that the strategic planning tools and techniques adopted by tourism firms are of equal sophistication to those used by manufacturing firms.

2.3.4.1.8 Tableau de Bord

Tableau de Bord is a strategic management system with a wide adoption especially within the confines of the French borders. According to Juergen (2005), the Tableau de Bord concept of enterprise control – relatively unknown outside of France, where it has been practiced for over forty years – has a number of similarities to the much more recent Balanced Scorecard concept, as well as a number of differences. The French tableau de bord is a system of indicators that aim at monitoring and conducting economic operations and individual behaviors in a way that is compatible with the business strategy (Pezet, 2009).

The Tableau de Bord is a management tool that is comprised of both a set of indicators

that are related, not by deterministic, algebraic operations, but by causal relationships and links, and the process of selection, documentation, and interpretation of these indicators. Each one of these indicators is chosen to measure the status of a part of the business to be managed, so that all indicators, taken together, offer a model of the general functioning of the business (system) in achieving list objective (Juergen, 2005).

2.3.4.2 Contemporary Management Accounting Techniques

2.3.4.2.1 Activity Based Costing (ABC)

Activity Based Costing is considered to be one of the most important innovations in the cost and MA area (Bjørnenak, 1997; Bjørnenak & Mitchell, 1999). ABC systems use sophisticated methods to allocate indirect costs to cost objects. ABC systems seek to use only cause-and-effect cost drivers whereas traditional systems often rely on arbitrary allocation bases. Also, ABC systems tend to establish separate cost driver rates for support departments whereas traditional systems merge support and production center costs (Drury C. 2000). Designing ABC systems needs four steps: (1) identify the major activities that take place in an organization; (2) assign costs to cost pools /cost center for each activity; (3) determine the cost driver for each major activity; and (4) assign the cost of activities to products.

In the Collier and Gregory (1995) study, no use of Activity-Based Costing (ABC) was found in any of the six hotel groups. The practical reasons given by the six case sites for the lack of ABC included the integrated nature of operations, staff flexibility and inter-changeability, high margins and the fact that prices are market determined. There are some studies that have reported on the application of ABC in the hospitality industry where the hotel or restaurant has agreed to install a system suggested by the researchers (Krakhmal, 2006; Harris & Krakhmal, 2008).

In Greece, Pavlatos and Paggios (2007, 2009a, 2009b) observed that 23.5% of hotels have implemented ABC. According to Pavlatos and Paggios (2009b), 80% of ABC adopters used it for customer profitability analysis. The satisfaction with the existing cost accounting system, the high cost of implementation and the lack of top management support were appointed as the main causes for rejecting ABC. The authors found that ABC systems in the hospitality

industry do not embrace many cost drivers, and determine the cost of few activities (e.g., housekeeping, check-in/check-out, reservation, food production/service, marketing, and general administration). Moreover, they observed a positive correlation between the number of cost drivers and the number of activities. Finally, ABC adopters have a higher percentage of indirect costs and higher sales volumes than ABC non-adopters. Also, in Greece, Zounta and Bekiaris (2009) reported that 70.8% of the managers of the surveyed hotels were aware of ABC, but only 14 of them were actually using it, resulting in an ABC adoption rate of 19.4%; 20% were neither aware nor were users of ABC.

In contrast, Adamu and Olotu (2009) found that none of the hotels surveyed used ABC, although 67% were aware of it. Similarly, Faria et al. (2018) reported that none of the hotels surveyed implements this contemporary technique, with about 9% of the respondents confessing that they are not aware of it. This lack of awareness is believed to be even larger as some respondents questioned the meaning of this concept but did not select “Not aware”.

2.3.4.2.2 Customer Profitability Analysis (CPA)

Customer profitability analysis (CPA) entails allocation of revenues and costs to specific customers in a way that the profitability of individual customers can be calculated (Dalci, Tanis, & Kosan, 2010). Horngren *et al*. (1994) state that CPA frequently highlights how vital a small set of customers is to total profitability. They add that managers need to ensure that the interests of those customers receive high priority and state that ‘not all revenue dollars are endowed equally in profitability’.

Kaplan and Narayanan (2001) outline that understanding CPA is especially important for service companies. Indeed, for service companies, CPA is more important than production companies because the cost of providing a service is generally determined by customer behavior. According to Zeithaml and Bitner (1996), the cost of finding and gaining a new customer in service companies is five times greater than the cost of retaining current customers. Cotton (2005) asserts that the effective use of CPA enables service companies to increase customer satisfaction and boost profitability. Pavlatos and Paggios (2009) reported a 70.6% adoption rate of ABC in hotels in Greece. They found that the majority of hotels that have adopted ABC use CPA. CPA is highly valuable by itself and is a useful tool which helps the hotel in deciding what customer strategy to adopt.

Faria *et al*. (2018) investigated the use of customer profitability analysis (CPA) in four and five star hotels located in Algarve (Portugal). The findings show that CPA is far from widespread in hotel management; instead, hotels accumulate costs in profit centers and in cost centers. None of the surveyed hotels adopts activity based costing, despite this technique being viewed as the most appropriate to calculate individual customer profitability. However, reasons for the non-adoption of CPA techniques among them are the use of other performance indicators, such as the average room rate, uselessness of CPA and having costs higher than the potential returns.

2.3.4.2.3 Activity Based Budgeting

CIMA Official Terminology describes activity-based budgeting (ABB) as a method of budgeting based on an activity framework, using cost driver data in the budget setting and variance feedback processes. As its name suggests, ABB focuses on activities rather than functions. In simple terms, ABB follows three stages:

1. Identify activities and their cost drivers

2. Forecast the number of units of cost driver for the required activity level

3. Calculate the cost driver rate (cost per unit of activity).

Like activity-based costing, activity-based budgeting draws attention to overhead activities and their associated costs. It emphasizes that activity costs may be controllable if activity volume is controlled. Where traditional budgeting tends to focus on input costs, ABB takes an outputs-based approach, recognising that activities drive costs. ABB views the business as a collection of activities, a perspective that links well with organisational strategy. According to Hansen and Mowen (2003) ABB begins with output and then determines the resources necessary to create that output. For Tandung, Guangming and Huyhanh (2013), ABB uses knowledge about the relationships between the quantity of production units and the activities required to produce those units to develop detailed estimate of activity requirements underlying the proposed production plan.

According to Shane (2005), ABB is an outgrowth of ABC, which is similar to zero-based budgeting. This budget type accounts for how staff members allocate their effort among activities. Once the full cost of each activity has been calculated, drivers can be established

that link support activities to the primary activities of the organization. By developing a comprehensive activity-based budget executives are able to create a clear nexus between workload and costs. Once developed, executives and managers can exercise control in several ways: 1) assign personnel based upon a demonstrated need, 2) expand or contract personnel proportionately as the need changes, 3) uncover waste and hidden costs, 4) view which activities are most and least expensive, thus subjecting them to review, 5) assess the full efficiency of the organization, 6) identify places to cut spending, 7) establish a cost baseline that may be influenced through process or technology changes that reduce effort requirements for the activity and, perhaps most importantly, 8) argue from an informed, objective position in favor of the organization's budget.

2.3.4.2.4 Balance Scorecard (BSC)

BSC is a performance evaluation framework that has evolved into a strategic management system capable of guiding strategic objectives, by monitoring performance indicators and aligning the different hierarchical levels of a given organization (Kaplan & Norton,1996). The BSC is capable of integrating all the diverse aspects of the hospitality business into one single model, and, thus, it is a management tool that fits the characteristics of the hospitality sector: it emphasizes the role of intangible assets, it focuses on human resources and it recognizes the difficulties associated with a consistent supply of services that is linked to different types of activities (housing, food and drinks) with different cost structures (Ribeiro, Vasconcelos & Rocha, 2019).

The BSC translates an organization's mission and strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system (Kumari, 2011). The balanced scorecard is a strategic-based performance management system that typically identifies objectives and measures for four different perspectives; the financial perspective, the customer perspective, the internal process perspective, and the learning and growth perspective (Kaplan and Norton, 1996). The objectives and measures of the four perspectives are linked by a series of cause-and effect hypotheses. This produces a testable strategy that provides strategic feedback to managers. Alignment with the strategy expressed by the BSC is achieved by communication, incentives, and allocation of resources to support the strategic initiatives (Guan *et al.*, 2009).

Harris and Mongiello (2001) and Doran *et al.* (2002) examined the range of key indicators that hotel managers find useful in managing their businesses, acknowledging the value of the BSC. In Greece, Pavlatos and Paggios (2009) reported that 21% of the hotels surveyed had implemented the BSC. Ivankovič, Jankovič and Peršič (2010) in Slovenia confirmed the successful application of BSC as a performance measurement system in hospitality organizations.

2.3.4.2.5 Benchmarking

Benchmarking is a continuous systematic process for evaluating the products, services and work of organizations that are recognized as representing best practices for the purpose of organizational improvement (Spendolini, 1992). Benchmarking is applied in hotel management. It is often used in order to achieve business strategies, and less as a method of quality evaluation. International consulting companies use benchmarking methods in their research, to analyze the situation and to project the future development of hotel industry in a certain area (Kosar, 2014).

Min, Min and Chung (2002) used an empirical study to carry out external (competitive) benchmarking to prove that dynamic benchmarking can be used as a service improvement tool in hotels. The researchers used two key dimensions: guest room values and front office service attributes to determine the “best practice” among Korean luxury hotels in a study carried out in Seoul, South Korea in the year 2000. Findings from this study indicate that the most important attribute in determining hotel service quality is cleanliness of a guest room; followed closely by courtesy of hotel employees; quietness of a guest room; handling of complaints; and comfort of bed/pillows.

Nassar (2012) sought to investigate the current state, understanding and opinions of benchmarking in the Egyptian hotel sector in order to establish perceived benefits, obstacles and possible improvements. The findings reveal the current benchmarking practices in three major areas which are: quality enhancement for better service, inexpensive too and quality improvement. According to the research, most hotels in Egypt have benchmarking experience regardless of their location or size. The hotels demonstrate a positive attitude towards benchmarking; and perceive it to be a useful tool in assessing performance as well as a means of increasing competitiveness and quality. The study also found that implementation of

benchmarking faces some challenges, including: lack of capacity to carry out such a qualitative study; time constraints; competitive barriers; cost; resistance to change; and lack of knowledge sharing among hotels.

2.3.4.2.6 Economic Value Added (EVA)

EVA is the incremental difference in the rate of return over a company's cost of capital. In essence, it is the value generated from funds invested in a business. If the EVA measurement turns out to be negative, this means a business is destroying value on the funds invested in it.

EVA is the financial performance measure that most accurately reflects a corporation's true profit (Stewart, 1991). EVA is the difference between a company's net operating income after taxes and its cost of capital of both equity and debt (Stewart, 1994). Chow, Haddad, Leung and Sterk (2003) conducted a survey of hotel managers and the respondents confirmed that adopting value-based performance measure such as EVA is more effective than traditional financial performance measures. They also provided useful guideline before implementing EVA as a hotel performance measure.

2.3.4.2.7 Product Life Cycle Costing

Life cycle costing is a technique designed to systematically consider the full financial costs to an organization of a particular purchasing decision over the whole time period that the purchase, or its alternatives, will be relevant. It is especially valuable where the operating, maintenance, training, and disposal costs (or salvage value) of one purchase choice are different from another. In the hospitality industry, life cycle costing can be profitably applied to mundane purchases (e.g., light bulbs) just as readily as to complex purchases (e.g., outsourcing the housekeeping or laundry function) (Pizam, 2010).

2.3.4.2.8 Target Costing

Target Costing is a structured approach to determine the life-cycle cost at which a proposed product with specified functionality and quality must be produced to generate the desired level of profitability over its life cycle when sold at its –anticipated selling price.' (Cooper & Slagmulder, 1999). Target Costing has evolved from early cost reduction techniques found in the beginning of the twentieth century at Ford in the US and in the development of the Volkswagen Beetle in Germany in the 1930s (Rösler,1996).

In Japan, Target Costing has been used as a strategic weapon in controlling costs while producing high-quality products containing features and functionality desired by customers. Currently, more than eighty per cent of Japanese manufacturing companies are using Target Costing successfully with many other Japanese industries: construction, insurance, and governmental agencies embracing the Target Costing concept in an effort to improve their performance results (Kim & Berry, 2011). To my best knowledge, there is no study that examines the application of this technique in the hotel industry.

2.3.5 Uniform System of Accounting for Lodging Industry (USALI)

The USALI is considered to be the guide for hotel owners, managers and other interested parties for reporting and presenting their property's financial statements. The resulting standardization established by the Uniform System permits internal and external users of financial statements to compare the financial position and operational performance of a particular property with similar types of properties in the lodging industry (Lynn & Anne, 2015). The USALI was developed in 1926 by the Hotel Association of New York City to overcome the limitations of a traditional system of accounts better suited to manufacturing firms. Although several editions have been published since then, the basic principles have remained the same (Harris & Mongiello, 2012).

The uniform system for the hotel industry is very important and most significant for a number of reasons. First, it provides guidance to all. With guidance, it enables comparability among different properties and companies; it is a time-tested, beneficial turnkey system and is easily adaptable by operations of different sizes (Schmidgall, 2014). Most importantly, it serves as a model for other segments of the hospitality industry.

The Uniform System of Accounts for the Lodging Industry (USALI) is widely used by hotel companies across the USA and Europe and the growth of US-based chain hotels has led to a worldwide application of this standard (Atkinson & Jones, 2008). Even where companies are not explicitly operating the USALI, it appears to influence the design of accounting packages which adopt a department accounting system common to USALI (Harris & Mongiello, 2006).

Pavlatos and Paggios (2007) found that only 11.8% of the 85 surveyed hotels in Greece use the USALI, reflecting low acceptance and application of the USALI. 53,3% of the hotels

belonging to multinational chains use the system, while only 2.9% of private companies or members of a national chain do so. These findings show that the USALI has been mainly adopted by hotels belonging to multinational chains.

According to Pizam, (2010) uniform systems of accounts are designed to meet four distinct, yet overlapping, objectives:

1. Comparability. Because uniform systems provide carefully developed formats reflecting evolving operating and financing trends in their segments, the comparisons of financial results among adopters' operations are more reliable.
2. Responsibility Accounting. Uniform systems distinguish between direct and indirect costs, thus permitting the assignment of costs to the activities and their managers.

   A direct cost is an expense that is readily and reliably assigned to a revenue generating activity or a cost center. In the USALI, for example, the cost of food sold is readily identified if appropriate record keeping procedures are followed, and it can reliably be assigned as a cost of generating food sales. Similarly, payroll and related expenses of both revenue centers (e.g., rooms department, food and beverage department) and cost centers (e.g., marketing, property operations, and maintenance) are direct costs because they are the responsibility of individual revenue and cost center managers.

   An indirect cost is an expense that cannot be readily and reliably assigned to a revenue generating activity. For example, under the USALI, no cost of sales is assigned to the rooms division. Obviously, significant costs are incurred to generate the sale of room nights, but assigning other costs of generating the rooms department revenue would: a) violate the objective of responsibility accounting, since the rooms division manager does not control the size of the rooms division (or its marketing budget) and,

   b) require the use of subjective allocation bases. Indirect costs are thus considered overhead costs, or burden. Under the USALI, operating overhead costs are termed Undistributed Operating Expenses (UOE).

3. Adherence to Accounting Standards. Careful use of uniform systems helps to ensure that property level accounting personnel are reporting transactions according to Generally Accepted Accounting Principles (GAAP).

4. Flexibility. Uniform systems typically contain far more classifications and accounts than are used by most adopters, but this feature permits individual operations to customize the system to their needs while preserving comparability and accuracy.

The benefits of this system have been frequently described by the users in terms of its contribution towards greater “standardization”, “uniformity”, “comparability”, and “consistency”. The USALI provides detailed guidance for categorizing, organizing, and presenting financial information and promotes a standardized reporting system that facilitates the comparison of results of various hotel operations (Guilding, 2009).

USALI pursues two objectives (HANYC, 2014). The first is to provide an accounting model that can be easily adapted by any hotel regardless of size and category, and, that is at the same time useful for any type of users, both internal and external. Secondly, being a uniform and standardized model, to give the possibility of comparing between different hotels and hotel chains, even if they perform with another operating system or if they are established in different countries. It is also important to mention that several improvements and updates have been carried out in the eleventh revised edition of USALI (2014).

The 11th revised edition, which contains five sections, was analyzed by Schmidgall and DeFranco (2015), and they pointed out several changes compared to the 10th edition:

> The 275 pages of the 10th edition divided the Uniform System into the four sections: Financial Statements, Operating Statements, Ratios and Statistics, and Expense Dictionary; the 353 pages of the 11th edition contain five main parts. The 11th edition puts Operating Statements as its first section. It provides two Operating Statements, one for the operators and one for the owners. The next is additional schedule “Information and Telecommunications Systems” which is shown in the UOE section of the summary operating statement. The schedule “Rentals and Other Income” is renamed as “Miscellaneous Income”.
>
> The second section is Financial Statements, which is aimed at external users (bankers, potential investors). The main innovation in this section is the Statement of Comprehensive Income which reflects changes in U.S. GAAP.

The third section - Ratios and Statistics - changed its name to Financial Ratios and Operating Metrics. The recommended labor cost schedule is included for each department, since they are the biggest expense line item in the hotel business.

The fourth section also changed its name from Expense Dictionary to Revenue and Expense Guide. It provides more sophisticated classification by individual items, departments/schedules and accounting names.

The last fifth section is completely new (the 10th edition had only four), and is called Gross Versus Net reporting. It shows the treatment of surcharge service changes, and gratuities.

Generally, the authors conclude that the new 11th edition is more user-friendly and provides new guidance in a number of important areas. Guilding (2014) quotes the following significant benefits of using this system:

- it represents an "off the shelf" accounting system that can be adopted by any business in the hotel industry,
- the system can be viewed as "state of the art" as it benefits from the accumulated experience of the parties that have contributed to the system's development over many years,
- by promoting consistent account classification schemes as well as consistent presentation of performance reports, it facilitates comparison across hotels,
- it represents a common point of reference for hotels within the same hotel group.

USALI represents an essential framework for the introduction of responsibility accounting information systems in hotels, in other words, for defining the monitoring and reporting of all types of revenue and costs by individual departments (Janković & Poldrugovac, 2015). It enables the evaluation of the performance of departmental managers based on revenues and costs within their control. The departmental statements of income provide some of the most important internal sources of information for hotel managers (Janković *et al*., 2012).

A study by Planas (2004) found a 63% rate of USALI's adoption in Spain. They surveyed 27 hotel chains and independent hotels and the response rate was 77.1%. Kosarkoska and Mirsheska (2012), in Republic of Macedonia, investigated how USALI is used as Cost Management (CM) tool and its impact on making comparable standardized

financial reports within the hospitality industry. Findings show that this region is not familiar with the USALI (69.2%), but there is a high willingness to learn about this system (69%).

Faria (2012) and Faria *et al*. (2015) focused in the Algarve region and conclude that the USALI is used by 50% of the hotel units. This research also reveals some advantages and drawbacks in USALI's usage, as well as reasons for (not) adopting it, who takes the decision to adopt the USALI and its importance in relation to other standards. It also makes reference to cost allocation issues.

This chapter sought to describe and summarize the prior studies conducted on the usage of MA techniques by the hotels. The chapter commenced with the definition and classification of hotel, the hotel market in Nigeria, the MA and its use in the hotel industry, as well as the definition of USALI and its importance. The chapter then reviewed the prior studies conducted in various countries on the types of MA techniques employed by the hotels, which revealed a high uptake of traditional MA techniques. This chapter also reviewed the prior studies that had investigated the purpose for which MA techniques are used. In this regard, the chapter revealed MA techniques were used for diversified purposes depending on the tool in question. Budgets for instance were commonly used for planning, controlling and evaluating performance, as well as for developing strategies. Performance measurement tools were used for evaluating product and customer profitability.

CHAPTER THREE

3. METHODOLOGY

The word methodology, as defined by Kaplan (1964), is the explanation and justification of methods and not the methods themselves. Methods, however, is the procedure of forming concepts and hypothesis, interview and questionnaire, methods of collecting data, sampling techniques, making observation, providing explanation and making predictions.

This chapter outlines the methodology used in the present study, namely the theoretical foundations of the research, the research design, the population and the sample, the method of data collection and data analysis.

3.1 Contingency Theory

In this study contingency theory will be used to examine the relationship between contextual variables such as size, intensity of competition and cost structure and the use of MA techniques in hotels in Nigeria.

Contingency theory has been widely used in MA research. It is based on the premise that the MA techniques are not used equally by all organizations (Haldma & Laats, 2003). These techniques depend upon the specific characteristics of an organization, such as organizational context and structure. The contingency theory helps to explain the impact of factors in MA. Several authors use this theory when examining divers factors (Haldma & Laats, 2003; Cadez & Guilding, 2008). Burns and Stalker (1961) discussed why MA practices may be alike when comparing one organization to the other. This can be related to organizations operating in different industries or sectors.

Otley (1980) applied contingency theory to MA practices and explained that there is no single general standard accounting practice that can be applied to all organizations. In essence, each organization will have its own MA practices.

Chenhall (2000) provides a critical review of findings of contingency based studies conducted in the previous 20 years. Widely appraised factors in contingency research include technology, environment, organization size, structure, strategy and culture. The theory looks

at certain influential factors that will assist management to decide on an appropriate MA practice. For example, a manufacturing food company may want to change the technology used to a more modern hygienic and efficient way of handling, processing and packaging its food. It may then consider installing a computer based system that mass produces its products. However, the type of qualified personnel that is required to operate such highly complex equipment will influence the type of MA practices selected and production costs.

The external environment is also considered as a powerful contextual factor and forms a base in contingency studies (Chenhall, 2003; 2007). The two most commonly researched factors of the external environment are market competition and perceived environmental uncertainty (PEU) (Kamisah, Suria & Noor, 2010). Khandwalla (1972) examined the effect that the type of competition faced by a firm had on its use of management controls and concluded that the sophistication of accounting and control systems was influenced by the intensity of the competition it faced. Adaptation to the external environment and to achieve long-term success in hotel enterprises depends on the development of appropriate strategies. According to Tanima and Bates (2011) the organizational structure can be mechanistic or organic. The mechanistic organization is related to a stable environment and an organic organization is related to an unstable environment. This can influence the usage rates of MA techniques.

The firm size (measured through sales volume or number of employees) is also a factor that influences the MA techniques in a company (Clarke *et al*., 1999; Cadez and Guilding, 2008). Cadez and Guilding (2008) refer that a large company implies an increase of complexity and sophistication in MA techniques. In fact, there is a positive association between the size of a company and the use of SMA. In addition, larger organizations face more problems of control, and organizations need ever more and better information, so those of largest size tend to employ more sophisticated management techniques (Abdel-Maksoun, 2004). Uyar and Bilgin (2011) verified that the differences in MA were attributable to hotel size, complexity of operations, uncertainties, coordination and communication among departments.

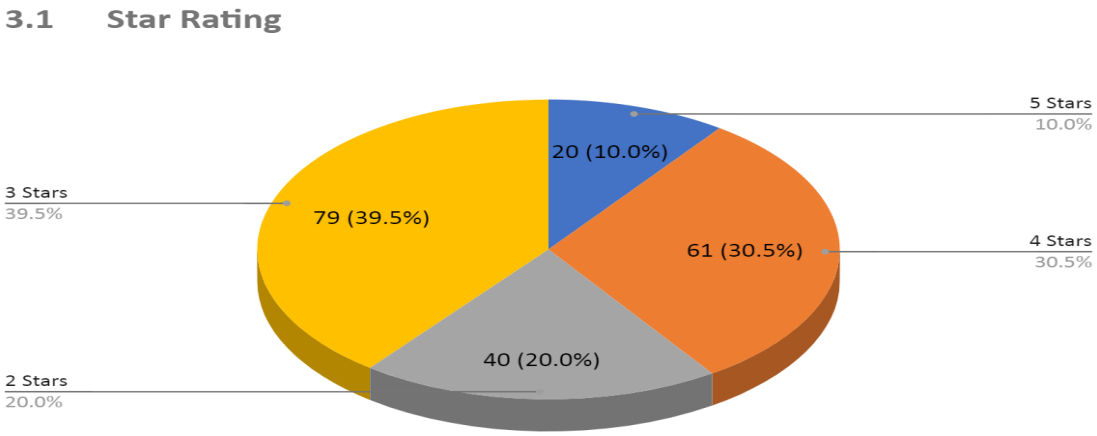
Internal organizational factors, such as organizational structure and culture, influence change and the implementation of MA techniques (Joseph, 2006). For example, in some industries, a culture of change may be more embedded than in others (e.g., technology and biotechnology, as opposed to processed foods). The influence of culture may therefore vary

with the firm's size, age, and industry. According to Chenhall (2003) and Baird *et al.* (2004), the organization culture influences MA practices.

3.2 Population

The population of the research comprises 10,217 hotels (i.e. 2-stars, 3-star, 4-star, 5-star and apartment hotels) in 1,787 cities in Nigeria. The list of the hotels was obtained from the Nigeria number one hotel booking online portal, hotels.ng (accessed 13/04/2018). From the population, 200 hotels were chosen by purposeful sampling technique to select the desired sample for the study.

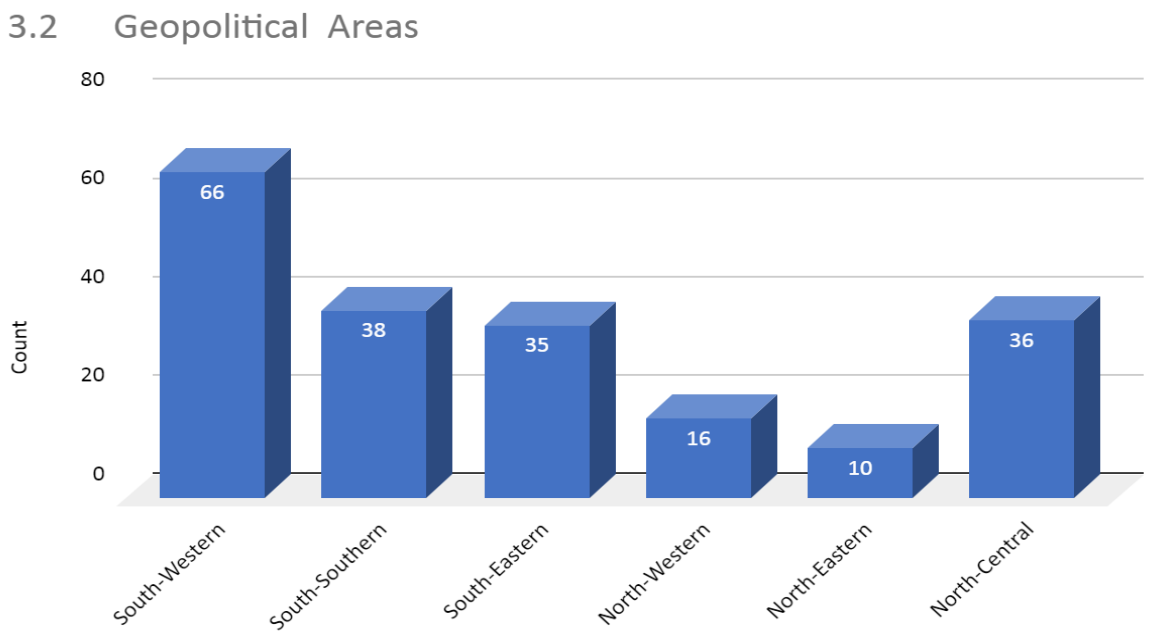
Graph 3.1 shows the star rating of the hotels in the population.



3.3 Sampling

Sampling is an essential part of research study that all social scientists and management can hardly do without. The researcher obtained information for this study from classified hotels of varying sizes found within the six geopolitical areas in Nigeria (North-Central, North-Eastern, North-Western, South-Eastern, South-Southern, and South-Western).

Graph 3.2 shows the geopolitical areas or zonal of the hotels in the sample.



These six geopolitical areas were targeted because it fitted in well with the time dimension selected for the study.

To select the 200 hotels sampled, a purposeful sampling technique was employed. In purposive sampling personal judgment needs to be used to choose cases that help answer research questions or achieve research objectives.

According to the type of cases, purposive sampling can be divided into the following six categories (Black, 2010):

1. **Typical case**. Explains cases that are average and normal.
2. ***Extreme or deviant case***. Deriving samples from cases that are perceived as unusual or rare such as exploring the reasons for corporate failure by interviewing executives that have been fired by shareholders.
3. **Critical case** sampling focuses on specific cases that are dramatic or very important.
4. **Heterogeneous** or **maximum variation sampling** relies on researcher's judgment to select participants with diverse characteristics. This is done to ensure the presence of maximum variability within the primary data.
5. **Homogeneous sampling** focuses on one particular subgroup in which all the sample members are similar, such as a particular occupation or level in an organization's hierarchy (Saunders, Lewis & Thornhill, 2012).
6. **Theoretical sampling** is a special case of purposive sampling that is based on an inductive method of Grounded Theory.

The most appropriate method for this study is heterogeneous sampling. This method was deemed appropriate because of the following reasons: firstly, it entails a sample being drawn from the part of population that has the characteristics of the researcher's interest (De Vos, Strydom, Fouche & Delport, 2011). Secondly, because it is a fast and inexpensive way of collecting data if the units of analysis are located in areas accessible to the researcher as was the case in this study. Thirdly, the method is relatively easy to execute given that there are few rules to be followed on how a sample should be selected. Fourthly, due to the lack of comprehensive list of all hotel operating in Nigeria, the usage of other sampling methods such as the random sampling was not an option. Fifthly, a larger sample size obviously requires more expenditure on collecting and analysing data (Henry, 1990).

Thus this research must balance the trade-offs of obtaining a sufficient sample size within budget and time constraints. To know whether the sample size can work within these constraints, it is essential to discuss aspects in determining the sample size. There are number of statistical formulas available to calculate an appropriate sample size but these manually require data on variability (standard deviation), estimation precision and degree of confidence. However, information on variability is unavailable since the variability of the use of MA among the hotels in Nigeria has not yet been assessed in any of the previous research.

Other guides include references to consistent rules of thumb provided by statisticians to help in determining sample size. Roscoe (1975) proposed that sample sizes larger than 30 and less than 500 are appropriate for most research. This is supported by Stutely (2003) who advises a minimum number of 30 for statistical analyses. The minimum sample size arises because statisticians have proved that a sample size of 30 or more will usually result in a sampling distribution for the mean that is very close to a normal distribution; a position which is important to ensure that spurious results do not occur (Saunders, Lewis & Thornhill 2009).

As already mentioned, purposeful sampling method was employed to select the desired sample for the study. This could mean that the sample may not be representative of the population of this study since the sample was chosen non-randomly. This type of sampling method has several problems: 1. Vulnerability to errors in judgment by researcher. 2. Low level of reliability and high levels of bias. 3. Inability to generalize research findings.

3.4 Data Collection

In the course of these research, heavy reliance was placed on primary source of data (mainly quantitative); that's why a structured questionnaire was used. The choice of this instrument was based on the following expedient reasons. First, according to Green (2015), it is cost-effective, time-efficient and easy to evaluate objectively. Second, according to Milne (1999), with the use of questionnaire it is relatively quick to elicit information from a large portion of a group. Third, according to Wahyudi (1999), if closed-ended questions are used, the data collected in a questionnaire survey can be quickly and easily captured, quantified and analyzed objectively by the researcher using a variety of statistical software packages.

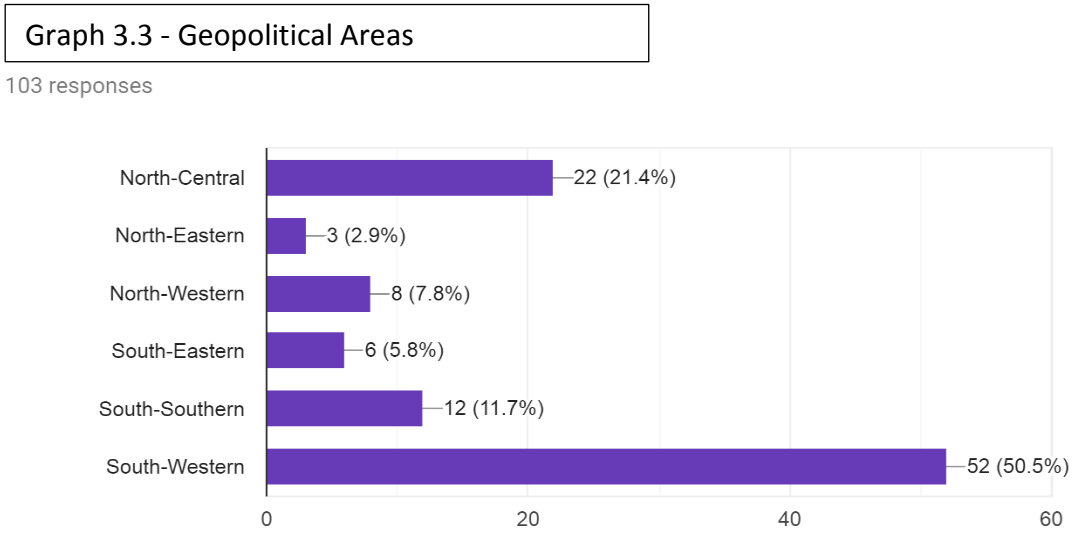
The limitations of a survey instrument such as questionnaire are well documented in the literature. One of these limitations is non-response bias, which usually occurs when intended respondents do not want to participate in the survey or decline to answer some of the questions due to certain characteristics they possess that differ from those who agree to answer the questionnaire or who answer all questions of the same. (De Vos *et al.*, 2011). In order to reduce the effect of the non-response bias, the researcher approached different decision makers, who comprised managers, accountants and financial managers of the hotels, both male and female, to participate in the survey. In addition, the respondents' profile was analyzed to ensure that decision makers with different characteristics had answered the questionnaire. Another limitation of using a questionnaire survey especially when it is administered to hotel decision makers is their reluctance to participate in a survey owing to their busy schedule. To overcome this, the researcher explained the purpose of the study to the respondents while handing over the questionnaire to them. In addition to this, the researcher visited some respondents severally and reassured them that any information they divulge will be kept confidential.

The questionnaire designed for this study comprises of four sections. The first section collects basic information about the demographic data of the respondents, the second section captures company's information. The third section requested information on the MA practices used within the hotels. These questions are divided into five categories: cost accounting, budgeting, performance evaluation, decision making and strategic analysis. They are specifically, aimed at ascertaining the types of MA practices used, the benefits gained over the past three years, the factors influencing their choice, and to what extent is MA being used as

an instrument to support the formulation and implementation of strategies in meeting management's objectives. The fourth section was devoted to the questions on the level of adoption of the USALI by the hotels in Nigeria. The data was collected between June and December 2018.

The questionnaire was administered to the hotels by hand to the respondents who completed them at their own convenient time. The researcher went back on appointment to collect the completed questionnaires. The hand-delivery approach was deemed suitable as it gave the researcher an opportunity to explain and introduce the research topic to the respondents, an aspect that certainly increased their willingness to participate in the study. This approach was also beneficial because it saved time and increased the response rate. Out of the 200 questionnaires that were distributed, 103 usable questionnaires were returned (See Graph 3.3 for the geopolitical areas of the hotels).

Graph 3.3 shows the geopolitical areas of the hotels in the sample



The questionnaire was accompanied by an introductory letter that informed the respondent about the nature and purpose of the study and that assured confidentiality. No individuals or organizations taking part in the survey can be individually identified from the survey results published. On the introductory letter, hotel managers, accounting managers, financial managers or other managers that are likely to be knowledgeable and engaged in the

MA system were asked to respond to the questionnaire. This procedure is expected to increase reliability and validity of the answers given to the survey.

The content of the questionnaire survey was obtained from past studies on MA system by different researchers from different regions and adapted for this study. Questions on section one, two and four were draw from Faria (2012), while section three questions were draw from both Santos *et al*. (2010) and Pavlatos and Paggios (2009).

3.5 Data Analysis

Data analysis is the process of bringing order, structure and meaning to the mass of information collected (Mugenda & Mugenda, 2003). The completed questionnaires were checked for completeness and consistency and coded for analysis. Analysis was done using Statistical Package for Social Sciences (SPSS). SPSS was used to apply data analysis techniques to the obtained data. The data collected in this study will be used to generate descriptive statistics, and the dependent and independent variables will be test using multivariate and bivariate statistical analysis.

Descriptive statistics provide simple summaries about the sample and the observations made. Some of the measures that are typically used to describe the sample include measures of central tendencies such as arithmetic mean, mode, median and measures of dispersion such as standard deviation and variance. For the purpose of this study, percentages and graphs were used to summarize the responses of the respondents. In addition, an arithmetic mean was used to summarize and rank the responses of respondents to all the five-point Likert scale questions (1 determined by the hotel to 5 determined by the market; 1 negligible to 5 extremely intense; 1 strongly disagree to 5 strongly agree; 1 least important to 5 most important; and 1 low benefit to 5 high benefit).

Given the objective of the project and the nature of the variables, a multivariate technique was chosen (CATPCA) for the construction of clusters, that will allow a better understanding of the correlations between the variables. These procedures are used to reduce the dimensionality of data by transforming the original set of correlated variables into a smaller and more understandable set of uncorrelated variables (Jolliffe, 2014).

To understand how these clusters are related with the variable, a bivariate statistical analysis will be used whereby each contingent factor is tested individually against the dependent variable. Since the data is non-parametric, Crosstab and Chi-square tests will be used to analyses the data. The results of these tests are presented in Chapter 5.

3.6 Categorical Principal Component Analysis (CATPCA)

For a better understanding the existence of clusters of hotels, CATPCA technique was applied on the dataset. Initially, OPTIMAL SCALLING was applied on the data, with the purpose of reducing the dimensions of the variables.

Table 3.1 shows the model summary for the application of OPTIMAL SCALLING, using two latent variables.

Table 3.1: SPSS Optimal Scaling

Model Summary

Dimension	Cronbach's Alpha	Variance Accounted For: Total (Eigenvalue)
1	,908	8,160
2	,730	3,395
Total	,945[a]	11,555

a. Total Cronbach's Alpha is based on the total Eigenvalue.

source: own source

It's possible to observe that latent variables (dimensions 1 and 2), account for the total amount of 94,5% of the total variance of the sample. This means that we can proceed with the technique.

Table 3.2 shows the component loadings, specifically, the contribution that each variable gives for the construction of the new latent variables 1 and 2.[2]

Latent variable 1 is mainly composed by the following MA practices:

- Cost Accounting [2];

[2] Latent variables 1 is composed of cost accounting: 3; budgeting: 2; performance evaluation: 9; information for decision making: 2; and strategic analysis 2. Latent variables 2 is composed of cost accounting: 1; budgeting: 5.

- Cost Accounting [3];
- Cost Accounting [4];
- Budgeting [1];
- Budgeting [2];
- Performance Evaluation [EVA];
- Performance Evaluation [2]
- Performance Evaluation [4]
- Performance Evaluation [5]
- Performance Evaluation [6]
- Performance Evaluation [7]
- Performance Evaluation [8]
- Performance Evaluation [9]
- Performance Evaluation [10]
- Information for decision making [2] and [3]
- Strategic Analysis [1] to [5]

And latent variable 2:

- Cost Accounting [Absorption cost]
- Budgeting [3]
- Budgeting [4]
- Budgeting [5]
- Budgeting [6]
- Budgeting [8]

Some variables are discarded from this analysis because they have similar values for both dimensions, like budgeting [7] or Information for decision making [1], making them plan variables, that do not add variance to the analysis.

Given the variables that compose each dimension, it was decided that:

- Dimension 1 will be named **Management indicators**;
- Dimension 2 will be named **Budgeting**

Component Loadings

Component Loadings

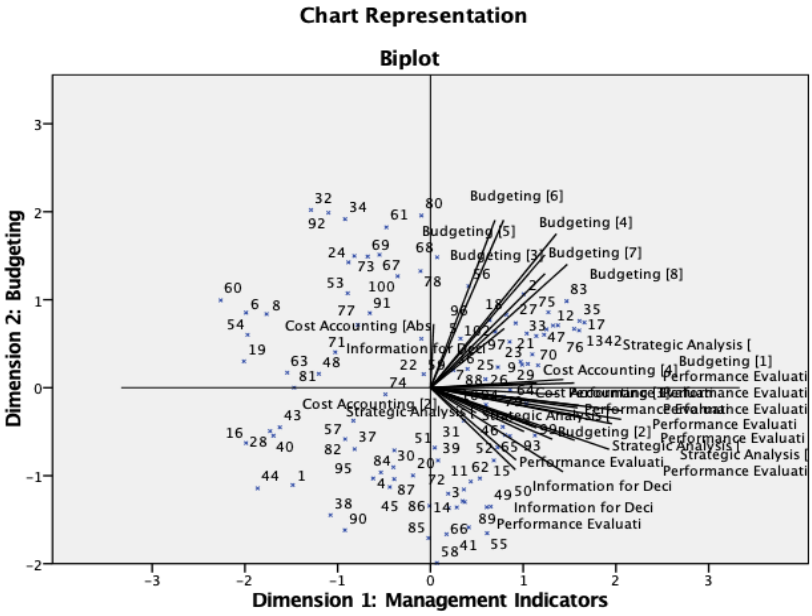
	Dimension	
	1	2
Cost Accounting [Absorption costing]	,013	,282
Cost Accounting [2]	,192	-,111
Cost Accounting [3]	,415	-,057
Cost Accounting [4]	,447	,021
Budgeting [1]	,558	,037
Budgeting [2]	,446	-,178
Budgeting [3]	,481	,588
Budgeting [4]	,529	,681
Budgeting [5]	,271	,742
Budgeting [6]	,307	,743
Budgeting [7]	,575	,546
Budgeting [8]	,481	,505
Performance Evaluation [1]	,359	-,320
Performance Evaluation [2]	,531	-,030
Performance Evaluation [EVA]	,619	-,089
Performance Evaluation [4]	,633	-,127
Performance Evaluation [5]	,763	-,160
Performance Evaluation [6]	,801	-,140
Performance Evaluation [7]	,623	-,078
Performance Evaluation [8]	,803	-,102
Performance Evaluation [9]	,751	-,273
Performance Evaluation [10]	,557	-,372
Information for Decision Making [1]	,357	-,363
Information for Decision Making [2]	,310	,262
Information for Decision Making [3]	,393	-,194
Strategic Analysis [1]	,343	-,154
Strategic Analysis [2]	,431	-,170
Strategic Analysis [3]	,604	,021
Strategic Analysis [4]	,512	-,228
Strategic Analysis [5]	,605	-,233

Variable Principal Normalization.

Table 3.2 component loadings, Source: SPSS

Graph 3.4 shows a graphical representation of the obtained dimensions, and the position of each variable. The closest the variable is of the horizontal axis, the more relevant its contribution for the construction of the dimension 1. The closest to the vertical axis, the more relevant its contribution for dimension 2. Variables that have a 45 degree angle with both axis are irrelevant for either dimension.

Graph 3.4: Graphical representation of latent variables.



Source: SPSS

After having the two latent variables, Management Indicators and Budgeting, and transforming the data using optimal scaling, it is possible to apply clustering techniques. The clustering technique that was found more appropriate was K-MEANS, using Euclidean Distance Square as the dissociation method.

After several iterations, three clusters were found, as shown on table 3.3.

Table 3.3: Cluster analysis using K-means clustering technique

Number of Cases in each Cluster

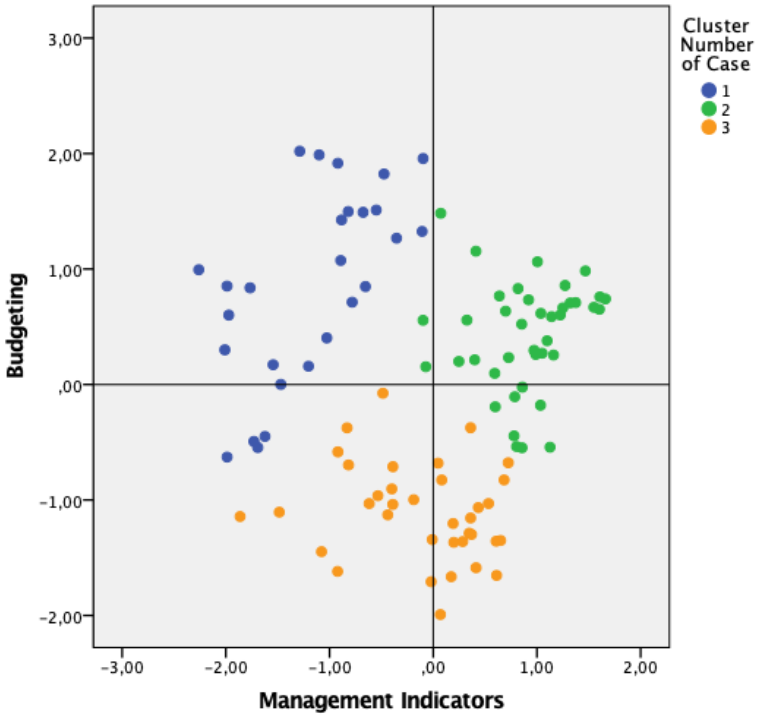
Cluster	1	27,000
	2	40,000
	3	36,000
Valid		103,000
Missing		,000

Source: SPSS

Table 3.3 shows that, for the 103 individuals, we have cluster 1, composed by 27 hotels, cluster 2 by 40 hotels and cluster 3 by 36 hotels.

Graphic 3.5, represents the dispersion of hotels in a 2-dimensional scale. Each dot represents an hotel (observation) and the colors, the cluster to which they belong. In blue the hotels of cluster 1, in green the hotels in cluster 2 and in yellow, hotels in cluster 3.

Graph 3.5: Graphical representation of cluster membership



Source: SPSS

With the details of the cluster membership, a crosstab analysis will be made, to better understand how clusters are composed.

CHAPTER FOUR

4. ANALYSIS AND DISCUSSION OF RESULTS

The aim of this chapter is to analyze and discuss the results of the questionnaire survey undertaken to investigate the state of MA in hotels in Nigeria. The chapter commences with the characteristics of the respondents in Section 4.1. In Section 4.2 hotel's characterization is presented. Section 4.3 of the questionnaire elicited responses on who organized the actual MA system and the types of software system used. Section 4.4 analyses and discusses the results on the usage of MA techniques and the benefit derived from MA techniques. Finally, Section 4.5 analyses and discusses the results on the level of adoption of the Uniform System of Accounts for the Lodging Industry (USALI). Section 4.6 provides the summary and conclusion of the chapter.

4.1 Characteristics of the respondents

The respondents were asked in the questionnaire (Section A) to provide information relating to their age, level of education, position, and number of years of experience in current position. This was done to ascertain whether they were decision-makers of the hotel and thus appropriate as respondents for this study.

The results shown in (Table 4.1) reveal that the majority of the respondents fall within the age grouping of 35 to 50 years (55.3%), 30 (29.2%) of the respondents have above 50 years, while 16 (15.5%) have up to 35 years of age. This suggests that the respondents are mature and economically active. With respect to respondents' level of education, 47.6% of the respondents have a bachelors' degree (See Table 4.1). Similarly, 40.8% of the respondents have a master's degree, while 6.8% have a PhD. Only 5 (4.9%) of the respondents possess only a certificate. Accordingly, most of the respondents have some form of academic qualification.

With regard to the respondents' position, the analysis of the results indicates that 55.3% of the respondents are managers, while 29.1% are accounting managers (See Table 4.1). Only 15.5% of the respondents are financial managers. As far as the respondents' years of experience in the hospitality industry as either managers, financial managers or

accountants is concerned, the analysis of the results indicates that 51.5% of the respondents have four to ten years' experience in their respective position (See Table 4.1). Likewise, 37.9% have more than ten years' experience while 10.7% have one to three years' experience. These suggests that 50% of the respondents have more than five years of experience in their respective positions and thus expected to be knowledgeable about the operations of their industry.

Table 4.1 Characteristics of the respondents

	N	***%***
Age		
Up to 35	16	15.5
35-50	57	55.3
Above 50	30	29.2
Qualifications		
High School	5	4.9
Bachelor's Degree	49	47.6
Master's Degree	42	40.8
Doctor Degree	7	6.8
Position		
Manager	57	55.3
Accounting Manager	30	29.1
Financial Manager	16	15.5
Number of Experience		
1-3 years	11	10.7
4-10 years	53	51.5
More than 10 years	39	37.9

4.2 Characteristics of the Hotel

In Section B of the questionnaire the respondents were asked to provide information of their businesses pertaining to the number of years of operation, affiliation, hotel classification, number of rooms, number of beds, number of employees and annual sales turnover, to ensure that only respondents from hotels were included in the survey.

The results in table 4.2 show that an overwhelming majority of the hotels (52.4%) is in business for more than 10 years. This is followed by hotels who have been in the business between 4-10 years (41.7%). In contrast, the number of newly operating firms (1-3 years) is only 5.8%. Thus, the vast majority of the responding hotels are established businesses that might reasonably be expected to use MA techniques and have developed MA systems that are suitable for their business needs.

As far as the respondents' affiliation is concerned, independent hotels account for 68% (70) participants of all the hotels in the sample, 18% (19 hotels) belong to international hotel chains, while 14% (14) of the hotels belong to national chains. The results in table 4.2 show that 40.8% (42) of the hotels have 4 stars, 28.2% (29) of the hotels have 3 stars, 16.5% (17) have 2 stars and 14.5% (15) hotels have 5-stars.

The number of rooms varied amongst the 103 hotels. As shown in Table 4.2, 38.8% (40) hotels have 101 to 200 rooms, 25.2% (26) have 51 to 100 rooms, 17,5% (18) have 201 to 300 rooms, 13.6% (14) have below 50 rooms while 4.9% (5) have above 300 rooms. The study also sought to determine how many employees the hotels currently employ. As per the findings in Table 4.2, most (48, 46.6%) of the hotels have 51 to 100 employees, 33% (34) have under 50 employees, 16.5% (17) have 101 to 200 employees and finally 3.9% (4) of the hotels have 201 to 300 employees.

Almost 34% (35) of the responding hotels reported annual sales from 5 to 10 million naira (Table 4.2). This is followed by annual sales above 10-25million naira (26.2%, 27 hotels) and 23.3% (24) hotels have annual sales above 25 million naira. The smallest groups with lower annual sales range from 1-5 million with (13.6%, 14 hotels) and three hotels (2.9%) have below 1 million naira.

Table 4.2: Characteristics of the hotel

	N	%
Years of Operation		
1-3 years	6	5.8
4-10 years	43	41.7
More than 10 years	54	52.5
Affiliation/Management		
Independent	70	68.0
International hotel chain	19	18.4
National hotel chain	14	13.6
Hotel Classification		
2 Stars	17	16.5
3 Stars	29	28.2
4 Stars	42	40.8
5 Stars	15	14.5
No of Rooms		
101-200	40	38.8
201-300	18	17.5
51-100	26	25.2
Above 300	5	4.9
Under 50	14	13.6
No of Beds		
Under 50	6	5.8
51-100	30	29.1
101-200	10	9.7
201-300	32	31.1
300-500	24	23.3
Above 500	1	1.0
No of Employee		
Under 50	34	33.0
51-100	48	46.6
101-200	17	16.5
201-300	4	3.9
Annual Sales Turnover		
500,000-1 million	3	2.9
1.0-5 million	14	13.6
5.0-10 million	35	34.0
10-25 million	27	26.2
More than 25 million	24	23.3

Note: Nigerian Naira to Euro Conversion 1NGN = 0.00250623 EUR 1 EUR = 399.005 NGN

4.2.1 Cost Structure

The cost structure of the respondent hotels is presented in Table 4.3. Regarding the weight of indirect costs in total costs, in 28 hotels (27.2%) they represent between 35% and 45% of total costs, in 17 (16.5%) hotels up to 35%, in 15 (14.6%) hotels between 55% and 65%, in 12 (11.7%) hotels between 45% and 55%, in 9 (8.7%) hotels more than 75%, and in 8 (7.8%) hotels between 65% and 75%. It is clear that in almost a third of the hotels indirect costs represent more than 55% of total costs. The results of the present study do not differ from those reported by Pavlatos and Paggios (2007), Faria (2012), and other studies that suggest that the hospitality industry has a high proportion of indirect costs (around 50%) (e.g. Brignall *et al.* 1991).

Regarding the weight of fixed costs in total costs, 45% and 55% has the highest percentage of fixed cost followed by 55% and 65%. The least percentage of fixed cost is 35%.

Table 4.3: Cost Structure

	Indirect cost		**Fixed cost**	
	N	**%**	**N**	**%**
Up to 35%	17	16.5%	8	7.8%
35%-45%	28	27.2%	13	12.6%
45%-55%	12	11.7%	19	18.4%
55%-65%	15	14.6%	17	16.5%
65% - 75%	8	7.8%	14	13.6%
Over 75%	9	8.7%	15	14.6%
Unknown	14	13.6%	17	16.5%
Total	**103**	**100%**	**103**	**100%**

4.2.2 Price Determination

The respondents were asked to indicate to what extent prices are determined by the hotel or by the market. The responses were placed on a five point Likert scale ranging from 1 (determined by the hotel) to 5 (determined by the market). The results in Table 4.4 show that 44 (42.7%) of the respondents indicated that prices are determined by the market while few respondents (6, 5.8%) noted that prices are determined by the hotel.

Table 4.4 - Price determination

	1 (determined by the hotel)	**2**	**3**	**4**	**5 (determined by the market)**
N	6	10	24	19	44
%	5.8%	9.7%	23.3%	18.4%	42.7%

4.2.3 Intensity of Competition in the Hotel Industry

Intensity of competition was measured using a five point Likert scale (1- Negligible to 5 Extremely intense) to measure different aspects of competition including price promotion, qualified labor force, and new services/packages. The majority of the sample believes price competition to be extremely intense (47, 45.6%); 6 (5.8%) believes to be negligible. Likewise, 32 (31.1%) consider also extremely intense the competition for qualified labor force and 12 (11.7%) perceive it as negligible. As for the competition for New services/packages, is it not intense for 34 (33%) hotels of the sample.

Table 4.5 Intensity of competition

Intensity of competition	1	2	3	4	5	Mean	Std. Deviation
Price competition	5.8%	9.7%	14.6%	24.3%	45.6%	3.94	1.235
Competition for qualified labour force	11.7%	9.7%	19.4%	28.2%	31.1%	3.57	1.333
New services/packages	8.7%	9.7%	24.3%	33.0%	24.3%	3.54	1.211

4.3 Management Accounting practices

Section C of the questionnaire elicited responses on who organized the actual MA system and the types of software system used.

4.3.1 Who organized the actual MA system?

As far as the responsible for the organization of the MA system (Table 4.6) is concerned, in slightly more than one third of the hotels, the decision to apply the current accounting system

was made by the management consulting company (32; 31.1%). In twenty-eight hotels (27.2%) it was other internal resources of the hotel / group that made such decision. In 18,4% and 14.6% of the hotels, the decision was made by the external consultant and the software house, respectively. Rarely did the manager or the actual responsible for the system made this decision (6, 5.9% and 3, 2.9%).

Table 4.6 Organization of the MA system

	N	%
Management consulting company	32	31.1
Other internal resources of the hotel/group	28	27.2
External consultant	19	18.4
Software house	15	14.6
Manager	6	5.9
The actual responsible for the system	3	2.9

4.3.2 Types of software system used in MA

The findings in Table 4.7 show that the majority (76, 73.8%) of the Nigerian hotel enterprises use an integrated package for both financial accounting and MA. Only few of the respondents (10 hotels, 9,7%) indicated that MA was done using spreadsheets or manually (7 hotels, 6.8%).

Table 4.7 - Software system used

	N	%
Integrated package for both Financial and Management Accounting	76	73.8
Management accounting is done in spreadsheets	10	9.7
Management accounting is done manually	7	6.8

4.3.3 Software application used

As for the software used in accounting (Table 4.8), Account Edge is the most used software among the hotels in Nigeria (32, 31.1%). Twenty-two (21.3%) respondents indicated that they use their own software. An integrated business management system such as Oracle and SAP

is used by nineteen (18.4%) and fifteen hotels (14.6%) respectively. Only few (15 hotels, 14.6%) indicated that they do not use any accounting software.

Table 4.8 Software application

Variable	*N*	*%*
Account Edge	32	31.1
None	15	14.6
Oracle	19	18.4
Own software	22	21.3
SAP	15	14.6

4.4 Use of MA Techniques

Respondents were asked to indicate which MA techniques have they adopted. Each MA practice is ranked according to the numbers of respondents who indicated their business has adopted their practice (Table 4.9).

Table 4.9- Use of MA Techniques

	N	%	Rank
Cost Accounting			
Variable costing	34	33%	9
Activity based costing (ABC)	33	32%	10
Standard costing	36	35%	8
Budgeting			
Activity based budgeting (ABB)	10	9.7%	18
Budgeting for controlling costs	62	60.2%	1
Budgeting for coordinating activities of the various parts of the organization	44	42.7%	4
Budgeting for evaluating the performance of managers	14	13.6%	15

Budgeting for long terms (strategic) plans	23	22.3%	12
Budgeting for planning annual operations	11	10.7%	17
Flexible budgeting	5	4.9%	23
Zero budgeting	7	6.8%	21
Performance Evaluation			
Balanced scorecard	38	36.9%	7
Benchmarking	49	47.6%	3
EVA	3	2.9%	24
Nonfinancial measures related to customers	7	6.8%	21
Nonfinancial measures related to employees	6	5.8%	22
Nonfinancial measures related to innovations	2	1.9%	25
Profitability measures (operating profit and revenue growth)	30	29.1%	11
Residual income	8	7.8%	20
Return on sales	6	5.8%	21
ROI	8	7.8%	20
Information for Decision Making			
Customer profitability analysis	59	57.8%	2
CVP analysis	20	19.6%	14
Product profitability analysis	42	38.2%	5
Strategic Analysis			
ABM	12	11.7%	16
Analysis of competitive position	41	39.8%	6
Analysis of competitors' strengths and weaknesses	21	20.4%	13
Industry analysis	38	36.9%	7

The first top techniques are: budgeting for controlling cost, customer profitability analysis, benchmarking, budgeting for coordinating activities of the various parts of the organization and product profitability analysis. The less used techniques are: non-financial measures related to innovations, EVA, flexible budgeting, non-financial measures related to employees, return on sales, residual income, activity based budgeting (ABB), long range forecasting. It is clearly observed that traditional MA techniques are widely used at hotels in Nigeria. This result is consistent with prior research results' (e.g. Pavlatos and Paggios, 2008; Faria *et al.*, 2012; Sunarni, 2015).

Cost Accounting

In relation to cost accounting, Table 4.9 shows that standard costing is the main technique used (36 hotels, 35%), followed by variable costing (34 hotels, 33%). Interestingly, contemporary techniques such as ABC (used by 33 hotels, 32%) are used by almost a third of the hotels in Nigeria. However, this usage of ABC is higher than that reported in a number of previous studies (Adamu & Olotu, 2009). It may be that, this result is not wholly credible. Perhaps the response reflects a desire by those answering to overstate their use of management accounting techniques to show a positive response for the survey. Another possible contributory reason is that some of the respondents might not understand the term and this led them to answer yes in case they did not use it.

Budgeting

With respect to budgeting, it can be seen in Table 4.9 that budgeting for controlling costs (60.2%), budgeting for coordinating activities of the various parts of the organization (42.7%), and budgeting for long term (strategic) plans (22.3%) are the most popular practices among the hotels in Nigeria. ABB (9.7%), zero budgeting (6.8%) and flexible budgeting (4.9%) reveal low adoption rates.

Performance Evaluation

Table 4.9 shows that benchmarking (49 hotels, 47.6% %) and balanced scorecard (38 hotels, 47.6%) have a high adoption rate followed by profitability measures (operating profit and revenue growth) 29.1% with relatively moderate used. Findings also show that management tools such as residual income (7.8%), ROI (7.8%), return on sales (5.8%), EVA (2.9%) and nonfinancial measures related to customers (6.8%), to employees (5.8%) and to innovations (1.9%) are less used. The low usage of non-financial measures found in this study may be

attributed to the size of the firms as it is difficult for smaller firms to employ as many performance measures as larger firms because of cost and other limitations. Besides, non-financial measures are recently-developed measures, their adoption may not be as widespread as opposed to the traditional measures which have long been used by many firms. Thus, these reasons might explain the low adoption rates of non-financial measures found in this study.

Information for Decision Making

In terms of adoption rates, among the three techniques listed under Information for decision making in Table 4.9, customer profitability analysis has the highest adoption rates (57.8%). Product profitability analysis were moderately adapted (38.2%) while results on CVP analysis (19.6%) reveal low adoption rates.

Strategic Analysis

With respect to strategic analysis, it can be seen in Table 4.9 that analysis of competitive position (39.8%) and industry analysis (36.9%) are the most used strategic analysis techniques among the hotels in Nigeria. Analysis of competitors' strengths and weaknesses 20.4% has relatively moderate used. However, results on ABM 11.7% and long range forecasting 8.7% reveal low adoption rates.

Further questions were asked form respondents that had indicated that their businesses used specific MA technique to specify the benefit derived from it (Table 4.10). A five-point Likert scale was used ranging from 1 (low benefit) to 5 (high benefit). Therefore, the closer the mean was to five, the more often a specific MA technique was used.

Regarding reported benefits in our survey, customer profitability analysis was ranked 1st, budgeting for planning annual operations was ranked 2nd followed by budgeting for controlling cost (ranked 5th) and absorption costing (ranked 8). Relatively moderate benefits were reported to be derived from balanced scorecard (ranked 13th), analysis of competitors' strengths and weaknesses (ranked 16th) and low benefits for ABB (ranked 29th) and residual income (ranked 30th). These findings suggest that traditional budgeting practices seem to provide higher benefits, rather than contemporary budgeting tools. The below results are consistent with the findings of Pavlatos and Paggios (2008), Santos *et al.*, (2010), Sunarni, (2015) and Mohamed (2017).

Table 4.10 - Benefits derived from MA Techniques

	Mean	Std. Dev	Rank
Customer profitability analysis	3.78	1.275	1
Budgeting for planning annual operations	3.76	1.142	2
Product profitability analysis	3.73	1.300	3
Budgeting for long terms (strategic) plans	3.72	1.133	4
Budgeting for controlling costs	3.72	1.216	5
Benchmarking	3.69	1.372	6
Industry analysis	3.54	1.282	7
Absorption costing	3.50	1.473	8
Budgeting for coordinating activities of the various parts of the organization	3.49	1.327	9
Profitability measures (operating profit and revenue growth)	3.48	1.162	10
Long range forecasting	3.46	1.370	11
Budgeting for evaluating the performance of managers	3.44	1.218	12
Balanced scorecard	3.44	1.296	13
ROI	3.42	1.354	14
Analysis of competitive position	3.31	1.306	15
Analysis of competitors' strengths and weaknesses	3.29	1.405	16
Variable costing	3.25	1.377	17
Standard costing	3.23	1.345	18
CVP analysis	3.21	1.152	19
Activity based costing (ABC)	3.17	1.458	20
Nonfinancial measures related to customers	3.17	1.235	21
Return on sales	3.06	1.290	22
Zero budgeting	3.02	1.328	23
Nonfinancial measures related to employees	2.99	1.295	24
EVA	2.96	1.212	25
Nonfinancial measures related to innovations	2.96	1.240	26
ABM	2.91	1.489	27
Flexible budgeting	2.90	1.280	28
Activity based budgeting (ABB)	2.88	1.523	29
Residual income	2.85	1.279	30

Hotels use management accounting mainly with the purpose of supporting their decision-making process (32%), budgeting process (14.6%) and for performance evaluation (14.6%) (See Table 4.11).

Table 4.11 - Purpose of using MA techniques

Variable	N	%
To support decision-making	33	32
To support the budgeting process	15	14.6
To support management information systems	6	5.8
For Financial reporting (preparation of income statements)	5	4.9
To estimate the cost of products/services	6	5.8
To comply with law obligations	2	1.9
For Performance evaluation	15	14.6
Other	21	20.4

The respondents were asked to indicate if their hotels had strategic planning. The results in Table 4.12. show that the majority (87.4%, 90 hotels) of the respondent hotels have strategic planning.

Table 4.12 Does your hotel have strategic planning?

Variable	N	%
Yes	90	87.4
No	13	12.6

4.5 Uniform System of Accounts for the Lodging Industry (USALI).

Survey participants were asked about their use of the USALI. The survey included questions about USALI actual use, who made decision to adopt the USALI, to what extent was the USALI used and reasons for not adopting the USALI.

More than half of the hotels 74 (71.2%) in the sample (Table 4.13) do not use the USALI; only few hotels adopt the USALI (29 hotels, 28.2%). The low adoption rate might be because two star hotels are included in the present study and these are less likely to use the USALI.

Table 4.13 - USALI usage

Does the Hotel use the USALI?	N	%
Yes	29	28.2
No	59	57.3
Considering using it in the future	14	13.6
Never heard of it	1	0.9%
Total	**103**	**100%**

Table 4.14 To what extent does the hotel follow the USALI?

Completely	21	72.4
In most but not all aspects	8	27.6

Surprisingly, not all the hotels which adopt the USALI (See Table 4.14) follow it completely, but the majority of follows it completely 72.4%, while the remaining 27.6% indicated in most but not all aspects. These findings were similar to those of previous studies. Faria *et al.* (2015) pointed that 80% of the sample uses USALI completely. Murteira (2017) reported that 65% of the respondents who adopted the USALI used it completely. In Table 4.15 the three reasons of non-adoption were listed: no skilled staff is the main reason for the non-adoption of USALI (42%), not being mandatory/compulsory (35.1%) and limitations in terms of financial resources (22.9%). These findings were slightly different from those of previous studies, such as Faria *et al*. (2015) and Murteira (2017) that point out "not being mandatory" as the main reason for the non adoption of the USALI and well as the satisfaction with the current system.

Table 4.15 - Why doesn't the hotel adopt the USALI?

Variable	*N*	*%*
Not compulsory	26	35.1
Limitations in terms of financial resources	17	22.9
No skilled staff (insufficient knowledge/experience)	31	42

In slightly more than one-half (58.6%) of the hotels (see Table 4.16), the decision to follow USALI was made by financial executive/controller; in 20.8% of the hotels the decision was made by general manager. For the remaining hotels the administration (17.2%) or the owner (3.4%) made the decision.

Table: 4.16 Who made the decision to adopt the Uniform System of Accounts?

Variable	N	%
Administration	5	17.2
Financial executive/Controller	17	58.6
General manager	6	20.8
Owner	1	3.4

4.17 Allocation of indirect costs

The respondents were asked about the allocation of indirect costs (Administrative and General, Sales and Marketing, Property Operation and Maintenance, Utilities and Fixed charges) to the revenue pool centers for the four purposes referred in the USALI. The responses were placed on a five Likert scale ranging from 1 (strongly disagree) to 5 (strongly disagree). A mean of above 3 is regarded to measure satisfaction on the test variables. Standard deviation was used to indicate the variation or "dispersion" from the "average" (mean). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data is spread out over a large range of values.

Table 4.17 - Allocation of indirect costs

	1 (Strongly disagree)	2	3	4	5 (Strongly agree)	Mean	Std. Deviation
Assessing the profitability of a department	10 9.7%	5 4.9%	12 11.7%	17 16.5%	59 57.3%	4.07	1.330
Determining prices for services and goods	6 5.8%	9 8.7%	18 17.5%	13 12.6%	57 55.3%	4.05	1.279
Considering whether outsourcing for services is practicable	18 17.5%	3 2.9%	27 26.2%	15 14.6%	39 37.9%	3.70	1.454
To provide departmental manager with more incentive to monitor the costs of service departments	14 13.76%	8 7.8%	20 19.4%	14 13.6%	47 45.6%	3.53	1.467

As shown in Table 4.17, 57.3% of the respondents strongly agree with the allocation of indirect costs to assess the profitability of a department, followed by to determine prices for services and goods (55.3%) and to provide departmental manager with more incentive to monitor the costs of service departments (45.6%). To consider whether outsourcing for services is practicable received the lowest rate(37.9%)

In Table 4.18 respondents were asked to rate the importance of each of those standards/tools to the financial management of the hotel. The evaluation of each standard/tool is measured by a five point Likert scale, where one is “least important” and five is “most important”. The National Accounting Standards and International Accounting Standards (IAS/IFRS's) clearly rank as being more important than USALI and Internal Revenue Code (IRC). Considering the four standards/tools, the average response from respondents results in the National Accounting Standards being ranked as the most important (51.4%) followed closely by International Accounting Standards (IAS/IFRS's), verified for 49.5% of the sample. As for USALI, it's most important by 38.7%. Finally, IRC also ranks as most important, for 30% of the sample. This findings differ from those obtained by Kwansa and Schmidgall (1999), in the role of USALI in the management of US hotel businesses, where it is concluded that the USALI and the IRC, are clearly more important than the American (FASB) standards.

Table 4.18 Importance of each of the standards/tools to the financial management of the

	1 (Least important)	**2**	**3**	**4**	**5 (Most important)**	**Mean**	**Std. Deviation**
USALI	17 16.7%	6 5.8%	13 12.6%	27 26.2%	40 38.7%	3.68	1.174
National Accounting Standards	9 8.7%	12 11.7%	5 4.9%	24 23.3%	53 51.4%	3.97	1.354
International Accounting Standards (IAS/IFRS's)	3 2.9%	14 13.6%	7 6.8%	28 27.2%	51 49.5%	4.07	1.443
IRC code/tax legislation costs of service departments	18 17.5%	14 13.6%	11 10.7%	29 28.2%	31 30%	3.40	1.478

As summarized in Table 4.18, none of the 2 and 3 star hotels surveyed adopt the USALI. Almost all of the five star hotels (80%) adopt the USALI, while the proportion of four star hotels adopting it is much lower (40.5%).

Table 4.18: USALI Adoption/Star Rating

USALI Adoption	2 Stars	3 Stars	4 Stars	5 Stars	Total
Yes	0	0	17 40.5%	12 80%	29
No	17	29	25 59.5%	3 20%	74
Total	**17**	**29**	**42**	**15**	**103**

According to the data in Table 4.20, 42.1% from the hotels belonging to international chains use the USALI, followed by hotels belonging to national chains (28.6%) and by independent hotels (24.3%).

Table 4.20: USALI Adoption/Affiliation Hotel

USALI Adoption	Independent	International	National	Total
Yes	17 24.3%	8 42.1%	4 28.6%	29
No	53 75.7%	11 57.9%	10 71.4%	74
Total	**70**	**19**	**14**	**103**

Table 4.21 shows the frequencies of USALI's usage per sales volume. Hotels with larger level of sales (greater than 5Million Naira) tend to use USALI and hotels with smaller level of sales (less than 5Million Naira) do not tend to use the USALI.

4.21: USALI Adoption/Sales Volume

USALI Adoption	1-5M	5-10M	10-25M	Above 25M	Total
Yes	1	7	9	12	29
No	18	26	18	12	74
Total	**19**	**33**	**27**	**24**	**103**

4.6 SUMMARY OF THE CHAPTER

The primary focus of this chapter was to analyze and discuss the results of the questionnaire survey conducted to investigate the state of MA in hotels in Nigeria. The chapter analyzed and discussed the results on the types of MA techniques used, the benefits derived from traditional and contemporary MA practices, and the level of adoption of the Uniform System of Accounts for the Lodging Industry (USALI) by the hotels in Nigeria.

Regarding the types of MA techniques used, the top techniques are budgeting for controlling cost, customer profitability analysis, benchmarking, budgeting for coordinating activities of the various parts of the organization and product profitability analysis. The less used techniques are: non-financial measures related to innovations, EVA, flexible budgeting, non-financial measures related to employees, return on sales, residual income, activity based budgeting (ABB), long range forecasting. It is clearly observed that traditional MA techniques are widely used at hotels in Nigeria.

Concerning reported benefits in our survey, customer profitability analysis was ranked 1st, budgeting for planning annual operations was ranked 2nd followed by product profitability analysis (ranked 3rd), budgeting for long terms (strategic) plans was ranked 4th, and budgeting for controlling cost (ranked 5th). Relatively moderate benefits were reported to be derived from analysis of competitive position (ranked 15th), activity based costing (ABC) (ranked 20th), nonfinancial measures related to customers (ranked 21st) and low benefits were recorded for ABM (ranked 27th), activity based budgeting (ABB) ranked 29th and residual income (ranked 30th). These findings suggest that traditional MA seem to provide higher benefits, rather than contemporary MA techniques.

Regarding the level of adoption of the USALI, more than half of the hotels (74 hotels, 71.8%) in the sample don't use the USALI; only few hotels adopt it (29 hotels, 28.2%). No skilled staff is the main reason for the non-adoption of this accounting standard. Surprisingly, not all the hotels which adopt the USALI do it completely, but the majority of them use it completely 72.4% (21), while the remaining 27.6% (8) indicated in most but not all aspects. In terms of classification, none of the 2 and 3 stars hotels surveyed adopt USALI. Almost all of the five stars hotels (12, 80%) adopt the USALI, while the proportion of four stars hotel adopting it is much lower (40.5%).

CHAPTER FIVE

5. MULTIVARIATE AND BIVARIATE ANALYSIS

This chapter seeks to further analyze the data set using multivariate and bivariate analysis. As it was explained in section 3.6 when we do the multivariate analysis to the construction of cluster, we are getting 95% of the total variance explained which means that the multivariate analysis explained 95% of the sample. This means that we can proceed with the technique.

5.1.1 Hotel's location

From the findings in table 5.1 below, cluster 1 is composed mostly by hotels located in the South, cluster 2 and 3, location not specific.

Table 5.1 Response Rate

Hotel location	Cluster			Total
	1	2	3	
North-Central	5	12	5	22
North-Eastern	0	1	2	3
North-Western	2	1	5	8
South-Eastern	1	2	3	6
South-Southern	3	6	3	12
South-Western	16	18	18	52
Total	27	40	36	103

5.1.2 Respondents' Age

As far as the respondents' age is concerned the findings in Table 5.2 show that age doesn't look like a relevant factor that can give a lot of information because there is not a lot of splitage between them.

Table 5.2: Respondents' Age

Age	Cluster			Total
	1	2	3	
35-50 years	16	26	15	57
Above 50 years	7	11	12	30
Up to 35 years	4	3	9	16
Total	27	40	36	103

5.1.3 Level of education

With respect to respondents' level of education it seems education is not a relevant factor according to the cluster result in Table 5.3.

Table 5.3: Level of education

Academic qualifications	Cluster			Total
	1	2	3	
High School	0	2	3	5
Bachelor's degree	11	20	18	49
Master's Degree	13	15	14	42
Doctor Degree	3	3	1	7
Total	27	40	36	103

5.1.4 Respondents' position

With regard to the respondents' position, the analysis of the results (Table 5.4) indicates that cluster 3 is composed clearly by managers but in clusters 1 and 2, the positions are not clearly defined.

Table 5.4: Respondents' position

Position	Cluster			Total
	1	2	3	
Accounting Manager	8	16	6	30
Financial Manager	4	5	7	16
Manager	15	19	23	57
Total	27	40	36	103

5.1.5 Years of experience

As far as the respondents' years of experience in the hospitality industry as either managers, financial managers or accountants is concerned, the result on table 5.5 shows that Cluster 2 is composed by individuals with more than 3 years of experience but Clusters 1 and 3 are not specific about experience.

Table 5.5: Years of experience

Years of experience	Cluster			Total
	1	2	3	
1-3 years	3	1	7	11
4-10 years	16	24	13	53
More than 10 years	8	15	16	39
Total	27	40	36	103

5.1.6 Number of years in operation

Regarding the number of years in operation the result in Table 5.6 indicates that all cluster show NOT NEW hotels, however, cluster 2 clearly with more than 3 years in business. This means that an overwhelming majority of the hotels are in business for more than 3 years.

Table 5.6: Years of operations

Years of operations	Cluster			Total
	1	2	3	
1-3 years	2	0	4	6
4-10 years	14	15	14	43
More than 10 years	11	25	18	54
Total	27	40	36	103

5.1.7 Hotel affiliation

Table 5.7 shows the findings for the variable hotel affiliation. Affiliation doesn't look like a relevant factor in the kind of MA techniques adopted. This is to say that being a hotel chain is not necessarily correlated with MA usage.

Table 5.7 Hotel affiliation

Hotel affiliation	Cluster			Total
	1	2	3	
Independent	14	29	27	70
International hotel chain	9	6	4	19
National hotel chain	4	5	5	14
Total	27	40	36	103

5.1.8 Hotel star rating

In terms of classification, Cluster 1 is composed by 4 and 5 stars hotels, Cluster 2 by 3 and 4 stars hotels, Cluster 3 by all categories of hotels. The findings in Table 5.8 show that cluster 1 are mainstream/normal hotel.

Table 5.8 Star rating

Star rating	Cluster			Total
	1	2	3	
2 Stars	2	8	7	17
3 Stars	3	15	11	29
4 Stars	18	14	10	42
5 Stars	4	3	8	15
Total	27	40	36	103

5.1.9 Hotels' size

Regarding the hotels' size, Table 5.9 shows cluster 1 has 200-500 beds, Cluster 2 has under 500 beds, Cluster 3 has mainly 50-500 beds. In terms of number of employees Cluster 2 has under 200 employees. In addition, Table 5.9 shows the cluster result of MA usage per sales volume. Cluster 1: more than 5million naira turnover, cluster 2: more than 1million naira, cluster 3: all types.

Table 5.9 Hotels' size

Hotels' size	Cluster			Total
	1	2	3	
No of Beds				
Under 50	1	2	3	6
51-100	2	14	14	30
101-200	2	6	2	10
201-300	13	10	9	32
300-500	8	8	8	24
Above 500	1	0	0	1
No of Employees				
Under 50	4	14	16	34
51-100	16	20	12	48
101-200	4	6	7	17
201-300	3	0	1	4
Annual Sales Turnover				
500,000-1million	0	0	3	3
1.0-5million	1	7	6	14
5.0-10million	10	11	14	35
10-25million	9	13	5	27
More than 25 million	7	9	8	24
Total	27	40	36	103

Note: Nigerian Naira to Euro Conversion 1NGN = 0.00250623 EUR 1 EUR = 399.005 NGN

5.1.10 Cost Structure

The cost structure is presented in Table 5.10. Indirect cost doesn't seem relevant because there's not a lot of splitage between them but regarding the weight of fixed costs in total costs the findings show that Cluster 1 has over 35% fixed cost**.**

Table 5.10: Indirect costs to total cost

Indirect cost	Cluster			Total
	1	2	3	
Up to 35%	6	4	7	17
35%-45%	9	12	7	28
45%-55%	3	4	5	12
55%-65%	2	6	7	15
65% - 75%	2	3	3	8
Over 75%	3	3	3	9
Unknown	2	8	4	14
Total	27	40	36	103

Fixed cost	Cluster			Total
	1	2	3	
Up to 35%	0	4	4	8
35%-45%	2	4	7	13
45%-55%	6	6	7	9
55%-65%	7	2	8	17
65% - 75%	5	6	3	14
Over 75%	5	6	4	15
Unknown	2	12	3	17
Total	27	40	36	103

5.1.11 Price Determination

The respondents were asked to indicate to what extent prices are determined by the hotel or by the market. The responses were placed on a five Likert scale ranging from 1 (determined by the hotel) to 5 (determined by the market). The results in Table 5.11 show that in cluster 2 the price determination is done by the market, in clusters 1 and 3 it is not relevant.

Table 5.11 Price determination

Cluster	Price Determination					Total
	1 (determined by the hotel)	2	3	4	5 (determined by the market)	
1	2	5	5	7	8	27
2	0	2	8	6	24	40
3	4	3	11	6	12	36
Total	6	10	24	19	44	103

5.1.12 Intensity of Competition in the Hotel Industry

In Table 5.12, the findings show that hotels in Cluster 2 face intense competition for price, labour force competition and hotels in Cluster 1 and 2 face competition for new services/packages.

Table 5.12 Intensity of competition

	Price competition					
	1 (negligible)	2	3	4	5 (extremely intense)	Total
1	2	5	4	8	8	27
2	0	2	5	10	23	40
3	4	3	6	7	16	36
Total	6	10	15	25	47	103
	Competition for qualified labor force					
	1 (negligible)	2	3	4	5 (extremely intense)	Total
1	3	2	6	7	9	27
2	2	5	7	13	13	40
3	7	3	7	9	10	36
Total	12	10	20	29	32	103
	Competition for new services/package					
	1 (negligible)	2	3	4	5 (extremely intense)	Total
1	3	3	8	10	3	27
2	1	3	8	18	10	40
3	5	4	9	6	12	36
Total	9	10	25	34	25	103

5.1.13 Types of software system used in MA

In Table 4.13, Cluster 1 shows that the majority of the Nigerian hotel enterprises use an integrated package for both financial accounting and MA. Hotels in Clusters 2 and 3 use spreadsheets or do MA manually.

Table 4.13 Software used

What type of software system is used in MA?	Cluster			Total
	1	2	3	
An integrated package for both Financial and MA	23	37	26	76
MA is done in spreadsheets	1	5	4	10
MA is done manually	1	3	3	7
Total	25	35	33	93

5.1.14 Software application used

As for the software used in accounting, Table 5.14 shows that the Software application doesn't seem a relevant factor that can give a lot of information because there is not a significant splitage between them.

Table 5.14 Software application used

What type of software system is used in MA?	Cluster			Total
	1	**2**	**3**	
Account Edge	9	15	8	32
None	2	5	8	15
Oracle	7	6	6	19
Own Software	5	9	8	22
SAP	4	5	6	15
Total	27	40	36	103

5.2 Use of MA Techniques

5.2.1 Cost Accounting

In relation to cost accounting, Table 5.15 shows that cost accounting is not a relevant variable in the multivariate analysis because all the techniques are in the same proportion. It will be analysed through bivariate analysis.

Table 5.15 Cost Accounting Techniques

Cost Accounting	Cluster			Total
	1	2	3	
Variable costing	9	10	15	34
ABC	9	15	9	33
Standard costing	9	15	12	36
Total	27	40	36	103

5.2.2 Budgeting

With respect to budgeting, it can be seen in Table 5.16 that hotels in Cluster 3 mainly use budgeting for controlling cost, coordinating activities and strategic plan (MANAGEMENT BUDGETING). Cluster 1 and 2: the use of budgeting for these purposes is not so relevant.

Table 5.16 Budgeting

Budgeting	Cluster			Total
	1	**2**	**3**	
ABB	2	3	5	10
Budgeting for controlling cost	11	15	34	62
Budgeting for coordinating activities	6	11	27	44
Budgeting for evaluating the performance of	4	6	4	14
manager	2	7	14	23
Budgeting for long terms (strategic) plans	0	4	7	11
Budgeting for planning annual operations	3	0	2	5
Flexible budget	2	1	4	7
Zero budgeting				
Total	30	47	97	174

5.2.3 Performance Evaluation

In Table 5.17 regarding performance evaluation cluster one is showing clearly that are advanced hotels because they use techniques such as BSC, profitability measures and residual income. But, surprisingly, those in Lluster 1 do not use it in an intensive way because they don't use non nonfinancial measures related to customers, employees and innovation. Clusters 2 and 3 are composed by hotels that adopt benchmarking, BSC and profitability measures.

Table 5.17: Performance Evaluation

Performance Evaluation	Cluster			Total
	1	**2**	**3**	
Balanced scorecard	4	11	23	38
Benchmarking	2	18	29	49
EVA	0	2	1	3
Nonfinancial measures related to customers	0	1	6	7
Nonfinancial measures related to employees	0	2	4	6
Nonfinancial measures related to innovation	0	0	2	2
Profitability measures	12	7	11	30
Residual income	5	1	2	8
Return on sales	2	1	3	6
ROI	2	3	3	8
Total	27	46	82	157

5.2.4 Information for Decision Making

In terms of adoption rates, among the three techniques listed under Information for decision making in Table 5.18, hotels in cluster 3 use customer analysis and profitability; hotels in clusters 1 and 2 do use all the techniques. Maybe most of them don't know what CVP analysis is.

Table 5.18 Information for Decision Making

Information for Decision Making	Cluster			Total
	1	2	3	
Customer profitability analysis	11	15	21	47
CVP analysis	8	12	2	22
Product profitability analysis	8	13	13	34
Total	27	40	36	103

Strategic Analysis

With respect to strategic analysis, it can be seen in Table 5.19 that most of the hotels analyze the competitive position. However hotels in cluster 2 also use Industry analysis because, as seen before, they compete with price. Most of the strategic analysis in cluster 2 is based on market that shows clearly that cluster 2 are mainstream hotels.

Table 5.19 Strategic Analysis

Strategic Analysis	Cluster			Total
	1	2	3	
ABM	3	2	7	12
Analysis of competitive position	11	12	18	41
Analysis of competitor's strengths	9	7	5	21
Industry analysis	4	16	5	25
Long rang forecasting	0	3	1	4
Total	27	40	36	103

5.3 Cluster Construction Analysis

Based on the obtained crosstabs, for the clusters, the clusters are constructed (See Table 5.20) in the following way:

Table 5.20 Cluster Construction

Cluster 1	Cluster 2	Cluster 3
South hotels 4-5 stars Not new hotels Managers have Bachelor or Master degree 200-500 beds More than 5million in revenue More than 35% in fixed costs Competing for new services/products With an integrated software both for finance and MA Performance evaluation: Balance Scorecard, Profitability and Residual income.	North Central and South Western hotels Manager over 35 years of Age Managers have Bachelor or Master degree Over 3 years of experience More than 3 years of business activity 3-4 star hotels Less than 500 beds Less than 200 employees More than 1 Million in revenue Price defined by market Intense price competition Competition for new services / packages Performance evaluation: Balance Scorecard, Profitability and Residual income	Mainly manager position respondents Mostly independent hotels 50-500 beds Intense price competition Integrated package software for financial and MA Budgeting for: controlling cost, coordinating activities and strategic planning Performance evaluation: Benchmarking, balance scorecard and profitability measures Costumer analysis and profitability analysis Strategic Analysis

Based on the above information, it was decided that:

Because cluster 1 is composed by 4 and 5 stars hotels, its competing with new services/packaging using an integrated software we have decided to call it High-end hotel management.

Because cluster 2 is composed of 3 and 4 star hotels, with less than 500 beds, and they compete on price we have decided to call it: Normal/Mainstream high competition hotels

Because Cluster 3 is mainly composed by independent hotels, including all types of categories (stars) and all types of location, we have decided to call it Independent hotel.

The preceding analysis showed that hotels in different clusters compete using different strategies. Hotels in cluster 1 are competing with innovation (new services/packaging) and technology (new software), whilst hotels in cluster 2 are competing with price. Is relevant to do a financial analysis to understand how the elements in both clusters are conditioned by this different strategies.

Cluster 3 is composed by independent hotels, that showed mixed strategies, so this units should be similar to the results of the financial analysis of both clusters 1 and 2.

5.4 Bivariate Analysis

To understand the financial behavior among the hotels Crosstab and Chi-square tests will be used to analyses the data. The results of these tests are presented below.

Table 5.21 shows a surprisingly high uptake of individual techniques, given that few hotels will use probably more than one costing technique. The overall uptakes of small and large sized hotels are similar. In terms of variable costing, 4 star hotels have the highest adoption rate followed by 3 and 2 star hotels. None of the 5 star hotels surveyed adopted variable costing techniques.

Surprisingly, 3 star hotels have the highest adoption rate of ABC techniques, in comparison with 4 and 5 star hotels. However, this ABC usage is higher than that reported in a number of previous studies. It may be that this result is not wholly credible. Perhaps the response reflects a desire by those answering to overstate their use of management accounting techniques to show a positive response for the survey. Another possible contributory reason is that some of the respondents might not understand the term and this led them to answer yes even if they didn't use it.

Table 5.21 Cost Accounting

	Cost Accounting						
	2 Stars	**3 Stars**	**4 Stars**	**5 Stars**	**Total**	**%**	**Rank**
Variable costing	8	8	18	0	34	33%	9
Activity based costing (ABC)	3	14	6	10	33	32%	10
Standard costing	6	7	18	5	36	35%	8

Table 5.22 shows that in relation to the type of budget methods, 4 star hotels obviously have indicated higher adoption rates of all budget methods in comparison with others. Of all the budget methods listed, Budgeting for controlling costs is used by 60% of all respondents with a budget system. Flexible budgeting and ABB are the least reported techniques. However, 5 star hotels have a significantly higher uptake of ABB over small hotels.

Table 5.22 Budgeting

	Budgeting						
	2 Stars	**3 Stars**	**4 Stars**	**5 Stars**	**Total**	**%**	**Rank**
Activity based budgeting (ABB)	1	3	2	4	10	9.7%	18
Budgeting for controlling cost	11	15	26	8	60	60.2%	1
Budgeting for coordinating activities	6	11	21	6	44	42.7%	4
Budgeting for evaluating the performance of managers	4	6	3	1	14	13.6%	15
Budgeting for long terms (strategic) plans	2	7	10	4	23	22.3%	12
Budgeting for planning annual operations	0	4	4	3	11	10.7%	17
Flexible budgeting	3	0	2	0	5	4.9%	23
Zero budgeting	2	1	3	1	7	6.8%	21

The findings in Table 5.23 indicate that the majority of hotels reporting use of performance evaluation measures make considerable use of a range of performance measures with uptakes across categories varying from a minimum of 8% up to 49%. Large sized hotels have a much higher use of these measures compared to small size hotels. Nevertheless, both small and large hotels show significant adoption rates of most performance evaluation measures.

Among 10 performance measures/systems listed, balanced scorecard, benchmarking and profitability measures (operating profit and revenue growth) are the most popular measures;

with nearly 80% of the hotels using performance measures reporting their use. Nonfinancial measures and EVA are the least used.

Table 5.23 Performance Evaluation

	Performance Evaluation						
	2 Stars	**3 Stars**	**4 Stars**	**5 Stars**	**Total**	**%**	**Rank**
Balanced scorecard	4	11	14	9	38	36.9%	7
Benchmarking	2	18	23	6	49	47.3%	3
EVA	0	2	0	1	3	2.95	24
Nonfinancial measures related to customers	0	1	2	4	7	6.8%	21
Nonfinancial measures related to employees	0	2	2	2	6	5.8%	22
Nonfinancial measures related to innovations	0	0	0	2	2	1.9%	25
Profitability measures (operating profit and revenue growth)	12	7	8	3	30	29.1%	11
Residual income	5	1	2	0	8	7.8%	20
Return on sales	2	1	2	1	6	5.8%	21
ROI	2	3	3	0	8	7.8%	20

In Table 5.24 it can be seen that the overall adoption of decision support systems is moderate. Four star hotels have use more all techniques than others. This finding clearly suggests that larger sized hotels are more likely to use a more sophisticated approach to management accounting. Among the three techniques listed under the information for decision making, the most used technique is customer profitability analysis followed by product profitability analysis. CVP analysis is adopted by a slightly lower percentage of those respondents who made some use of decisions support systems.

Table 5.24 Information for Decision Making

	Information for Decision Making						
	2 Stars	**3 Stars**	**4 Stars**	**5 Stars**	**Total**	**%**	**Rank**
Customer profitability analysis	13	12	26	8	59	57.8%	2
CVP analysis	3	7	8	0	20	19.6%	14
Product profitability analysis	1	10	24	7	42	38.2%	5

Table 5.25 indicates that the overall uptake of individual strategic MA techniques is moderate among respondents who reported use of SMA techniques. Small sized hotels have a considerably lower adoption rate than large sized hotels. As has been discussed in the previous section 6.4.1, given the SMA is an advanced management accounting practice and is therefore more likely to be employed by larger firms who will have a more sophisticated approach to strategic planning.

Table 5.25 *Strategic Analysis*

	Strategic Analysis						
	2 Stars	**3 Stars**	**4 Stars**	**5 Stars**	**Total**	**%**	**Rank**
ABM	3	2	4	3	12	11.7%	16
Analysis of competitive position	11	5	22	3	41	39.8%	6
Analysis of competitors' strengths and weaknesses	1	12	4	4	21	20.4%	13
Industry analysis	2	10	22	4	38	36.9%	7
Long range forecasting	0	0	8	1	9	8.7%	19

Are there any statistically significant differences between management accounting techniques adopters and no adopters?

This study employs Chi Square to test whether the MA tools adopters are different from non-adopters. This means that the study tris to find whether hotels that adopt each MA practice have any characteristics that distinguish them from hotels that do not adopt them. Contingency theory is adopted to demonstrate how specific aspects of an accounting system are associated with various contextual variables such as hotel size (measured in terms of sales

revenue), cost structure (indirect cost to total (per cent), level of competition (hotels were asked to indicate the price competition that face their company).

The results in Table 5.26 show the significance levels between pair of variables including: ABC adopters and non-adopters, hotel size, intensity of competition, and the cost structure of the hotel. Except for one variable in table 5.26. It is clearly observed that the levels of significance for all the other variables are greater than 0.05. This implies that there are no statistically significant differences in the level of competition as well as cost structure, between ABC adopters and non-adopters. For the exception variable, that is, sales revenue, it is clearly observed that there are statistically significant differences (v= 26.584, p = .046), in sales revenue between ABC adopters and non-adopters. Therefore, hotels that use ABC techniques have a higher sales revenue than those that do not use this contemporary MA tool.

Table 5.26

Cost Accounting			
ABC adopters & non-adopters	**Value**	**df**	**Sig.**
Sales revenue 2017 (Naira)	**26.584**	**16**	**0.046**
Indirect cost to total (per cent)	**21.532**	**24**	**0.607**
Level of competition	**14.992**	**16**	**0.525**

The results in Table 5.27 shows the significance levels between pair of variables including: the use of MA techniques (ABB adopter and non-adopter and Flexible Budget adopters and non-adopters), hotel size, intensity of competition, and the cost structure of the hotel. It is clearly observed that there are statistically significant differences in sales revenue between ABB adopters and non-adopters (v = 32.110, p = .010). Therefore, hotels that use ABB techniques have a higher sales revenue than those that do not use this MA tool. However, the relationships between the indirect costs and the use of ABB techniques is not significant. Similarly, the relationship between the level of competition and the use of ABB techniques is not significant. Besides, it is clearly observed that the levels of significance for all the other variables were greater than 0.05. This means that there were no statistically significant differences in sales revenue, the level of competition as well as cost structure, between Flexible Budget adopters and non-adopters.

Table 5.27

Budgeting ABB adopters & non-adopters	Value	Df	Sig.
Sales revenue 2017 (Naira)	**32.110**	**16**	**0.010**
Indirect cost to total (per cent)	**18.964**	**24**	**0.754**
Level of competition	**19.106**	**16**	**0.263**
Flexible Budget adopters & non-adopters			
Sales revenue 2017 (Naira)	**26.115**	**16**	**0.052**
Indirect cost to total (per cent)	**18.978**	**24**	**0.753**
Level of competition	**19.980**	**16**	**0.221**

The results in Table 5.28 show the significance levels between pair of variables including: the use of MA techniques (Balanced scorecard adopters and non-adopters and Benchmarking adopters & non-adopters), the size of the hotel, intensity of competition, and the cost structure of the hotel. It is clearly observed that the levels of significance for all the variables were greater than 0.05. This implies that there are no statistically significant differences in sales revenue, the level of competition as well as cost structure, between balanced scorecard adopters and non-adopters. Similarly, there are no statistically significant differences in sales revenue, the level of competition, as well as cost structure, between benchmarking adopters & non-adopters.

Table 5.28

Performance Evaluation Balanced scorecard adopters & non-adopters	value	Df	Sig.
Sales revenue 2017 (Naira)	**21.416**	**16**	**0.163**
Indirect cost to total (per cent)	**21.057**	**24**	**0.635**
Level of competition	**20.111**	**16**	**0.215**
Benchmarking adopters & non-adopters			
Sales revenue 2017 (Naira)	**18.164**	**16**	**0.314**
Indirect cost to total (per cent)	**22.938**	**24**	**0.929**
Level of competition	**23.496**	**16**	**0.101**

The results in Table 5.29 show the significance levels between pair of variables including: the use of MA techniques (CPA adopters and non-adopters and CVP adopters & non-adopters), the size of the hotel, intensity of competition, and the cost structure of the hotel. It is clearly observed that the levels of significance for all the variables were greater than 0.05.

This implies that there were no statistically significant differences in sales revenue, the level of competition as well as cost structure, between CPA adopters and non-adopters. Similarly, there were no statistically significant differences in sales revenue, the level of competition as well as cost structure, between CVP adopters & non-adopters.

Table 5.29

Information for Decision Making			
CPA adopters & non-adopters	**value**	**Df**	**Sig.**
Sales revenue 2017 (Naira)	**17.193**	**16**	**0.373**
Indirect cost to total (per cent)	**22.112**	**24**	**0.537**
Level of competition	**12.783**	**16**	**0.689**
CVP adopters & non-adopters			
Sales revenue 2017 (Naira)	**21.333**	**16**	**0.166**
Indirect cost to total (per cent)	**24.138**	**24**	**0.454**
Level of competition	**23.048**	**16**	**0.112**

In summary, the above discussion shows that the majority of respondents have used the five management accounting areas identified. Use of the cost accounting, budgeting and performance evaluation systems are significantly higher than for the decision support system and SMA, which indicates that the adoption rate of traditional MA techniques is greater than for sophisticated MA techniques. The results for all practices also indicates a higher usage by large sized hotels as opposed to small sized hotels.

This finding contrasts with the cluster analysis made earlier. So in both cluster 1 and 2 there are adopters of MA techniques and non-adopters, thus, the profile of the hotel is not relevant for the adaption of MA techniques.

CHAPTER SIX

6. SUMMARY, RECOMMENDATIONS AND FUTURE RESEARCH

This chapter summarizes the findings and derives conclusions on the state of management accounting in hotels in Nigeria. The dearth of research on the usage of management accounting techniques among the hotels in this country motivated this study. To achieve the afore-mentioned aim, a questionnaire survey was conducted.

6.1 SUMMARY

The questionnaires were administered to 200 hotels across the six geo-political zones in Nigeria. Out of the 200 questionnaires that were distributed, 103 usable questionnaires were returned, resulting in a response rate of 51.5%. The relatively high response rate was achieved through hand delivery and collection of the questionnaire, as well as constant follow-up also minimized non-response bias.

The data was analysed, discussed and interpreted on the basis of the study objectives, which were to investigate the level of adoption of management accounting techniques in Nigerian hotels, to ascertain their relevance to the decision making process and to identify the level of application of the Uniform System of Accounts for the Lodging Industry (USALI) by the hotels in Nigeria.

Out of 103 filled questionnaires, 40.8% were 4 stars hotels, 28.2% were 3 stars, 16.5% were 2 stars and 14.5% were 5-star hotels. 55.3% were managers, 29.1% were accounting managers, while 15.5% were financial managers. With regard to the respondent's years of experience in the above-mentioned positions, 50% had more than five years of experience in their respective positions. About 95% of the respondents had either a bachelors' degree, a masters' degree or a doctorate's degree. Given the above profile, respondents were expected to be knowledgeable about the operations of their businesses, particularly with regard to the usage of management accounting techniques by their businesses.

According to the management status of the hotel; 68% of the hotels were independent, 18.4% of the hotels were members of international chain, and 13.6% of hotels were members of national chain. It was observed that most (46.6%) of the respondents' hotel

have 51-100 employees, 101-200 rooms, 201-300 beds and 5-10 Million Naira annual turnover.

Regarding the weight of indirect costs in total costs, in a high proportion of hotels (27.2%) they represent between 35% and 45%, and more than 45% and 55% for fixed costs in total cost. The results of the present study do not differ from those reported by Pavlatos and Paggios (2007) and Brignall *et al*. (1991) which found that most hotels have a high proportion of fixed cost with approximately three quarters of the total cost of a hotel being fixed and uncontrollable.

Concerning the intensity of competition among the hotels in Nigeria, the results revealed that the majority of the respondents considered competition for price extremely intensive followed by competition for qualified labour force. New services/packages have the lowest competition score. This result is consistent with those reported in most of the studies reviewed (Ahmad, 2012; Hatem, 2017). Ahmad (2012) mentioned that intensity of market competition is an external factor of competition and managers need to gain knowledge and experience regarding new costing system to compete in an intense market competition.

As far as the organization of management of accounting is concerned, this study reveals that more than one third of the management accounting systems were organized by a management consulting company (31%); 27% of the decisions were made by other internal resources of the hotel / group. Also, the main software used in accounting, apart from Excel or equivalent, is Account Edge, Oracle or SAP. Only few hotels (4.6%) indicated that they do not use any accounting software.

Concerning the adoption of cost accounting tools, the results revealed that standard costing is the most adopted technique followed by variable costing. Activity based costing (ABC) has the least usage among the hotels in Nigeria. So, we can conclude that traditional cost accounting techniques are the most used among the hotels in Nigeria, which is in line with the findings of similar surveys by Pavlatos and Paggios (2008), in Greece, Sunarni, (2015) in Indonesia and Mohamed (2017) in Bahrain. However, ABC has started to gain popularity among the hotels in Nigeria, considering the relatively high adoption rate (32%).

Concerning the adoption of budgeting tools, the results revealed that budgeting for controlling costs, budgeting for coordinating activities of the various parts of the organization, and budgeting for long term (strategic) plans are the most popular practices among the hotels in Nigeria. While results on activity based budgeting (ABB), zero budgeting, and flexible

budgeting reveal low adoption rates, traditional budgeting techniques adoption rate show they are popular among the hotels in Nigeria which is in line with the findings of similar surveys (Jones, 1998; Pavlatos & Paggios, 2008; Santos *et al.*, 2009).

Explanation for the low usage of flexible budgeting can be supported by the findings of Collier and Gregory (1995). They believe this is due to the relatively high fixed cost base of the hotel sector. It is possible there is little to be gained in using flexible budgeting within hotels; the technique is of best use in high variable cost situations. Clearly, this reason for the lack of use of flexible budgeting is logical, given the nature of costs, but more research is needed to confirm the situation. ABB and zero-based budgeting reveal low adoption rates. It would not be expected zero-based budgeting to be strongly applied but it is surprising to see that the adoption rate of this technique is higher than that of flexible budgeting.

As far as the adoption of performance measurement tools is concerned, the results revealed that benchmarking and balanced scorecard have high adoption rates followed by profitability measures (operating profit and revenue growth) with relatively moderate used. Findings also show that the management tools residual income, ROI, return on sales, EVA and nonfinancial measures related to customers, related to employees and related to innovations were used in relatively lower degree.

The lower use of non-financial measures may be attributed to the size of the as it is difficult for smaller firms to employ as many performance measures as larger firms because of cost and other limitations. With regard to Information for decision making, customer profitability analysis has the highest adoption rates. Product profitability analysis were moderately adapted while results on CVP anaiysis reveal low adoption rates. These results are consistent with the findings of Pavlatos and Paggios (2008).

Concerning the adoption of strategic analysis tools, the results revealed that analysis of competitive position and industry analysis were the most used strategic analysis techniques among the hotels in Nigeria. Analysis of competitors' strengths and weaknesses has relatively moderate used. However, results on ABM and long-range forecasting reveal low adoption rates.

The findings indicate that relatively high benefits are derived from traditional techniques such as customer profitability analysis, budgeting for planning annual operations, product profitability analysis, budgeting for long terms (strategic) plans, budgeting for controlling costs. Moderate benefits were reported to be derived from balanced scorecard

(ranked 13), activity based costing (ranked 20), nonfinancial measures related to customers (ranked 21). ABM, flexible budgeting, activity based budgeting (ABB) and residual income were considered to generate low benefits. This result corroborates previous studies, such as Chenhall and Langfield-Smith (1998) and Pavlatos and Paggios (2008).

The results indicate that there are statistically significant differences in sales revenue between ABC adopters and non-adopters and ABB adopters and non-adopters. However, there are no statistically significant differences between balanced scorecard adopters and non-adopters, benchmarking adopters & non-adopters, CPA adopters and non-adopters and CVP adopters and non-adopters.

Concerning the adoption rates of USALI, the main findings indicate that USALI's adoption rate is 28.2%, where 72.4% adopt it fully. In terms of classification, none of the 2 and 3 stars hotel surveyed adopt the USALI. Almost all the five stars hotels (80%) adopt the USALI, while the proportion of four stars hotel adopting it is much lower (40.5%). Hotels with larger level of sales (greater than 5Million Naira) tend to use USALI and hotels with smaller level of sales (less than 5Million Naira) tend not to use USALI. This findings are in line with previous research by Santos *et al.* (2015) and Hatem (2017).

Similarly, there is no relation with the affiliation/management of the hotel and USALI's usage. The results revealed that 42.1% of the hotels belonging to international chains use USALI, followed by hotels belonging to national chains (28.6%) and for independent hotels (24.3%).

The major decision-makers are the financial executive/controller (who decided in 58.6% about USALI's adoption) and the general manager (20.8%). For the remaining hotels, the administration 5 (17.2%) or the owner 1 (3.4%) made the decision. These findings are in line with those of Kwansa and Schmidgall (1999). The importance of the four standards/tools to the financial management of the hotel were ranked. The National Accounting Standards and International Accounting Standards (IAS/IFRS's) clearly rank as being more important than USALI and IRC. This finding differs from those obtained by Kwansa and Schmidgall (1999), in the role of USALI in the management of US hotel businesses, where it is concluded that USALI and IRC, are clearly more important than the FASB standards.

The main conclusion is that the traditional management accounting techniques were widely used at hotels in Nigeria more than the recent management accounting techniques.

6.2 CONTRIBUTION OF THE STUDY

This study makes several contributions to the management accounting literature. It is the first study to investigate the state of management accounting in hotels in Nigeria. It therefore fills in the gap in knowledge by uniquely investigating some key management accounting techniques that are critical for the survival of hotels.

Also, this study provides a unique insight into the usage of management accounting tools by hotels in the Nigeria context, the purpose for which they are used, the perceived effectiveness of the tools and the benefits derived from using these tools. Given that prior studies, which were mostly conducted in other countries, have highlighted the benefits of usage of these tools by hotels, this study provides unique empirical evidence in a different country's context, namely Nigeria, on the state of art of the usage of these tools.

Besides, unlike the prior Nigeria studies (Mohammed, 2013, assessed the role that budget target setting plays in effective performance measurement in Nigerian hotel industry) which examine the usage of one management accounting techniques at a time, the current study examines the usage of traditional, contemporary management accounting and the USALI at once. It therefore provides insight on the usage of these tools as a collective instead of the silo approach common in the prior studies that has resulted to sub-optimal recommendations on the interventions that should be taken to increase hotels' uptake of these tools.

6.3 LIMITATIONS OF THE STUDY

This study encountered limitations in the methods of data collection, research instrument, and context of the study. The study was based on cross-sectional design to collect data at a single point in time. Delays by some of the respondents in completing the questionnaires within the limited time resulted in many questionnaires not being retrieved for inclusion in data analysis.

The second limitation was the interpretation of questions asked in this research and the understanding of some modern accounting techniques and technical terms. Even though a glossary of terms and accounting techniques was attached to the questionnaires, it appeared that some participants had difficulties with some of the terms.

The data collection aspect also lacked sufficient cooperation from some of the participants. In some establishments, it was difficult to access the appropriate officer to

complete the questionnaire. In one case, the questionnaire was returned without responses because the “manager” was too busy; while one hotel that is part of an international chain declined to participate in the survey because their company policy didn't allow it.

As already mentioned, purposeful sampling method was employed to select the desired sample for the study. This could mean that the sample may not be representative of the population of this study since the sample was chosen non-randomly.

Despite these limitations, the results of the current study contribute significantly to the understanding of the usage of management accounting by the hotels in Nigeria. Therefore, the above limitations do not out-weigh the insights provided by this study.

6.4 RECOMMENDATIONS FOR FUTURE RESEARCH

During the process of this study a number of possibilities for future research have been identified. In this section, a summary of the most significant is presented.

Research concerning management accounting systems in different sectors of the hospitality industry is rare. Although the hotel industry is relatively well covered, the restaurant industry was found to be significantly less covered. Future studies should examine specific factors as to why 2 or 3 stars hotels are not adopting newly developed management accounting tools. In addition, the dependence between traditional and new management accounting techniques needs further investigation.

As Kaplan and Norton (1992) suggest, the links between financial and non-financial measurements of performance can be clarified using the balanced scorecard. The authors recommend future research on how the context of the hospitality industry affects these links.

The hotel classifications indicated in the results may not reflect the correct class of each hotel that participated in the survey due to lack of an official classification record from the Nigeria Hotels and Restaurants Authority. Indeed, some hotels indicated their class to be 3-stars in the research instrument, yet they were identified as 2-star hotels in Appendix 1. It is recommended that the Nigeria Hotels and Restaurants Authority regularly updates the list of classified hospitality establishments in the country. This would ensure that any research carried out in the hospitality industry based on classification would reflect the true status of the establishments studied.

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Appendix 1: Letter of Introduction

Faculty of Economics,

University of Algarve,

Faro, Portugal.

7th September 2018

Dear Respondent:

I am a student undertaking studies for the degree of Master of Tourism Organizations Management at the University of Algarve, Faro-Portugal. I am conducting a master's thesis on "The State of Management Accounting in Hotels in Nigeria". Your establishment was selected to participate in this study as a stakeholder in the hotel industry.

I would appreciate your honesty and willingness to take a few minutes to complete the questionnaire. Please respond to all questions appropriately to assist me in completing my research project. Your participation is truly important to this study, and will contribute to our knowledge and understanding of the management accounting in the hotel industry. I would like to assure you that this survey is being undertaken for educational purposes. All information provided is strictly confidential; and will be used only for the intended purpose. If you wish to obtain a copy of the research report, an electronic copy may be provided upon request.

Thanking you in advance for your participation.

Best regards,

Adeyemo Taiwo Ibrahim

Appendix 2 : Research Questionnaire

TITLE: THE STATE OF MANAGEMENT ACCOUNTING IN HOTELS IN NIGERIA

(Please complete this section by checking the correct answer)

A Profile of the Respondent

1. Age: [ ] Up to 35 [ ] 35-50 [ ] Over 50

2. Academic qualifications: High School[ ] Bachelorship/Degree course[ ] Master/PHD [ ]

3. Position: Hotel Manager[ ] Accounting Executive[ ] Financial Manager[ ] Others [ ]

4. Years of experience in current position: 1-3 years[ ] 4-10 years[ ] More than 10 years[ ]

B Hotel Data

5. Years of operations/business
   1-3 years [ ] 4 - 10 years [ ] More than 10 years [ ]

6. Hotel location
   North-Central [ ] North-Eastern [ ] North-Western [ ] South-Eastern [ ]
   South-Southern [ ] South-Western [ ]

7. Affiliation/Management of the hotel
   Independent [ ] National hotel chain[ ] International hotel chain[ ] Others [ ]

8. Hotel Star Rating
   2 Stars [ ] 3 Stars [ ] 4 Stars [ ] 5 Stars [ ]

9. Number of rooms
   Under 50 [ ] 51 – 100 [ ] 101 – 200 [ ] 201 – 300 [ ] Above 300 [ ]

10. Number of beds
    Under 50 [ ] 51 – 100 [ ] 101 – 300 [ ] 301 – 500 [ ] Above 500 [ ]

11. Number of employees (average 2017)

    Under 50 [ ] 51 – 100 [ ] 101 – 200 [ ] 201 – 300 [ ] Above 300 [ ]

12. Annual sales turnover (average 2017)

    500,000 to 1.0 million [ ] 1.0 to 5.0 million [ ] 5.0 to 10 million [ ]

    10 million to 25 million [ ] More than 25 million Naira [ ]

13. Cost structure:

	Indirect cost (as a percentage of the total cost)	Fixed cost (as a percentage of the total cost)
a. Up to 35%	[ ]	[ ]
b. 35%-45%	[ ]	[ ]
c. 45%-55%	[ ]	[ ]
d. 55%-65%	[ ]	[ ]
e. 65% a 75%	[ ]	[ ]
f. Over 75%	[ ]	[ ]
g. Unknown	[ ]	[ ]

14. What type of business strategy does the hotel adopt?

    a. Cost leadership [ ]

    b. Differentiation of services [ ]

    c. Focus [ ]

    d. None of the above [ ]

15. To what extent prices are determined by the hotel or by the market?

    Score using the key which ranges from 1 (Determined by the hotel) to 5 (Determined by the market)

Determined by the hotel				**Determined by the market**
1	2	3	4	5

16. How intense is the competition in each of the following facets in the industry?

Score using the key which ranges from 1 (Negligible) to 5 (Extremely intense)

Price competition	1	2	3	4	5
Competition for qualified labour force	1	2	3	4	5
Competition for new services/packages	1	2	3	4	5

C Management Accounting practices

17. Who organized the actual management accounting system?
    a. Management consulting company [ ]
    b. Software house [ ]
    c. External consultant [ ]
    d. The actual responsible for the system [ ]
    e. Other internal resources of the hotel/group [ ]
    f. Other (please specify) _____

18. What type of software system is used in management accounting? [ ]
    a. An integrated package for both Financial and Management Accounting [ ]
    b. Management accounting is done in spreadsheets [ ]
    c. Management accounting is done manually [ ]
    d. Other (please specify) _____

19. Which software application do you use in Management Accounting?
    a. None [ ]
    b. Sage [ ]
    c. Oracle [ ]
    d. SAP [ ]
    e. Own Software [ ]
    f. Other (please specify) _____

20. Which of the following management accounting practices does your hotel adopt?

(Please tick in the appropriate box)	**X**
Cost Accounting	
Variable costing	
Activity based costing (ABC)	
Standard costing	
Budgeting	
Activity based budgeting (ABB)	
Budgeting for controlling cost	
Budgeting for coordinating activities of the various parts of the organization	
Budgeting for evaluating the performance of managers	
Budgeting for long terms (strategic) plans	
Budgeting for planning annual operations	
Flexible budgeting	
Zero budgeting	
Performance Evaluation	
Balanced scorecard	
Benchmarking	
EVA	
Nonfinancial measures related to customers	
Nonfinancial measures related to employees	
Nonfinancial measures related to innovations	
Profitability measures (operating profit and revenue growth)	
Residual income	
Return on sales	
ROI	
Information for Decision Making	
Customer profitability analysis	
CVP analysis	
Product profitability analysis	
Strategic Analysis	
ABM	
Analysis of competitive position	
Analysis of competitors' strengths and weaknesses	
Industry analysis	
Long range forecasting	

Other techniques (please specify) _____

21. Please indicate the benefits gained from the technique over the last 3 years.

Score using a scale anchored at 1 (Low Benefit) to 5 (High Benefit)

	1	2	3	4	5
Cost Accounting					
Absorption costing					
Activity based costing (ABC)					
Standard costing					
Variable costing					
Budgeting					
Activity based budgeting (ABB)					
Budgeting for controlling cost					
Budgeting for coordinating activities of the various parts of the organization					
Budgeting for evaluating the performance of managers					
Budgeting for long terms (strategic) plans					
Budgeting for planning annual operations					
Flexible budgeting					
Zero budgeting					
Performance Evaluation					
Balanced scorecard					
Benchmarking					
EVA					
Nonfinancial measures related to customers					
Nonfinancial measures related to employees					
Nonfinancial measures related to innovations					
Profitability measures (operating profit and revenue growth)					
Residual income					
Return on sales					
ROI					
Information for Decision Making					
Customer profitability analysis					
CVP analysis					
Product profitability analysis					
Strategic Analysis					
ABM					
Analysis of competitive position					
Analysis of competitors' strengths and weaknesses					
Industry analysis					
Long range forecasting					

22. For which purpose(s) does your hotel use management accounting techniques?

To support decision-making	[ ]
To support the budgeting process	[ ]
To Support management information systems	[ ]
Financial reporting (elaboration of income statements)	[ ]
To estimate the cost of products/services	[ ]
To comply with law obligations	[ ]
Performance evaluation	[ ]

Other (please specify) _____

23. Does your hotel have strategic planning in your hotel? For how many years ahead? (Please tick in the appropriate box) Yes [ ] No [ ]

24. To what extent does management accounting in your hotel is being used as an instrument to support the formulation and implementation of strategies, in following areas?
Score using a scale anchored at 1 (Not used at all) to 5 (Used to a great extent).

Decision making process	1	2	3	4	5
Planning and control	1	2	3	4	5
Operating performance	1	2	3	4	5
Management information systems	1	2	3	4	5
Budgeting process	1	2	3	4	5
Controlling of costs	1	2	3	4	5

D. Uniform System of Accounting

25. Does your hotel use the Uniform System of Accounts for the Lodging Industry (USALI)?

Yes	[ ]	Please skip to question 27
No	[ ]	
Considering using it in the future	[ ]	
Never heard of it	[ ]	
Don't know	[ ]	

26. Why doesn't the hotel adopt the Uniform System of Accounts for the Lodging Industry?

a. It is not compulsory [ ]

b. There are limitations in terms of financial resources [ ]

c. There is no skilled staff (insufficient knowledge/experience) [ ]

d. Other (please specify) _____

_____

27. Who made the decision to adopt the Uniform System of Accounts in use?

a. Administration [ ]

b. Financial executive/Controller [ ]

c. General manager [ ]

d. Owner [ ]

e. Don't know [ ]

f. Other (please specify) _____

28. To what extent does the hotel follows the USALI?

a. Completely [ ]

b. In most but not all aspects (please specify) _____

_____

29. Do you agree on the allocation of indirect costs (Administrative and General, Sales and Marketing, Property Operation and Maintenance, Utilities and Fixed charges) to profit centers with the following purposes?

Score using a scale anchored at 1 (Strongly disagree) to 5 (Strongly agree)

Assessing the profitability of a department	1	**2**	**3**	**4**	**5**
Determining prices for services and goods	1	2	3	4	5
Considering whether outsourcing for services is practicable	1	2	3	4	5
To provide departmental manager with more incentive to monitor the costs of service departments	1	2	3	4	5

30. Rate the importance of each of the following standards/tools to the financial management of the hotel:

    Score using the key which ranges from 1 (Least important) to 5 (Most important)

Uniform System of Accounts/USALI	1	**2**	**3**	**4**	**5**
National Accounting Standards	1	2	3	4	5
International Accounting Standards (IAS/IFRS's)	1	2	3	4	5
IRC code/tax legislation	1	2	3	4	5

31. In your opinion, which are the main advantages and disadvantages of the USALI usage?

    Please, list two of each.

Advantages	**Disadvantages**

Thank you very much for your participation.