The Balanced Scorecard System in the Hotel Industry: Application of Contingency Theory Perspective

Cihan Alphun

Submitted to the
Institute of Graduate Studies and Research
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
in
Tourism Management

Eastern Mediterranean University
August 2019
Gazimağusa, North Cyprus

Approval of the Institute of Graduate Studies and Research

Prof. Dr. Ali Hakan Ulusoy
Acting Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Doctor of Philosophy in Tourism Management.

Prof. Dr. Hasan Kılıç
Dean, Faculty of Tourism

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Doctor of Philosophy in Tourism Management.

Prof. Dr. Hüseyin Araslı
Supervisor

Examining Committee
_____

1. Prof. Dr. Hüseyin Araslı   _____

2. Prof. Dr. Himmet Karadal   _____

3. Prof. Dr. Asım Saldamlı   _____

4. Prof. Dr. Cem Tanova   _____

5. Assoc. Prof. Dr. Ali Öztüren   _____

ABSTRACT

This study based on the contingency theory examines the influence of perceived environmental uncertainty (PEU) on hotel performance (HP) by examining the mediating role of balanced scorecard (BSC) adoption. The study also examines the moderating role of organizational structure in the direct relationship between the extent of BSC adoption and HP and the indirect relationship between PEU and HP.

Structured surveys were collected through research team. A total of 400 top- and middle-level managers from 44 five-star-hotels in Antalya responded to surveys. Hayes's process-macro models was used for analysis.

According to the findings of this study: HP was influenced by PEU and BSC dimensions' adoption, including financial, customer, and internal business processes, as well as innovation and learning. Financial, customer, and internal business processes mediated the relations between PEU and HP. Besides, the effects of financial, customer, and internal business processes on HP were strengthened by high decentralization. The results highlight the importance of BSC dimensions' adoption and flexible decision making that could help in alleviating the effects of PEU and the resulting high HP in five-star hotels.

In the presence of unpredictable environment, hotel managers should attempt to improve the offerings to their customers in order to delight and retain them and closely follow their competitors and other developments to react in a more effective and timely manner. They should also utilize the BSC for being informed and keeping themselves updated about current internal and external environmental conditions. Additionally, in

a decentralized organizational structure, the BSC adoption helps authorized managers to make better decisions, especially in uncertain environments. In conclusion, this study demonstrates how and when PEU, BSC dimensions' adoption and decentralized structure might shape HP outcomes in a five star hotel setting.

Keywords: Hotel performance, Decentralized structure, Perceived environmental uncertainty, Balanced scorecard adoption

ÖZ

Bu çalışma durumsallık teorisine dayanarak, algılanan çevresel belirsizliğin otel performansı üzerindeki etkisini, dengeli ölçüm kartının (BSC) benimsenmesi aracılığı ile incelemektedir. Çalışma ayrıca, kurumsal yapının dengeli ölçüm kartının benimsenmesi ile otel performansı arasındaki doğrudan ilişkideki; ve algılanan çevresel belirsizlik ile otel performansı arasındaki dolaylı ilişkideki dönüştürücü rolünü de incelemektedir.

Yapılandırılmış anketler araştırma ekibi aracılığıyla toplanmıştır. Anketlere Antalya'daki 44 beş yıldızlı otelden toplam 400 üst ve orta düzey yönetici katılmıştır. Analiz için Hayes işlem-makro modelleri kullanılmıştır.

Bu çalışmanın bulgularına göre: otel performansı, algılanan çevresel belirsizlik ve dengeli ölçüm kartının boyutları olan finansal, müşteri ve işletme içi operasyonel boyutlarının yanı sıra yenilik ve öğrenme boyutunun benimsenmesinden etkilenmektedir. Finansal, müşteri ve işletme içi operasyonel boyutları, algılanan çevresel belirsizlik ile otel performansı arasındaki ilişkiye aracılık etmektedir. Ayrıca, finansal, müşteri ve işletme içi operasyonel boyutların otel performansı üzerindeki etkileri yüksek ademi merkeziyetçilikle güçlendirilmektedir. Sonuçlar, dengeli ölçüm kartının boyutlarının benimsenmesinin ve esnek karar vermenin, beş yıldızlı otellerde algılanan çevresel belirsizliğin etkilerini hafifletmeye yardımcı olacağının ve bunun sonucunda ortaya çıkan yüksek otel performansının önemini vurgulamaktadır.

Çevresel belirsizliğin olduğu bir ortamda, otel yöneticileri müşterilerini memnun etmek ve onları tutmak için sunmakta oldukları hizmeti iyileştirme girişiminde

bulunmalı, rakiplerine ve diğer çevresel faktörlere daha etkin ve zamanında tepki vermek için yakından takip etmelidirler. Ayrıca, mevcut iç ve dış çevre koşulları hakkında bilgi sahibi olmak ve kendilerini güncel tutmak için dengeli ölçüm kartını kullanmalıdırlar. İlaveten, merkezi olmayan bir organizasyon yapısında dengeli ölçüm kartının benimsenmesi, yetkili yöneticilerin özellikle belirsiz ortamlarda daha iyi kararlar almasına yardımcı olmaktadır. Sonuç olarak, bu çalışma algılanan çevresel belirsizliğin, dengeli ölçüm kartının boyutlarının benimsenmesinin ve merkezi olmayan yapının nasıl ve ne zaman, beş yıldızlı bir otel ortamında otel performans sonuçlarını şekillendirdiğini göstermektedir.

Anahtar Kelimeler: Otel performansı, Merkezi olmayan yapı, Algılanan çevresel belirsizlik, Dengeli ölçüm kartının benimsenmesi

DEDICATION

To my family

ACKNOWLEDGMENT

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

BSC   Balanced Scorecard

HP   Hotel Performance

MA   Management Accounting

MAPs   Management Accounting Practices

MAS   Management Accounting System

MC   Management Control

PEU   Perceived Environmental Uncertainty

PM   Performance Measurement

Chapter 1

INTRODUCTION

This chapter explains the rationale for this study and also, provides a general introduction to this thesis. This chapter first includes background of the study which involves the motivation to undertake this research. Then, aims and objectives of the research is presented and the contribution of this study is underlined.

1.1 Background to the Study

In today's globalized and competitive world, the ultimate aim of all businesses is to enhance organizational performance, achieve competitive advantage, and increase market share. In response to such an uncertain competitive environment; managers have been using different performance measurement (PM) systems for improving organizational performance (Sainaghi, Phillips, & Zavarrone, 2017). Organizational performance is very important as it indicates whether performance outcomes of firm is below or above expectations. In a competitive marketplace, businesses cannot rely anymore on traditional performance measures, but rather more sophisticated PM systems to survive. The balanced scorecard (BSC) is one of the most important strategic PM systems used to improve organizational performance. As a contemporary PM system, the BSC lead to improved organizational performance in both the service and manufacturing industries (Cadez & Guilding, 2008; Quesado, Guzman & Rodrigues, 2014, 2016).

According to contingency theory, there is no unique structure that best suits all organizations in every circumstance, but rather each company has a responsive structure to its specific conditions, namely external (environmental) and internal (firm-specific) contingencies (Chenhall, 2003). As an external contingency factor, perceived environmental uncertainty (PEU) is defined as how managers perceive the stability and predictability of their organizations' external environment covering technological, industrial, economic, and competitive aspects, as well as the preferences of clients (Gordon & Narayanan, 1984). PEU has been shown to be substantively effective in obtaining hotel performance (HP), but not all empirical results have revealed this. For example, Uyar and Kuzey (2016) conducted a study on Turkish firms in which PEU and business performance were found to be positively related. However, Hoque (2004) found that the impact of environmental uncertainty on organizational performance was not significant. In hotel industry, Köseoglu, Topaloglu, Parnell, and Lester (2013) indicated that the relationship between environmental uncertainty and performance was partially supported. Moreover, Wang, Chen, and Chen (2012) reported that understanding and being responsive to environmental factors can create utilities and effectiveness for hotel organizations and the authors emphasized the lack of consideration on the association between external environmental factors and HP in empirical studies. Although these significant mixed findings exist, there are three notable gaps in the literature on PEU.

First, although research in this field has grown, it has primarily focused on the effect of PEU on organizational performance in manufacturing industry (Uyar & Kuzey, 2016) while paying less attention to how and when PEU may influence performance outcomes, particularly in hotel industries. A notable exception is the study by Köseoglu et al. (2013), which demonstrated that PEU was positively related to HP in

terms of the strategies of Porter, and Miles and Snow, in three-, four- and five-star hotels in Mugla. Although these findings are encouraging, little is known about the underlying mechanisms that link PEU with HP. Aware of such gaps in the relevant literature, some researchers have called for studies to examine the potential mediating and moderating mechanisms underlying the relationship between PEU and HP (Bangchokdee & Mia, 2016; Elbanna, Eid, & Kamel, 2015).

Second, the BSC has received considerable attention in the literature. The BSC was introduced by Kaplan and Norton (1992) as a strategic PM system with four perspectives (financial, customer, internal business processes, and innovation and learning) as a response to the deficiency in traditional PM systems. Several scholars have suggested that BSC leads to improved organizational performance both in service and manufacturing industries (Jusoh, 2008; Quesado et al., 2014). Recently, it has been claimed that BSC studies are sparse in the hospitality industry, except for some case studies (Denton & White, 2000; Huckestein & Duboff, 1999; Phillips, 2007). Sainaghi, Phillips, and Corti (2013, p. 157) stated that, for HP from the BSC perspective, "no broad theoretical frameworks have yet emerged." Similarly, Elbanna et al. (2015) recognized this gap in the hospitality industry and developed a new BSC scale for PM in the hotel industry, which may help hotel businesses continuously improve in terms of the BSC's four dimensions. However, these studies again did not give any detailed information regarding which of the BSC's component(s) significantly impact HP. This is an important question that must be answered but has, as yet, not received adequate interest in the hospitality literature. Therefore, we investigate the extent of BSC adoption by separating it into its four dimensions (financial, customer, internal business processes, and innovation and learning) in the hotel context and determine each dimension's effect separately. This is an important issue, since the hospitality

industry suffers from seasonality problems and seasonality has a critical impact on HP. Therefore, BSC's components may not function as expected in different types of hotels, such as resort and city hotels, at the same levels. This study thus contributes to our understanding of each dimension's role in BSC adoption on the relationship between PEU and HP.

Third, in addition to these gaps, this study also examines when PEU is related to HP in the hospitality industry. Recently, studies underlined the need for implementing innovative PM systems that consider contextual variables (Elbanna et al., 2015; Pavlatos, 2015; Sainaghi et al., 2017). However, applying the BSC is not an easy task as it is inevitably subjected to organizational and environmental factors that shape its design and usage. With respect to this, Hoque (2014) reported that empirical BSC studies were mainly concerned with its features, generic analysis, and the consequences from its application. Quesado et al., (2014, 2016) reported that the BSC is affected by organizational and environmental factors and regarding this there is a lack of theoretical and empirical studies about the factors which have an impact on the adoption and implementation of BSC either positively or negatively. Hence, the reviewed literature clearly underlines the need for more in-depth evidences regarding the influence of organizational decision-making mechanisms on the BSC's dimensions, particularly HP in the hospitality context, which is one of the most important contributions of this study. Decentralization is defined as the authorization of decision-making to lower-level managers (Chenhall & Morris, 1986; Gosselin, 2011). The role of decentralized organizational structure in the adoption of BSC dimensions and its relationship with HP is another important aspect that has neglected in the hospitality literature. Decentralized organizational structure is the actual mechanism which converts each dimension of the BSC into better HP. More

specifically, based on contingency theory, it is suggested that PEU influences BSC dimensions' adoption, which in turn may help hotel organizations to achieve higher performance. Hence, it is suggested that the relationship between BSC dimensions' adoption and HP is contingent on decentralized structure.

1.2 Research Aims and Objectives

Based on these gaps in the literature mentioned in the previous section, this empirical study examines if, how, and when PEU is related to HP in the hospitality industry. More specifically, drawing on contingency theory, it proposes that PEU encourages hotel organizations to adopt the BSC, which in turn helps hotels to improve performance. In addition, when organizational structure is flexible and highly decentralized, the benefits of BSC adoption for hotel organizations become even more critical to their success. To the best of our knowledge, no studies to date have analyzed the moderating role of decentralization between the extent of BSC dimensions' adoption and performance results in the hotel context. Hence, it is proposed that the relationship between BSC dimensions' adoption and HP is contingent on hotels' decentralized structure. Thus, this thesis purposes to answer below questions:

- To investigate the influence of PEU on both HP and the BSC dimensions' adoption.

- To research the effect of the BSC dimensions' adoption on the HP.

- To examine mediating role of the BSC dimensions' adoption between PEU and HP.

- To determine moderating role of decentralization on the relationship between the BSC dimensions' adoption and HP; and PEU and HP through the BSC dimensions' adoption.

Tourism in Turkey mainly depends on the combination of sea, sun and sand; so the country is an attractive tourism destination for summer vacations. This research will be conducted in the hotel industry of Antalya. According to the 2019 tourism actual, there are 407 five-star hotels in Antalya. What is more, we identified several reasons for choosing Antalya as a research field. First of all, tourism industry in Antalya is diversified; consists of hotels, restaurants, pubs, festivals, clubs, guesthouses, and nature-based events etc. Of course, hotels constitutes the largest share within this industry. Good climate, nature, history, culture, different facilities (water sports, theatre) and hospitality of host people, etc. make Antalya city the popular tourism center for many years on the Mediterranean coast of Turkey. Monthly Border Bulletin (April 2019) provided by Ministry of Culture and Tourism (2019) displayed that 1.437.445 foreign visitors and 123.466 citizen visitors arrived to Antalya between January-April 2019. Statistics also showed that after Istanbul (%40,38), Antalya (%28,29) took the second place among the top five provinces that foreign visitors entered Turkey between January-April 2019. Obviously, this industry undertakes biggest role in Antalya's development and the major income of Antalya city is obtained from this industry. There is no doubt that hotel industry in Antalya is one of the biggest contributor to the economic development of Turkey. According to the statistics of the Ministry of Culture and Tourism (2018) Antalya city with %67.27 achieved the highest occupancy rate in Turkey. Five-star hotels' occupancy rate accounted for %66.95 in 2018. For April 2019, statistics indicated that Antalya city has obtained %42.53 occupancy rate. Regarding of these, Sharma (2002) made a similar emphasis about the hotel industry's economic prominence for the world. Secondly, in today's competitive globalized scenario, hotel industry faces greater uncertainty because of intense competition and rapidly changing market conditions

particularly in terms of customers' needs and preferences. As Sharma (2002) stated that service organizations highly depend on the external environment. Moreover, when different needs and wants of hotel customers are considered, it is apparent that standardization of services is almost not possible. Unlike manufacturing industry, production, delivery and consumption of hotel services occur at the same time (Fitzgerald, Johnston, Brignall, Silvestro, & Voss, 1991; Sharma, 2002). As a result, according to the purpose of research at hand, hotel industry is found appropriate to be researched.

1.3 Research Contribution

As a result of the above discussions, this research aims to make several contributions. To begin with, this research investigates the relationship between PEU and HP directly and indirectly through the mediating role of the extent of BSC dimensions' adoption (i.e., financial, customer, internal business process, and innovation and learning), whereas decentralization moderates the direct relationship between the BSC dimensions' adoption and HP and the indirect one between PEU and HP via the BSC dimensions' adoption. This study provides additional insights of the moderation effect of decentralization on the relationship between PEU, the BSC dimensions' adoption and HP, which has not been determined by previous studies. In this way, the study contributes to our understanding of the role of BSC dimensions' adoption on the relationship between PEU and HP under decentralized organizational structure. At this point, it is noteworthy to underline that we investigate the BSC adoption by separating it into its four dimensions in the hotel context. We determine each dimension's effect separately in our model. Thus, with the use of a moderation contingency fit in theorizing the research problem, our study enables the creation of valuable insights into the subject trend. According to hospitality PM literature, this subject is not

developed or explained. Besides, although numerous studies have researched BSC application in different industries, limited ones have applied it with contingency factors, either only as a mediator or moderator. As such, several authors identified the limited studies on contingency theory with the BSC (Chenhall, 2003). Similarly, Elbanna et al. (2015) called for future research to examine the relationship between specific contextual factors and BSC use and organizational performance. Recently, Sainaghi et al. (2017) underlined the need for implementing innovative PM systems with consideration of contextual variables. Hence, the reviewed literature clearly underlines the need for more depth on this issue, particularly in the hospitality context, which is one of the most important contributions of this study. Thus, with understanding of examined contingency variables, the BSC dimensions' adoption and HP, this study contributes further to shed some light on the integrated contingency approach in the hospitality context.

Second, the literature shows that related empirical studies considered only the perspectives of top management (Bangchokdee & Mia, 2016). However considering the purpose of this study, it is essential to consider the views of departmental managers. Therefore, we consider both top- and middle-level managers in our study sample.

In addition, at least we have done so far, reviewed relevant literature indicated the lack of studies concerning this research topic in Turkey's hotel industry particularly in Antalya. Therefore, this study's subject deserves research attention in this particular location. Regarding this, Avci, Madanoglu, and Okumus (2011) reported that Turkey's tourism industry has grown enormously and the country is among the top 10 tourism destinations in terms of tourist arrivals and receipts, in the world. Although tourism industry grows rapidly in Turkey, tourism is seasonal and hotels face with several

challenges such as transportation or logistics problems, intense competition in the market, low occupancy rates, dependent on foreign tour operators, insufficient infrastructure, inadequate marketing and advertising strategies, instability in terms of economy and politics, and terrorism issues (Avci et al., 2011; Köseoglu et al. 2013). It is crucial to note that sustainable growth of hotel industry has an important contributions for country's development and therefore, all the stakeholders of the industry such as government, suppliers do their best in order to provide low cost and high quality services for their customers and achieve a good performance which is critical for their survival. At this point, operational control must be done rigorously. So it is important to understand the efficiency and effectiveness of hotel operations whence adoption of innovative PM system is a necessity for hotels in Antalya. This is also stressed by Köseoglu et al. (2013) as advanced level of PM system is required for the hotel industry in Turkey. With respect to this, even though several studies conducted in developed countries, it is apparent that such studies are meagre for developing countries. That is why, it increases the essence of this research in Antalya hotels, as a developing destination.

This thesis at hand also has some valuable contributions to the managers working in hotel industry. First of all, this study points to the importance of hotel managers who can attempt to improve the offerings to their customers especially in the case of a perceived unpredictable environment, try to delight and retain them, and can closely follow their competitors and other developments to react in a more effective and timely manner. In the presence of unstable environment, hotel managers can utilize the BSC in order to be informed and also to keep themselves updated about current internal and external environmental conditions. In addition, in a decentralized structure, the BSC

adoption helps authorized managers to make better decisions, especially in uncertain environments. All these subsequently help managers to achieve better HP.

In closing, to the best of our knowledge, this is one of the first studies to demonstrate how and when PEU, BSC dimensions' adoption and decentralized organizational structure might shape HP outcomes in a five star hotel settings, in Antalya.

1.4 Structure of the Thesis

In addition to introduction chapter, this thesis includes six further chapters. Chapter 2 focuses on the literature review. This chapter reviews relevant literature on perceived environmental uncertainty, the balanced scorecard, decentralized organizational structure, and hotel performance and provides a detailed description of the main themes of this thesis research. Chapter 3 introduces theoretical background of this research. This chapter explains and provides a better understanding of the contingency theory, also makes a discussion about performance measurement. Chapter 4 develops and justifies theoretical model of the research, then formulates and presents the hypotheses which will be examined in this study. The theoretical model comprises contingent variables, the balanced scorecard dimensions' adoption, and HP. Chapter 5 describes the research methodology. The chapter explains research population, sample and procedure that used to achieve the research objectives. It then introduces study variables' measurement and the chapter ends with a brief description of data analysis. Chapter 6 describes the results. The chapter aims to provide validity and reliability assessments of the research model which is followed by testing and interpreting the results of statistical analysis related to research hypotheses. Finally, chapter 7 presents discussion and conclusion. This chapter summarizes the findings of

this research and continues with a theoretical and practical implications of the study.

The chapter ends with limitations of the study and possibilities for future research.

Chapter 2

LITERATURE REVIEW

This chapter aims to review the related literature regarding our study variables. Next section starts with the description of perceived environmental uncertainty. This is followed by an explanation of the balanced scorecard. The subsequent section continues with a description of decentralized organizational structure. Final section provides some explanations about hotel performance.

2.1 Perceived Environmental Uncertainty (PEU)

Today's business milieu is obscure because of intense competition. It is more difficult for businesses to predict the likely effects of the external environment under uncertain conditions than in stable environments. As such, numerous businesses are exposed to environmental unpredictability due to factors such as production technologies, the actions of competitors, customer relations and their changing preferences, and industry relations (Hoque, 2005). Each firm is thus exposed to distinct environmental factors at different levels. Such factors are less controllable for firms because they are obscure and constantly changing. Therefore, it is critical for businesses to be aware of, and respond to, them to survive.

PEU is defined as how managers perceive the stability and predictability of their organizations' external environment in terms of technological, industrial, economic, and competitive aspects, as well as client preferences (Gordon & Narayanan, 1984). Earlier, Mintzberg (1979) stressed that PEU is related with the level of unexpected

change occurring in the environment, such as changing customer preferences, and also stated that the technological, political, economic, and social factors in which a business operates comprise the external environmental factors. Environmental uncertainty is related to organizational inability in terms of predictions regarding external environmental occurrences (Chong & Chong, 1997; Milliken, 1987; Tymon, Stout, & Shaw, 1998). PEU has been explained by several studies (Gul & Chia, 1994; King et al., 2010; McManus, 2013) in terms of the fact that it is not actual uncertainty in the environment, but rather the perceptions of managers towards uncertainty, that has an impact on their decision-making. For example, intensity of competition, development of new technologies, entry of new rivals into the industry, market demand, customer choices, and changes in government regulations increase unpredictability in the environment, which cause difficulties in decision-making of managers. The environment involves all external factors for an organization; in particular, those concerning customers, competitors, suppliers, etc., introduce uncertainty into the external environment of organizations. With respect to this, Hoque (2004) stated that when companies perceive uncertainty in their outside environment, they are not able to forecast its likelihood impacts on them.

From these explanations, it is clear that environmental uncertainty continues to be a key challenge for organizational managers who are exposed to less-controllable business environments, which have a definite impact on the operations and performance of businesses. According to the literature, when the likelihood degree of uncertainty is greater on firm performance, managers are more likely to consider advanced management accounting system (MAS) as it provides useful information for them. Several studies demonstrated association among environment's uncertainty and design of MAS (Gordon & Miller, 1976; Gordon & Naryanan, 1984; Chenhall &

13

Morris, 1986; Chong & Chong, 1997; Gul & Chia, 1994; Hammad, Jusoh & Ghozali, 2013; Tymon, Stout & Shaw, 1998). Gordon and Miller (1976) claimed that PEU is a vital factor in the design of accounting information systems, and also has a significant influence on MAS design, particularly in terms of broad scope (non-financial) and timely information features designed to cope with uncertainty (Chenhall & Morris, 1986; Gordon & Narayanan, 1984; Gosselin, 2005; Hammad, Jusoh & Ghozali, 2013; King et al., 2010). Very earlier, Otley (1980) mentioned that environmental factors explain why there are differences in the use of MASs. Its importance was reported by several researchers as, when managers perceive more environmental uncertainty, they search for an information that is non-financial, external, and ex-ante (Chenhall & Morris, 1986; Gordon & Narayanan, 1984; Gosselin, 2005; Gul & Chia, 1994; Liu, Ratnatunga, & Yao, 2014; McManus, 2013). Specifically, McManus (2013) pointed out that, when environmental uncertainty is high, firm managers need current information about the external environment and that such information is non-financial and future-focused to manage uncertainty. This information is essential and helpful for managers' decision-making. Here an argument is that in uncertain settings, organizations do not find financially based systems sufficient due to their historical and financially focused nature which makes them inefficient in terms of performance. Lastly, it is interesting that PEU is significantly and negatively related with aggregated, broad-scope, timely MAS information, and is insignificantly related with integrated MAS information (Hammad et al., 2013).

2.2 The Balanced Scorecard (BSC)

The BSC was introduced by Kaplan and Norton (1992) as a strategic PM system with four perspectives (financial, customer, internal business processes, and innovation and learning) as a response to deficiencies in traditional PM systems (Kaplan & Norton,

1992, 1993, 2001). Authors defined the concept as "The collision between the irresistible force to build long-range competitive capabilities and the immovable object of the historical-cost financial accounting model has created a new synthesis: the Balanced Scorecard" (Kaplan & Norton, 1996). The BSC has gained widespread acceptance and is now the most popular and effective PM system. The BSC's financial perspective identifies how an organization is viewed by its shareholders. This perspective includes measures like operating income, return on investment, sales growth, etc. The customer perspective measures how a firm differentiates itself from competitors and how a firm is seen by its customers in terms of aspects like the firm's relationship with its clients, its reputation, and its image. This perspective usually includes measures like customer satisfaction, market share, rate of customer retention, etc. The customer perspective provides information about the customers and helps a business to develop its ability to enhance customer service and satisfaction. In general, enhanced customer satisfaction leads to increased loyalty and decreased defection which subsequently facilitate better financial performance. The perspective of internal business processes analyzes the processes that are critical for achieving customer and shareholder satisfaction, such as productivity and operational efficiency. These internal business processes are the mechanism for achieving performance expectations. With this perspective, businesses can continuously improve their internal process in order to enhance value offering. The innovation and learning perspective identifies innovation and improvement areas necessary for an organization to achieve its vision. These measures are related to employee development, product and service innovation, etc. Measures for this perspective provide those for the other three BSC perspectives.

An organization's ability with respect to learning, creativity, and continuous improvement is directly related to its organizational value. In this way, it is possible for an organization to enter new markets, increase its profit margins, and thus provide more earnings to its shareholders. This perspective is critical because it highlights necessary resources and identifies an organization's requirements for its future development. Elbanna et al. (2015) suggested that this dimension is the basis on which the BSC is built. Therefore, the BSC enables businesses to understand and respond to its four basic perspectives: financial; customer; internal business processes; and innovation and learning. It shows the level of performance achieved through innovation and learning, internal business processes, and customer perspectives, and then links these results to the financial performance of the business. The financial perspective of the BSC focuses on traditional performance aspects, while the other three perspectives consider long-term performance achievements.

The distinctive attribute of the BSC is that it shows the cause-and-effect relationship between these four perspectives with the aim of achieving the desired performance. The financial and non-financial performance measures under the four perspectives of the BSC combine to underpin the organization's strategy. It can be stated that providing successful management of those four perspectives display successful strategy of the organization. So, the BSC is a strategy map for businesses (Kaplan & Norton, 2004). More specifically, that cause-and-effect linkage between outcome measures (lagging indicators) and drivers of outcomes (leading indicators) of the BSC provides a feed-forward control system for organizations. Thus, the scorecard displays in which areas a business shows progress and in which areas it still needs improvement. The pioneers of the BSC proclaimed that it can contribute to organizational performance by considering not only short-term views, but also by

focusing on the long-term performance achievements of organizations through their non-financial dimensions (Kaplan & Norton, 1992, 1993, 2001; 2007). In particular, the BSC as a strategic management system help managers to link short-term actions with tomorrow's long-term strategy in order to achieve better performance (Kaplan & Norton, 2007). Thus, the BSC provides balance between short- and long-term goals. This helps businesses establish mission, vision, and strategy, and then measure and follow up on their performance against policies and strategies for firm success. BSC aims to inform organization's goals and strategy to everybody throughout the organization. So each individual knows his/her responsibility. Besides, characteristics of the BSC help organizations to tackle many issues about: consideration of different stakeholders; measurement of effectiveness, efficiency and equity; capturing non-financial and financial results; providing horizontal linkages across the value chain and vertical linkages between strategy and operations; and last but not least providing information about the way the firm relates to its external environment and its capability in order to adapt (Chenhall, 2003). Quesado et al., (2014, p.216, 217) stated that:

> BSC is a necessary "asset" in the organizations, if used as a focus or guide in the implementation and communication of the strategy, and as a system to understand what actually adds value to the organizations, and not only as a mere performance measurement system. Accordingly, we have the opinion that the BSC is "good" if adding value to the organization, and "necessary" if it is essential to improve management.

The BSC has been implemented successfully in different type of industries (Bose & Thomas, 2007; Elbanna et al., 2015; Gosselin, 2005, 2011; Hendricks, Hora, Menor, & Wiedman, 2012; Hoque, 2005; Jusoh, 2008; Liu et al., 2014). Bose and Thomas (2007) examined The Fosters Brewing Group, Australian leading beer & wine company and found that BSC implementation is vital and necessary for firm's continuous prosperity; with the BSC, the company also take care of both short and

long term plans, and by using this tool they provide motivation for all staff towards common objective of a company. As a result of BSC application, the company become more productive, diversified and innovative; decrease costs; follow development and opportunities and consider ethical standards. Although BSC adoption and use has been researched in manufacturing and service industries, it has been researched in only a limited way, except for a few case studies, in the hospitality industry (Denton & White, 2000; Huckestein & Duboff, 1999; Phillips, 2007; Phillips & Louvieris, 2005).

Huckestein and Duboff (1999) explained how hotel business strategy is harmonized with the BSC and what type of benefits are obtained from BSC implementation in their study of Hilton Inc. The authors underlined that the benefits of BSC outweigh the necessary time and resources for its implementation. The study noted several benefits, including encouraging managers to focus both on short- and long-term achievements, raising the brand value of hotel, engendering a consistent business culture, encouraging teamwork among hotel staff, motivating hotel staff to suggest innovations, achieving staff commitment to the hotel, rewarding teamwork performance outcomes objectively, sharing best practices that encourage other independent hotels to use the BSC, and communicating hotel strategy throughout an organization (Huckestein & Duboff, 1999).

In their White Lodging Services study, Denton and White (2000) first noticed a difference between the purposes of hotel managers and owners. For example, while hotel owners focused on return on investment, managers concentrated on revenue development. With the application of the BSC, these different priorities were aligned and, after two years, the hotel had improved performance in several areas, including profitability, revenue, aligning of objectives between owners and managers,

understanding how to meet the long-term objectives, and enabling identification of any negative trends at an early stage of their operations, thus preventing a decline in financial performance. The BSC thus allows for the establishment of common goals that take into consideration all stakeholders and brings all parties together to offer the best possible customer service and thus achieve positive financial performance outcomes (Denton & White, 2000).

Phillips (2007) undertook a three-year, longitudinal case study that sought to understand the theoretical and practical aspects of the BSC. The study found that, if an organization relied heavily on the BSC's success without considering strategic control, this could lead to an exit strategy for a product that was profitable for an organization. In addition to these studies, a study in Northeastern England, involving general managers of medium to large hotels, showed that hotels use many different types of measures that are included in all four of BSC perspectives (Evans, 2005). Moreover, Doran, Haddad, and Chow (2002) revealed potential BSC benefits, pitfalls arising from BSC application, and potential solutions for these pitfalls in the hospitality industry. Authors came up with such a result that "Rather, effective development and use of the BSC can be a complex and lengthy process which requires serious commitment of time, resources, and support, linkage to the mission and strategy of the organization, and continuous learning and adjustment" (Doran et al., 2002, p.57).

Further, Sainaghi, Phillips, and Corti (2013) stated that, for HP from the BSC perspective, "no broad theoretical frameworks have yet emerged" (p. 157). In the same vein, Elbanna et al., (2015) recognized this gap in the hospitality industry and developed a new BSC scale for PM in the hotel industry, which helps hotel businesses

continuously improve in terms of finance, customer, internal business process, and innovative and learning.

To summarize, the BSC: translates a business's mission into objectives, performance measures, and actions; aligns the goals of individuals and organizations; and, with performance measures, helps management to evaluate business progress toward the attainment of these goals. It considers not only interests of firm's shareholders, but rather those of all stakeholders. While the system tracking progresses, it enables managers to recognize opportunities, problems, and also whether there is a need to change strategy. Thus, as underlined by Doran et al. (2002), the scorecard provides firm with a holistic perspective of happenings inside and outside of the firm.
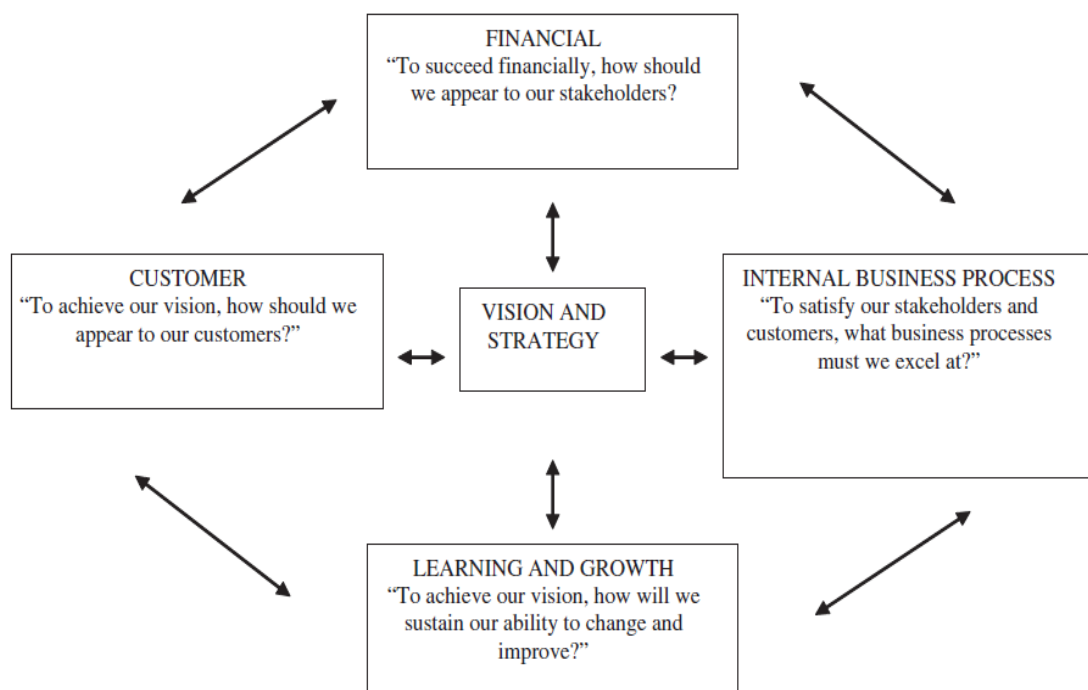
Figure 1: Four Perspectives of BSC (Kaplan and Norton, 1996, p. 54)

2.3 Decentralized Organizational Structure

Management accounting practices (MAPs) are essential in determining organizational performance. Contingency theory is the basis of much research that provides understanding of what elements are behind the use of MAPs and what determines these usages (Chenhall, 2003). Therefore, numerous studies have analyzed the impact of contingency factors on firm performance. One internal (firm-specific) contingency factor is organizational structure. Gordon and Narayanan (1984) defined structure as an internal factor because management has some control over it. Organizational structure can be perceived from various dimensions, such as centralization, formalization, or decentralization. In this study, decentralization is examined. While centralization is described as the degree of a centralized structure of decision-making related with departmental management, decentralization is defined as the authorization of decision-making to lower-level managers (Chenhall & Morris, 1986; Gosselin, 2005, 2011; Govindarajan, 1988; King et al., 2010; McManus, 2013, Uyar & Kuzey, 2016). Abernethy, Bouwens, and Van Lent (2004) stated that decentralized organizational structure occurs when firm management assigns decision rights to lower-level/divisional managers. Decentralized organizational structure provide managers authority delegation thus they have greater access to information compare to information available to corporate board (Waterhouse & Tiessen, 1978). In decentralized organizations, departmental managers are delegated authority, which enables them to make decisions for their departments and be responsible for their consequences. These department managers can actively generate new ideas for an organization, as they are closer to the operational process of a business than top managers. Therefore, they can closely monitor operations and bring innovative ideas to improve business operations. What is more, authorized managers take the initiative

to react timely, speedily and creatively to any changes in the business/job environment. They can solve problems at the beginning, making fruitful and accurate decisions quickly, which subsequently decrease customer complaints and increase their satisfaction. Hence, it is important to support and maintain decentralized structure in organizations, especially in service industry which requires the need for timely decisions. Such organizational structure also benefits authorized managers as they have a positive sense of purpose toward their jobs and are self-motivated for the continuous improvement of their organizations so, enhance organizational performance. For instance, involving middle managers in forming strategy and setting objectives is positively related to organizational performance (Wooldridge & Floyd, 1990); they have more responsibility in planning, controlling, and decision-making. Another study demonstrated that involvement and autonomy of middle management have an impact on the company performance through organizational capabilities (Ouakouak, Ouedraogo & Mbengue, 2014). These aforementioned explanations underlined that in decentralized organizational structure, it is vital for corporate management to use performance measures which help to evaluate and understand whether authorized managers make their decisions efficiently or not (Abernethy et al., 2004; Widener et al., 2008). Widener et al., (2008) especially emphasized that delegation and performance measures depend on each other, as if performance measures are informative, reliable and understandable for controlling then more tasks can be delegated by the management. Regarding this, in decentralized organizations, managers do not find financial measures sufficient therefore they adopt and use innovative PM systems (see section moderating role of structure).

2.4 Hotel Performance (HP)

Performance is a sweeping concept and its meaning might be different according to the needs and views of users (Avci et al., 2011; Sin, Alan, Heung, & Yim, 2005). In today's competitive world, the goal of every organization is to improve performance. Organizational performance has traditionally measured in accounting terms. Lusthaus, Adrien, Anderson, Carden and Montalván (2002) defined organizational performance in terms of efficiency, effectiveness, relevancy and financial viability. According to the authors' explanations, an organization performs well when it achieves the balance between effectiveness, efficiency, and relevancy at the same time being financially viable. Being relevant to organization's stakeholders is an important issue because different stakeholders desire different types of firm performance. What is more, Sainaghi (2010a) stated that performance is related to the consideration of an organization's generated value, the integration of financial and non-financial measures, and the involvement of an organization's main stakeholders, as well as testing an organization's strategy over time. Brown, Spillman, Lee, and Lu (2014) asserted that performance is related to the measurement of the managers' or owners' expectations regarding organizational outcomes. HP systems should be multidimensional, involving financial and non-financial aspects, to improve hotels' performance results (Bangchokdee & Mia, 2016; Köseoglu et al., 2013; Sainaghi et al., 2013). In a similar way, Sainaghi (2010b) further underlined that it is not possible to achieve good financial performance without accompanying operational achievements. This is because hotel organizations provide diversified services such as accommodations, recreational, food and beverage services, and conference and meeting organizations.

In addition, organizational performance is mainly measured from two perspectives which are subjective and objective perspectives. While subjective performance is based on perceptions of respondents, objective performance is based on the absolute performance data (Sin, Alan, Heung & Yim, 2005). Regarding this, Avci et al., (2011) touched an important issue that is obtaining actual performance data from firms is difficult because of privacy. This statement is also in line with previous studies as these authors argued that subjective measure of business performance is common in research when there is no possibility for obtaining actual performance data (Jusoh, 2008; Sin, Alan, Heung, & Yim, 2005; Zhou, Brown, Dev, & Agarwal, 2007).

As a result of these discussions, in this study, hotel performance was measured subjectively with the consideration of supporting literature. This is because in Antalya hotels firm's performance information is regarded as highly confidential and most of the hotel managers are reluctant to provide such information. Therefore, we opted to use subjective measurement of hotel performance in order to encourage respondents' willingness for answering questions.

Chapter 3

THEORETICAL BACKGROUND

The contingency theory has been used in this research to present the theoretical background of the proposed study variables and their relationships. Thus, the aim of this chapter is to explain contingency theory in detail. Subsequently, performance measurement topic will be explained.

3.1 The Contingency Theory

Contingency theory has long been used intensively in accounting and management research, involving different industries (Abdel-Kader & Luther, 2008; Bangchokdee & Mia, 2016; Cadez & Guilding, 2008; Chenhall, 2003, 2006; Gerdin & Greve, 2004; Gosselin, 2011; Hoque, 2004, 2005; King, Clarkson, & Wallace, 2010; Pavlatos & Paggios, 2009; Quesado et al., 2014; Sharma, 2002; Uyar & Kuzey, 2016). There have been an increased number of MA techniques, in diverse industries. These increased number of techniques reflect changing needs of business world, evolutionary process. The reason is today's globalized scenario has lead business milieu to experience uncertainty, removal of the borders to different markets, diversification of goods and services, strict competition, technological advancement, and consequently short-lived of products. All these developments have reminded Chenhall (2003)'s "Contingency Theory" who explained what factors cause organizations to adopt different MAPs. Author particularly emphasized that businesses need to have a PM systems which are compatible with the circumstances in which they are operated. Thus, contingency theory fundamentally explains why different types of MAPs are in use by different

companies. According to contingency literature, there is no unique structure that best suits all organizations in every circumstance, but rather each company has a responsive structure to its specific conditions, namely external (environmental) and internal (firm-specific) contingencies (Abdel-Kader & Luther, 2008; Auzair & Langfield-Smith, 2005; Chenhall, 2003; Fisher, 1995; King et al., 2010; Otley, 1980; Pavlatos & Paggios, 2009; Tillema, 2005; Uyar & Kuzey, 2016). For an efficient and effective PM system, organizations should consider both the external and internal contingent factors that surround them. Pettigrew, Whipp, and Rosenfield (1989) defined organizational context as the external environment of an organization – an industry's rivalry, political, and economic situation – and internal context, which can be an organization's culture, strategy, and structure. Gordon and Narayanan (1984) stressed that external contingencies refer to events occurring outside of an organization's domain, whereas internal ones are related to the organization itself. From these point of views, it is understandable that organization's internal characteristics and external environment have an impact on the shape of ideal PM approach.

The contingency theory is crucial in order to understand differences in the use of PM systems. Numerous authors contended that contingency factors of organizational setting have an impact in the design and use of management control (MC) systems (Chenhall, 2003, 2006; Fisher, 1995; Otley, 1980). Therefore, in the management accounting (MA) literature different contingency factors play an influential role in the diversity of PM systems. In addition to these, organizational performance has been an important place in the contingency theory related research. According to the contingency theory approach, organizational performance is achieved as a result of fit between contingent variable/s such as environment, structure and MC systems (Chenhall 2003, 2006). So, "fit" is central to the development of a contingency theory.

Numerous studies highlighted that contingency theory plays a role in the variations of MAPs. Recently, Uyar and Kuzey (2016) claimed there is no unique MAS that suits all the conditions of different companies, while Tillema (2005) had earlier stated that the utilization of MA techniques most convenient for a firm relies on the conditions surrounding the firm, thus calling for the adoption of contingency theory. Perhaps this is why Abdel-Kader and Luther (2008) claimed there is a continual interest in understanding the adoption of diverse MAPs by organizations, while also mentioning that contingency elements, either environmental or specific to the company, cause MASs to evolve. In a similar vein, Pavlatos and Paggios (2009) stated that firm's effective cost system design is related with its ability to adapt to changes both in external and internal conditions. Furthermore, in line with the contingency theory, Cadez and Guilding (2008) highlighted that there is no strategic MAS which is accepted worldwide. Regarding of these, Gerdin and Greve (2004, p.303) emphasized that "The continuous stream of empirical articles signals the importance and vitality of this research area".

Different contingent variables are identified in MA literature, which have a critical role on the application of MAPs for firms. These are organizational size, PEU, strategy, organizational structure, market orientation, technology, organizational life cycle stage, etc (Abdel-Kader & Luther, 2008; Auzair & Langfield-Smith, 2005; Bangchokdee & Mia, 2016; Chenhall, 2003; Gosselin, 2005; 2011; Hoque, 2004; King et al., 2010; McManus, 2013; Otley, 1980; Sharma, 2002; Uyar & Kuzey, 2016). To illustrate, Chenhall (2003) mentioned that according to the contingency theory, an organization's choice of MC system is affected by its strategy, structure and environment.

Nevertheless, the results of Bourne, Kennerley, and Franco-Santos (2005) showed that the impact of contextual issues on PM has received scant attention in the literature. What is more, Cadez and Guilding (2008) stressed the reality of scarce empirical investigation in understanding the nature and context of implementing strategic MA. In line with previous argument, other writers also mentioned about the factors which have an impact on the utilization of strategic MA, and accordingly suggested that it should be further investigated to shed some light on this topic (Naranjo-Gil, Maas, & Hartmann, 2009; Pavlatos, 2015). In particular, the MA literature has shown the need to gain a better understanding of MAS formation and contingent variables in service companies, which account for the majority of contributions to the world economy (Auzair & Langfield-Smith, 2005; Chenhall, 2003; Sharma, 2002). So, it should be highlighted that, even though the literature is vast with respect to contingency theory, this research is concern with one of the PM systems, the BSC in the hotel industry. Thus, this study primarily draws from contingency theory to develop hypotheses as it provides the necessary theoretical approach for studies that investigate the antecedents of different MAPs' adoption and use (Chenhall, 2003). In this study, PEU and organizational decentralized structure are considered as contingency factors both having a critical impact on the adoption and use of an organization's PM system and, subsequently, on the organization's performance outcomes. They are also influential in the hotel context (Pavlatos, 2015; Sharma, 2002).

3.2 Background of Performance Measurement (PM)

Globalization of today's world undoubtedly indicates how all businesses aim to be profitable and to survive in the market. Achieving a good performance is the main concept to deal with this issue. For a long time ago, Neely (1999) stated that achieving better performance is the biggest concern for a successful corporation. With respect to

this, since 1990s, PM topic has become a critical issue for academics and industry practitioners. Similarly, Garrigós-Simón, Palacios Marqués, and Narangajavana (2005) emphasized that conceptualizing and operationalizing of PM has been a concern for literature. Numerous authors make definitions for this concept. Kollberg, Elg and Lindmark (2005, p.98) defined PM as "the process of collecting, computing and presenting quantified constructs for the managerial purposes of following-up, monitoring and improving organisational performance". PM has a function of gathering, analysing, and reporting the information for effective decision-making process (Neely, 2005). The PM system has been found useful by many academicians and practitioners as it facilitates operational effectiveness of the firm. In addition, it is perceived as a feedback mechanism from the point of businesses as the system informs them about their current positions; achieved goals and improvement areas in order to attain their goals. Not only this, it has a key role in the strategic planning process as well (Sainaghi, Phillips, Baggio, & Mauri, 2019). Thus, organization' PM system is very crucial in terms of managing, controlling, and attaining its objectives. In the past, the PM systems were only based upon the historical financial measures such as return on equity, reduction of cost etc. However, this caused serious problems due to such systems were detected imperfect. The main source of the problem is the fact that traditional financial measures are indicators of only short-term achievements of business; so they are exposed to criticisms and are found less effective for organizational performance (Atkinson & Brown, 2001; Bose & Thomas, 2007; Kaplan and Norton, 1992, 1993, 1996, 2001; Lucianetti, Battista, & Koufteros, 2019; Neely, 1999; Norreklit, 2000; Otley, 2003; Phillips, 1999). When changing business milieu is considered, it is not surprising that such measures are ineffective for the accurate demonstration of business performance because they only reflect firm' s past activities

but are not able to show what would happen to business in the near future namely they have historical focus. It is considerable to note that successful life of the business depends on long-term focus together with supporting of short-term achievements. In addition, these measures cannot spot in which area the firm needs to improve its strategy and engage with innovativeness (Lucianetti et al., 2019; Neely, 1999; Sainaghi, 2010b). So they are not sufficient in the assessment of organizational performance. This is also true for departmental performance evaluation. To illustrate, organization's department cannot measure the level of customer satisfaction by considering only financial performance measures. Instead, non-financial measure, customer satisfaction stands for such assessments. As a result, the solution was found by injecting non-financial measures into the PM system thus the system become more appropriate for measuring various aspects of an organization. That is why traditional financial PM leave their place to contemporary PM in today's competitive business world. Contemporary PM systems also involve non-financial measures which are concern with organization's long-term success such as innovation, satisfaction of both employees and customers, efficient business process all of which play a role in the performance improvement (Baines & Langfield-Smith, 2003; Bose & Thomas, 2007; Hoque & James, 2000; Kaplan & Norton, 1992, 1993, 1996, 2001; Lucianetti et al., 2019; Otley, 1999, 2003). Obviously, non-financial measures in the PM systems can see a better picture of organizational performance in the long run, thus, organizational efficiency and effectiveness can be improved better. Firm managers consider such contemporary PM systems in order to achieve both short-term and long-term firm performance (Lucianetti et al., 2019). As an example, employee skills and abilities is a non-financial measure and its use is crucial because it indicates the level of ability of per employee which is very critical in offering quality of goods and services; creates

customer satisfaction; and increase revenue and performance of a firm in the long-run. If firm managers make use of only financial performance measures to improve short-term profitability, this affects negatively efficiency of operations and quality of products/services; and ultimately lead to have an adverse impact on customer satisfaction, competitive advantage and firm's future performance (Bangchokdee & Mia, 2016). Thence, these measures help to firm's managers to understand and improve efficiency of business operational process, product/service quality and customer satisfaction which subsequently creates enhanced business performance and competitive advantage. Furthermore, it is essential to follow up firm's performance against its policies and strategies with the utilization of PM system that involves both financial and non-financial measures for the firm's success (Abdel-Kader & Luther, 2008). Herington, McPhail and Guilding (2013) pointed out that in competitive hotel industry, PM has gained an utmost importance and alternative measures are in use although previously financial indicators are dominant to the PM systems of hotels. Earlier, Phillips, (1999) concluded that hotels' PM that only considers accounting performance indicators is not appropriate; instead they also need to consider economic, organization specific, and environmental factors in their PM systems. Moreover, "It is also considered vital for the performance measurement systems to reflect the complex nature of the service delivery process within hotels" (Atkinson & Brown, 2001, p.130). Another study indicated that even companies predominantly use financially - oriented PM, they also have a rising trend for the use of more balanced PM systems (Lääts, Haldma, & Moeller, 2011). Similarly, Baines and Langfield-Smith (2003) displayed that manufacturing companies which rely more on non-financial performance measures, achieve better organizational performance.

31

Abovementioned discussions sign the main motive behind why academia has been continuously developed different types of PM techniques, including different sectors. To illustrate, critical success factors, the BSC, competitor accounting, customer accounting, activity-based costing etc. All of them mainly focus on value creation for organizations. Kaplan and Norton's (1992) balanced scorecard (BSC) is the most popular PM system for organizations which was discussed in detail in the previous section.

Chapter 4

RESEARCH HYPOTHESES AND THE CONCEPTUAL MODEL

The literature review together with theoretical background presented in chapters 2-3 provide some support with respect to our study model. Nevertheless, below relationships are still deprive of and not clear due to scant research in this field, particularly in the hotel industry. Therefore, the main purpose of this chapter is to demonstrate explanations and clarifications in order to build the research theoretical model and to develop the hypotheses. This is mainly based on the key findings and suggestions from the reviewed literature of the contingency theory, numerous PM systems and the BSC. So this chapter provides the suggested relationships between the research variables and accordingly the formulations of hypotheses are given.

4.1 Perceived Environmental Uncertainty (PEU) and Hotel Performance (HP)

In literature, several studies have examined the relationship between PEU and organizational performance either directly or indirectly (Hoque, 2004; Jusoh, 2008; Uyar & Kuzey, 2016), although their results are mixed. For instance, Uyar and Kuzey (2016) conducted a study on Turkish firms indicated that PEU and business performance were positively related. Hoque (2004), however, found that the impact of environmental uncertainty on organizational performance was not significant. Notably, Jusoh (2008) specified a negative significant association between PEU and

firm performance through BSC use, implying that, when environmental uncertainty is less perceived, firms show more use of the BSC to improve performance.

Surprisingly, research of this type is limited in the hospitality context (Köseoglu et al., 2013; McManus, 2013; Wang et al., 2012). Köseoglu et al. (2013) conducted an empirical study with managers of three-, four-, and five-star hotels in Mugla city in Turkey and found that the relationship between environmental uncertainty and performance was partially supported. Wang et al. (2012) asserted that understanding and being responsive to environmental factors can create utilities and effectiveness for hotel organizations, or otherwise problems arise. Particularly, they emphasized the lack of consideration for the association between external environmental factors and HP in empirical studies, reporting that these factors have an impact on HP mostly in terms of economic, political, cultural, legal, technological, and social issues (Wang et al., 2012).

In recent years, Turkey has been exposed to high degree of environmental uncertainty due to economic and political crises that have affected the business milieu throughout Turkey. Therefore, it is critical to understand and being responsive to the effects of PEU on organizational performance, especially in the hotel industry, which is highly dependent on the external environment due to competition. In this regard, the reviewed literature has paid little attention to a direct relationship between PEU and organizational performance, with some exceptions for which the results were not consistent. Therefore, it is valuable to empirically test the relationships between PEU and HP. Hence, the following research hypothesis is proposed:

    H1. PEU is positively related to HP.

4.2 The Mediating Role of the Balanced Scorecard (BSC)

Traditional financial performance measures have long been exposed to criticism as such measures only reflect firms' past activities and are inadequate for evaluating likely future performance because they are historical and financially denominated. They do not consider non-financial performance areas such as customers, business operations, and other innovation- and strategy-related areas, which are critical for achieving competitive advantage (Elbanna et al., 2015). Therefore, the integration of non-financial measures has been called for (Brown et al., 2014; Chenhall & Morris, 1986; Gosselin, 2005; Hoque, 2005; Kaplan & Norton, 1992, 1993, 2001). These types of measures are important for an organization's long-term focus. Today's globalized competitive world has led to the development of different types of PM practices, such as non-financial performance measures, the BSC, and customer accounting. These PM practices mainly focus on value creation for organizations.

The BSC, as the most popular one, is not implemented in the same way by all businesses, but the mission, vision, strategy, and culture of a firm are considered (Kaplan & Norton, 1993). Further, Doran et al. (2002) emphasized that the BSC's components and measures differ in distinct organizations according to their objectives and situations. Another study reported that local setting of organizations should be considered in the implementation of the BSC because it causes differences among organizations (Sandhu, Baxter & Emsley, 2008).Similarly, Evans (2005, p. 386) stated that "[t]hus BSC requires tailoring to each set of organizational circumstances and cannot be viewed as a one-off event but rather as a continuing process that requires monitoring, continuous learning, feedback and adjustment." From this perspective, companies should not be indifferent to extrinsic and intrinsic factors that influence the

company's PM system. One such important extrinsic factor is PEU. Hoque, (2005) highlighted essential role of environmental elements in providing effective PM system. In this regard, conventional financial performance measures can be considered as ineffective in the evaluation of company performance, especially in the case of unpredictable environments (Chenhall & Morris, 1986). Therefore, when a high level of uncertainty is perceived in the environment, companies undeniably utilize more advanced MAPs (Abdel-Kader & Luther, 2008). Similarly, Quesado, et al., (2016) showed that PM systems that rely on traditional financial measures are not sufficient in today's complex and rapidly-changing environments, requiring the inclusion of non-financial measures. Consequently, it is obvious that sophisticated MAPs allow organizations to cope with obstacles arising due to volatile environments.

It is empirically proved by many MA related studies that PEU is a critical issue. Numerous contingency theory related studies have demonstrated the association between PEU and PM techniques (Ezzamel, 1990; Hendricks et al., 2012; Hoque, 2005; Jusoh, 2008; Pavlatos, 2015; Uyar & Kuzey, 2016). However, the insufficiency of hospitality studies is obvious, with some notable exceptions, including McManus (2013), Pavlatos (2015) and Sharma (2002). Most of these studies found significant positive relationships among PEU and various PM tools. Liu et al. (2014) pointed out that Singaporean manufacturing firms tend to adopt and use the BSC in more uncertain environments. This study involved only financial controllers and the scale used was specific to the manufacturing industry. Moreover, a research done in Dutch companies with financial managers and management accountant showed that there is a positive association between environmental dynamics and experiencing the BSC (Braam & Nijssen, 2011). Furthermore, a positive and significant relationship has been found between environmental uncertainty and the extent of BSC adoption (Gosselin, 2005,

36

2011; Hendricks et al., 2012). For example, Gosselin (2011) reported that the relationships among PEU and adoption of the BSC is significant. So, when there is an uncertainty in the business environment, managers have more tendencies to adopt the BSC. However, these studies' samples did not comprise departmental managers. With respect to this, Gosselin (2005) specified that the outcomes of the study would be different if the operation managers were included in the study. We therefore, included top and middle managers in our study. Also, the questions used to measure BSC adoption were not specific to hotel industry characteristics, such as "tonnage of production waste produced", "number of machine or plant hours used" (Gosselin, 2011).

In contrast, the relationship between an uncertain firm environment and non-financial PM systems was found insignificant by Ahmad and Zabri (2016). Besides, King et al. (2010) revealed a negative association between PEU (dynamism) and the extent of budget use in healthcare firms. Surprisingly, McManus (2013) conducted research on Australian hotels and could not support the relationship between a higher PEU and the use of customer and marketing performance measures. Similarly, another valuable hotel study, which based on the contingency theory, showed that the different aspects of PEU differently affect budget system characteristics, both positively and negatively (Sharma, 2002). These two hotel-industry-related studies (McManus, 2013, Sharma, 2002) involved only hotel managers and financial controllers as respondents and considered types of measurement techniques that do not provide holistic performance aspects of a business as the BSC does. Regarding this issue, Elbanna et al. (2015) underlined that, in the hospitality industry, where there is a high level of competition, an effective PM system, such as the BSC, is essential and needful. However no study has been performed in the literature that breaks down the BSC into its four separate

dimensions and offers hypotheses related to PEU to see which perspective has the most significant relationship with PEU. Previous studies have also mostly ignored departmental managers of organizations in their sample. These considerations, combined with the mixed results obtained to date, demonstrate the need of a better understanding of the relationship between PEU and the extent of BSC dimensions' adoption, especially in the hotel context. Therefore, the following hypotheses are posited:

H2a. PEU is positively related to the financial dimension of the BSC in the hotel industry.

H2b. PEU is positively related to the customer dimension of BSC in the hotel industry.

H2c. PEU is positively related to the internal business processes dimension of BSC in the hotel industry.

H2d. PEU is positively related to the innovation and learning dimension of BSC in the hotel industry.

Integrated contemporary PM systems play an essential role in the improvement of organizational performance. Notably, non-financial measures are also essential for the various departments of companies, because department managers understand and improve the efficiency of business operations, product/service quality, and client satisfaction with the help of these measures, subsequently enhancing business performance and creating competitive advantage. Numerous studies have determined the relationship between contemporary PM techniques and firm performance (Bangchokdee & Mia, 2016; Hoque & James, 2000; Hoque 2005; Jusoh, 2008; McManus, 2013). For instance, Jusoh (2008) concluded that use of BSC was positively

and significantly related with manufacturing firms' performance; greater use of the BSC led to improved performance in these firms which is in line with outcomes of Hoque and James (2000). Bangchokdee and Mia (2016) affirmed that top managers' use of integrated performance measures was positively and significantly related to HP. Despite the results of these studies being generally positive and significant, some studies have found adverse relationships. McManus's (2013) hotel study could not find an association between the accounting and marketing customer-oriented performance measures with HP, except for customer satisfaction analysis. A review of the existing literature reveals that more research is needed regarding the BSC and firm performance, particularly in the hotel industry, a gap also noted by Elbanna et al. (2015). Consequently, this research improves the understanding of the empirical relationship between the extent of BSC dimensions' adoption and HP by considering not only top-level managers' perspectives, but also those of middle-level managers. Hence:

> **H3a.** The financial dimension of BSC is positively related to HP.
>
> **H3b.** The customer dimension of BSC is positively related to HP.
>
> **H3c.** The internal business processes dimension of BSC is positively related to HP.
>
> **H3d.** The innovation and learning dimension of BSC is positively related to HP.

The considerable MA literature have applied contingency theory and suggested that, in the case of a greater degree of PEU, businesses are more concerned with MASs to deal with this vague situation, as such a practice impacts business performance (Chenhall & Morris, 1986; Gordon & Narayanan, 1984). Some studies have yielded evidence on the association between PEU and firm performance through the mediator

roles of different types of PM techniques (Jusoh, 2008; King et al., 2010; Uyar & Kuzey, 2016). What is more, a study was conducted about the effect of PEU on the association between non-financial performance measures' use and organizational performance and found a significant relationship (Hoque, 2005). However, a study on manufacturing firms with Chief Executive Officers showed, through the usage of non-financial performance measures, that environmental uncertainty and organizational performance were not related (Hoque, 2004). However, this study only considered non-financial performance measures which cannot be considered as the BSC. To the best of our knowledge, there is no empirical study investigating the impact of PEU on HP through the extent of BSC dimensions' adoption in the hotel industry. Furthermore, Bangchokdee and Mia (2016) recommended an investigation of the effect of PEU on HP through the use of integrated performance measures. Therefore, it is valuable to empirically test the relationship between PEU and HP through the mediator role of each dimension of BSC. Hence, it is hypothesized that:

H4a. The financial dimension of BSC mediates the relationship between PEU and HP.

H4b. The customer dimension of BSC mediates the relationship between PEU and HP.

H4c. The internal business processes dimension of BSC mediates the relationship between PEU and HP.

H4d. The innovation and learning dimension of BSC mediates the relationship between PEU and HP.

4.3 The Moderating Role of Structure

In the MA literature, organizational structure, as a contingency factor, has long been researched, with studies examining the relationship between structure and MASs

(Abernethy et al., 2004; Abernethy & Bouwens, 2005; Chenhall, 2003, 2006; Chenhall & Morris, 1986; Gordon & Miller, 1976; Gordon & Narayanan, 1984; Hammad et al., 2013; Otley, 1980). To illustrate, in their study Abernethy et al., (2004) concluded that decentralization is a crucial determinant of MAPs. Abernethy and Bouwens (2005) reported important role of decentralization choices on the effective implementation of MAS innovations. Also, another study conducted in hospitals indicated that decentralization is significantly and positively related with aggregated, integrated, and timely MAS information but is not related with broad-scope MAS information (Hammad et al., 2013). Furthermore, some studies have examined the relationship between decentralization and strategic MAPs (Abdel-Kader & Luther, 2008, Pavlatos, 2015), while others have explained the relationship between decentralization and PM systems (Gosselin, 2005, 2011; King et al., 2010; Merchant, 1981; Quesado et al., 2014; Sharma, 2002; Uyar & Kuzey, 2016). Abdel-Kader and Luther (2008) suggested that organizations with a more decentralized structure need more information for their managers, which helps their planning, controlling, and decision-making, and advanced MAPs provide such information. Pavlatos (2015) found that decentralized structure of hotels have more use of strategic MA compared to centralized hotels as strategic MA techniques provide necessary information to the lower-level managers which helps their decision-making. Research conducted in healthcare businesses by King et al. (2010) found positive a relationship between decentralized firm structure and the extent of budget use. Gosselin (2011) indicated that decentralized firms have a higher use of non-financial measures but, interestingly, such firms do not tend to adopt BSC (Gosselin, 2011). Sharma (2002) found that, in hotels, decentralization had a positive and significant impact on the control and performance evaluation characteristics of the budget system.

41

These previous studies, either in the manufacturing or service industry, have been limited to investigating the relationship between organizational structure and different types of PM techniques. Little research has been undertaken to examine the mediating effect of PM systems between decentralization and organizational performance. For example, in line with the contingency theory Uyar and Kuzey (2016) indicated that there was a positive significant relationship between decentralized structure and firm performance, both directly and indirectly through the extent of budget use. A study in the hotel industry found that the mediator role of performance measures' use between decentralization and HP was both positive and significant; however, the relation between decentralization and the use of financial performance measures was not significant (Bangchokdee & Mia, 2016). The authors concluded that the use of financial measures was not a mediator among decentralization and HP. McManus (2013) conducted a study with hotel managers in Australia and showed that hotels with decentralized structures had a moderate effect on the use of customer accounting and marketing performance measures. The "fit" between decentralized hotel structure and stated performance measures, however, was found to be not related with HP, except for customer satisfaction analysis.

The results of these hotel studies reveal the need for contemporary PM systems when decision-making authority is given to the middle managers as such performance measures provide necessary information about clients, market, employees, and operational processes, which are critical for their decision-making. In addition, it is crucial to consider the unique characteristics of each department of hotels because each of them provide a specialized and different service. As previously mentioned, studies have thus far considered only the top-management level. Therefore, this research incorporates hotel department managers to provide a better understanding of the

performance measures and HP, in line with the arguments of Bangchokdee and Mia (2016) who called for future studies involving departmental managers in such processes.

The above studies have mostly discussed, and indicated different results among, decentralized structure and various PM techniques, with very few extended to include organizational performance. Surprisingly, no studies have analyzed the moderating role of decentralization between the extent of BSC dimensions' adoption and performance results in the hotel context. We suggest that it is in conditions of hotel decentralized structures that the extent of BSC dimensions' adoption is most beneficial for improved HP. Hence, it is proposed that:

H5a. Decentralization moderates the positive relationship between the financial dimension of BSC and HP, so that the relationship is stronger when decentralization is high.

H5b. Decentralization moderates the positive relationship between the customer dimension of BSC and HP, so that the relationship is stronger when decentralization is high.

H5c. Decentralization moderates the positive relationship between the internal business processes dimension of BSC and HP, so that the relationship is stronger when decentralization is high.

H5d. Decentralization moderates the positive relationship between the innovation and learning dimension of BSC and HP, so that the relationship is stronger when decentralization is high.

Decentralized structures are more flexible in nature; hence, an organization with a more decentralized structure is able to process information better, which is required by

dynamic environments and thus such organizations become successful in this type of environment (Gordon & Narayanan, 1984, Govindarajan, 1988; Gul & Chia, 1994). A highly decentralized structure is more able to respond to unexpected occurrences. In the hotel sector, a decentralized structure enables flexible and rapid responses to the external environment (Bangchokdee & Mia, 2016) because middle managers are typically more experienced, as well as closer to their clients and suppliers, than general managers. Similarly, Ouakouak et al., (2014) asserted that the authorization of departmental managers regarding decision-making enabled quick responses to changing environmental conditions; these managers could take more suitable and prompt decisions in unpredictable conditions.

However, in such an environment, middle managers need more information about their customers, market, employees, and business processes to make better decisions and improve their departmental performance, which in turn positively impacts HP. This information is critical, especially in uncertain environments, and can be provided by integrated performance measures, such as the BSC, thus making its adoption important as it helps to reduce uncertainty in the firm environment. These arguments represent an integrated framework, in which the extent of BSC dimensions' adoption mediates the relationship between PEU and HP, the relationship of which is in turn moderated by a decentralized structure. Based on the idea that a positive, significant relationship between the extent of BSC dimensions' adoption and HP is stronger when the structure is more decentralized and PEU is positively and significantly related to the extent of BSC dimensions' adoption, we posit that the positive significant indirect effect of PEU on HP via the extent of BSC dimensions' adoption will be stronger when a structure is more decentralized. Thus, it is posited:

H6a. Decentralization moderates the indirect effect of PEU on HP via the financial dimension of BSC, so that the indirect effect is stronger when decentralization is high.

H6b. Decentralization moderates the indirect effect of PEU on HP via the customer dimension of BSC, so that the indirect effect is stronger when decentralization is high.

H6c. Decentralization moderates the indirect effect of PEU on HP via the internal business processes dimension of BSC, so that the indirect effect is stronger when decentralization is high.

H6d. Decentralization moderates the indirect effect of PEU on HP via the innovation and learning dimension of BSC, so that the indirect effect is stronger when decentralization is high.

H1

H4a – H4b – H4c – H4d

BSC Components*

Financial

H2a

H3a

Customer

H2b

H3b

Perceived environmental uncertainty

H2c

Internal business processes

H3c

Hotel performance

H2d

H3d

H5a-5b-5c-5d

Innovation & learning

Structure:

Decentralized

H6a – H6b – H6c – H6d
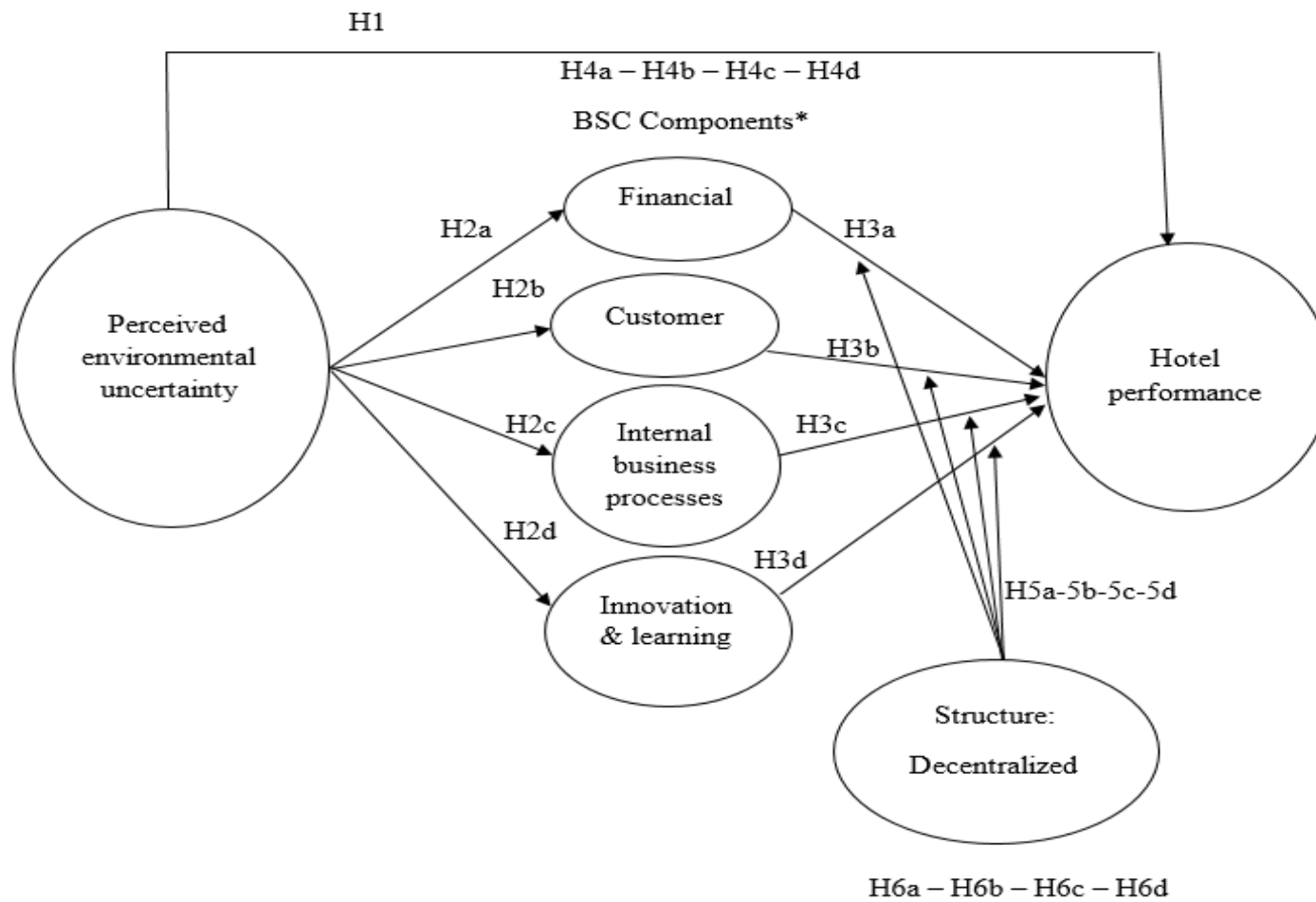
Figure 2. Conceptual Model
Note: * Denotes balanced scorecard components.

Chapter 5

METHODOLOGY

This chapter explains the methodology of this research that has been employed by this study. Specifically, this chapter is structured as: it begins with a discussion of the research population and the sample and procedure. This is followed by an explanation of the variables' measurement. It then briefly describes the data analysis.

5.1 Research Population

The term population is described as the overall group of people, things, or events of interest which are investigated and the population frame consists of all the components in the population from which the sample is drawn (Sekaran, 2003). In this research, population is five-star hotels in Antalya, Turkey. The rationale for targeting the hotel organizations in Antalya is as follows:

- This research sample involves hotel organizations in order to control the number of confounding variables which can impact any outcomes from a multi-industry. This is in line with Ittner, Larcker and Randall (2003) recommendations, even though considering one industry limits the ability to generalize the outcomes.

- The unique characteristics of hotel services include: intangibility, inseparability of production from consumption as customers are also involved in the service processes, diversity in services because even the same person provides services, it may be different among customers or at different times, and services' perishability (Auzair & Langfield-Smith, 2005; Brignall, 1997;

Fitzgerald et al., 1991). These authors also stressed that due to the nature of hotel companies, their environment tend to become more uncertain, volatile and complex. Human participation plays a key role in the production process of hotel services. Regarding this, Pavlatos (2015) and Sharma (2002) highlighted that hotel industry is exposed to highly human interaction and frequently changing environment. In addition to this, environmental uncertainty is believed to be more influential on five-star hotels which is in line with the results of earlier study by Ezzamel (1990) who evidenced that PEU had a stronger impact on the large firms compared to small ones. Taking into consideration these, the hotel organizations are more relevant and reflect the constructs of this research since its variables; PEU and decentralization are clearly related to the hotel organisations.

- Five-star hotels are targeted in the population. This is because five-star hotel organizations are expected to have a well-designed PM system compared to other hotels with less stars.

- The combination of non-financial performance measurements with financial performance measurements in PM systems has been received considerable emphasis in hotel industries (Bangchokdee & Mia, 2016; Elbanna et al., 2015).

- The literature of PM system focuses on conducting the empirical studies in the hotel industries (Bangchokdee & Mia, 2016; Elbanna et al., 2015). In today's competitive environment, it is important to focus on measuring and improving the efficiency of hotel companies thereof, innovative PM system is deemed necessity.

5.2 Sample and Procedure

In general, methodology is described as the research process. Specifically, it tries to provide answer to who, what, why, where, and how that the data is gathered and then analyzed. There are two main type of researches of social sciences: quantitative and qualitative. It always become a big challenge for researchers to specify the most appropriate research method for their studies. Precisely, it cannot be stated that this method is superior to the other. Instead the research nature and its objective are the key elements which lead researcher to which type of method will be used. In contingency theory related studies, it is possible with deductive approach to test a theory, explain relations among variables, and make generalizations (Gerdin & Greve, 2004). So, in this study, a deductive approach was used in order to delineate the relationships among the study variables (Altinay, Paraskevas, & Jang 2016). In this type of research approach, several hypotheses are developed, are expressed in numerical terms and then are empirically tested in order to prove their validity. Creswell (1994, p. 1-2) earlier defined it as "an inguiry into a social or human problem, based on testing a theory composed of variables, measured with numbers, and analyzed with statistical procedures, in order to determine whether the predictive generalizations of the theory hold true". This method mainly purposes to generalize the study findings as to broad context as possible.

This paragraph was discussed pros and cons of this type of methodological approach (Amaratunga, Baldry, Sarshar, & Newton, 2002; Sogunro, 2002). First of all, the data is collected faster and economic way that is more suitable and preferable in case of the researcher does not have sufficient resources to conduct the study such as money, time. In terms of gathering data, it is possible to reach large population through experimental

design and/or survey. Data analysis process is not complex as statistical analyses are used. Furthermore, these studies are based on causal explanations so they consider the specific context with their small number of research variables. Also, it is possible to make comparison or replication to other settings. Moreover, interpretation of these studies are done more objectively. On the other hand, this type of methodology is not effective to explore research topic in greater depth. Also, such researches are conducted within specif period of time hence, they cannot reflect any arisen temporal changes. Lastly, this types of methodology does not help to generate theories.

A total of 44 five-star hotels in Antalya, Turkey were included in this study. In total, 550 questionnaires were distributed and 400 general, assistant general, and department managers participated in this study, which constitutes a 72.7% response rate. This response rate was obtained as a result of cooperation with senior hotel managers and rigorous data collection process. Those managers who did not respond the questionnaires showed their reasons as unwillingness to participation and lack of time. We chose this population because it is the most appropriate and knowledgeable for the purpose of our study. We used judgemental sampling that five-star hotels were chosen not only because they attract the majority of tourists in Antalya, but because they are also more likely to use integrated PM systems, such as the BSC in their performance evaluations. Although the BSC has been applied in small, medium, and large companies, some studies have shown that large businesses are more likely to adopt and use the BSC (Hendricks et al., 2012; Liu et al., 2014; Quesado et al., 2016). Analogously, a study was done in two, three, four, and five-star hotels and as a result, it was found that five-star hotels adopt more contemporary MAPs compared to others (Sunarni, 2015).

A research team instructed and conducted the survey with the participants. The respondents were notified that their participation was anonymous and that their responses would be used to shed light on certain academic aims; namely the principle of information confidentiality was observed for all collected data. Also, before distributing the questionnaires, the managers were informed with some justifying explanations about the study. Regarding the format of the survey, all of them were paper– pencil/pen questionnaires. Pilot questionnaires were undertaken before the final questionnaires were sent to the target respondents, and one academician checked and reviewed the questionnaire. In this way, the clarity, relevancy, and coherency of questions were verified. In the questionnaire, respondents were asked questions that were related with PEU, decentralized organizational structure, the extent of BSC dimensions' adoption and HP, and kindly requested from them to provide answers based on their perceptions. In the final part of the survey, there were questions regarding demographic information of respondents. Convenience sampling was used as managers filled out the questionnaires during their working time but at their own convenience. Among the hotel managers, 60.8% of the participants were male and 39.2% were female. The majority of participants were aged between 28 and 47 years (63.3%). Approximately 54% held a high-school diploma or below, 26% a junior college degree, and 19.8% a bachelor's or higher degree. More than half of respondents (64.5%) had tenure of five years or less at their current hotel organizations. Regarding job positions, 23.3% were food and beverage (F&B) managers, 14.5% were general manager assistants, 13% were human resource (HR) managers, 12.5% housekeeping managers, 10.8% front-office managers, 9% marketing managers, 8.5% were general managers, and the rest were other department managers, such as finance and IT.

5.3 Measurement of Variables

The scales we used were originally created in English, so the back-translation method was used from English to Turkish to ensure that meanings were equivalent in each language (Brislin, 1980; Uyar & Kuzey, 2016): scale items were first translated from English into Turkish, then back-translated from Turkish into English to verify item equivalence. In line with the recommendations of Schaffer and Riordan (2003), some minor changes were made according to the opinions of hotel managers in the surveyed hotels in order to ensure that the items could be generalized to the hotel context.

In this study, PEU, as independent variable; decentralization, as a moderator; the extent of BSC dimensions' adoption, as a mediator; and HP, as a dependent variable were measured. PEU and decentralization were measured using seven-point Likert-type scales, ranging from 1 (strongly disagree) to 7 (strongly agree). The extent of BSC adoption was measured on a five-point Likert-type scale, ranging from 1 (highly dissatisfied) to 5 (highly satisfied). Here, the respondents were also asked to specify indicator(s) if any measure of the BSC was not in use. HP was measured using a five-point Likert-type scale, ranging from 1 (not at all satisfactory) to 5 (outstanding). The variables in this study were adopted from previously validated instruments:

- **Hotel Performance (HP).** The HP scale was first used by Gupta and Govindarajan (1984) and included 12 items. In addition to the 12 items, two more items were added –customer satisfaction and revenue per available room – because they are considered key performance measures in the hotel context (Lamminmaki, 2007; O'Neill & Mattila, 2004). Revenue per available room is the industry standard for measuring HP and takes into account both price (average daily rate) and occupancy rate (Anderson & Lawrence, 2014; Zhang,

Lawrence, & Anderson, 2015). Sample items in this scale are "Cash flow from operations, and profit to sales ratio". Cronbach's alpha for this scale was 0.96.

- **Balanced Scorecard (BSC).** A multi-item PM scale, the BSC, was used as recently developed by Elbanna et al. (2015) because, according to the literature, there is no other theoretical scale developed for the hotel industry. The scale consists of four dimensions (financial, customer, internal business processes, innovation and learning) and helps hotels focus their measurements by considering key strategic aspects (Sainaghi et al., 2013). For this reason, it was found appropriate for this study. An example of items which measure the BSC are "Meeting financial targets, customer retention rate, serving customers on time, and staff development". Cronbach's alpha for the financial dimension was 0.85, for the customer dimension 0.95, for the internal business processes dimension 0.97, and for the innovation and learning dimension 0.80.

- **Perceived Environmental Uncertainty (PEU).** We measured PEU with the six items developed by Gordon and Narayanan (1984). The scale was subsequently used in other studies (Gosselin, 2005, 2011; Hoque, 2005; King et al., 2010). A sample item of PEU is "External environmental factors (economic and technological) facing your hotel is changing rapidly". Cronbach's alpha for this measure was 0.85.

- **Decentralization.** To measure decentralization, six items was utilized as per Gordon and Narayanan (1984), which were subsequently used by other studies (Abdel-Kader & Luther, 2008; Abernethy et al., 2004; Bangchokdee & Mia, 2016; King et al., 2010; Uyar & Kuzey, 2016). One of the items of decentralization scale is "Most operating decisions are made at the lower managerial level". Cronbach's alpha for this scale was 0.95.

5.4 Data analysis

Internal consistency reliabilities were measured through a cut-off level of 0.70. Additionally, Pearson correlation analysis was applied to clarify the relationships between study variables. We used a moderated mediation model, in which the financial, customer, internal business processes, and innovation and learning dimensions of BSC were used as mediators and decentralization worked as a moderator. Therefore, the SPSS process macro developed by Hayes (2013) was used to test the data.

Chapter 6

RESULTS

This chapter aims to present and discuss the validation of the measurement model and testing the hypotheses with respect to aforementioned relationships which were explained in chapter 4.

6.1 Validation of the Measurement Model

According to the suggestions of Podsakoff et al. (2003), Harman's single-factor analysis as a statistical avenue was utilized to minimize the potential influences of the common method variance (CMV) on the findings of this study, because the data collected in this research were self-reported. Of the five factors identified, the principal factor explained 30.06% of the variance. Because one factor did not explain more than 50% of the variance, CMV did not pose a challenge in the dataset (Podsakoff et al., 2003). Furthermore, confirmatory factor analysis (CFA) was performed to examine if these factors were different. CFA showed that factor loadings were significant to assess together, except for one item from interactional justice, ranging from 0.607 to 0.963 ($p<0.05$). Moreover, all constructs showed the acceptable composite construct reliabilities (CCR) ranging between 0.848 and 0.978. Our results were compatible with the explanations of Nusair and Hua (2010) that the composite reliabilities for all the constructs are above the threshold value of 0.70, denoting high reliability for all the constructs. Average variance extracted (AVE) values were measured for evaluating convergent and discriminant validity. Indicators are representative of the latent construct, proving convergent validity in case of AVE values are 0.50 and higher (Hair,

Black, Babin, & Anderson, 2010). AVE scores of constructs were between 0.545 and 0.856, indicating convergent validity sufficiently. Specific measures have been develop in order to assess an ability of model to represent the data. These are mainly goodness-of-fit index, root-mean-square error of approximation, comparative fit index etc. For an acceptable model fit, Schreiber, Nora, Stage, Barlow, and King (2006) stated that the x^2/df ratio must be under 3, comparative fit index value should be greater than 0.90 and close to 1 (Hair et al., 2010) and the root-mean-square error of approximation value should be lower than 0.08. Analyses demonstrated that the hypothesized model yielded an acceptable fit to the data (χ^2=2865.929; df=1406, p<0.01; comparative fit index (CFI)=0.922; goodness-of-fit index (GFI)=0.893; Tucker–Lewis index (TLI)=0.917; root-mean-square error of approximation (RMSEA)=0.051; and standardized root-mean-square residual (RMR)=0.0541), which recommended that these variables should be acknowledged as different constructs. Overall, the ratio of the AVE in each construct was greater than the square of the correlation coefficient between variables, ensuring discriminant validity (Fornell, & Larcker, 1981; Hair et al., 2010).

As shown in Table 1, most correlations among the constructs in this study were as expected. For example, PEU was positively related to the financial (r=0.488, p<0.01), customer (r=0.429, p<0.01), internal business processes (r=0.131, p<0.01), decentralization (r=0.264, p<0.01), and HP (r=0.443, p<0.01) dimensions. Moreover, HP was positively and significantly correlated with the financial (r=0.334, p<0.01), customer (r=0.310, p<0.01), internal business processes (r=0.189, p<0.01), innovation and learning (r=0.146, p<0.01), and decentralization (r= 0.595, p <0.01) dimensions. Decentralization was also positively related to the financial (r=0.274, p<0.01), customer (r=0.235, p<0.01), internal business processes (r=0.102, p<0.05), and

innovation and learning dimensions ($r=0.219$, $p<0.01$) constructs. These results present preliminary support for the majority of our hypotheses, which we analyze in greater detail below.

Table 1. Means, Standard Deviations, and Correlations

Constructs	Means	SD	1	2	3	4	5	6	7
1. PEU	3.82	0.76	(0.85)						
2. Financial	3.76	0.79	0.488**	(0.88)					
3. Customer	3.83	0.83	0.429**	0.717**	(0.96)				
4. Internal business processes	3.34	1.14	0.131**	0.216**	0.262**	(0.97)			
5. Innovation and learning	3.91	0.75	0.073	0.287**	0.205**	0.233**	(0.84)		
6. Decentralization	3.8	0.97	0.264**	0.274**	0.235**	0.102*	0.219**	(0.95)	
7. Hotel performance	3.86	0.84	0.443**	0.334**	0.310**	0.189**	0.146**	0.595**	(0.96)

Notes: PEU=perceived environmental uncertainty; SD=standard deviation. Values in parentheses along the diagonal represent the reliability (Cronbach's alpha). $^{*}p<0.05$, $^{**}p<0.01$.

6.2 Hypotheses Testing

The findings in Table 2 reveal that PEU had a significant positive effect on HP (β=0.44, p<0.01), thus supporting H1. PEU was also significantly and positively associated with the financial (β=0.49, p<0.01), customer (β=0.43, p<0.01), and internal business processes (β=0.13, p<0.01) dimensions, providing empirical support for H2a–2c, respectively, whereas H2d was rejected because PEU did not have a significant effect on the innovation and learning dimension (β=0.07, p>0.05). Additionally, there was a significant and positive relationship between HP and the financial (β=0.33, p<0.01), customer (β=0.31, p<0.01), internal business processes (β=0.19, p<0.01), and innovation and learning dimensions (β=0.15, p<0.01), thus supporting H3a–3d.

Table 2. Results of Regression Analysis

Predictors	Model 1	Model 2	**HP** Model 3	Model 4	Model 5	**F** Model 6	**C** Model 7	**IBP** Model 8	**I&L** Model 9
Constant	1.99^{**}	2.51^{**}	2.65^{**}	3.39^{**}	3.22^{**}	1.83^{**}	2.05^{**}	2.59^{**}	3.64^{**}
PEU	0.44^{**}					0.49^{**}	0.43^{**}	0.13^{**}	0.07
Financial		0.33^{**}							
Customer			0.31^{**}						
Internal business processes				0.19^{**}					
Innovation and learning					0.15^{**}				
R^2	0.2	0.11	0.09	0.04	0.02	0.24	0.18	0.02	0.01

Notes: PEU=perceived environmental uncertainty; HP=hotel performance; F=financial; C=customer; IBP=internal business processes; I&L=innovation and learning. $^{*}p<0.05$, $^{**}p<0.01$.

Our test on the mediating effects proposed in H4a–4d required analyzing the conditions suggested by Preacher and Hayes (2004) which included:

1. Estimating the effect of the predictor variable (PEU) on the mediator (financial) (Table 3, Model 1, b=0.51, p<0.01) and customer (Model 3, b=0.47, p<0.01), internal business processes (Model 5, b=0.20, p<0.01), and innovation and learning dimensions (Model 7, b=0.07, p>0.05).

2. Estimating the effect of the mediator (financial) on the outcome variable (HP) (Model 2, b=0.16, p<0.01) while controlling for the effect of the predictor variable (Model 2, b=0.40, p<0.01), estimating the effect of customer dimension on HP (Model 4, b=0.15, p<0.01) while controlling for the effect of the predictor variable (Model 4, b=0.42, p<0.01), estimating the effect of internal business processes dimension on HP (Model 6, b=0.10, p<0.01) while controlling for the effect of the predictor variable (Model 6, b=0.47, p<0.01), and estimating the effect of innovation and learning dimension on HP (Model 8, b=0.13, p<0.05) while controlling for the effect of the predictor variable (Model 8, b=0.48, p<0.01).

3. Bootstrapping the sampling distribution of the indirect effect and deriving a confidence interval (CI) with the empirically-derived bootstrapped sampling distribution.

As indicated, because the impact of PEU on innovation and learning was insignificant, H4d was rejected. The indirect effect through the financial dimension was estimated at between 0.07 and 0.16 with 95% confidence and normal theory tests for the indirect effect (z=2.91, p<0.01), through the customer dimension at between 0.05 and 0.14 with 95% confidence and normal theory tests for the indirect effect (z=2.84, p<0.01), and through the internal business processes dimension between 0.04 and 0.05 with 95%

confidence an normal theory tests for the indirect effect (z=1.91, $p<0.05$). Because zero is not included in the 95% CIs, it can be concluded the indirect effects are significantly different from zero and that the financial, customer, and internal business processes dimensions mediate the effect of PEU on HP, providing support for H4a–4c, respectively.

Table 3. Results of Mediation Analysis

Variables	Model 1 DV=Financial	Model 2 DV=HP	Model 3 DV=C	Model 4 DV=HP	Model 5 DV=IBP	Model 6 DV=HP	Model 7 DV=I&L	Model 8 DV=HP
PEU	$0.51 \ (0.04)^{**}$	$0.40 \ (0.06)^{**}$	$0.47 \ (0.04)^{**}$	$0.42 \ (0.05)^{**}$	$0.20 \ (0.07)^{**}$	$0.47 \ (0.05)^{**}$	$0.07 \ (0.05)$	$0.48 \ (0.05)^{**}$
Financial	—	$0.16 \ (0.05)^{**}$						
Customer	—	—		$0.15 \ (0.05)^{**}$				
Internal business processes						$0.10 \ (0.03)^{**}$		
Innovation and learning								$0.13 \ (0.05)^{*}$
R^2	0.24	0.21	0.18	0.21	0.02	0.21	0.01	0.21

Notes: n=400. Entries corresponding to the predicting variables are coefficient effects, β, with standard errors appearing in parentheses. HP=hotel performance; C=customer; IBP=internal business processes; I&L=innovation and learning. $^{*}p<0.05$, $^{**}p<0.01$.

H5 predicted that decentralization would moderate the positive relationships: (a) between the financial dimension and HP; (b) between the customer dimension and HP; (c) between the internal business processes dimension and HP; and (d) between the innovation and learning dimension and HP. The predicted interactions of Financial $\times$ Decentralization (b=0.15, p<0.01), Customer $\times$ Decentralization (b=0.14, p<0.01), and Internal Business Processes $\times$ Decentralization (b=0.09, p<0.05) are statistically significant, supporting H5a–5c, respectively. H5d was rejected because the interaction effect of Innovation & Learning $\times$ Decentralization (b=0.01, p>0.05) was not significant (see Table 4).

Table 4. Results of Moderating Role of Decentralization

Predictors	Coefficient	t	Coefficient	t	Coefficient	t	Coefficient	t
Constant	3.83 (0.03) ***	108.22	3.82 (0.03) ***	111.28	3.85 (0.03) ***	112.85	3.86 (0.03) ***	111.62
IV								
Financial	0.25 (0.05) ***	4.61						
Customer			0.23 (0.05) ***	4.22				
IBP					0.10 (0.03) ***	3.21		
I&L							0.02 (0.04)	0.38
Moderator								
Decentralization	0.49 (0.04) ***	10.76	0.50 (0.04) ***	11.06	0.50 (0.04) ***	11.08	0.51 (0.04) ***	11.46
Interaction								
Financial × Decentralization	0.15 (0.05) ***	2.65						
Customer × Decentralization			0.14 (0.05) ***	2.67				
IBP × Decentralization					0.09 (0.04) ***	2.01		
I&L × Decentralization							0.01 (0.04)	0.04
Model fit								
R^2	0.41 ***		0.42 ***		0.38 ***		0.35 ***	

Notes: n=400. Entries corresponding to the predicting variables are coefficient effects, β, with standard errors appearing in parentheses. IBP=internal business processes; I&L=innovation and learning. $^*p<0.05$, $^{**}p<0.01$, $^{***}p<0.001$.

H6 proposed conditional indirect effects, so that the indirect relationships between PEU and HP through the BSC dimensions' adoption: (a) financial, (b) customer, (c) internal business processes, and (d) innovation and learning dimensions would be moderated by decentralization. The conditional indirect effects of PEU through the financial and customer dimensions are presented in Tables 5 and 6, respectively. Notably, the indirect effect of PEU via financial dimension under higher levels of decentralization (b=0.11) was higher than that under lower levels of decentralization (b=0.06). Similarly, the indirect effect of PEU through the customer dimension under higher levels of decentralization (b=0.10) was higher than that under lower levels of decentralization (b=0.04). Hayes's (2013) index of moderated mediation also provided a test for the strength of the mediator at different levels. The index was significant when the financial dimension was entered as the mediator variable (effect=0.03, SE=0.02, 95% CI=[0.02, 0.07]) and when the customer dimensions was introduced as the mediator variable (effect=0.02, SE=0.02, 95% CI=[0.03, 0.08]). Therefore, these results demonstrate the effect of PEU on HP via financial and customer dimensions increases as decentralization enhances, providing empirical support for H6a and H6b. H6c and H6d were rejected because, when internal business processes and innovation and learning were entered as the respective mediator variables, Hayes's (2013) index of moderated mediation did not provide a significant effect for internal business processes (Table 7, effect=0.01, SE=0.01, 95% CI=[0.00, 0.04]) and for innovation and learning (Table 8, effect=0.01, SE=0.01, 95% CI=[–0.01, 0.04]).

Table 5. Conditional Effect of PEU on Hotel Performance through Financial Dimension for Various Values of Decentralization

Mediator	Decentralization	Effect	SE	LLCI	ULCI
Financial	−1 SD	0.06	0.03	0.01	0.12
	0	0.08	0.04	0.01	0.16
	+1 SD	0.11	0.05	0.01	0.22

Notes: LLCI=lower level confidence interval; ULCI=upper level confidence interval.

Table 6. Conditional Effect of PEU on Hotel Performance through Customer Dimension for Various Values of Decentralization

Mediator	Decentralization	Effect	SE	LLCI	ULCI
Customer	−1 SD	0.04	0.02	0.01	0.1
	0	0.07	0.03	0.01	0.14
	+1 SD	0.10	0.04	0.01	0.2

Notes: LLCI=lower level confidence interval; ULCI=upper level confidence interval.

Table 7. Conditional Effect of PEU on Hotel Performance through Internal Business Process Dimension for Various Values of Decentralization

Mediator	Decentralization	Effect	SE	LLCI	ULCI
Internal business processes	−1 SD	0.01	0.01	−0.01	0.03
	0	0.02	0.01	0.01	0.05
	+1 SD	0.03	0.02	0	0.08

Notes: LLCI=lower level confidence interval; ULCI=upper level confidence interval.

Table 8. Conditional Effect of PEU on Hotel Performance through Innovation & Learning Dimension for Various Values of Decentralization

Mediator	Decentralization	Effect	SE	LLCI	ULCI
Innovation and learning	−1 SD	−0.01	0.01	−0.05	0.01
	0	0.01	0.01	−0.01	0.03
	+1 SD	0.02	0.01	0	0.06

Notes: LLCI=lower level confidence interval; ULCI=upper level confidence interval.

Chapter 7

DISCUSSION AND CONCLUSION

This chapter has presented the discussion and conclusion of the study. It starts to introduce strength of the study, then describes the theoretical and practical implications. Finally, chapter ends with expressing limitations and directions for future research.

7.1 Strength of the Study

This study set itself various different aims and its empirical findings offer valuable information. Based on contingency theory, this paper examined the influence of PEU on HP both directly and indirectly through the mediating role of the extent of BSC dimensions' adoption. It also examined the moderating role of organizational structure in the direct relationship between the extent of BSC dimensions' adoption and HP and the indirect relationship between PEU and HP. A total of 400 top- and middle-level managers from 44 five-star-hotels in Antalya responded to surveys. This study makes contribution hospitality performance management and measurement literature in several ways. To begin with, our study researched HP by considering the extent of BSC dimensions' adoption and PEU in the hotel industry that is not examined in the hospitality literature. The results proved that only financial, customer, internal business process dimensions of the BSC mediated the relationship between PEU and HP. Another important revelation of this study was an examination of the moderating role of decentralized organizational structure in both the direct relationship between the extent of BSC dimensions' adoption and HP and the indirect relationship between

PEU and HP. The outcomes we have obtained displayed that decentralized structure strengthened the association between financial, customer, and internal business processes dimensions' adoption of the BSC and HP. Moreover, the indirect influence of PEU on HP only via the extent of financial and customer dimensions' adoption of the BSC was stronger when the decentralization was high. Additionally, this study contributed to the literature by using an integrated view on the perspectives of both top and middle managers in the hotel industry. The investigation of abovementioned relations was done through conducting hotel managers in Antalya, Turkey; developing tourism destination. We did moderated mediation analysis which is our methodological contribution in this research field. All in all, this research clearly provides in-depth understanding into the determinants of HP namely PEU, decentralized organizational structure and BSC dimensions' adoption. In this way, we also provided contribution to the contingency theory literature from the hospitality perspective. Consequently, these outcomes have important implications for hotel managers' performance.

7.2 Theoretical Implications

Empirical findings of this study offer valuable information for theoretical implications. First of all, in line with the contingency theory, the extent of BSC adoption mediated the relationship between PEU and HP for the financial, customer, and internal business processes dimensions, but not for the innovation and learning dimension. Furthermore, a decentralized structure moderated the direct effect of the extent of BSC dimensions' adoption on HP, except for the innovation and learning dimension, and the indirect effect of PEU on HP through the extent of BSC dimensions' adoption, excluding the internal business processes, and innovation and learning dimensions.

Based on a sample of 44 hotels, the results suggest that PEU affects HP positively and significantly, which is in line with the results of Uyar and Kuzey (2016). This positive significant relationship can be explained by being responsive to the factors of volatile environment having a positive impact on the abilities of hotels to improve and provide better services, thus enhancing their performance. For instance, when hotels perceive the environment to be more unpredictable, they try to improve products and services due to the changing needs and choices of their customers, do their best to attract new customers, and react their competitors' actions. This was also argued by Wang et al. (2012), who stated that understanding and being responsive to environmental factors can provide effectiveness for hotel organizations. This also supports past research in which the linear positive relationship was revealed (Köseoglu et al., 2013).

PEU was also positively and significantly linked to the extent of the BSC dimensions' adoption, except for the innovation and learning dimension. As mentioned previously, one of the strengths of this study is the examination of BSC's dimensions and measuring each of these four dimension's effects on HP outcomes. In volatile environments, firm managers attach greater importance to the non-financial performance measures, which are related to the market, customers, and business operation processes, such as customer satisfaction, market share, and efficient business processes (Hoque, 2004). In this study, we could not find a relationship between PEU and the innovation and learning dimension of the BSC. This outcome shows that managers do not consider human capital development and innovative product/service development in such a volatile environment as resort hotels in Antalya. Most probably, two potential reasons are the work intensity of current managers and employees, and the seasonal employees' image in the eyes of the hotel managers who do not consider such employees as a secure investment of resources due to the lack of any binding

physical contract between the two parties for the next season. Our results also showed that the extent of BSC adoption was related with improved HP, which is consistent with prior research (Bangchokdee & Mia, 2016; Jusoh, 2008) in that the combination of the financial and non-financial aspects of the BSC provides a better picture of the whole organization, and comprehensive use of performance measures in the scorecard reflects positively on organizational performance.

Additionally, our empirical analysis about the mediating effect of the four dimensions of the BSC showed that, while financial, customer, and internal business processes dimensions played a significant mediating role in the relationship between PEU and HP, the innovation and learning dimension did not. This means that, even in volatile environments, human capital and new service development are not perceived as important in the determination of HP.

Another important outcome of this study is the positive and significant association between the extent of BSC dimensions' adoption by hotel managers and decentralized structure to produce a positive influence on HP. Our conclusions draw attention to the effects of decentralized organizational structure on effective and efficient BSC adoption which is consistent with the contingency theory. Notably, a greater adoption of BSC measures was linked to enhanced HP, but only when the structure of a hotel was more decentralized. In other words, better practical results can be achieved in relation to HP if a "fit" is achieved between the adoption of BSC dimensions and the decentralized structure.

As we indicated, one of the notable gaps filled by this present study is to examine the moderating role of decentralized organizational structure on the components of BSC,

which directly influence HP. As has been stated theoretically, a more decentralized organizational structure should lead to higher BSC scores. However, one of the unique contributions of this study lies in examining this relationship in resort hotels, which are dominated by seasonal employees (Arasli & Arici, 2019; Ozdemir et al., 2012). Thus, these hotels, when the high season ends, tend to release their employees. Legally, because there is no binding agreement between employee and employer, employers are hesitant to invest in their employees and there is no opportunity to establish efficient training programs for the employees during that dynamic season. Even if they invest in their human resources, it is not clear that these employees will come back to their job the next season. This shows that, even in a decentralized structure, human capital development is not considered effective in enhancing HP. This finding is compatible with the statement of Köseoglu et al., (2013) who underlined a lack of qualified staff working in the hotel sector. Therefore, as the study results highlight, three dimensions of the BSC were found effective on these hotels' HP, namely financial, customer, and internal business processes. Regarding a high decentralized organizational structure, the results provided more detail than previous studies and determined which dimensions of the BSC have a significant impact on HP when the decentralized organizational structure is high. In this way, with the application of contingency theory, this study also contributed to BSC literature by identifying crucial and new situations under which the BSC influences HP.

Finally, our study confirmed the relationships between PEU, BSC dimensions' adoption, and HP by testing the moderating effect of decentralization. The indirect influence of PEU on HP through the extent of BSC dimensions' adoption was stronger when the decentralized structure was high, except for the internal business processes and innovation and learning dimensions. This means that, in unpredictable

environments, financial and customer dimensions are considered crucial to improve HP only when the decentralized structure is high. However, even in a highly decentralized hotel structure, PEU had no effect on the internal business processes and innovation and learning dimensions of the BSC, which subsequently determines HP. This means that, in highly decentralized hotel structures, even the unstable environment does not affect hotel service operations and the investment in their staff for training and development purposes. To sum up, including BSC and a decentralized structure in the model helps in understanding how PEU is related to HP.

7.3 Practical Implications

This study can benefit industry professionals in understanding the antecedents of HP, enabling them to find ways to improve their performance outcomes. Our conclusions specify that PEU affects HP positively. Hotel organizations depend greatly on the external environment. Therefore, hotel managers could attempt to improve the offerings to their customers in the case of a perceived unpredictable environment to delight and retain them and could closely follow their competitors and other developments, e.g. economic and technological, to react in a more effective and timely manner. Thus, they could achieve the goal of staying ahead of their competitors.

According to our results, hotel managers saw PEU as a challenging but constructive factor in the improvement of their HP. PEU was found to be an antecedent of BSC, which subsequently determines performance. In uncertain environments, hotel managers need information about their financial issues, the market, customers, competitors, employees, service operations, etc., which can be provided comprehensively both through the financial and non-financial performance dimensions of the BSC. Therefore, hotel managers could utilize these integrated

performance measures to be informed about their customers, markets, employees, operations, and competitors, thus keeping themselves updated about current internal and external environmental conditions.

However, our results showed that PEU did not have an impact on the innovation and learning dimension of the BSC. In Antalya, hotels managers did not find it effective to invest in human capital and new service/product development, even in the presence of unpredictable environments. Nevertheless, hotel managers could take into consideration their employee training and development to react to an unstable external environment in a timely manner. If managers prioritize their employees' training and capability development, then employees feel that they are valuable to their organizations, understand that their role is important in achieving organizational goals, and thus will be satisfied with their work. In this way, employee training and satisfaction creates behavioral motivation and enables them to react to any unexpected situation more consciously. Thus, better HP outcomes can be provided.

Another finding is that BSC adoption helped enhance HP. With the adoption of the BSC dimensions, hotel managers could improve not only short-term achievements but also long-term ones with the help of both financial and non-financial performance measures. For example, hotel managers, with the application of the BSC, can understand the needs of their customers. Having trained and competent staff leads to efficiency in service operations, which means providing quality services to their customers on time. At this point, customer satisfaction reflects positively on the hotel's financial performance results. The BSC provides managers with the necessary feedback about their performance, helps them to identify areas that need improvement, and thus leads to success in their performance outcomes. In this way, hotel managers

could make better decisions and improve their intangible competences, such as processes for service delivery (Bangchokdee & Mia, 2016).

Our findings also evidenced the mediator effect of BSC adoption (except for innovation and learning) between PEU and HP. When hotel managers face volatile environments, they should adopt a BSC system, as it would allow them to establish strategic goals, coordinate their strategic plans and actions more effectively (Hendricks et al., 2012), and measure performance both from financial and non-financial aspects in a comprehensive manner. In a dynamic hotel industry, such a scorecard system helps hotel managers to identify and evaluate their organizations' innovative aspects, customer relations, business operation processes, and financial results. We could not, however, find any mediator effect of the innovation and learning dimension of BSC between PEU and HP. As previously mentioned, in unstable environments, hotel managers should pay more attention to their staff development, as they have key role in service operations and customer relations. Their development can help to decrease the uncertainty arising from the external environment. Further, hotel managers should value their employees' opinions and ideas, especially in uncertain operational environments, as they are key people in contact with customers; hence, their satisfaction is critical to achieving better performance.

Another important point is that, in changing environmental circumstances, managers should review, and update if necessary, the BSC items to ensure that they are still useful and relevant for the hotels' performance measurement. In this way, hotel managers can also identify other new, relevant measures to be placed in the BSC. All these efforts, in turn, reflect positively on their HP outcomes.

Our study found a positive and significant interaction between the financial, customer, and internal business processes dimensions of BSC adoption and a decentralized structure, producing a positive influence on HP. Therefore, BSC adoption could lead to enhanced HP under a more decentralized organizational structure, as BSC adoption helps authorized managers to make better decisions in their area of operations. Our study showed an insignificant relationship between the innovation and learning dimension of BSC adoption and a decentralized hotel structure for obtaining a positive impact on HP, which means that even if a decentralized structure is present in the hotels, managers' view towards human capital development is not considered an effective way to improve HP, but may instead be viewed as a meaningless effort. However, with a decentralized hotel structure, it is better for hotel managers to invest in human capital, as employees play a critical role in HP and their performance can be monitored by authorized departmental managers. Moreover, hotel management should provide more participation and authorization in introducing new products/services. Finally, if department managers are empowered in their departments, they could cope with uncertain environments more effectively, as these integrated measures would enable them to react in a timely manner (Bangchokdee & Mia, 2016). In this way, they can help to improve overall HP.

However, our study found that even in highly decentralized hotel structure, the internal business processes and innovation and learning dimensions of BSC adoption did not have a mediator effect on the relationship between PEU and HP. Our results suggest that, when a hotel's external environment is not stable, managers should consider allocating more resources and pay greater attention to providing efficient operational process, as well as training and development opportunities for their employees, which subsequently influence performance outcomes under a decentralized hotel structure.

With respect to this, as Kruja, Ha, Drishti, and Oelfke (2016) asserted, in decentralized organizational structures, it is important to consider training and development policies together with rewards or punishments according to the performance results, all of which can be explained with a comprehensive PM system, such as the BSC. Therefore, if internal business processes enable the efficient and effective provision of hotel services with well-trained employees, then this will reflect positively on customer satisfaction, which is key to performance achievements in hotels.

Finally, it should not be forgotten that the use of the BSC in Western countries and Turkey is not the same due to cultural differences. Therefore, the management of hotel businesses should implement the BSC by considering these cultural differences along with their own environmental and operational conditions.

7.4 Limitations and Future Research Directions

The results of the present study should be evaluated in light of their limitations. First, our empirical study only included hotel companies in Antalya, Turkey. Therefore, the results are limited to this destination. Hotel organizations in other countries may well differ from the surveyed companies because of dissimilarities in market rivalry, legal and economic policies, and restrictions. Future studies should, therefore, focus on other settings or a comparative analysis. Nevertheless, Ittner et al., (2003, p. 722), for example, highlighted that "[a]lthough restricting the sample to a single industry limits our ability to generalize the results, we believe that a single industry analysis has substantially higher internal validity than a multi-industry analysis." Industry differences can also be eliminated with single industry analysis.

Second, generalization of this study's findings is difficult due to its focus only on five-star hotels. Single-source bias could be a concern for the study. However, this study's responses involved the perceptions of general, assistant general or equivalent, and middle-level managers, meaning the findings prevent common method bias (O'Connor, Deng, & Luo, 2006).

Another limitation is that, as Quesado et al. (2016) stated, applying a quantitative research methodology through a survey creates problems in terms of commenting questions. Specifically, a limitation is represented by the responses about performance measures and organizational performance based upon respondents' perceptional assessments instead of data from financial reports. This is considered self-assessment and subjective PM because hotel managers were asked to evaluate their hotel's performance. Despite the subjective PM creating problems, such research can still be considered valid and reliable (Dess & Robinson, 1984). The reason for this is the difficulty in obtaining real financial data via the survey method. To alleviate this disadvantage, a case study or interviews can be conducted to verify our results, where data can be collected in a more objective and detailed manner to enrich the research results. Conducting a study using objective PM would be a fruitful future research area and, as this study included only resort hotels, it would be useful to analyze the extent to which PEU indirectly affects HP through the BSC dimensions' adoption in city hotels.

Additionally, areas which are worthy of further consideration, include the following. Respondents' demographic characteristics and also other contextual factors could be added for likelihood effects on this research issue as there are undoubtedly other variables at work such as organization size, general manager's leadership style,

strategy etc. For example, it would be interesting to include cultural factors and thus enrich study's model by providing additional insights. In addition, future studies could develop exhaustive BSCs for each hotel department managed by a departmental manager. Furthermore, as a strategic PM system; the role of the BSC in fulfillment of hotel strategy needs to be enlightened. Finally, it is needed to confirm the findings of this research by using different methods due to the potential weaknesses of the cross-sectional study. It would be vital to undertake longitudinal studies to understand trends over time, because the consequences of this study are time- dependent. Bearing in mind that BSC systems require continuous monitoring, needing time to be built and nurtured to yield results in terms of organizational performance, a longitudinal study would illuminate the causal relationships between the variables of concern that were not obtained by the survey, and thus provide outcomes more accurately. This type of methodological approach may shed further light on the analyzed issue.

REFERENCES

Abdel-Kader, M., & Luther, R. (2008). The impact of firm characteristics on management accounting practices: A UK-based empirical analysis. *The British Accounting Review*, *40*(1), 2–27.

Abernethy, M. A., Bouwens, J., & Van Lent, L. (2004). Determinants of control system design in divisionalized firms. *The Accounting Review*, *79*(3), 545-570.

Abernethy, M. A., & Bouwens, J. (2005). Determinants of accounting innovation implementation. *Abacus*, *41*(3), 217-240.

Ahmad, K., & Zabri, S. M. (2016). The application of non-financial performance measurement in Malaysian manufacturing firms. *Procedia Economics and Finance*, *35*, 476–484.

Altinay, L., Paraskevas, A., & Jang, S. (2016). *Planning Research in Hospitality and Tourism*, Oxon: Routledge.

Amaratunga, D., Baldry, D., Sarshar, M., & Newton, R. (2002). Quantitative and qualitative research in the built environment: application of "mixed" research approach. *Work study*, *51*(1), 17-31.

Anderson, C. K., & Lawrence, B. (2014). The influence of online reputation and product heterogeneity on service firm financial performance. *Service Science*, *6*(4), 217-228.

Arasli, H., & Arici, H. E. (2019). The art of retaining seasonal employees: three industry-specific leadership styles. *The Service Industries Journal*, *39*(3/4), 175–205.

Atkinson, H., & Brander Brown, J. (2001). Rethinking performance measures: assessing progress in UK hotels. *International Journal of Contemporary Hospitality Management*, *13*(3), 128-136.

Auzair, S. M., & Langfield-Smith, K. (2005). The effect of service process type, business strategy and life cycle stage on bureaucratic MCS in service organizations. *Management Accounting Research*, *16*(4), 399-421.

Avci, U., Madanoglu, M., & Okumus, F. (2011). Strategic orientation and performance of tourism firms: Evidence from a developing country. *Tourism Management*, *32*(1), 147-157.

Baines, A., & Langfield-Smith, K. (2003). Antecedents to management accounting change: a structural equation approach. *Accounting, organizations and society*, *28*(7-8), 675-698.

Bangchokdee, S., & Mia, L. (2016). The role of senior managers' use of performance measures in the relationship between decentralization and organizational performance: Evidence from hotels in Thailand. *Journal of Accounting & Organizational Change*, *12*(2), 129–151.

Bose, S., & Thomas, K. (2007). Applying the balanced scorecard for better performance of intellectual capital. Journal of intellectual capital, 8(4), 653-665.

Bourne, M., Kennerley, M., & Franco-Santos, M. (2005). Managing through measures: A study of impact on performance. *Journal of Manufacturing Technology Management*, *16*(4), 373–395.

Braam, G., & Nijssen, E. (2011). Exploring antecedents of experimentation and implementation of the balanced scorecard. *Journal of Management & Organization*, *17*(6), 714-728.

Brignall, S. (1997). A contingent rationale for cost system design in services. *Management Accounting Research*, *8*(3), 325-346.

Brislin, R. W. (1980). Translation and content analysis of oral and written materials. *Methodology*, 389-444.

Brown, D., Spillman, K., Lee, M. Y., & Lu, Y. (2014). Factors influencing small tourism business performance: The case of central Kentucky, United States. *Journal of Hospitality Marketing & Management, 23*(7), 768–789.

Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, Organizations and Society*, *33*(7/8), 836–863.

Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, *28*(2), 127–168.

Chenhall, R. H. (2006). Theorizing contingencies in management control systems research. *Handbooks of Management Accounting Research, 1*, 163–205.

Chenhall, R. H., & Morris, D. (1986). The impact of structure, environment, and interdependence on the perceived usefulness of management accounting systems. *Accounting Review*, *61*(1), 16–35.

Chong, V. K., & Chong, K. M. (1997). Strategic choices, environmental uncertainty and SBU performance: a note on the intervening role of management accounting systems. *Accounting and Business Research*, *27*(4), 268-276.

Creswell, J. W. (1994). *Research Design: Qualitative and Quantitative Approaches*. Thousand Oaks, CA: Sage.

Tourism Actual. (2019). Available at: https://www.turizmaktuel.com/haber/antalya-da-kac-otel-ne-kadar-yatak-var (accessed 27 June 2019).

Ministry of Culture and Tourism. (2019). Tourism Statistics. Retrieved on 26 June 2019, from http://yigm.ktb.gov.tr/TR-201121/isletme-bakanlik-belgeli-tesis-konaklama-istatistikleri.html.

Ministry of Culture and Tourism. (2019). Monthly Border Bulletin (April 2019). Retrieved on 26 June 2019, from http://www.kultur.gov.tr/EN-233808/monthly-border-bulletin-april-2019-is-puslished.html.

Denton, G. A., & White, B. (2000). Implementing a balanced-scorecard approach to managing hotel operations: The case of white lodging services. *Cornell Hotel and Restaurant Administration Quarterly*, *41*(1), 94–107.

Dess, G. G., & Robinson, R. B. (1984). Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. *Strategic Management Journal*, *5*(3), 265–273.

Doran, M. S., Haddad, K., & Chow, C. W. (2002). Maximizing the success of balanced scorecard implementation in the hospitality industry. *International Journal of Hospitality & Tourism Administration, 3*(3), 33–58.

Elbanna, S., Eid, R., & Kamel, H. (2015). Measuring hotel performance using the balanced scorecard: A theoretical construct development and its empirical validation. *International Journal of Hospitality Management*, *51*, 105–114.

Evans, N. (2005). Assessing the balanced scorecard as a management tool for hotels. *International Journal of Contemporary Hospitality Management, 17*(5), 376–390.

Ezzamel, M. (1990). The impact of environmental uncertainty, managerial autonomy and size on budget characteristics. *Management Accounting Research*, *1*(3), 181-197.

Fisher, J. (1995). Contingency-based research on management control systems: categorization by level of complexity. *Journal of accounting literature*, *14*, 24–53.

Fitzgerald, L., Johnston, R., Brignall, T. J., Silvestro, R., & Voss, C. (1991). *Performance measurement in service businesses* (Vol. 69). London: Chartered Institute of Management Accountants.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, *18*(1), 39-50.

Garrigós-Simón, F. J., Palacios Marqués, D., & Narangajavana, Y. (2005). Competitive strategies and performance in Spanish hospitality firms. *International Journal of Contemporary Hospitality Management*, *17*(1), 22-38.

Gerdin, J., & Greve, J. (2004). Forms of contingency fit in management accounting research—a critical review. *Accounting, organizations and society*, *29*(3-4), 303-326.

Gordon, L. A., & Miller, D. (1976). A contingency framework for the design of accounting information systems. In C. Emmanuel, D. Otley, & K. Merchant (Eds.), *Readings in accounting for management control* (pp. 569–585). Boston, MA: Springer.

Gordon, L. A., & Narayanan, V. K. (1984). Management accounting systems, perceived environmental uncertainty and organization structure: An empirical investigation. *Accounting, Organizations and Society*, *9*(1), 33–47.

Gosselin, M. (2005). An empirical study of performance measurement in manufacturing firms. *International Journal of Productivity and Performance Management, 54*(5/6), 419–437.

Gosselin, M. (2011). Contextual factors affecting the deployment of innovative performance measurement systems. *Journal of Applied Accounting Research*, *12*(3), 260–277.

Govindarajan, V. (1988). A contingency approach to strategy implementation at the business-unit level: integrating administrative mechanisms with strategy. *Academy of management Journal*, *31*(4), 828-853.

Gul, F. A., & Chia, Y. M. (1994). The effects of management accounting systems, perceived environmental uncertainty and decentralization on managerial performance: A test of three-way interaction. *Accounting, Organizations and Society, 19*(4-5), 413–426.

Gupta, A. K., & Govindarajan, V. (1984). Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. *Academy of Management Journal*, *27*(1), 25–41.

Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice-Hall.

Hammad, S. A., Jusoh, R., & Ghozali, I. (2013). Decentralization, perceived environmental uncertainty, managerial performance and management accounting system information in Egyptian hospitals. *International Journal of Accounting and Information Management*, *21*(4), 314-330.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.

Hendricks, K., Hora, M., Menor, L., & Wiedman, C. (2012). Adoption of the balanced scorecard: A contingency variables analysis. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, *29*(2), 124–138.

Herington, C., McPhail, R., & Guilding, C. (2013). The evolving nature of hotel HR performance measurement systems and challenges arising: An exploratory study. *Journal of Hospitality and Tourism Management*, *20*, 68-75.

Hoque, Z., & James, W. (2000). Linking balanced scorecard measures to size and market factors: impact on organizational performance. *Journal of management accounting research*, *12*(1), 1-17.

Hoque, Z. (2004). A contingency model of the association between strategy, environmental uncertainty and performance measurement: Impact on organizational performance. *International Business Review*, *13*(4), 485–502.

Hoque, Z. (2005). Linking environmental uncertainty to non-financial performance measures and performance: A research note. *The British Accounting Review*, *37*(4), 471–481.

Hoque, Z. (2014). 20 years of studies on the balanced scorecard: trends, accomplishments, gaps and opportunities for future research. *The British accounting review*, *46*(1), 33-59.

Huckestein, D., & Duboff, R. (1999). Hilton Hotels: a comprehensive approach to delivering value for all stakeholders. *Cornell Hotel and Restaurant Administration Quarterly, 40*(4), 28–38.

Ittner, C. D., Larcker, D. F., & Randall, T. (2003). Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society, 28*(7/8), 715–741.

Jusoh, R. (2008). Environmental uncertainty, performance, and the mediating role of balanced scorecard measures use: Evidence from Malaysia. *International Review of Business Research Papers*, *4*(2), 116–135.

Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard-measures that drive performance. *Harvard Business Review*, *70*(1), 71–79.

Kaplan, R. S. & Norton, D. P. (1993). Putting the balanced scorecard to work. *Harvard Business Review*, *71*(5), 134–140.

Kaplan, R. S., & Norton, D. P. (1996). Linking the balanced scorecard to strategy. *California management review*, *39*(1), 53-79.

Kaplan, R. S., & Norton, D. P. (2001). Transforming the balanced scorecard from performance measurement to strategic management: Part I. *Accounting Horizons*, *15*(1), 87–104.

Kaplan, R. S., & Norton, D. P. (2004). *Strategy maps: Converting intangible assets into tangible outcomes*. Harvard Business Press.

Kaplan, R. S., & Norton, D. P. (2007). Using the balanced scorecard as a strategic management system. *Harvard business review*, *85*(7-8), 150-+.

King, R., Clarkson, P. M., & Wallace, S. (2010). Budgeting practices and performance in small healthcare businesses. *Management Accounting Research*, *21*(1), 40–55.

Kollberg, B., Elg, M., & Lindmark, J. (2005). Design and implementation of a performance measurement system in Swedish health care services: a multiple case study of 6 development teams. *Quality Management in Healthcare*, *14*(2), 95-111.

Köseoglu, M. A., Topaloglu, C., Parnell, J. A., & Lester, D. L. (2013). Linkages among business strategy, uncertainty and performance in the hospitality industry: Evidence from an emerging economy. *International Journal of Hospitality Management*, *34*, 81–91.

Kruja, D., Ha, H., Drishti, E., & Oelfke, T. (2016). Empowerment in the hospitality industry in the United States. *Journal of Hospitality Marketing & Management, 25*(1), 25–48.

Lääts, K., Haldma, T., & Moeller, K. (2011). Performance measurement patterns in service companies: An empirical study on Estonian service companies. *Baltic Journal of Management*, *6*(3), 357-377.

Lamminmaki, D. (2007). Outsourcing in Australian hotels: A transaction cost economics perspective. *Journal of Hospitality & Tourism Research*, *31*(1), 73–110.

Liu, L., Ratnatunga, J., & Yao, L. J. (2014). Firm characteristics and balanced scorecard usage in Singaporean manufacturing firms. *International Journal of Accounting & Information Management*, *22*(3), 209–222.

Lucianetti, L., Battista, V., & Koufteros, X. (2019). Comprehensive performance measurement systems design and organizational effectiveness. *International Journal of Operations & Production Management*, *39*(2), 326-356.

Lusthaus, C., Adrien, M. H., Anderson, G., Carden, F., & Montalván, G. P. (2002). Organizational assessment. *A framework for improving performance. Ottawa/Washington DC: International Development Research Centre and Inter-American Development Bank.*

McManus, L. (2013). Customer accounting and marketing performance measures in the hotel industry: Evidence from Australia. *International Journal of Hospitality Management*, *33*, 140–152.

Merchant, K. A. (1981). The design of the corporate budgeting system: influences on managerial behavior and performance. *Accounting Review*, 813-829.

Milliken, F.J. (1987). Three types of perceived uncertainty about the environment: State, effect, and response uncertainty. *Academy of Management Review*, *12*(1), 133–143.

Mintzberg, H. (1979). *The structuring of organizations*. Upper Saddle River, NJ: Prentice Hall.

Naranjo-Gil, D., Maas, V. S., & Hartmann, F. G. (2009). How CFOs determine management accounting innovation: an examination of direct and indirect effects. *European accounting review*, *18*(4), 667-695.

Neely, A. (1999). The performance measurement revolution: why now and what next?. *International journal of operations & production management*, *19*(2), 205-228.

Neely, A. (2005). The evolution of performance measurement research: developments in the last decade and a research agenda for the next. *International Journal of Operations & Production Management*, *25*(12), 1264-1277.

Norreklit, H. (2000). The balance on the balanced scorecard a critical analysis of some of its assumptions. *Management accounting research*, *11*(1), 65-88.

Nusair, K., & Hua, N. (2010). Comparative assessment of structural equation modeling and multiple regression research methodologies: E-commerce context. *Tourism Management*, *31*(3), 314-324.

O'Connor, N. G., Deng, J., & Luo, Y. (2006). Political constraints, organization design and performance measurement in China's state-owned enterprises. *Accounting, Organizations and Society*, *31*(2), 157–177.

O'Neill, J. W., & Mattila, A. S. (2004). Hotel branding strategy: Its relationship to guest satisfaction and room revenue. *Journal of Hospitality & Tourism Research*, *28*(2), 156-165.

Otley, D. T. (1980). The contingency theory of management accounting: achievement and prognosis. In *Readings in accounting for management control* (pp. 83-106). Springer, Boston, MA.

Otley, D. (1999). Performance management: a framework for management control systems research. *Management accounting research*, *10*(4), 363-382.

Otley, D. (2003). Management control and performance management: whence and whither?. *The British Accounting Review*, *35*(4), 309-326.

Ouakouak, M. L., Ouedraogo, N., & Mbengue, A. (2014). The mediating role of organizational capabilities in the relationship between middle managers' involvement and firm performance: A European study. *European Management Journal, 32*(2), 305–318.

Ozdemir, B., Aksu, A., Ehtiyar, R., Çizel, B., Çizel, R. B., & İçigen, E. T. (2012). Relationships among tourist profile, satisfaction and destination loyalty: Examining empirical evidences in Antalya region of Turkey. *Journal of Hospitality Marketing & Management*, *21*(5), 506–540.

Pavlatos, O., & Paggios, I. (2009). A survey of factors influencing the cost system design in hotels. *International Journal of Hospitality Management*, *28*(2), 263-271.

Pavlatos, O. (2015). An empirical investigation of strategic management accounting in hotels. *International Journal of Contemporary Hospitality Management*, *27*(5), 756-767.

Pettigrew, A., Whipp, R., & Rosenfeld, R. (1989). Competitiveness and the management of strategic change processes: a research agenda. In M. Tharaken, & A. Francis (Eds.), *The competitiveness of European industry: Country policies and company strategies*. Boston, MA: Thomson Learning.

Phillips, P. A. (1999). Performance measurement systems and hotels: a new conceptual framework. *International Journal of Hospitality Management*, *18*(2), 171-182.

Phillips, P. A. (2007). The balanced scorecard and strategic control: A hotel case study analysis. *The Service Industries Journal*, *27*(6), 731–746.

Phillips, P., & Louvieris, P. (2005). Performance measurement systems in tourism, hospitality, and leisure small medium-sized enterprises: a balanced scorecard perspective. *Journal of Travel Research*, *44*(2), 201-211.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36*(4), 717–731.

Quesado, P. R., Guzman, B. A., & Rodrigues, L. L. (2014). Determinant Factors of the Implementation of the Balanced Scorecard in Portugal: empirical evidence in public and private organizations. *Revista Brasileira de Gestão de Negócios*, *16*(51), 199-222.

Quesado, P. R., Aibar-Guzmán, B., & Rodrigues, L. L. (2016). Extrinsic and intrinsic factors in the balanced scorecard adoption: An empirical study in Portuguese organizations. *European Journal of Management and Business Economics*, *25*(2), 47–55.

Sainaghi, R. (2010a). Hotel performance: state of the art. *International Journal of Contemporary Hospitality Management, 22*(7), 920–952.

Sainaghi, R. (2010b). A meta-analysis of hotel performance. Continental or worldwide style? *Tourism Review, 65*(3), 46–69.

Sainaghi, R., Phillips, P., Baggio, R., & Mauri, A. (2019). Hotel performance: Rigor and relevant research topics. *International Journal of Hospitality Management*, *78*, 13-26.

Sainaghi, R., Phillips, P., & Corti, V. (2013). Measuring hotel performance: Using a balanced scorecard perspectives' approach. *International Journal of Hospitality Management*, *34*, 150–159.

Sainaghi, R., Phillips, P., & Zavarrone, E. (2017). Performance measurement in tourism firms: A content analytical meta-approach. *Tourism Management*, *59*, 36–56.

Sandhu, R., Baxter, J., & Emsley, D. (2008). The balanced scorecard and its possibilities: the initial experiences of a Singaporean firm. *Australian Accounting Review*, *18*(1), 16-24.

Schaffer, B. S., & Riordan, C. M. (2003). A review of cross-cultural methodologies for organizational research: A best-practices approach. *Organizational research methods*, *6*(2), 169-215.

Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of educational research*, *99*(6), 323-338.

Sekaran, U. (2003). Research Methods For Business, A Skill Building Approach, John Willey & Sons. *Inc. New York*.

Sharma, D. S. (2002). The differential effect of environmental dimensionality, size, and structure on budget system characteristics in hotels. *Management Accounting Research*, *13*(1), 101–130.

Sin, L. Y., Alan, C. B., Heung, V. C., & Yim, F. H. (2005). An analysis of the relationship between market orientation and business performance in the hotel industry. *International Journal of Hospitality Management*, *24*(4), 555-577.

Sogunro, O. A. (2002). Selecting a quantitative or qualitative research methodology: An experience. *Educational Research Quarterly*, *26*(1), 3.

Sunarni, C. W. (2015). Management accounting practices at hospitality business in Yogyakarta, Indonesia. *Review of Integrative Business and Economics Research*, *4*(1), 380–396.

Tillema, S. (2005). Towards an integrated contingency framework for MAS sophistication: case studies on the scope of accounting instruments in Dutch power and gas companies. *Management Accounting Research*, *16*(1), 101–129.

Tymon Jr, W. G., Stout, D. E., & Shaw, K. N. (1998). Critical analysis and recommendations regarding the role of perceived environmental uncertainty in behavioral accounting research. *Behavioral Research in Accounting, 10*, 23–46.

Uyar, A., & Kuzey, C. (2016). Contingent factors, extent of budget use and performance: A structural equation approach. *Australian Accounting Review*, *26*(1), 91–106.

Wang, C. H., Chen, K. Y., & Chen, S. C. (2012). Total quality management, market orientation and hotel performance: The moderating effects of external environmental factors. *International Journal of Hospitality Management*, *31*(1), 119–129.

Waterhouse, J. H., & Tiessen, P. (1978). A contingency framework for management accounting systems research. *Accounting, Organizations and Society*, *3*(1), 65-76.

Widener, S. K., Shackell, M. B., & Demers, E. A. (2008). The juxtaposition of social surveillance controls with traditional organizational design components. *Contemporary Accounting Research*, *25*(2), 605-638.

Wooldridge, B., & Floyd, S. W. (1990). The strategy process, middle management involvement, and organizational performance. *Strategic Management Journal, 11*(3), 231–241.

Zhang, J. J., Lawrence, B., & Anderson, C. K. (2015). An agency perspective on service triads: Linking operational and financial performance. *Journal of Operations Management*, *35*, 56-66.

Zhou, K. Z., Brown, J. R., Dev, C. S., & Agarwal, S. (2007). The effects of customer and competitor orientations on performance in global markets: a contingency analysis. *Journal of International Business Studies*, *38*(2), 303-319.