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## **Crisis Management Practices of Hotels in Addis Ababa during COVID-19 and their Impact on Performance**

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**Crisis Management Practices of Hotels in Addis Ababa during COVID-19 and their Impact  
on Performance**

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**A thesis submitted to Addis Ababa University College of Management and Economics,  
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**Addis Ababa University  
College of Management and Economics  
Department of Management**

**Addis Ababa  
March, 2022**

## Declaration

I, Liwam Tegenu, hereby declare that this thesis entitled “**Crisis Management Practices of Hotels in Addis Ababa during COVID-19 and their Impact on Performance**” submitted by me, for the award of the degree of Masters Business Administration; is my original work and it has never been presented in any other university. All sources and materials used in this thesis have been appropriately acknowledged.

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**ADDIS ABABA UNIVERSITY**  
**COLLEGE OF BUSINESS AND ECONOMICS**  
**SCHOOL OF GRADUATE STUDIES**

**“Crisis Management Practices of Hotels in Addis Ababa during COVID-19 and their Impact on Performance”**

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# Abstract

*Given the increasing number of travel restrictions, the COVID-19 outbreak has dealt a crippling blow to the hotel industry. The main purpose of this study is to analyze the crisis management practices used by hotels to cope up with the effects of the pandemic and the effect the practices had on their performance. A refined model based on the crisis management model of Israeli was used in this research. The study used a questionnaire for evaluating the importance and usage of different practices for crisis management. Follow-up in person interviews were conducted to validate the results of the study. The results show that hotels have used practices they deemed are important. The practices under the pandemic prevention category had a significant impact on their performance and other categories also. This study contributes to the knowledge of contingency planning for crisis management across crisis periods. The paper concludes with recommendations for further research on the recovery and adaptability of the business sector.*

**Key Words: Crisis Management, COVID-19, Hotel industry, Performance**

# 1. Chapter One: Introduction

## 1.1 Background

Globally there have been 423,437,674 confirmed COVID-19 cases and 5,878,328 deaths (WHO, 2022). COVID-19 was not only a health crisis it has impacted almost every aspect of the human life. The world has suffered and continues to struggle with the effect of the COVID-19. According to (Bachman, 2020) COVID 19 could impact global economy by disrupting production, supply chain and by impacting the finance of firms and financial markets.

Different sectors were affected at different level. Globally the service sector was one of the hardest hit sectors of the economy because the industry relies mainly on a face-to-face interaction. One of the services sectors that was badly hit by the pandemic at the global level is the travel and tourism sector.

In Africa the travel and tourism sector dropped by 49.2% in 2020 (World Travel and Tourism Council, 2021). The impact on travel and tourism sector was mainly due to the travel restriction put on by countries (World Travel and Tourism Council, 2021). Likewise, in Ethiopia the tourism, hospitality, aviation, trading and retail industries were among the hardest hit sectors (United Nations Ethiopia, 2020).

On April 2020 Ethiopia announced a state of emergency in order to combat the spread of COVID-19 (Addis Fortune, 2020). The state of emergency had strict rules that govern the conduct of people living in Ethiopia as well as people that were coming to Ethiopia. Almost during the same time one of the largest airlines in Africa and the world, Ethiopian Airlines, announced its suspension of flights to more than 80 destinations across the globe (Africanews, 2020). Addis Ababa is home to

one of the largest diplomatic communities in the world. As a result, the primary drivers of demand for the hotel industry include the diplomatic, aid and NGO organizations. The following table summarizes the international tours arrivals into Ethiopia from 2012 – 2020 (Addis Ababa Hotel Owners Trade Sectorial Association, 2020).

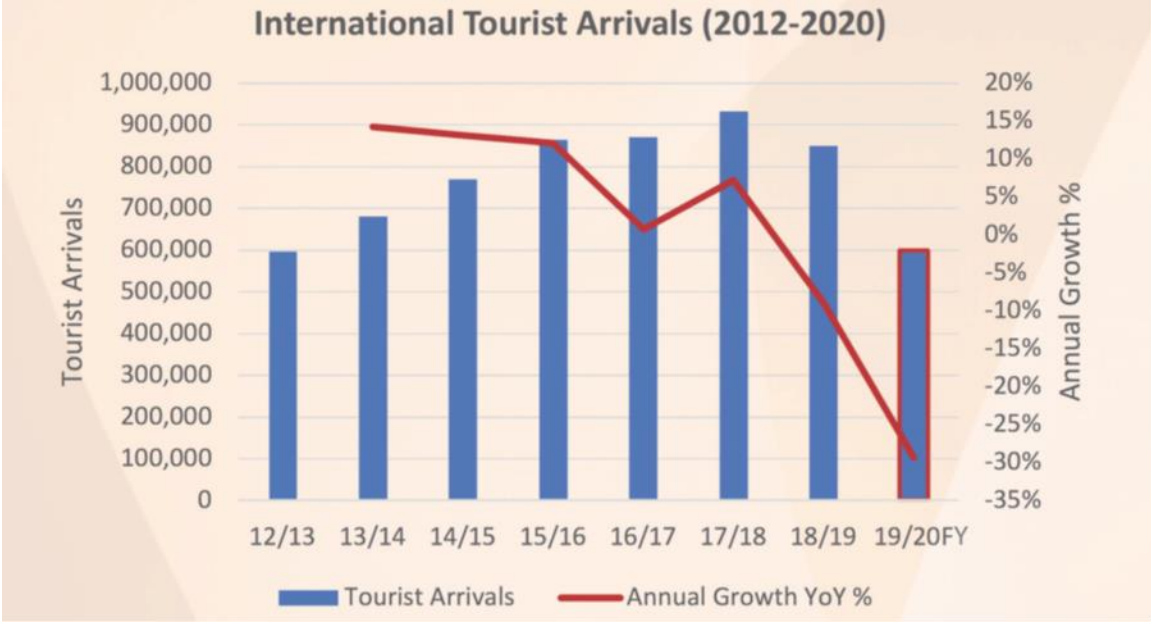


Figure 1: International Tourist Arrivals (2012-2020) (AHA, 2020)

According to the study conducted by (Addis Ababa Hotel Owners Trade Sectorial Association, 2020) the reduction in the arrivals of international tourists and the stricter measures that were enforced due to covid-19 have made 88% of its member hotels to fully or partially close their operation due to low occupancy rates. The same study by the hotel owners’ associations described that 56% were fully closed, while 32% were partially closed and 12% turned themselves into a quarantine facility.

Another report by (Ethiopian Catering and Toursim Training Institute, 2020) also shows that Ethiopian businesses in the travel, tourism and hospitality sectors were badly affected by the pandemic. Catering and Tourism Training Institute conducted a research on the impact of COVID-

19 on 300 hotels across the country. The study covered the No star, One Star, Two Star, Three Star, Four Star and Five Star hotels. The following figure shows the surveyed hotels categorized based on their star ratings.

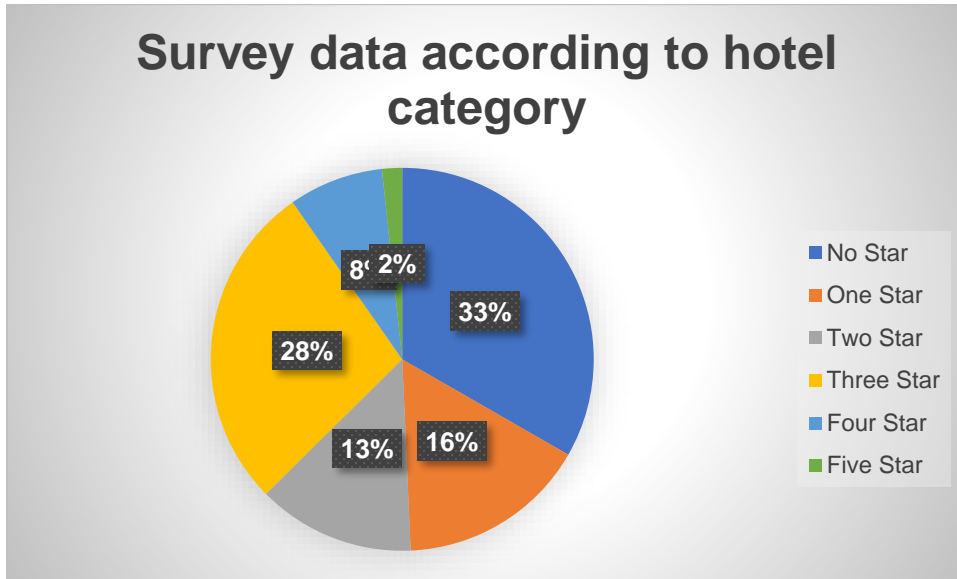


Figure 2: Catering and Tourism Training Institute Survey, July 2020

One of the metrics used to evaluate the performance of the hotel industry is the Average Daily Rate (ADR). The average daily rate is the average revenue earned for an occupied room on a given day (Investopedia, 2020). The average daily rate of Ethiopian Hotels declined by 15.94% following the outbreak of the pandemic (Ethiopian Catering and Tourism Training Institute, 2020). Similarly, the occupancy rate declined by 61.10% from the pre-pandemic times. The drop in the occupancy rate among the different star rated hotels and geographies was found to be statistically insignificant (Ethiopian Catering and Tourism Training Institute, 2020). This shows all hotels regardless of their location and star rating have felt the impact of the pandemic almost equally. A drop in the average daily rate and occupancy percentage means the revenues of hotels was hit hard.

Countries, especially the developed world passed different stimulus package to help their companies and citizens cope up with the challenges and hardships posed by COVID 19 pandemic. In Ethiopia, the package provided by the government to the private business includes tax relief for companies affected by COVID 19 (Bloomberg News, 2020) and also credits via commercial banks. Multinational corporations such as IMF and UNDP have also lent their hand to Ethiopia in its fight against COVID 19. For the hotel industry the specific measures taken by the government were a reduction in the loan interest rate and the provision of soft loan for working capital for the firms (Business Info Ethiopia, 2022). These measures taken by the government were not enough according to the hotel industry players. Hotels via their hotel owners' association requested in 2021 for loan extension from commercial banks in a letter sent to the National Bank of Ethiopia. This letter was declined by the National Bank of Ethiopia.

One thing this pandemic taught us is that in an increasingly interconnected world being crisis ready is very important. The question is not if but when the next crisis takes place (World Travel and Tourism Council, 2019). Different companies in the service sector responded differently to the pandemic. Companies like Ethiopian Airlines have responded by reconfiguring their operations to cargo transport as the number of passengers declined. At a time when other airlines were struggling to survive and a number of them were getting government bailouts Ethiopian Airlines earned a positive revenue due to the changes it implemented (Gebremariam, 2021). But this is not true to other companies in the services sector. Likewise, some hotels responded to the crises by changing their entire hotel into a quarantine center and reconfiguring their operations. Others responded by taking cost cutting measure such as laying off workers or cutting on employee salaries.

This study aims to understand the practices hotels used to cope up with the challenges of COVID-19 pandemic and its impact on performance. The crisis management practices importance and

usage model developed by (Israeli & Reichel, 2003) is the most extensively used crisis management practice. It has been used to analyze the impact of crisis such as terrorism and pandemic in Hotel and Restaurant industries widely. The Israeli crisis management model only analyzes the importance management gives to the practices and the level of its usage. It does not link the usage of these practices with performance, or more specifically with the extent to which it enabled the companies to cope up with the challenge. A more refined model was developed and used (Lai & Wong, 2020) that tried to link usage with performance.

## 1.2 Statement of the problem

Hotels have taken various actions that they think would allow them to cope up with the impact of COVID 19 pandemic. The result of these various practices/actions on hotel performance was not the same. Knowing past practices is important and identifying the practices that resulted in better performance is important for the industry in designing an appropriate crisis management strategy for future similar crisis. After all we live in a world where the occurrence of crisis is the new normal.

In order to systematically analyze the actions taken by the hotels an appropriate crisis management model has to be used.

## 1.3 Objectives of the study

### 1.3.1 General Objective

The main objective of this research is to analyze the actions taken by hotels in response to the COVID-19 pandemic and their impact on performance using a predefined set of crisis management practices.

### 1.3.2 Specific Objectives

More specifically the research intends to achieve the following specific objectives.

- Analyze the importance level of crisis-management practices,
- Analyze the usage level of crisis-management practices,
- Analyze the correlation between the importance and usage of crisis-management practices,
- Analyze the impact of these crisis-management practices on the performance of hotels.

## 1.4 Research questions

The proposed research questions are:

- What are the level of importance attach to different crisis management practices?
- To what extent have hotels used the crisis management practices?
- How have the practices affected the performance as seen from the hotel managers' perspective?
- What is the level of relationship between the usage of a practice and its perceived impact on performance?

## 1.5 Significance of the study

So far, the study conducted by the Ethiopian tourism institute or the Addis Ababa Hotel Owners Association has focused on the impact of COVID-19 on the hotel industry. A systematic analysis of the actions taken by the hotel managers in response to the COVID-19 pandemic has not been analyzed so far. So, this study will be used to fill the knowledge gap in this area.

## 1.6 Scope of the Study

This study is mainly focused on hotels in Addis Ababa. Hotels in Addis Ababa were selected due to time and budget constraint of the research. In terms of time the research only deals with the impact of COVID especially during the pandemic period, which is mainly characterized by strict measures on travel, and other activities. It mainly covers the time from the start of the pandemic until the vaccination time.

The study tries to measure the performance in subjective matters only. In other words, performance as perceived by hotel management. So, financial data of hotels were not used to analyze performance.

## 1.7 Limitations of the study

Only star-rated hotels that are located in Addis Ababa are accounted in the population due to geographic limitations, however the study is sufficient for generalization since major hotel business are taken in the capital city

The study only tries to view performance as measured subjectively by the hotel managers. The lack of available financial data from the hotels has forced the researcher to evaluate the performance only from the response of the hotel managers.

Another limitation is that the study did not analyze the long term impact of the actions taken by hotels in their performance.

## 2. Chapter Two: Literature review

### 2.1 Crisis Management

There are multiple definitions of a crisis. Crisis as defined by (Thierry & Ian, 1992) is a disruptive event that physically affects a system and its existence. An alternative definition provided by (Okumus & Karamustafa, 2005) puts crisis “as an unplanned event emerging from the internal or external environment of an organization, region, or country which can disrupt operations, threaten people physically and mentally, and endanger the viability of entities no longer able to cope with the situation using normal managerial procedures”. (C.B.Tse, So, & Sin, 2006) described crisis as events with low probability and high impact affecting the viability of the firm. uA more tourism and hospitality related definition given by (Sönmez, Backman, & Allen, 1994) defines crisis as phenomenon that threatens the operations of business related to tourism and damage the reputation of tourist destinations.

Another term that is usually confused with crisis is disaster. Researchers such as (Sevil, 1998) described disaster as an event that causes loss of human life, damage to property and a disruption to the economy. The main difference is that crisis can be triggered by internal or external reasons while a disaster is mainly caused by an external event. Generally, the difference between disaster and crisis seems to be blurred and often times have overlapping meaning. One thing that is common for both crisis and disaster is that both have a negative impact on the operations of a business.

Human history has taught us that crisis will occur. It's not an issue of if but when. That is why the majority of literatures on crisis management such as (Kash & Darling, 1998) and (Fink, 1986) are mainly focused on preparation for crisis and how to minimize its impact when the crisis occurs. These literatures have identified the various stages of a crisis and have recommended actions to be taken in each stage. The stages of the crisis that have been identified are pre-crisis, acute-crisis, chronic crisis and resolution.

## 2.2 Organizational capabilities and crisis management

Crisis such as the COVID-19 pandemic test the resilience and adaptability of organizations. In light of the COVID-19 pandemic some businesses are thoroughly reexamining their operations, questioning long-held views about which in-person steps truly add value over remote options (Guzman, Prema, Sood, & Wilkes, 2020). In our country some companies such as Ethiopian Airlines has changed their business models and operations to stand the effects of the pandemic. The quick decision by the airlines to build as much capacity as possible to build cargo business has resulted in positive cash flow (Gebremariam, 2021). This shift was made possible due the capacity built in the airlines in the past 10 years that have enable the company to be agile and resilient (Gebremariam, 2021). The shift in operations and business model by Ethiopian Airlines was appreciated by different media outlets. The company seemed to stand the slowdown in global passenger travel by changing its operations without getting a single bailout money from the government. The story of Ethiopian Airlines is not true for all companies. Some companies have struggled to cope up with the challenges posed by the pandemic.

Getting a sustainable competitive advantage and growth had occupied organizational management academics and professionals for quite some time. Different theories have been developed trying

to explain the source of competitive advantage of organizations. One among them is the resource based theory.

Resource based theory of management views resources as the source of competitive advantage. Within this framework, competitive advantage can flow at a point in time from the ownership of scarce but relevant and difficult-to-imitate assets, especially know-how (Teece D. J., 2007). Resource based view believes that the source of superior organizational performance is the resources (both tangible and intangible). Resources are something an organization owns/has. This is quite different from Porter five forces model (Porter, 1979 ) which tried to put focus on the external forces of the industry because the resource-based view/theory is focused on the internal aspects of the organization.

The resource-based theory was made famous during the 1980s and 1990s. Building on the resource-based theory Prahalad and Hamel argued that the core competencies are the source of competitive advantage for an organization. Core competencies are unique and hard to imitate resources that an organization possesses. They are in a way different from tangible assets that an organization owns. For example, Sony's miniaturization capability was a core competency (Prahalad & Hamel, 1990).

Dynamic capabilities, by contrast, relate to high level activities that link management's ability to sense and then seize opportunities, navigate threats, and combine and reconfigure specialized and co-specialized assets to meet changing customer needs, and to sustain and amplify evolutionary fitness thereby building long-run value for investors. If an enterprise possesses resources/competencies but lacks dynamic capabilities, it has a chance to make a competitive return (and possibly even a supra-competitive return) for a short period; but it cannot sustain supra-competitive returns for the long term except due to chance (Teece D. , 2009).

For analytical purposes, dynamic capabilities can be disaggregated into the capacity (1) to sense and shape opportunities and threats, (2) to seize opportunities, and (3) to maintain competitiveness through enhancing, combining, protecting, and when necessary, reconfiguring the business enterprise's intangible and tangible assets. (Teece D. , 2009)

Sensing includes searching for information about what's going on in the business ecosystem. Once a new (technological or market) opportunity is sensed, it must be addressed through new products, processes, or services. This requires quick decision making. A very bureaucratic organization might not be able to act on the opportunities in a timely manner due the embedded processes and procedures. An agile and more flexible organization will most likely respond to these opportunities and there by reaping the benefits. Managerial judgments (decision-making skills) take on great significance in such contexts.

A key to sustained profitable growth is the ability to recombine and to reconfigure assets and organizational structures as the enterprise grows, and as markets and technologies change, as they surely will. In short, success will breed some level of routine, as this is necessary for operational efficiency. Departure from routines will lead to heightened anxiety within the organization, unless the culture is shaped to accept high levels of internal change.

Top management leadership skills are required to sustain dynamic capabilities. An important managerial function is achieving semi-continuous asset orchestration and corporate renewal, including the redesign of routines. Dynamic capabilities reside in large measure with the enterprise's top management team, but are impacted by the organizational processes, systems, and structures that the enterprise has created to manage its business in the past (Teece D. , 2009).

According to Eriksson's (2014) review of dynamic capabilities, two different links between dynamic capabilities and company performance are pursued in the research studies. While some studies promote an indirect link between dynamic capabilities and company performance, and argue that dynamic capabilities affect the operational capabilities, which in turn affect the company performance, most studies still adhere to the view that dynamic capabilities have a direct effect on organizational outcomes.

### 2.3 Crisis management in the hotel industry

The Oxford dictionary defines hotel as "an establishment providing accommodation, meals, and other services for travelers and tourists." Crisis management in the hotel industry is something which is not new. The frequent terrorist attacks in the United States, Europe, Africa, the Middle East and Asia as well as the pandemics such as the SARS have to some extent positively contributed to the development of crisis management literature in the hospitality industry (Israeli, Mohsin, & Kumar, 2011).

The majority of crisis management literature in the hospitality industry has focused on preparation for future crisis situations (Cohn, 2020) (Lynch, 2004), the recovery methods after crisis (Blackman & Ritchie, 2008) or on the actions taken by the hospitality industry actors to cope up and survive the crisis (Israeli & Reichel, 2003).

(Filimonau & Coteau, 2019) tried to explain organizational preparation for a crisis from an organizational resilience perspective. Organizational resilience describes the readiness of a business to crisis and disaster (Filimonau & Coteau, 2019).

One of the early researches that provided ideas on how to cope up with crisis situation was provided by (Mansfeld, 1999). The other research that is widely used in hospitality industry crisis

management practice is the research done on the Israeli hospitality industry in light of the terrorism crisis (Israeli & Reichel, 2003).

The study conducted by (Israeli & Reichel, 2003) took the hotel managers as a unit of analysis and tried to understand the actions taken by managers during the pandemic as they battle the impact of the crisis. (Israeli & Reichel, 2003) first tried to analyze the how the hotel managers coped up with the terrorism related crisis in Israel. The researchers constructed a list of crisis management practices and evaluated the importance managers assigned to each practice and the extent to which these practices have been used during the crisis time. These practices were based on the interview they conducted with thirteen hotel managers and the previous literatures such as (Mansfeld, 1999). Based on the (Mansfeld, 1999) they created the marketing category, and added two cost cutting categories, which are the human resources and maintenance categories. In addition, they included government support as a category which is external in nature.

The framework constructed by (Israeli & Reichel, 2003) was based on the Importance-Performance Analysis (IPA) model developed by (Martilla & James, 1977). Importance-Performance Analysis Model provides a framework to analyze managerial action based on the relationship between importance and performance. According to the IPA model of (Martilla & James, 1977) there are four possible categories, “keep up the good work” for actions categorized as high importance and performance, “concentrate here” category for actions with high importance and low performance, “possible overkill” category for actions with low importance but high performance and finally “low priority” category for actions with low importance and performance level.

The objective of the study conducted by (Israeli & Reichel, 2003) was to analyze if managers know what actions they should take during crisis and if they have used them accordingly. In other

words, the objective was to evaluate manager's belief (the importance they attach to each practice) and their actions (the level of usage of these practices) are consistent enough. The model was used to analyze crisis management practice of Israeli hospitality, restaurant and travel industries.

This framework was slightly modified during the course of time. It was modified and applied to study the Indian luxury hotels industry in the wake of the terrorism attack (Israeli, Mohsin, & Kumar, 2011). They discovered that managers were mainly reactive and they strongly looked for support from government (Dung & Phi, 2021).

Crisis management researches on the hospitality industry such as (Israeli & Reichel, 2003) and (Mansfeld, 1999) suggest that strengthening marketing activities for local consumers and government support are very important for coping up with the effects of the crisis. Other researchers (Breier, Kallmuenzer, Clauss, Johanna Gast, & Tiberius, 2020) gave more focus on Business Model Innovation as a way to survive and recover from crisis.

(Miloradov, Elena, Kovalchuk, & Blinova, 2016) tried to develop a crisis management model for the Russian hotel industry based on previous studies.

The crisis management researches focused on terrorism, financial, political and other crisis. Some have also focused on health crisis or pandemics. (Tew, Lu, Tolomiczenko, & Gellatly, 2008) did research on the impact of SARS pandemic of 2003. But these pandemics or crisis were short lived and cannot be just simply compared with the COVID-19 pandemic both in its geographic coverage and duration.

## 2.4 COVID-19 and the hotel industry

Labelled as a black swan event and likened to the economic scene of World War two, the outbreak of COVID-19 pandemic has had a determinant effect on every aspect of human life as we know it (Nicolaa, et al., 2020). The pandemic has affected the entire world. To counter and control the spread of the pandemic countries started to implement their own measures. Many developed nations started implementing tighter border control measures to international travels and lock down measures in their home. Bail-out money was also availed to struggling businesses. Globally the service sector was one of the badly affected areas (Guzman, Prema, Sood, & Wilkes, 2020). This was mainly because the services sector relies heavily from in person interactions and measures such as social distancing and travel restrictions had a direct effect in its operations. Some of the impacts of COVID on these industries will be permanent. Going back to operations before the pandemic is highly unlikely.

The impact of COVID-19 has been felt in all sectors of the economy and across the world. The report published by the world bank (World Bank, 2020), describes that the effects of COVID-19 beyond the immediate result of loss of life is far reaching and will have a longer impact. As a result, the world bank was forced to revise the projections made for different regional and country level economies.

Measures taken to by governments across the globe to curb the transmission of the infectious diseases such as travel restrictions, mandatory quarantines and assembly restrictions have affected the hotel industry. As a result, both leisure and business travelers begun cancelling their trips and delaying their plans (Foo, Chin, Tan, & Phuah, 2020) which directly affected the hotel industry. The hotel industry was not only affected due to a significant drop in the number of business and

leisure travelers, but also due to cancelled meetings as a result of the restriction put in place by governments (Canhoto & Wei, 2021).

The impact of CoVID-19 on hotel industry is far greater than the impact of the terrorist attack of 9/11, the 2008 financial crisis and the SARS epidemic combined (Dung & Phi, 2021). Globally, the average revenue per room fell down by nearly 90% (Dung & Phi, 2021). The nature of the hotel industry, as a service industry, limits its ability to catch up for lost revenue. A room that is not booked is a lost revenue that cannot be recovered. (Theguardian, 2020) described the threat created by the COVID-19 as an “existential threat” to the hotel industry.

In order to survive hotels took cost cutting measures such as laying off employees and postponing renovation works or in some cases completely closing off the hotel was a solution taken by hotel owners and managers alike (Hao, Xiao, & Chon, 2020). The nature of the pandemic requires hotel managers to revise their business in a way that can stand the long-lasting impact of the pandemic (Dung & Phi, 2021).

The COVID-19 pandemic is unlike the previously seen health crisis. In terms of geographic coverage, it had engulfed the entire world in a very short period of time. When compared to previous pandemics such as SARS the COVID-19 pandemic is unprecedented (Canhoto & Wei, 2021). Most pandemics were short lived and heir geographic coverage was also narrow in scope. For such kind of crisis, the hotel managers know that they will be over in a short period of time and their actions will be based on this assumption (Lai & Wong, 2020).

## 2.5 Conceptual framework

Most of the literature on crisis management for the hospitality industry have only focused on the preparation organizations should take in anticipation for crisis or on evaluating the actions taken

by managers during the crisis in order to mitigate its negative effects. Most existing crisis management literatures and models treat all crisis as similar, which is, undermining the difference among crisis in terms of duration and magnitude (Dung & Phi, 2021). They are mainly focused on the larger tourism industry and does not focus specifically on the hospitality industry. The most widely used model in this regard is the model used to analyze the Israeli hotel industry with regard to the terrorism crisis (Israeli & Reichel, 2003).

The Israeli model was in understanding the Indian luxury hotel industry crisis management practice in relation to the terrorist attacks. But one thing this model lacks is it just only tries to understand the level of usage of the different crisis. It does not try to analyze the practice of the managers and its relationship with performance.

The relationship between the actions taken by hotels and its impact on performance has not been systematically analyzed by many researchers. (Lai & Wong, 2020) have tried to analyze the link between the actions taken by hotels and their impact on performance. the model they created was based on the widely used hospitality crisis management framework by (Israeli & Reichel, 2003)

The following conceptual framework was used for this research. This conceptual framework is based on the model used by (Lai & Wong, 2020).

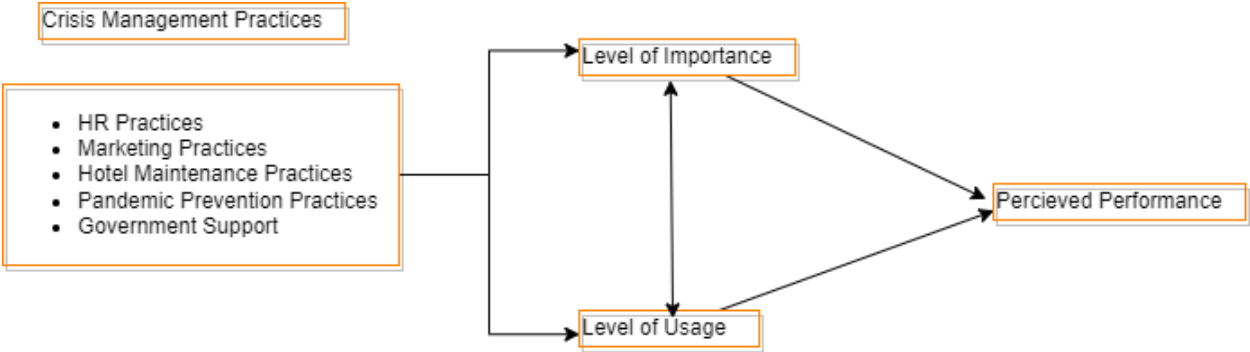


Figure 3: Study based model framework

The five practice categories are:

- **HR:** contains 7 practices related to HR.
- **Marketing:** contains 7 practices related to marketing
- **Hotel Maintenance:** contains 5 practices related to hotel maintenance.
- **Pandemic Prevention:** contains 7 practices related to pandemic prevention
- **Government Support:** contains 5 practices related to government support

The importance level of each practice under the five major categories measures the importance managers assign to each practice in relation to its role in coping up with the practice. The usage level measures to what extent the managers have used the practices during the crisis. Normally one could expect managers would use the practices they deemed are important.

The effect of each practice on the performance of the firm or the hotel is shown by the line connecting usage and performance. Performance here is not viewed from financial perspective. Performance is subjectively judged by hotel managers. It is mainly related to operational performance or in other words in terms of surviving the crisis. The impact each crisis management category has on performance will be analyzed.

Importance and usage are the independent variables while perceived performance is dependent variable.

## 3. Chapter Three: Research Methodology

### 3.1 Introduction

“Research approaches, research designs, and research methods are three key terms that represent a perspective about research that presents information in a successive way from broad constructions of research to the narrow procedures of methods” (Creswell J. W., 2018).

This part of the study covers the research approach, research design, research method, data collection instrument, target population and sample design, model specification and variable description, method of data analysis, proposed reliability, and validity tests and ethical consideration

### 3.2 Research Approach

Research approaches are the plans for research from assumptions to data collection, analysis and interpretation methods (Creswell J. W., 2018). There are three research approaches. These are qualitative research, quantitative research and mixed research. Neither of these research approaches are right or wrong. Research can choose one of these approaches or a combination of both. Selection of a research approach depends to a large extent on the goals and preferences of a researcher (Hancock & Algozzine, 2006).

This study has employed a mixture of both qualitative and quantitative research approaches. (Hoepfl, 1997) suggest that when little is known about an issue, a qualitative research approach is appropriate. Discovering underlying motives and desires by using interviews if the main aim of qualitative type of research (Kothari, 2004). Research in such a situation is a function of the researcher’s insights and impressions (Kothari, 2004). The goal of qualitative research is to understand the situation from the participants perspective (Hancock & Algozzine, 2006).

Qualitative designs are flexible and emergent in nature and are often non-linear (Kumar, 2012). Qualitative research requires a greater access to the participants of the research because methods such as focus group discussion and interviews usually require greater participation of the participants of the research (Hancock & Algozzine, 2006).

Quantitative approach often involves instruments, which produce useful data in short period of time (Hancock & Algozzine, 2006). Surveys and tests are some of the instruments that are used in quantitative research. Quantitative research often identifies variables and the impact they have (Hancock & Algozzine, 2006). Other factors that decide the research approach to be used is the access to people who are involved in a research. if a researcher has limited access to the people involved in the research quantitative approach may be preferred because quantitative research can be accomplished with minimum involvement of the research participants (Hancock & Algozzine, 2006). This research also has an exploratory aspect which included interviews with hotel managers from the industry. Furthermore, the research has a direct linkage to the methodology employed by (Martilla and James, 1997) and (Israeli and Reichel, 2003) research about Israel's hotel industry.

### 3.3 Research Design

“A research design is a procedural plan that is adopted by the researcher to answer questions validly, objectively, accurately and economically” (Kumar, 2012). The research design allows the researcher to communicate to others the research design used, how respondents are selected, how information is collected from the respondents, how the information collected from the respondents is analyzed and findings communicated (Kumar, 2012).

One of the quantitative research designs is survey method. “A survey research provides a quantitative or numeric description of trends, attitudes or opinions of a population or tests for

association among variables of a population by studying a sample of that population” (Fowler, 2013). A survey study can include cross-sectional and longitudinal studies using questionnaires or structured interviews for data collection – with the intent of generalization from sample to population (Creswell J. W., 2018).

## 3.4 Research Population and Sampling

### 3.4.1 Research Population

The research population is all-star rated hotels in Addis Ababa. The reason why we chose star rated hotels is because star rated hotels usually have established management and organizational structure.

### 3.4.2 Sampling method

Purposive selection was used for selecting hotels and simple random sampling technique was used for respondents, because such a sampling technique avoids researcher bias in selecting the sample and improves the external validity of the research (Saundres, and Lewis, 2012). simple and stratified random sampling techniques have been used. Simple random sampling was used because of the following reasons: first, it completely avoids the researcher's bias. The second reason is, it produces a random result. Thirdly, managers of different hotels almost perform similar activities. Stratified random sampling was also used because there are different divisions and data needs to be collected from each division considering each division as strata. Sample from each division was selected proportionally.

### 3.4.3 Sample size

The overall population of the hotels as can be seen from Annex C, is small. So, using the normal sample size calculation will make the sample size very small and its conclusion statistically

unacceptable. In order to have a significant sample size we had to distribute the questionnaire to more than one manager in a given hotel. For example, a general manager, HR manager, Marketing Manager, Finance Head are some of the positions that filled out the questionnaires. Our final respondents size 121. The sample size is determined based on the following formula.

$$n = N / 1 + N(e)^2$$

Where:

n- is the required sample size from the population under study

N- is the whole population that is under study

e- is the precision or sampling error (0.05)

Therefore: -

$$n = 163 / 1 + 163(0.05)^2$$

$$n = 163 / 1.4075$$

$$n = 116$$

## 3.5 Data Collection

### 3.5.1 Quantitative data collection

The approaches to data collection can be classified as primary and secondary data (Kumar, 2012). Primary data was collected through a questionnaire distributed to hotels. The objective and relevance of the study were explained to respondents in the questionnaires that were distributed. To some of the respondents more clarification was provided over the phone and in a face-to-face meeting. The questions were written in plain language and in a way that can easily be understood by respondents. The respondents were not required to provide personal information; all data was collected anonymously. The main reason for allowing anonymous data collection is to allow the respondents to answer questions without any bias.

The questionnaire was prepared in google forms and the link to the google forms was sent to hotels via email. The email of all hotels in Addis Ababa was acquired from the Addis Ababa Hotel Owners' association. For those who were not able to use google forms either a questionnaire in Microsoft Word was sent via email or a printed copy of the questionnaire was provide at their offices.

All the questions in the questionnaire were mandatory, which means respondents had to provide an answer. The questions in the questionnaire were closed questions. The respondents had to tick one of the scales assigned to each question.

Though the questionnaire was a standard one used in other scientific settings, before administering the questionnaire to the research group a pre-test was conducted. The main question of the pre-test was to evaluate if the questions were clear and descriptive enough. Following the pre-test some minor modifications on the questions were used to make it more understandable.

A five point numerical Likert scale was used to measure the response of respondents to each practice asked in the questionnaire. The list of questions included in the questionnaire are referenced in the Annex A.

### 3.5.2 Qualitative data collection

Interviews with managers of different hotels were conducted to supplement the findings of the quantitative result. Interviews with managers of Monona Hotel, Sapphire Addis, Mosiac hotel, Capital Hotel and Ramada Addis were conducted. In addition, an interview with the manager of Addis Ababa Hotels Association was also conducted. The interviews were conducted following the scientific interviewing procedure. The list of questions used for the interviews are attach to in this report, as Annex B.

### 3.6 Method of Data Analysis

After the data is collected through a questionnaire the researcher organized and cleaned the collected data before proceeding to analysis. Descriptive analysis was used to summarize demographic data of the respondents. To see the importance and usage level of the crisis-management practices, RII(relative importance index) was applied. Pearson Correlation analysis is done to check the relationship between the level of importance and usage of crisis-management practices. Principal Component analysis was used for data quality assessment and to obtain the rotated component matrix which is used as an input for logistic regression. Logistic regression was done using STATA software to see the impact of crisis management practices on the performance of hotels. various statistical analysis was done using SPSS 23 software.

### 3.7 Ethical Consideration

In conducting this research, respondents were informed that any information collected is never be used for other purpose than this study and that the data will be kept confidential.

## 4. Chapter Four: Results and Discussions

### 4.1. Introduction

In this chapter the results of the study are presented and discussed with reference to the objective of the study, which was to analyze the crisis management practices used by hotels in Addis Ababa in response to the COVID-19 pandemic and its impact on performance. The answer to each research question based on the survey data and the interview results are also included in this chapter.

### 4.2 Description of profile of the respondents

Out of the 130 questionnaires filled by respondents, 121 usable questionnaires were returned. The high usability rate was because most respondents used the google forms link to provide their responses. Because hotel senior staffs voluntarily responded to the call for online survey, there was no response rate. As shown in table 4.1 Respondents were predominantly male (81%), and 19% are female. 23.1% of the respondents' average age was between 25-30 years, 49.6% of the respondents are between the age of 31-40 years, the rest (27.3%) of the respondents are above 40. Around 18% of the respondents were supervisory level and 82% of respondents were managerial level or above. As they needed to work closely with other departments, they were able to answer questions on various aspects of hotel operations. The background of respondents in the survey is shown in table below.

Demographic	Descriptive	Frequency	Percent
Gender	Female	23	19.0
	Male	98	81.0
Age	25-30	28	23.1
	31-40	60	49.6
	>40	33	27.3
Managerial Position	General manager/CEO	32	26.4
	Department/Division manager	62	51.2
	Supervision	22	18.2
	Owner	5	4.1
Your Hotel Rating	One Star	3	2.5
	Two Star	16	13.2
	Three Star	51	42.1
	Four Star	40	33.1
	Five Star	11	9.1

*Table 1: Profile of respondents*

### 4.3 Questionnaire pilot testing

Doing a pilot testing for questionnaires ensures that questions are easily understood and their concepts are clearly captured by respondents (Husni, Meyer, Cohen, Mody, & Qureshi, 2007). Prior to distributing the questionnaire to respondents, a pilot test was conducted. Ten (10) respondents were selected and the questionnaire was distributed to them as part of the pilot study. The objectives of the pilot study were to establish that the respondents understand the questions in the survey clearly and to collect feedback from them that will enhance the quality of the questionnaire. Based on the pilot test modifications to some of the questions were made in order to make them easily understandable and to avoid any ambiguity.

## 4.4 Data Analysis

### 4.4.1 Data Quality Assessment

Statistical measures generated by SPSS such as the Kaiser-Meyer-Olkin (KMO) and Bartlett's test of Sphericity (Pallant, 2010) show the factorability of any data. Sampling adequacy is measured by Kaiser – Meyer –Olkin (KMO). KMO measures if it is adequate to conduct Factor Analysis by measuring the distribution value. The cutoff points for Kaiser-Meyer-Olkin (KMO) measures are: a measure of  $>0.9$  is marvelous,  $>0.8$  is meritorious,  $>0.7$  is middling,  $>0.6$  is mediocre,  $>0.5$  is miserable and  $<0.5$  is unacceptable. Moreover, Bartlett's test of Sphericity tests a null hypothesis; this supposed that the population correlation matrix was an identity matrix. This test depends on the assumption of normality which was proved above. FA would be meaningless with an identity matrix. A significance value  $<0.05$  indicates that the data DO NOT produce an identity matrix and are thus appropriately multivariate normal and acceptable for FA (George & Mallery, 2003).

Because this study has revised and amended the attributes, principal component analysis was conducted using statistical package for the social sciences version 23 on the data collected in the initial stage as recommended by (Lai & Hitchcock, Importance–performance analysis in tourism: A framework for researchers, 2015). The initial Kaiser-Meyer-Olkin (KMO) value suggested that data were adequate for factor analysis (KMO = 0.768). The five categories were marketing (five items), maintenance (four items), epidemic prevention (seven items), human resources (seven items) and governmental assistance (five items). All factor loadings are higher than 0.6, and the lowest one is 0.608. The convergent validity is also assured which is discussed later discussed in normality of data section. (Hair et al.,2010).

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.768
Bartlett's Test of Sphericity	Approx. Chi-Square	200.348
	df	10
	Sig.	.000

Table 2: KMO and Bartlett's Test

#### 4.4.2 Assessing Common Method bias

Questionnaire survey is used by different researchers for data collection purpose. The information is used to measured dependent and independent variables during data analysis. This brings a bias risk due to Common Method Bias. “The common method Bias (CMB) is the systematic variance shared among the variables

Questionnaire survey is used by different researchers for data collection purpose. The information obtained from the survey is used to measure the independent and dependent variables in the data analysis. In doing this the estimated impact of one variable on other variable is at risk of being biased due to Common Method Bias (CMB). Common Method Bias (CMB) is the systematic variance shared among the variables (Podsakoff & MacKenzie, 2012). Common bias method is usually the source of measurement error and affects validity negatively. The presence of CMB in any measure means the correlation is inflated (Meade, Watson, & Kroustalis, 2007)and the conclusions are hypothetically ambiguous conclusion (Carlson, Kacmar, & Williams, 2000). In order to be free from CMB the first factor of unroated factor analysis should be less than 50% (Podsakoff & MacKenzie, 2012). In this study the first factor accounted for 29.43%, therefore, the results suggested that there was no common variable.

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.844	25.304	25.304	7.844	25.304	25.304	6.241	20.132	20.132
2	6.019	19.416	44.720	6.019	19.416	44.720	4.370	14.096	34.227
3	3.785	12.209	56.929	3.785	12.209	56.929	4.206	13.567	47.795
4	3.038	9.801	66.729	3.038	9.801	66.729	3.257	10.506	58.301
5	1.823	5.881	72.610	1.823	5.881	72.610	2.696	8.697	66.998
6	1.431	4.618	77.228	1.431	4.618	77.228	2.473	7.979	74.977
7	1.189	3.835	81.063	1.189	3.835	81.063	1.698	5.478	80.455
8	1.092	3.523	84.585	1.092	3.523	84.585	1.280	4.130	84.585
9	.835	2.693	87.279						
10	.558	1.800	89.079						
11	.523	1.687	90.766						
12	.446	1.439	92.205						
13	.380	1.225	93.430						
14	.318	1.025	94.456						
15	.284	.915	95.370						
16	.241	.776	96.146						
17	.207	.669	96.815						
18	.175	.565	97.380						
19	.153	.493	97.873						
20	.121	.390	98.263						
21	.100	.321	98.584						
22	.090	.291	98.875						
23	.081	.260	99.135						
24	.063	.202	99.338						
25	.053	.172	99.510						
26	.051	.165	99.675						
27	.041	.133	99.808						
28	.023	.075	99.883						
29	.017	.054	99.937						
30	.015	.049	99.987						
31	.004	.013	100.000						

Table 3: Total Variance Explained

#### 4.4.3 Identifying outliers

Outliers occur when much smaller or much larger observations or measures are presented in the responses. These extremes do not show the analysis result correctly. Outliers occur due to different reasons; inappropriate scale of data, data entry problem, and complexities among variables which were not expected (Tabachnick & Fidell, 2013). Atkinson and Riani (2000) recommended checking the presence of outliers by running a test prior to data analysis. The analysis will be influenced by the presence and nature of the outliers (Kline, 2005).

If the absolute value of Z-score is greater than 3.29 with  $p < .001$ , it indicates that there is a univariate outlier (Tinsley & Brown, 2000). So, based on this we can see that in this research there were no outlier cases.

If the relationship between the independent and dependent variables is linear the standard multiple regression accurately estimates their relationship. If their relation is not linear then the results of the regression analysis will under-estimate the true relationship and inaccurate statistical result will occur (Jensen and Ramirez, 2013).

#### 4.4.4 Assessing multi-collinearity Assumption

In regression multi-collinearity is when predictors are correlated. The existence of multi-collinearity increases the standard error of the coefficients. Multi-collinearity makes some variables to be statistically insignificant when they should be significant. But those variables are significant if multi-collinearity or standard error does not exist (Kleinbaum, Kupper, Nizam, and Rosenberg, 2013).

Variance inflation factor (VIF) and Value of Tolerance are used to measure multi-collinearity in regression. A VIF value of 1 means no factors are correlated. When a predictor variable has a

strong linear association with other predictor variables, the associated VIF is large and is evidence of multi-collinearity. The cutoff point for VIF is less than or equal to 3.3 and Tolerance greater than 0.1 (McClendon and McKee, 2003).

The table below shows the value of VIF calculated for all independent variables using SPSS. As can be seen from the table the VIF results are below the threshold value of 3.3. and the tolerance values also show that there is no multi-collinearity problem.

<b>Coefficients</b>			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Human Resources	.631	1.584
	Marketing	.883	1.133
	Hotel Maintenance	.631	1.584
	Epidemic Prevention	.811	1.233
	Government Support	.864	1.157
a. Dependent Variable: Perceived Performance			

Table 4: multi-collinearity test

#### 4.4.5 Normality Test

The disturbance of regression equation is generally assumed by the normality assumption. An error that occurs in the relation between the independent and dependent variable is called disturbance of regression equation. This disturbance should be normally distributed for all cases (Good and Hardin, 2003).

The normality was evaluated by the researcher using skewness and kurtosis, Shapiro-wilk test, histograms and Q-Q plots.

The tilt or lack of it of a distribution is skewness; while peakness of a distribution is Kurtosis. To get skewness and kurtosis one should run descriptive statistics. For a normally distributed data both skewness and kurtosis should be within the -2 to +2 range (Lemann, 2008).

The shapiro-wilk test ( $p > 0.05$ ), the null hypothesis for this test of normality, is that the data are normally distributed. For a P value of below 0.05 the null hypothesis is rejected. Accordingly, all the p values are above 0.05, so we keep the null hypothesis. In terms of the shapiro-wilk test we can assume that the data is approximately normally distributed.

When we look at the graphical figures for all the observed items, starting by inspecting the histograms visually, they should the approximate shape of normal curve, and in this case they have.

Next, we look at the normal Q-Q plots, the dots should be along the line, this indicates that the data are approximately normally distributed. And the box plots should be approximately symmetrical.

A shapiro-wilk's test ( $p > 0.05$ ) and a visual inspection of their histograms, normal Q-Q plots and box plots showed that the data were normally distributed, with a skewness of 0.662 (SE=0.220) and a kurtosis of -0.183 (SE=0.437) for Human Resource, a skewness of -0.761 (SE=0.220) and a kurtosis of -0.068 (SE=0.437) for Marketing, a skewness of 0.205 (SE=0.220) and a kurtosis of -0.840 (SE=0.437) for Hotel Maintenance, a skewness of -3.157 (SE=0.220) and a kurtosis of 11.183 (SE=0.437) for Epidemic Prevention and a skewness of 0.022 (SE=0.220) and a kurtosis of -1.217 (SE=0.437) for Government Support.

#### 4.4.6 Validity

Has the results really measured what they are supposed to measure is the answer given by Validity. There are different types of Validity. For example, Content, External or Construct Validity are some of the types of validity (Straub, Boudreau, and Gefen, 2004).

The pilot test conducted has made sure that the questions are relevant and easy to understand, this covers the content validity part. The sample size is large enough to make generalizations about the entire population. The factor analysis part in this chapter covers the convergent and discriminant validity aspects.

#### 4.4.7 Reliability

Reliability measures the stability of any measurement (Oluwatayo, 2012). Test for reliability measures consistency across the parts of any instrument (Taherdoost, 2016). Cronbach Alpha coefficient is mostly used to measure internal consistency and reliability. Cronbach Alpha coefficient is appropriate for measuring reliability of Likert scale measures. The minimum internal consistency or cutoff point that most researchers agreed as a cutoff point for internal consistency is 70.

An instrument's reliability should be greater than or equal to 0.6 according to Straub et al. (2004). According to Zwick and Velicer (1982) the cutoff points for excellent reliability, high reliability, moderate reliability and low reliability are 0.9, 0.7, 0.5 and below 0.5 respectively. For a reliability to be sufficient it has to be combined with validity. A reliable test should also be valid (Zwick and Velicer, 1982).

Practice	Cronbach's alpha	CR	AVE	HR	MK	HM	EP	GA
Human Resource (HR)	.880	0.89	0.54	1				
Marketing (MK)	.883	0.93	0.74	0.43	1			
Hotel Maintenance (HM)	.817	0.89	0.61	0.354	0.229	1		
Epidemic Prevention (EP)	.960	0.97	0.83	-0.119	0.214	0.183	1	
Government Assistance (GA)	.916	0.93	0.72	0.318	0.396	0.253	0.293	1

*Table 5: Reliability, construct validity and discriminant validity*

## 4.5 Factor Analysis: Principal Component Analysis

Discovering common factors is what factor analysis pursues. Taking out as much common variance as possible in the first factor is the technique used by factor analysis. The maximum amount of the remaining common variance is intended to be accounted by subsequent factors (Hu & Bentler, 1999). The factor matrix can be derived from the correlation matrix by applying mathematical models in direct extraction method. But this is not sufficient to make conclusions. Adjustments are required to reduce ambiguities (Child, 1990).

Principal components, unweighted least squares, generalized least squares, maximum likelihood, principal axis factoring, alpha factoring and image factoring are some of the ways of conducting Factor Analysis (George and Mallery, 2003).

### 4.5.1 Communality

Communality is variables variation percentage that is explained by factors. In other words, it is the variance an original variable shares with all other variables in the analysis. We say there is high communality when a variable has much in common with other variables (Islam and Mamun, 2005). In addition, communality also measures the presence of variance in a variable as explained by all the factors jointly, which can be assumed as the reliability of the indicator.

A variable could be omitted due to low communality value i.e., below 0.5 (Thompson, 2004).

Initially a principal component analysis assumes that all variances are common. Before extraction the communalities are one (1).

The amount of variance in each variable is represented by communalities after extractions, this is explained by retained factors.

As can be shown from the table below all variables have a value greater than 0.5, which means there is high communality.

Communalities		
	Initial	Extraction
Laying off employees to reduce labor force	1.000	.816
Using unpaid vacation to reduce labor force	1.000	.805
Reducing the number of workdays per week	1.000	.900
Freezing pay rates	1.000	.727
Replacing high- tenure employees with new employees	1.000	.795
Increased reliance on outsourced human resources	1.000	.689
Provide voluntary early retirement or resignation plan	1.000	.852
Reducing prices on special offers	1.000	.856
Reducing list prices of office services	1.000	.934
Marketing to foreign tourists with a specific focus on the location's distinctive and relative safety	1.000	.728
Marketing and promoting new products or services	1.000	.902
Marketing to new segments	1.000	.859
Marketing to domestic tourists in joint campaigns with local merchants	1.000	.855
Advertising on different media channels	1.000	.876
Cost cuts by postponing office maintenance	1.000	.794
Cost cuts by postponing systems' maintenance	1.000	.759
Cost cuts by purchasing lower-cost office supplies	1.000	.743
Cost cuts by closing less used facilities	1.000	.781
Extending credit or postponing scheduled payments	1.000	.885
Implement body temperature checks for customers at the entrances	1.000	.789
Provide sufficient protective materials (such as masks) to employees	1.000	.938
Educate employees about the knowledge of epidemic prevention	1.000	.968
Remind guests of the importance of epidemic prevention	1.000	.938
Implement sufficient cleaning and disinfection in public areas in hotels	1.000	.941
Implement sufficient cleaning and disinfection in hotel rooms	1.000	.947
Develop and implement standardized epidemic prevention procedures	1.000	.912

The government provides tax benefits	1.000	.792
The government provides subsidies to hotel employees	1.000	.871
The government holds international events to attract customers to Addis Ababa	1.000	.808
The government provides subsidies to customers who consume hotel rooms	1.000	.865
The government provides subsidies to local residents who consume hotel facilities	1.000	.896
Extraction Method: Principal Component Analysis.		

Table 6: Communality

#### 4.5.2 Total Variance Explained

Total variance explained used to assess the variance in all variables which are accounted for by a single factor. Total variance is displayed by Eigen values. The ration of explanatory importance of the factors with respect to the variables is the ration of Eigen values. The percentage of explanatory importance of a given factor with respect to the variables is expressed by the ratio of Eigen values. A factor with low Eigen value is considered as a redundant when compared to the more important factors and contribute small in explanation of the variance in the variables (Kaiser, 1958). Mostly different extraction approaches are used but the most used extraction approach is —root greater than one criterion and originally suggested by (Kaiser, 1958). According to these criterion components with Eigen values of greater than 1 will be retained. In the standardized test score space, any component should account for more variance than any single variable, is the rationale behind this criterion.

As shown in table 3, in this study 8 variables extracted with Eigen values above one explained 84.585% of the variance using Varimax rotation to conduct this analysis.

#### 4.5.3 Factor Rotation

The main reason of using factor rotation is to improve and check the interpretability of factors. Rotation used to maximize the loadings of each variable on one of the extracted factors at the same time it minimizes the loading on all other factors. Despite the fact that keeping their differential

values constant, rotation works through changing the absolute values of the variables despite the fact that keeping their differential values constant (Field, 2009).

Varimax, quartimax and equamax are the three techniques of orthogonal rotation. The varimax method is the most popular among these techniques and is often used to make factor analysis FA. The procedure seeks to rotate factors so that the variation of the squared factor loadings for a given factor is made large (Hair, Black, Babin, Anderson, and Tatham, 2006). The particular item will have a better representation on the factor the higher the loading is. Hair et al., (2006) recommended that factor loadings greater than 0.30 are the minimum requirement; loadings of 0.40 are considered more important; and loadings of 0.50 or greater are considered significant. The exact choice of rotation depends largely on whether or not the researcher should choose one of the orthogonal rotations (Generally, researchers recommend as varimax).

Based on this guideline, varimax rotation is used and items that have factor loadings of lower than 0.50 discarded to get items more representatives for their respective factor. In order to increase the significance of items to their respective factor the researcher used 0.50 as cutoff. Moreover, this technique initially divided the factors into fourteen factors but later they were reduced in to nine when some variables were dropped because they were unrelated to any of the factors and/or because of low loadings (loadings below 0.5). The analysis was conducted iteratively until all factor extraction rules were met. The rotated factor loadings for the nine constructs obtained from the SPSS outputs are presented in table 4.6. These out puts of EFA are used as inputs for Ordinal Logistics Regression. In summary, the PCA results in five factors namely Human Resource, Marketing, Hotel Maintenance, Epidemic Prevention and Government support, consisting of 7, 5, 3, 7, and 5 questions respectively

Rotated Component Matrix <sup>a</sup>							
	Component						
	1	2	3	4	5	6	7
Educate employees about the knowledge of epidemic prevention	.949						
Remind guests of the importance of epidemic prevention	.941						
Implement sufficient cleaning and disinfection in hotel rooms	.937						
Implement sufficient cleaning and disinfection in public areas in hotels	.934						
Provide sufficient protective materials (such as masks) to employees	.930						
Develop and implement standardized epidemic prevention procedures	.908						
Implement body temperature checks for customers at the entrances	.778						
Marketing and promoting new products or services		.946					
Marketing to new segments		.882					
Advertising on different media channels		.868					
Marketing to domestic tourists in joint campaigns with local merchants		.818					
Marketing to foreign tourists with a specific focus on the location's distinctive and relative safety		.783					
The government provides subsidies to local residents who consume hotel facilities			.917				
The government provides subsidies to customers who consume hotel rooms			.900				
The government provides tax benefits			.852				
The government provides subsidies to hotel employees			.847				
The government holds international events to attract customers to Addis Ababa			.711				
Laying off employees to reduce labor force				.872			
Freezing pay rates				.711			
Replacing high-tenure employees with new employees				.687			
Cost cuts by postponing systems' maintenance				.565			
Reducing the number of workdays per week					.895		
Provide voluntary early retirement or resignation plan					.679		
Using unpaid vacation to reduce labor force					.650		

Increased reliance on outsourced human resources					.610		
Extending credit or postponing scheduled payments						.844	
Cost cuts by postponing office maintenance						.721	
Cost cuts by purchasing lower-cost office supplies						.625	
Cost cuts by closing less used facilities						.508	
Reducing list prices of office services							.930
Reducing prices on special offers							.766

Table 7: Factor Rotation

## 4.6 Results

### 4.6.1 Level of importance of crisis-management practices

To answer research question 1, the relative importance index was applied to the importance level of different crisis management practices. Accordingly, 31 key variables, which are also crisis management practices, that were identified in the literature review were presented to supervisors, managers, and senior staff of different star-rated hotels to solicit their views.

On each of the 31 variables, respondents were asked to indicate which variable they would say important in helping them cope up with the effects of the pandemic, based on a five-point scale where: 1-Not Important, 2-Less Important, 3-So-So, 4-Important, and 5-Very important.

The Relative Importance Index (RII) was used to rank the variables according to their relative importance. Where Relative Importance Index or weight is a type of relative importance analysis which is used for ranking indicators (degree of importance). Relative Importance Index helps in finding the contribution of a particular variable makes to the prediction of a criterion variable both by itself and in combination with other predictor variables (Johnson & LeBreton, 2004). To calculate the relative importance index, the following formula was used.

$$RII = \frac{\sum w}{A * N}$$

where, W-weighting was given to each statement by the respondents and ranges from 1 to 5;  
A-Higher response integer (5); and N—total number of respondents.

Practices	5	4	3	2	1	W	N	A*N	RII	Rank
<b>Human Resource</b>									<b>0.549233</b>	<b>5</b>
HR1	50	96	81	60	30	317	121	605	0.523967	
HR2	110	128	63	50	21	372	121	605	0.614876	
HR3	95	136	78	54	15	378	121	605	0.624793	
HR4	60	56	72	82	30	300	121	605	0.495868	
HR5	10	72	60	64	49	255	121	605	0.421488	
HR6	85	92	45	70	31	323	121	605	0.533884	
HR7	125	104	90	44	18	381	121	605	0.629752	
<b>Marketing</b>									<b>0.816765</b>	<b>2</b>
MK1	265	172	33	26	1	497	121	605	0.821488	
MK2	190	196	60	28	0	474	121	605	0.783471	
MK3	205	192	33	28	7	465	121	605	0.768595	
MK4	355	80	54	16	4	509	121	605	0.841322	
MK5	335	144	18	14	5	516	121	605	0.852893	
MK6	325	124	45	16	2	512	121	605	0.846281	
MK7	265	136	66	14	5	486	121	605	0.803306	
<b>Hotel maintenance</b>									<b>0.687934</b>	<b>4</b>
HM1	155	140	75	42	6	418	121	605	0.690909	
HM2	115	100	63	64	18	360	121	605	0.595041	
HM3	110	112	63	82	9	376	121	605	0.621488	
HM4	205	152	60	34	5	456	121	605	0.753719	
HM5	240	128	87	8	8	471	121	605	0.778512	
<b>Epidemic prevention</b>									<b>0.922786</b>	<b>1</b>
EP1	385	84	18	32	1	520	121	605	0.859504	
EP2	440	100	12	8	0	560	121	605	0.92562	
EP3	465	80	15	6	0	566	121	605	0.935537	

EP4	415	100	30	6	0	551	121	605	0.910744	
EP5	475	88	3	6	0	572	121	605	0.945455	
EP6	505	52	12	6	0	575	121	605	0.950413	
EP7	450	96	12	6	0	564	121	605	0.932231	
<b>Government support</b>									<b>0.768595</b>	<b>3</b>
G1	225	236	27	12	2	502	121	605	0.829752	
G2	195	236	36	12	5	484	121	605	0.8	
G3	245	172	36	20	7	480	121	605	0.793388	
G4	155	192	69	18	10	444	121	605	0.733884	
G5	100	192	81	32	10	415	121	605	0.68595	

Table 8: relative importance index

For a five-point scale the Relative Importance Index will produce a value ranging from 0.2 up to 1 (Badu, Owusu-Manu, Edwards, Adesi, & Lichtenstein, 2013). Similarly, the group index is the average relative importance index of the variables within the group (Fugar & Agyakwah-Baah, 2010).

The RII values of the groups which is for Human resources, Marketing, Hotel maintenance, Epidemic prevention, and Government support are 0.549233, 0.816765, 0.687934, 0.922786, and 0.768595 respectively.

According to the Relative Importance Index, the largest value was given to Epidemic prevention, followed by marketing, government support, hotel maintenance and human resource categories/groups.

#### 4.6.2 level of usage of crisis-management practices

Research Question 2 is about the extent these practices have been used by hotel managers during the pandemic. Relative Importance Index was applied again to analyze the reported level of usage of crisis management practices.

practices	5	4	3	2	1	W	N	A*N	RII	Rank
<b>Human Resource</b>									<b>0.507674</b>	<b>5</b>
HR1	55	60	90	70	30	305	121	605	0.504132	
HR2	110	96	69	50	27	352	121	605	0.581818	
HR3	80	100	78	64	22	344	121	605	0.568595	
HR4	55	36	63	54	53	261	121	605	0.431405	
HR5	35	44	57	56	56	248	121	605	0.409917	
HR6	55	88	105	22	42	312	121	605	0.515702	
HR7	110	76	57	48	37	328	121	605	0.542149	
<b>Marketing</b>									<b>0.767178</b>	<b>2</b>
MK1	195	184	84	16	0	479	121	605	0.791736	
MK2	140	188	96	22	3	449	121	605	0.742149	
MK3	170	204	69	14	6	463	121	605	0.765289	
MK4	270	132	51	26	4	483	121	605	0.798347	
MK5	195	212	51	14	5	477	121	605	0.78843	
MK6	190	152	93	14	7	456	121	605	0.753719	
MK7	185	140	90	16	11	442	121	605	0.730579	
<b>Hotel maintenance</b>									<b>0.629752</b>	<b>3</b>
HM1	105	148	60	64	11	388	121	605	0.641322	
HM2	80	84	81	74	20	339	121	605	0.560331	
HM3	55	136	78	54	23	346	121	605	0.571901	
HM4	110	148	123	36	3	420	121	605	0.694215	
HM5	140	76	144	52	0	412	121	605	0.680992	
<b>Epidemic prevention</b>									<b>0.927509</b>	<b>1</b>
EP1	475	32	6	16	8	537	121	605	0.887603	
EP2	510	40	15	2	3	570	121	605	0.942149	
EP3	505	44	18	0	3	570	121	605	0.942149	
EP4	470	68	18	2	3	561	121	605	0.927273	
EP5	475	88	0	2	3	568	121	605	0.938843	
EP6	450	108	3	0	3	564	121	605	0.932231	

EP7	440	100	15	0	3	558	121	605	0.922314	
<b>Government support</b>									<b>0.528926</b>	<b>4</b>
G1	60	132	84	58	19	353	121	605	0.583471	
G2	50	136	108	26	28	348	121	605	0.575207	
G3	140	16	66	22	19	263	121	605	0.434711	
G4	65	116	72	38	36	327	121	605	0.540496	
G5	30	132	72	34	41	309	121	605	0.510744	

Table 9: level of usage

Epidemic prevention practices were highly used, followed by marketing, hotel maintenance, government support and HR respectively. This also goes with the interview results. There were protocols developed by the World Health Organization and adopted by governments and companies across the world. These protocols had to be applied by the hotels in Ethiopia. In addition, to the legal requirements implementing and adhering to the COVID-19 prevention protocols will attract customers because it will portray the hotel as a safe place to stay.

Marketing practice category was used in the second level. This also aligns with the results from the interviews. Most hotels started to reduce prices on rooms in order to attract customers. While others tried to reorient the hotel and converted it into a quarantine center that provides full accommodation including foods.

Based on the questionnaire result hotel maintenance activities were ranked 3<sup>rd</sup>. Most hotels have postponed periodic maintenance activities such as fixing of laundry equipment, kitchen utensils, elevators, generators and other machines that required periodic maintenance in order to cut costs.

Government support was ranked on the fourth level. The help from government mainly came in two ways. The first one is government in collaboration with all commercial banks availed a soft loan, around 5% interest, to hotels; the second one is government have extended the tax payment

period for hotels by one quarter. Both these government actions provided hotels the much-needed working capital they required to run their companies because the pandemic has affected their revenues significantly.

The least used practice is the HR category. One can assume that in a crisis any organization would use cost cutting measures and one of the areas to cut costs would be human resources. It seems the least usage level value for HR is counter intuitive. But based on the interview conducted with the hotel managers' hotels did not use the HR practices for two reasons. The first reason is government forced hotels not to lay off employees. This government restriction was not only applied to the hotel industry, organizations in other industries were also prohibited from laying off their employees. The second reason is the hotel industry is primarily a service industry and its service quality depends on the quality of its employees. The market for the hotel professionals has been supplying fewer workers to hotels. Most hotels were investing in their human resources by providing trainings and capacity building programs. So, for them losing their human capital was seen like closing their hotels. So, they tried their best to retain their hotels. But some hotels have reduced the salary of their higher level managers. Almost all hotels interviewed have given vacations to their employees, a paid one.

#### 4.6.3 Relationship between importance and usage

In order to answer the third research question, which measures the relationship between the importance level managers attached to each practice and their level of usage Pearson correlation analyses were employed as shown in the table below. In general, all the correlations were positive and statistically significant (at  $p < 0.05$ ), suggesting that managers have used practices they deemed are important. It shows that there is a certain level of consistency in the crisis-management behavior of managers. The highest correlation (0.82) was for practice EP4. For this practice,

average usage (4.64) was higher than importance (4.55). For the two following practices with the highest correlation, average importance was higher than average usage. These practices were practice E3 (correlation 0.76, average importance 5.06, average usage 4.93) and practice E5 (correlation 0.73, average importance 5.59, average usage 5.45).

The lowest correlation was for practice G1. With respect to this practice, average importance was higher than average usage (correlation 0.29, average importance 4.15, average usage 2.92). Next was practice G3, for which importance was higher than average usage (correlation 0.25, average importance 3.97, average usage 3.36). Finally, the lowest correlation was measured for practice G2, for which average importance was higher than average usage (correlation 0.14, average importance 4.00, average usage 2.88).

	Importance		Usage		Pearson correlation	Rank
	Mean	Std. Dev	Mean	Std. Dev		
EP4	4.55	0.752	4.64	0.827	0.822	1
EP3	4.68	0.673	4.71	0.779	0.789	2
EP5	4.73	0.606	4.69	0.751	0.75	3
EP1	4.3	1.1	4.44	1.217	0.736	4
EP2	4.63	0.709	4.71	0.8	0.734	5
EP6	4.75	0.636	4.66	0.737	0.708	6
EP7	4.66	0.665	4.61	0.789	0.668	7
HR7	3.15	1.346	2.71	1.497	0.667	8
HR5	2.11	1.146	2.05	1.231	0.646	9
HR1	2.62	1.28	2.52	1.246	0.601	10
HR6	2.67	1.405	2.58	1.365	0.597	11
HR4	2.48	1.259	2.16	1.31	0.585	12
HM3	3.11	1.264	2.86	1.273	0.574	13

HM4	3.77	1.182	3.47	1.033	0.554	14
HR2	3.07	1.379	2.91	1.426	0.55	15
HM2	2.98	1.411	2.8	1.282	0.545	16
HR3	3.12	1.275	2.84	1.31	0.506	17
MK1	4.11	1.015	3.96	0.907	0.475	18
HM5	3.89	1.168	3.4	1.069	0.462	19
MK4	4.21	1.125	3.99	1.151	0.439	20
MK5	4.26	1.071	3.94	1.035	0.427	21
HM1	3.45	1.31	3.21	1.264	0.391	22
MK7	4.02	1.11	3.65	1.236	0.387	23
G4	3.67	1.179	2.7	1.394	0.35	24
MK2	3.92	0.971	3.71	1.004	0.334	25
G5	3.43	1.161	2.55	1.335	0.329	26
MK6	4.23	1.015	3.77	1.131	0.308	27
MK3	3.84	1.183	3.83	1.062	0.296	28
G1	4.15	0.882	2.92	1.242	0.293	29
G3	3.97	1.169	3.36	1.39	0.249	30
G2	4	1	2.88	1.282	0.143	31

*Table 10: Pearson correlation analysis between importance and usage level of crisis management practices*

#### 4.6.4 Impact on performance

To answer the fourth research question of this study, ordered logistic regression analysis was applied to identify the factors that were influential in determining the performance of hotels during the pandemic.

Ordinal Logistic Regression is a statistical test used to predict a single ordered categorical variable using one or more other variables. It also is used to determine the numerical relationship between such sets of variables.

#### 4.6.4.1 Assumptions for Ordinal Logistic Regression

Every statistical method has assumptions. Assumptions mean that your data must satisfy certain properties in order for statistical method results to be accurate. The assumptions for Ordinal Logistic Regression include:

- **Linearity:** Logistic regression assumes that the relationship between the natural log of these probabilities (when expressed as odds) and the predictor variable is linear.
- **No Outliers:** Logistic Regression is sensitive to outliers, or data points that have unusually large or small values.
- **Independence:** Each of the observations or data points should be independent. This means that each value of the variables doesn't "depend" on any of the others.
- **No Multi-collinearity:** Multi-collinearity refers to the scenario when two or more of the independent variables are substantially correlated amongst each other. When multi-collinearity is present, the regression coefficients and statistical significance become unstable and less trustworthy, though it doesn't affect how well the model fits the data

In this section, hotels' performance in a time of crisis is regressed against the natural log of perceived performance in major categories: Human Resource, Marketing, Hotel Maintenance, Epidemic Prevention, and Government Support. And the estimation results are presented in table below.

	PP1	PP2	PP3	PP4	PP5
Explanatory Variables	Perceived performance through HR	Perceived performance through Marketing	Perceived performance through Hotel Maintenance	Perceived performance through Epidemic Prevention	Perceived performance through Government support
PC1	0.229*** (0.0670)	0.307*** (0.0688)	0.403*** (0.0764)	0.525*** (0.0937)	0.233*** (0.0650)
PC2	-0.362*** (0.0900)	-0.192** (0.0840)	-0.274*** (0.0961)	-0.234** (0.107)	-0.0732 (0.0821)
PC3	0.0512 (0.0849)	0.101 (0.105)	-0.0649 (0.0931)	-0.370*** (0.119)	-0.170** (0.0862)
PC4	0.0222 (0.133)	-0.534*** (0.138)	0.260* (0.134)	0.0758 (0.150)	-0.158 (0.122)
PC5	-0.144 (0.154)	0.175 (0.152)	-0.127 (0.155)	0.196 (0.163)	-0.116 (0.141)
PC6	0.231 (0.166)	-0.632*** (0.179)	0.0857 (0.186)	0.204 (0.195)	-0.220 (0.157)
PC7	-0.256 (0.171)	-0.0667 (0.174)	-0.0150 (0.181)	-0.263 (0.200)	-0.00947 (0.167)
Constant cut1	3.618*** (0.530)	-4.214*** (0.625)	-5.244*** (1.010)	-4.913*** (0.763)	-1.931*** (0.274)
Constant cut2	-1.842*** (0.340)	-2.453*** (0.380)	-2.758*** (0.680)	-4.549*** (0.210)	-0.845***
Constant cut3	-1.330*** (0.241)	-1.591*** (0.267)	-1.979*** (0.293)	-3.658*** (0.546)	0.0793 (0.194)
Constant cut4	1.011*** (0.214)	1.211*** (0.228)	0.780*** (0.210)	-0.0222 (0.222)	1.619*** (0.244)
Observations	121	121	121	121	121
Prob > chi2	0.0000	0.0000	0.0000	0.0000	0.0029
Pseudo R <sup>2</sup>	0.1052	0.1506	0.1447	0.2532	0.0564

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 11: Ordered logit regression result

The original model used in this study had 5 independent categories of variables. The principal component analysis (PCA) used at the beginning of data analysis stage have added 2 new additional independent variable categories. In other words, the PCA expanded the five independent variable categories into seven. The probability of these seven categories (epidemic prevention, optimization, marketing, cost reduction and competitive cost, mixed tactics, cost-cutting, and human resource) was examined. The tendency of change in the category, either in the form of remixing the variables from one category to another or adding new category, were also observed in the studies made by the model developers in the Israeli hotel industry (Israeli A. A., 2007).

When the analysis results are examined, the significance level was found to be statistically significant when p values of some variables were less than 0.05.

The analysis shows PC1(epidemic prevention practice) affects the performance of hotels positively and significantly at a 1% significance level across all the major categories. This supports the idea that epidemic prevention is the most significant positive indicator explaining the performance of hotels. Based on the positive sign of its coefficient, estimates that a large positive value of this variable leads to a larger logit value and a higher probability of increasing performance. This is also supported by results from the interview. In order to attract the small number of customers hotels had and boost revenues following pandemic prevention protocols developed by the World Health Organization such as measuring temperature, applying disinfectants periodically were very important.

While PC2 (optimization) which is a new category that contains variables from human resources and epidemic prevention (HR1, HR4, EP2, EP3, EP4) is not helping to boost the performance of hotels during pandemics. More specifically it has a significant and negative effect on four major

categories (human resource, marketing, hotel maintenance, and epidemic prevention) of hotels' performance, it has no impact on Government support perspective.

PC3(marketing) have also a significant negative impact on epidemic prevention and government support categories of hotels' performance. The marketing practices that are included as part of PC3 (MK3, MK4, MK5, MK6 and MK7) are mostly not related to pricing.

PC4(cost reduction and competitive prices) which includes MK1, MK2, HM1, HM3 and HM5 practices affects the marketing category of hotels' performance negatively and significantly at a 1% of the significance level. These practices came from hotel maintenance and marketing categories of the original model. These practices are mainly cost cutting and pricing aspects of marketing and hotel maintenance categories.

PC6(cost-cutting in HR, marketing, and hotel maintenance) affects the marketing category of hotels' performance negatively and significantly at a 1% of significance level.

But PC5 (mixed tactics) which includes a mix of practices from HR (HR2, HR3, HR5), marketing (MK2), and epidemic prevention(EP1), and PC7(human resource practices) are insignificant in determining the likelihood of increasing hotels' performance.

The finding implied that, human resource practice is insignificant in determining the performance of hotels due to the following two main reasons:

- Hotels were prohibited by government law from laying off workers in order to minimize the effect of the pandemic. So, practices such as laying off, early retirement or reducing salaries were not used.
- The key differentiating factor in hotels is its employees. Competent HR means higher quality service which will make the hotel more attractive to customers. The talent pool in

the hotel industry is very limited. Hotels had to invest in training and building the capability of their workers. So, most hotels also were reluctant to let go their workforce on whom they have invested a lot and which are also difficult to replace them from the market. So, this was the second reason for hotels reluctance to use HR practices.

# 5. Chapter Five: Summary, Conclusion and Recommendation

## Introduction

This chapter is divided into three sections. The first section contains a summary of the major findings of the research. The second section of contains conclusions made from the results analysis chapter of the research. The recommendations are included in the third section of this chapter.

### 5.1 Summary

The impact of COVID-19 on hotels in Addis Ababa was significant leading even to closure of a large number of hotels (Addis Ababa Hotel Owners Trade Sectorial Association, 2020). Those who survived have used different practices to keep them in operation. The practices used by the hotels in order to cope up with the effects of the pandemic were analyzed by using a crisis model developed and used extensively in the hospitality industry (Israeli & Reichel, 2003).

Hotels in Addis Ababa have used practices they believed are important. So, in large part there is a strong correlation between their belief and actions. Though they believed government support is important in order to survive the crisis they believed that the support has been in adequate. Interviews with the hotel managers have revealed that the soft loan provided by commercial banks up on the request of the government and governments decision to defer the payment of taxes have helped them in fulfilling their need of working capital. But they expected the government to provide support especially in rescheduling loans hotels had from commercial banks. This request was submitted by their hotel association to the government and it was denied.

Of all the crisis management practices epidemic prevention had a significant impact on performance. This could be because of two reasons. The first one is that customers who used hotel services especially rooms were very curious of the safety of the hotel rooms. So, implementing practices such as wearing of masks, regularly disinfecting hotel rooms and facilities, and other practices were important in attracting the small number of customers that were available at that time such as airline pilots or business travelers. The second one is the regulation that imposed by government forcing hotels to comply with the protocols developed by the World Health Organization.

## 5.2 Conclusion

At the beginning of this study were there four questions which need to be answered. Firstly, what are the level of importance attached to the crisis-management practices. Secondly, to what extent did the hotels used the crisis-management practices. Thirdly, the relationship between the level of importance and usage of the crisis-management practices, and fourthly, the impact of those crisis-management practices on the performance of hotels.

The study observed that out of all crisis management practices the most important and widely used and also the one that significantly affected the performance of hotels was pandemic prevention. And as the result shows, this crisis-management practice had also a significant impact on other crisis-management practices such as Human Resource and Marketing. The pandemic prevention was implemented by the workforce so it is normal to assume its impact on HR. Even if marketing practices such as reducing prices of rooms significantly and changing the entire hotel facility into a quarantine center were used to attract customers their effectiveness to a large extent depended on the pandemic prevention practices that were used.

### 5.3 Recommendation

Based on the findings and conclusions, the following recommendations have been proposed.

The first recommendation is for hotel managers or policy makers for developing crisis management strategies and practices which is shifted from reactive crisis-management practices to proactive one. Hotels and managers need to shift their approach in crisis management from. Hotel managers mainly focused on reactive crisis-management rather than focusing on prevention of crises from happening. Hence, hotels and managers should do more improvement efforts and resources before crisis phase as opposed to during crisis phase, more of a focus needs to be given on how to be prepared in dealing with tourism crisis.

Second: hotel managers have an important role in the recovery of the hotel industry by promoting not only their own hotels but also Ethiopia as a safe and secure destination as it is critical for the hotel industry. Hotel websites should provide up to date information to their customers. Hotels should put successful crisis-management experiences on their website to share with other hotels in order to increase the crisis awareness.

Third: marketing strategies should target the less-sensitive market segments first, to ensure a quick recovery from the downward trend. Hotel managers could also identify and target new market segments of guests, such as local people.

Fourth: hotel managers should upgrade the quality of HR in the tourism sector as a must. Hotels should educate not only hotel managers but also employees for which they work on the importance of crisis-management for hotels.

Another area that could be analyzed to analyze why some of the hotels were closed and some survived the crisis. This crisis only analyzed those hotels that survived the crisis.

## 5.4 Direction for Future Research

As this research emphasizes: the primary suggestion is to extend the research to different industries that face crises. Unfortunately, there'll always be a location under crisis and so, it carries potential for more practical crisis management within the future. Another interesting and significant question that has yet to be answered is do crisis management practices improve position and performance of the firm within the long run? At now, we lack the long-term perspective needed to check the strategy proposed during this paper and to discuss the above question. This question remains unanswered as a challenge for future research.

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# Annex A: Questionnaire

## Questionnaire

### Part one: Demographics \*

1. Gender
  - Male
  - Female
2. Age
  - 18-24
  - 25-30
  - 31-40
  - Over 40
3. Managerial position
  - General Manager/CEO
  - Department or Division Manager
  - Supervisor
  - Owner
4. Your hotel rating
  - One Star
  - Two Star
  - Three-star hotel
  - Four-star hotel
  - Five-star hotel

**Part two: Level of Importance**

How do you personally evaluate the importance of the following practices during the pandemic?

Instruction: please answer the following sections according to the following order

- 1- Not important
- 2- Less Important
- 3- Neutral
- 4- Important
- 5- Very Important

Category	Practices	1	2	3	4	5
Human Resource	Laying off employees to reduce labor force					
	Using unpaid vacation to reduce labor force					
	Reducing the number of workdays per week					
	Freezing pay rates					
	Replacing high- tenure employees with new employees					
	Increased reliance on outsourced human resources					
	Provide voluntary early retirement or resignation plan					
Marketing	Reducing prices on special offers					
	Reducing list prices of office services					
	Marketing to foreign tourists with a specific focus on the location's distinctive and relative safety					
	Marketing and promoting new products or services					

	Marketing to new segments					
	Marketing to domestic tourists in joint campaigns with local merchants					
	Advertising on different media channels					
Hotel maintenance	Cost cuts by postponing office maintenance					
	Cost cuts by postponing systems' maintenance					
	Cost cuts by purchasing lower-cost office supplies					
	Cost cuts by closing less used facilities					
	Extending credit or postponing scheduled payments					
Epidemic prevention	Implement body temperature checks for customers at the entrances					
	Provide sufficient protective materials (such as masks) to employees					
	Educate employees about the knowledge of epidemic prevention					
	Remind guests of the importance of epidemic prevention					
	Implement sufficient cleaning and disinfection in public areas in hotels					
	Implement sufficient cleaning and disinfection in hotel rooms					

	Develop and implement standardized epidemic prevention procedures					
Government	The government provides tax benefits					
	The government provides subsidies to hotel employees					
	The government holds international events to attract customers to Addis Ababa					
	The government provides subsidies to customers who consume hotel rooms					
	The government provides subsidies to local residents who consume hotel facilities					

**Part three: Level of usage**

How often you have used the following practices

Instruction: please answer the following sections according to the following order

- 1- Never
- 2- Rarely
- 3- Sometimes
- 4- Often
- 5- Always

Category	Practices	1	2	3	4	5
Human Resource	Laying off employees to reduce labor force					
	Using unpaid vacation to reduce labor force					
	Reducing the number of workdays per week					
	Freezing pay rates					
	Replacing high- tenure employees with new employees					
	Increased reliance on outsourced human resources					
	Provide voluntary early retirement or resignation plan					
Marketing	Reducing prices on special offers					
	Reducing list prices of office services					
	Marketing to foreign tourists with a specific focus on the location's distinctive and relative safety					
	Marketing and promoting new products or services					
	Marketing to new segments					
	Marketing to domestic tourists in joint campaigns with local merchants					

	Advertising on different media channels					
Hotel maintenance	Cost cuts by postponing office maintenance					
	Cost cuts by postponing systems' maintenance					
	Cost cuts by purchasing lower-cost office supplies					
	Cost cuts by closing less used facilities					
	Extending credit or postponing scheduled payments					
Epidemic prevention	Implement body temperature checks for customers at the entrances					
	Provide sufficient protective materials (such as masks) to employees					
	Educate employees about the knowledge of epidemic prevention					
	Remind guests of the importance of epidemic prevention					
	Implement sufficient cleaning and disinfection in public areas in hotels					
	Implement sufficient cleaning and disinfection in hotel rooms					
	Develop and implement standardized epidemic prevention procedures					
Government	The government provides tax benefits					
	The government provides subsidies to hotel employees					
	The government holds international events to attract customers to Addis Ababa					
	The government provides subsidies to customers who consume hotel rooms					
	The government provides subsidies to local residents who consume hotel facilities					

**Part four: perceived performance**

For each of the following statements rate your level of agreement on the performance of your hotel

Instruction: please answer the following sections according to the following order

- 1- Strongly Disagree
- 2- Disagree
- 3- Undecided
- 4- Agree
- 5- Strongly Agree

Category	Performance measures	1	2	3	4	5
Human Resource	I believe that my hotel performance was positively affected by the implemented human resources practices					
Marketing	I believe that my hotel performance was positively affected by the implemented Marketing practices					
Hotel maintenance	I believe that my hotel performance was positively affected by the implemented Hotel Maintenance practices					
Epidemic prevention	I believe that my hotel performance was positively affected by the implemented Epidemic Preventions practices					
Government	I believe that my hotel performance was positively affected by Government support					

## Annex B: Interview questions

The interview was a semi-structured interview. A list of predefined questions was used as a starting point for the interviews but the interviewer had raised follow up questions based on the response of the interviewee and the interviewee was also given the chance to explain him/herself.

Before the start of the interview the researcher introduced her self, briefly described the research interview objective and had asked for the consent of the interviewee to be recorded.

At the end of every interview the result of the interview was transcribed into Microsoft word.

The interview questions are categorized into

1. **Introduction:** name, title, place of work and background of the interviewee was asked before going in detail to the research topic related questions.
2. **Human resource**
  - What kind of specific HR practices did you use to cope up with the COVID-19 pandemic?
  - Were these practices useful in keeping your hotel survive the pandemic?
  - Were there employee layoffs? If yes, what kind of employees did you lay off?
  - did you try to reduce the number of working days or provide unpaid vacation, freeze pay rates to reduce costs?
  - Did you use any kind of outsourcing to reduce costs?
3. **Marketing**
  - Have you used price discounts as a way of attracting users?
  - Any new products and services you initiated during the pandemic?

- What kind of advertising methods did you use if any?
  - Have you tried to attract a new customer segment (e.g. domestic users)
  - To what extent have the changes in your marketing activity helped in you coping up with COVID-19?
4. Hotel maintenance
- How often did you do maintenance on a regular basis? how much has that been reduced during the pandemic?
  - Did you try to cut costs on maintenance activities? Which were these activities? What kind of impact did they have on the hotel service quality?
  - Did you had a chance to reschedule your loan repayment?
  - Did the changes you introduced in the hotel maintenance activity helped you cope up with COVID-19 pandemic? To what extent?
5. Epidemic prevention
- To what extent did you follow the COVID-19 prevention protocols such as wearing masks, putting sanitizers, disinfectant, awareness and temperature checks?
  - What kind of impact did these prevention activities have on your hotel, both in positive and negative side?
  - Did these prevention activities helped you in your quest for coping up with COVID-19?
6. Government support
- What kind of support did you get from government?
  - Could the government have done better in terms of support?
  - What were the impact of these supports?
  - Did you pay income tax during the pandemic? If yes, was is significantly lower than that of the pre-pandemic years?

Annex C: List of Hotels in Addis Ababa and their rating (data from AHA)

S.No	Hotel Name	Sub city	Star
1	Abyssinia Renaissance Hotel	Bole	3
2	Amran Hotel	Bole	4
3	Aaron Hotel	Gulele	2
4	Archi Hotel	Yeka	3
5	Addis Regency Hotel	Gulele	3
6	Addissinia Hotel	Bole	4
7	Addis view Hotel	Arada	3
8	Adot-Tina Hotel	Kirkose	2
9	Afropolitan International Hotel	Yeka	2
10	Airport Motel	Bole	On process
11	Ambassador Hotel	Bole	On process
12	Aphrodite International Hotel	Kirkos	3
13	Ararat Hotel	Yeka	3
14	Astara Hotel	Yeka	3
15	Atlas International Hotel	Kirkos	on process
16	Aselefech Merga hotel and spa		
17	Axum Hotel	Bole	2
18	Ayma International Hotel	Yeka	on process

<b>19</b>	Azzeman Hotel	Bole	4
<b>20</b>	Beacon Hotel	Kality	2
<b>21</b>	Base Ethiopia int Hotel	Bole	4
<b>22</b>	Bealeta Hotel Apartemnt	N/silke lafto	3
<b>23</b>	Bata Hotel	Bole	3
<b>24</b>	Beer Garden Inn	Bole	3
<b>25</b>	Berlottue Hotel	Yeka	4
<b>26</b>	Bellvue Hotel	Yeka	4
<b>27</b>	Beshale Hotel	Yeka	3
<b>28</b>	Bethelehem Gebru(Abegaz) Hotel	Bole	3
<b>29</b>	Best Western Plus Hotel	Bole	4
<b>30</b>	Best western Plus pearl Addis	Bole	4
<b>31</b>	Blue Birds international Hotel	Bole	on process
<b>32</b>	Blue Nest Hotel	Lideta	3
<b>33</b>	Blue-Sky Hotel	Bole	3
<b>34</b>	Bole International Hotel	Bole	on process
<b>35</b>	<b>Bole Skygate Hotel</b>		
<b>36</b>	Capital Hotel and Spa	Bole	5
<b>37</b>	Caravan Hotel	Bole	3
<b>38</b>	Cfun Addis Hotel	Kirkos	1
<b>39</b>	Celeste Ethiopia Hotel	Bole	3
<b>40</b>	Churchill Hotel	Arada	3

<b>41</b>	Checkinn Hotel	Bole	4
<b>42</b>	Crown Hotel	Akaki kaliti	on process
<b>43</b>	Cot Hotel	Bole	3
<b>44</b>	Daamt Hotel	Bole	3
<b>45</b>	Damu Hotel	Bole	2
<b>46</b>	Dabi Hotel & Apartments	kirkos	on process
<b>47</b>	Desalegn Hotel	Yeka	4
<b>48</b>	Diamond Hotel	Bole	3
<b>49</b>	Denver Hotel	Bole	on process
<b>50</b>	Deber Damu Hotel	Kirkose	4
<b>51</b>	Dimitri Hotel	Yeka	on process
<b>52</b>	Dream liner Hotel	Arada	4
<b>53</b>	Demenama Hotel	Yeka	1
<b>54</b>	Edna Addis Hotel	Yeka	3
<b>55</b>	Elgel Hotel and Spa	N/silke lafto	4
<b>56</b>	Eyerusalem Hotel	Bole	No Star
<b>57</b>	Efoyi Piza Lounge	Arada	No Star
<b>58</b>	Eliana Hotel	Kirkos	4
<b>59</b>	Ellily International Hotel	Arada	5
<b>60</b>	Emmad Hotel	Bole	on process
<b>61</b>	Embilta Hotel	Gulele	3
<b>62</b>	Empire Addis International Hotel	Bole	4

<b>63</b>	Ethiopia Sky Light Hotel	bole	5
<b>64</b>	<b>Enyi /Pullman Hotel</b>		
<b>65</b>	Ethiopia Hotel	Kirkose	3
<b>66</b>	Eyomer Hotel	Bole	3
<b>67</b>	Filowha Spa Service Enterprise	Kirkos	5
<b>68</b>	Foyat Hotel	Bole	3
<b>69</b>	Friendship International Hotel	Bole	4
<b>70</b>	<b>Grand Palace Hotel</b>		
<b>71</b>	Getfam Hotel	Bole	5
<b>72</b>	GG Royal Hotel	Bole	2
<b>73</b>	Ghion Hotel	Kirkos	2
<b>74</b>	Global Hotel	Kirkos	3
<b>75</b>	Golden Royal Hotel	Bole	3
<b>76</b>	Golden Tulip Hotel	Bole	4
<b>77</b>	Garalay Hotel	Gulele	
<b>78</b>	Guzara Hotel	Bole	on process
<b>79</b>	<b>Haven Hotel</b>		
<b>80</b>	Haimi Apartment	Bole	2
<b>81</b>	Harambe Hotel	Lideta	on process
<b>82</b>	Harmony Hotel	Bole	4
<b>83</b>	Hera Addis Hotel	Kirkos	3
<b>84</b>	Heyday Hotel	N/silke lafto	4

<b>85</b>	Hilton Addis Hotel	Kirkos	5
<b>86</b>	Homage Hotel	Bole	2
<b>87</b>	Hotel Concord	Kirkos	1
<b>88</b>	Hotel D'Afrique	Kirkos	on process
<b>89</b>	Hotel De Leopol	Kirkos	on process
<b>90</b>	Hotel Lobelia	Bole	3
<b>91</b>	Hotel Siyonat	Bole	3
<b>92</b>	Hyatt Regency Hotel	Kirkos	5
<b>93</b>	Hotel Tirago	Bole	3
<b>94</b>	Holiday Hotel	yeka	3
<b>95</b>	Intercontinental Addis Hotel	Bole	5
<b>96</b>	Imprse Hotel	Birkos	3
<b>97</b>	Jupiter International Hotel	Kirkos/bole	4
<b>98</b>	Kaleb Hotel	Bole	3
<b>99</b>	Kenenisa Hotel	Bole	3
<b>100</b>	Kings Hotel	Birkos	3
<b>101</b>	Mado Hotel	Bole	4
<b>102</b>	Marcen Addis Hotel	Bole	3
<b>103</b>	Mamas kitchen Hotel	Bole	on process
<b>104</b>	Magnolia Hotel	Yeka	4
<b>105</b>	<b>Manrashiwa Hotel</b>	<b>Kirkos</b>	

<b>106</b>	Marriott Executive Apartment	Bole	5
<b>107</b>	Millanium Hotel Apartment	Bole	on process
<b>108</b>	Medal Hotel	Bole	3
<b>109</b>	Meridian Hotel	Bole	on process
<b>110</b>	Moonlight Hotel		
<b>111</b>	Momona Hotel	Bole	3
<b>112</b>	Monarch Hotel	Bole	3
<b>113</b>	Motera hotel	Addis ketema	No Star
<b>114</b>	Mosy Hotel	kirkos	on process
<b>115</b>	Orange River Hotel	Bole	3
<b>116</b>	Oasis Apartment Hotel	Bole	on process
<b>117</b>	Opal Stone Hotel		
<b>118</b>	Oxygen Hotel		
<b>119</b>	Natna Hotel	Kirkos	On process
<b>120</b>	Nazra Hotel	Bole	
<b>121</b>	New Day Hotel	Bole	on process
<b>122</b>	Nexus Hotel	Kirkos	4
<b>123</b>	Negest Saba Hotel		
<b>124</b>	Nigist Towers Hotel	Yeka	on process
<b>125</b>	North Addis Hotel		
<b>126</b>	Pasific Hotel	Yeka	2
<b>127</b>	Panorama Hotel	Kirkos	3
<b>128</b>	Radisson Blu Hotel	Bole	5

<b>129</b>	Ramada Addis Hotel	Bole	5
<b>130</b>	Ras Amba Hotel	Lideta	On process
<b>131</b>	Ras Hotel	Bole	on process
<b>132</b>	Reliance Hotel Apartment	Bole	3
<b>133</b>	Ronali Hotel	Bole	3
<b>134</b>	Southern Addis Hotel	Bole	3
<b>135</b>	Saromaria Hotel	Bole	4
<b>136</b>	Sabon International hotel	Addis ketema	3
<b>137</b>	Sapphire Addis Hotel	Addis ketema	5
<b>138</b>	Sarem International Hotel	Kirkos	4
<b>139</b>	Semien Hotel	Yeka	1
<b>140</b>	Sheraton Addis Hotel	Yeka	5
<b>141</b>	Sunspot Hotel		
<b>142</b>	Sherar Addis Hotel	Bole	New
<b>143</b>	Sidra International Hotel	Addis ketema	3
<b>144</b>	Solo Te Hotel	Yeka	2
<b>145</b>	Soder Resort Hotel		
<b>146</b>	Solish Hotel		1
<b>147</b>	Sunland Hotel	Bole	3
<b>148</b>	Seba Dereja		
<b>149</b>	Soramba Hotel	Bole	On process
<b>150</b>	Stay Easy Hotel	Yeka	1

<b>151</b>	Tarik Hotel	Lideta	3
<b>152</b>	The hub hotel	Yeka	On process
<b>153</b>	Tegen Hotel	Bole	On process
<b>154</b>	Tesfu Hotel		2
<b>155</b>	Tulip Inn Hotel	Kirkos	4
<b>156</b>	The Mosaic Hotel	Bole	4
<b>157</b>	The Residence Hotel	Bole	On process
<b>158</b>	Tizeze Hotel	bole	3
<b>159</b>	Tewodros Belay Hotel	Lideta	3
<b>160</b>	Three Days International Hotel	Yeka	on process
<b>161</b>	Tirar Hotel	Bole	4
<b>162</b>	Top Ten Hotel	N/silke lafto	3
<b>163</b>	Trinity Hotel	Bole	on process
<b>164</b>	Umma Hotel	Lideta	on process
<b>165</b>	Venetian Hotel	Bole	3
<b>166</b>	Wabe Shebele Hotel	Bole	3
<b>167</b>	Washington Hotel	Arada	4
<b>168</b>	Wassamar Hotel	Bole	3
<b>169</b>	YadmZewd Hotel	Bole	3
<b>170</b>	<b>Yebo Hotel and Spa</b>		
<b>171</b>	Yober Hotel	Bole	3
<b>172</b>	Yoly Addis Hotel	Bole	4
<b>173</b>	Yina Hotel	Gulele	3

<b>174</b>	Zemalex Hotel	Bole	3
<b>175</b>	Zigzag Hotel and Spa		
<b>176</b>	Zola Hotel	Bole	3
<b>177</b>	Zmama Hotel	Bole	3

*Figure 4: List of hotels in Addis Ababa (AHA data)*