EFFECT OF FOOD SAFETY AND FOOD QUALITY ON CUSTOMER CHOICE OF DINING DESTINATIONS IN KENYA.

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DECLARATION

I do hereby declare and state that this is my original work and has not been presented in the Technical University of Kenya or any other institution of learning in Kenya or elsewhere for whatever purpose.

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We confirm that the work in this thesis was done by the candidate under our supervision as the appointed University supervisors.

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DEDICATION

I dedicate this work to my loving wife Petrigona and my children, Clinton and Duke for their wonderful support and encouragement

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ABBREVIATIONS AND ACRONYMS

ASC	Assured Safe Catering
CAC	*Codex Alimentarius* Commission
CC	Customer Choice
DD	Dining Destination
E. COLI	Escherichia coli
FAO	Food and Agriculture Organization
FSMS	Food safety management systems
GHP	Good hygiene practices
GMP	Good manufacturing practices
HACCP	Hazard Analysis Critical Control Point
ISO	International standard organization
KEBS:	Kenya Bureau of Standards
MF	Moderating factors
NACOSTI	National Commission for Science Technology and Innovation
PRPS	Prerequisite programmes
QAS	Quality Assurance systems
QMS	Quality management systems
WHO	World Health Organization
β_0	Constant (the intercept of the model)
ε	The error term

OPERATIONAL DEFINITION OF TERMS

Food quality: Quality includes all product attributes that influence its value to consumers

Food safety: Assurance that food will not cause harm to the consumer when it is prepared and consumed according to its intended use.

Dining destination: Hospitality establishments obliged to receive and offer food and drinks to travelers who are willing and able to pay

Customer Choice: Preferences that customers make based on needs and wants e.g. food establishments at a particular time

HACCP: A structured approach to assessing potential hazards in a food operation by monitoring critical control points and deciding which are critical to consumer safety.

Food hygiene: These are conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain.

Food safety assurance: A series of activities that require up-front planning, identification of hazards, critical control points, and an action plan to deal with deviations in the food processing.

Dining: An activity of eating a meal in a restaurant or a food service operation

Food Safety Monitoring: Manually checking the temperature, humidity and status of food storage areas as well as recording the completion of hygiene checks and recording the temperature of raw and cooked food

ABSTRACT

The effect of Food safety (FS) and Food Quality (FQ) on customer's destination choice (DC) remains controversial. A number of empirical studies conducted in Kenya failed to seek the manner in which consumers themselves perceived FS and FQ in order to choose their destination of choice. Owing to this contradiction, this study was to determine the effects of FS and FQ on customer choice of dining destinations in Kenya. The objectives of the study were; to assess the relationship between food quality and customer choice on the dining destinations in Kenya, to determine the relationship between food safety assurance and customer choice on dining destinations in Kenya, to determine the relationship between food monitoring and surveillance systems and customer choice of dining destinations in Kenya, to assess the moderating effect of top management commitment on the relationship between food safety and quality and customer choice of dining destinations in Kenya and to assess the moderating effect of customer-based factors on the relationship between food safety and quality and customer choice of dining destinations in Kenya. A cross-sectional survey design was adopted in this study where1058 guests were sampled based on 49% average bed occupancy statistics. Additionally, 54 hotel staff (managers and Sous chefs) were purposively selected from 4-star and 5-star hotels in Kenya. Self-administered questionnaires and structured interview schedules were employed to collect data from respondents. Qualitative data collected through interview schedules was analyzed thematically while quantitative data was analyzed using multiple regression analysis. The study found out that there was positive significant relationship between FQ, FS and FSM in determining customer's choice of dining destinations (p-values 0.015, 0.005 and 0.044). The study also found out that there was a moderating effect of top management commitment on the relationship between FQ, FS and choice of customer's dining destination (p-value = 0.004). While there was a general agreement that top management are committed in affirming food safety and quality, it was also revealed that for every positive improvement in top management commitment, there would be a corresponding positive rate of influence on dining destination choice. The output of the models with and without interaction confirmed that the moderation effect of customer-based factors was found not to be significant but presented itself as an explanatory variable (P=0.25). Although the study presented unique insights into food safety, quality, monitoring as well as surveillance; there were a number of limitations based on the empirical as well as conceptual settings. The study failed to investigate the physical, chemical as well as microbial contaminations that can cause unsafe food. This therefore could be a prime area for future research.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study.

Food safety and food quality refers to the totality encompassed in food products' characteristics that make food products meet all the legal, direct as well as implied consumer requirements. It also refers to the chances of contracting any disease or causing any side effect after consumption of that food (Oloo, 2010). There is a distinction between food safety and food quality which draws much implications in the manner in which the organization's management systems are developed in the quest to manage either safety or quality (Manning & Soon, 2016).

Food safety on the other hand refers to the risk perception by consumers in relation to the consumption of harmful substances such as harmful chemicals, poisonous micro-organisms or physical contaminants that form part of their food (Griffith *al.*, 2010). Food safety has emerged as a global challenge and most of the developing countries are the victims of the devastating perils of foodborne illness. Globally, it is estimated that around 9.4 different illness cases, 55,961 hospitalizations and consequently 1,351 deaths are caused by contaminated food intake with identified causal agents (Scallan*et al*., 2011). Since, microbes are developing resistance and are able to survive many food production and processing operations thus they pose a potential threat to human health and are regarded as the major sources of foodborne illness. Food safety is well recognized as a primary indicator of economic growth in the developing world therefore, a wave of realization has spurred both at public and government levels for safe food supply (Akhtar, Sarker & Hossain, 2014).

When consumers have this perceived risk, it would negatively impact on their food choice decisions and thereby reduce the consumption patterns (Griffith *et al.,* 2010). This implies that in matters of food safety is in a greater percentage influenced by the trust that is placed on food

production methods as well as the people involved in the production. In this regard, a number of researchers have dwelt on a number of factors that inhibit compliance in food safety. These inhibitors include; inadequate management commitment on training as well as lack of training facilities and deficient governmental support in terms of legal and financial support from relevant non-government organizations (Tunalioglu *et al*., 2012).

Food quality on the other hand refers to the attributes of food products that enhance the food value to customers. This consist of the taste of the food, health requirements, appearance, process as well as convenience (Shaharudin *et al*., 2011). The definition of food quality suggests a certain interconnection between food quality and food safety. The relationship indicates that FQ depends on FS when the producer guarantees the consumer that food will not cause harm or bring any sickness to the consumer when eaten according to the appropriate measure and for the intended purpose. It therefore follows that food safety is the main criterion upon which food quality is enhanced (Griffith *et al.,* 2010). This indicates that food quality should not be viewed in isolation as if it relates to the product only, but rather should be extended to the entire food production process. To fill this research gap, the current study focused on the food quality in hotel food production, particularly how to get a consistent level of food quality through food production processes within hotel food production operations.

While food safety and quality are significant, there have been mixed findings from previous researchers on the impact of FS and FQ on customer's dining destination. Wu *et al.,* (2012) arguably indicated that food quality had a positive effect on customer's dining experience, while Albayrak and Caber (2018) reportedly suggested that there is a decline on the quality of customers' dining experience as a result of enhancing food quality. Ha and Jang (2013) in their study on determinants of diner's variety-seeking intentions, recommended that the competitiveness of hotel

establishments is based on its ability to undertake food quality practices. The study however did not specifically investigate the management practice that would impact the hotel's performance as far as choice of hospitality destinations are concerned. A study by Arendt, Paez and Strohbehn (2013) established the struggle that exist in a number of food establishments as they seek to enhance food quality management systems that would be appropriate in meeting as well as exceeding the needs and expectations of customers in the global scenario. The study nonetheless, fell short of elucidating the key challenges that hinder implementation of quality management systems in the quest to increase and improve organization performance.

Ha, and Jang (2013) recommend that competitiveness of a destination is primarily as a result of the quality practices. The study however, did not take into consideration the specific quality management practices that would result in enhancement of the organization's performance. According to Arendt, *et al*; (2013), most of the food processing firms that are internationally established aspire to improve and enhance their quality management systems to create a distinction between competitions. The study also failed to bring into light the implementation challenges for this quality management system.

Shaharudin *et al*., (2011) argues that there are robust challenges in the current world as consumers have become increasingly fragmented in their choices. Additionally, there is increasing demand to receive the best possible quality, as far as food consumption and destination choice is concerned. Consumers are therefore increasingly demanding for producers to stretch the limit as they are cognizant of their safety needs and wonderful experiences. According to Food and Drugs Administration (Singer *et al.,* 2019) consumers are susceptible to their choices in food consumption as they are exposed to various food hazards that exist in the food they decide to consume. It is fortunate that most consumers and in particular in the developed world, have become

increasingly aware of these risks and are therefore careful in the choices they make in regard to food they consume and choice of destination (Wan and Chan, 2013). It is therefore an open secret that food safety and food quality have internationally elicited much attention from consumers, producers as well as researchers. According to Nouaimeh, Pazhanthotta, Taylor & Bulatovic-Schumer (2018), it is the choice of every consumer to demand and desire to get safe food and of high-quality. On the other hand, Emond (2018) argues that the concerns surrounding consumers in regard to the safety and the nature of food quality, highly affects their future food purchase patterns. Additionally, the researcher notes that the quality and food safety is a core element in the decision to purchase food in every consumer, that the consumers are willing to incur a premium on normal prices in order to guarantee receiving high quality food (Ortega, Wang, Olynk, Wu, & Bai, 2012).

Quality assurance standards which have been put in place internationally and support food quality and food safety and are consequently referred as "safety assurance systems". These systems are composed of: Good Hygiene Practices (GHP), Good Manufacturing Practices (GMP), Hazard analysis Critical Control Point (HACCP) Just to mention but a few. Governments all over the world are challenged to implement and enhance food safety and quality management practices among their populace (Al Yousuf *et al.*, 2015a). Governments that have been able to address this challenge in a greater percentage have found reciprocal advantages in their public health, tourism as well as economic boost. These governments have established comprehensive strategies that are well implemented, assessed and reassessed for bottlenecks or loopholes.

Hotels are highly globalized sub-sector and as such, there is high inter-destination competition among the players. This is where competitiveness is sought from all avenues including food safety and quality aspects. It is therefore competitively important for hotel establishments to identify that

the government plays a major role in defining the destination choice in regard to the maintenance of food safety and security standards. However, the competition between establishments in the same destination exist, which may also be guided by the factors of food quality and food safety among other factors. It is therefore clear that the management of an establishment should be alive to the fact that their commitment is a key component in the success within this inter-destination competition (Burusnukul, Binkley &Sukalakamala, (2011).

A study conducted by Mburu and Paulos (2010) also observed that among the issues that influenced clients in choosing a dining destination among different establishments was food safety and quality. Ohiokpehai, 2003; Omemu and Aderoju (2008) confirm that there is inadequate studies that have been undertaken in Africa in regard to food quality and food safety; of those carried out mainly took their focus on food handling by street vendors and therefore failed to scrutinize and factor in perception of food quality and safety from the consumer's point of view.

According to Haiyang and Carmon (2010)when are determining the choice of their preferred dining destination, they are guided by a seven stage process of decision making: The first process is need recognition where they identify the need to dine, the other is searching for information, then it is followed by evaluation of the different choices among the ones identified, then after settling on one establishment they make the decision to purchase, they then undertake post-purchase evaluation and finally divestment. Further, Engel, Roger and Paul, (1995) argue out on the evaluative criteria that is applied by consumers in making decisions in regard to their dining destinations; they suggest that consumers use established standards as well as product specificity while comparing products among different alternatives. This implies that criteria for evaluation among alternatives results from experiences of previous purchase and consumption and are therein expressed in the form of preferred attributes. Shek (2020) was of the opinion that globalization has

brought increased complexity in food safety chain which aggravates the uncertainty and distorts the known supply chain by the increasing asymmetry in available information in regard to food safety and food quality. This has therefore made it cumbersome to monitor and implement food safety and quality standards (Validi, Bhattacharya, & Byrne, (2014); Darkow (2015).

According to Nyamari (2009), the responsibility of enhancing food safety falls on the shoulders of all food producers and food handlers. This implies that they are therefore under the obligation of ensuring that raw materials used in food production and processing are of high quality, and meets the required food safety standards. The critical component of enhancing food safety and quality should commence from the raw materials used, to the final stage of presenting the food to the consumers and the after sales services. The entire supply chain should therefore be scrutinized from inside out to ensure that dangers are kept away from food manufacturing and processing (Trafialek & Kolanowski, 2014).

In Kenya, while the objective to enhance the safety and quality of food control remains constant, effective food control and monitoring is undermined. This may be as a result of fragmentation in existing legislation, surveillance weaknesses, enforcement of existing laws, as well as availability of multiple jurisdictions. In Kenya, the country is at its infancy stage as far as transparency in governance is concerned. There is also the absence of self-discipline in handling and distribution of food, lack of intertwined supply chain that would foster monitoring of raw materials from the supplier to the end process. There is also inadequate resource that would enhance implementation and detection system that would detect food quality and raw materials in real time basis, which has brought out difficulties in regulation and effective legislation of the industry (Zhang *et al.*, 2015). According to Oloo (2010), in Kenya, there exist shared responsibility between various agencies and ministries that govern food quality control. These ministries may have distinct

responsibilities and roles that make it common for duplication of efforts in enhancing control in food quality and safety in such countries (Birch, 2018). Similarly, despite the increasing quality management systems in the food industry and in other sectors as well, the effectiveness of such systems depends on their implementation which varies across different destinations and different hotel establishments (Wu & Liu, 2010)As such the implementation of these quality systems is considered effective by different studies while other studies doubt it (Song *et al.,* 2017).

Organizations which strategize around food safety and quality ensure their management team is composed of forwarding thinking personnel, who are able to establish and shape policies towards achieving delivery of high quality food of equal safety standards. In different regions, the agencies in charge of safety and control also require the top management to undertake personal commitments in the delivery of safe and quality food that is in line with Hazard Analysis and Critical Control Point (HACCP) systems. Researchers have also found that the personal commitment by the management team is effective in enhancing food safety and quality in establishments. It is therefore an international concern for the need of the management of each hotel to align itself with the requirement of enhancing personal commitments to food safety and quality (Rouvière & Caswell, 2012).

It is from this competitive background, that the need to implement personal commitments from top management team in each hotel establishment gives a bearing towards food safety and quality. This triggers the ability of the manager to enhance adequate surveillance of each food process, monitoring delivery and services to customers that guarantees hygiene processes and high quality raw materials that would lead to high food quality and safety that would meet and exceed customer's expectations. Therefore, this research is intended to determine the effects of food safety and quality on customer choice of dining destination in Kenya.

1.2 Statement of the research problem

Food safety and quality remain a challenge in Kenyan Hospitality industry. While food safety and food quality play an important role in hospitality, limited studies have been conducted to assess their effect on customer choice of destination in Kenyan hotels.

Previous studies conducted in Africa and Kenya in particular (Ohiokpehai *et al.,* 2009);Omemu &Aderoju, 2008) put their emphasis on the handling food by street vendors however they failed to seek the manner in which consumers themselves perceived food safety and quality in order to make their decisions in regard to their destinations of choice. In addition, Tunalioglu *et al.,* (2012), Validi *et al.,* (2014), and Darkow, (2015) confirm that Kenya faces a number of obstacles in implementing its food safety and quality compliance standards due to insufficient monitoring, lack of training facilities and deficient management support. Further, (Grace, 2015) State that non-compliance of food safety and food quality standards that are already established. The poor monitoring system where different agencies and ministries are responsible of the same mandate weakens the control system and leads to duplication of efforts. According to the report, standards and policies among food producers is also negligible.

Other studies conducted Arendt *et al*., (2013), point out that many hotel managers are inadequately endowed to enhance food safety and quality management systems as they lack the necessary training and experience expected to ensure that the customers' needs are met and exceeded. There is there fragmentation and increased information asymmetry in the entire supply chain where customers are disenfranchised as their expectations are left unmet and food safety is compromised (Validi *et al.,* 2014; Darkow 2015). These studies, however did not factor in the specific food quality and safety management and monitoring systems which enhances the performance of hotel establishments. Other research by(Benn *et al.,* 2015) has revealed that there has been a change in

consumer purchase behavior towards food safety and quality and other products leading to attitude–behavior- gap.

Therefore, this study sought to find out whether the perceived FS, FQ as well as food safety and quality monitoring attributes are applicable among Kenyan hotels and to the extent they affect customer choice of dining destination.

1.3 Research Objectives

1.3.1 Main objective

The main objective of the study was to determine the effects of food safety and quality on customer choice of dinning destination in Four and Five-Star hotels in Kenya.

1.3.2 Specific Objectives

Based on the main objective, the study captured the following specific objectives:

i. To assess the relationship between food quality and customer choice on the dining destinations in the Four- Five Star hotels in Kenya.
ii. To determine the relationship between food safety assurance and customer choice on dining destinations in the Four- Five Star hotels in Kenya.
iii. To determine the relationship between food monitoring and surveillance systems and customer choice of dining destination in the Four- Five Star hotels in Kenya.
iv. To assess the moderating effect of top management commitment on the relationship between food safety and quality indicators and customer choice of dining destination in the Four- Five Star hotels in Kenya.
v. To assess the moderating effect of customer-based factors on the relationship between food safety and quality indicators and customer choice of dining destination in the Four- five star hotels in Kenya.

1.4 Study Hypothesis

H_{01}: There is no significant relationship between Food quality systems and customer choice of dining destination in Kenya

H_{02}: There is a significant relationship between Food safety assurance and customer choice of dining destination in Kenya

H_{03}: There is no significant relationship between food safety monitoring and surveillance systems and customer choice of dining destination in Kenya.

H_{04}: Top management commitment does not have any moderating effect on the relationship between food safety and quality on customer choice of dining destination in Kenya.

H_{05}: Customer-based factors do not have any moderating effect on the relationship between food safety and quality on customer choice of dining destination in Kenya.

1.5 Significance of the Study

The results of this study have the potential to help managers in decision-making process and policy formulation in regard to food safety and quality management system (QFSMS). These findings further could inform dining destination on food safety and quality strategies they should emphasize in order to improve competition. Apart from management the study could be used by the government to develop policy to guide a holistic approach to quality management by designing and re-designing initiatives aimed specifically at the hospitality, and food sectors in order to improve quality products that exceeds customer expectations

Scholars could be able to use the findings in this study to establish gaps for further research in the area of food safety and quality on customer choice to dining destination. Even though this investigation brought out extraordinary insights into the connection between food safety, quality, surveillance and screening, top management commitment responsibility and client based

components to destination choice; its conceptual and empirical setting had a number of limitations. For example, the study did not investigate the physical, chemical and microbial contamination that can cause food safety. Additionally, scholars may find theories and methodologies of this research potential in their research, specifically in food safety and quality management. This can be used as a source of future study.

1.6 Delimitations of the Study

The study was limited to hotels in Nairobi and Mombasa and generalization of research findings should be made with caution because the operational setting this limited population because the operational setting for other star-rated hotels differs. The inclusion criteria into the study were those hotels categorized as four and five star hotels in Kenya.

1.7 Limitations of the Study

The study was carried out in four and five star hotels in Kenya. Due to the sensitivity and the nature of the research, some hotels were likely not to give information on the subject matter. In order to mitigate this, approval letter from the University was provided and earlier appointments with the hotel Managers made. The study results may not exhaustively explain all the effects of food safety and quality on customer choice of destination in Kenya. This may be so in respect to the sampling errors and possible methodological errors.

Further, the study may not exhaust all possible determinants of successful implementation of FS and FQ systems in four and five star Hotels and therefore a critical factor beyond the scope of this study could also still be important.

1.8 Assumptions of the study

The study assumed that the target population of the study operates in the same standard environment. This study assumed also that all target populations were to be available for the study.

Further, the study also assumed that there was sufficient time and resources to accomplish the study by the researcher.

CHAPTER TWO: REVIEW OF LITERATURE

2.0 Introduction

This chapter builds on the fundamental concepts that were highlighted in the previous chapter (chapter one). This chapter opens by presenting information on the empirical literature on food quality, as well as the safety of food. It also elucidates on the effect of effective monitoring and the involvement of personal commitment of top management and the enhancement of customer-based factors. It will also present theoretical concepts and conceptual frameworks and models related to food safety and quality.

2.1 Empirical Literature

2.1.1 Food Quality

The definition of food quality is basically on the entire traits found in food specifically concerning the food's nutritional value, its sensory value as well as the convenience brought about by the food and its impact on the health of the consumer. It is thus a broader concept than the safety of food concept. Therefore, food quality is perceived as all elements and attributes in food that makes it palatable, pleasant to the eye and beneficial to the health of the consumer (Chamhuri & Batt, 2015). Shaharudin *et al.,* (2011) on the other hand attributes food quality on the type of the food that is backed up by an individual's preference and attributes which change over time. Many studies have confirmed that FQ attributes include: how fresh the food is perceived, manner in which it is presented, the taste, variety of the food as well as the temperature at which the food is served (Chamhuri& Batt, 2015). On these researches, Shaharudin *et al;*(2011) suggest that it is just a fraction which has been undertaken that relates the crucial attributes of food quality and customer satisfaction as well as the intended behavior. It is therefore clear that unlike other previous studies

that focused on overall effect of perception in the food quality and customer satisfaction, this study considers the unique relationship of food quality perceptions and destinations choice.

The general understanding of the consumers' perception on quality of food is an important element that guides the decision of purchasing the food and particularly the decision in regard to future purchases (Grunert, 2005; (Röhr *et al.*, 2005). Food quality and safety: Consumer perception and public health concern. It therefore becomes paramount for consumers to understand their individual quality preferences as it guides their future decisions in regard to the purchase of certain food (Nouaimeh *et al.*, 2018). This implies that it would be ineffective to consider the attributes of food quality that comprise the overall food quality without aligning these food quality attributes to the understanding of the consumer in regard to food quality attributes.

(Sulek& Hensley, 2004) asserted to the fact that among the factors considered by a consumer before visiting a hotel establishment is the quality of food served in the establishment as it serves a key role in defining the hotel establishment. There are also several researches that have been undertaken on food quality attributes; and which basically considers the freshness of food, presentation, the taste, variety as well as the temperature at which the food is served. On these studies there are handful of researches that have been undertaken on determination of critical food attributes and relating these attributes that make up food quality to customer satisfaction and purchase intention (Shaharudin *et al.*, 2011). This study therefore precisely validates the relationship of food quality perceptions and customer satisfaction leading to DD as compared to previous studies that emphasized on effect of perceived quality on customer satisfaction.

2.1.2 Food Quality Assurance Systems

According to, quality management relates to the attainment of high quality output that is enabled through an integrated approach of resources. Systems for managing quality have evolved rapidly

in recent years. Four distinct stages can be identified: inspection, quality control, quality assurance, and; total quality management. Quality management has focused on discovering any defects in a product/service before delivering to customers through an inspection stage(s). Quality control is often applied at the end of manufacturing process to check that the product was right. If not, it would be rejected and either scrapped or reworked.

Quality assurance is defined as all those planned or systematic actions necessary to provide adequate confidence that a product or service will satisfy given needs."

Oloo (2010) pointed that a huge percentage of food processing companies in Kenya registered a decline in revenue as a result of non-compliance with implementation of effective quality management system as stipulated in certifications such as ISO 9001:2008. The main aim of adopting ISO 9000 is to ensure quality consistency regardless of who will carry out the work. These systems that enhance quality may be common in most establishments in the entire world, though their effectiveness is based on the manner in which they are implemented thus makes their effectiveness questionable. However, quite a good number of studies establish that there is positive relationship between the use of these systems and performance of these firms (Wu & Liu, 2010; Marin & Ruiz-Olalla, 2011). However, there exists a number of studies that find no significant relationship between the quality management systems and performance (Taylor & Taylor, 2004; Morris, 2006). There have also been significant contribution and study by researchers as they sought to establish the effects of ISO 22000 certification (Nouaimeh *et al.*, 2018);(Kafetzopoulos *et al.*, 2013); (Benner & Veloso, 2008);(Trafialek & Kolanowski, 2014). It is also apparent that the rate at which food establishments succeed is highly correlated to the manner in which it adopts these quality management schemes. These establishments have therefore resulted in committing significant resources in securing as well as implementation of these quality assurance systems.

A number of studies have also highlighted the impact experienced by organizations as a result of achieving ISO 22000 certification. Starke *et al*. (2012) identified an increase in sales revenue as well as a rise in asset turnover ratio for the firms that were able to achieve ISO 22000 certification. Tari and Morina (2002) agreed that there was general improvement in terms of greater customer satisfaction, employee motivation and satisfaction, increased social presence and greater impact thereof, as well as improved business performance as a result of firms seeking ISO 22000 standard certification.(Starke *et al.,* 2012) found that companies that adopted ISO 22000 standard improved their performance, regardless of the capital structure adopted by the company or the industry in which the company is situated or the size of the company. This study therefore pre-empted the notion that large companies are able to implement ISO 22000standards from the fact that they are in position to afford it due to their financial capability as compared to small companies that may not have such financial capability.

It is from this perspective that it would be ideal for future studies on food quality management to consider the manner in which the factors and elements that enhance food quality should be assessed, quantified and modelled(Luning &Marcelis, 2007). (Kealesitse & Kabama, 2012) in their study solidified the position that quality practices in hotel establishments helped in advancing their competitive capacity. The study, however, did not specify the exact quality management practices that enhanced the performance of these establishments.(Arendt *et al.,* 2013) further established that a good number of food processing firms were struggling to inculcate effective quality management systems that would help in meeting the consumer needs and demands both in the local context as well as the international context. The study also failed to elucidate on the challenges that inhibited implementation of quality management with the view to attain improved organization's performance.

2.2 Food Safety

Food is considered to be safe if there is reasonable demonstrated certainty that no harm will result from its consumption under anticipated conditions of use. In developed countries research in food safety is focused on risks associated with food as well as microbial composition of food.

The full extent of the burden and cost of unsafe food is currently unknown in both the developed and developing countries. Food-borne diseases remain a problem in Kenya. Approximately 70% of all episodes of diarrhea are attributable to ingestion of contaminated food and water. Processed foods constitute 75% and 25% of the diets in the urban and the rural areas of Kenya, respectively. while this is the case, studies ignore opportunistic behavior that comprises the highest percentage of food safety crisis in the developing countries such as Kenya. In a study that was conducted by (Wu, 2013) in Taiwan identified the impetus brought to the food industry as a result of government's policy. It is therefore crucial for developing countries that have different systems and regulatory environments, to recognize the different strategies that they would employ to ensure social co-regulation of food safety. This would enhance compliance and promote food safety in these unique and distinct market conditions(Geng *et al.,* 2015); (Spink *et al.,* 2017).

2.2.1Food safety and quality standards applied in Kenya

FS standards implemented in Kenya may be categorized into two level; mandatory and voluntary food safety standards. Mandatory standards are those set by the government through regulation or necessary legislation and particularly in regard to testing or obtaining certain certification as well as pertaining labeling. These standards are enforced by the use of relevant set rules for non-compliance. On the other hand, voluntary standards refer to those set by use of formal coordinated approach undertaken by relevant stakeholders in particularly those in the supply chain.(Shek, 2020) confirm that voluntary standards are not necessarily legal standards, though some of these

have escalated into de-facto mandatory standards such as the ISO 9000 standards for quality management which are critical when producers intend to compete in international markets.

It is critical for food handlers to sensitize the issue of enhancing healthy environment in the entire supply chain process as well as ensure that all the food market players are able to adhere to all safety standards. Hospitality stakeholders should take a proactive approach towards enhancing food safety by ensuring that all their employees are qualified and have obtained necessary certification before being actively engaged in the industry. They should be able to indicate critical understanding of the requirements to enhance food safety and healthy environment in the workplace(Shrestha *et al.*, 2009).

2.2.2 Food safety assurance systems in Kenya

Considering factors that are critical to enhance food quality, food safety is the key and core feature and therefore the law introduced on food regulates this critical issue to ensure that food consumed meets this requirement as far as quality and safety is concerned. It also makes up as an issue of public health concern where governments across the world find it ideal to ensure that concerns that surround food risks are adequately addressed. Governments therefore have prioritized the establishments of quality assurance systems that have been termed as safety assurance systems

The food safety assurance systems are therefore comprised of Good Hygiene Practices (GHP), Good Manufacturing Practices (GMP), as well as the Hazard Analysis Critical Control Point (HACCP). Good hygiene practices (GHP), are affected by both external and internal factors. Externally, there should be existing food laws with available enforcement agencies who ensure strict adherence, registration and certification with available training and awareness creation.

According to (Oloo, 2010), internally, management commitment and available capital to develop the premises to standard is also important. GMP food safety assurance systems provide guidelines that set out action plans in regard to food manufacturing processes, that would guarantee that the food produced met all the necessary required procedures and therefore meets safety standards. GHP as well as HACCP are all concerned on the issue of food safety standards and their functions are also on sensitization as well as the implementation of hygiene practices throughout the entire food chain (Ruane &Sonnino, 2011).

Regardless of all these standards, Kenya fights with a number of challenges that include non-compliance with a good number of food safety practices, making food in these local markets have increased risk to food poisoning or low quality food products. There is also low sensitization of these food safety standards particularly in small food vendors whose ignorance may bring to serious ratifications (FAO, 2009).

2.2.3 Assured Safe Catering (ASC)

Assured safe catering (ASC) is a system that was established to alleviate the problems related to food safety by the caterers. This system is highly related to principles of HACCP as it seeks to critically check the step by step catering operations right from the time ingredients are received to the production till food is served to the customer. It is therefore ideal for enabling planning for each catering process in simple steps as it also highlights the undertaking of safety precautions in the preparation of food, the handling of food as well as establishing the right temperature for each kind of food. It is pertinent for all the catering staff to receive proper training in order to implement the ASC system as well as support of record keeping and enhancing control (Foskett, 2010).

2.2.4 Hazard Analysis and Critical Control Point (HACCP)

The definition of HACCP was undertaken by Codex Alimentarius commission that spelt out the method for identification, evaluation and control of food hazards in the entire food chain; and therefore provides a food safety assurance method. It is also an international standard which singles out the requirements of establishing food safety through a number of management systems. This standard is incorporated in ISO 22000 which also incorporates the provisions of HACCP and seeks to implement hazard control methods Safety Management System. Arvanitoyannis and Varzakas (2008) undertook a study that sought to compare ISO 22000 and HACCP where they found that the notifiable difference between the two was the prerequisite programs (PRPs) which posed a great challenge to the developing economies due to the presence of informal food markets (McDermott *et al.,* 2000).

2.2.5 Food legislation in Kenya

In Kenya, the regulation of food safety and quality systems is undertaken by a number of statutory agencies which are also under different ministries (FAO/2010). They have a specific mandate of safeguarding public health as well as the protection of consumers from health hazards and the enhancement of economic development. (Birch, 2018) established that the country fell short of clear and well established policy in regard to food safety to integrate to the overall National Food and Nutritional Policy. This could partly be attributed to the fact the food safety control agencies are domiciled in various ministries, including the trade ministry, public health, industrialization, livestock, fisheries and development as well as ministry of agriculture. These agencies that in one way or the other are critically involved in the implementation of food safety standards include Kenya Bureau of Standards (KEBS), Kenya Dairy Board (KDB), Kenya Plant Health Inspectorate Services (KEPHIS), Kenya Agricultural Research Institute (KARI), Department of Public Health

(DPH), Department of Veterinary Services (DVS), and Horticultural Crops Development Authority (HCDA) as well as others as and when established. It is unfortunate that despite all these agencies, the country suffers from major non-compliance to basic food safety and quality (Oloo, 2010).

2.3 Food safety surveillance and monitoring system.

The purpose of the setting up of surveillance and monitoring system in the food industry is to guarantee the safety of food delivered to the hotel. The system ensures that consumers are not exposed to physical, chemical as well as microbiological contaminants which would also bring food borne diseases. In order to establish the effectiveness of such a food surveillance and monitoring system, the frequency and extent of diseases brought about by these contaminants is considered. It is however agreeable to all stakeholders that the effectiveness of food safety management systems would only be realized, if all the stakeholders are actively involved in the production and management of the production process (Oloo, 2010).

Every consumer is wary of ingesting harmful chemical substances or physical contaminants through food that would make the food unsafe for consumption. Any perceived risk from the customer on hotel establishments may result to heavy losses that means that such business establishments would experience huge losses due to reduced consumers' consumption patterns (Griffith *et al.,* 2010). This implies that food safety is not only influenced by the handling of food, it also influenced by raw materials used in the production process.

2.4 Management Commitment

Leadership is generally concerned with the setting up of strategic direction of the organization, the alignment of the people to the achievement of the goals and objectives as well as the inspiration and motivation of these people to enhance the achievement of these goals and objectives (Griffith,

2017). Regarding management responsibility, it covers three major areas: commitment to quality, focus on customer and supporting quality policy as indicated in ISO 9000 (2008). (Sikora & Nowicki, 2007) emphasized the importance of management commitment to the quality system. This commitment includes supporting the development, implementation and improvement of the quality system.(Lin *et al.,* 2020) focused on one leadership attribute that they viewed was paramount in leadership as far as food safety is concerned.

A study conducted by (Feyisitan, 2017) in Zimbabwe. Identified that the major barrier to implementation of FSMS was Lack of top management commitment 16.7% lack of enforcement of the food safety policy, 13.3%.

This is particularly because leadership in food safety entails the extent to which the leader is able to enact as well as enforce prescribed food safety rules. The study found that leaders of high integrated were in position to enforce food safety rules that led to great reduction in food safety related risks such as food-borne illnesses. He further explored that top Management was the most highly loaded and in theory, represents the first hurdle to overcome before actual development and implementation begins. For some enterprises, it is management that pushes for food safety certifications or compliance. Under this particular circumstance, the first hurdle of getting top-level management involved would have been overcome. However, for other advocates, other than top management, it is essential to gain the commitment of top management, as the requirements for most international food safety standards explicitly state the requirements for management. Therefore, ignoring the role of top management would be condemning the whole process to failure.

According to (Barrow *et al.*, 2022) the current day type of management has undergone a paradigm shift, where establishments that are critically concerned of their food safety and quality, rely on forward thinking and proactive managers to manage people and the processes that propel these

establishments to their goals achievement. It has also become a standard practice for regulatory bodies and agencies, to request evidence for management commitment as a way of enhancing food safety and quality, more in the implementation of HACCP systems.

It has been established that effective management commitment has proportionately led to enhanced food safety and quality systems. With the current global competition on hotel establishments, it has become critical for all establishments to ensure that they are able to obtain effective management commitment towards attaining food safety and quality. It is however, cumbersome to determine with accuracy the commitment of a manager and therefore the standard practice is to consider their dedication towards change implementation, understanding the bigger picture and working towards it, the understanding of interdependencies in different food processes and align them accurately towards enhancing food safety and quality systems. Management commitment should be coupled with the appropriate staff with relevant skills and experience. This will help them incorporate their innovativeness and skills in boosting the performance of the employees and as a result record improved performance in the food system(Ruane &Sonnino, 2011)

(Foskett, 2010) noted that among the key steps for each leader in food and beverages industry is to ensure that they are able to adapt to the food systems concept. It is therefore critical to hire professionals who would provide the required expertise in their area of undertaking. The managers in the food industry are therefore expected not only to produce today's solutions but also assess future expected changes and needs of consumers to align the organization strategy, towards those goals and objectives. It therefore requires critical understanding of each process in the supply chain and how these processes have evolved over time and therefore a calculated expectation of future changes in these processes.

Barrow *et al.*,(2022) asserts that when organizations take part in the support of their professionals' keen in the implementation of the organization's goals and objectives, it is a long-term investment that is geared towards the promotion of systems, organization culture as well as the structure of the organization. Similarly, hotel establishments should promote their well-endowed professionals in order to ensure that they enhance and promote food safety and quality in their establishments.

Food safety as well as food quality is purely technical. However, when the appropriate technique is used it is possible to align it with the existing learning groups in the establishment. The managers who are keen and directly responsible of the first line employee should ensure that these employees are well supported in order to increase their learning and other initiatives geared towards the promotion of food safety and quality. Technological application such as the use of integrated food systems are thereby introduced in different establishments to support the leaders in undertaking the necessary bridges that would allow future leaders have an easier time and opportunity to undertake the critical change required in the establishment(Barrow *et al.*, 2022).

2.5Customer based factors

In the service industry it is imperative for consumers to undertake research of different providers before they make the purchase decision as it is impossible to experience the service before purchase(Cetin & Walls, 2016). The undertaking of a purchase decision involves the consumer to consider multiple cues simultaneously. It involves the vital cues that are directly related to the service. Consumers may therefore have different motivation from the different stages that make up the provision of the service and therefore result in simultaneous cues but with different results (Tanford& Kim, 2019). A good example is the use of online purchase systems where the reviews may inform the primary cues as they provide direct information regarding the entire service product quality. The price of the service product on the other hand may form the involvement that

is able to establish the reliance of a central versus peripheral cues by the customers(Chang *et al.*, 2012).

There are a number of studies that have delved into the psychological effect for customer reviews and how they are able to inform customer attitudes and decisions to purchase in restaurants(Lee & Cranage, 2014). Similar studies specified that negative reviews in regard to a restaurant established led to critical and significant changes on attitudes as well as consumer's attributions for the specified restaurant.

Tourists on the other hand have increasingly investigated different destinations in regard to what they are known for and therefore good at it in their services as well as any other reviews that concerns the restaurant before undertaking their decision to make the restaurant their travel destination of choice. It has also been found that the services that the customers get coupled with the level of satisfaction and post-purchase behavior of the restaurant, the tourist makes the decision on whether to undertake a repeat purchase on the same or not (Ramseook-Munhurrun *et al.*, 2015); (Berbeglia *et al.*, 2021).To this end it is critical to ensure that the positioning strategy of the restaurant, coupled with the product attributes are undertaken with the seriousness that they deserve, and are therefore able to enhance tourists' satisfaction.

The popularization of healthy living among populations has solicited enough interest on the consumption of healthy food (Cakici &Yıldız, 2020). As a result the causal effect has sensitized consumers and restaurants that are persuaded to pursue health-related values and attributes in their services, have experienced positive impact consumers' purchase intentions and behavior (Cakici & Yıldız, 2020)also came into the conclusion that the healthiness of food in a restaurant had an indirect impact on consumer behavior through the mediating role of satisfaction. The conclusion

in these studies thereby indicated that the level of health concern in a restaurant affected consumer behavior as healthy options were more preferred by consumers rather than in the restaurants that had less health concerns.

Healthiness of food can also be the main factor that make customers choose destination (Ferdinand, 2021). However, it is notably important that consumers would always seek for the information regarding their choice destination before undertaking the decision in what is referred to as pre-choice stage, but they undertake the actual purchase at the choice stage. However, the decision on whether to continue with the relationship and undertake repeat purchases is defined at the post-choice stage(Ferdinand, 2021).Guests are also attributed to the practice of undertaking multiple cues before arriving at a particular judgment in regard to online purchasing (Santos *et al.,* 2020).

One of the attributes which is equally important in the influence of decision to consume is price. This implies that consumers' budget has great role in the decision onto the decision of where to eat or not to eat. It therefore leads to the fact that consumers may decide to eat in high health risk restaurant as a result of economic situation (Kiatkawsin & Sutherland, 2020).(Burusnukul *et al.*, 2011) on their study that sought to comprehend tourists' patronage in food service establishments in Thailand found that ignorance on local foods was critical on causing psychological risks among tourists in a situation called food neophobic. In the same context, familiar food brought about the familiar home comfort that therefore reduced the risk of food neophobic. This situation is likely to take part for tourists in unfamiliar territory where they would only feel comfortable in taking /eating what they have been familiar with at their homes. However, different destinations seek to provide an international nostalgia in the food to tourists who seek their services as they provide them an opportunity to explore different types of food and beverages that make up memorable

experiences. Such memorable experiences provide a platform for a repeat purchase by the tourists as they would seek to relive the experience once more (Kiatkawsin& Sutherland, 2020).

Tourists that prefer luxury restaurants obtain their value and satisfaction from use of hotel establishment in their functional as well as their financial value. The experience value on the other hand is brought by hedonic as well as expressive value (Kiatkawsin& Sutherland, 2020).

Table 2.1: Summary of literature gaps

Source	Description of study	Purpose	Results	Knowledge gap
Jenni Nordenskjold **(2012)**	Implementation of a quality Management system in food Production	Investigate how the process of implementing a quality management system for food safety was handled in four different food producing companies in Sweden	- quality of food is also correlated to the product safety -Quality management systems creates a competitive edge to other hotels	-Find out how to improve on competition through quality and safety
Maria Aguiar *etal.*, **(2013)**	Consumer behavior towards food safety	expectations of consumers on food safety and their predictable behavior in case of food borne outbreaks	-consumers are more reactive in terms of their consumption habits	-More information required on food safety and quality -More parameters to be used in ascertaining the effect of safety in beef
Chow keng*et al.*, **(2013)**	Factors influencing dining experience on customer satisfaction	- to examine the factors of food quality, service quality as well as restaurant environment that influences customer satisfaction and revisit intention among undergraduates	-Food quality is seen as one of the most important factors for guest revisit -Food processes must be monitored at all times	-Monitoring of the safety and quality processes not properly done
Oloo**(2010)**	Food safety and quality management in Kenya: an Overview of the roles played by various stakeholders Quality systems and competitive	-Ascertain food safety and quality from the farm to the fork (table) in Kenya - Legislations under which they operate	- Legislation is fragmented - monitoring is impossible	No research has been conducted to establish effectiveness -informal sector need to be monitored

Dimitrios*et al.,* **(2011)**	performance of food companies	Enhance implementation of ISO 9001 as well as ISO 22000 systems and compare with the competitive performance of food manufacturing companies	there was direct significant relationship between the variables of ISO 22000 implementation and competitive performance.	Consider more criteria to assess company competitiveness -Consider a research to assess relationship among company's orientation in regard to ISO 9001 and ISO 22000 certification
Ruth et al., 2013	Women consumer decision making on food quality Risk measurement framework and extension and validation of food safety risks in international travel destinations	Classification as the analytical framework Present an analytical risk management in the context of food safety risk in overseas destinations	Looking on information on a product Probability of becoming sick from infected food related illnesses attribute to medium effect to perceived risk Tourists identified harm or risk caused by infected food as a reason of choosing a destination	There is need to have multidimensional model to assess or any other model
Johnson *et al.,* 2015	Consumers mental model of food safety of fresh vegetables in Nairobi	The purpose of the paper was to examine consumers perception of food safety for vegetables at the traditional urban market	The cognitive content structure of the aggregated consumer's mental model were identified and mapped. The maps included positive and negative meanings indicating a need to tackle the hygiene problem prevailing in most traditional markets	Policy, regulation framework and marketing actions by value chain actors in the fresh vegetable subsector should give priority of tackling hygiene problems prevalent in most traditional markets in developing countries

2.6 Theoretical literature review

Dining destination choice depends on a number of factors. These factors can be categorized in terms of theories and models. As observed by, (Zander & Hamm, 2010); (Yang & Carmon, 2012a), the following theories and models best describe how food quality and safety affect customer choice destination.

2.6.1 The Total Food Quality Model (TFQM)

The total food quality model (TFQM) was developed from the consumer purchasing process theory. Consumer quality perception is reviewed using the Total Food Quality model as a structuring device. This model uses integrative approaches and tries to bring together different approaches into a single framework as a way for determining the perception of quality in food products by the consumer. There are three streams of research on food quality and safety, dealing with consumer demand for quality and safety, provision of quality and safety, and consumer perception of quality and safety.

The first stream examines to what extent certain quality and/or safety improvements correspond to consumer preferences in the sense that they result in consumer willingness to pay for the added quality or safety features. The second stream deals with the corresponding supply side. Providing added safety and/or differentiated quality may require changes in the organization of agricultural and food production, mainly with regard to governance structures of value chains.

More recently, a third stream has been added. It deals with the question of how quality and safety is perceived by consumers, and how these perceptions influence consumer decision-making. Consumer preferences are thus not only regarded as being revealed in their demand, but their formation in interaction with the supply of goods becomes a separate area of inquiry.

Quality perceptions may be distinguished in three phases: before purchase, during purchases and after purchase. Most food products are bought several times, and many are bought continuously over extended periods. Quality perception may change across the whole range of purchases.

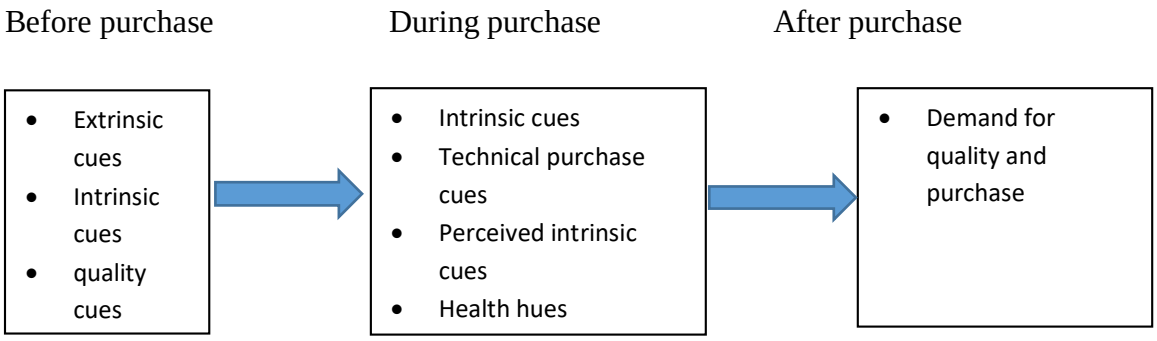

Figure 2.1: The Total Food Quality Model

Prior to the undertaking the purchase, the model is cognizant of the fact that there is the formation of food safety and quality expectation on the basis of quality cues that may either be extrinsic or intrinsic in nature. The intrinsic quality cues which relates to the technical specifications of the product are those qualities that can be objectively determined. Extrinsic quality cues on the other hand refer to all the other characteristics including the price, packaging, brand name among others (Grunert, 2005). However, there is more precision in this model in regard to the formation of the expectations which are coupled with experience and satisfaction.

2.6.2 Quality assurance management in the food industry theory

The international life sciences institute (ILSI) developed this theory to demonstrate quality assurance management levels within the food industry. At the level of baseline, it's the vital food safety management integrating the HACCP risk assessment and management systems. The model has with it good manufacturing and hygiene practices (GMP/ GHP) as key components in its

management Figure 2.3 displays the contents of management of Quality Assurance within the Food Industry Model.

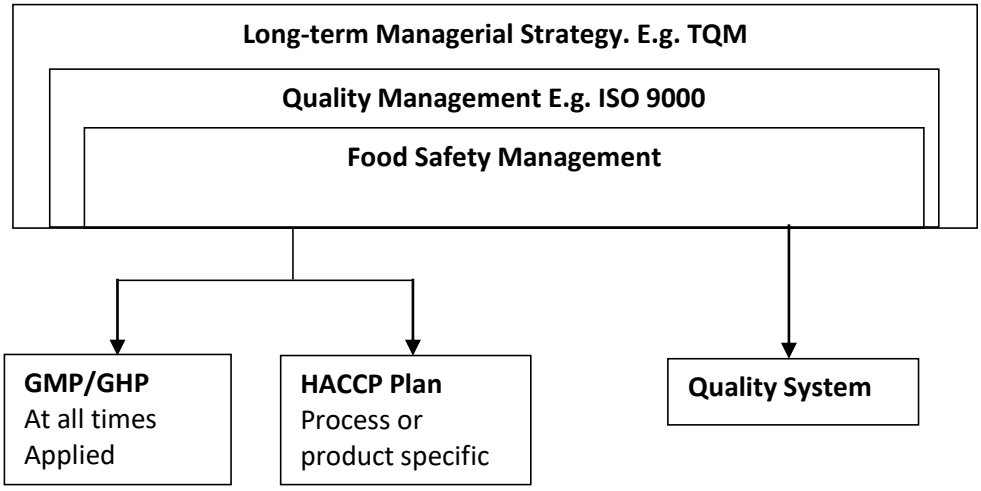

Figure 2.2: Management of quality assurance in the food industry model

Source: Nigel *et al.*, (2001)

This model also emphasizes ISO 09000 standards use in management of quality assurance. The HACCP principles were ideally developed in line with ISO 9000 lines. HACCP principles are increasingly becoming mandatory in food and beverage industry at international level. The model is emphasized in this study because it advocates the need for HACCP system in promoting food safety. It also shows the possibility of combining HACCP with other food safety systems to achieve quality in food safety management.

2.6.3 Top Management beliefs and participation model

This model demonstrates how different activities are distributed and adopted within the organization. According to Top Management Beliefs and Participation in Assimilation Model they are two theoretical stages in the method by which top executive gives support to a managerial plan, that is, management belief and participation. TMB (top management beliefs) denotes a personal

psychological state concerning the enterprise resource planning (ERP potential), whereas top management participation (TMP) denotes the actions as well as behavior executed to aid incorporation of ERP. It reveals how the external surroundings influence the top management beliefs. In fact, top managers come up with "belief structures" to run ideas as well as motives from the surroundings and utilize these beliefs as a foundation for conclusions. Therefore, the top managers' positive beliefs concerning the systems usefulness consequence in definite managerial dealings planned to incorporate such systems (Liang *et al.,* 2007).

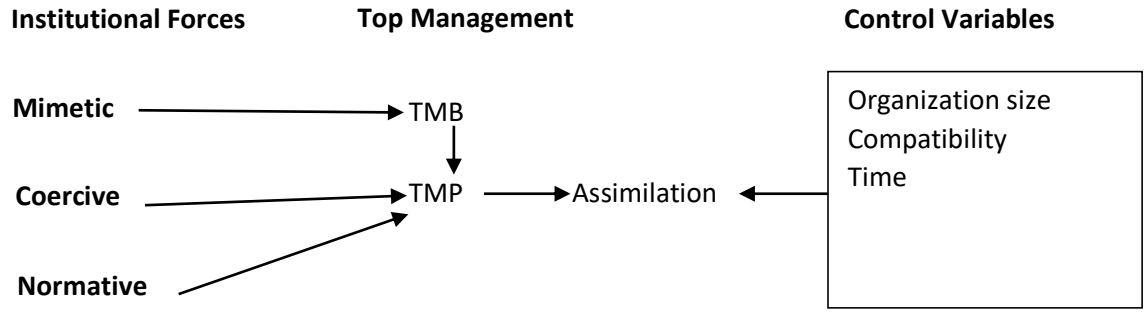

Figure 2.3: Top management beliefs and participation model

Source:(Liang *et al.,* 2007)

But owing to the ERP broad impact implantation on organizational processes as well as structure, organizational sanctions and rules can either hinder or facilitate the adjustment by workers. Therefore, it's important for the top administration to design systems of performance control that are suitable with the profit accumulating from implementation (Mokdad *et al.,* 2003) and by doing so encouraging members of the organization to acclimatize a novel system toward a precise objective.

2.6.4 Engel-Blackwell-Miniard (EBM) model

The Engel, Miniard and Blackwell Model (EBM) were developed from the consumer purchasing process theory. The model was based on the different stages of decision making process. In the

making of decision, there are different factors that impact the decision process and allure the consumer in the making of a certain decision. The model is therefore in the form of a seven stage decision making process comprised of recognition of the need, looking for information, evaluating the different alternatives, purchase, post-purchase evaluation and lastly divestment (Yang & Carmon, 2012b).

According to(Kovacs, 2021), consumers are critical in determining the alternative that they would consume among different products, their decisions are in most cases guided by previous experiences or gathered knowledge and which are expressed in the form of desired attributes. The attributes are however based on the nature of individual consumer as well as environmental influences. These therefore become product specific attributes for a particular consumer's motive, values as well as attitudes.

One of the setbacks of this model is that it ignores the individual as well as environmental impact on the information processing involved after the reception of stimuli. Apart from the stages of decision making, these factors also influence the internal process in the mind of the consumer. The stages may also be followed every time and therefore some of the steps may be skipped. Additionally, the model cannot be empirically tested.

2.6.5 Purposive Model (PM)

The purposive model (PM) is anchored in hunger as the basic instinct in any human being and as indicated in Maslow's hierarchy of needs, food is a basic need in the basic level of this hierarchy. Nevertheless, food, consumers' income, the price as well as the situation of the consumer may be inhibiting factors that makes the consumer result to the consumption of food that is reasonably priced as well as convenient (Atinkut *et al.*, 2018). The preference of food choices would occur even if the source of the food is unhygienic (Muoki, 2012). It is therefore left on the hands of the

consumer to caution themselves against food safety risk through their own evaluation in order to achieve an optimal situation between the highest level of food safety and quality and the preferred food in consideration of the budget constraint.

The consumer's self-protection against these risks may never take place if the consumer is not aware or does not appreciate importance of food safety. Therefore, the recognition of food safety would direct the consumer towards the avoidance of food that is perceived to be less safe and of lower quality and optimize food safety and quality in the midst of a constraint budget. The attitude of a consumer in regard to food safety is a new variable that has been introduced in the purposive model. It is therefore expected to enhance strength of purchase of safe food (Burusnukul *et al.,* 2011). It is also true that the model is crucial in the analysis of logical as well as consistent decisions made by the consumers in undertaking food purchase.

2.6.6 Health Belief Model (HBM)

The Health belief model (HBM) on the other hand draws its focus on individuals' representations of health and behavior. It provides the manner in which consumer perceives threat in either being susceptible to illness or rather bring major health problems as well as the severity of the consequences of such problems. The evaluation of behavior is made up two sets of beliefs which are either on the benefits of a recommended healthy behavior or the costs to be undertaken in enhancing this health behavior (Azmi *et al.,* 2021).

Some of the challenges of using the model were that it lacked clarity on the operationalization of perceived susceptibility, severity, as well overall threat perception. Therefore, this model has been operationalized in a series for close to a total of six separate independent variables which may be the cause of the variance in health behaviors. The definition of these six constructs still lacks clarity

and was left open to debate. This therefore calls for a study that will ideally address this gap by having a clear definition of these constructs(Azmi *et al.,* 2021).

The theory has its advantages however; its disadvantage is that the model has a number of arbitrary assumptions on the basis of the size of test, number of variables, attributes, profiles to asses among others. It is deficient of clear instructions in the manner in which consumers choose and make decisions on the basis of their preference structure.

2.7 Summary of theoretical litereture

Based on the theory and models reviewed and discussed in section 2.1 above, this study adopted a three–component conceptual framework to be used in the analysis of the decision making in regard to food safety and quality in dining destination in Kenya depicted in figure 2.1 above. There is not a single existing models which had been used as is, but rather various aspects were adopted as explained previously (Sharma, 2016). In other words, the key feature of the framework entails integrating the five models by undertaking theoretical principles as provided by the respective authors. Some of the models' constructs were excluded which may not be interpreted to mean that the comprehension of customer's decision making is compromised.

2.8 Conceptual Framework of choice

The study's conceptual framework in Figure 2.1 shows that determinants of food quality, food safety and food safety monitoring systems and how this factors separately and collectively influence the customer's choice of dining destination in four and five star Hotels in Kenya. This effect is collectively moderated by top management commitment and customer based factors. The key contextual factors of customer choice are customer knowledge, perceived benefits and Health motivation

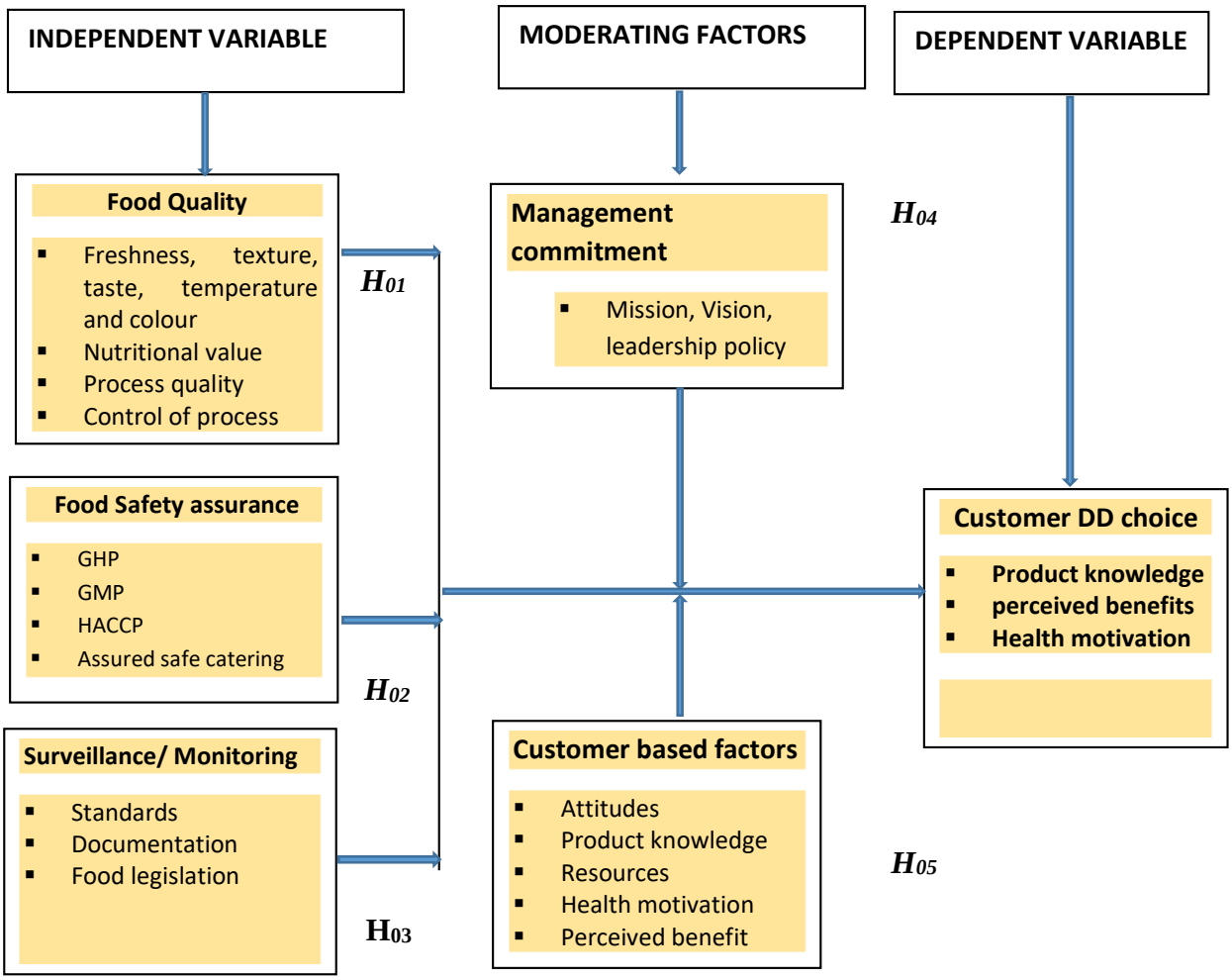

Figure 2.4: Conceptual framework of choice

Source: Modified from Engel-Blackwell-Miniard Model, Total Food Quality Model and Health Belief Model 2020

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

The chapter underpins the research methodology adopted in this study. The chapter justifies the relevant research philosophy, research design, target population, sampling design, sample size, sampling technique, the method of sample selection, measurement of variables under study, research instruments and administration procedures. The chapter also explores validity and reliability of the instruments, pilot study as well as ethical considerations, and data analysis methods.

3.1 Research Philosophy

There are several research philosophies that guide research projects both in the social and natural sciences. These include ontology (positivism), epistemology (interpretivism)and phenomenology (Howell, 2013). Positivist researchers seek objectivity and consistently use rational and logical approaches to research (Getzzg, 2022). According to (Indick, 2002), logical positivists emphasize for scientific rigor in the advancement of knowledge. A researcher who is a logical positivist presumes devises hypotheses, variables and operational definitions rooted in theories that exist (Creswell & Creswell, 2017). Additionally, positivist researchers seek objectivity and consistently use rational and logical approaches to research. Further, in positivism statistical and mathematical techniques are central in research methods. Epistemology philosophy (interpretivism) is based on the understanding about the acceptable knowledge of a particular area of study (Pan, 2015). Development of interpretivism philosophy is based on the critique of positivism in social sciences. Accordingly, this philosophy emphasizes qualitative analysis over quantitative analysis. Phenomenology is a method used to make inquiries about the real world as seen by people who actually lived it to give a specific experience as they found it (Pollio *et al.,* 1997).

In the current study, positivism was used to underpin quantitative method and interpretivism underpins qualitative method. Quantitative method includes designs, techniques and measures that produce discreet numerical or quantifiable data (Maher *et al.,* 2018). Quantitative methods aim at classifying features, count them and create statistical models to test hypothesis and explain observations. Data in quantitative researches are analyzed using statistical techniques(Creswell & Creswell, 2017). Qualitative research method, on the other hand, includes designs, techniques and measures that do not produce discrete numerical data. Data analyses in qualitative researches is thematic and results in in-depth information used to explain a phenomenon (Clark &Vealé, 2018).

3.2 Research Design

This study used a cross-sectional research design. According to(Creswell & Creswell, 2017), a cross sectional study entails noticing and explaining practices/characteristics of varying groups of respondents from different organizations without impacting them in any capacity.

The study pursued mixed methods approach examination approaches to comprehensively elaborate the nature of this study. This investigation explicitly examined quantitative data to summing up outcomes from a sample of the target populace. Qualitative techniques, were utilized to acquire an-in-depth comprehension of fundamental reasons and intentions of respondents. Qualitative strategies in this manner enabled some scientific methodology to be followed in a variety of settings and thus permitted new information and results to be part and parcel of the study (Creswell & Creswell, 2017). Further, qualitative strategies were utilized since it permitted the investigation to make inclusive of new ideas and results as they were found.

3.3 Area of study

The research was carried out in Nairobi and Mombasa (South and North Coast). Nairobi is the capital city of Kenya with a population of more than 3.5 million people. It is also known as the

"safari capital of the world'. Nairobi and Mombasa are two major cities in Kenya and one of Africa's key financial, business, transport, communication and tourism destinations with more than 300 star rated hotels. The study area was chosen because the cities (Nairobi and Mombasa) have four and five Star hotels that were likely to have standardized systems in food safety and quality management. Additionally, these areas provide excellent destination choice for both local and international customers.

3.4 Target Population

Population alludes to the whole constituent of individuals, occasions or things of interest with similar detectable attributes that the researcher wishes to investigate ((Franklin, 2012). It is a whole gathering of people or components that share at least one thing in character and from where the sample to be studied is derived (Cohen &Arieli, 2011). In these counties, the researcher focused on all Four Star Hotels (17) and Five Star Hotels (10) a total of 27 hotels as was contained in the government publication of star rated hotel 2016.

3.5 Sampling and sampling technique

Sampling is the process of selecting a representative portion or set of individuals or objects from a population. While a sampling design is the procedure a researcher adopts in selecting sample units. This representative portion of a population selected to be observed and used to make inferences on some population characteristics is a sample (Aliyeva, 2021).

Sampling designs are in two categories, probability and non-probability sampling. In probability sampling, respondents are randomly selected to take part in a survey or other mode of research thus allowing the researcher to make strong statistical inferences about the whole population. For a sample to qualify as a probability sample, each subject in a population must have an equal chance

of being selected for a study, and the researcher must know the probability that an individual will be selected. This study adopted both non-probability and probability sampling methods.

Non probability sampling technique is used when the researcher is not interested in selecting a sample that is not representative of the population (Mokdad *et al.,* 2003) It focuses on in-depth information and not making inferences or generalization. This sampling method depends heavily on the expertise of the researcher. This method is used when the desire of the researcher is to select what he/she thinks is a typical sample based on specialized knowledge (Mokdad *et al.,* 2003). This study adopted both Probability and non-probability sampling methods.

3.5.1 Quantitative sampling technique (guests)

In quantitative method, simple random sampling technique was used to select respondents (guests) 635 guests from a population of 3148. According to Kenya Tourism board statistics on hotels, 2016, the average annual bed occupancies of these hotels was 49%. From the 49% of bed occupancies of the sampled hotels, the researcher computed the 70% desired sample size. To obtain the actual number of guests to be interviewed in the sampled hotels, the researcher used the latter values (70% values) and the formula suggested by (Creswell & Miller, 2000a) for a population of less than 10,000 units. The computation was done as bellow:

$$n_f = \frac{n}{1 + n/N}$$

Where,

$n_f =$ Actual sample size when population size is less than 10,000

$n =$ Desired sample size when population size is less than 10,000 (which is 70% of the population size which correspond to bed occupancy)

$N =$ Population size

For example, for hotel code 001,

$$n_f = \frac{41}{1 + 41/59} = 24$$

Table 3.1: Sample size for guests

Region	Sampled Hotels	Total number of beds	Average Occupancy 49%	Desired sample size 70%	Actual Sample size *nf*
	001	120	59	41	24
	002	27	13	9	5
	003	94	46	32	19
Nairobi	004	102	50	35	21
	005	130	64	45	26
	006	163	80	56	33
	007	61	30	21	12
	008	124	61	42	25
	009	82	40	28	17
	010	80	39	28	16
	011	12	6	4	2
	012	127	62	44	26
	013	89	44	30	18
	014	97	48	33	20
	015	123	60	42	25
	016	80	39	27	16
	017	123	60	42	25
Mombasa (south coast, north coast)	018	87	43	30	18
	019	142	69	49	29
	020	58	28	20	12
	021	150	74	51	30
	022	152	74	52	31
	023	201	98	69	41
	024	42	21	14	8
	025	412	202	141	83
	026	174	85	60	35
	027	98	48	34	20
	TOTAL	**3148**	**1543**	**1080**	**635**

The actual sample size targeted by this study was therefore 635 guests. The guests included those who had booked accommodation and the walk-ins.

3.5.2 Qualitative sampling technique (staff)

(Kpan, 2018); (Low, 2019); (Creswell & Miller, 2000a)revealed that the most commonly-used type of sampling in qualitative research is non-probability sampling, in particular purposeful sampling. In terms of purposeful sampling, researchers purposefully select specific respondents who have experience in a particular issue to be explored and studied.

The hotel staff comprised of all food and beverage managers and head chefs or Sous chef. For managers and sous chefs, one manager and one sous chef at the top management level from each of the 4-5-star Hotel (27) were purposively picked as respondents without replacement. This made a total of 27 Food and beverage managers and 27 head chefs or Sous chefs. This implied that the targeted staff-participants for the entire hotels were 54 (27×2 = 54). However, of those 27 staff picked, only 24 managers and 25 executive chefs or sous chefs responded. The respondents were coded for purposes of tracking their responses. The staffs were selected because they were directly involved in the management and implementation of food safety and quality standards in the hotel and were more informed and qualified to handle the operations of the hotel as far as food safety and quality is concerned.

3.6 Data collection instruments

3.6.1 Interview schedules

Interviews schedules were used to obtain primary data from food and beverage managers and head chefs (Appendix 1V). Interviews plans/ schedules were utilized since they permit gathering of deeper information that was not brought to light by others devises or procedures.

Administered interview schedules were used to obtain data from managers and executive chefs or sous chefs. They contained questions that sought to get views and opinions of managers regarding objectives of this study. Interview schedules entailed use of semi-structured questions to collect

data (Guha *et al.*, 2021). Permission was obtained from the University and introduction letters presented to each respondent requesting for their participation. Permission was also sought from the administration of each Hotel to allow the researcher engage guests in the study.

3.6.2 Questionnaires

Questionnaires were used to collect data from guests (Appendix1 and appendix 111). The instrument allowed every participant to get a similar assessing tool to complete which resulted in standardized responses. Both open-ended and close-ended questionnaires were formulated based on the objectives of the study. the open-ended inquiries allowed respondents an opportunity to uninhibitedly communicate their mentality or discernment and a subjective knowledge to the investigation. For the closed-ended inquiries, the examination took the route of a Five Point Likert Scale and most factors/questions were ordinal in character (Lewthwaite & Holmes, 2018).

3.7Pre-Testing

Lai, (2018) elaborated that pre-test is performed to make aware the weaknesses that exist in instrumentation, design and to avail proxy data for the uptake of probability sample. In this study, pre-testing was done on one five-star hotel and one four-star hotel among the desired sample size. The pre-test was done two months before the actual research commenced. The pre-testing the research herein helped in the removal of mistakes to ascertain that there was proper application of the research devises and collection of valid and reliable information. The pre-tested establishments were included in the final results of the study.

3.8 Reliability Test

Reliability is the quality calculation of the proportion of how much research instruments yield consistent outcomes after trials have been conducted severally (Clarke & Visser, 2019) express that reliability is the degree to which a given estimating instrument creates a similar outcome each

time it is utilized. This quality, otherwise called internal consistency, is impacted by random error. That is, as random error builds, reliability diminishes. Cronbach's Alpha was utilized to gauge interior consistency. These statistics was utilized since it is appropriate and is significant in apparatuses where numerous Likert questions are utilized, as recently referenced to be contained in the study questionnaires.

According to (Olaniyi, 2019), Cronbach's Alpha coefficient (α) can be computed using the formula

$$\alpha = \left(\frac{K}{K-1}\right)\left(\frac{S_T^2 - \sum_{i=1}^{K} S_i^2}{S_T^2}\right)$$

Where;

K = Number items in a particular study variable

S_i^2 = Variance of an individual item i in a particular study variable

S_T^2 = Variance associated with the observed total scores in a particular study variable

Cronbach's alpha reliability coefficient ranges somewhere in the range of 0 and 1 (Olaniyi, 2019). The nearer the coefficient is to 1.0, the higher is the internal reliability of the variables (factors) in the scale. In this study, the estimated internal consistency reliability between 0.00and 1.00 was considered significant. Proper description of the value of alfalfa is as below:

Table 3.2: Interpretation of measure of reliability

Cronbach's Alpha Value	Interpretation
Alpha (A) is greater than or equal to 0.9 (A ≥ 0.9)	Excellent
Greater than 0.8 (> .8)	Good
Greater than 0.7 (> .7)	Acceptable
Greater than 0.6 (> .6)	Questionable
Greater than 0.5 (> .5)	Poor
Less than 0.5 (< .5)	Unacceptable

Since the study had three independent variables and two moderating variables, questions in the questionnaires used were categorized according to these variables. In each category, internal consistency was then examined.

3.9 Validity Test

Validity is the extent to which the instruments measure what it purports to measure (Khaana *et al.,* 2007). That is, instrument validity ensures that collected data will enable data analysis that will yield or answer the research questions appropriately. Validity of the research instrument was measured using correlation analysis. As previously defined, validity test examined whether study results obtained accurately and adequately suited theories they were intended for. In Hospitality, studies encounter difficulties in achieving that condition due to the nature of empirical research which relies on the behaviours and attitudes of people rather than natural sciences. According to (Creswell & Miller, 2000b)the validity in qualitative inquiry differs than the validity in quantitative inquiry, but it leads to ensuring the quality of data and analysis in both approaches.

There are four kinds of validity: statistical conclusion validity, internal validity, constructs validity, and external validity(Barak *et al.,* 2020). This research undertook construct validity. Construct validity alludes to how well you deciphered or changed an idea, thought, or conduct (a construct) into a functioning and working reality (Schmitz & Storey, 2020). Nguyen & Ha, (2020), express that construct validity checks whether proportions of an idea relate emphatically with another action that it should firmly correlate with and contrarily with measures it ought not concur with. That is, by ensuring construct validity, a researcher answers the question of whether the test measures the concept it intends to measure. In this study, construct validity was achieved by ensuring that all items and/or indicators and their measurements are carefully developed using

relevant existing knowledge. Specifically, the questionnaire and interview schedule used only had relevant questions as per the study variables.

This research additionally used content validity. Content validity is a qualitative sort of validity where the main area of the idea (domain) is clarified and the examiner decides whether the measures completely represent the domain (Maxwell, 2021). (Barak *et al.,* 2020) contends that there are two different ways of evaluating content validity; posing various inquiries about the instrument or test and requesting the assessment from expert judges in the area of specialty.

3.10 Data collection procedures

3.10.1 Quantitative data

The researcher visited the Hotel between 8.00 am in the morning and 10.00 am during the time guests were checking in. The researcher did not interact with the guests directly but through the hotel guest relations manager. The questionnaires were delivered to the hotel guests' relations manager and the guest relations manager approached the guests in the lounge or a convenient area in the hotel. The chosen area gave the respondents an opportunity to complete the questionnaire undisturbed. The questionnaires were randomly issued to the guests and were returned to the guest relations manager as soon as they were done. The questionnaires were later collected by the researcher for analysis.

3.10.2 Qualitative (interview schedules)

Oral interviews were conducted to the Hotel managers and executive chefs and where possible recording of the interviews was done to ensure that all the information was recorded. This was for the purpose of verification and clarification of some details given in the interview by the respondents. The researcher also went through the data to establish facts on primary and secondary data for verification of some issues. The secondary data was used to supplement primary data and

the data was obtained from occupancy reports, newsletters, guest comment cards and Audit reports from Kenya bureau of standards or other safety assurance systems (Hammersley, 2018).

3.11 Operationalization and Measurement of study variables

The key variables for this study were independent/predictor, dependent/criterion and moderating variables. The independent variables were: food quality, food safety and food safety monitoring and surveillance. Top management commitment and customer-based factors formed the moderating variables of the study. Customer choice of dining destination was the dependent variable.

Table 3.3: Operationalization and measurement study variable

Variable	Variable Type	Operationalization/ Indicators	Measurement in the Questionnaire	Supporting Literature
Food quality	Independent	▪ Freshness ▪ Texture ▪ Temperature ▪ Colour ▪ process quality ▪ control of process	8-10	Pages 12-14
Food safety assurance	Independent Variable	▪ Good manufacturing processes ▪ Good hygiene practices ▪ Hazard analysis critical control point ▪ Assured safe catering	11-12	Pg. 15-19
Food safety surveillance and monitoring	Independent Variable	▪ Standards ▪ Documentation ▪ Legislation	13-21	Pg.19-20
Management commitment	Moderating	▪ Mission ▪ Vision ▪ Leadership commitment ▪ Policy	22	Pg. 20-22
Customer based factors	Moderating Variable	▪ Purchasing attitudes ▪ Product knowledge ▪ Resources ▪ Health motivation ▪ Perceived benefits	23	Pg. 22-24
Dining destination	Dependent Variable	▪ Product knowledge ▪ Perceived benefits ▪ Health motivation		

3.12 Data Analysis

The research yielded both qualitative and quantitative data.

3.12.1 Quantitative Data Analysis

Quantitative data collected through structured and unstructured questionnaires was analysed using inferential statistics such as regression analysis to determine the characteristics and weight of the connections between the factors and to test the hypothesized relationships. As shown in Appendix 111 each study variable had a number of facets. However, during data analysis all scores in a study variable were combined to a single variable in SPSS using the Compute Variable procedure under the Transform command. The study hypothesis was tested at 95% confidence level for purposes of drawing conclusions. Pearson's product moment correlation (r) was derived to indicate the characteristic and strength of the connection. Coefficient of determination (R^2) was used to calibrate the value of variation in the dependent variable explained by the independent variable. The hypothesis was tested at 0.05 level of significance ($\alpha = 0.05$). At 5% level of significance, the rejection rule applied to reject the null hypothesis for the tests with probability estimates lower than 5% ($p \leq 0.05$) and thus concluded that the relationships are significant.

3.12.2Empirical Modelling (Relationship Testing)

The study was guided by regression analysis as the main procedure in inferential data analysis. In social research, regression analysis is often used when a researcher wishes to examine existing hypothesized relationships between dependent variable(s) and one dependent variable (Alqurashi *et al.,* 2019). Regression analysis fitted this study since it allowed assessment of whether there is a significant relationship between the dependent variable and the independent variables. This assessment was important in testing the research hypotheses. Regression analysis, as an inferential procedure, enabled the researcher to determine the relative strength of effect of each independent

variable on the dependent variable. Moreover, the analysis involved obtaining models that are very crucial in predicting how various aspects of food safety and quality affects destination choice of a customer.

Use of regression modeling is limited to the assumption that there is a linear relationship between the independent variable(s) and the dependent variables(Knight, 1984). Also, suitability of regression analysis in a scientific research is pegged on the condition of data completeness, which is not always guaranteed. However, in this study, call backs were done to ensure that there are complete responses from any participant. Regression models suffer a major drawback which can misleading estimation results when a researcher makes a wrong conclusion with regard to correlation results. Existence of correlation between any two variables does not always imply causation relationship. That is, any researcher who assumes that any significant correlation is bound to making errors especially in predictions and/or estimations. This error becomes more pronounced in the presence of outliers or missing responses. This is due to the fact that regression analysis is highly sensitive to presence of outliers (King, 1987.,Kelly, 2021).

Multiple regression models were used in this study. In particular, direct and indirect effects models were used in data analysis and testing of research hypotheses as discussed herein. In both cases, empirical models were obtained and used to test the hypotheses.

3.12.3 The Direct Effect Model (Analysis of independent variables)

Analysis of Independent Variable (food quality, safety, surveillance and monitoring)

Direct effects model involved obtaining a multiple regression model of customer destination choice on food quality, food safety and food monitoring and assurance systems. This model exhibited a general form

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_{3+} + \varepsilon$ ……..……. (i)

Where;

Y	=	Customer destination choice	(Dependent variable)
X_1	=	Food quality systems	(Independent variable 1)
X_2	=	Food safety	(Independent variable 2)
X_3	=	Food monitoring and assurance system	(Independent variable 3)
ε	=	the error term	
β_0	=	Constant (the intercept of the model)	
$\beta_{1...}\ \beta_3$,	=	Coefficients of the independent variables (X variables)	

The coefficients explain the change induced in customer destination choice by X_1, X_2, and X_3,

ε = error term that accounts for the variability in Y that cannot be elaborated by the linear effect of the predictor variables.

To determine how each independent variable influences the dependent variable, simple and step wise multiple regression analyses was conducted. Stepwise multiple regression analysis looks at the connection between a set of independent variables and the dependent variable, after one has controlled for the effects of some other independent variable on the dependent variable. The corresponding p-values for each of the five coefficients was used to test for the significances of β_1, β_2 and β_3. The p-values will thus be used to test hypotheses **H_{01}, H_{02}**, and **H_{03}**

3.12.4Indirect effect model (Analysis of Moderating Variables)

The moderated multiple regressions analysis was used to establish the interaction of a composite of food quality and safety variables and top management commitment and customer-based factors in explaining customer destination choice. Consequently, two regression models were used; one for top management commitment and the other for customer-based factors. In this case, therefore, the researcher tested the moderating effect using the following regression equations;

$Y = \beta_0 + \beta_1 X + \beta_2 Z_1 + \beta_5 (X*Z_1) + \varepsilon$……..…….……. (ii)

$Y = \beta_0 + \beta_1 X + \beta_3 Z_2 + \beta_6 (X*Z_2) + \varepsilon$ ……. …..……..….. (iii)

Where;

Y = Customer destination choice (Dependent variable)

X = Composite of food safety and quality (Combined variables)

Z_1 =Top management commitment (Moderating variable 1)

Z_2 = Customer-based factors (Moderating variable 2)

$X*Z_1$ = Interaction between Top Management Commitment and Food Safety and Quality

$X*Z_2$ = Interaction between Customer-Based Factors and Food Safety and Quality

E =the error term

β_0 = Constant (the intercept of the model)

β_1 = Regression coefficient for the composite food safety and quality indicators

β_2 = Regression coefficient for top management commitment

β_3 = Regression coefficient for customer-based factors

β_4 = Regression coefficient for interaction between top management commitment and customer destination choice

β_5 = Regression coefficient for interaction between customer-based factors and Customer destination choice

The corresponding p-values for $\beta_4$and $\beta_5$will be used to test hypotheses H_{04} and H_{05}.

3.12.5 Hypothesis Testing

Table 3.4: Summary of hypothesis testing

Research Objective	**Hypothesis**	**Statistical model**	**Interpretation of results**
Research Objective1: To assess the relationship between food quality and customer choice on the dining destination in Kenyan	**Hypothesis 1:** **H_{O1}:**There is no significant relationship between Food quality systems and customer choice of dining destination in the Four- Five Star hotels in Nairobi and Mombasa	$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$ Where: Y is composite index for customer dining destination choice β_0= intercept β_1 = regression coefficient for food quality systems β_2= regression coefficient for food safety assurance β_3= regression coefficient for food quality and surveillance β_4= regression coefficient for food monitoring and assurance systems	H_{01}: $\beta_1 = 0$ H_{11}: $\beta_1 \neq 0$ Where β_1=regression coefficients for Food quality systems Reject H_{01} whenever $p < 0.05$ Otherwise fail to reject the H_{01}
Research Objective 2: To determine the relationship between food safety assurance and customer choice on dining destination in Kenyan	**Hypothesis 2**: **H_{O2}** There is no significant relationship between Food safety assurance and customer choice of dining destination in the Four- Five Star hotels in Nairobi and Mombasa		H_{02}: $\beta_2 = 0$ H_{12}: $\beta_2 \neq 0$ Where β_1=regression coefficients for Food safety assurance Reject H_{02} whenever $p < 0.05$ Otherwise fail to reject the H_{02}
Research Objective 3: To determine the relationship between food monitoring and surveillance systems and customer choice of dining destination in Kenyan Four-Star and Five-Star hotels.	**Hypothesis 3**: **H_{O3}**: There is no significant relationship between food safety monitoring and surveillance systems and customer choice of dining destination in the Four- Five Star hotels in Nairobi and Mombasa		H_{03}: $\beta_3 = 0$ H_{03}: $\beta_3 \neq 0$ Where β_1=regression coefficients for Food quality and surveillance Reject H_{03} whenever $p < 0.05$ Otherwise fail to reject the H_{03}

Research Objective 4: To assess the moderating effect of management commitment on the relationship between food safety and quality indicators and customer choice of dinning destination.	**Hypothesis 4**: **H_{O4}:**Top management commitment does not have any moderating effect on the relationship between food safety and quality on customer choice	X_1 = Food quality systems X_2 = Food safety assurance X_3 = Food quality and surveillance X_4 = Food monitoring and assurance system ε = random error term	H_{04}: $\beta_4 = 0$ H_{14}: $\beta_4 \neq 0$ Where β_1=regression coefficients for Food quality and surveillance Reject H_{04} whenever $p < 0.05$ Otherwise fail to reject the H_{04}
Research Objective 5: To assess the moderating effect of customer-based factors on the relationship between food safety and quality indicators and customer choice of dinning destination	**Hypothesis 5**: **H_{O5}:** Customer-based factors do not have any moderating effect on the relationship between food safety and quality on customer choice of dinning destination in Kenyan Four- Five Star hotels	$Y = \beta_0 + \beta_1 X + \beta_2 Z_1 + \beta_5 (X*Z_1) + \varepsilon$ where Y=Firm Performance β_0=is intercept constant β_1=regression coefficient for food safety and quality indicators β_2= regression coefficient for top Management Commitment β_5= regression coefficient for the interaction between top management commitment and Customer destination choice ε = random error term	H_{05}: $\beta_5 = 0$ H_{15}: $\beta_5 \neq 0$ Reject H_{05} whenever $p < 0.05$ Otherwise fail to reject the H_{05}

3.13 Qualitative data Analysis

Data collected through interview schedules were analysed using thematic framework techniques. According to (He & Schonlau, 2020) the most common widespread approach which is applied by most social researchers is to analyze qualitative data through identifying and coding data into themes. This approach incorporates various tasks, e.g. discovering themes and sub-themes, picking important themes, establishing hierarchies of themes, and linking themes into theoretical models. Data was therefore classified, coded and analysed according to themes. Processing was on daily basis whenever an interview was conducted and data analysis was an "ongoing "process. When editing the data, the researcher reviewed data and checked for completeness and accuracy. The data obtained from each interview schedule was read thoroughly for familiarization. Thematic approach was used during the reading process and notes card was used to record the data available as similar themes were grouped together(He &Schonlau, 2020). Field notes from interviews were edited and cleaned up to organize the data. Various categories which were distinct from each other were detected and their relationship established.

Each phenomenon was represented by a particular code in the creation of categories, themes and patterns during data analysis procedure. Once themes, categories and procedures were identified; the data was evaluated and analysed to determine the adequacy of the information, credibility and usefulness as per the study objectives.

Additionally, an extensive number of verbatim quotations have been used within data analysis of this study to strengthen the quality of the study. This supports the notion of (Eldh *et al.,* 2020) that there is an emphasis to incorporate verbatim quotations from respondents through qualitative research analysis to effectively produce a best qualitative research practice

The results obtained from qualitative data was presented in tables and graphs and explanation presented in prose.

3.14 Ethical Considerations

In compliance with research code of ethics, the researcher followed moral codes established, which incorporated a moral survey process prior to engaging the respondents to guarantee that methods will be reasonable and unprejudiced to all who were involved. In recruiting hotels as cases to the study, an email was sent to the subjects as a method of introduction to explain them the nature of the study and to invite them to participate.

Prior to the dissemination of the questionnaires, the researcher clarified the purpose behind the investigation to the research subjects just as guaranteeing their confidentiality and while at the same time simultaneously requesting their consent after their agreement. Stringent care was taken to guarantee that these participants were kept totally unknown and the confidentiality of the data acquired in the study was ensured. Notwithstanding the introduction letter from the Technical University of Kenya, consent from the Ministry of Education, Science and Technology under the National Commission for Science, Technology and Innovation (NACOSTI) was obtained. The respondents' names were coded to disguise identity. Additionally, all significant works and statements cited in the study was dully referred to with source plainly indicated, within text and appropriately referenced.

3.15 Dissemination of Information

Dissemination alludes to "an arranged process that includes thought of target audiences and the settings in which research discoveries are to be gotten and, where proper, imparting and communicating with more extensive strategy and service audiences in manners that will work with research uptake in dynamic processes and practice" (Mauldin, 2020). Availing to proficient audiences is intended to bring research work to the consideration of other social researchers and scholastics, yet additionally other social specialists or experts who practice in fields related to food safetyand quality. Research finding from this study will be disseminated in the following ways;

3.15.1 Stakeholders (Hotels and Restaurants)

Stakeholders (Hotel and restaurants) were identified, listed, and assessed in terms of their interest in the project and importance for its success and further dissemination.

3.15.2 Internal stakeholders (Technical University)

Results from this study was presented to different individuals, groups, and internal organizations that were interested in the project. This was to keep members of the project consortium and also Technical University of Kenya (TUK) informed about the progress of the project. Adequate internal dissemination also ensured that the project has a high profile within my field of study.

3.15.3 External stakeholders (conference presentation)

The results from the research will be presented to individuals who will gain positively from the findings of this research, as well as to "opinion makers" such as lecturers, librarian sand researchers, who can act to promote the disbursement of information crucially needed. Furthermore, findings shared can be utilized by a wider audience than the specific target group through articles, newsletter, conference presentations and case studies.

3.15.4 Publications

This research work was subjected to publication. This passes on the potential benefits to researchers, practitioners and the wider community. This meant including publishing of the research in books or, creative works, academic journals, webpages, professional and organizations repositories and conference presentations.

CHAPTER FOUR: RESEARCH FINDINGS

4.0 Introduction

This chapter presents the discoveries of the research. It is structured into three sections. Section one, which is the overall segment, gives how sampling was done and the general response rate. This segment goes before other sections since it affirms whether sample gathered was sufficient in representation. Section two examines the overall attributes of the respondents. Section three, then again, gives reactions of the respondents according to the research targets. Likewise, the section incorporates how the research hypotheses were tested.

4.1 Response Rate

Response rate indicated the extent to which the study was in position to collect data from the sample size initially adopted by the study. It is therefore the proportion from the actual number of respondents of the research as compared to the total sample size initially selected. There is a direct variation between the response rate and the sampling fraction and which therefore follows that with an adequate sizeable sampling fraction there results in a desirable sample representation. High response rates limit acquiring biased statistics and subsequently, make study discoveries valid and reliable. Response rate was calculated utilizing the formula

$$\frac{Actual\ Number}{Expected\ Number} \times 100$$

Using this formula, the study obtained the following response rate for hotel guests as follows

Table 4.5: Response rate for hotel guests

Targeted Sample Size	635
Actual Response	527
Percent	83.0%

From the selected area of study, the actual number of respondents who completely took part in the study was 527 from the envisaged number of 635 respondents. This number therefore indicates a response rate of 83.6%, which is far much above the minimum required level of 70%. It therefore follows that the response rate is adequate for drawing inferences for the purpose of this study.

4.2 Gender Distribution

Based on the output of gender distribution (Table4.2) 79% of managers were male while 20% were female. 72% of the executive chefs were male compared to 28% of their counterparts. This implies that the industry is dominated by male in positions of Managers and chefs. 54% of guests were male while 45%were female.

Table 4.6: Gender distribution

Age Distribution	Managers	Executive Chefs	Hotel Guests
Male	19 (79.2%)	18 (72.0%)	288 (54.6%)
Female	5 (20.8%)	7 (28.0%)	239 (45.4%)
Total	**24**	**25**	**527**

4.3 Reliability Analysis

This analysis is particular on investigating the consistency with which the research instrument would provide similar results when undertaken through similar process in similar conditions. It is determined by the use of random error, where increase in random error leads to decrease in the reliability of the research instrument. This study adopted the use of Cronbach Alpha in determining the random error and therefore measures the reliability of the research instrument. The results are as indicated in table 4.3.

Table 4.7: Reliability results

Questionnaire Section	No. of Items	Alpha Score(α)	Comment
Food Quality	24	0.932	Reliable
Food Safety Assurance	12	0.961	Reliable
Food Safety Monitoring and Surveillance	12	0.970	Reliable
Customer-Based Factors	10	0.772	Reliable
Top management commitment	18	0.896	Reliable
Customer Destination Choice	10	0.875	Reliable
Overall reliability coefficient	95	0.901	Excellent

Source: Survey data (2019)

In the interpretation of the reliability of research instruments we used table 4.3 that indicates the number of items that used to determine each factor of the study as well as the Cronbach Alpha value for each factor. The interpretation of Cronbach Alpha is basically stated that values that exceed 0.7 indicate internal consistency that suggest that the factor is reliable. The table therefore indicates that all the factors are above the baseline score of 0.7 and therefore all the factors were reliable. The general coefficient was indicated as 0.901 that also suggest increased reliability of the research instruments.

4.4 Validity

In correlation analysis, Pearson correlation coefficients and the corresponding p – values were used and the results were as shown in Table 4.4

Table 4.8: Validity results

		FC	FSA	CBF	FS/M	DC
FC	Pearson Corr.	1	.375	.342	.311	.695
	Sig. (2-tailed)	-	.000	.000	.000	.006
FSA	Pearson Corr.	.375	1	.327	.360	.645
	Sig. (2-tailed)	.000	-	.000	.000	.000
CBF	Pearson Corr.	.342	.327	1	.342	.207
	Sig. (2-tailed)	.000	.000	-	.000	.004
FS/M	Pearson Corr.	.311	.360	.342	1	.621
	Sig. (2-tailed)	.000	.000	.000	-	.000
DC	Pearson Corr.	.695	.645	.207	.621	1
	Sig. (2-tailed)	.006	.000	.004	.000	-

DC = Destination Choice, FSA = Food Safety Assurance, CBF = Customer-Based Factor, FS/M = Food Surveillance/Monitoring, DC = Destination Choice

Source: Survey data (2019)

Pearson correlation coefficient measures the extent of association between any two variables. The coefficients range from -1 to +1 and significance of these associations is measurable using the corresponding p – values. Significant relationship is shown by a p-value less than 0.05. In Table 4.4, though some of the associations depict weak correlation, all the associations were however, significant. This is indicated by all p-values < 0.05. Existence of association is an evidence that the results would be consistent with the hypothesized relationships. Therefore, the instrument used was valid.

4.5 Biographic Characteristics

The research instruments were also very critical in collecting general characteristics of the respondents that were composed of gender, education level, the work position, and the years served which was summarized and recorded as indicated in the sections that follows. Descriptive statistics in connection to the extent of similarity or dissimilarity is also presented.

4.5.1 Age Distributions and Highest Level of Education

Age distributions and level of education of all respondents were summarized as shown in Table 4.5

Table 4.9: Age distributions

Age Distributions	Managers	Executive Chefs	Hotel Guests
Less than 31	3 (12.5%)	4 (16.0%)	165 (31.3%)
31-40	4 (16.7%)	11 (44.0%)	203 (38.5%)
41-50	16 (66.7%)	6 (24.0%)	106 (20.1%)
51-60	1 (4.2%)	4 (16.0%)	48 (9.1%)
Above 60	0	0	5 (0.9%)
Highest Level of Education			
O-Level or A-Level certificate	1 (4.2%)	4 (16.0%)	2 (0.4%)
College Level	9 (37.5%)	13 (52.0%)	29 (5.5%)
Bachelor's Degree	12 (50.0%)	7 (28.0%)	167 (31.75)
Postgraduate	2 (8.3%)	1 (4.0%)	329 (62.4%)
Total	24	25	527

Source: Survey data (2019)

From table 4.5, it can be observed that majority of managers are aged between 41 and 50 years (66.78%) with 50% having bachelor's degree. While for executive chefs, majority of the respondents were aged between 31 and 40 (44.0%) with majority (52%) having reached college level. However, for hotel guests, it was noted that majority of guests under the study were aged between 31 and 40 (38.5%) with postgraduate degree (62.4%).

4.5.2 Number of Years Worked

To check whether the hotel staffs were conversant with operations within their premises, a question of number of years worked was raised and the responses summarized as shown in

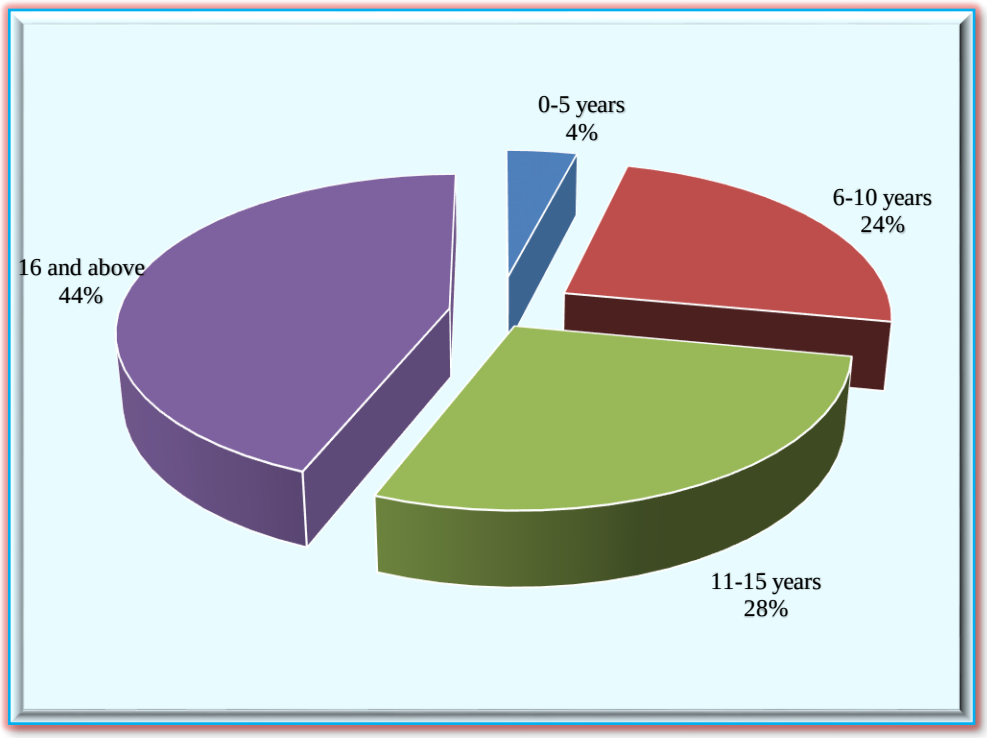

Figure 4.1: Number of Years Worked

From Figure 4.1, it can be seen that majority of the hotel staffs (44%) had worked in their respective premises for more than 15 years while only 4% of all hotel staffs had worked in their current workplaces for at most 5 years. Since majority of the staffs had worked for a long time in their current places of work, it showed that the staffs were well conversant with various issues within the hotel and tourism industry.

4.5.3 Length of Hotel in Operation

The main response variable was customer destination choice and it was important to check whether the hotels had operated long enough to be noticed by would-be customers. The staff-respondents were then asked the duration their premises had operated and the responses were summarized as shown in Figure 4.2

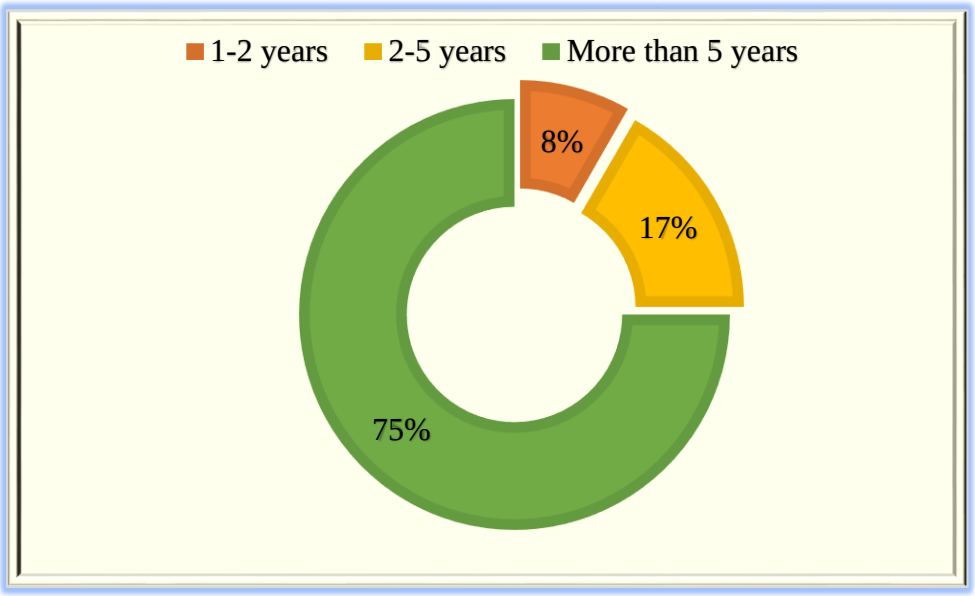

Figure 4.2: Length of Hotel Operation

From Figure 4.2, it was observed that majority of the hotels (75%) had operated for more than 5 years while only 8% of the hotels had operated for less than 2 years. This observation implied that most hotels have operated long enough to be easily noticed by any customer and consequently, the selected hotels correctly fit this study. Additionally, the age of the hotel means that the longer the hotel had been in operation the more it had acquired knowledge and skills in food safety and quality operational systems.

4.5.4 Nature of Ownership

To deeply understand the nature of management and/or operation, the staffs were asked about the nature of ownership and the size of employees. A cross-tabulation of findings from these two questions was summarized as shown in Table 4.6

Table 4.10: Nature of Ownership and Employees' Size

Ownership	Employees' size					Total
	≤ 5	5-10	10-20	20-50	> 50	
Sole proprietorship	0	0	1	1	0	**2 (8.3%)**
Partnership	0	1	3	3	4	**11 (45.8%)**
Limited Company	0	0	4	1	4	**9 (37.5%)**
Family-owned	1	0	0	0	1	**2 (8.3%)**
Total	**1 (4.5%)**	**1 (4.5%)**	**8 (33.3%)**	**5 (20.8%)**	**9 (37.5%)**	**24 (100.0%)**

Source: Survey data (2019)

From Table 4.6, it can be observed that most of the hotels (45.8%) had partnership as their form of ownership followed by limited company ownership (37.5%). Sole proprietorship and family-owned had 8.3% each. Compared with employees' size, it was observed that most hotels (37.5%) had employees' size of more than 50 followed by group of hotels having between 10 and 20 employees (33.3%). The big proportion of large employees' size is perhaps attributed to the fact that most these hotels are formed from partnerships. In line with these findings, it is important to note that because of this nature of arrangement, these hotels are likely to have food safety and quality systems in place

4.5.5 Hotels with restaurant Outlets

Having known that most of the hotels are formed through partnership and that most of these hotels have their employees' size more than 50, the respondents were then asked whether their hotels have restaurant outlets. The responses were summarized as shown in Figure 4.3

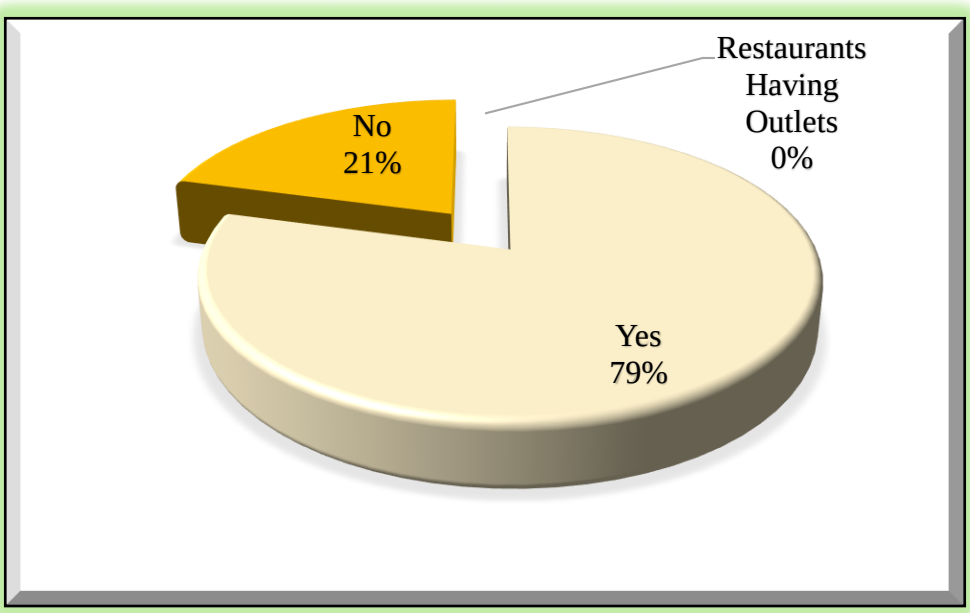

Figure 4.3: Restaurant Having Outlets

Figure 4.3 shows that 79% of the hotels had outlets while only 21% did not have outlets. This observation could be attributed to the fact that most of the hotels had operated for more than 5 years and are formed through partnerships. These two factors are good recipes for formation of outlets. Establishment of outlets improves placement of the hotels in the geographical map and thus, hotel reputation becomes well known. Additionally, availability of the restaurants places the hotels in inter-destination competitive edge.

4.5.6 Individual Questions Responses

Apart from the hotel and staff characteristics, the guests were asked some individual questions and summaries obtained as shown in Table 4.6

Table 4.11: Individual Questions Responses

	Count	Percent %
Source of Information about the Hotel		
Television	195	37
Radio	69	13
Hotel website	94	18
Social media	89	17
Print media	51	10
Word of mouth	29	6
Nature of Occupation		
Self-employed	104	20
Full-time employed	273	52
Part-time employed	150	29
Frequency of Visit		
First timer	140	27
Been here before	249	48
I frequent here yearly	45	9
I frequent here once in a while	93	18
Nature of Meal Served		
Breakfast	169	32
Early lunch	109	21
Normal lunch	139	26
Business lunch	46	9
High teas	24	5
Dinner	31	6
Late dinner	9	12
Visit Company		
Alone	96	18
With friends	229	44
With work colleagues	87	17
With family	113	21
With school mate	2	.4
Reason For Visit		
To take meal/drink	302	57
To meet with friends	118	22
To transact a business	74	14
To access free internet	6	1
To watch favorite TV program	2	.4
To enjoy ambience/cool environment	25	5

From Table 4.7, it can be observed that television served as the main source of information about the hotel (37%) followed by hotel websites (17.8%) and social media (16.9%). The least sources

of information were, however, word of mouth (5.5%) and print media (9.7%). This question was vital, especially to the hotel management since this determines which means of advertisement a hotel should invest on to ensure large customer attraction.

On the nature of occupation, it was observed that more than half of the guests (51.8%) were on full time employment while only 28.5% and 19.7% were on part-time and self-employment arrangements. Based on this fact, many guests with full employment are likely to invest in travelling and holiday making since their salaries are standardized.

On frequency of visits, highest ranking was on those who responded that they have been visiting hotels before (47.2%) followed by those who responded that it is their first time to be in that hotel. In this question, the least category was those who responded that they visit the hotel annually with a proportion of 8.5%. This implies that a higher proportion of guests will visit the places they have been before if quality services were provided when they first visited the properties.

Breakfast and normal lunch seemed to be the main meals served that the responding guests with respective percentages 32.1% and 26.4%. Late night dinner, however, scored the least, accounting for only 1.7% responses from the guests. This means that many holiday makers after breakfast or lunch are likely to go out and view other parts of the country and enjoy meals elsewhere.

When asked about the visit company, it was observed that most guests visit the hotels with the company of friends (43.5%) or family (21.4%). Related to this was the question of reason for visit. It was observed that more than half of the respondents answered that they had visited the hotels to take a meal or a drink (57.3%). The reason with the least proportion of responses was to watch a favorite TV program accounting for only 0.4%.

4.6 Qualitative Data Analysis

This section explores data generated from interviews with managers and sous chefs which formed the qualitative data. This analysis was used to supplement quantitative data. From these interviews, several factors were identified and were developed into main themes. These themes have been analyzed thematically by discussing them in line with the specific objectives which were as follows: To assess the relationship between food quality and customer choice on the dining destination in the Four- Five Star hotels in Kenya, to determine the effect of food safety assurance and customer choice on dining destination in the four- five Star hotels in Kenya, to determine the relationship between food monitoring and surveillance systems and customer choice of dining destination in the four- five Star hotels in Kenya, to assess the moderating effect of top management commitment on the relationship between food safety and quality indicators and customer choice of dining destination in the four- five Star hotels in Kenya, to assess the moderating effect of customer based factors on the relationship between food safety and quality indicators and customer choice of dining destination in the four- five star hotels in Kenya.

All respondents who agreed to conduct an interview were contacted by telephone and e-mail communication to ascertain whether they were willing to be interviewed to give further information relating to food quality and safety within hotel food production operations. Each interview lasted between one and two hours.

4.6.1 Assessment of relationship between food quality and customer choice of customer's choice of dining destination

The first question sought to assess the relationship between food quality and customer choice on the dining destination in the Four- Five Star hotels in Kenya. The first question was posed as follow:

Q1 what do you think about the relationship between food quality and customer choice of dining destination"?

In regard to the above question majority of managers were in agreement with the statement that there is a relationship between food quality and dining destination choice. The following were key responses:

"It is part of our day to day operations" (Respondent 2, male, aged 30–35 hotel 002) ---------

'Our Hotel revenue has increased the moment we improve our quality" (Respondent 4, male, *aged 41-50 hotel 004)*

Q2Do you have quality assurance management system in place?

In response, there was a recurring point of agreement among the managers as:

"*There is an existing quality assurance management system in place" ((Respondent 2, male, aged 41-50 hotel 0012)-*

4.6.2 To determine the relationship between food safety assurance and customer choice on dining destinations in the Four- Five Star hotels in Kenya.

Q1 what food safety assurance systems do you use in your hotel?

The responses were as follows:

"In my hotel we apply good hygiene and safety practices" (Respondent 10, male, aged 41-50 hotel 005)" ---------"at least you cannot work in a hotel without systems" (Respondent 10, male, aged 41-50

Q2. How is the system implemented in your organization? The responses were:

"The most important issue in implementing the quality strategy was through good training".

Q3. Is food safety a factor to consider in choice of a destination?

There were unanimous responses from the respondents in this question as below:

"It is a major factor because many guests ask if there are cases of food contamination before they do reservations (Respondent 10, male, aged 41-50 hotel 005)" ……." Many managers are keen to know whether our hotel is certified by hygiene and safety agencies" (Respondent 15, male, aged 41-50 hotel 020

4.6.3 To determine the relationship between food monitoring and surveillance systems and customer choice of dining destination in the Four- Five Star hotels in Kenya.

Q1 what standards do you use for monitoring food safety and quality?

Many managers were in agreed that their existed standards that were used to monitor food safety and quality. The responses were as below:

"Our Hotel uses ISO 22000 as a way of monitoring the food safety systems (Respondent 10, male, aged 41-50 hotel 005)" …… "at least our systems are audited by Kenya bureau of standards and our products are checked each and every time (Respondent 10, male, aged 41-50 hotel 005)

*Q2*what specifications do you use when making your purchases?

Many of the responses, managers and sous chefs confirmed that they deal with certain suppliers particularly specified for their hotels so each hotel had the same suppliers

> *"We work with national suppliers. Suppliers are on national level and these suppliers are specified only for us, so each hotel in the chain works with the same suppliers everywhere to achieve consistency" (Respondent 10, male, aged 41-50 hotel 005)"*

Q3 what are food safety and quality audits conducted in your hotel?

On conducting food safety audits respondents were asked to identify types of quality audits in their respective Units. Most of the respondents saw quality audits as being very important to ensure quality assurance during food production and they indicated that they were conducting regular internal audits.

The interval periods to conduct these audits were varied and ranged between every month to two times a year and it would take two or three days to conduct the quality audit. Many audits were done annually. The responses were as below:

> *"We conduct audits at the end of the year bur when need arises we conduct them quarterly" (Respondent 10, male, aged 41-50 hotel 005) ----------"Audits must be conducted at least every six months but in some sections like in food service we conduct monthly" (Respondent 10, male, aged 41-50 hotel 005)*

4.6.4 To assess the moderating effect of top management commitment on the relationship between food safety and quality indicators and customer choice of dining destination in the Four- Five Star hotels in Kenya.

The purpose of this objective was to know whether there is support from top management and how this support leads to better performance

Q1. How far is top management involved in supporting the operation?

Key Responses were as below:

> *"There are policies established by the hotel which guides us on how to improve our quality" …… (Respondent 10, male, aged 41-50 hotel 005)" ……" Yes, as a management team, we stress on quality food, because we need to be competitive, we need to achieve consistency in the products we present, "Respondent 10, male, aged 41-50 hotel 005)" ……." We need to stress on standard to be more confident" …… (Respondent 10, male, aged 41-50 hotel 005)"*

Q2. Are staff well-trained to produce a consistent level of quality? Almost all respondents positively replied that they offer training programmes for staff related to food quality. Key responses were as below:

> *Every member or who handles food goes through beginning health and safety training, basic food hygiene, handling with equipment as per the law. (Respondent 10, male, aged 41-50 hotel 005)" ……..*

Q3. What level of training do staff go through? One of the respondents indicated that this training depending on the level of employee to be trained, for example if they are new employees, they are just trained to know the basics:

> *"If you get new employees, you work with them to present all the standards used. They are just trained to know how to make the plate, just the basic task. Actually we have training programmes for each employee not just new employees. (Respondent 10, male, aged 41-50 hotel 005)" ……"*

Q 4 How does the top management support lead to customer choice of your Hotel?

There were a number of responses given as bellow:

"When you are confident with your product guests will come back again because of consistence in product provision" ----- (Respondent 10, male, aged 41-50 hotel 005)" --- "customers nowadays are keen with quality products" ------ (Respondent 10, male, aged 41-50 hotel 005)"

4.6.5 To assess the moderating effect of customer-based factors on the relationship between food safety and quality indicators and customer choice of dining destination in the Four-five star hotels in Kenya.

This objective was aimed at establishing factors that customer consider when visiting any hotel from the manager's point of view

Q1 what makes customers choose your facility against your competition?

There was a recurring point of agreement among the managers and sous chefs as follows,

"*Guest patronize our facility because of good quality food that is well presented" --------- (Respondent 10, male, aged 41-50 hotel 005)"*

"Many guest like the ambience and the products that we offer since they have visited us" before" ------ (Respondent 10, male, aged 41-50 hotel 005)" -------"Many of our guest know what they want they have product knowledge and they can go where they want" -- --(Respondent 10, male, aged 41-50 hotel 005)"

4.6.6 Summary of qualitative analysis

Based on the responses above, it is imperative to conclude that food safety, food quality and food safety and surveillance are components that are indispensable in the management of hotels. All managers and stakeholders should consider seriously if their performance is to be above their competition

4.7 Descriptive Statistics of Each Study Variable

4.7.1 Food Quality

To understand more about food quality as an independent variable, all the three categories of respondents were asked different questions. To begin with, managers and executive chefs were asked whether they were aware of what food quality entails. They responded in the positive that they were aware. This was a good observation since, as a dependent variable, the managers and executive chefs could now effectively modify various aspects of food quality in order to gain a competitive advantage over other hotels. That is, by hotel management having the knowledge of what high food quality entails, proper mechanisms and/or suitable adjustments that attracts more guests can be formulated and implemented. This 100% awareness level of food quality was, thus, a point of strength for these star-rated hotels.

For hotel guests, the question was whether food quality was an important factor while choosing their hotel destinations. Responses on this question were summarized as shown in Table 4.8

Table 4.12: Whether Food Quality is Important

Whether food quality is a decision factor	Count	Percent
Yes	521	98.9
No	6	1.1

Source: Survey data (2019)

From Table 4.8, we observe that almost all the guests (98.9%) agreed that food quality is one of the key factors they consider while deciding on which hotel to visit. This observation supported the researcher's decision of considering food quality as a vital variable that directly influences destination choices. It was presumed that those who did not consider food quality as a crucial

factor while deciding on which hotel to visit are constituted by individuals who responded that they had other reasons for visiting the hotels other than taking a meal (see Table 4.6).

In this study, the following were considered as important aspects of food quality: taste, natural or organic, freshness, appearance, not being risky, good health guarantee, good condition and quality mark. Respondents were then asked to rate the level of importance of each of the identified aspects using a Five-Point Likert scale. Table 4.8 gives the summary of the responses for each aspect.

Table 4.13: Responses on various aspects of food quality

Aspect	Not Important	Least Important	Less Important	Important	Most Important
Taste	2	1	1	97	426
Freshness	5	1	0	128	393
Good Condition	15	0	6	176	330
Not Risky	76	1	6	156	288
Healthy	52	2	22	237	214
Natural/Organic	152	2	76	122	175
Appearance	162	1	44	154	166
Quality Mark	180	11	39	153	144
Average	**80.5**	**2.4**	**24.3**	**152.9**	**267.0**

Source: Survey data (2019)

From Table 4.9, we observe that the top three aspects that were considered to be highly important while referring to food quality included taste (n = 426), freshness (n = 393) and good condition (n = 330). On the other hand, top three aspects that were considered to be least important included quality mark (n = 191), appearance (n = 163) and being natural or organic (n = 154). This observation provides an insight on which aspects of food quality to focus on while adjusting food flow procedures meant to improve food quality that can attract guests to a destination.

Using the averages of the response ratings, a summary pie chart was obtained as shown in Figure 4.4

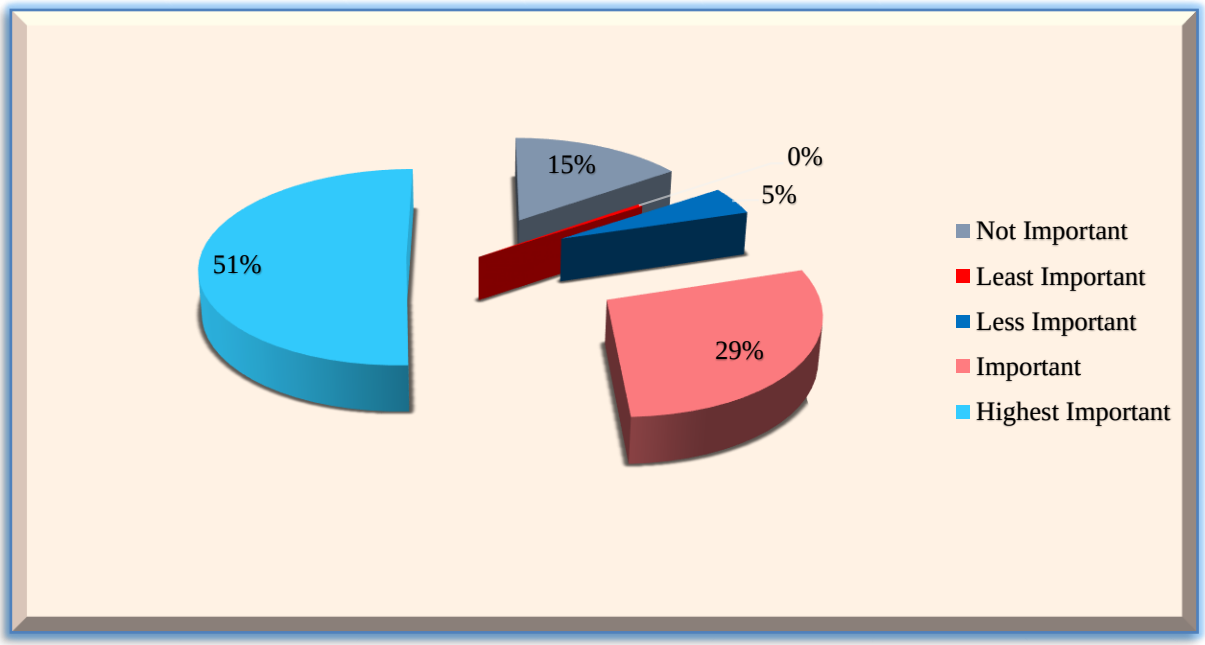

Figure 4.4: Compressed responses on various aspects of food quality

From Figure 4.4, it can be observed that, on average, more than half of the respondents (51%) agreed that the identified aspects were highly important. An interesting observation is made when we reduce the Five-Point Likert scale to Three-Point scale such that we have new categories "Important," "Less Important" and "Not Important." In this case, we would have the "Important" category with 80%, "Less Important" category with 5% and "Not Important" category with 15%. This observation further implies that, in general, all the identified aspects were important and were thus, a good fit for this study.

On the same question of ratings on various aspects of food quality, it was noted that ratings of hotel heads exhibited a trend similar to that of guests. This comparison was presented as shown in Figure 4.5

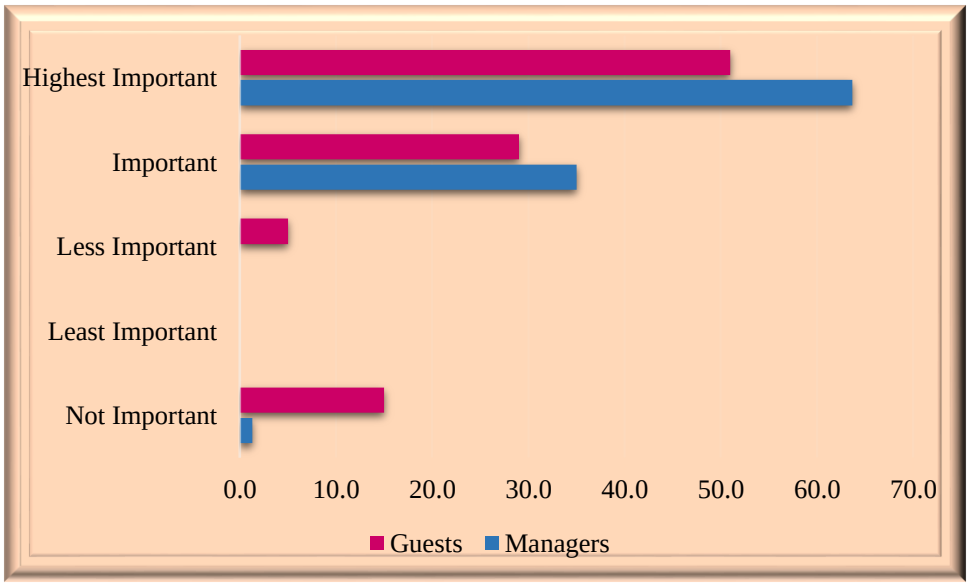

Figure 4.5: Comparison on responses on various aspects of food quality

It can be seen from Figure 4.5 that while, for guests, top two ratings accounted for 80%, for managers, the top two ratings accounted for 98.7%. Only 1.3%, on average, gave a "Not Important" response. This observation implies that almost all managers were in agreement with the researcher that the identified aspects were important while handling food quality issues.

4.7.2 Food safety assurance

As another independent variable, the study explored responses on various aspects of food safety assurance. The study begun by asking respondents whether they are aware of food safety assurance. Just like it was observed in the awareness of food safety, all the managers and executive chefs confirmed that they are aware of what constitutes food safety assurance. That is, executive chefs as well as managers were all aware of issues in regard to food safety.

Hotel guests, on the other hand, were asked whether food safety assurance is a key decision factor while choosing a dining destination. Responses on this question were given in Figure 4.6

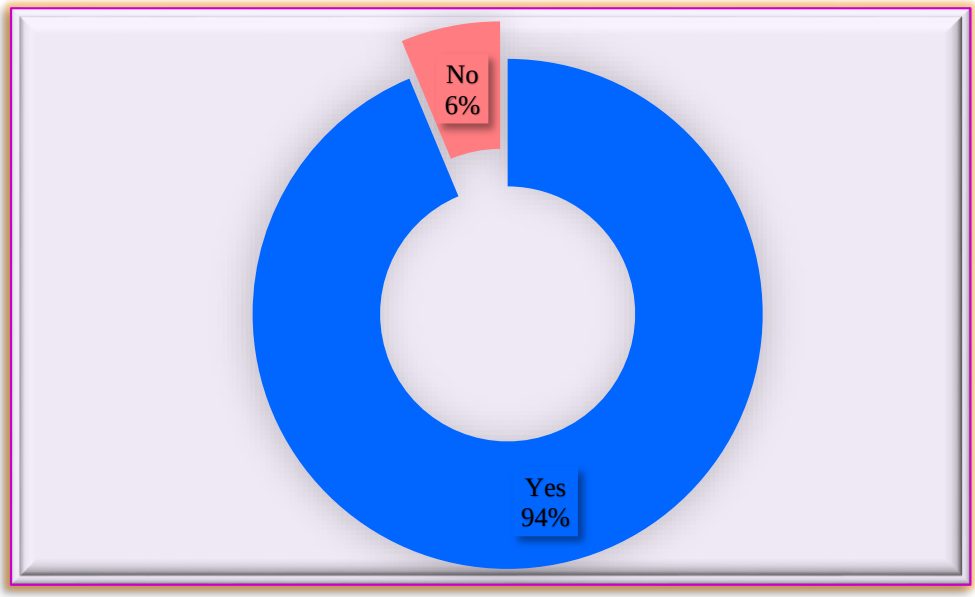

Figure 4.6: Whether food safety assurance is a decision factor

From Figure 4.6, we observe that 94% of all the respondents indicated that food safety was a vital decision factor in deciding their hotel destination. Similarly, food quality had similar results with only 6% of the respondents indicating that food quality was not among key factors to consider in undertaking the decision to visit a hotel. This would mean the small number is made up of those visitors that visit hotels due to other reasons unrelated to taking meals from their destinations. Since majority of the respondents have agreed that food safety assurance is a key decision variable, this was an indication that the variable was correctly placed as an independent variable.

In food safety assurance, identified aspects included hygienic and presence or absence of physical, chemical and microbiological contaminants. Managers and executive chefs were asked to rate the significance of the identified aspects in determining destination choices of guests. Summary of the ratings was as shown in Table 4.9

Table 4.14: Responses on various aspects of food safety assurance

		Ratings of Importance				
Aspects of Food Safety		**Not Important**	**Least Important**	**Less Important**	**Important**	**Most Important**
Hygienic	Managers	0	0	0	18	6
	Ex. Chefs	0	0	0	12	12
Physical	Managers	0	0	0	11	13
Contaminants	Ex. Chefs	0	0	1	11	12
Chemical	Managers	0	0	0	4	20
Contaminants	Ex. Chefs	0	0	0	7	17
Microbiological	Managers	0	0	0	10	14
Contaminants	Ex. Chefs	0	0	0	9	15
Average		0	0	0.125	10.25	13.625

Source: Survey data (2019)

It can be observed from Table 4.10 that both managers and executive chefs agree on the importance of the pre-stated aspects of food safety assurance. None of the hotel staffs responded that any of the identified aspects is not important or least important. From the table, only one executive chef responded that presence or absence of physical contaminants is less important while addressing issues surrounding food safety assurance. The responses in Table 4.10 can be compressed as shown in Figure 4.7

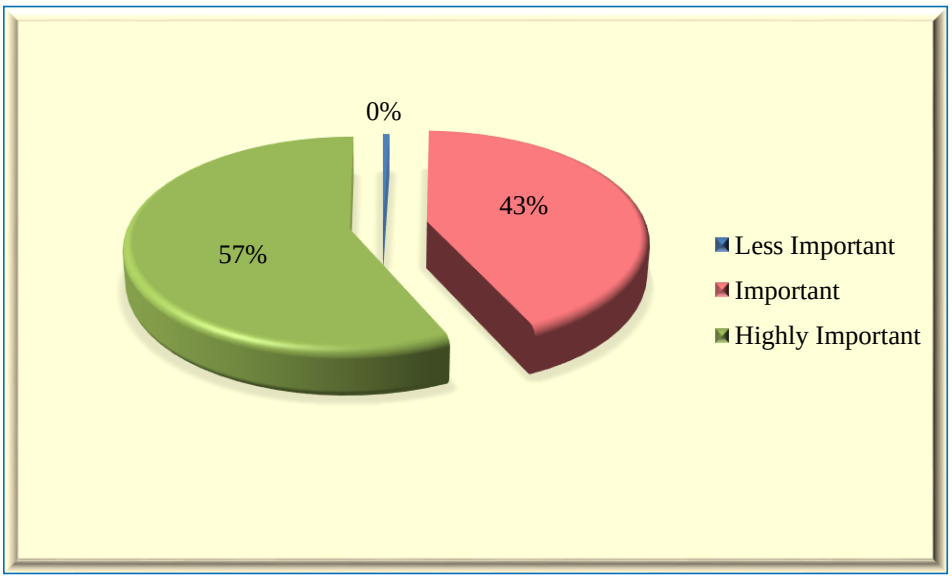

Figure 4.7: Compressed responses on aspects of food safety assurance

Figure 4.7 reveals that more than half of the staff-respondents (57%) agreed that all the identified aspects are highly important while addressing food safety assurance issues. It is also worth noting that in the compressed response ratings, the "Less Important" response becomes insignificant. Consequently, responses of managers and executive chefs on this question strongly suggest that the researcher was very correct in not only identifying the pre-stated aspects, but also considering food safety assurance as a factor that influences destination choices.

To test whether managers and executive chefs were aware of the existing food safety assurance systems, some safety assurance systems were identified and respondents asked to indicate whether they were aware of them. Responses on this question was summarized in Table 4.10

Table 4.15: Knowledge of managers on safety assurance systems

Safety Assurance Systems	Yes	No
Good hygienic practices	66.7	33.3
Good manufacturing process	33.3	67.7
HACCP	70.8	29.2
Assured safe catering	33.3	67.7
KEBS	37.5	62.5
Average	48%	52%

Source: Survey data (2019)

From Table 4.11, it can be observed that most hotel superiors and/or departmental superiors are more informed of HACCP (Yes = 70.8%) as one of the safety assurance systems in relation to other listed systems accompanied by Good hygiene practices (Yes = 66.7%). According to the reactions obtained, the systems which are not know extensively areGood manufacturing process (Yes = 33.3%) and Assured safe catering (Yes = 33.3%). These results should be utilized by the hotel superiors to determine which focal points to concentrate on while educating their staff more on food safety assurance systems. The 'Average' row indicates that in general, slightly more than

50% of managers and executive chefs in these hotels are not aware of food safety assurance systems.

4.7 Food Safety Monitoring and Surveillance Systems

In food safety monitoring and surveillance, respondents were first asked about the standards used by the government to monitor food safety and quality. Four standard measures were identified, which were voluntary standards, ISO 9000, ISO 22000 and Testing, certification and labelling. Respondents were then asked to state the one used in their hotels. Responses were as shown in

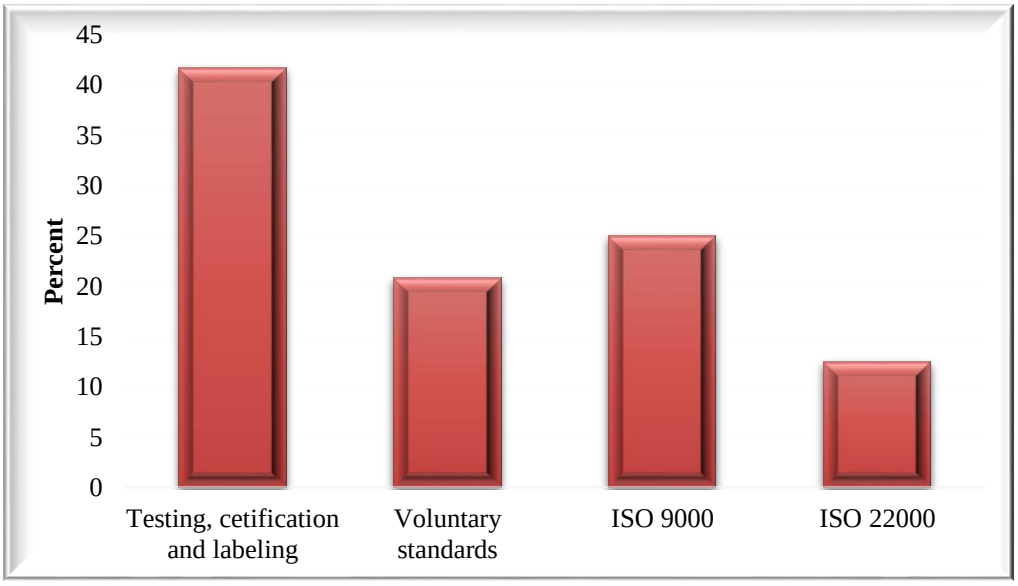

Figure 4.8: Government standards for monitoring food safety and quality

From Figure 4.8, it can be seen that most hotels do adopt testing, certification and labeling, accounting for 41.7%. This was followed by ISO 9000, which accounted for 25%. Voluntary standards and ISO 22000 accounted for 20.8% and 12.5% respectively.

To ensure effective food safety and quality monitoring and surveillance systems, proper procedures should be taken to ensure that food is safe and is of high quality while flowing from farm to fork. That is, care should be taken at all main food flow stages to ensure that food safety and quality is not compromised. Main stages included selection of food suppliers, receiving food,

storage of already supplied food, food preparation, holding food for service, food preservation and reheating food. Using a Five-Point Likert Scale, respondents were asked to indicate the level of quality and safety inspection in managing main food flow stages where 1 represented "Not applicable at all" and 5 represented "Very applicable". Responses were as shown Table 4.11

Table 4.16: Statistics on food flow management and choice of food supplier

Level of Quality and Safety Inspection in Managing Food Flow Stages	Min.	Max.	Mean	Std. Dev.	Skewness Coeff. (S_k)
Selecting food supplies	4	5	4.54	.509	-.179
Receiving food	4	5	4.63	.495	-.551
Storing already supplied food	4	5	4.67	.482	-.755
Preparation of food	4	5	4.79	.415	-1.534
Holding food for service	4	5	4.71	.464	-.979
Preservation system	4	5	4.83	.381	-1.910
Reheating	4	5	4.29	.464	.979
Aggregate (N=24)	**4**	**5**	**4.64**	**0.459**	**-0.704**

Source: Survey data (2019)

From Table 4.12, we have the ratings minimum, maximum, mean and standard deviation. The table also gives the coefficient of skewness, which is a measure of distribution of the responses. In the minimum and maximum columns, we observe that the level of quality and safety inspection in managing main food flow stages is either applicable (rating = 4) or very applicable (rating = 5). This finding implied that there was a unanimous agreement that at all the stages of food flow, food quality and safety inspection is very crucial.

The column for mean indicates that preservation stage had the highest mean while reheating stage had the least mean. This implies that of all the stages identified, there was a high response that food quality and safety inspection was very applicable in the preservation stage. This is also evident in the standard deviation column, where we note that preservation system, as a food flow stage, has the lowest standard deviation compared to other stages in the food flow. Since standard deviation is a measure of distribution of responses, small value indicates that there was

homogeneity of the responses. High variation, on the other hand, was observed in the selection of food suppliers stage. For the standard deviation column, which measures the dispersion of responses, selecting food supplies had the highest standard deviation (= 0.509) while preservation system had the lowest standard deviation (0.381).

In the skewness column, it is worth noting that skewness occurs when there is a lack of symmetry in a data set. It is usually measured using coefficient of skewness, which can either take negative or positive values. Negative coefficient values imply negative skewness while positive values imply positive skewness. In the skewness column, we observe that all the coefficients are negative except coefficient value for reheating stage. This implies that the responses for this stage tended towards *rating = 4* than towards *rating = 5*. We recall that in the mean column, the corresponding mean response for this stage was 4.29, which is closer to 4 than to 5. All negative coefficient values imply that the responses are closer to 5 than to 4. To determine which stage has a dense cluster towards 5, we use the absolute coefficient values. Using this approach, we observe that the top three stages that require serious application food safety and quality inspection are preservation stage (S_k = -1.91), food preparation (S_k = -1.534) and holding food for service (S_k = -0.979) stages. However, in the averages, we observe that the overall mean rating is 4.64, which is closer to 5 than to 4. Also, the overall coefficient of skewness is a negative value, indicating that the cluster of responses tends towards 5.

On choosing a food supplier, as the first stage in food flow, important factors were identified and respondents asked to rate the extent of significance of the factors using a Five-Point Likert Scale, where 1 represented “Very large extent” and 5 represented “Not used at all.” Summary for this question is given in Table 4.13

Table 4.17: Important factors while choosing food supplier

Important factors while choosing food supplier	Min.	Max.	Mean	Std. Dev.	Skewness Coeff.
Knowledge of product source	1	2	1.42	.504	.361
Supplier's reputation	1	2	1.58	.504	-.361
Supplier's warehouse inspection	1	3	1.46	.658	1.165
Safety program in place	1	3	1.33	.565	1.522
Training on food safety or not	1	3	1.71	.550	-.090
Condition of delivery trucks	1	3	1.42	.654	1.353
Aggregate (N=24)	**1**	**3**	**1.50**	**0.573**	**0.658**

Source: Survey data (2019)

From Table 4.13, we observe that the minimum response rating is 1 while the maximum rating is 3, an indication that most responses were on the very large extent rating. Responses that tend to the "Very large extent" is also evident in the means of each factor. As shown in Table 4.12, all the mean ratings fall between "Very large extent" and "Large extent." A low mean rating, for example as seen in 'Safety program in place' implies that most responses on this factor agreed that while choosing food supplier, safety programs in place are extremely significant. Compared to the least mean rated factor, which is whether the supplier trains on food safety or not (mean = 1.72, approx. 2), the mean rating value is an indication that though this factor is significant, it is not as strong as 'Safety program in place.'

In the skewness column, the negative values imply that the responses tend towards the "Not used at all," while positive coefficient values imply that responses tend towards the "Very large extent." We can observe some underlying relationship between the rating means and the corresponding coefficients of skewness. We observe that there is an inverse relationship between the mean ratings and the respective coefficients of skewness. Based on this observation, we can deduce that the most significant factor to consider while choosing a food supplier is whether the supplier has safety

programs in place, while the least significant factor is whether the supplier trains on food safety or not.

As the next step of receiving and storing supplied food, key measures that would compromise food safety and quality during this stage of food flow were identified. Respondents were then asked to rate how often such measures and/or steps are considered using the scale 1 = Always, 2 = Rarely, 3 = Never. Summary of the responses are presented in Table 4.14

Table 4.18: Important measures in food reception and storage

Food Reception Measures	Min.	Max.	Mean	Std. Dev.	Skewness Coeff.
Inspecting quality and quantity	1	1	1.00	.000	.
Taking temperatures of supplied food	1	2	1.04	.204	4.899
Aggregate (N=24)	**1**	**2**	**1.02**	**0.102**	**4.899**
Food Storage Factors					
Storage temperature	1	1	1.00	.000	.
Storage area cleanliness	1	2	1.04	.204	4.899
Aggregate (N=24)	**1**	**2**	**1.02**	**0.102**	**4.899**

Source: Survey data (2019)

From Table 4.14 we observe that no manager or executive chef responded that they never consider the identified measures; there was no rating of '3.' We however note that inspection of quality and quantity and checking of storage temperatures are important measures that are always being performed while receiving and storing any supplied food. This is so because there was a unanimous response that the two measures are always being considered. It is because of this one-point response that the corresponding standard deviations and coefficients of skewness are both zero in the two measures. These is, however, a small standard deviation for 'Taking temperatures of supplied food' and 'Ensuring storage area cleanliness.' Nevertheless, mean ratings for these latter measures is closer to "Always" than "Rarely" with corresponding positive coefficient values for

both. This is an indication that distribution of responses in these latter two measures are almost equivalent to the former two.

In food preparation and cooking stage, a similar approach of identifying key processes and/or measures was followed. Respondents were asked to rate the extent to which they adhere to each process using a Five-Point Likert scale, where 1 = Very large extent, 2 = Large extent, 3 = Neutral, 4 = Small extent, 5 = Not used at all. Responses were summarized as shown in Table 4.15

Table 4.19: Food preparation and cooking steps

Food Preparation and Cooking Steps	Min.	Max.	Mean	Std. Dev.	Skewness Coeff.
Food thawing	1	5	1.54	.884	2.750
Use of clean and sanitized work area/equipment	1	2	1.33	.482	.755
Hand washing before handling food	1	2	1.17	.381	1.910
Faster food cooking once from refrigerator	1	5	1.79	1.062	1.639
Food cooking with required time and temperature	1	3	1.33	.565	1.522
Use of gloves to handle food	1	5	1.46	.932	2.772
Use of gloves/sanitized hands in salad preparation	1	3	1.33	.565	1.522
Aggregate (N=24)	**1**	**5**	**1.42**	**0.696**	**1.839**

Source: Survey data (2019)

From Table 4.15, we observe that in all the processes, there was at least 'Very large extent' in all the identified processes. We also observe that the mean ratings are between 1 (one) and 2 (two), which is an indication that the level of adherence to the processes were at least to a large extent. Based on the mean ratings and corresponding standard deviations, hand washing before handling food and use of clean and sanitized work area/equipment were top most processes where the extent of adherence was very large.

On the other hand, faster food cooking once from the refrigerator exhibited the least level of adherence (mean = 1.79) with a high variation of the responses. A positive coefficient of skewness is an indication that though some respondents said that they do not adhere to a given process (rating = 5), the overall distribution of responses in that particular process, however, tends to 'Very large

extent.' This is also confirmed by the aggregate values we have in the positive coefficient of skewness. This can be visualized as presented in Figure 4.9

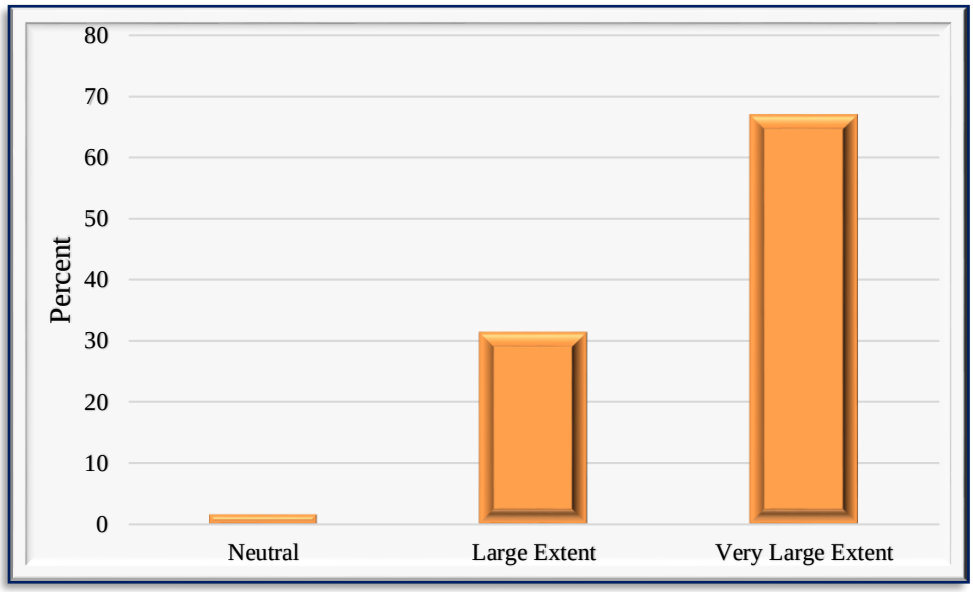

Figure 4.9: Level of adherence

It can be seen from Figure 4.9 that the ratings '4 = Small extent,' and '5 = Not used at all' becomes insignificant when we consider the percentage averages. Almost all managers and executive chefs admitted that they adhere to the aforementioned processes, accounting for 98.5%. However, the remaining 1.5% who responded that they are, on average, 'Neutral' on the extent to which they adhere to the stated processes should be a wakeup call to hotel heads to investigate why such a response was observed.

As another vital aspect of food monitoring and surveillance, the participants were asked to state how frequent they conduct quality inspection. Responses were as shown in Figure 4.10

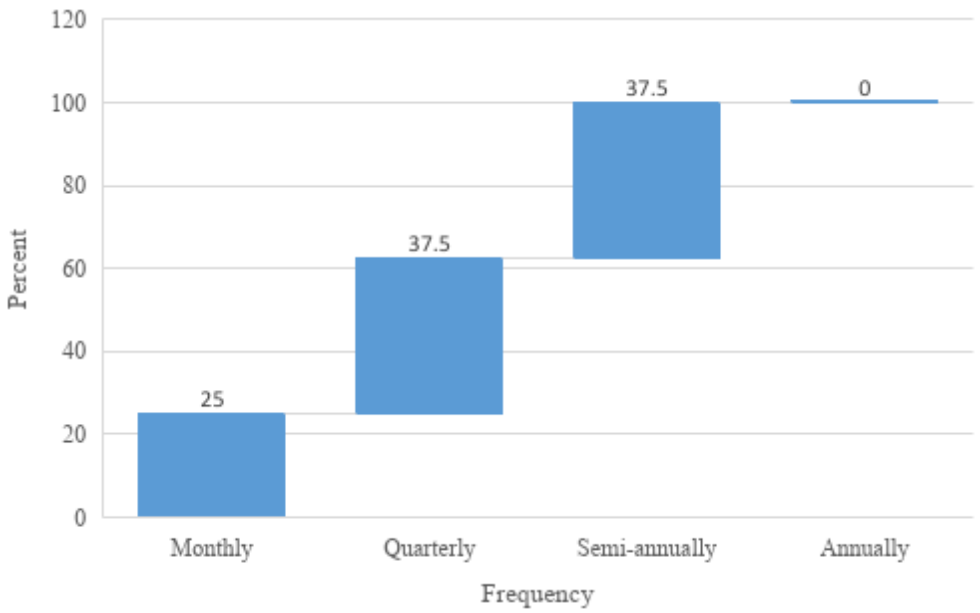

Figure 4.10: Frequency of conducting quality inspection

It can be seen from Figure 4.10 that most hotels do conduct quality inspection quarterly and semi-annually, with each accounting for 37.5%. Only 25% of the sampled hotels do conduct their quality inspections monthly. However, none of the hotels conduct their quality inspections annually. Despite absence of hotel that performs quality inspection annually, effective food monitoring and surveillance systems demand that the inspections should be conducted as frequently as possible. Success of such inspections is, nevertheless, pegged on tools used for monitoring and inspecting quality and safety. Figure 4.11 presents the proportions of different tools used for monitoring and inspecting quality and safety.

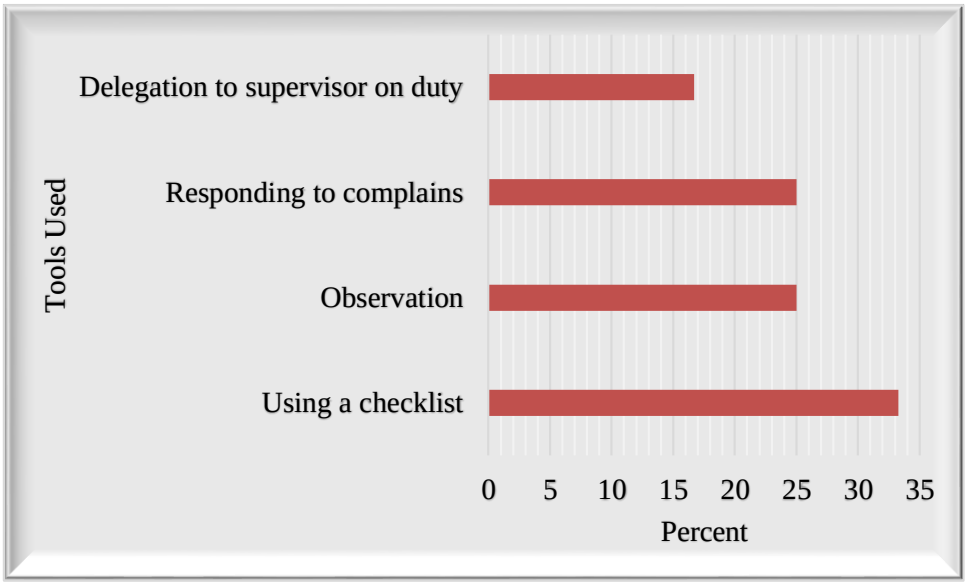

Figure 4.11: Tools for monitoring and inspecting quality and safety

In Figure 4.11, four tools were identified by the researcher and in each tool, there is at least a significant proportion of hotels that adopts it. Use of a checklist, nonetheless, exhibited a higher percentage (33.3%) compared to other tools, with the least adopted tool being delegation to supervisor on duty (16.7%). Responding to complaints and observation each accounted 25% of all responses. This observation implies that there is no uniformity in the tools used to monitor and inspect quality and safety. That is, each hotel adopts a tool or a combination of tools that it feels fits its operations.

4.8 Customer-Based Factors

In customer-based factors, the researcher focused on two areas, which were rating on the importance of some identified factors in determining customer destination choices and the level of agreement in various determinants in influencing customer destination choices. On the level of importance of some customer-based factors, a Five-Point Likert scale was used and hotel guests asked to rate the factors. The percentage distribution of the ratings in each factor was as shown in Table 4.16

Table 4.20: Customer-based factors

Customer-Based Factors	Least important	Less Important	Not important	important	Most important
	1	**2**	**3**	**4**	**5**
Customer's financial strength	8.3	4.2	16.7	58.3	12.5
Customer knowledge	16.7	50.0	0.0	12.5	20.8
Brand name	0.0	0.0	12.5	54.2	33.3
Price	0.0	0.0	4.2	54.2	41.7
Packaging	0.0	0.0	0.0	33.3	66.7
Average Percentage	**5.6**	**9.7**	**8.3**	**45.1**	**31.3**

Source: Survey data (2019)

From Table 4.16, we note that, on average, there is at least a confirmation in all the ratings. Using cumulative percentage totals such that we now have two categories of 'Important,' (combination of ranks 4 and 5) and 'Not Important,' (combination of ranks 1, 2 and 3), we observe that packaging is the most important factor (100%) while making destination choices. This factor is closely followed by price (95.9%) and brand name (87.5%). Using this compressed scale, we observe that customer knowledge is the least important with proportion of only 33.3% followed by customer's financial strength, which accounted for 70.8%. Nevertheless, the average percentages reveal that all the factors, on average, are significant since the compressed scale shows that the 'Important' category displays 76.4%. On how true the identified determinants influence the destination choices, responses were summarized as given in Table 4.17

Table 4.21: Determinants of destination choice

Determinants of Destination Choice	Definitely False	False	Neither	True	Definitely True
	1	**2**	**3**	**4**	**5**
Choice based on safety only	0.8	22.2	0.2	42.5	34.3
Choice based on both quality and safety	0.6	1.9	1.3	13.1	83.1
Product knowledge	0.6	17.3	20.3	48.2	13.7
Health motivation	0.6	9.1	19.7	35.7	34.9
Perceived benefit	3.2	17.1	20.5	38.3	20.9
Leadership	1.1	32.6	27.5	30.0	8.7
Average Percentage	**1.1**	**17.5**	**12.8**	**35.2**	**33.4**

Source: Survey data (2019)

To understand Table 4.17, we can use a similar approach of reducing the five-points scale to two-point scale of 'True,' (combination of ranks 4 and 5) and 'Not True,' (combination of ranks 1, 2 and 3). In this case, we observe that the most significant determining factor is choosing destination based on both quality and safety with 96.2% admitting that it is indeed a significant determinant. On the other hand, the least significant determinant is the type of leadership that exists in a hotel (38.7%). This implies that guests do not care much on the existing management as long as they are served to their satisfaction. Thus, to attract more customers, hotels should ensure high levels of food safety and quality. Cumulatively, we note that majority of the responses (78.6%) tended towards confirming that the stated determinants are significant in influencing destination choices.

4.9 Top Management Commitment

While exploring the moderation effect of top management commitment in the relationship between the independent variables and the dependent variable, various aspects were identified and respondents asked to rate how true the statements are, with regard to commitment of top management in ensuring quality strategies. A Five-Point Likert scale, where 1 = Definitely false,

2 = False, 3 = Neutral, 4 = True, 5 = Definitely true, was used for this question and summaries presented as shown in Table 4.18

Table 4.22: Responses on top management commitment

Aspects of Top Management Commitment	Min.	Max.	Mean	Std. Dev.	Skewness Coeff.
Having a clear mission on where the company should head on food safety and quality	1	5	4.63	.875	-3.387
Participating in annual food quality activities	4	5	4.54	.509	-.179
Having clear policies on food safety and quality	4	5	4.63	.495	-.551
Emphasis on personal leadership in food safety and quality management	4	5	4.63	.495	-.551
Visible demonstration of commitment to food safety and quality	2	5	4.58	.717	-2.246
Believes that employees are key to success in quality	3	5	4.42	.654	-.683
Encourages reporting of unsafe conditions	4	5	4.67	.482	-.755
Reporting food safety concerns if need be	4	5	4.58	.504	-.361
Understanding the mission and direction the company should go	4	5	4.79	.415	-1.534
Average	**3**	**5**	**4.61**	**0.57**	**-1.14**

Source: Survey data (2019)

From Table 4.18, it can be seen that despite some aspects having the low ranks of one (1) and two (2), the average rankings, nevertheless fall between rank three (3) and five (5). This implies that the responses tend towards 'True.' That is, the respondents were more likely to admit that top management is committed to ensuring high safety and quality with regard to the identified aspects. This is further confirmed by the values in the skewness coefficient column. All the coefficients of skewness for all the aspects were found to be less than zero ($S_k < 0$), a clear indication that most respondents agreed that the statements regarding top management commitment were true. Generally, having and understanding mission and direction the company should go and proper handling of unsafe conditions were among the top indications to top management commitment. This observation is based on the high mean ratings and high negative coefficient values.

4.10 Dining Destination Choice

As earlier noted, choice of dining destination was the dependent variable in this study. Both staffs and guests were asked the extent to which the previously discussed variables influence the choice of dining destination. Responses for guests were summarized as shown in Figure 4.12

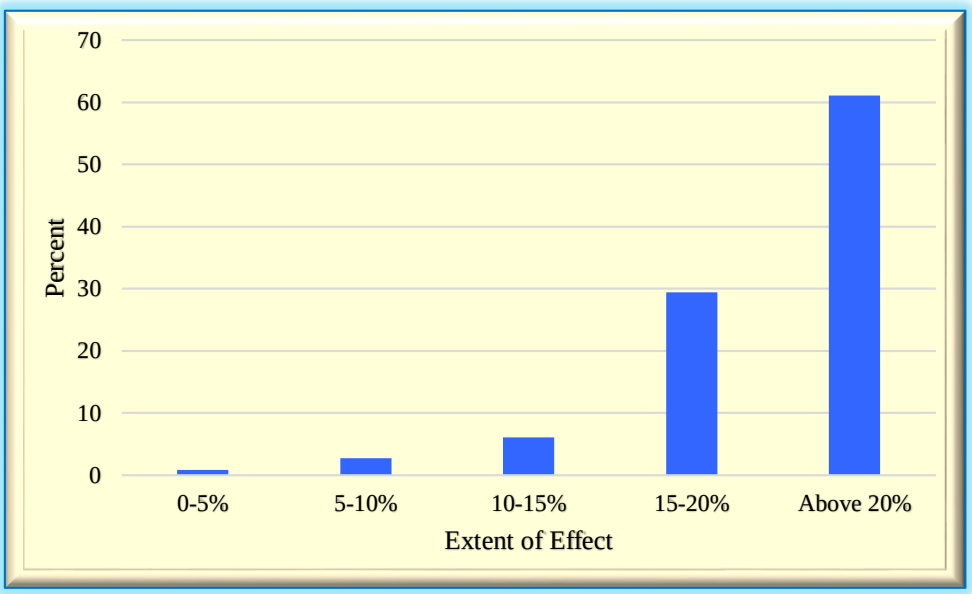

Figure 4.12: Extent of effect of food safety and quality on destination choice (guests)

From Figure 4.12, we note that more than half of the guests (61.1%) were in agreement that indeed food safety and quality related issues account for more than 20% of factors that influence dining destination choices. Cumulatively, more than 90% of the guests agreed that the identified factors have a more than 15% effect on customer dining destination choices. A similar trend was observed when hotel staffs were asked about the extent of effect of the pre-stated independent variables. The responses were summarized as shown Figure 4.13

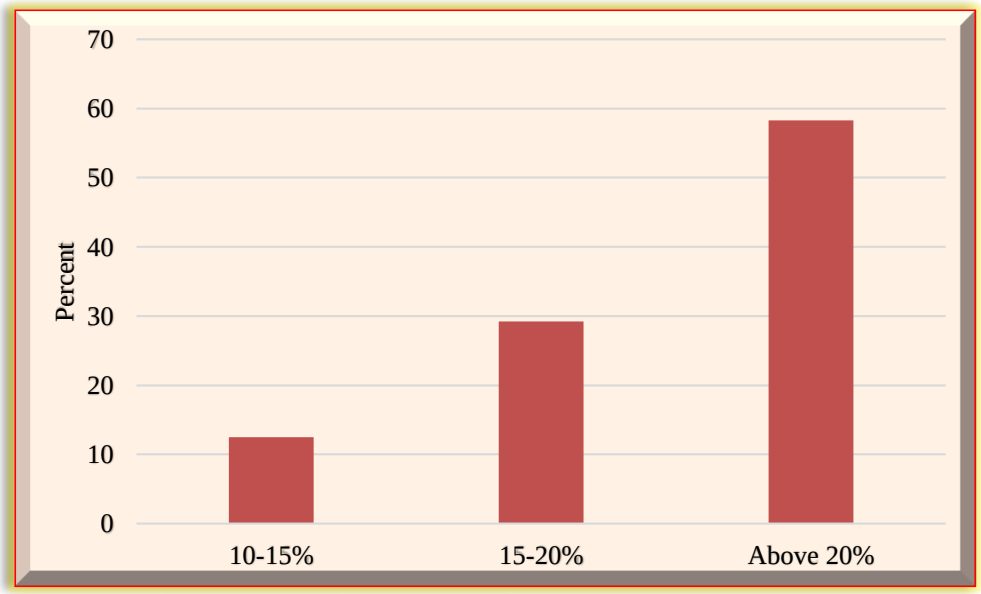

Figure 4.13: Extent of effect of food safety and quality (staff)

In Figure 4.13, we observe a general agreement that influences the independent variables on customer dining destination choices. The higher two categories of the extent of effects account for 87.5%. Unlike responses of guests (refer Figure 4.12), hotel heads generally noted a higher extent of effect than guests since Figure 4.13 does not include the least two categories. The observations given in Figure 4.12 and Figure 4.13 are, however, based on descriptive procedures. A clear picture on the nature and the significance of the effects can be best understood by performing regression analysis, which constitutes inferential statistical procedures. This is discussed in the subsequent sections.

4.11 Regression Analysis (quantitative Analysis)

In this research, regression analysis analyzed the direct and indirect effects of the study factors/variables on the choice of dining destinations of guests. Direct effects entailed measurements of how the three independent variables affect the choice of dining destinations. Indirect effects, on the flip side, involved investigating the moderation effect of customer-based factors and top management commitment on the connection between the independent variables

and the choice of dining destinations. However, diagnostics tests were implemented before these analyses to establish whether the collected data was viable for regression modeling. These estimation diagnostic tests conducted prior included linearity, homoscedasticity, multicollinearity, and tests for normality.

4.11.1 Normality Test

A test of normality is undertaken when the researcher intends to identify whether the data follows a normal curve distribution or whether it is skewed. This study used Shapiro-wilk test as a measure of normality, where the null hypothesis stated that the data collected was normally distributed while the alternative hypothesis negated the statement. The decision criteria was therefore to reject the null hypothesis in the case p-value < .05. Table 4.17 indicated the findings of normality test undertaken.

Table 4.23: Normality test

Study Variables	Shapiro- Wilk Statistic	df	Sig.	Comment
Food Quality	.623	24	.121	Normal
Food Safety Assurance	.705	24	.211	Normal
Food Safety Monitoring	.728	24	.109	Normal
Customer-Based Factors	.690	24	.450	Normal
Top Management Commitment	.787	24	.104	Normal

Source: Survey data (2019)

The findings as per the table 4.19 show the test statistics for the variables had scores between 0.6 to 0.8 where the p-values were all greater than 0.05. The study therefore failed to reject the null hypothesis and concluded that the data collected for all the study variables was normally distributed.

4.11.2 Linearity test

In the quest to regress variables, a major assumption made is that the variables may be expressed in a linear format. This therefore suggests that linearity test should be undertaken to clearly show

that it is possible to express the data in a linear format (Pilling *et al.*, 2008):(Cohen &Arieli, 2011). The study undertook a test that investigated the p-value or the significance of deviation from linearity that sought to seek the extent to which a variable deviated from linearity. This means that p-values below 0.05 were therefore indicated as having significant deviation from normality. The outcomes were summarized as demonstrated in the table4.20.

Table 4.24: Linearity test

Independent Variables	Significance of Deviation from Linearity (*p-value*)	Observation	Conclusion
Food Quality	.135	Deviation from linearity not significant	Linear relationship
Food Safety Assurance	.421	Deviation from linearity not significant	Linear relationship
Food Safety Monitoring	.325	Deviation from linearity not significant	Linear relationship

Source: Survey data (2019)

The table 4.20tabulates the results of linearity test which indicates p-values greater than 0.05 and therefore shows the variables did not deviate significantly from linearity. The variables could therefore be expressed in linear format (Galvao*et al.*, 2014). This was likewise affirmed by the significance of the corresponding correlation coefficients, which is subsequently examined in this chapter.

4.11.3 Homoscedasticity test

The principle of Homoscedasticity points out that changes of the dependent variable are consistent for all the levels of changes in the independent variables. It is also referred as the homogeneity of variances and this test is undertaken by the use of Levene's test. The test therefore is set to indicate whether the rate of change of the dependent variable is equal to the change by the independent variables at all levels. In the event that the test isn't significant (which happens when the probability

≥ 0.5), the fluctuations at all levels of the independent variables are not fundamentally different and are consequently approximately equivalent (Gastwirth *et al.,* 2009) many applications, the underlying scientific question concerns whether the variances of k samples are equal. There are a substantial number of tests for this problem. Many of them rely on the assumption of normality and are not robust to its violation. In 1960 Professor Howard Levene proposed a new approach to this problem by applying the F-test to the absolute deviations of the observations from their group means. Levene's approach is powerful and robust to nonmorality and became a very popular tool for checking the homogeneity of variances. This paper reviews the original method proposed by Levene and subsequent robust modifications. A modification of Levene-type tests to increase their power to detect monotonic trends in variances is discussed. This procedure is useful when one is concerned with an alternative of increasing or decreasing variability, for example, increasing volatility of stocks prices or "open or closed gramophones" in regression residual analysis. A major section of the paper is devoted to discussion of various scientific problems where Levene-type tests have been used, for example, economic anthropology, accuracy of medical measurements, volatility of the price of oil, studies of the consistency of jury awards in legal cases and the effect of hurricanes on ecological systems Results are as classified in Table 4.21.

Table 4.25: Homoscedasticity test

	Levene's Statistics	df 1	df 2	Sig.	Comment
Food Quality	8.024	2	20	.075	$p > 0.05$, hence equal variance
Food Safety Assurance	13.455	2	20	.059	$p > 0.05$, hence equal variance
Food Safety Monitoring	6.003	2	20	.320	$p > 0.05$, hence equal variance
Customer-Based Factors	7.128	2	20	.351	$p > 0.05$, hence equal variance
Top Management Commitment	6.405	2	20	.062	$p > 0.05$, hence equal variance
Dependent List: Customer Destination Choice					

Source: Survey data (2019)

Table 4.21demonstrates that the factors have diverse Levene's statistics. Notwithstanding, all the p-values are higher than .05. This means that fluctuations of the dependent variable across all levels of the variables are equivalent. (Pandey & Bright, 2008)proposes that the probability for the Levene's statistic ought to be more than 0.05 to meet the variance homogeneity supposition. Thus the homoscedasticity supposition is fulfilled. Consequently, the regression model for this research is suitable for investigation.

4.11.4 Multicollinearity

The concept of multicollinearity arises from the fact that independent variables are correlated to each other. In that case, the effect of the independent variable on the dependent variable is thereby reduced by the fact that it is related to another independent variable. Multicollinearity is tested by the use of tolerance values as well as by the use of Variance Inflation Factors (VIF). As clarified by (Garg & Tai, 2013)a tolerance value of 1 indicates that the independent variables are highly correlated to another independent variable and as such it would not be ideal to retain the two independent variables and as such the variable is dropped from the regression equation.

Notwithstanding, variation inflation factors (VIF) estimates the extent to which fluctuation of the assessed coefficients are increased to ascertain that there will be no correlation among the independent variables. In the instance that there exists no correlation between independent variables, then all the VIFs will be 1. In the event that VIF for one of the factors is near or more than 10, there is collinearity related with that variable and in this manner, the variable should be eliminated from the regression model(Garg & Tai, 2013).

Table 4.26: Multi-collinearity analysis

	Collinearity Statistics		
	Tolerance	VIF	Comment
(Constant)			
Food Quality	.439	2.276	No multicollinearity
Food Safety Assurance	.361	2.767	No multicollinearity
Food Safety Monitoring	0.5	2.000	No multicollinearity
Customer-Based Factors	.558	1.791	No multicollinearity
Top Management Commitment	.244	4.105	No multicollinearity
Average VIF	.514	1.946	No multicollinearity
Dependent Variable: Customer Destination Choice			

Source: Survey data (2019)

Table 4.22 Demonstrates that all the VIFs of the variables were below 10 and Tolerance higher than 0.1 respectively. As stated by Landau and Everitt (2004), VIFs of at least 10 or tolerance of at most 0.1 relay presence of multicollinearity. A high VIF was observed in Top Management Commitment (VIF = 4.105) on the other hand, a less VIF was brought forth in Customer-Based Factors (VIF = 1.791). In contrast, Customer-Based Factors yielded the highest tolerance value at 0.568 and Top Management Commitment produced the lowest tolerance value at 0. 244. This was indicative that implies that multicollinearity was non-existent and thus all the predictor factors were sustained in the regression model as this is in line with the standard established by(Garg & Tai, 2013).

4.12 Test of Hypotheses

Testing hypothesis set out to determine uni-dimensionality through the institution of Principal Component Analysis (PCA) of all the components. The study applied Caeser's test to single out the major factors that would be retained in the subsequent analysis. The factors that were found to have a maximum characteristic root of greater than 1 were therefore chosen through the use of Caesar's test ($\lambda \geq 1.0$). Various hypotheses were tested to measure the impact of the predictor

variables on customer destination choices. The study retained the significance level of 5% and as such the rejection rule detailed that the null hypothesis was rejected if p-value was not greater than 0.05 (p-value < 0.05).

The process was initiated by differentiating between direct and indirect relationship hypotheses. The direct relationship was comprised of the testing of $\mathbf{H_{01}}$, $\mathbf{H_{02}}$ and $\mathbf{H_{03}}$. Indirect relationship researched the effects of the moderating variables. This was undertaken by testing hypotheses $\mathbf{H_{04}}$and $\mathbf{H_{05}}$.

4.12.1 Direct relationship: effect of the independent variables on the dependent variable

In direct effect relationship, the researcher focused on the effect of the independent variables on the dependent variable. The tested hypotheses were, thus, formulated as follows

$\mathbf{H_{01}}$: There is no significant relationship between Food quality systems and customer choice of dining destination in the Four- Five Star hotels in Kenya

$\mathbf{H_{02}}$: There is a significant relationship between Food safety assurance and customer choice of dining destination in the Four- Five Star hotels in Kenya

$\mathbf{H_{03}}$: There is no significant relationship between food safety monitoring and surveillance systems and customer choice of dining destination in the Four- Five Star hotels in Kenya

That is, in this case, we are examining the influence of food quality systems, food safety assurance and food safety monitoring and surveillance systems on the customer choice of dining destinations. The corresponding regression model for the direct relationship was, therefore, expressed as

$$\boldsymbol{Destination\ Choice = \beta_0 + \beta_1 FQ + \beta_2 FS + \beta_3 FMS + \varepsilon} \quad (4.2)$$

Where:

FQ = Food quality

FS = Food safety assurance

FMS= Food monitoring and surveillance

Summary statistics of the regression analysis for test were summarized in Table 4.23

Table 4.27: Direct relationship summary

Model Summary					
R	R^2	Adjusted R^2	Std. Error	F Change	Sig.
.799	.638	.629	.474	5.864	.005

Regression Coefficients				
	Beta	Std. Error	t-statistics	Sig.
(Constant)	.271	.283	0.958	.054
Food Quality	1.266	.315	4.018	.015
Food Safety Assurance	.738	.230	3.209	.005
Food Safety Monitoring	.326	.109	2.995	.044

ANOVA					
	Sum of Squares	df	Mean Squares	F-statistics	Sig.
Regression	22.536	3	7.512	5.864	.005
Residual	25.620	20	1.281		
Total	48.156	23			

Dependent Variable: Customer Destination Choice
Predictors: (Constant), Food Quality, Food Safety Assurance, Food Safety Monitoring

Source: Survey data (2019)

Table 4.23 presents the summary of the regression analysis output for the direct effect. The table is divided into three parts, which are the model summary, regression coefficients and the ANOVA section. The model summary section gives the correlation coefficient (R) and the explained variation in the dependent variable accounted for by variation(s) in the independent variable(s). This section also tests whether the overall relationship between the independent variable(s) and the dependent variable is significant or not. This is done using the p-value of the correlation coefficient.

Regression coefficient section gives the model coefficients, the corresponding standard errors and whether they are significant or not. By using p-values of each regression coefficient, we can test

whether a given predictor variable has a significant effect or not. This test can also be done by comparing the computed t-values in the table against the tabulated t-values. The ANOVA section tests the fittingness of the model. That is, using the obtained p-value, one can test whether the obtained model best explains the collected data. The three sections of Table 4.21 are, thus, important in examining the nature and the significance of the effect of a predictor variable on a dependent variable.

From Table 4.23, we observe R-squared is 0.638, F-statistic is 5.864. R^2 is the coefficient of determination and explains that the model is able to express 63.8% of the variations in the dependent variables while the rest 36.2% is expressed by other factors not contained in the model. That is, variations in food quality systems, food safety assurance and food monitoring and surveillance systems only account for up to 63.8% of the variations in the choices in the dining destinations. The remaining 36.2% is an indication that there are other predictor variables not included in the model but actively influences customer choice of dining destinations. The observed standard error for the coefficient of determination, R^2, was found to be 0.474.

The overall effect of food quality systems, food safety assurance and food monitoring and surveillance systems on customer dining destination choice was found to be significant since the corresponding –value for R^2 was 0.005, which was less than 0.05 (P-value = 0.005< 0.05). Significance of this relationship can also be verified by checking whether the obtained model correctly fits the data using the results in the ANOVA section. It can be seen that the obtained F-ratio is significant with a corresponding P-value of 0.005 (< 0.05). This shows that model is correct and it can, thus, be used to test for the significance of the effect of each of the independent variable. This is done using the results in the regression coefficients section, where all tests were done at 5% level of significance. The constant in the equation was found to be 0.271. This term

nevertheless, was not significant at 5% level as the P-value was greater than 0.05 (0.054 >0.05). The hypothesis tests on the other hand, for the direct effect were performed as follows:

4.12.2 Relationship between food quality systems and dining destination choice

P-values were used for testing the hypothesis in regard to the significance of the regression coefficients. The criteria set to reject the corresponding null hypotheses (H_{01}: There is no significant relationship between food quality systems and customer choice of dining destination in Kenya) whenever P-value is less than 0.05. In Table 4.21, we observe that food quality systems had coefficient value of 1.266 while the findings indicated a standard error of 0.315, t-static was 4.018 and the study rejected the null hypothesis since the p value was less than 0.05 (p-value = 0.015) $\mathbf{H_{01}}$ and the conclusion arrived by the study is that the coefficient for food quality system is significant. This inference implies that food quality systems have a significant effect on customer's choice of dining destinations. That is, there is a significant relationship between food quality systems and customer's choice of dining destinations.

The same deductions can also be created by way of comparison of the t-statistics (= 4.018) and the tabulated t-score. In this scenario, the tabulated t-value is 2.069 (i.e $t_{0.025,\ 23} = 2.069$) and we reject the null hypothesis in the case where the computed t-statistics is higher than the tabulated t-value. Since 4.018 is greater than 2.069, we reject the null hypothesis $\mathbf{H_{01}}$ and make the conclusion that there is a significant relationship between food quality systems and customer's choice of dining destinations. Thus, based on the deductions on the two tests, there is strong evidence that food quality systems have a significant relationship with customer's choice of dining destination.

4.12.3 Relationship between food safety assurance systems and dining destination choice

From Table 4.23 we observe that food safety assurance, as an independent variable, had a coefficient of 0.738 with a standard deviation of 0.230 and a t-statistics of 3.209. The

corresponding p-value for this independent factor was established to be 0.005. Clearly, the p-value (0.005) is less than 0.05, directing that we reject $\mathbf{H_{02}}$ and make the conclusion that food safety assurance significantly influences dining destinations picked by guests. On the other hand, t-test give the same results directing to the rejecting $\mathbf{H_{02}}$ since the evaluated t-value (3.209) is greater than the tabulated t-score (2.069). In both cases, the two tests lead to rejection of $\mathbf{H_{02}}$**,** which is a confirmation that there is a significant connection between food safety assurance and choice of dining destinations.

4.12.4 Relationship between food monitoring and surveillance systems and dining choice destination

The regression coefficient for food monitoring and surveillance systems was found to be 0.326 with a standard error of 0.109. This coefficient was established to be significant at 5% level since the p-value was less than 0.05 (0.044<0.05) and subsequently, we reject $\mathbf{H_{03}}$ at 0.05 level of significance. Rejection of $\mathbf{H_{03}}$suggests that food monitoring and surveillance systems had a significant relationship with customer's choice of dining destinations. Also, from the t-test, the computed t-value (t = 2.995) was higher than the tabulated t $\left(t_{0.025,\ 23} = 2.069\right)$directing to the rejecting the null hypothesis $\mathbf{H_{03}}$. The two tests, therefore, produce consistent results in reaffirming rejection of $\mathbf{H_{03}}$, an indication that food monitoring and surveillance systems is significant in influencing customer's choice of dining destination.

4.12.5 Conclusion on the independent variables

From discussions in Sections 4.6.2, 4.6.3 and 4.6.4, we have observed that all the three hypotheses H_{01}, H_{02}, and H_{03} have been rejected. This implies that all the three independent variables have a significant relationship with the dependent variable. This further implies that we can express

customer's choice of dining destination as a function of food quality systems, food safety assurance and food monitoring and surveillance systems as shown below

$$\textit{Destination Choice} = 0.271 + 1.266FQ + 0.738FS + 0.326FMS \quad (4.3)$$

Model 4.3 gives the extents to which customer's choice of dining destination is influenced (either positively or negatively) with respect to a unit change in each of the independent variables. It is worth noting that though the constant coefficient is not significant, its inclusion in the model does not, however, have any effect on the direct relationship. As earlier mentioned, fittingness of this model is examined using the ANOVA test section. From the results, the ANOVA section shows that the independent variables significantly predict the dependent variable since *p-value*< .05. That is, food quality systems, food safety assurance and food monitoring and surveillance system significantly predict a choice of a dining destination. Therefore, the regression model given in Model 4.3 is a good fit of the data.

4.13 Indirect relationship: Effect of the moderating variables

In the analysis of the moderating effect of top management commitment and customer-based factors, two types of regression analysis were performed; one with interaction and one without the interaction effect. Also, testing for the moderation effect involved obtaining the composite variable for the independent variables. As explained in Chapter Three, the researcher used X to denote the composite variable of the independent variables and Z_1 and Z_2 to denote top management commitment and customer-based factors respectively. In this case, the tested hypotheses shall be

H_{04}: Top management commitment does not have any moderating effect on the relationship between food safety and quality on customer choice of dining destination in Kenyan Four-Five Star hotels

H_{05}: Customer-based factors do not have any moderating effect on the relationship between food safety and quality on customer choice of dining destination in Kenyan Four- Five Star hotels

4.13.1 Moderation effect of top management commitment

Testing for the moderation effect of top management commitment was guided by the following two linear regression models (without interaction and with interaction):

$Y = \beta_0 + \beta_1 X + \beta_2 Z_1 + \varepsilon$……. (i)

$Y = \beta_0 + \beta_1 X + \beta_2 Z_1 + \beta_3 (X*Z_1) + \varepsilon$…….. (ii)

Where;

Y	=	Customer destination choice	(Dependent variable)
X	=	Composite of FS and FQ & FSM	(Combined variables)
Z_1	=	Top management commitment	(Moderating variable 1)
$X*Z_1$	=	Interaction between Top Management Commitment and FS and FQ &FSM	
ε	=	the error term	
β_0	=	Constant (the intercept of the model)	
β_1	=	Regression coefficient for the composite FS and FQ & FSM indicators	
β_2	=	Regression coefficient for top management commitment	
β_3	=	Regression coefficient for interaction between top management commitment and customer destination choice	

Analysis for the regression model without interaction (given in (i)) was performed and the outputs summarized as shown Table 4.22

Table 4.28: Moderation effect of top management commitment without interaction

Model Summary					
R	R^2	Adjusted R^2	Std. Error	F Change	Sig.
.784	.554	.547	.675	4.091	.004
Regression Coefficients					

	Beta	Std. Error	t-statistics	Sig.
(Constant)	5.138	1.640	3.133	.002
X (FS, FQ &FSM)	.329	.109	3.021	.005
Z_1(Top management commitment)	.374	.125	2.990	.010

ANOVA

	Sum of Squares	df	Mean Squares	F-statistic	Sig.
Regression	15.954	2	7.977	4.091	.004
Residual	40.950	21	1.950		
Total	56.904	23			

Dependent Variable: Customer Destination Choice
Predictors: (Constant), X, Z_1

Source: Survey data (2019)

A result in Table 4.24 summarizes the results when moderation effect is disregarded. This ascertains that the independent variables were composite variable of FQ, FS and FMS aspects and top management commitment. The results showed that these two predictor variables explain only 55.4% of other variations in the decisions for dining destinations ($R^2 = 0.554$). The value of R-squared implies that the other 44.6% of all the variations in making dining destination choice are hardly considered by this model. However, study findings indicate that the variations which are explained by the model has significant relationship with food safety and quality as the p-value was found to be less than 0.05. ($p - value = 0.04 < 0.05$). In the regression coefficients section in Table 4.24, we observe that the entire regression coefficient is not only positive, but also significant $(p - values < 0.05)$. This is an indication that dining destination choice is significantly influenced by these two independent variables. Thus, the model that gives the effect of X and Z_1 on dining destination choice can be expressed as

$$\boldsymbol{Y = 5.138 + 0.329X + 0.374Z_1} \quad \text{..... (iii)}$$

As shown in Model (iii), dining destination choice is positively affected by FQ, FS, FMSM composite variable and top management commitment. For a single positive enhancement of X and $Z_1$for each case, would lead to a corresponding positive rate of influence on dining destination

choice by 0.329 units and 0.374 units respectively. There is however a limitation of the model in that it fails to describe the effect of the association between X and Z_1. It was also in accordance to the findings of the study that the fitted regression model (Model (iii)) was significant as shown by the results of the ANOVA test. The findings indicated that the ANOVA F-Statistic was significant at 5% significance level.

Table 4.29: Moderation effect of top management commitment with interaction

Model Summary					
R	R^2	Adjusted R^2	Std. Error	F Change	Sig.
.828	.686	.676	.582	5.177	.001
Regression Coefficients					
		Beta	Std. Error	t-statistics	Sig.
(Constant)		1.784	3.110	1.743	.067
X		2.301	.782	2.943	.030
Z_1		1.862	.490	3.801	.018
Interaction		2.229	.150	14.86	.004
ANOVA					
	Sum of Squares	df	Mean Squares	F-statistic	Sig.
Regression	14.833	3	4.944	5.177	.001
Residual	18.90	20	.945		
Total	33.733	23			
Dependent Variable: Customer Destination Choice **Predictors:** (Constant), FSQ, TMC, Interaction of FSQ and TMC					

Source: Survey data (2019)

This model was also deliberate in investigating the interaction effect where in this case the independent variables were X, Z_1 and interaction of X and Z_1. When interaction variable was considered in the model, the explained variation in firm performance was found to increase to 68.6% ($R^2 = 0.686$) with an adjusted R-squared value of 0.676. This explained variation was significant as indicated by the output; $p - value = 0.001 < 0.05$. The study also indicated that the effects of all the independent variables were positive $(\beta's > 0.00)$. All the regression co-efficients were similarly found to be significant, which follows the findings of the model without interaction

($p-value = 0.001 < 0.05$). The resultant model that expressed the relationship between the study variables was therefore transformed into;

$Y = 1.784 + 2.301\ X + 1.862\ Z_1 + 2.229(X*Z_1)$ ……. (iv)

As seen in Model (iv), when interaction is included in the model, the effect of any improvement in X, Z_1 and interaction of X and Z_1 by a single unit results to a corresponding positive rate of influence on dining destination choice by 0.755 units, 0.862 units and 0.229 units respectively. Similarly, this model (Model (iv)) was found to correctly describe the collected data since the F-ratio for the ANOVA test was significant at 0.05 significance level.

4.13.2Moderation effect of customer-based factors

In this case, we test hypothesis **H_{05}**. Similar to moderating effect of top management commitment, two regression analyses were performed: one excluding the interaction effect and another involving the interaction effect of customer-based factors and the three independent variables in the study. The guiding models were, thus, expressed as follows:

$Y = \beta_0 + \beta_1 X + \beta_2 Z_2 + \varepsilon$ ……..……..….. (v)

$Y = \beta_0 + \beta_1 X + \beta_2 Z_2 + \beta_3 (X*Z_2) + \varepsilon$ ……...……..….. (vi)

Where;

Y	=	Customer destination choice	(Dependent variable)
X	=	Composite of FS, FQ & FSM	(Combined variables)
Z_2	=	Customer-based factors	(Moderating variable 2)
$X*Z_2$	=	Interaction between Customer-Based Factors and Food Safety and Quality	
ε	=	the error term	
β_0	=	Constant (the intercept of the model)	

β_1 = Regression coefficient for the composite food safety, quality and food monitoring systems indicators

β_2 = Regression coefficient for customer-based factors

β_3 = Regression coefficient for interaction between customer-based factors and Composite of food safety, quality and food safety monitoring systems

In the first case of regression analysis without interaction effect, the following output in Table 4.26 was obtained

Table 4.30: Moderation effect of customer-based factors without interaction

Model Summary					
R	R^2	Adjusted R^2	Std. Error	F Change	Sig.
.796	.513	.510	.501	14.951	.025
Regression Coefficients					
		Beta	Std. Error	t-statistics	Sig.
(Constant)		1.624	.771	2.106	.041
X (composite of FS, FQ & FSM)		.838	.421	1.991	.005
Z_2 (customer based factors)		.941	.372	2.530	.002
ANOVA					
	Sum of Squares	df	Mean Squares	F-statistic	Sig.
Regression	23.470	2	11.735	14.951	.025
Residual	476.84	524	.910		
Total	500.31	526			
Dependent Variable: Customer Destination Choice **Predictors:** (Constant), X and Z_2					

Source: Survey data (2019)

Table 4.26 gives the regression analysis by taking the independent variables as FQ, FS and FMS (X) and customer-based factors (Z_2). The model summary section indicates that X and Z_2 explain only 51.3% of the total variations in customer's destination choice ($R^2 = 0.513$). The remaining 48.7% of the total variation in the choice of dining destinations are not explained by factors included in the model. The adjusted R-squared value was found to be 0.510 and the overall model

standard error of 0.501. This relationship was significant ($p-value=0.025<0.05$).In the regression coefficients section, the respective regression coefficients for X and Z_2 were 0.838 and 0.941 and the corresponding standard errors were 0.421 and 0.372 respectively. Based on the respective p-values, the two predictor variables were found to be significant and consequently, the regression model showing the relationship between Y and X and Z_2 was expressed as

$Y = 1.624 + 0.838\ X + 0.941\ Z_2$ ……..….. (vii)

Using the ANOVA test results, Model (vi) correctly explains the collected data since the computed F-ratio is significant at 5% level of significance (that is 0.025 < 0.05).

When the interaction effect of X and Z_2 was included in the model and regression analysis conducted, the output was summarized as shown in Table 4.26. In this case, the predictor variables were X, Z_2 and interaction of X and Z_2.

Table 4.31: Moderation Effect of customer-based factors with interaction

Model Summary					
R	R^2	Adjusted R^2	Std. Error	F Change	Sig.
.680	.463	.460	.951	2.848	.059
Regression Coefficients					
		Beta	Std. Error	t-statistics	Sig.
(Constant)		2.821	2.432	1.160	.055
X		3.225	2.401	1.343	.102
Z_2		5.405	4.801	1.126	.250
Interaction		3.741	4.289	0.872	.061
ANOVA					
	Sum of Squares	df	Mean Squares	F-statistic	Sig.
Regression	15.816	3	5.272	2.848	.059
Residual	968.073	523	1.851		
Total	983.889	526			
Dependent Variable: Customer Destination Choice **Predictors:** (Constant), X, Z_2, Interaction of X and Z_2					

Source: Survey data (2019)

From Table 4.27, we note that when interaction was included in the model, the explained variation in firm performance reduced to 46.3% (R^2). This explained variation was, however, not significant since $p-value=0.590>0.05$.This lack of significance of the model is attributed to the introduction of the interaction variable. For this analysis, the regression coefficients for the predictor variables X, Z_2 and interaction of X and Z_2 were found to be 3.225, 5.405 and 3.741 respectively, with a corresponding standard error of 2.401, 4.801 and 4.289. It can be seen that none of these coefficients is significant at 5% level of significant. Again, we can deduce that this lack of significance is attributed to introduction of the moderating variable. Nevertheless, using these coefficients, we obtain the regression model

$Y = 2.821 + 3.225\,X + 5.405\,Z_2 + 3.741\,(X*Z_2)$ ……..……. ….. (viii)

The result in the ANOVA test, however, indicates that Model (viii) does not correctly fit the collected data. This inference is due to the fact that the F-ratio is not significant at 5% ($p-value=0.59>0.05$), implying that the effect of customer-based factors is not as shown in Model (viii).

4.13.3 Summary of the moderating effects

For the analysis of the moderating effects of top management commitment and customer-based factors, the results can be summarized as shown in Table 4.28

Table 4.32: Summary of the moderating effect of top management commitment and customer-based factors

Variable	Before Moderation		After Moderation		Significance of change	Implication of change
	Coeff.	p-value	Coeff.	p-value		
Top Management Commitment						
X	0.329	0.005	2.301	0.030	P-value = 0.030 < 0.05	Z_1 is a moderating variable P-value < 0.05
Z_1	0.374	0.010	2.229	0.004	P-value = 0.004< 0.05	
Customer-Based Factors						
X	0.838	0.005	3.225	0.102	P-value = 0.102> 0.05	Z_2 is explanatory variable since P-value > 0.05
Z_2	0.941	0.002	5.405	0.250	P-value = 0.250>0.05	

Source: Survey data (2019)

It can be seen from Table 4.28 that after moderation, top management commitment still remains significant. This observation is, however, not made in customer-based factors. Moderation makes customer-based factors, as a moderating variable, a non-significant moderating variable but a significant explanatory variable. This variable is, thus, a predictor variable and not a moderating variable.

Further, summary of how the study hypotheses were tested is summarized in Table 4.29

Table 4.33: Summary of hypothesis testing

Variable Category	Variable Definition	Beta	P-value	Decision
Independent Variables	Food Quality	1.266	0.015	Reject H_{01}
	Food Safety Assurance	0.738	0.005	Reject H_{02}
	Food Safety Monitoring	0.326	0.044	Reject H_{03}
Moderating Variables	Top Management Commitment	2.229	0.004	Reject H_{04}
	Customer-Based Factors	5.405	0.250	Accept H_{05}

Source: Survey data (2019)

CHAPTER FIVE: DISCUSSION

5.0 Introduction

This chapter expounds on the findings of this research. Both the quantitative and qualitative approaches were used to answer specific research hypothesis as identified in section 1.3.1. The results are discussed in context of previous research, the theories in the study and also interpretation of empirical data.

Several hypotheses were tested to establish the impact of the predictor variables on customer destination choices. The hypotheses were tested at 5% level of significance and thus, the rejection rule was to reject the null hypothesis whenever p-value < 0.05. The hypotheses were divided into two parts: direct relationship hypotheses and indirect relationship hypotheses. Direct relationship examined the impact of the independent variables (food quality, food safety and food monitoring and surveillance) on the dependent variable (Choice of destination). Indirect relationship investigated the effects of the moderating variables (customer based factors) and top management commitment. This was performed by testing hypotheses. The results are discussed below.

5.1 Assess the relationship between food quality and customer choice on the dining destination in Kenya.

Food quality is amongst the most pertinent components geared towards diner's satisfaction irrespective of the eatery they take their food from (Grunert, 2005). Food quality greatly impacts consumers to have an intention to revisit (Emond & Taylor, 2018). The interest for top notch food has continually expanded during recent decades, as has the premium in the food quality issue both because of market pressure (like solicitations from progressively demanding and learned consumers) and furthermore as a response to different elements, for instance wellbeing and environmental concerns (Mascarello *et al.,* 2015).

From Table 4.7, results of this study indicated that almost all the guests (98.9%) agreed that food quality is one of the key factors to consider while deciding on which hotel to visit. The results also indicated in figure 4.4 on the compressed responses that (51%) of the respondents agreed that food quality is of highest importance. This is in agreement and consistent with (Grunert, 2005); (Röhr*et al.,* 2005). Additionally, (100%) awareness level of managers and chefs on food quality was, thus, a point of strength for the managers and executive chefs to effectively modify various aspects of food quality in order to gain an upper hand in competition over other hotels. (Zhang, 2001) recommended that ability of a hotel to compete effectively is as a result of its quality practices. This is explicitly clear with (Shaharudin, 2011) who argued that in the current state of affairs, hotel guests have developed into a more demanding lot, full of criticism, and more differentiated in their food selections and their food purchasing decisions.

It can be seen from Figure 4.5, guests, top two ratings accounted for 80%, for managers, the top two ratings accounted for 98.7%. This observation implies that almost all managers and guests were in agreement with the researcher that the identified aspects of quality were important while handling food quality issues. Quality assessment comprises of two phases; The first goes before the buying act, and the subsequent one is identified with what occurs after the buying act while consuming the food. In relation to the food quality assurance theory, a guest goes through three stages when purchasing food: pre- purchase, during purchase and post purchase. With respect to initial phase, at the point-of-purchase, consumers exude both express cues (cost, colour, and guarantees) and unpretentious signals that are portrayed by packaging design, similar to visual communication, material, and color(van Ooijen *et al.,* 2017).

From Table 4.8, the study observed that the top three aspects that were considered to be highly important while referring to food quality, included taste (n = 426), freshness (n = 393) and good

condition (n = 330). On the other hand, top three aspects that were considered to be least important included quality mark (n = 191), appearance (n = 163) and being natural or organic (n = 154). This observation provides an insight on which aspects of food quality to focus on while adjusting food flow procedures meant to improve food quality.

Researchers characterize food quality utilizing six components. Food quality is gauged by utilizing presentation, variety, healthy alternatives, taste, freshness and temperature. Consumer's fulfillment and their aim to return to or demeanor towards the eatery relies upon how well these six components are presented. Presentation is characterized as the manner in which food is plated on, and its allure. Which means it ought to be well balanced in contrast, color, textures and shape. This is a significant cue of the consumer's impression of quality(Grunert, 2005). According to (Iacobucci et al., 2019) on his findings and contribution featured the significance of food quality assessment for wellbeing and environment security, and built up a structure for the comprehension of food quality assessment dependent on the examination of Romanian and Belgian food buyers. The outcomes stressed that the researched buyers allocated high attention regarding food quality and utilized taste, freshness, and appearance the most predominant in food quality. The utilization recurrence of food quality cues related to wellbeing was fundamentally impacted by the attention paid to food quality. The packaging was the main marker of the environmental effect of food, in this way featuring a potential intercession for less contamination and resource consumption connected to packaging, which can be all the more effortlessly accepted by the buyers. Environmental security, healthy eating regimens, and human advancement are inter-dependent.

From the outcomes got in Table 4.21, we see that food quality had a coefficient value of 1.266 with a standard error of 0.315 and a corresponding t-statistic (or calculated t-value) of 4.018. Since

the corresponding p-value (= 0.015) is under 0.05, we reject the null hypotheses H_{01} and infer that the coefficient for food quality system is significant. This surmising infers that food quality significantly affects consumer's decision of dining destinations. That is, there is a significant connection between food quality systems and client's decision of dining destinations. This is affirming Nordenskjöld, (2012)'s deductions that quality food is correlated with client's decision of destination. In a similar research undertaken by Nordenskjöld, a regression model was utilized to test the proposed connection between nearby cuisine experience and destination fulfillment. Four components were utilized as independent factors to comprehend their impact on destination fulfillment, of which food quality was among them. The overall model was discovered to be significant at 0.01 ($F = 47.738$, $p < 0.01$). The model clarified 42.9% of the variance for destination fulfillment, with a R^2value of 0.429. In particular, the model showed that food quality (= 0.218, $p < 0.01$), emphatically influenced the destination fulfillment of travelers. This finding thus recommends that food quality is predominant constituent of customer decision in dining destinations decision through extant empirical evidence. Great quality food prompted destination determination and low quality prompted rejection of the destination.

Various eatery studies have revealed that food quality is a significant trait that is considered when restaurant adherents settle on dining destination decisions (Johns and Pine, 2002; Soriano, 2002). Magnificent food quality guarantees eatery loyalist that different components of their dining experiences, for example, food taste and mindful service, will satisfy their expectations (Ha & Jang, 2010a). These investigations were consistent with (Grunert, 2005). discoveries on his investigation on the conflict of decision and how consumers pick where to go, the research affirms that greater part of respondents favored the eatery choice with great quality food regardless of whether its price was generally high; the greater part of the respondents favored utility acquired

from food quality over price. On the contrary, favorability for service quality over price was not really that strong as that for food quality.

This result is consistent with the total food quality Model (TFQM) which is cognizant of the fact that before guests make their purchase decisions, they have to determine the safety and food quality in food products. The customer has to identify the intrinsic or extrinsic quality cues which relate to the product (Ha & Jang, 2010b).

Results of the repeated proportions of logistic regression assessing the impact of respective attribute levels on the decision of hotel utilizing Model diagnostics were satisfactory at a Chi-square statistic of 481.60 with 5 degrees of freedom = 481.60 and significant at $p < 0.001$. True to form, the coefficient on great food quality was statistically significant at $p < 0.001$ with a positive impact on respondents picking the hotel. Unexpectedly, poor food quality had a significant, adverse effect at $p < 0.001$. The chances of an eatery with great food quality being chosen over that with normal food quality was 3.387 to 1, while the chances of a hotel with poor food quality had the odds of 0.091 to 1 of being chosen over hotels with normal/average food quality.

A regression analysis undertaken to establish the moderation impact of senior management on food quality (table 4.22 and Table 4.23) shows that both Model (iii) (without interaction) and Model (iv) (with interaction) really fit the gathered data since the corresponding p- values were under 0.05. These p-values inferred that the connections depicted by Model (iii) and Model (iv) are right and significant.

In view of the results for the models with and without interaction effect, p-values for regression coefficients and the ANOVA test, the investigation concluded that the interaction effect is significant (<0.05). This was likewise upheld by the fact that there was an increment in the clarified

variation when the interaction variable was inculcated in the model (from 55.4% to 68.6%). The research accordingly, dismissed the null hypotheses **H_{04}.** This inferred that top Management commitment moderating affects the connection between food quality and safety aspects and consumer's dining destination decision.

5.2 Determine the relationship between food safety assurance and customer choice on dining destination in Kenya.

A study undertaken by(Mburu &Paulos, 2010)affirmed that one of the variables that impact customers to pick hotel destinations among rivalry is based on food safety. This implies that the presence of perceived dangers can adversely affect purchasers' food choice decisions (Griffith *et al.,* 2010). As indicated by (Jevšnik *et al*., 2008b), food safety keeps on being an issue in the food service industry and since food-borne diseases outbreaks ceaselessly occur, keeping a healthy environment ought to be the first concern for food entrepreneurs.

Results got from Figure 4.6, indicate that practically all respondents (94%) concurred that food safety assurance is a choice factor while deciding on a destination. Like food quality, it was brought forth that just a little fraction of visitors (6%) reacted that food safety assurance is certainly not a key choice factor. Again, this little proportion could be the individuals who visited the hotel for different reasons other than for taking a meal. Since lion's share of the respondents have concurred that food safety assurance is a key choice factor, this meant that the variable was accurately set as an independent variable. Luckily, customers particularly in the developed countries, know about these food safety risks and have gotten more discriminative with their food product decisions (Röhr *et al.,* 2005).

Hertzman & Barrash (2007), on their study whose purpose was to examine the food safety information and practices of catering workers in one of the cities in the Southwestern United States

affirmed that the performance of workers, paying little attention to their food safety and sanitization information (in light of the study results), was less than anticipated. A lion's share of workers understood what proper procedures and prerequisites in food safety involved, however, they neglected to follow them during the execution of a task, either in the kitchen or in the dining area and whether or not the function was on premise or off premise. This absence of worker execution was additionally apparent whether or not they were working at corporate or independently catered food occasions and whether the worker was a part-time or full-time worker of the employer. These discoveries were like that of (Howes, 1996) who additionally saw that workers' food safety knowledge doesn't generally convert into good food safety practices. Numerous researchers (Griffith *et al.,* 2010); (Green *et al.,* 2005); (Disanto *et al.,* 2021). likewise found that food safety training was not adequate to urge workers to perform desirable food safety and sanitation observances.

Furthermore, there was an appearance of an absence of oversight by the catering managers during the catering occasion. It is conceivable that if these administrators had circled more information during the occasions, the workers would have been bound to follow the proper food safety procedures realizing they would be reprimanded for below par procedures. Research conducted by researchers Green *et al.,* (2005)discovered that monitoring and surveillance plays a huge part in the degree to which food workers participate in safe food preparation practices. Shockingly, even with the knowledge that the researcher’s analysts were keenly noticing them for appropriate food safety and sanitation practices, the workers didn't endeavor to follow these practices. Aside from the executives, full-time, workers with longer years catering experience, who are in an administrative job, are more likely to perform appropriate hygiene procedures, than their counterparts. This being the situation, it is very important to comprehend why the management

should zero in on training more youthful and less experienced workers. Significant incongruities were noted in the overall knowledge if those individuals who were trained, contrasted with the individuals who were not. (Hertzman &Barrash, 2007) study affirmed that there is an absence of temperature checking in food products, particularly in high-risk products. The current study additionally found that temperature was not satisfactorily monitored in the back-up of food products. The two investigations established that workers neglected to practice of appropriate procedure of wearing gloves when working around ready to eat food.

In food safety assurance, identified aspects included hygienic and presence or absence of physical, chemical and microbiological contaminants. Figure 4.7 and table4.9 indicate an above average number of the staff-respondents (57%) were in agreement that all the identified aspects of food safety (hygiene, physical contaminants, chemical contaminants and microbiological contaminants) are highly important. This is in agreement with (Rohr *et al.*, 2005) that food purchasers, particularly in the developed countries, know about these food safety hazards and have gotten more discriminative with their food item decisions.

This result is consistent with the health believe model that draws its focus on individual representation on the health behavior. In this case guest will be conscious to purchase food items that will cause health effect when consumed according to the intended use (Green, et al; 2020).

From Table 4.10, it is brought to light that most hotel heads and/or departmental heads have knowledge of HACCP (Yes = 70.8%) as one of the safety assurance frameworks contrasted with other listed frameworks followed by Good hygiene adherence (Yes = 66.7%). As per the reactions, the least known frameworks are Good manufacturing process (Yes = 33.3%) and Assured safe cooking (Yes = 33.3%). This result ought to be utilized by the hotel heads to know which areas to zero in on while illuminating their workers on food safety assurance frameworks. Notwithstanding,

utilization of HACCP has been a significant challenge in developing nations in light of informal food markets (Mwangi *et al.,* 2000). It is noted with worry that the primary driver of food safety crisis in developing nations, for example, Kenya is rarely investigated(Chen *et al.,* 2017). With various regulatory frameworks, non-industrial nations ought to recognize their own specific manners to advance social co-regulation of food safety according to their particular market and institutional characteristics (Chen *et al.,* 2017). Eco-innovation has become a core engine for long-term stable economic development, as well as a fundamental way to ease the tension between economic growth and environmental resources management. Through the construction of a measurement index system, this paper evaluates the level of regional eco-innovation in 30 Chinese provinces from 2000 to 2014. This paper also employs panel data analysis to study the factors that influence Chinese regional eco-innovation. The results show that, during the observation period, the levels of eco-innovation increased significantly overall. However, the regional comparison of the eco-innovation index revealed an obvious, gradually decreasing distribution pattern from east to west. Factors such as technology push, market pull, and environmental regulation pull have positive but differentiated influences on the eco-innovation throughout China and among the eastern, central and western regions. Based on these heterogeneous influences and the targets of ecological civilization construction, promoting the regional synergy of technology push, market pull, and environmental regulation pull is necessary to improve the level of eco-innovation in eco-innovation (Chen *et al.,* 2017).

The output from hypothesis testing on food safety assurance (See Table 4.21), as an independent factor, had a coefficient of 0.738 with a standard deviation of 0.230 and a t-statistics of 3.209. The relating p-value for this independent factor was discovered to be 0.005. Out rightly, the p-value (0.005) is under 0.05, inferring that we reject $H_{02}$and deduce that food safety assurance

significantly impacts on the dining destinations selected by guests. Then again, t-test likewise leads to a similar decision of dismissing H_{02} since the calculated t-value (3.209) is greater than the tabulated t-score (2.069). In the two cases, the two tests lead to dismissal of H_{02}, which is an affirmation that there is a significant connection between food safety assurance and choice of dining destinations.

5.3 Determine the relationship between food monitoring and surveillance systems and customer choice on dining destination in Kenya.

This study was geared towards finding out if there exists a connection between monitoring and surveillance systems and customer choice on dining destination. The monitoring included systems, tools and processes used.

5.3.1 Food safety and quality monitoring systems

Figure 4.8: shows results generated from this study indicating that majority of restaurants do up-take certification and labeling and testing, accounting for 41.7%. Subsequently, what followed is ISO 9000, which accounted for 25%. Voluntary standards and ISO 22000 accounted for 20.8%.

To ensure effective food safety and quality monitoring and surveillance systems, proper procedures should be taken to ascertain that what is eaten is safe and is of high quality when flowing from farm to fork. That is, care should be taken at all main food flow stages to ascertain that food safety and quality is not compromised. Main stages included selection of food suppliers, receiving food, storage of already supplied food, food preparation, holding food for service, food preservation and reheating food. Using a Five-Point Likert Scale, respondents were asked to indicate the level of quality and safety inspection in managing main food flow stages (see Section D, Appendix 1),

From Table 4.11, we have the ratings maximum, minimum, mean and standard deviation. The table also gives the coefficient of skewness, which is a measure of distribution of the responses.

In the minimum and maximum columns, we observe that the level of safety inspection in managing main food flow stages is either applicable (rating = 4) or very applicable (rating = 5). This finding implied that there was a unanimous agreement that at all the stages of food flow, food safety inspection is very crucial. Additionally, since the certification testing and labeling had 41.7% is a mandatory monitoring system by the government, this explains why many hotels will go in for it.This is in accordance with research undertaken by(Sikora & Nowicki, 2007) which noticed that, numerous food handling firms are as of now battling to accept highly recommended food safety and quality management frameworks to fulfill clients' needs.

The column for mean indicates that preservation stage had the highest mean while reheating stage had the least mean. This implies that of all the stages identified, there was a high response that food quality and safety inspection was very applicable in the preservation stage. This is also evident in the standard deviation column, where we note that preservation system, as a food flow stage, has the lowest standard deviation compared to other stages in the food flow. In the same scale, to determine which stage has a dense cluster towards 5, the researcher used the absolute coefficient values. Using this approach, the researcher observed that the top three stages that require serious application food safety and quality inspection are preservation stage (S_k = -1.91), food preparation (S_k = -1.534) and holding food for service (S_k = -0.979) stages. This therefore means that managers must take care in these stages in order to avoid gaps leading to contamination. As recommendedby (Oloo, 2010), quality Framework and compétitive performance of food films is distinguished by food safety. There exits a positive and critical connection between the combined viable exécution for food quality standards and compétitive performance of certified food organisations. The researcher concluded that managers of companies dealing in food can

increase competitive performance for hotel, if these companies will seamlessly uptake and uphold the principles and align to the demands of these standards.

5.3.2 Food safety and quality monitoring tools

In Figure 4.11, four tools of monitoring safety and quality were identified by the researcher and in each tool; there is at least a significant proportion of hotels that adopts it. Use of a checklist, nonetheless, exhibited a higher percentage (33.3%) compared to other tools, with the least adopted tool being delegation to supervisor on duty (16.7%). Responding to complain and observation each accounted 25% of all responses. This observation implies that there is no uniformity in the tools used to monitor and inspect quality and safety. That is, each hotel adopted a tool or a combination of tools that it felt fits its operations. Ruth et al., (2013) on her research on risk calculation system and approval of food safety hazard in worldwide travel destinations distinguished food safety devices as one of the components that can improve travel destination good-standing, Marketing exercises and Precaution measure hazard reduction, particularly associated with food safety hazard in global destinations. All things considered, Kenya is still at its outset stage with a variant of difficulties, for example, absence of transparency and self-restraint in food handling, reluctance to collaborate between crude material providers. Furthermore, an absence of monitoring and detection framework additionally makes it hard to control the business (Zhang, 2001); (Chen *et al.*, 2017).

From a policy point of view, establishments should build and keep up satisfactory food safety frameworks and infrastructures (for example labs) to react to and oversee food safety hazards along the entire food chain, including during crises; and furthermore incorporate food safety into more extensive food programmes and policies.

5.3.3 Considerations When Choosing Food Supplier

Supplier quality management is a vital piece of SCQM procedures as it is the primary phase of total quality management (Gu *et al.,* 2017). Interactions between food production and suppliers that are not healthy can prompt opportunistic practices and disregards of item security; both can bring about potential food safety issue in the food supply chain with serious results which can't be easily identified at the start (Hong *et al.*, 2020).

From Table 4.12, the researcher observed that the minimum response rating is 1 while the maximum rating is 3, an indication that most responses were on the very large extent rating. Responses that tend to the "Very large extent" is also evident in the means of each factor. As shown in Table 4.12, all the mean ratings fall between "Very large extent" and "Large extent." A low mean rating, for example as seen in 'Safety program in place' implies that most responses on this factor agreed that while choosing food supplier, safety programs in place are extremely significant. Compared to the least mean rated factor, which is whether the supplier trains on food safety or not (mean = 1.72, approx. 2), the mean rating value is an indication that though this factor is significant, it is not as strong as 'Safety program in place.'

With globalization, food store network has gotten progressively unpredictable. This exasperates the vulnerability and information asymmetry in the supply network and makes observing of food safety more challenging (Validi *et al.,* 2014);(Darkow *et al.,* 2015). As indicated by (Hong *et al.,* 2020). all food makers are liable for guaranteeing food safety. In this way, they should focus on the quality and wellbeing of crude materials utilized in the production process. The most important devices of ascertaining that superior quality of crude materials is free from hazards is the best method of getting risks far from the food and the manufacturing facility. The approach upheld for food safety should cover the whole supply network, beginning with providers (Trafialek & Kolanowski, 2014).

Considering the incessant food safety occurrences, the scholarly community and industry have started to focus more on supply chain quality management (SCQM) to guarantee food safety by zeroing in on the improvement of quality traceability framework, quality safety framework, quality risk investigation, and quality coordination system, among others(Aung & Chang, 2014). Most examinations on food safety center around purchaser and enterprise conduct, as well as guidelines made by government and social institutions. There is an absence of investigation of the core issues, for example, the jobs of various actors in social governance and the cooperative synergies acquired from coordinated effort between actors.

This infers that a provider should have his own quality framework set up, which should fulfill certain industry guidelines. This program should incorporate; self-inspection programs; raw material and finished items examinations, incoming products and trailer investigative programs; outbound trailer assessments; coded cleaning methodology; an expert disinfection plan; a documented review program (including the capacity to perform mock reviews); a HACCP program; a coded isolation strategy; allergen control strategy with respect to how to oversee modification; water testing records; techniques in regards to taking care of administrative reviews; a client objection program; a safety committee; and verification of training for both new and tenured workers in areas pertinent to the product/item.

This finding proposes that, food undertakings should focus adequately on establishing long-term strong strategic collaboration with their major suppliers, fortifying information transfer and together forming operation techniques with their associates. In such a case, they can all the more likely oversee and control the source of raw materials, lessen the chance of infusing quality issues into the production line because of sub-standard supplies hence eliminate food safety dangers from its source.

In the skewness column, the negative values imply that the responses tend towards the “Not used at all,” while positive coefficient values imply that responses tend towards the “Very large extent.” The researcher observed some underlying relationship between the rating means and the corresponding coefficients of skewness. The study observed that there is an inverse relationship between the mean ratings and the respective coefficients of skewness. Based on this observation, we can deduce that the most significant factor to consider while choosing a food supplier is whether the supplier has safety programs in place, while the least significant factor is whether the supplier trains on food safety or not.

5.3.4 Measures in food reception and storage

As the next step of receiving and storing supplied food, key measures that would compromise food safety and quality during this stage of food flow were identified. Respondents were then asked to rate how often such measures and/or steps are considered using the scale 1 = Always, 2 = Rarely, 3 = Never. Summary of the responses are presented in Table 4.1

Receiving of food items is the principal control point in the food movement through a cook's facility. Cautious consideration can decrease defects which may bring about problematic issues all through the whole framework. Additionally, Garden-Robinson, (2012) guaranteed that all food ought to be in outstanding condition when they are served or delivered. The food quality and temperature ought to be checked intently at delivery. Additionally, in low seasons the delivery ought to be planned accordingly. What's more, (Campos *et al.,* 2015) added that spaces of storage ought to be cleaned preceding the getting of food ingredients so that the food items can be stored right away. The spaces of storage ought to be spotless and sufficiently bright to prevent infestation by pests. Sterile carts ought to be accessible. (Polley, 2015), concurred with (Jevšnik *et al.,* 2008a) that food business should focus on all Practicable means to guarantee that they get the safest and

appropriate food. This included the food received which should be shielded from contamination and those getting it should ensure it has the right temperature to be stored without the risks of possible hazards. Food and Drug Administration (2012) concurred with Kendall and Diamond (2010) that appropriate food storage plays a major role in keeping the quality and nutritional benefit of the bought food.

From Table 4.13 the researcher observed that no manager or executive chef responded that they never consider the identified measures thus there was no rating of '3.' We however note that inspection of quality and quantity and checking of storage temperatures are important measures that are always being performed while receiving and storing any supplied food. This is so because there was a unanimous response that the two measures that these measures are always being considered. It is because of this one-point response that the corresponding standard deviations and coefficients of skewness are both zero in the two measures. These is, however, a small standard deviation for 'Taking temperatures of supplied food' and 'Ensuring storage area cleanliness.' Nevertheless, mean ratings for these latter measures is closer to "Always" than "Rarely "with corresponding positive coefficient values for both. This is an indication that distributions of responses in these latter two measures are almost equivalent to the former two. In food preparation and cooking stage, a similar approach of identifying key processes and/or measures was followed. Responses were summarized as shown in Table 4.14.

5.3.5 Food preparation and cooking steps

From Table 4.14, the researcher observed that in all the processes, there was at least 'Very large extent' in all the identified processes. the researcher also observed that the mean ratings are between 1 (one) and 2 (two), which is an indication that the level of adherence to the processes were at least to a large extent. Based on the mean ratings and corresponding standard deviations,

hand washing before handling food and use of clean and sanitized work area/equipment were top most processes where the extent of adherence was very large. (Hertzman &Barrash, 2007), on his investigation on an appraisal of food safety knowledge and practices of catering workers in the US, discovered that the main blunder made by catering workers was the lack of individual cleanliness practices; all the more explicitly, the lack of appropriate hand washing. This is upsetting as numerous researchers (Griffith et al., 2010);(Guzewich & Ross, 1999) (as referred to in Clayton and Griffith, 2004), tracked down that appropriate hand washing was the absolute most significant methods for preventing the spread of food borne disease during cooking.

Furthermore, he likewise discovered that while moving food to or from warming or refrigerated equipment, workers didn't check the food temperature. At the point when food isn't served at the appropriate temperature, it can harbor microorganisms which duplicate dramatically the longer the food is in the temperature danger zone (37^0c-65^0c). These microorganisms can cause food borne diseases to be contracted by the hotel diners.

On the other hand, faster food cooking once from the refrigerator exhibited the least level of adherence (mean = 1.79) with a high variation of the responses. A positive coefficient of skewness is an indication that though some respondents said that they do not adhere to a given process (rating = 5), the overall distribution of responses in that particular process, however, tends to 'Very large extent.' This is also confirmed by the aggregate values we have a positive coefficient of skewness. This can be visualized as presented in Figure 4.9

These inconsistencies between the knowhow of the food workers and their activities should be investigated to decide the reasons why they happen. It is critical to take note of that further research is needed to establish how catering workers can improve their food safety and sanitation knowledge and practices. Likewise, the management methods and knowledge on these issues

ought to be researched to establish their inspiration to monitor and discipline their workers in adherence to food safety.

5.3.6Level of adherence

It can be seen from Figure 4.9 that the ratings '4 = Small extent,' and '5 = Not used at all' becomes insignificant when we consider the percentage averages. Almost all managers and executive chefs admitted that they adhere to the aforementioned processes, accounting for 98.5%. However, the remaining 1.5% who responded that they are, on average, 'Neutral' on the extent to which they adhere to the stated processes should be a wakeup call to hotel heads to investigate why such a response was observed.

On another vital aspect of food monitoring and surveillance, the participants were asked to state how frequent they conduct quality inspection. Responses were as shown in Figure 4.10. It can be seen that most hotels do conduct quality inspection quarterly and semi-annually, with each accounting for 37.5%. Only 25% of the sampled hotels do conduct their quality inspections monthly. However, none of the hotels conduct their quality inspections annually. Despite absence of hotel that performs quality inspection annually, effective food monitoring and surveillance systems demand that the inspections should be conducted as frequent as possible. Success of such inspections is, nevertheless, pegged on tools used for monitoring and inspecting quality and safety. Figure 4.11 presents the proportions of different tools used for monitoring and inspecting quality and safety.

From this standpoint, management should incorporate policies and guidelines in their production processes to ensure audits and inspections are done in order to safeguard the safety of their products

5.3.7 Food safety and food quality surveillance and customer choice destination

The regression coefficient for food monitoring and surveillance systems was found to be 0.326 with a standard error of 0.109. This coefficient was discovered to be significant at 5% level since the p-value was under 0.05 (0.044<0.05) and consequently, we reject H_{03} at 0.05 level of significance. Rejection of H03 suggests that a food checking and surveillance framework has a significant connection with client's decision of eating destination. Likewise, from the t-test, the calculated t-value (t = 2.995) was higher than the tabulated t $\left(t_{0.025,\ 23} = 2.069\right)$prompting to rejecting the null hypothesis$\mathbf{H_{03}}$. The two tests, consequently, produce consistent results in affirming rejection of H_{03}, and conclude that food monitoring and surveillance systems is significant in influencing customer's choice of dining destination.

5.4 Assess the moderating impact of top management commitment on the connection between food safety and quality indicators and customer choice of dinning destination in Kenya.

One of the intentions of this study was to explore the moderating effect of management commitment in the relationship between the independent variables and the dependent variable.

5.4.1 Aspects of top management commitment

Results obtained from table 4.16 indicated that the respondents were more likely to admit that top management was committed to ensuring high safety and quality with regard to the identified aspects. This is further confirmed by the values in the skewness coefficient column. All the coefficients of skewness for all the aspects were found to be less than zero ($S_k < 0$); a clear indication that most respondents agreed that the statements regarding top management commitment were true.

It is pertinent to understand that undertakings that esteem food safety and quality depend on ground breaking managers to oversee individuals, processes, and needs at the same time. Moreover, certification organizations are requiring food establishments to get commitment of the management responsibility within their set up Hazard Analysis and Critical Control Point (HACCP) frameworks or other applicable frameworks. Throughout the long term, solid management responsibility, or the deficiency in that department, has demonstrated to directly affect the viability of a food safety and quality framework. With more food organizations adjusting themselves around the world, there is a developing requirement for management to exhibit their obligation to food safety and quality. Griffith *et al.*, (2010) establishes the components of food safety culture as leadership, correspondence, staff responsibility, resources and hazard mindfulness related with food safety and cleanliness.

Food safety leadership is tied in with setting bearing, adjusting individuals to it and afterward rousing and motivating them to accomplish it (Griffith *et al.*, 2010). Guchait *et al.*, 2016) in their study thought about one component of leadership, to be specific, leader behavioral integrity for food safety i.e. the degree to which administrators/ leaders reliably ordered or implemented food safety rules, protocols, and inferred that those managers with high leadership behavioral integrity impact food safety execution and diminish the danger of food-borne sickness.

Catering Industry leaders want to have a significant effect in food safety and quality. The capability to influence change, perceiving the bigger picture and understanding the interdependencies all through the food framework is fundamental. As a feature of this, they need to assist others with moving the organization vision, mission and plans forward. They will require the abilities to encourage coordinated effort and development inside their groups and across disciplines to assist

everybody in succeeding as pertains to the improvements required in the food framework (Urrutia *et al.,* 2019).

One of the critical strides for new leaders in food and beverage industry is to adjust to food frameworks thinking. Most experts were employed for their insight in a particular area of specialty. Presently, to become cutting edge pioneers, they should consider the entire food production framework and how all choices made in this framework, from sourcing and production to supply network and retail sale, influence individuals and the environment.

At the point when organizations furnish experts with critical reasoning abilities, they are building up their experts who need to have a significant effect inside their organizations, as well as in the whole food framework. This is genuine empowerment to improve the future of food cycle and make organizations feasible and competitively advantaged for what's to come. In the event that a hospitality organization doesn't have this training capacity internally, different organizations have support programs that are assisting with building these leaders. Projects like the new Integrated Food Systems Leadership are intended to help future leaders connect the current skills gap in the food framework. These future leaders will have the instruments to drive the change pertinent for many organizations to succeed while we feed the future (Urrutia *et al.,* 2019).

As earlier noted, choice of dining destination was the dependent variable in this study. Both staffs and guests were asked the extent to which the previously discussed variables influence the choice of dining destination. Results from the study (see table 4.12), we note that more than half of guests (61.1%) were in agreement that indeed food safety and quality related issues accounts for more than 20% of factors that influence dining destination choices. Cumulatively, more than 90% of the guests agreed that the identified factors have a more than 15% effect on customer dining

destination choices. A similar trend was observed when hotel staffs were asked about the extent of effect of the pre-stated independent variables.

5.4.2 Top management commitment and destination choice (without interaction)

Results in Table 4.22 sum up the yield for the analysis if moderation impact isn't considered. Hence, in this model, the independent factors were composite variable of food safety and quality perspectives and top management responsibility. The outcomes showed that these two predictor factors clarify just 55.4% of the total variations in the decision of dining destinations ($R^2 = 0.554$). The value of R-squared suggests that the remaining 44.6% of the total variation in the dining destination decision are not clarified by predictor factors included in the model. In any case, the explained variation in the relationship was discovered to be significant since the p-value was discovered to be under 0.05 ($p - value = 0.04 < 0.05$). In the regression coefficients segment in Table 4.22, the researcher observed that the entire regression coefficient is not only positive, but also significant $(p - values < 0.05)$. This is an indication that dining destination choice is significantly influenced by these two independent variables. Thus, the model that gives the effect of X and Z_1 on dining destination choice can be expressed as $Y = 5.138 + 0.329X + 0.374Z_1$

As shown in Model, dining destination choice is positively affected by food quality and safety composite variable and top management commitment. For each incremental improvement in X and Z1 by a solitary unit for each case, there would be a corresponding positive rate of effect on dining destination decision by 0.329 units and 0.374 units respectively. This model doesn't, nonetheless, depict the impact of the interaction between X and Z1. The analyst additionally discovered that the fitted regression model (Model (iii)) was hugely dependent on the results of the ANOVA test. The ANOVA test yield shows that the model best elaborated the gathered data since the ANOVA F-statistic was significant at 5% significance level.

5.4.3. Top management commitment and destination choice (regression with interaction)

In this model, the interaction effect was brought into consideration and along these lines, the independent factors were X, Z1 and interaction of X and Z1. At the point when interaction variable was included for the model, the explained variation in firm performance expanded to 68.6% ($R^2 = 0.686$) with a changed R-squared value of 0.665. This explained variation was huge since $p - value = 0.001 < 0.05$. . Further, the researcher saw that the impacts of the independent factors were all positive $(\beta's > 0.00)$. In the same light, like the model without interaction, all the regression coefficients were discovered to be significant ($p - value = 0.001 < 0.05$).Accordingly, the model showing the connection between the independent factors and the dependent factors was depicted as follows

$Y = 1.784 + 2.301\ X + 1.862\ Z_1 + 2.229(X*Z_1)$

As found in Model (iv), when interaction is included for the model, the impact of any improvement in X, Z_1 and interaction of X and Z_1 by a solitary unit results to a corresponding positive rate of effect on dining destination decision/choice by 0.755 units, 0.862 units and 0.229 units respectively. Additionally, this (Model (iv)) was found to accurately portray the gathered data since the F-ratio for the ANOVA test was significant at 0.05 significance level.

Results in Table 4.22 and Table 4.23 depict that both Model (iii) (without interaction) and Model (iv) (with interaction) really fit the gathered data since the corresponding p= values were under 0.05 $(p - value = 0.004 < 0.05\ and\ p - value = 0.001 < 0.05)$. These p-values suggested that the connections depicted by Model (iii) and Model (iv)are accurate and significant.

In view of the yields for the models with and without interaction effect, p-values for R^2 regression coefficients and the ANOVA test, the analyst deduced that the interaction effect is significant (p-values<0.05). This was additionally upheld by the way that there is an increment in the explained

variation when the interaction variable is included in the model (from 55.4% to 68.6%). The analyst/researcher, subsequently, rejected the null hypothesis H04. This suggested that Top Management Commitment moderating influence on the connection between food quality and safety aspects and customer's dining destination choice.

5.5 Assess the moderating effect of customer based factors on the relationship between food safety and quality indicators and customer choice of dinning destination in Kenya.

In customer-based factors, the researcher focused on two areas, which were rating on the importance of some identified factors in determining customer destination choices and the level of agreement in various determinants in influencing customer destination choices. On the level of importance of some customer-based factors, a Five-Point Likert scale was utilized and hotel guests asked to rate the factors. From Table 4.15, we note that, on average, there is at least a confirmation in all the ratings.

5.5.1 Customer based factors

Results from table 4, we observe that packaging is the most important factor (100%) while making destination choices. This factor is closely followed by price (95.9%) and brand name (87.5%). Using this compressed scale, we observe that customer knowledge is the least important with proportion of only 33.3% followed by customer's financial strength, which accounted for 70.8%. Nevertheless, the average percentages reveal that all the factors, on average, are significant since the compressed scale shows that the 'Important' category displays 76.4%.

One of the characteristic that can conceivably impact restaurant guests eating choice is cost. The choices of what and where to eat may rely upon the person's travel budget. In spite of implied health risks, customers may buy certain food items on account of financial capabilities (Verbeke &Vackier, 2004). (Burusnukul *et al.*, 2011), on his research on "Understanding tourists' loyal support of Thailand foodservice establishments affirmed that newness to local food varieties can

give vacationers psychological risks (where purported Food Neophobic becomes an issue). Furthermore, Consumption of recognizable food is noted additionally as giving the psychological confidence of home. This is particularly valid for tourists in new conditions where they may look for food that is part and parcel of their typical every day schedules in their nation of origin. Destination food experience in a worldwide destination permits travelers to explore and appreciate destination food and drinks for a special and memorable experience. This experience can trigger revisit intention among travelers who enjoy destination food sources, demonstrating the potency of destination food as another showcasing tool for tourists on vacation(Kim *et al.,* 2019). For clients of extravagance eateries, the value is more evolved with utilitarian value represented by both useful and monetary value, while experiential value is represented by decadent and expressive value (Yang & Mattila, 2016). The expanding interest in healthy living has resulted into an increment in the consumption of healthy food (Story *et al.*, 2008). Investigating this connection intensively, recent examination in the casual eatery sector proposes that health related qualities emphatically; positively affect conduct and purchase goals (Jun *et al.,* 2014). Also, (Shin *et al.,* 2019) found that impression of eatery food healthiness indirectly influence consumer behavioral intentions by means of the interceding part of fulfillment. Accordingly, in view of the extant impression that worry about wellbeing, can altogether influence customer conduct, when healthy alternatives are available:

Health factor of food was likewise analyzed in light of the fact that eatery clients are keen on healthy food decisions (Bufquin *et al.,* 2017);(Shin *et al.*, 2019). The outcome affirmed that travelers perceived positive and lovely sentiments in destination food eateries as exceptionally significant. In any case, Consumers fundamentally look for data in the pre-decision stage and settle on the actual buy in the decision stage. In the post-decision stage, they decide whether to keep up

the relationship with the supplier and make a recurrent purchase(Gensler *et al.*, 2012). Visitors go through numerous signs to impact decisions in a web-based/online purchase (Janiszewski & Wyer, 2014). This infers that consumers are bound to be impacted by personal values than prior experiences as regards to looking for an assortment in their eatery decisions.

Marketers can use this strategic initiative to position their business brands in a way that can attract dinning destinations

5.5.1.1 Moderation effect of customer-based factors and customer choice (regression without interaction)

In this case, the researcher tested hypothesis **H_{05}**. Similar to moderating effect of top management commitment, two regression analyses were performed; one excluding the interaction effect and another involving the interaction effect of customer-based factors and the three independent variables in the study.

Table 4.24 reflects the regression investigation by taking the independent factors as food safety and quality (X) and client-based components (Z_2). The model outline area demonstrates that X and Z_2 expounds on just 51.3% of the total variations in client's destination decision ($R^2 = 0.513$). 48.7% being the remainder of the total variation in the decision of dining destination are not clarified by factors included in the model. The adjusted R-squared value was discovered to be 0.510 and the overall model standard error of 0.501. This connection was significant ($p - value = 0.025 < 0.05$).In the regression coefficients section, the respective regression coefficients for X and Z_2 were 0.838 and 0.941 and the corresponding standard errors were 0.421 and 0.372 respectively. In light of the respective p-values, the two predictor factors were brought forth as significant and therefore, the regression model indicative of the connection among Y and X and Z_2 was expressed as indicated.

Utilizing the ANOVA test results, Model (vi) effectively clarifies the gathered data since the processed Ratio is significant at 5% degree of significance (that is 0.025 < 0.05). At the point when the interaction effect of X and Z2 was inculcated in the model and regression examination carried out, the yield was summed up as demonstrated in Table 4.25.5. In this case, the predictor variables were X, Z_2 and interaction of X and Z_2.

In conclusion this implies that in a practical sense, in order for managers to improve their destination restaurant, they should understand the international touristsperception of the value of the eatery and therefore make products and services that will attract guests into their destinations.

5.5.1.2 Moderation effect of customer-based factors and customer choice (regression with interaction)

The results obtained from Table 4.25, we note that when interaction was included in the devised model, the explained variation in firm performance reduced to 46.3% $\left(R^2 = 0.341\right)$. This explained variation was, however, not significant since $p - value = 0.590 > 0.05$ .This lack of significance of the model is as a result of the introduction of the interaction variable. For this analysis, the regression coefficients for the predictor variables X, Z_2 and interaction of X and Z_2 were found to be 3.225, 5.405 and 3.741 respectively, with a corresponding standard errors of 2.401, 4.801 and 4.289. It can be seen that none of these coefficients is significant at 5% level of significant. Again, we can deduce that this lack of significance is attributed to introduction of the moderating variable. Nevertheless, using these coefficients, we obtain the regression model Y = 2.821+ 3.225 X+ 5.405 Z_2+ 3.741 (X*Z_2)

The results in the ANOVA test, however, indicate that Model (viii) does not rightly fit the collected data. This inference is due to the fact that the F-ratio is not significant at 5%(

$p-value = 0.59 > 0.05$), implying that the effect of customer-based factors is not as shown in Model (viii).

From Table 4.24 and Table 4.25, we observe that introduction of the interaction term brings three main effects, which are: reduction in the explained total variation, all the predictor variables now become insignificant and the resulting new model does not correctly fit the data. These three effects imply that customer-based factors present itself as an explanatory variable not as a moderating variable. That is, moderation effect of customer-based factors was found not to be significant. Therefore, based on these observations, we fail to reject the null hypothesis $\mathbf{H_{05}}$ at 5% level of significance and conclude that customer-based variables do not have a significant moderation impact on the connection between food safety and quality and dining destination choice.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

In this chapter the researcher emphasizes the key discoveries of the study. The chapter concludes with recommendations relevant to the discoveries of the study. The conclusions are made in line with the research objectives and of the impact of food safety and quality on customer decision of dining destination. The chapter ends by identifying recommendations to the hotel stakeholders and researchers who may want to conduct further research in this line of academic discipline.

The objectives of research were met based on the findings that were generated from this study and the researcher concluded as follow;

6.1 Relationship between Food Quality and Customer Choice of Destination

There is indeed a strong connection between food quality and customer decision of dining destination. Results of his study indicated that almost all the guests (98.9%) agreed that food quality is one of the key factors to consider while deciding on which hotel to visit. Additionally, (100%) awareness level of managers and chefs on food quality was, thus, a point of strength for the managers and executive chefs to effectively modify various aspects of food quality products such as freshness, taste, and good condition in order to have an upper hand in competition over other eateries.

Apart from management the government should develop a holistic approach to quality management by designing and re-designing initiatives aimed specifically at the hospitality, and food sectors in order to improve quality products that exceeds customer expectations

6.2 Relationship between food safety and customer choice of destination

Indeed, there is a connection between food safety and customer's choice of dining destination as observed from the results almost all participants (94%) agreed that food safety security is a decision factor while selecting a hotel to dine in. This eludes that whenever there is a suspected risk or presence thereof, it can adversely affect consumers' food choice decisions as confirmed by both empirical and theoretical evidence. It's worth noting that consumers in recent times are well informed of the existing food safety risks and subsequently they have become more and more critical and selective as per their food product choices.

Governments in developing countries with varying regulatory systems, Kenya in particular ought to establish their particular strategies to advance the social co-regulation of food safety policies in line with their unique market and institutional characteristics. Management then should play a significant role and must focus on training, supervision and putting safety programs in place to the extent in which food practitioners get involved in preparation of food practices that are safe for human consumption

6.3 Relationship between Food Quality, Food Safety, Food Safety Monitoring and Surveillance and Customer Choice of Destination

The regression coefficient for food monitoring and surveillance systems was found to be 0.326 with a standard error of 0.109. This coefficient was discovered to be significant at 5% level since the p-value was under 0.05 (0.044<0.05) and consequently, we reject H_{03} at 0.05 level of significance. Rejection of H_{03} suggests that a food checking and surveillance framework has a significant connection with client's decision of eating destination. Likewise, from the t-test, the calculated t-value (t = 2.995) was higher than the tabulated t $\left(t_{0.025,\ 23} = 2.069\right)$prompting to rejecting the null hypothesis $\mathbf{H_{03}}$. The two tests, consequently, produce consistent results in

affirming rejection of H_{03}, and conclude that food monitoring and surveillance systems is significant in influencing customer's choice of dining destination.

The conclusion is in line with the long held view that this surveillance and monitoring is a key component in determining customer choice. Thought this factor may strongly be observed from the management perspective, it can also be revealed through certification of the products. All the stages of food flow, food safety inspection and monitoring is very crucial.

6.4 Moderating Effect of Top Management Commitment on Food Safet Quality Indicators on Dinning Destination Choice.

While there was a general agreement that top management are committed in affirming food safety and quality, it was also revealed that for every positive improvement in top management commitment, there would be a corresponding positive rate of influence on dining destination choice.

6.5Moderation Effect of Customer-Based Factors and customer choice

It was concluded that packaging (100%), price (95.9%) and brand name (87.5%) are the most important factors while making destination choices. While this is the case its worthy to note that all the other factors are significantly important. After regression analysis it was however concluded that the effects that customer-based factors present is an explanatory variable not as a moderating variable. That is, moderation effect of customer-based factors was found not to be significant moderating variable rather as an independent variable.

6.6Recommendations

1. For efficient running and management of Hotels food safety and quality system, governments should come up with mandatory laws and regulations which can be applied and easily managed

by stakeholders. Once applied efficiently they will make many hotels to have a competitive edge in customer's dining destination choice

2. From a policy point of view, establishments should build and keep up satisfactory food safety frameworks and infrastructures (for example labs) to react to and oversee food safety hazards along the entire food chain, including during crises; and furthermore incorporate food safety into more extensive food programmes and policies.
3. Destinations must build and maintain adequate food safety frameworks and developments (for example labs) to react to and oversee food safety hazards along the whole food chain, including during crises; and furthermore coordinate food safety into more extensive food strategies and programmes.

4. It is pertinent to understand that hospitality top management undertakings that esteem food safety and quality depend on ground breaking managers to oversee individuals, processes, and needs at the same time. Moreover, certification in organizations are requiring food establishments to get commitment of the management responsibility within their set up Hazard Analysis and Critical Control Point (HACCP) frameworks or other applicable frameworks.

5. This finding recommends that, food undertakings should focus adequately on establishing long-term strong strategic collaboration with their major suppliers, fortifying information transfer and together forming operation techniques with their associates. In such a case, they can all the more likely oversee and control the source of raw materials, lessen the chance of infusing quality issues into the production line because of sub-standard supplies hence eliminate food safety dangers from its source.

6.7 Future Research Opportunities

1. Even though this investigation brought out important insights into the connection between food safety, quality, surveillance and screening, top management commitment responsibility and client based components to destination choice; its conceptual and empirical setting had a number of limitations. For example, the study did not investigate the physical, chemical and microbial contamination that can cause food safety. This can be used as a source of future study.
2. Further study is required to clarify why, notwithstanding accreditation, the functioning of the mandatory HACCP standards is often deficient and further, what elements influence the correct activity, as well as if these are adequate to guarantee food safety.
3. The moderation effect of customer-based factors was found not to be significant moderating variable rather as an independent variable in the study. it will be of great importance if a research is conducted to include customer based factors as one of the independent variable
4. This study was limited to 4-5 star hotels in Kenya. The study recommends that a study of the Same magnitude is conducted which will include all the star rated Hotels in Kenya to establish the extent to which food safety and quality will affect customer choice of dining destination
5. These inconsistencies between the knowhow of the food workers and their activities should be investigated to decide the reasons why they happen. It is critical to take note of that further research is needed to establish how catering workers can improve their food safety and sanitation knowledge and practices. Likewise, the management methods and knowledge on these issues ought to be researched to establish their inspiration to monitor and discipline their workers in adherence to food safety.

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APPENDICES

APPENDIX I: QUESTIONNAIRE FOR HOTEL MANAGERS AND CHEFS

HOTEL CODE ----------

Kindly Tick where best applies to your case

SECTION A: GENERAL INFORMATION OF THE RESPONDENTS

1. Indicate Your Gender_____

2. Please indicate your age bracket

[a] Between 20 and 30 years [ ]
[b] Between 31 and 40 years [ ]
[c] Between 41 and 50 years [ ]
[d] Between 51 and 60 years [ ]
[e] From 61 years and above [ ]

3, please indicate your highest level of education

[a] I did not complete my primary education [ ]
[b] Primary school certificate [Kenya Certificate of Primary Education [ ]
[c] O-level or A-level certificate [Kenya Certificate of Secondary Education [ ]
[e] College Certificate [ ]
[f] College Diploma [ ]
[g] Bachelor Degree from university [ ]
[h] Postgraduate Degree (Master or PhD) from university [ ]

4. Please indicate, for how long has the Hotel been in operational

[a] Less than year [ ]
[b] Not more than 2 years [ ]
[c] Not more than 5 years [ ]
[d] More than 5 years [ ]

5. Please indicate nature of ownership of the restaurant

[a] Sole proprietorship [ ]
[b] Jointly owned with other partners [ ]
[c] It is a limited company [ ]
[d] It is a family-owned [ ]
[e] If others, specify……..

6. How many workers does your hotel employ as at now?

[a] Not more than 5 employees [ ]
[b] Not more than 10 employees [ ]

[c] Not more than 20 employees [ ]
[d] Not more than 50 employees [ ]
[e] More than 50 employees [ ]

7. Does the restaurant have other outlets?

Yes [ ]
No [ ]

SECTION B: FOOD QUALITY ASSURANCE

8. In your opinion which aspects are important for the definition of high quality of food? Please list the importance of quality on order of preference.

	Statement on definition of quality	**Least important**	**Less Important**	**Not important**	**important**	**Highest important**
		1	**2**	**3**	**4**	**5**
1	Taste					
2	Natural/organic					
3	Freshness					
4	Not risky					
5	Appearance					
6	Guarantee					
7	Good condition					
8	Quality on the mark of the product					
9	Any other					

9. Are you aware of any food quality assurance system yes [ ] No [ ]
10. Are you aware of any food quality control system yes [ ] No [ ]

SECTION C: FOOD SAFETY ASSURANCE

11. In your opinion which aspects are important for the definition of food safety? Please list the importance of safety with the number 1-5, 1- means the least important and 5- means the highest importance

	Statement on definition of safety	Least important	Less Important	Not important	important	Highest important
		1	2	3	4	5
1	Not causing harm					
2	Natural/organic					
3	Freshness					
4	Not risky					
5	Good appearance					
6	Safety Guaranteed					
7	Good quality					

12. Below is a list of safety assurance systems applied in monitoring of food safety. Pick the one/s applicable in your organization

a) Good Hygiene practices [ ]
b) Good manufacturing processes [ ]
c) HACCP (Hazard analysis critical control point) [ ]
d) Assured safe catering [ ]
e) Kenya Bureau of standards [ ]
f) Any other specify ----------

SECTION D: FOOD MONITORING AND SURVEILLANCE SYSTEMS

13. The following are some of the important stages in the food flow chain from production to consumption. Using the scale below indicate the level of quality and safety inspection in managing food flow from purchasing to service.

	Stages in the food flow	Not applicable at all	Less applicable	Neither applicable	applicable	Very applicable
		1	2	3	4	5
1	Selecting food suppliers					
2	Receiving food					
3	Storing already supplied food					
4	Preparation of food					
5	Holding food for service					
6	Preservation system					
7	Reheating					

14. The following are some of the factors considered to ensure that appropriate food supplier is chosen. Please indicate the extent to which you check on each of the following qualities of the supplier in your attempt to apply good hygiene practices in your institution.

	Factors to be considered when choosing a food supplier	Very large extent	Large extent	Neutral	Small extent	Not used at all
1	Knowledge on the sources of suppliers' products	1	2	3	4	5
2	Reputation of the supplier					
3						
4	Inspection suppliers warehouse or plant if possible					
5	Ensuring whether the suppliers have safety program in place					
6	Finding out whether the supplier's employees are trained in food safety or not					
7	Checking the condition of the supplier's delivery trucks					

15. The following are some of the steps taken during the delivery of food by the suppliers. Please indicate how often your carry out the mentioned steps/process at the reception of food from a supplier in an attempt to ensure proper monitoring and surveillance is adhered to.

	Steps/processes	**Always**	**Rarely**	**Never**
1	Inspection of the delivered food to confirm the qualities, quantities and conditions			
2	Taking temperature for the supplies especially for foods such as meat, fish etc			
3	Any other step/process			

16. The following are some of the factors to be considered when storing food after the supplies. Please indicate how often you consider the following factors to ensure that food supplied is appropriately stored.

	Factors considered in storing food	**Always**	**Rarely**	**Never**
1	Storage temperature			
2	Cleanliness of the storage areas			
3	Any other factor			

17. The following are some statements on the processes involved in food preparation and cooking. Please indicate the extent to which you adhere to each process in your institution

	Steps/processes in food preparation and cooking	**Very large**	**Large extent**	**Neutral**	**Small extent**	**No used at all**
		1	**2**	**3**	**4**	**5**
1	Thawing food to a temperature below the room temperature					
2	Use of clean and sanitized work areas, cutting boards, knives and utensils					
3	Washing hands before handling food					

4	Cooking food as quickly as possible once it is taken from the refrigerator					
5	Cooking food within the required time and at the recommended temperature					
6	Use of utensils or gloves to handle food after cooking					
7	Use of gloves/sanitized hands in salad preparation					

18. The following are of the factors to be considered in serving food. Please indicate the level to which your institution adheres to the standards for serving food.

	Standards of food safety and quality in service	**Not used at all**	**Small extent**	**Neutral**	**Large extent**	**Very large extent**
		1	2	3	4	5
1	Serving food at the right temperature					
2	Use of clean sanitized utensils for service					
3	Use of serving utensils with long handles					
4	Serving food in clean restaurant environment					
5	Organized wash up area					
6	Availability of hot water					
7	Availability of sanitizers					
8	Availability of drainage and storage racks					
9	Minimizing bare hand contact with food					
10	Protecting food on display with sneeze guards					
11	Use of scoops and tongs					
12	Proper handling of glassware and dishes					

13	Use of clean serving plates and silverware for reserves					
14	Practicing good personal hygiene					
15	Any other					

19.What other government standards are used in monitoring food safety and quality

[a]Testing, certification and, labeling [ ]

[b] Voluntary standards [ ]

[c] ISO 9000 [ ]

[d] ISO 22000 [ ]

20. How often do you conduct quality inspection?

[a] monthly [ ]

[b] Quarterly [ ]

[c] After six months [ ]

[d] Annually [ ]

21. What tools do you use to monitor and inspect quality and safety?

[a] Using a checklist [ ]

[b] Observation [ ]

[c] Responding to complain [ ]

[d] Delegation to supervisor on duty [ ]

[e] Any other method specify ----------

SECTION E: TOP MANAGEMENT COMMITMENT ON FOOD SAFETY AND QUALITY

22. Indicate the extent to which top management is committed to quality strategies by kindly responding to the statements below according to a scale of 1-5,

	Statements on top management commitment	Definitely False	False	Neither	True	Definitely True
		1	2	3	4	5
1	The management of this Company has a clear mission of where this Company should go in terms of food safety and quality					
2	I am given time by my supervisor to participate in food quality training activities.					
3	I participate in the food quality team/committee or activities during the year					
4	The management has developed a clear quality management policy on food safety and quality					
5	The Management emphasizes personal leadership in managing quality and safety					
6	Company Management (production manager, Supervisors) visibly demonstrates a commitment to food safety.					
7	Management believes that employees are key to success in quality					
8	My immediate supervisor actively encourages the reporting of all unsafe conditions.					
9	When I observe a food safety concern, I report it.					

SECTION F: MODERATING EFFECT OF CUSTOMER-BASED

23. In your opinion which aspects are important in the purchase decision of food in a destination? Please list the importance of purchase decision with the number 1-5, 1- means the least important and 5- means the highest importance

	Statement on moderating effect on food safety and quality on purchase decision	Least important	Less Important	Not important	important	Highest important
		1	2	3	4	5
1	Customer's financial strength					
2	Customer knowledge					
3	Brand name					
4	Price					
5	Packaging					

APPENDIX II: QUESTIONNAIRES FOR EXECUTIVE CHEF/ SOUS CHEF

HOTEL CODE ----------

SECTION A: GENERAL INFORMATION OF THE RESPONDENTS

Kindly Tick where best applies to your case

1. Indicate Your Gender_____

2. Department ----------

3. Please indicate your age bracket

[a] Between 20 and 30 years	[ ]
[b] Between 31 and 40 years	[ ]
[c] Between 41 and 50 years	[ ]
[d] Between 51 and 60 years	[ ]
[f] From 61 years and above	[ ]

4. Please indicate your education level

[a]Primary education level	[ ]
[b] Not completed Secondary level	[ ]
[c] Secondary level	[ ]
[d] College level	[ ]
[e] University level	[ ]
[f] Masters level	[ ]
[g] PhD level	[ ]
[h] Others ----------	

5. Number of years worked

[a] 0-5	[ ]
[b] 6-10	[ ]
[c] 11-15	[ ]
[d] 16 and above	[ ]

SECTION B: FOOD QUALITY AND CUSTOMER CARE

6. In your opinion which aspects are important for the definition of high quality of food? Please list the importance of quality on order of preference.

	Statement on definition of quality	**Least important**	**Less Important**	**Not important**	**important**	**Highest important**
		1	**2**	**3**	**4**	**5**
1	Taste					
2	Natural/organic					
3	Freshness					
4	Not risky					
5	Appearance					
6	Guarantee					
7	Good condition					
8	Quality on the mark of the product					
9	Any other					

7. Are you aware of any food quality assurance system
   Yes [ ]
   No [ ]
8. Are you aware of any food quality control system
   Yes [ ]
   No [ ]

SECTION C: FOOD SAFETY ASSURANCE

9. In your opinion which aspects are important for the definition of food safety? Please list the importance of safety with the number 1-5, 1- means the least important and 5- means the highest importance

	Statement on definition of safety	Least important	Less Important	Not important	important	Highest important
		1	2	3	4	5
1	Not causing harm					
2	Natural/organic					
3	Freshness					
4	Not risky					
5	Good appearance					
6	Safety Guaranteed					
7	Good quality					

10. Below is a list of safety assurance systems applied in monitoring of food safety. Pick the one/s applicable in your organization

a) Good Hygiene practices [ ]
b) Good manufacturing processes [ ]
c) Hazard analysis critical control point [HACCP] [ ]
d) Assured safe catering [ ]
e) Kenya Bureau of standards [ ]
f) Any other specify ----------

SECTION D: FOOD MONITORING AND SURVEILLANCE SYSTEMS

11. The following are some of the important stages in the food flow chain from production to consumption. Using the scale below indicate the level of quality and safety inspection in managing food flow from purchasing to service.

	Stages in the food flow	Not applicable at all	Less applicable	Neither applicable	applicable	Very applicable
		1	2	3	4	5
1	Selecting food suppliers					
2	Receiving food					
3	Storing already supplied food					
4	Preparation of food					
5	Holding food for service					
6	Preservation system					
7	Reheating					

12. The following are some of the factors considered to ensure that appropriate food supplier is chosen. Please indicate the extent to which you check on each of the following qualities of the supplier in your attempt to apply good hygiene practices in your institution.

	Factors to be considered when choosing a food supplier	Very large extent	Large extent	Neutral	Small extent	Not used at all
1	Knowledge on the sources of suppliers' products	1	2	3	4	5
2	Reputation of the supplier					
3						
4	Inspection suppliers warehouse or plant if possible					
5	Ensuring whether the suppliers have safety program in place					
6	Finding out whether the supplier's employees are trained in food safety or not					
7	Checking the condition of the supplier's delivery trucks					

13. The following are some of the steps taken during the delivery of food by the suppliers. Please indicate how often your carry out the mentioned steps/process at the reception of food from a supplier in an attempt to ensure proper monitoring and surveillance is adhered to.

	Steps/processes	**Always**	**Rarely**	**Never**
1	Inspection of the delivered food to confirm the qualities, quantities and conditions			
2	Taking temperature for the supplies especially for foods such as meat, fish etc			
3	Any other step/process			

14. The following are some of the factors to be considered when storing food after the supplies. Please indicate how often you consider the following factors to ensure that food supplied is appropriately stored.

	Factors considered in storing food	**Always**	**Rarely**	**Never**
1	Storage temperature			
2	Cleanliness of the storage areas			
3	Any other factor			

15. The following are some statements on the processes involved in food preparation and cooking. Please indicate the extent to which you adhere to each process in your institution

	Steps/processes in food preparation and cooking	**Very large**	**Large extent**	**Neutral**	**Small extent**	**No used at all**
		1	**2**	**3**	**4**	**5**
1	Thawing food to a temperature below the room temperature					

2	Use of clean and sanitized work areas, cutting boards, knives and utensils					
3	Washing hands before handling food					
4	Cooking food as quickly as possible once it is taken from the refrigerator					
5	Cooking food within the required time and at the recommended temperature					
6	Use of utensils or gloves to handle food after cooking					
7	Use of gloves/sanitized hands in salad preparation					

16. The following are of the factors to be considered in serving food. Please indicate the level to which your institution adheres to the standards for serving food.

	Standards of food safety and quality in service	**Not used at all**	**Small extent**	**Neutral**	**Large extent**	**Very large extent**
		1	2	3	4	5
1	Serving food at the right temperature					
2	Use of clean sanitized utensils for service					
3	Use of serving utensils with long handles					
4	Serving food in clean restaurant environment					
5	Organized wash up area					
6	Availability of hot water					
7	Availability of sanitizers					
8	Availability of drainage and storage racks					
9	Minimizing bare hand contact with food					
10	Protecting food on display with sneeze guards					

11	Use of scoops and tongs					
12	Proper handling of glassware and dishes					
13	Use of clean serving plates and silverware for reserves					
14	Practicing good personal hygiene					
15	Any other					

17. What other government standards are used in monitoring food safety and quality

[a]Testing, certification and, labeling [ ]

[b] Voluntary standards [ ]

[c] ISO 9000 [ ]

[d] ISO 22000 [ ]

18. How often do you conduct quality inspection?

[a] monthly [ ]

[b] Quarterly [ ]

[c] After six months [ ]

[d] Annually [ ]

. 19. What tools do you use to monitor and inspect quality and safety?

[a] Using a checklist [ ]

[b] Observation [ ]

[c] Responding to complain [ ]

[d] Delegation to supervisor on duty [ ]

[e] Any other method specify ----------

SECTION E: TOP MANAGEMENT COMMITMENT ON FOOD SAFETY AND QUALITY

20. Indicate the extent to which top management is committed to quality strategies by kindly responding to the statements below according to a scale of 1-5,

	Statements on top management commitment	**Definitely False**	**False**	**Neither**	**True**	**Definitely True**
		1	**2**	**3**	**4**	**5**
1	The management of this Company has a clear mission of where this Company should go in terms of food safety and quality					
2	I am given time by my supervisor to participate in food quality training activities.					
3	I participate in the food quality team/committee or activities during the year					
4	The management has developed a clear quality management policy on food safety and quality					
5	The Management emphasizes personal leadership in managing quality and safety					
6	Company Management (production manager, Supervisors) visibly demonstrates a commitment to food safety.					
7	Management believes that employees are key to success in quality					
8	My immediate supervisor actively encourages the reporting of all unsafe conditions.					
9	When I observe a food safety concern, I report it.					

SECTION F: MODERATING EFFECT OF CUSTOMER-BASED

21. In your opinion which aspects are important in the purchase decision of food in a destination? Please list the importance of purchase decision with the number 1-5, 1- means the least important and 5- means the highest importance

	Statement on moderating effect on food safety and quality on purchase decision	**Least important**	**Less Important**	**Not important**	**important**	**Highest important**
		1	**2**	**3**	**4**	**5**
1	Customer's financial strength					
2	Customer knowledge					
3	Brand name					
4	Price					
5	Packaging					

APPENDIX III: QUESTIONNAIRE FOR HOTEL GUEST

HOTEL CODE ----------

SECTION A: GENERAL INFORMATION OF THE RESPONDENTS

Kindly Tick where best applies to your case

1. Indicate Your Gender_____

2. Please indicate your age bracket

[a] Between 20 and 30 years [ ]
[b] Between 31 and 40 years [ ]
[c] Between 41 and 50 years [ ]
[d] Between 51 and 60 years [ ]
[f] From 61 years and above [ ]

3. Indicate frequency of your visit to this Hotel

[a] It is my first time [ ]
[b] I have been here before [ ]
[c] I frequent here yearly [ ]
[d] I frequent here once in a while [ ]

4. Indicate nature of Meal served

[a] Breakfast [ ]
[b] Early Lunch [ ]
[c] Normal Lunch [ ]
[d] Business Lunch [ ]
[e] High teas [ ]
[f] Dinner [ ]
[g] Late Dinner [ ]
[g] Others [ ]

5. Please indicate your education level bracket

[a]Primary education level [ ]
[b] Not completed Secondary level [ ]
[c] Secondary level [ ]
[d] College level [ ]
[e] University level [ ]
[f] Masters level [ ]
[g] PhD level [ ]
[h] Others ----------

6. Please indicate that best describe nature of your occupation

[a] Self-employed [ ]

[b] Full-time employed [ ]
[c] Part-time employed [ ]
[d] Others ----------

7. Please indicate your monthly earning brackets

KSH	USD	Tick here
Not more than Ksh. 50,000	5,000	
Between 50,000-100,000	5,000-10,000	
Between 100,000-150,000	10,000-15,000	
Between 150,000- 200,000	15,000-20,000	
Between 200,000- 250,000	20,000-25,000	
Between 250,000- 300,000	25,000-30,000	
Above 3000	30,000	

8. I frequent into this hotel while

[a] Alone [ ]
[b] As a group with friends [ ]
[c] As a group with colleague workers [ ]
[d] As a group with my family [ ]
[e] As a group with school/collage mate [ ]

[f] If others; state ……

SECTION B: FOOD QUALITY AND DESTINATION CHOICE

9. Indicate what reasons make you visit this hotel/ restaurant

[a] To take a meal/food
[b] To take a drink
[c] To meet with friends
[d] To transact a business
[e] To use/access free internet service
[f] To watch my favorite soap operas
[g] Its convenient compared to others
[h] To enjoy ambience and its environment
[i] If others, state ……..

10. Was quality one of the considerations that made you choose this hotel?

Yes [ ]
No [ ]

11. If your answer is yes in 10 (above), indicate aspects that are important for the definition of high quality of food? Please list the importance of quality with the number 1-5

	High quality definition	**Least important**	**Less Important**	**Not important**	**important**	**Highest important**
		1	**2**	**3**	**4**	**5**
1	Taste					
2	Natural/organic					
3	Freshness					
4	Not risky					
5	Appearance					
6	Guarantee					
7	Good condition					
8	Quality on the mark of the product					
9	Any other					

12. Please indicate what you like in this particular Hotel

[a]_____
[b]_____
[c]_____
[d]_____
[e]_____
[f]_____
[g]_____
[h]_____

13. If other reasons, indicate them_____

14. Please indicate how you got to know about this Hotel

[a] Through television
[b] Through radio
[c] Through their website
[d] Through social media
[e] Through print media
[f] Through other word of mouth
[g] Through road shows
[h] If others, indicate…….

15. Please indicate your preference on choice of restaurants
[a] I prefer any restaurants near me
[b] I prefer this particular restaurant
[c] I prefer restaurants that are fine dining
[d] I prefer restaurants that have memberships
[e] I prefer chain restaurants
[f] If others, indicate…….

16. How important are the following issue during your visit to a fine dining restaurant?

How important are the following issues in a fine dining restaurant		**Extremely Important**	**Important**	**Neutral**	**Not important**	**Extremely unimportant**
1	Ambiance in the restaurant					
2	Quality of foods and drinks					
3	Variety of foods and drinks					
4	Guaranteed food safety					
5	Location of the restaurant					
6	Friendliness of waiting staff					
7	Pricing of foods and drinks					
8	Reputation of the restaurant					
9	Lighting in the restaurant					
10	Mode of payment of bills					
11	Quality of service					

12	convenience payments					
13	Guaranteed privacy while in the restaurant					
14	Guaranteed security to self and personal items					
15	Guaranteed personalized services					
16	Availability of ample parking spaces					
17	Cleanliness of entire restaurant					

SECTION C: FOOD SAFETY ASSURANCE

17. In your opinion which aspects are important for the definition of food safety? Please list the importance of safety with the number 1-5, 1- means the least important and 5- means the highest importance

	Statement on definition of safety	**Least important**	**Less Important**	**Not important**	**important**	**Highest important**
		1	**2**	**3**	**4**	**5**
1	Not causing harm					
2	Natural/organic					
3	Freshness					
4	Not risky					
5	Appearance					
6	Guarantee					
7	Good condition					

18. Was safety one of the considerations that made you choose this hotel?

Yes [ ]

No [ ]

19 If yes in 19 (above) briefly explain ----------

---

20. Based on the factors listed in the table below, tick in order of importance factors that make you buy food in a restaurant of your choice, indicate with the number 1-5

No.	**Statements on choice of destination**	**Definitely False**	**False**	**Neither**	**True**	**Definitely True**
		1	**2**	**3**	**4**	**5**
1	Choice based on quality only					
2	Choice based on safety only					
3	Choice based on both quality and safety					
4	Choice not influenced by food quality					
5	Choice not influenced by food safety					
6	Choice based on neither quality nor safety					
7	Product knowledge					
8	Health motivation					
9	Perceived benefit					
10	Leadership					

APPENDIX IV: INTERVIEW SCHEDULE FOR HOTEL STAFF

1. Do you have quality assurance management system in place?
2. What do you think is the relationship between food quality and customer choice of dining destination"?
3. What food safety assurance systems do you use in your hotel?
4. How is the system implemented in your organization? The responses were:
5. Is food safety a factor to consider in choice of a destination?
6. What standards do you use for monitoring food safety and quality?
7. What specifications do you use when making your purchases?
8. What are food safety and quality audits conducted in your hotel?
9. How far is top management involved in supporting the operation?
10. Are staff well-trained to produce a consistent level of quality?
11. What level of training do staff go through?
12. How does the top management support lead to customer choice of your Hotel?
13. What makes customers choose your facility against your competition?

APPENDIX V: STAR RATING (THE TOURISM ACT 2016)

(*No. 143 of 2016*)
THE TOURISM REGULATORY AUTHORITY REGULATIONS, 2014

(L.N. 128 of 2016)
PUBLICATION OF CLASSIFIED TOURISM ENTERPRISES

IN EXERCISE of the powers conferred by regulation 7(1) of the Tourism Regulatory Authority Regulations, 2014, the Tourism Regulatory Authority publishes the name, location, address and class of
hotels, lodges, tented camps and restaurants in the Nairobi, Central, Coast, Upper and Lower Eastern
tourism regions set out in the schedule.

Establishment	Address	County	Location	Capacity		Star rating
FIVE STAR HOTELS						
1. Villa Rosa Kempinski	P.O. Box 14164-00800, **Nairobi** reservations.nairobi@kempinski.co	Nairobi	Waiyaki Way / Chiromo Road	200	216	*****
2. Hemingway's Nairobi	P.O. Box 146-00502, **Nairobi** info.collection@hemingways.co	Nairobi	Mbagathi ridge	45	50	*****
3. Sankara Nairobi	P.O. Box 1638–00606, **Nairobi** connect@nairobi.sankara.com	Nairobi	05 Woodvale Groove	156	157	*****
4. Fairmont The Norfolk	P.O. Box 5858-00200, **Nairobi** kenya.reservations@fairmont.com	Nairobi	Harry Thuku Road	170	200	*****
5. The Sarova Stanley	P.O. Box 30680-00100, **Nairobi** sarovastanley@sarovahotels.com	Nairobi	Kenyatta Avenue	217	440	*****
6. Radisson Blu Hotel Nairobi	P.O. Box 21695-00100, **Nairobi** info@radissonblu.com	Nairobi	Elgon Road - Upper Hill	271	354	*****
7.Dusit D2	P.O.Box 41596-00100, **Nairobi** info@dusit.com	Nairobi	Off Riverside Drive	101	122	*****

8.Tribe Hotel	P.O.Box 1333-00621, **Nairobi** gm@tribehotel-kenya.com	Nairobi	Limuru Road	137	154	*****
9.Crowne Plaza	P.O. Box 25574-00100, **Nairobi** info@cpnairobi.com	Nairobi	Upper Hill	206	254	*****
FOUR STAR HOTELS – NAIROBI						
1.Ole Sereni Hotel	P.O. Box 18187-00500, **Nairobi** info@ole-serenihotel.com	Nairobi	Mombasa Road	134	206	****
2.House of Waine	P.O. Box 25035-006005, **Nairobi** mail@houseofwaine.co.ke	Nairobi	Masai Lane, Karen	11	20	****
3.Weston Hotel	P.O. Box 36379-00200, **Nairobi** info@westonhotel.com	Nairobi	Langata Road	120	154	****
4. Southern Sun Mayfair Nairobi	P. O. Box 66807-00800, **Nairobi** admin@southernsun.co.ke	Nairobi	Parklands Road	171	212	****
5.The Boma Nairobi	P.O. Box 26601-00100, **Nairobi** info@theboma.co.ke	Nairobi	Red Cross Rd off Popo Road	148	178	****
6.Fairview Hotel	P.O. Box 40842-00100, **Nairobi** gm@fairviewkenya.com	Nairobi	Bishops Road	127	133	****
7.Sarova Panafric Hotel	P.O. Box 30486-00100, **Nairobi** panafric@sarovahotels.com	Nairobi	Valley Rd/ Kenyatta Avenue	162	324	****
8.Windsor Golf Hotel and Country Club	P.O. Box 5587-00100, **Nairobi** info@windsor.co.ke/admin@winds or.co.ke	Nairobi	Kigwa lane off Kiambu road	130	205	****
FOUR STAR HOTELS – MOMBASA REGION						

1.Leopard Beach Resort and Spa	P.O. Box 34, **Diani** admin@leopardbeachresort.com	Kwale	Diani Beach Road	198	396	****
2.Swahili Beach Resort	P.O. Box 5202-80401, **Diani** info@swahilibeach.com	Kwale	Diani Beach Road	125	250	****
3.Voyager Beach Resort	P.O. Box 34117-80118, **Mombasa** info@voyagerresorts.co.ke	Mombasa	Mt. Kenya Road	236	472	****
4.Marina English Point	P.O. Box 90521-80100, **Mombasa** info@englishpointmarina.com	Mombasa	Silos Road	96	96	****
5.Sarova White Sands Beach Resort and Spa	P.O. Box 90173-80100 **Mombasa** reservations@sarovahotels.com	Mombasa	Mombasa-Malindi Road	335	435	****
6.Diamond Dream of Africa	P.O. Box 68-80200, **Kilifi** Info.doa@diamonds-resorts.com	Kilifi	MalindiCasuarina Road	35	70	****
7.Leisure Lodge Beach & Golf Resort	P.O. Box 84383-80100, **Mombasa** exec@leisurelodgeresort.com	Kwale	Diani Beach Road	253	506	****
8.Baobab Beach Resort & Spa	P.O. Box 32-80400, **Ukunda** reservations@baobab-beachresort.com	Kwale	Diani Beach Road	343	686	****
9.Serena Beach Resort and Spa	P.O. Box 90352-80100, **Mombasa** Mombasa@serena.co.ke	Mombasa	Off New Malindi Road	164	328	****
10.Turtle Bay Beach Club	P.O. Box 10-80202, **Watamu** General.manager@turtlebay.co.ke	Mombasa	WatamuMida Creek Road	145	290	****

APPENDIX VI: AUTHORIZATION PERMIT

INSTITUTIONAL RESEARCH AND ETHICS COMMITTEE (IREC)

MOI TEACHING AND REFERRAL HOSPITAL
P.O. BOX 3
ELDORET
Tel: 33471//2/3

MOI UNIVERSITY
COLLEGE OF HEALTH SCIENCES
P.O. BOX 4606
ELDORET
Tel: 33471/2/3

Reference: IREC/2019/194
Approval Number: 0003516

5th December, 2019

INSTITUTIONAL RESEARCH & ETHICS COMMITTEE
05 DEC 2019
APPROVED
P. O. Box 4606-30100 ELDORET

Mr. Robert Orenge Ondara,
Technical University of Kenya,
Faculty of Social Sciences,
P.O Box 52428-00200,
NAIROBI-KENYA.

Dear Mr. Ondara,

EFFECTS OF FOOD SAFETY AND QUALITY ON CUSTOMER CHOICE OF DINNING DESTINATION IN KENYA

This is to inform you that ***MU/MTRH-IREC*** has reviewed and approved your above research proposal. Your application approval number is ***FAN: 0003516.*** The approval period is **5th December, *2019 – 4th December, 2020.***

This approval is subject to compliance with the following requirements;

i. Only approved documents including (informed consents, study instruments, MTA) will be used.
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by ***MU/MTRH-IREC***.
iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to ***MU/MTRH-IREC*** within 72 hours of notification.
iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to ***MU/MTRH-IREC*** within 72 hours.
v. Clearance for export of biological specimens must be obtained from relevant institutions.
vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
vii. Submission of an executive summary report within 90 days upon completion of the study to ***MU/MTRH-IREC.***

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://oris.nacosti.go.ke and also obtain other clearances needed.

Sincerely,

for

PROF. E. WERE
CHAIRMAN
INSTITUTIONAL RESEARCH AND ETHICS COMMITTEE

cc CEO - MTRH Dean - SOP Dean - SOM
Principal - CHS Dean - SON Dean - SOD

APPENDIX VII: NACOSTI RESEARCH AUTHORIZATION

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/19/26299/28998**

Date: **15th May, 2019**

Robert Orenge Ondara
The Technical University of Kenya
P.O. Box 52428 - 00200
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Effects of food safety and quality on customer choice of dining destination in Nairobi and Mombasa, Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **Mombasa and Nairobi Counties** for the period ending **15th May, 2020.**

You are advised to report to **the County Commissioners and the County Directors of Education, Mombasa and Nairobi Counties** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

DR. MOSES RUGUTT, PHD, OGW
DIRECTOR GENERAL/CEO

Copy to:

The County Commissioner
Mombasa County.

The County Director of Education
Mombasa County.