# ELECTRONIC CUSTOMER RELATIONSHIP MAN-AGEMENT AND PERFORMANCE OF STAR RATED HOTELS IN KENYA

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## Electronic Customer Relationship Management and Performance of Star rated hotels in Kenya

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A thesis Submitted in Partial Fulfilment of the Requirements for the Degree of Doctor of Philosophy in Business Administration of the Jomo Kenyatta University of Agriculture and Technology

#### DECLARATION

This thesis is my original work and has not been presented for a degree in any other University

This Thesis has been submitted for examination with our approval as the University Supervisors

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### **DEDICATION**

This thesis is dedicated to my husband, Thomas Gioko and our children: Francis Gioko, Muiru Gioko, Kioko Gioko and Wahura Gioko, for inspiration and immeasurable sacrifices and lastly to my beloved parents David Ng'ang'a & Professor Grace Njeri for their immeasurable sacrifices, encouragement and selfless support.

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## ABBREVIATIONS AND ACRONYMS

Ads	Advertisements
ANOVA	Analysis of variance
CRM	Customer Influence Management
e-CRM	Electronic Customer Relationship Management.
e-Marketing	Electronic Marketing
GDP	Growth Domestic Product
IDIC	Identify, Differentiate, Interact, Customize
IT	Information Technology
m-CRM	Mobile Customer Influence Management.
SEM	Search Engine Marketing
SMES	Small and Medium Enterprises
SMS	Short Message Service
VIF	Variance Inflation Factor
ZPR	Computed z-scores of the predicted values.
ZRE	Standardized residuals

#### **DEFINITION OF TERMS**

**Electronic personalization:** The process of customizing web pages to the special requirements or performance of various users on the website, with the goal of expanding the business outcomes of the e-commerce platform.in addition is the process of tailoring pages on a website to the characteristics or performances of individual users, with the goal of increasing business (Mehmood, Verleye, & De Keyser, 2020).

**Electronic Service Quality:** Customers' overall reviews and judgments on the excellence and quality of electronic service delivery in the virtual market, including both pre-and post-website service perspectives. It is also the overall customer evaluations and judgments about the excellence and quality of electronic service delivery in the virtual market, line with the virtual market, service delivery in the virtual market, and judgments about the excellence and quality of electronic service delivery in the virtual market, service (Yuan, Jusoh, Muhd, & Moh, 2020).

**E-technology Infrastructure:** Businesses can improve organizational performance by applying and implementing technology. Etechnology infrastructure enables firms to be innovative by developing new products that enable them to create new markets and gain a competitive advantage through increased interactivity Macharia, Wang, & Lepa, 2020).

**Electronic Innovation:** The generation, acceptance and implementation of new ideas, processes, products or services which is delivered through digital marketing (electronic / online) platforms). Innovation also entails the introduction of new products or a new quality for the products or service (Mohammad and Tamer 2020).

- Customer Relationship Management: The strategy used mostly by companies to place the customer at the heart of their operations, processes, activities and culture. Information Technology tools are used to achieve CRM. improves the process of identifying, building, and retaining long-term influence with profitable customers. AlQershi, Mokhtar, & Abas, 2020).
- **Electronic Customer Relationship Management:** Marketing activities, techniques, and tools conveyed on the web with the objective of finding, constructing, and enhancing long-term customer influence. It is an important tool for measuring an organization's performance in order to assist the company in increasing profits and increasing customer loyalty to the company's product. Building better customer relationships is one way to improve e-CRM performance. (Herman, Sulhaini, & Naili, 2020).
- **Performance:** This is the ability of a business to implement strategy to achieve organizational objectives. Outcomes or processes that, if viable, can be defined in terms of excellence. (Mjongwana & Kamala, 2018).

#### ABSTRACT

Hotels are striving to build and maintain stronger ties with their clients, and they are also operating in a very competitive climate. Since hotel owners have realized the importance of customers and their beneficial impact on the hotel's performance, they are willing to make a focused investment in the field of electronic Customer Relationship Management (e-CRM.) The goal of this study was to look into the relationship between e-CRM and hotel performance in Kenya. The study aimed to provide insights into the e-CRM used by Star rated hotels in Kenya, for hotels to achieve competitiveness and improve performance. Specifically, to assess the relationship between e-personalization and the performance of Kenya's Star rated Hotels, and to determine the relationship between electronic service quality and performance of Star rated hotels in Kenya. In addition to determining the relationship between electronic technology infrastructure and performance of Star rated hotels in Kenya, assessing the relationship between electronic innovation and performance of Star rated hotels in Kenya and determining the relationship between electronic customer relationship management dimensions and performance of Star rated hotels in Kenya to investigate the moderating effect of hotel location on the relationship between e-CRM and performance of Star rated hotels in Kenya. The study was influenced not only by the hotel industry's poor performance over the last two decades, but also by the mixed results and contentious debate over the effect of electronic customer relationship management strategies such as e-personalization, e-service quality, e-technology infrastructure, and e-innovation on performance. This study employed cross sectional research design, the population was 112Star rated hotels in Kenya, this was a census study. A structured questionnaire was used to collect data from key managers involved in strategy formulation and implementation. Out of the 112 questionnaires distributed, 90 were returned and found to be usable, representing an 80 percent success rate for this type of research. Correlation analysis was used to perform inferential data analysis. Multiple and simple regression analysis were used to fit regression models, and standard F and T tests were used to test hypotheses. According to the findings, e-CRM, as measured by e-personalization, e-service quality, e-technology infrastructure, and e-innovation, was significant and positively related to hotel performance. However, hotel location was not found to be a moderator of the relationship between e-CRM and performance of Kenyan Star rated hotels in Kenya. The study confirms that hotel location is neither a prerequisite nor a factor in the successful implementation of e-CRM in Kenya's Star rated hotels in Kenya. The study advocated for e-personalization when interacting with customers via electronic and social media platforms. Based on deliberate high e-service quality processes in hotels, increased implementation of e-technology infrastructure, and ensuring e-innovation of their products and procedures in hotels. The study's conclusions and recommendations are that e-CRM significantly affects firm performance in developing countries and they should be implemented in businesses.

#### **CHAPTER ONE**

#### **INTRODUCTION**

#### **1.1 Introduction**

This chapter focuses on the introduction of the research problem by presenting the background to the study, statement of the problem as well as the study objectives. The chapter also included the hypotheses, significance of the study as well as the scope of the study.

#### 1.2 Background of study

The study sought to explore the relationship between Electronic Customer Relationship Management on performance of Star rated hotels in Kenya. In an era of fierce competition, many organizations must develop strategic plans in order to gain a competitive advantage or to win the competition. Marketing is a key to success because it contributes significantly to the achievement of organizational visions and goals. Marketing is a management process that aims to maximize profit (returns) to shareholders while also providing a competitive advantage in product. A key underlying factor in marketing is that in order for a business to succeed, it must identify and satisfy the needs and desires of customers in target markets. Marketing has become increasingly important for businesses around the world in order to remain competitive. (Morgan, Whitler, & Feng, 2019).

According to Almir and Anela (2012), the purpose of any firm's electronic business activity is to maintain a relationship with its consumers, and they employ Electronic Customer Relationship Management (e-CRM) as an efficient marketing technique. To empower businesses to build customer loyalty, save money, be more efficient, and provide better customer service and support. Indeed, e-CRM is regarded as one of the most critical concepts in modern marketing. In order to manage customer connections, businesses must interact with their customers utilizing proper technologies such as social media. Many business executives were recently obliged to comprehend the relevance of e-CRM.

#### **1.2.1 Customer Relationship Management Trends**

According to (Pohludka & tverková, 2019), Customer Relationship Management (CRM) improves the process of identifying, building, and retaining long-term influence with profitable customers. CRM is also a comprehensive customer culture developed within a company, which means that each customer is recognized and identified based on their need and name. CRM gives businesses a comprehensive view of their customers. CRM implementation helps businesses improve customer satisfaction while lowering costs by focusing on profitable customers.

CRM is a business strategy that prioritizes the customer in the processes, activities, and culture of an organization. Information Technology (IT) applications, in this context, are the tools that allow organizations to put their strategy into action (AlQershi, Mokhtar, & Abas, 2020). Customer management assists managers in developing new services, improving service quality, lowering marketing costs, and identifying and retaining profitable customers. This is because increased customer loyalty boosts a company's profitability. CRM is a straightforward philosophy that places the client at the center of a business organization's processes, activities, and culture in order to improve service satisfaction and, as a result, maximize profits (Nasution & Rafiki, 2018).

According to Mohammed (2018), CRM can be used to retain existing customers and maximize customer value, and CRM seeks to create, enhance, and influence customers in order to increase customer value and corporate profitability through the use of IT. CRM, on the other hand, has been described by many authors as a business strategy that improves customer acquisition and retention and should be present throughout the organization.

CRM has evolved into several trends, according to Navarro, Badenes, and Antonio (2020), including Mobile CRM (m-CRM), Electronic CRM (e-CRM), Customer analytics and forecasting, and Social CRM. Mobile customer relationship management (m-CRM) strategy are services that promote customer influence, customer acquisition or retention, support marketing, sales, or service processes, and use the broadband network as a medium of customer delivery. Analytics and forecasting as a

CRM means investing in understanding the value of customers and modeling their behavior through the use of analytics. This includes data collection and customer learning, as well as their spending habits and other factors. Companies can use the data to get to know their customers (comments, emotional states). (Nasution & Rafi-ki, 2018).

Customer Relationship Management in social media and social network platforms such as Twitter, Facebook, LinkedIn, and YouTube are examples of social customer relationship management (also known as CRM 2.0). Companies can use social networking tools to test new ideas and get feedback from customers. This ultimately improves products and brands. Customers expect a higher level of interaction with customer service representatives. As a result, companies are being challenged to upgrade their CRM systems to online capacity. Blogs, forums, wikis, and other social networking tools that assist businesses in reaching out to customers (Muhammad, & Munaw, 2019).

#### **1.2.2 Electronic Customer Relationship Management and Perfomance**

Electronic customer relationship management (e-CRM) is an important tool for measuring an organization's performance in order to assist the company in increasing profits and increasing customer loyalty to the company's product. Building better customer relationships is one way to improve e-CRM performance. Personalization, customer satisfaction, and technology infrastructure all have an impact on performance when it comes to E-CRM (Onyeocha & Chinonso, 2015). A social customer-to-company relationship enables businesses to achieve competitive excellence; in today's competitive environment, businesses should shift their focus away from meeting sales and marketing targets and toward effective relational capability development. Several dimensions, such as personal interaction, mutual trust, personal friendship, and developed learning, can be used to assess the effectiveness of a relationship (Badwan, Al Shobaki, & Abu Nas, 2017).

Because an organization understands its customers' needs and exceeds their expectations, the e-CRM feature improves performance. This is the adaptation of a company's products and services for the consumer based on information derived

from the consumer's behavior or transactions. Personalization fosters a long-term relationship between a business and its customers, resulting in more loyal customers. As a result, the companies' performance has improved (Montgomery & Smith , 2008).

e-CRM strategies aid in product innovation by establishing long-term relationships with customers, who are then encouraged to interact with the company by providing advice or ideas to improve the company's products and services. As a result, the company creates innovative products or capabilities while maintaining long-term competitive excellence (Ramani & Kumar, 2008). Companies can focus their efforts to strengthen the CRM through customer participation at an early stage by encouraging customers to suggest practical ideas or innovations in aiding new product development or innovating existing products through the use of e-CRM (Herman, Sulhaini, & Naili, 2020). Electronic personalization entails individualizing customer interactions with the company, which leads to an increase in correctly valuing customer engagement as a result of effective customer service. Companies can use e-personalization to solve problems as they arise and to prevent them from occurring in the first place. Good customer service as a result of e-personalization enables businesses to retain loyal customers and allows customers to offer suggestions, creating opportunity and leading to innovation (Mugobo & Baschiera, 2015).

Electronic service quality improves customer satisfaction by allowing customers to easily obtain product or service information from the company via their online platforms. In order to improve service quality, managers should pay attention to how customers interpret and evaluate web applications. In today's competitive environment, businesses are turning to online platforms to help them grow, gain a competitive advantage, and be more efficient. Furthermore, e-service quality ensures that there is no disparity between what a company promises to deliver and what they actually deliver (Yuan,. *et al*, 2020).

Electronic technology infrastructure enables businesses to provide automated, fast, smart, and innovative technology to meet consumer needs. Companies should ensure

that new technologies are introduced on an annual basis in order to capitalize on innovative ideas and improve business performance. Because it allows direct exposure and creates a channel without intermediaries with potential customers in the market, e-technology infrastructure increases brand loyalty in the internet economy (Zaures, *et al* 2020).

Three key characteristics of digital technology is that it has altered the nature of innovation to electronic innovation: To begin with, once digitized, information can be stored, transformed, transmitted, and traced by any digital device, regardless of its content. Second, digital information can be edited via re-programming, making digital solutions malleable to changes after deployment via interaction with external systems. Third, because digital technology is inherently self-referential, digital technology is required to create digital technology. That is, digital technology is both the result of and the foundation for developing digital innovations, implying high scalability and low entry barriers, as well as enabling widespread participation and democratization (Horng , Wang, Hsing, & Tsai, 2016).

#### **1.2.3 Performance**

Performance measurement is a basic element of business management to understand the source of sector's competitiveness and support the implementation of strategies. According to Kala & Bagri, (2014) key Performance Indicators (KPIs) in the hotel industry, are the selected indicators considered significant for monitoring the performance of strategic objectives, outcomes, or key result areas absolutely critical and important to the success and growth of the organization. The purpose of hotel KPIs is to provide decision makers in the organization measurable indicators for judging the hotel performance and for measuring the achievements of hotels objectives. These KPIs can help hospitality managers in their efforts to ensure efficient and effective management of resources and profit maximization through customer's satisfaction. KPIs are used by hotels and other industries as tool for benchmarking with others so as to improve their own performance.

Occupancy Percentage Rate: Refers to the ratio of total number of occupied rooms to the total number of rooms available for sale, business stability expressed by rate of occupancy and customer satisfaction, as a parameter that occupies an increasingly important role in the research of business performance (Kamarudin, Aziz, & Bakht, 2011). The higher the number of room occupancy, the bigger will be the profits. The occupancy rate is determined by the customer awareness of the services of the hotel. customer satisfaction was crucial in determining hotels" successful occupancy. This operating ratio compares the number of rooms sold to the number of rooms available. Managers rely on this ratio in determining whether, or not, the premises are being utilized efficiently and whether expansion is possible. Bedroom occupancy rate is calculated by dividing the number of rooms sold by the number of rooms available (Kim, 2010).

Personal referrals have been shown to be significant influences in hotel purchase decisions, the most widely-recognized source of customer influence comes in the form of product referrals, , customers acquired by other customers (i.e., through referral programs) also tend to be more loyal and valuable than customers acquired through firm-initiated communication (Brady, Bourdeau, & Heskel, 2005). The online ratings can be seen as the consumer's perceived quality for the service or attribute and are likely to influence hotel room rates, many times individual purchasing or booking decisions are based on other travelers' opinions on different forums. hotel managers should monitor their guests' reviews online as they offer significant insight into the expectation's customers and targets for development. (Ilieva & Ivanov, 2014).

They use post-stay guest surveys to identify what matters most to their guests, by sliding scale questions can be used to quantitatively track your guests' sentiment over time. Regularly surveying guests and keeping track of their responses will help you identify what you do well and need to work on. It will also help you identify problem areas before they get out of hand. Revenue management has become an important competitive strategy in the hotel, and the level of hotel performance directly reflects the effectiveness of the application of revenue management. Hotel revenue management process includes developing strategic goals, collecting and analyzing data, forecasting demand, making price and book policies, implementing and evaluating the result (Wang Xiaowen & Chen Jie, 2014). in his study on Irish

Hotel Industry established that year-on-year sales growth increased revenue as part of a growth strategy which were greatly contributed by management of costs and improvement of the hotel 's financial position, the need to win 8 new and retain existing customers, improved satisfaction and quality ratings, gaining best value from existing customers.

According to Ng'ang'a (2013), operating costs and return on investments were the most used financial measures, in the hotel industry. Expertise of employees and the total operating costs also affect to a considerable extent the customers 'perspective, hence influencing the performance of the hotel. A firm's profit strategy pushes it to be socially responsible because of an anticipated benefit (e.g., reputation enhancement) from CSR actions, good CSR reputation helps build reliable customer relations. Positive influence of CSR on the immediate hotel environment improves the firm's competitive edge, due to improved relationships with stakeholders., resulting to economic benefits (Vilanova, Lozano, & Arenas, 2009).

Hotels advertising Return on investment measure success by the amount of net profit or net results they generate from their advertising activities. ROI fulfils business need for a tangible profit from an investment. ROI is considered more from engagement, influence, awareness, reputation and relationship perspectives. abilities to estimate awareness that campaigns create, and more importantly, that companies can identify if the awareness leads to purchases (Helander, 2010). Maintaining star hotel classification rating, Attitude, behavior, and expertise of employees (Kala & Bagri, 2014). Hotel star ratings function as a promotional tool that is associated with growth in hotel business measured by volume of sales and occupancy rate. This is supported by a study by Vallen & Vallen, (2005) who noted an approximately 20% increase in sales among top-rated hotels in the Mobile Guide and a 40% increase in business among small hotels rated in AAA after hotels were awarded with classifications. Hotels also perceive ratings as a pricing tool, where price variations partially are explained by star ratings and the star rating system is a significant predictor of hotels' decision in setting prices (Israeli & Uriely, 2000).

#### 1.2.4 Location

Location is used to identify environment, since the environment, in the case of the hotel industry, may be more specific to the location than the industry to which the property belongs.

The hotel location is an essential factor in the hotel environment and is considered as the strongest determinants of hotel performance; their location is categorized and named as, urban, suburban, airport, resort, small metro or town, and interstate. A strategic environment will undoubtedly promise well for superior performance by the hotel in terms of revenue generation, in the short as well as long term. The importance of hotel environment is in the product differentiation which produces "place-sensitive products". The environment choice for a hotel facility has a significant impact on the hotel's strategies for competitive advantage in terms of financing, marketing, human resources, and customer satisfaction (Aznar-Alarcón, Sayeras Maspera, & Rocafort, 2016).

As a service industry, hotels and restaurants are keen on environments that are proximate to their potential markets because they seek increased demand from potential guests. Hotels close to a potential market outperform their counterparts which have poor accessibility in terms of efficiency. Environment can impact the destination image in the mind of customers and influence their destination travel choices. The importance of environment (in terms of access to/distance from particular places, intrinsic site characteristics and neighborhood characteristics) for product differentiation in the hospitality and tourism sectors (which produce "place-sensitive products". The environment will influence guest satisfaction, hotel revenue per available room, increased demand, and overall profitability (Aznar-Alarcón, Sayeras Maspera, & Rocafort , 2016).

As a service industry, hotels and restaurants are keen on locations that are proximate to their potential markets because they seek increased demand from potential guests. According to Barros (2005), hotels close to a potential market outperform their counterparts which have poor accessibility in terms of efficiency. As indicated by a model proposed by Yokeno (1968), in a monocentric city, hotels choose centrality of spatial

location. In this regard, there is a large demand for accommodation in the city center which may be the central business district or tourist district (Shoval, 2006). Barros (2005) also found that location appears to be the explanatory factor for efficiency whereby hotels near cities are more efficient than those in more remote locations

An attractive location is connected with a possibility of both generating income (demand and price level) and creating costs (availability and production factor costs) and, in consequence, with economic effectiveness and hotel profitability. The location of business hotels should enable business tourists an easy and quick journey by personal and public transport. Therefore, these hotels should be located near motorways, airports and train stations. The surrounding area of a hotel is also crucial. Interesting environment and varied infrastructure enabling attractive leisure activities can be essential factors attracting business clients (Sidorkiewicz & Puciato, 2017).

Hotel Location or position is a factor with a great impact on the hotel sector, because the decision regarding where to build a hotel requires certain nearby tourism resources. It is the strategy defined by the company that will decide whether we locate our business on the beach, in mountain areas to take advantage of the snow, in cities with historical attributes, such as monuments, or in important cities, near airports, ports, etc. The location economies arise when the companies are geographically concentrated, because they require a specific factor located in a specific geographic area or because they share suppliers and markets (Molina-Azorini, Tari, & Moli, 2015). A good location allows the hotel to charge a higher price and the demand will be probably less elastic than in hotels located far from the city center. Our results suggest that location is a key factor in explaining better performance. Being located near to a huge supply of Airbnb apartments is common for hotels in the city center, a location that many customers are willing to pay extra for (Aznar, Sayeras, & Rocafor, 2017).

Technology adoption such as e-CRM depends on their overall ICT understanding owners / ownership, hotel owners' have an impact on hotels strategies regarding branding, franchising, and service that has significant effects on hotel financial performance. Hotel owners may not operate their hotels directly; they can influence their properties indirectly through various strategies in choosing environment, segment, brand, and operator.

#### **1.2.5 Hotel Trends**

The global tourism market is one of the fastest expanding sectors of the global economy. According to the World Tourism Organization (UNWTO), the annual increase is roughly 3%, and tourism development receives about 6% of global capital investments. Tourism accounts for more than 10% of global GDP and over 30% of commerce volume. The hotel industry is growing in tandem with the increase in visitor traffic. This industry is regarded as the most important component of tourism infrastructure (The World Tourism Organization, 2023)

The global tourism industry has been negatively impacted by the Covid-19 pandemic due to the economic consequences of the cessation of activities and movement. This has created uncertainty in the hotel industry's operations. Bouarar and Mouloudj (2020). International tourism is well on its way to returning to pre-pandemic levels, with twice as many people travelling during the first quarter of 2023 than in the same period of 2022. The UNWTO data also analyses recovery by sub-region and by destination: Southern Mediterranean Europe and North Africa have also recovered prepandemic levels in Q1 2023, while Western Europe, Northern Europe, Central America and the Caribbean all came close to reaching those levels. international tourism receipts grew back to hit the USD1 trillion mark in 2022, growing 50% in real terms compared to 2021, driven by the important rebound in international travel. (The World Tourism Organization , 2023)

In Africa, International tourism had a good start in 2022, with a growth in the number of places around the world eliminating travel constraints. According to UNWTO data, international visitor visits have more than doubled compared to last year, and Africa has had a 51% increase in early 2022 compared to 2021, however numbers remain far below pre-pandemic levels of 2019. To expedite recovery, UNWTO and WHO emphasized the critical need of having risk-based, evidence-informed, and context-specific travel safeguards in place to enable a seamless resumption of tourist operations and safe travel. Furthermore, we are able to give information and analyses of post-pandemic scenarios, as well as report on actions implemented by Member States to enhance the tourist sector, through the UNWTO Global tourist Dashboard on Tourism and COVID-19, and the Tourism Recovery Tracker. (The World Tourism Organization, 2023)

In Kenya. the tourism and hospitality industries are among the world's fastest growing and are significant top foreign earners for Kenya. Kenya's hotel infrastructure is spread out across the country, with varying degrees of concentration. (Tourism Regulatory Authority, 2021). Kenya hotels are classified as follows: hotels, which can be either town hotels or vacation hotels, lodges, tented camps, villas, cottages, and restaurants, which can be found in the various tourism regions. The Star rated hotels in Kenya are then subdivided as follows: there are 14 town hotels, 24 lodges, 18 tented camps, and 5 villas, apartments, cottages, and 1 restaurant (Tourism Regulatory Authority, 2021).

Kenyan Five-star hotels are the best categorized in terms of luxury, service, environment, fine dining with exquisite menus and frequently renowned chefs. They strive for excellence in all aspects of hospitality and are known for their excellent craftsmanship in architecture, landscape, interior decor, and exquisite taste. Four-star hotels provide excellent restaurants, fine restaurants, bars, lounges, and full room service in addition to high-quality lodging. There are high-quality buildings, personalized service, modern furniture, valet parking, and a variety of other major hotel amenities. The staff's primary concern is the comfort of the guests.Landscaping and grounds are beautifully groomed and well laid-out.

Three-star hotels are significantly modernized, with more spacious guest rooms with quality amenities, excellent hotel restaurant service, and, in most cases, a swimming pool and a fitness center. Star rated hotels in Kenya have the capacity to invest in IT infrastructure, and hotels are high foreign income earners in Kenya, so the study focuses on them. The findings of this study on how to improve hotel performance benefit Star rated hotels in Kenya greatly.

Some of the challenges confronting the Kenya hotel industry include the fact that, despite the use of information and communication technology in their operations,

hotel performance has continued to decline (Kenya National Bureau of Statistics, 2019). Other resources are lacking in hotels in order to generate technology infrastructure competencies that create valuable, interchangeable goods and services, which is the source of competitive advantage. Kenyan hotels are also failing to implement technology infrastructure to respond to new market opportunities and deal with competitive threats (Macharia & Thuo, 2011).

In order to improve performance, technology infrastructure should be used in hotel operations. In competitive industries, technology infrastructure is critical for organizational performance, growth, and survival (Chakravarty, 2015). Another challenge confronting Kenya's hotel industry is the dynamic hotel operating environment, which is characterized by rapidly changing customer expectations and preferences. To overcome this challenge, innovation is essential as a suitable growth strategy that will boost good performance (Korir, 2020). Service quality is also cited as a major challenge in the Kenya hotel industry, as it affects customer satisfaction. Customer satisfaction determines a hotel's ability to compete successfully in the market. Kenya's hotel industry performance has been hampered by poor service quality levels as a result of low customer satisfaction (Kinyingi, 2018).

In Kenya, tourism is a significant economic growth and development driver, the spread of COVID-19 has had an impact on hotel operational and commercial activities, resulting in hotel financial crises. This has resulted in widespread travel restrictions, which have had a negative impact on the industry, resulting in a slowdown in hotel economic activity. Furthermore, there has been a decline in demand and an increase in prices for their services, putting the hotel industry's profitability in jeopardy. According to the United Nations World Tourism Organization (UNWTO), there will be a loss of 850 million to 1.1 billion international tourist arrivals, as well as a loss of \$910 million to \$1.1 trillion in export revenues (Hemmington & Neill, 2021).

According to the International Labor Organization (2021), hotels worldwide, including Kenya, are currently facing unprecedented challenges that have negatively impacted their performance. Workers in the industry have been laid off, hotels have been temporarily closed, and hotel reservations have been canceled. As a result, occupancy rates and revenue per available room have decreased. According to Dogan and Chi (2020), hotel survival is a major challenge for most hotels worldwide, particularly in the current context of COVID-19. This has been evident in Kenya, where the pandemic has exacerbated pressures on an already difficult business environment for Kenyan hospitality businesses. According to Andreas, Nicola, and Rempel (2020), the COVID-19 pandemic has significantly altered the hotel industry, which was already subject to low margins, unsustainable financial results, and disruptions as new technology-driven players entered traditional market segments. The pandemic has resulted in market failure for the global hospitality industry in the Kenyan hotel industry. Its negative consequences have been an economic slowdown and a lack of liquidity as a result of the hotel industry's seasonal ability.

Kenya's travel and tourism contribution to the gross domestic product (GDP) was 8.8 percent in 2019, and 4.4 percent in 2020. The tourism industry lost 74 percent of its indirect international tourism receipts in 2020, amounting to 37 billion shillings (336 million US dollars) against a projected revenue of 1.34 billion dollars for the review period (World Travel & Tourism Council, 2019). Kenya tourism arrivals increased by 3.9 percent from 2.02 million in 2018 to 2.05 million in 2019. Revenue was at KSh163.56 billion prior to the COVID-19 pandemic, which reduced revenue to a loss of \$125 billion. Including a USD 511 million loss in hotel room revenue and a Sh2.5 billion annual 2% Catering Levy loss (Government of Kenya Ministry of tourism and Wildlife, 2020).

Kenyan hotel industry grew by 10.3 percent in 2019, and they were the hardest hit by the COVID-19 pandemic, contracting by 57.9 percent in the third quarter of 2020, compared to an 83.3 percent contraction in the second quarter. This contraction was attributed to the government's measures to control the spread of COVID-19. These measures included the cancellation of passenger flights, the closure of hotels and bars, and the imposition of a night curfew. As the rate of infection decreased, the economy gradually reopened, albeit with strict health protocols, and hotels and entertainment areas began to reopen as well (Kenya National Bureau of Statistics, 2019).

#### **1.3 Problem statement**

For Kenya, tourism is one of the major economic pillars and the second largest contributor to foreign exchange earnings of over USD 1.57 billion and has created 1.1 million jobs. Research shows that the hotel industry is one of the fastest-growing sectors with significant multiplier effect on employment and related industries. In developing countries, hotels and other related tourism products have a greater contribution to the local economy than most economic activities (The International Labour Organization , 2023). Hotel industry contributed 8.7% Total contribution to employment (1.08M people), most outside of the main urban areas. It contributed 4.4%1 direct GDP contribution of the sector :9.3% total contribution. (Government of Kenya Ministry of tourism and Wildlife, 2020).

The Kenyan tourism and hotel sector has performed poorly in comparison to other sectors, according to statistics from the Kenya National Bureau of Statistics, with a growth rate of 3.9% between 2019 and 2020. (Kenya National Bureau of Statistics, 2020). The main argument is that incorporating and implementing e-CRM strategies has a positive impact on business performance in terms of increased customer satisfaction and retention (Shahram & Farhad, 2013, Ishmael, 2015, Macharia & Thuo, 2011, Mang'unyi, Khabala, & Govender 2017).

Various authors' empirical studies on the impact of e-CRM on business performance have yielded mixed results. According to Kumar and Vikkraman (2011), successful implementation of e-CRM allows companies to achieve massive gains in terms of high return on investment (ROI) while increasing customer loyalty. Hande and Hülya (2009) agreed, concluding that successful implementation of e-CRM is an important driver of competitive advantage. They point out that it enables businesses to prevent customers from switching to a competitor's company.

In contrast, Lou and Taghva (2017), found that the use of social networks in e-CRM has no positive effect on aspects of business performance and communicative marketing in their study, the efficacy of e-CRM and business Performance on Hotel Industry. They concluded that using email as an e-CRM strategy has no positive impact on learning or financial perspectives. According to Arora and Dreze (2008), e-

personalization improved business performance by increasing profits. Kaur (2018), acknowledged that e-service quality is a central driving force in enhancing and sustaining competitive advantage. Sheung (2014), acknowledged that e-technology infrastructure not only aids in gaining a competitive advantage, but also in increasing business productivity.

According to (Horng, Wang, Hsing, & Tsai (2016), e-innovation enables businesses to develop new methods and elements of business operations that result in efficient business performance. While investigating the value of e-CRM Practices and Customer Satisfaction in the Insurance Sector in India, Biswamohan and Bidhubhusan (2012) discovered that brand popularity, as an e-CRM variable, was insignificant in creating customer satisfaction. Sunny and Abolaji (2016) discovered that internet e-CRM had no effect on the market performance of firms in the telecommunication sector in their study, e-CRM and Marketing Performance: Empirical Evidence from the Nigeria Telecom Sector. They came to the conclusion that e-CRM was not yet a popular marketing strategy that had an impact on business performance.

The studies discussed above present a contradictory argument about the impact of e-CRM on organizational performance. There has been limited research in Kenya on e-CRM and its impact on business performance, particularly in the hotel industry (Shahram & Farhad, 2013; Ishmael, 2015; Macharia & Thuo, 2011; and Mang'unyi, Khabala, & Govender 2017). This highlights the need for a study to fill existing gaps and dispel doubts about the influence of e-CRM on organizational performance. Against this backdrop, the study sought to fill this knowledge gap

# **1.4 Objective of Study**

The objectives were meant to highlight the purpose of the study and comprised both general and specific objectives

# **1.4.1 General objective**

The purpose of this study is to investigate the relationship between Electronic Customer Relationship Management and performance of Star rated hotels in Kenya

# 1.4.2 Specific objectives

- 1. To determine the relationship between electronic personalization and performance of the Star rated hotels in Kenya
- 2. To assess the relationship between electronic service quality and performance of the Star rated hotels in Kenya
- 3. To determine the relationship between electronic technology infrastructure and performance of the Star rated hotels in Kenya
- 4. To assess the relationship between electronic innovation and performance of Star rated hotels in Kenya
- 5. To determine the moderating influence of hotel location on the relationship between e-CRM and performance of Star rated hotels in Kenya

# **1.5 Statistical Hypothesis**

The study was guided by the following null hypotheses;

- **H**<sub>01</sub>: There is no significant relationship between electronic personalization and performance of the Star rated hotels in Kenya
- **H**<sub>02</sub>: There is no significant relationship between electronic service quality and performance of the Star rated hotels in Kenya
- **H**<sub>03</sub>: There is no significant relationship between electronic innovation and performance of the Star rated hotels in Kenya
- **H**<sub>04</sub>: There is no significant relationship between electronic technology infrastructure and performance of the Star rated hotels in Kenya
- **Hos:** There is no significant moderating effect of location on the relationship between e-CRM and performance of the Star rated hotels in Kenya

#### **1.6 Justification of Study**

The study's main goal was to determine the influence of e-CRM on the performance of three to five-Star rated hotels in Kenya. The study focuses on Star rated hotels in Kenya because they cater to both international and domestic tourists and account for the majority of the industry's market share in Kenya. The study's findings will be important to a variety of parties, including the government and policymakers, hotel management, management of other firms in other industries, electronic customer relationship management practitioners, and future academicians and scholars. These beneficiaries are discussed below in terms of how they will benefit.;

The study findings will benefit the management of Star rated hotels in Kenya in that they will establish e-CRM strategies that should improve their performance. This will allow them to identify the best e-CRM strategies to successfully implement in order for their hotels to gain competitiveness. The management will identify ways to fill the gaps that have always rendered their strategies unsuccessful through the discussed e-CRM strategies.

The study's findings will be important to policymakers, who will use them to determine the best ways to formulate laws on how to regulate Star rated hotels in Kenya and how to provide a level playing field for them to remain competitive. Through its representatives, the government, which is also a stakeholder in many companies, will identify the best approaches to take in order to drive the e-CRM strategies to success and deliver the expected results.

Other large/small organizations, in addition to Star rated hotels in Kenya, require strategies that allow them to diversify and maximize their profits and performance. As a result, the study's findings will be important to other organizations, which will use them to identify the need for marketing strategies to improve their performance.

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# 1.7 Scope of study

The study sought to determine the relationship between e-CRM and the performance of Three to Five Star Hotels in Kenya. The study focused on the following e-CRM strategies: electronic personalization, electronic service quality, electronic technology infrastructure, and electronic innovation. Several researchers from around the world have prioritized and recommended e-CRM strategies, finding them to be influential on business performance. Aldaihani & Bin (2018); EsmaeilMalek & Daghbandan (2014); Macharia & Thuo (2011) ; Rabbai (2013).

Because the hotels under study are located across the country on, the study concentrated on 112 Three to Five Star hotels in Kenya, Second, international and domestic tourists consider and visit Star rated hotels in Kenya. The study included all the Three-to-Five-star hotels in Kenya, with the goal of improving the quality of data collected. The goal of determining the difference in hotel performance before and after the implementation of e-CRM. This was necessary because there is limited local research in Kenya on the use and influence of e-CRM on hotel performance. The study included 112 respondents who worked for the 112 Three-to-Five-star hotels in Kenya. The study used cross-sectional research design.

# **1.8 Limitation of study**

The following are some of the limitations of the study. The generalization of the findings shall be limited if there are issues relating to breach ethical research practices. Secondly, the research focused only on the Three to Five star, as rated by the Kenya Tourism Regulatory Authority (Tourism Regulatory Authority; the one and two star rated hotels are left out. The study adopted descriptive and correlational analysis where the relationship of the independent variables and dependent variable were identified by regressing the independent variables with the dependent variables. The study was further limited to competitive Advantage model, innovation of Profits theory, IDIC model, E-SQUAL Model and Social Exchange theory.

### **CHAPTER TWO**

### LITERATURE REVIEW

### **2.1 Introduction**

A brief review of the literature related to the study is provided in this chapter. This includes a theoretical background as a basis for an appropriate conceptual and theoretical framework for the current study. The chapter also examines the corresponding past studies and presents a critique of the same. In conclusion, the chapter shows the research gaps justifying the current study.

### 2.2 Theoretical Review

This study focused on the following theories and models: Social exchange theory, electronic service quality theory, Identification differentiation interaction Model, Innovation of profits theory and Competitive advantage theory.

#### 2.2.1 Social Exchange Theory

Homans' (1961), theory suggests that social interchange or interactions influence business profits; the theory confirms that the use of subjective cost-benefit analysis and comparing alternatives is based on human influences. According to this theory, social exchange between at least two people is more or less expensive in terms of activity, whether tangible or intangible. Exchange is regarded as a social behavior that can result in both economic and social outcomes. According to Xia, Wu, and Zhou (2021), the theory assists businesses in understanding that social exchanges between customers and companies do not always produce tangible returns, and that people prefer to exchange their expertise or effort for intangible returns such as status and respect. (Hsieh, Hughes, & Schult (2020), confirm, this theory helps businesses maximize profit while minimizing costs. Furthermore, Yavuz (2020) stated that businesses should encourage employee behavior in order to ensure that customer interactions are preferred in the business because the social exchange process is some conditional interactions. These social exchanges encourage commercial friendship between customers and service personnel, and the aspects of service encounters are based on social exchanges. Customers who have a positive experience with service personnel are more likely to develop an emotional attachment and loyalty to the service provider. Because of its ability to foster friendly interaction that fosters business friendship, emotional devotion, and loyalty to service providers, interpersonal influence has become an important competitive armed device in the hotel industry (Redmond, 2015).

In today's markets the business influence becomes increasingly important, so that if a client accesses hotel services, he experiences certain process characteristics of personal influences. Interpersonal communication, relationships, relationship-setting, and friendly interaction are examples of dimensions that shape our clients' perceptions of interpersonal influence. Interpersonal communication is defined as more about the content and character of the exchange with regard to maintaining influence, which appears to have a strong influence on customer loyalty. This is due to the fact that interpersonal communication occurs when the other person is treated as a unique human being, and the interpersonal communication component in interpersonal influence plays a significant role in customer loyalty (Olannye, 2014).

The relevance of this theory to hotel performance is in the encouragement of behaviors between the hotel and its employees, so as to promote organizational commitment. As a result, the links among strategic orientation, organizational culture, organizational commitment, and organizational performance are intertwined and depict resource exchange relationships.

The interactions should remain consistent, relevant, and appropriate. The quality of friendly interaction as a dimension of interpersonal influence has overwhelming positive influence on performance in the hotel industry (Hailin, 2011). In this study, the theory aids the study in identifying profitable company to customer interactions (communication) and influences through customer intimacy, in addition it guides the study in understanding quality service delivery to the customers promoting customer loyalty which translates to improved company performance.

The implication of this theory to hotel performance is anchored in the fact that social exchange ensures hotel employee offer their all to the hotels. This can lead to better job outcomes. Employees will be happier, more motivated, perform better, and feel more connected to the organization. Benefits, on the other hand, may include the shared data, information, and knowledge of the teams, which may be leveraged to increase the teams' effectiveness in fostering customer loyalty, resulting to improved hotel performance.

### 2.2.2 Electronic Service Quality Theory (E-S-QUAL)

E-S-QUAL is a scale proposed by Parasuraman *et al.* (2005), for measuring the quality of electronic services. E-S-QUAL is a core service quality scale with four dimensions for measuring core service attribute: efficiency, fulfillment, system availability, and privacy. Zeithaml, Parasuraman, and Malhotra (2002), developed the E-S-QUAL theory as a measure of how customers judge the quality of e-services.

It has seven dimensions: efficiency, reliability, fulfillment, privacy, responsiveness, compensation, and contact (classified as the core service scale) (classified as recovery scale for they are only useful when online customers have questions or problems). These seven e-service quality dimensions are based on customer experience and evaluation. Efficiency is defined as a customer's ability to access electronic channels or a website, find their desired product and the information associated with it, and finally check out with minimal effort (Zeithaml, Parasuraman, & Malhotra, 2002). Fulfillment is the accuracy associated with the promise of the service and the product's delivery time. Reliability refers to the site's technical operation and the extent to which it is operational and available. Privacy: the degree to which the customer believes the site is secure and personal information is protected (Zeithaml, Parasuraman, & Malhotra, 2002).

For the hotel industry, ES-QUAL measurements have become very crucial to gain a competitive edge over other hotels. It helps the hotel to gauge customer satisfaction among the customers, hence improving performance. The theory relates to hotel [per-formance by allowing the hotels to define customers' perception of service quality, and to build models that outline the differences between customers' expectations and

the real service experience. For hotels to improve performance with this theory, it shall help them put emphasis on customers' information search, product evaluation, decision making, the transaction, delivery, returns, and customer service.

The theory is relevant to hotel performance, in that, it shall ensure the hotels improve customer loyalty. Loyal customers are worth up to ten times as much as its average customer and bring many benefits to a seller and be considered one of the critical indicators used to measure the success of marketing strategy

This theory is applicable to this study because it evaluates the influence of e-CRM on performance by identifying customers' perceptions of a company's electronic services and the electronic channels used. It also aids in comprehending the characteristics of high-quality electronic services, as well as assessing the quality of electronic service delivery and the impact of high-quality electronic services on customer satisfaction.

### 2.2.3 Identify, Differentiate, Interact and Customize (IDIC) Model

According to Peppers and Rogers (2004), in order to build and maintain one-to-one long-term customer influences, companies must take four actions: identify, differentiate, customize, and interact with the customer analysis is based on personalization and differentiation, as well as interactions with customers. The model aids in determining customer expectations and their value to the business. According to Deszcyn'ski (2018), the model focuses on relationships between a company and its customers, where a company must identify their customers and ensure that as much room for interaction as possible is created.

Businesses accomplish this by ensuring that tailored offers (products and services) are implemented based on customization of some aspects of the service or product. Godsway (2019), agreed concluding that the model guides businesses in implementing the four action steps in order to build intimate one-to-one relationships with their customers. This is also asserted by (Katende (2018), who states that with this Model, a company's interactions with customers must take place through "touch points," where the company can continuously gather knowledge of preferences, data that can

help them further, and continue to provide quantified value to customers. They go on to say that the model helps businesses develop and implement e-CRM strategies.

Identification: In order for a company to work towards e-CRM, it must collect information or knowledge about its customers' needs, desires, preferences, values, difficulties, and complaints. The more information they have about each client, the better they will be able to read their customers' habits and preferences (Ahmadi, *et al* 2012). This procedure includes data from and for customers. The relevant information gathered is linked to individual customers and will be used to serve them individually in order to satisfy their needs and preferences; this is primarily accomplished through interactions that focus on each individual customer (market segment). The needs of each customer are valued by the company, and the company tailors their offer to each customer. CRM's goal is to be able to deal with each customer on an individual basis (Jawed, Babak, & Tim, 2012).

Name, address, and purchase information must be collected at all points of contact throughout the company. The model assist businesses in identifying customers as individuals and letting them know that the organization is very familiar with them. Differentiation of customer expectations, according to Ahmadi, Osmani, Ibrahim, and Nilashi (2012), requires a company to differentiate their customers by their needs from their organization's needs, and must be categorized through a dedicated amount of value creation activities. Interact with customers: Interact with all customers based on their value and need because it improves the relationship between customers and the company.

Customer interactions aid in the understanding of customer expectations and how they relate to business products and services; the interaction, based on customer value and needs, provides an opportunity to collect feedback, opinions, and desires. Customizing products and services for the customer, according to Kankam (2019), leads to businesses being able to meet customer expectations. Companies should tailor their products and services to the needs and desires of their customers. The model is relevant to hotel performance because it will help the hotels set up for actual interaction with prospects and customers, giving the hotels a meaningful picture of the customer's wants and needs so that you can send them personalized content and communications. It is also helpful to the performance of the hotels by ensuring they differentiate their customers; better understand how much time and money you should put toward each one

This model will aid the research in the implementation of e-CRM, as it will use customer information to identify the customer at any electronic touch point in order to improve customer service. By enhancing the customer experience and assisting with marketing and customer communication. Furthermore, it will best explain the impact of the independent variables (electronic personalization, electronic service quality, electronic technology infrastructure, and electronic innovation) on the dependent variable performance.

#### 2.2.4 Innovation Theory of Profits

According to this theory, businesses can earn economic profits by introducing successful innovations; the primary function of a business is to introduce innovations, and the profit is given as a reward for his performance. According to Schumpeter, innovation is any new policy that an entrepreneur implements to reduce overall production costs or increase demand for his products (Tariq, Alzoubi, & Alshurideh, 2019). Thus, innovation can be divided into two categories: the first includes all activities that reduce overall production costs, such as the introduction of a new method or technique of production, the introduction of new machinery, and innovative methods of industry organization. The second category of innovation includes all activities that increase the demand for a product, such as the introduction of a new commodity or new quality goods, the emergence or opening of a new market, the discovery of new sources of raw materials, a new variety, or a product design (Rajibkumar, 2019).

Schumpeter argued that firms seeking profits must innovate using various jobs in the Economic System's existing productive resources, which leads to the conclusion that innovation is a key driver of competitiveness and economic dynamics. This theory

holds that innovation is at the heart of economic change, causing creative destruction in capitalism, socialism, and democracy (Farrokh, 2017). According to Schumpeter, the innovation process is divided into four dimensions: inventory, innovation, distribution, and imitation. The invention phase or basic innovation has less impact in Schumpeter's analysis, whereas the diffusion and imitation process has a much greater influence on economic conditions (ledzik, 2013).

The new idea alone will not lead to implementation; it must be taken up and implemented by its strong personality (entrepreneur). The power that causes things to happen is not the power of ideas, but the power of action. According to Schumpeter, the main function of an entrepreneur is to allocate existing resources to "new uses and new combinations." Economic growth requires innovation, and "the entrepreneur" is the primary innovator. Innovation is based on the creation of feasible new capacity that adds new value to the current round revenue stream, resulting in new profits and higher revenue. Innovation is a major reason why businesses, regions, and countries perform differently. Companies that excel at innovation thrive at the expense of their less capable competitors (ledzik, 2013).

The value of this theory is that it allows companies to improve managerial techniques, use new raw materials in the manufacturing process, change the quantity and quality of the product, implement or introduce new manufacturing techniques. Profits are generated as a result of successful innovations, either because the product's cost falls below the current market price or because the entrepreneur is able to sell more and at a higher price than previously (Cristescu & Neris, 2021).

This theory is applicable to hotel performance, as hotels that become innovative are able to thrive in today's highly competitive business environment. Customers are becoming more demanding and knowledgeable. Hotels require an edge in order to thrive and distinguish out. Innovation gives you that competitive advantage, increasing business production, growth, and p in terms of relative profitability, size, market share, and growth rate, the theory is critical to hotel performance. Innovation is defined as a company's endeavor to develop, produce, and market new products for the industry using technology and information. To put it another way, innovation is the modification or discovery of ideas for continual improvement and development in order to suit the needs of customers. In a nutshell, innovation is the successful implementation of innovative ideas within an organization.

This theory will aid the study in analyzing business performance through increased profits among businesses by identifying policies that will allow for lower production costs and increased demand for their goods and services. It will help the study analyze the implementation of e-CRM in order to improve business performance by increasing customer retention and loyalty. Which are based on the premise that innovation increases the perceived value of customers (Ülgen, 2014).

### 2.2.5 Competitive Advantage Model

According to the model, companies are pursuing policies that result in high-quality goods for market sale at high prices, resulting in increased competitive advantage. To gain a competitive advantage, a company must improve its production and implement low production costs. As a result, satisfied customers receive more value from the delivered products, resulting in higher income for the companies. Competitive advantage results from an organization's development of attributes that enable it to outperform its competitors. These characteristics enable access to highly trained and qualified personnel (Hosseini, *et al* 2018).

According to Lorenzo, Ramón, and Tere (2018), companies are viewed as a collection of activities that are performed to support the product in terms of design, production, marketing, and delivery. Logistics (inbound and outbound), operations, marketing and sales, and service are the primary activities in the value chain. Support activities include firm infrastructure, human resource management, technology development, and procurement. According to Ibrahim and Primiana (2015), in order to gain a competitive advantage, a company must establish standards to monitor product quality and consumer awareness.

The ability of a company to continue and prosper in the face of competition from other companies for the same profit is a major determinant of its superior performance, and the competitiveness of a company is its ability to continue and prosper in the face of competition from other companies for the same profit. To maintain its competitive advantage over competitors, a company must respond appropriately to changes. They will then require strategies to focus on their business and customers while also addressing emerging strategic and operational challenges. Finally, organizations must constantly assess and adapt to trends and conditions that may affect the industry. (Abdulwase, Ahmed, & Asma (2020), concluded that organizations that create value for their customers gain a competitive advantage by ensuring that they use marketing strategies that cannot be duplicated and are not currently used by any of the competitors.

The Mode is significant to hotel performance and location as a moderator because it creates hotel sustainability through competitive advantage. The model is relevant to performance in that it shall ensure hotels produce value for customers upon the design of hotel plans. Such values may be in the area of cost leadership, which offers customers products and services at reasonable costs, the area of product and service differentiation, or the area of superior customer response in the niche market than rivals in the same industry.

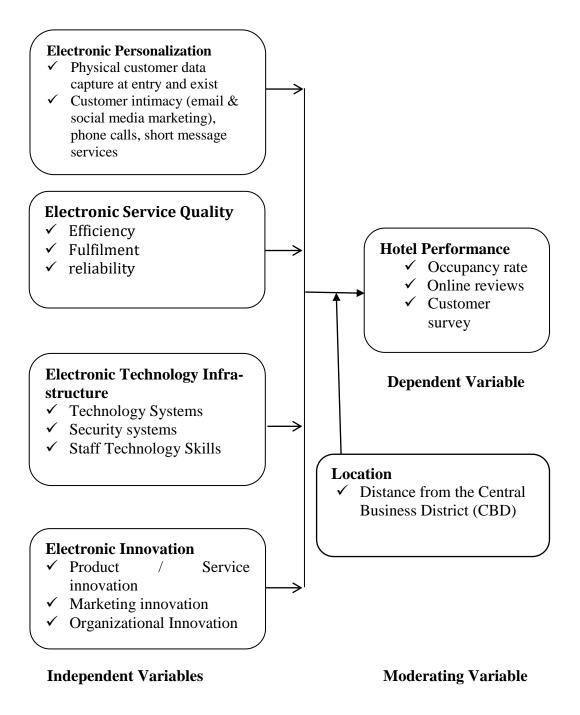
Competitive advantage is critical to the performance of any business because the value created for customers exceeds the cost incurred by the firm to create it. The building of a competitive advantage that encompasses all company operations should prioritize the values given to customers. Customers will be able to distinguish between competing products and services once they have recognized the values of the products and services.

This model will assist the researcher in analyzing the hotel operating location in order to create a competitive advantage in their business. It will help the study explain the moderating role of a hotel location in improving performance. Finally, it will aid the study in analyzing business competitors with the goal of improving performance.

### 2.3 Conceptual Framework

The independent variables in the study included e-personalization, e-service quality, e-technology infrastructure, and e-innovation. The dependent variable was hotel

performance as measured by non-financial metrics such as occupancy rate, online reviews, and customer surveys. The moderator is hotel location. Figure 2.1 depicts this.



**Figure 2.1: Conceptual framework** 

### 2.4 Review of variables

Various models and frameworks, processes have been proposed to demonstrate how e-CRM is effectively implemented and managed, many scholars emphasize the importance of having a clear vision and strategy, as well as evaluating and defining the necessary business goals and processes. Before considering any technology, it is stated that businesses could reduce their risk of failure by first developing a clear vision for the application, infrastructure, and transformation of their e-CRM. Then, by comprehending and addressing the commonly associated issues. According to Sin, Tse, and Yim (2005), the success of e-CRM is determined by how four key components: strategy, people, technology, and processes are handled.

According to Day (2003), there is a possibility of increasing customer influence if all four key areas are addressed correctly, and greater customer influence was achieved when the four areas were worked with one accord or as a unit. In other words, successful e-CRMs cannot be bolstered solely by one of the primary factors. According to Yim, Anderson, and Swaminathan (2004), e-CRM implementation typically entails four distinct, ongoing strategic activities: a focus on major customers, organization, knowledge management, and the integration of e-CRM technology. According to Sin, Tse, and Yim (2005), e-CRM consists of four broad behavioral components: key customer focus, e-CRM organizations, knowledge management, and technology-based e-CRM. They continued to emphasize to a company the importance of developing, maintaining, and improving long-term and mutually beneficial influences on its target buyers in order to maximize its long-term performance on issues such as customer satisfaction, confidence, return on sales, and return on investment.

#### **2.4.1 Electronic personalization (e-Personalization)**

Electronic personalization is the process of tailoring pages on a website to the characteristics or performances of individual users, with the goal of increasing business outcomes for an e-commerce platform (Mehmood, Verleye, & De Keyser, 2020). This is also claimed by (Markus, Laurens, & Dietmar, 2019). Companies use epersonalization to find and use the history of a customer's purchasing behavior in order to generate a unique product list for each user. This is accomplished by designing and recommending products and services based on the characteristics of customers or segments. Effective e-personalization begins with gathering customer information through Data Mining during interaction with the customer or user in order to provide services that are tailored to the customer or user.

E-personalization was discussed as part of the electronic Marketing strategy for this study: the use of the Internet and digital media capabilities in businesses to help sell their products or services. Companies can use an e-marketing strategy to reach out to people who are interested in their products and services (Bonett, 2001). Search Engine Marketing (SEM), Social Media Marketing, Mobile Marketing, Email Marketing, and Display Marketing are all methods of e-personalization through e-marketing (Onyeocha & Chinonso, 2015).

Search Engine Marketing is the e-personalization that occurs when Internet traffic is directed to the hotel's electronic channels. Social media marketing is an e-personalization method in which the hotel posts, spreads, and updates their electronic information quickly to a wide range of their consumers, using sites such as Facebook, Twitter, and YouTube, in order to persuade and keep the customer's attention. Sending relevant messages to a targeted audience via email using a permission-based list is what e-mail marketing is all about. It also fosters personalized interactive influences between the hotel and its guests (Lockett, 2018).

Display advertising is an e-personalization technique that uses the Internet as an advertising medium to display promotional messages on websites or search engine results pages. For example, banner ads, pop-ups, and text ads (Innovation Pei, 2017). SMS marketing, mobile web marketing, Bluetooth proximity marketing, Multi Media Service marketing, and mobile application marketing are all examples of mobile advertising methods. Mobile advertising, as an e-personalization method, enables simple and quick two-way communication between businesses and their customers, regardless of time or location. The hotels have a customer database, which allows them to e-personalize their marketing information in relation to their target customers (Sinisalo, 2007). In this study, e-personalization takes the form of: customer data

capture at entry and exit, customer intimacy via social media marketing, and e-mail marketing.

### **2.4.2 Electronic Service Quality**

Electronic Service Quality (e-SQ) refers to overall customer evaluations and judgments about the excellence and quality of electronic service delivery in the virtual marketplace, as understood from both pre- and post-website service perspectives. Electronic service quality has the potential to provide strategic benefits, improve operational efficiency, and boost profitability (Yuan, Jusoh, Muhd, & Moh, 2020). The core e-SQ dimensions of reliability, fulfillment, and privacy formed the core e-SQ for measuring customers' perceptions of service quality by e-retailers.

Companies in the twenty-first century are using the web to sell more services and products by improving communications with their customers through an alternative channel, thereby reducing the costs associated with interacting with customers. Businesses are employing an e-service quality strategy to attract and retain customers, owing to the fact that having a web presence is not the same as using the web as a center for delivering quality electronic services (Rita, Oliveira, & Farisa, 2019). Because of its reliability dimension and the nature of the influence between the customer and the provider of products and services, electronic service quality has a strong impact on customer satisfaction and company performance. It also has a positive impact on consumer purchase intent and user satisfaction; additionally, it makes online businesses more effective and appealing, resulting in higher levels of customer satisfaction and retention. Furthermore, it was reasoned that the productivity of e-service has a positive effect on consumer loyalty and satisfaction. The quality of electronic services is used as a critical prerequisite for satisfying and retaining valued customers, which translates to customer satisfaction. Trust in the company is a key component of e-Service Quality, and it has a positive impact on customer satisfaction. Quality of electronic services is an important factor in e-retailers' long-term competitive advantage (Xia, Wu, & Zhou, 2021). In this study, e-service quality takes the following forms: efficiency, fulfillment, and reliability.

Order fulfillment accuracy, on-time delivery, and accurate billing are all examples of reliability. Reliability is established through precise product representation, on-time delivery, and a variety of other fulfillment-related issues. The ratings of dependability can predict a customer's purchase intent or loyalty (Firdous & Farooqi, 2019). Efficiency refers to how easily and quickly a site can be accessed and used. E-commerce places a high value on efficiency, as convenience and time savings are widely regarded as the primary reasons for shopping online. This is the ability of a customer to access electronic channels or websites, find their desired product and associated information, and finally check out with minimal effort (Vatolkina , Gorbashko, Kamynina , & Fedotkina , 2020).

The extent to which the site's promises about order delivery and item availability are met is referred to as fulfillment. This is an important factor in determining the quality of an online store because keeping service promises and accurately filling orders are service quality elements that lead to customer satisfaction or dissatisfaction. It is also the accuracy associated with the service promise and keeping the product delivery time promised (Taufik, Khairusy, Salam, & Ilham, 2021).

# 2.4.3 Electronic Technology Infrastructure

Businesses can improve organizational performance by applying and implementing technology. E-technology infrastructure enables firms to be innovative by developing new products that enable them to create new markets and gain a competitive advantage through increased interactivity. E-technology infrastructure enables businesses to communicate directly with customers and partners, thereby improving firm performance. E-technology also benefits a company by increasing productivity and market share, as well as allowing for the introduction of new products and services. This causes a company to become more customer-oriented by responding more quickly to market changes (Macharia, Wang, & Lepa, 2020).

The firms can then use technology to personalize the preferred data and advanced customization technology by collecting customer information (Jabbouri & Ibrahim, 2015). Previous research has shown that implementing hotel technologies can improve customer satisfaction, productivity, and cost-cutting, resulting in a competitive

advantage (Collins & Cobanoglu, 2008). Hotels, for example, collect information because client books can be accessed via the Internet and hotels via Internet-based reviews such as Trip Advisor.

Examples of e-technology infrastructure include, use of mobile phones, use of the Internet, virtual socio-economic networking, Twitter, Facebook, and systems for generating hotel reviews. These new technologies have challenged hotels to develop communication processes and brand image through new channels. E-technology infrastructure is also the process that necessitates interaction with customer evaluation sites, individual customer feedback, and strategic marketing to capture and influence new types of customers in the emerging virtual space. New e-technology infrastructure in the hotel industry has also increased the influence of hotels offers to their customers, as data mining of customer databases allows hotels to develop detailed customer profiles and match service offerings to the profiles. As a result of long-term profitable exchange influences, customers are offered unique offerings (Jabbouri & Ibrahim, 2015).

Technological innovation is expected to dramatically alter the nature of hotel distribution channels, redrawing the nature of company/customer interaction while also transforming the nature of the company's influences with competitors (Nemec & Mihalic, 2007). Moving handheld systems, such as PDAs, tablets, cell phones, fingerprints, Iris scans, facial scans, or hand geometry analyses, are used in information technology applications to improve physical and data security, as well as Wi-Fi. The most important compatibility in the information technology industry is Wi-Fi. The rapid advancement of information technology (IT) has altered not only how information is collected and used, but also how businesses are conducted, implying that hotel managers have come to expect benefits from this e-technology infrastructure (Collins & Cobanoglu, 2008).

In this study, e-technology infrastructure is comprised of the following components: technology systems, security systems, and staff technological skills. Technological systems are systems that take an input, modify it for the system's use, and then produce an output. The technology infrastructure consists of hardware and software

components that support the business's applications and information management needs. The current e-technological infrastructure in hotels, according to (Kazandzhieva & Ilieva (2017), is Internet of Things (IoT), which refers to the interconnection of everyday physical devices such as sensors, actuators, identification tags, mobile devices, and so on.

Because they can more accurately gauge guest behaviors and preferences, this paradigm opens up new avenues for immediate, personalized, and localized services. Security systems are a means or method of securing something by utilizing a network of interconnected components and devices. Staff technological skills: these are the specialized knowledge and experience required to complete complex actions, tasks, and processes involving computational and physical technology, as well as a wide range of other businesses (Kaldeen, Nawaz , & Azizul , 2020).

### **2.4.4 Electronic Innovation**

A strategy for increasing market share or profitability through the development of new products and services is known as an innovation strategy. In order to innovate, firms must be able to modify and adapt, which necessitates creativity, acceptance, and implementation. Innovation also entails the introduction of new products or a new quality for the products or service; the introduction of a new method of manufacture; the opening of a new market; and the conquest of a new raw material source or half-manufactured goods (Mohammad and Tamer 2020).

Product innovation, marketing innovation, and organizational innovation will be studied in this study (Dzhandzhugazovaa, Blinovaa, Orlovaa, & Romanovaa, 2016). Product innovation entails the introduction of a new or significantly improved product or service in terms of its characteristics or intended uses. This manifests itself in changes directly observed by the client and is regarded as novel. Nicolau and Mara (2013). Product innovation results in the introduction of a marginally or radically improved good or service in terms of functions, characteristics, or components. Product innovation is primarily driven by demand, but supply can also be a significant driver of this type of innovation (Chang, Gong, & Shum, 2011).

Marketing innovation is the use of a new marketing method for a product or service that involves significant changes to any of the following elements: product design or packaging, placement, promotion, or price-setting criteria. This innovation entails attracting and retaining customers with existing products and services by utilizing innovative methods for organizational and customer value that are associated with increased efficiency. In addition, its main principle is the ability to effectively acquire consumer information, as well as the ability to reduce consumer transaction costs. Furthermore, its ability to increase sales by shifting consumer demand from elastic to more inelastic market segments through the delivery of better value (actual or perceived) to consumers (Sarper, & Apak, 2013).

The implementation of a new organizational method in the firm's business practices, workplace organization, or external relations is referred to as organizational innovation. These structural or management changes are intended to improve a firm's use of knowledge, the quality of goods and services, or the efficiency of work flows.

It is the process of adopting new organizational behavior that is critical in the development of new products and improving processes to reduce time to market. Organizational innovations can be designed to improve a firm's performance by lowering administrative or transaction costs, increasing workplace satisfaction (and thus labor productivity), and lowering supply costs. (Horng *et al.*, 2016; Wang *et al.*, 2016; Hsing *et al.*, 2016; Tsai *et al.*, 2016). It is also defined as the adoption of new organizational behavior that is critical in the development of new products and improving processes to reduce time to market. Organizational innovations can be designed to improve a firm's performance by lowering administrative or transaction costs, increasing workplace satisfaction (and thus labor productivity), and lowering supply costs. (Horng et al., 2016; Wang et al., 2016; Hsing et al., 2016; Tsai et al., 2016).

Organizational innovation will take the form of procedures within the hotel using electronic platforms, decision making using electronic platforms, new idea development and idea exploration using electronic platforms. Companies are utilizing electronic innovation to ensure that change is transformed into opportunities and thus success for an organization. Innovation has been identified as one of the most important factors in organizational performance (Horng, Wang, Hsing, & Tsai, 2016).

# 2.4.5 Hotel location

A strategic location will undoubtedly bode well for the hotel's superior performance in terms of revenue generation, both in the short and long term. The significance of hotel location is in product differentiation, which results in place-sensitive products. The location of a hotel facility has a significant impact on the hotel's competitive advantage strategies in terms of financing, marketing, human resources, and customer satisfaction. Customers' perceptions of a destination can be influenced by the location of a hotel, which in turn influences their destination travel choices. The significance of hotel location (in terms of proximity to/distance from specific locations, intrinsic site characteristics, and neighborhood characteristics) for product differentiation in the hospitality and tourism sectors (which produce place-sensitive products). The hotel's location will have an impact on guest satisfaction, hotel revenue per available room, increased demand, and overall profitability (Alarcón , Palacín, & Maspera, 2020).

An appealing location is associated with the ability to generate income (demand and price level) as well as create costs (availability and production factor costs), and thus with economic effectiveness and hotel profitability. The location of hotels should allow business tourists to travel easily and quickly by personal and public transportation. As a result, these hotels should be near highways, airports, and train stations. A hotel's surroundings are also important. An appealing hotel location and a diverse infrastructure that allows for appealing leisure activities can be important factors in attracting business clients (Si-dorkiewicz & Puciato, 2017).

Hotel enterprise research based on data from social media is becoming more popular, and it is widely discussed in the literature. Geographical considerations in the hotel industry are determined to be critical in terms of location, profitability, and the price level of hotel services offered. The hotel's location is one of the most important factors in consumer hotel selection, Tourist visitation patterns are naturally associated with the spatial distribution patterns of amenities, and because tourism demand is generally high around places with abundant amenity resources, the hospitality industry has inextricably linked proximity to amenities when making locational decisions. The location of the business is critical to its success because it can attract a large number of customers. The location of the hotels can be considered an important factor that can lead to increased room occupancy. One of the customer preferences that can lead to more purchases in fast food outlets is location. In the commercial airline industry, customer satisfaction from location had a positive relationship with customer loyalty (Nazari & Valencia, 2020).

#### 2.4.6 Hotel Performance

In the hotel industry, performance is frequently characterized by the concentration of best practices in a few large players with high economies of scale and profitability. Large international hotel chains are particularly representative of this situation. Local hotel chains, on the other hand, suffer from small operational scale and working capital constraints, which limit their rate of innovation and ability to adapt to best practices over time. Performance is a multifaceted concept that refers to achieving results and goals, as well as the path to take and behavior. The fact that performance includes components, products, consequences, impact, and it can also be related to efficiency, effectiveness, cost effectiveness, or equity demonstrates its complexity. Quality is an absolute requirement for ensuring performance. The rise in the importance of quality is primarily due to an increase in quality-based competition, consumerism, and sustained media intervention, as well as the sophistication of non-financial factors (Mjongwana & Kamala, 2018).

The increased competition in the surrounding area, as well as the complexity of tourism demand, necessitate the need for information obtained through continuous, consistent, and comparable monitoring of the operation in order to improve performance and market survival. Hotels require and rely on monitoring hotel business, and inadequate measurements may jeopardize hotel performance and market competitiveness. Performance is typically defined in terms of output or achievement of quantitative goals. According to hotel performance literature, measuring hotel performance aims to monitor and control the execution of pre-determined tasks. Long-term hotel survival in a competitive and seasonally characterized environment is dependent on companies' ability to identify the environmental factors that determine their performance and to adequately measure their business performance (Goran & krešimir, 2017).

Non-financial performance indicators can also capture important non-financial and industry-specific performance indicators. They include: Bed occupancy levels, customer satisfaction surveys completed by customers, guest evaluations of employee helpfulness, guest evaluations of design, facility renovations, and maintenance are examples of these in the hotel industry. Other factors include the number of repeat customers, the number of complaints, and the guest evaluation of additional benefits such as relaxation, exercise, and refreshments. Such non-financial measures are the true value drivers in modern businesses, making their future performance predictable (Bongani, 2013).

Occupancy Percentage Rate: Refers to the ratio of total number of occupied rooms to the total number of rooms available for sale, business stability expressed by rate of occupancy and customer satisfaction, as a parameter that occupies an increasingly important role in the research of business performance (Kala & Bagri, 2014). The online ratings can be seen as the consumer's perceived quality for the service or attribute and are likely to influence hotel room rates, many times individual purchasing or booking decisions are based on other travelers' opinions on different forums. hotel managers should monitor their guests' reviews online as they offer significant insight into the expectation's customers and targets for development. (Ilieva & Ivanov, 2014). Post-stay guest surveys to identify what matters most to their guests, by sliding scale questions can be used to quantitatively track your guests' sentiment over time. Regularly surveying guests and keeping track of their responses will help you identify what you do well and need to work on. It will also help you identify problem areas before they get out of hand (Bongani, 2013).

Performance measurement is a fundamental component of business management that helps to understand the source of a sector's competitiveness and supports strategy implementation. According to Kala and Bagri (2014), key performance indicators (KPIs) in the hotel industry are the selected indicators considered significant for monitoring the performance of strategic objectives, outcomes, or key result areas that are absolutely critical and important to the organization's success and growth. The goal of hotel KPIs is to provide measurable indicators to organizational decision makers for judging hotel performance and measuring achievement of hotel objectives. These KPIs can aid hospitality managers in their efforts to ensure resource efficiency and effectiveness, as well as profit maximization through customer satisfaction. Hotels and other industries use KPIs as a tool for benchmarking with others in order to improve their own performance. Therefore, this study will use three nonfinancial performance measures for the hotels: Occupancy rate, Online reviews, Customer survey.

#### 2.4.7 Customer Relationship Management Trends

According to (Pohludka & tverková, 2019), Customer Relationship Management (CRM) improves the process of identifying, building, and retaining long-term influence with profitable customers. CRM is also a comprehensive customer culture developed within a company, which means that each customer is recognized and identified based on their need and name. CRM gives businesses a comprehensive view of their customers. CRM implementation helps businesses improve customer satisfaction while lowering costs by focusing on profitable customers.

CRM is a business strategy that prioritizes the customer in the processes, activities, and culture of an organization. Information Technology (IT) applications, in this context, are the tools that allow organizations to put their strategy into action (AlQershi, Mokhtar, & Abas, 2020). Customer management assists managers in developing new services, improving service quality, lowering marketing costs, and identifying and retaining profitable customers. This is because increased customer loyalty boosts a company's profitability. CRM is a straightforward philosophy that places the client at the center of a business organization's processes, activities, and culture in order to improve service satisfaction and, as a result, maximize profits (Nasution & Rafiki, 2018).

According to Mohammed (2018), CRM can be used to retain existing customers and maximize customer value, and CRM seeks to create, enhance, and influence customers in order to increase customer value and corporate profitability through the use of IT. CRM, on the other hand, has been described by many authors as a business strategy that improves customer acquisition and retention and should be present throughout the organization.

CRM has evolved into several trends, according to Navarro, Badenes, and Antonio (2020), including Mobile CRM (m-CRM), Electronic CRM (e-CRM), Customer analytics and forecasting, and Social CRM. Mobile customer relationship management (m-CRM) strategy are services that promote customer influence, customer acquisition or retention, support marketing, sales, or service processes, and use the broadband network as a medium of customer delivery. Analytics and forecasting as a CRM means investing in understanding the value of customers and modeling their behavior through the use of analytics. This includes data collection and customer learning, as well as their spending habits and other factors. Companies can use the data to get to know their customers (comments, emotional states). (Nasution & Rafi-ki, 2018).

Customer Relationship Management in social media and social network platforms such as Twitter, Facebook, LinkedIn, and YouTube are examples of social customer relationship management (also known as CRM 2.0). Companies can use social networking tools to test new ideas and get feedback from customers. This ultimately improves products and brands. Customers expect a higher level of interaction with customer service representatives. As a result, companies are being challenged to upgrade their CRM systems to online capacity. Blogs, forums, wikis, and other social networking tools that assist businesses in reaching out to customers (Muhammad, & Munaw, 2019).

### 2.4.8 Electronic Customer Relationship Management (e-CRM)

According to Aldaihani and Bin (2018), e-CRM enables companies to achieve massive gains in high return on investment (ROI) by creating customer loyalty. If e-CRM is fully implemented, consumers will be able to access services and product

information much more easily than in the past. Where companies assisted customers in evaluating and purchasing products Web-based e-CRM applications include product configuration, electronic commerce ordering, tracking, and pricing. A company employee should directly take care of them; e-CRM consumers use self-service tools on the web, and as a result, customers become active participants in the service and purchase process. Companies gain more knowledge about their customers thanks to e-CRM, and the customer, on the other hand, is authorized to control and manage the process via the website.

According to Kimiloglu and Zarali (2008), successful e-CRM represents a significant competitive advantage that businesses can leverage to keep customers from switching to competitors. The need for large-scale effective e-CRM implementation grows in the busy online environment, as the highly competitive nature of the business industry makes it much more difficult for customers to be satisfied and loyal. Understanding the dynamics of e-CRM and evaluating its impact on business results is therefore critical, particularly in the service industry.

Keen (2001) concluded that innovative businesses must develop strategies for managing customer relationships, specifically through the use of e-CRM. According to the study, a successful e-CRM strategy necessitates a relationship between the customer and the organization. All interactions are integrated as a result of this relationship, which makes use of all available communication channels (web, e-mail, chat, etc). Furthermore, the study suggests that e-CRM should involve the customer beyond the initial transaction with the company in order to increase customer retention.

Scullin *et al.* (2001), investigated the benefits of e-CRM applications for banking and their customers and discovered that e-CRM reduced workload and administrative expenses, increased cross-sales, increased bank revenues, and enabled banks to understand future customer needs in relation to previous transactions. Furthermore, a well-implemented e-CRM system produces winning customers and companies because all customer experience improvements lead to higher customer satisfaction, which leads to higher profitability for businesses.

According to Abdallah (2015), banks should make every effort to increase the value of their e-CRM strategy in order to create satisfied, loyal customers, meet changing customer needs, and achieve competitiveness benefits. Furthermore, by determining customer needs, preferences, and revenues, banks can improve their e-CRM strategy from the perspective of their customers, which they label as customer data quality. CRM has also added that technology, clients, and people are key components in bank success while maintaining a high level of security in banks, and can also help banks increase their profitability by keeping up with their clients and reducing costs while increasing the value of customer relations. EsmaeilMalek *et al.* (2014) discovered that e-CRM enabled businesses to better serve customers by meeting their expectations and increasing business income and profit. Banks benefit from e-CRM by reducing industry workload, lowering administrative costs, increasing cross-sales and bank revenue, and allowing bankers to analyze customer needs based on previous transactions.

In Kenya, an e-CRM study conducted by Ishmael N. A., (2015), discovered that the adoption of e-CRM makes organizations more efficient, effectively manages resources, generates more business opportunities, and improves company performance. When compared to other companies, e-CRM adoption allows companies to generate business opportunities. He concluded that an e-CRM policy, objectives, and processes for managing risks and improving e-CRM should be established in order to achieve results in accordance with the organization's overall policies and objectives. Secure information, policies, controls, and processes must be implemented and maintained.

Another Kenyan study, Macharia and Thuo (2011), concluded that e-CRM necessitates providing customers with adequate, accurate, and timely information on products and services on a global scale. Ng'ang'a M. W (2018) discovered and concluded that e-CRM included customer understanding aspects; improved classification and categorization of customers and enterprises to determine customized approaches to their needs. According to research on organizational-al measures for the management of customer transactions, the company currently uses a manual system for the management of customer relations, as well as an online customer service and product services, particularly for the Isuzu brand. Their research also revealed that feedback channels must be improved through electronic channels and participation. Additional disclosures revealed that various media channels must be modernized and current practices implemented, particularly for social networking via online chat rooms, Twitter handles, WhatsApp, LinkedIn, Instagram, and Google Plus; interactive blog posts for Google; web-based websites for productive review, and interactive webpages (Ng'ang'a M. W., 2018).

Furthermore, Mbatia (2019), conducted research in Kenya and concluded that e-CRM training should be conducted on a regular basis. Employees who were positive and provided excellent customer service had the highest mean in organizational performance. e-CRM was found to be positively related to organizational performance. Mang'unyi et al. (2017), discovered that e-CRM is positively related to customer loyalty. Furthermore, Noorani *et al* (2017), established that each of the respondents generally agreed that e- CRM' have influence in achieving sustainable competitive advantage, and some of these include e- CRM's customer interaction, e- CRM's customers' expectations, e- CRM's personalization, and e- CRM's technology utilization. This is based on an e-CRM study conducted at beach tourist hotels in Mombasa County, Kenya. None of the preceding studies attempted to establish the impact of e-CRM on hotel industry performance, leaving a gap between Kenyan hotel performance prior to the implementation of e-CRM and their performance after the implementation of e-CRM.

Electronic Customer Relationship Management (e-CRM) is a highly functional CRM system that integrates online sales, marketing, and service strategies to enable customer identification, attraction, and retention (Romano & Fjermestad, 2009). Electronic Customer Relationship Management (ECRM) refers to all methods of managing customer interactions through the use of information technology (Hwang, Jung, & Suh, 2004). Globally, it has been established that e-CRM has a significant impact on organizational performance; it improves customer acquisition, development, and retention by managing deep and long-term influences; this increases the profitability of many companies. It also enables organizations to better understand customer be-

havior by anticipating customer needs, resulting in profitable customer influences and lower operating costs (Rabbai, 2013).

When compared to traditional CRM, the main advantage of e-CRM is that it allows organizations to streamline processes and provide better, more complete customer information to sales, marketing, and service personnel (Hadaya & Cassivi 2009). As a result, e-CRM enables organizations to build more profitable customer relationships while lowering operating costs (Hadaya & Cassivi, 2009). Because e-CRM software allows everyone in an organization to access the same business history and customer information, a company can communicate in a single and consistent voice to its customers, regardless of the communication chain. The data obtained from an electronic CRM system enables a company to calculate its actual customer retention and acquisition costs. This data enables the company to focus its time and resources on its most profitable customers (Epiphany.com, 2001). In the hotel industry, there is a growing use of e-CRM. According to Rong, Wang, and Liao (2001), e-CRM provides hotels with a large amount of customer data, which allows them to focus their time and resources on their most profitable customers. e-CRM is also being used by businesses to deliver what customers want by predicting the types of products that customers are likely to buy as well as the timing of purchases.

This leads to improved organizational performance, as evidenced by the organization's increased profitability (The National Computing Centre, 2015). According to another study, e-CRM benefits an organization in a variety of ways, including improved customer experience, increased customer loyalty, repeat purchases, word-ofmouth spread, customer retention, brand loyalty and customer satisfaction, and improved cost-cutting measures. As a result of the increased profit, the company performs well (Babita & Harshal, 2013).

### **2.5 Empirical Literature Review**

An empirical review is a systematic examination of previous studies that compare to the area of study or variables in the current study (Young, 2013). The research gaps are derived from an empirical review. Previous works by other scholars will be discussed in this study in light of the study's specific objective.

### **2.5.1 Electronic personalization**

JungKook (2107), did a study on e-personalization, the study aimed to investigate role oe e-personalization and the study concluded that e-personalization is usufuly in meeting customers' needs more effectively and efficiently, resulting in faster customer interactions and increased customer satisfaction. This increases the likelihood of repeat visits and, as a result, business performance. According to their findings, Arora and Dreze (2008) discovered that e-personalization is positively correlated to long-term advantages and higher industry profits. organizations that use e-personalization take advantage of previously gathered customer information and use it to determine the most appropriate marketing mix for each individual customer. This implies that the hotel industry should offer the right product or service to the right person in order to retain their customers (Masanell & Ricart, 2015). Chen, Feng, Liu, and Ju (2017) reached a different conclusion, claiming that e-personalization has a strong negative impact on consumers' ability and ability to choose what to buy on their own, without firms recommending the same to them. Businesses make consumers feel manipulated.

Lee J (2010), in his study confirmed the positive impact of e-personalization, concluding that e-personalization provides features such as personalized product recommendations because businesses can communicate with their customers through multiple channels such as e-mail, Web sites, and call centers. This concept enables long-term customer identification, purchase list storage, and the ability to track and log each customer's navigation actions. With e-personalization, businesses can improve client satisfaction, loyalty, trust, and trade revenue for retailers by making buyer connections more closely tailored to the individual. With e-personalization, the company must understand the customer's needs and preferences, as well as what products or services they are interested in. The first step in e-personalization is to collect information about the customer's first visit or purchase, and then analyze their behavior based on that information. This allows a company to suggest products or services that customers are interested in, which increases both consumer loyalty/satisfaction and benefits in terms of profits. Appel,. et al (2020), on the other hand, did a study that concluded that epersonalization has a negative impact on a business because the customer's privacy is invaded and trust in the companies is low. The legal and ethical aspects of customer data digital privacy are also negative effect e-personalization for a business. Customers' trust in firms is eroding on online platforms because customers are hesitant to share their data with businesses in order to receive personalized experiences (Martin, 2018). They are also uncooperative and uncomfortable with companies using their past purchase data to track their purchasing patterns. In order for businesses to be able to predict product preferences. Customers believe that brands should not be able to buy their data for marketing purposes.

A study was done by Sanne and Tabell (2018), that concluded that e-personalization assists businesses in providing the right products and services to the right customers. As a result, the customer considers the products or services to be relevant, and they pay attention to the products and services of a company. E-personalization improves business performance by increasing customer value more than traditional marketing strategies. When a company can address the customer directly through e-personalization, it increases sales by 31%. E-personalized brand messages increase customer engagement, which improves business performance.

Sanne and Tabell (2018), carried out a study on the impact of e-personalization and conclude that e-personalization is faced with the problem of value co-creation and value co-destruction for the customer: this is where a company uses e-personalization towards their customers but instead of producing positive value (co-value), it brings negative consequences by destroying the value to the customers. This is known as value co-destruction, and e-personalized value co-destruction has an impact on the firm's profits and performance. Chang, Liu, and Shen (2017), agreed that e-personalization can be annoying and irritable because it disrupts a customer's visit to a website or through various communication methods chosen by a company. Customers are said to ignore a company's offers if it contacts them too frequently.

Bol, et *al* (2018), conducted a study to investigated the impact of e-personalization and they acknowledged that e-personalization has positive effects before and during

online transactions. It consists of fostering perceived relevance, increasing customer attention to products, and increasing product elaboration to customers. Its long-term negative consequences This occurs when businesses use e-personalization in their marketing without taking into account customer privacy concerns. Lustria, Cortese, & Gerend (2016), concluded that e-personalization had a positive impact on brand attitude and brand engagement. According to them, businesses should spend more time on their electronic platform in order to collect more customer information for commercial purposes and increase business revenues.

#### **2.5.2 Electronic service quality**

According to study findings by Rita et *al.* (2019), e-service quality ensures that businesses practice customer service while providing goods and services to customers. Eservice quality also enables businesses to meet the needs of their customers by emphasizing correct and accurate order delivery to them. As a result of increased customer satisfaction, businesses are able to perform well. Order fulfillment is one of the determinants of e-service quality because it results in repeat customers who are willing to recommend the services to others. They concluded that firms with high customer satisfaction benefit from e-service quality, which is related to customer attitudes and intentions, which influence customers' positive behavioral intentions toward a firm's offerings.

A study by Firdous and Farooqi (2019), confirmed that the quality of e-services improves business performance by increasing customer retention levels for firms. Firms that implement e-service quality pay close attention to customer trust in businesses, which positively influences customer satisfaction. E-service quality must be implemented for online businesses to succeed because it increases long-term competitive advantage. Because of the nature of online business, customers have unlimited access to the information they require and may benefit from a broader range of options when selecting products and services at highly competitive prices. Firms should prioritize e-service quality to ensure their long-term viability and performance.

Study fingings of Vatolkina et *al.* (2020) disagreed that e-service quality has an effect on business performance, stating that e-service quality had a moderate impact on consumer intention to continue using a service. The means-end chain theory, which states that customers begin with a judgment of specific attributes and progress to perception or more abstract concepts like quality, experience, and satisfaction, backs up their findings. Santoso and Aprianingsih (2017), on the other hand, confirmed that e-service quality has an impact on business performance, with p-value <0.05 and 0.556 R<sup>2</sup>, and that increasing e-service quality has a direct impact on customer satisfaction. Increased customer satisfaction ensures that customers remain loyal to the company through repeat purchases. Customers' repurchase intentions must be high for a business to be sustained and successful, and this aids in the maintenance of long-term relationships with customers.

Similarly, study conclusions were done by Taufik et *al.* (2021) disagree that eservice quality improves business performance, concluding that e-service quality has no significant effect on satisfaction with p value > 0.05. They came to the conclusion that an increase in e-service quality has no effect on customer satisfaction and that a decrease in e-service quality leads to a decrease in customer satisfaction. Customer satisfaction is a feeling of pleasure or disappointment that occurs after comparing the results of a product or service to the expected result. According to Vatolkina, Gorbashko, Kamynina, and Fedotkina (2020), e-service quality affects business performance by improving customer experiences, which has a significant impact on customer satisfaction and intention to repurchase e-services. They argue that in order for businesses to improve their performance, customer experience and satisfaction should be embedded in the quality of their e-services. A customer voice includes the perception of customer experience, e-service quality, and satisfaction based on both customer requirements and expectations, all of which have a positive impact on business performance.

A study by Supriyanto et *al.* (2021) argued that e-service quality has no direct effect on customer loyalty (e-SQ Customer loyalty, with a pvalue >0.05). Their main point is that satisfied customers are not always loyal to a company. Sheng, Yeen, and Luen (2018), observed that e-service quality and consumer trust are important in ensuring that a business performs. They go on to say that high information quality must be backed up by high e-service quality. Firms must strive to provide customers with timely and accurate information about their products and services, which will assist customers in making purchases. As a result, increased customer satisfaction translates to improved business performance because e-service quality measures ensure that companies meet consumer demand by increasing consumer confidence.

Study findings that collaborate viewpoint that e-service quality affects performance, online customers evaluate every process as they interact with a business, noting that the online market place provides customers with greater freedom in terms of time. Customers can view the entire e-service approach as a complete process and outcome because there are no service representatives in the online business. E-service quality improves company performance by increasing the perceived customer value above what is expected, resulting in a positive shift in the customer's attitude toward the business. They conclude by stating that e-service quality benefits a company by increasing positive customer word of mouth, customer loyalty, and repeat purchases (Jalil, Kaur, & Jogia, 2021).

High e-service quality has been linked to more efficient customer relations between a company and its customers, because a firm is able to attract potential customers and increase its competitiveness. This translates into higher long-term profit levels for businesses. Businesses must strive to provide excellent customer experiences beginning with information search, product evaluation, decision making, the transaction, delivery, returns, and customer service. This was confirmed by (a study done by Zehira & Narckarab, 2016).

# 2.5.3 Electronic technology infrastructure

According to Sigala M. (2011) study findings, new electronic technology in the hotel industry has also deepened the influence between hotels and their customers, as data mining of customer data-bases allows hotels to develop in-depth customer profiles and match service offerings based on the profiles. As a result of long-term profitable exchange influences, customers are offered unique offerings. This was also supported by Nemec and Mihalic (2007), who concluded that electronic

technological innovation is argued to fundamentally alter the nature of the hotel firm's distribution channels, thereby redrawing the firm/customer relationship.

Findinmgs by Tan 2019, agreed that businesses use technology to get closer to their customers and transform the customer relationship through solutions provided by their products and services. Technology infrastructure also assists businesses in identifying profitable and unprofitable customers, customizing services, and retaining customers. All of this, in turn, ensures that a company remains competitive. A business can analyze customer information and respond by customizing responses to the customers by implementing e-technology infrastructure. As a result of firms' competitiveness, business performance improves.

A study done by Mils and Smith (2010), observed a contraction and concluded that technology does not directly influence business performance, but it does influence it indirectly through knowledge infrastructure capabilities, along with organizational culture and structure. Lorca, Andres, and Diez (2019), argue that e-technology has changed the relationship between businesses and their customers as a result of improved technology and the growth of internet users. They concluded that e-technology improves firm performance by differentiating their products and services, lowering prices and making them more competitive in the market.

Stufy findings by Ranatunga, Priyanath, and Megama (2021), agreed that technology in firms helps firms minimize market imperfections by providing proper information flows between the company and the customers. This increases customer satisfaction, which boosts a company's competitiveness; high customer service is also a result of technology implementation. The use of technology in business operations enables adequate, dependable, and timely decisions that are required for business improvement. This was confirmed by their study's 0.76  $R^2$ , indicating that the use of technology does, in fact, improve business performance.

A study done by Ahmed, Ahmad, & Muhammad,( 2018), concluded that Ecommerce has resulted in the development of technology and information technologies that firms in the twenty-first century use for marketing purposes. Online businesses should include e-technology infrastructure as it is critical to satisfying customers in all ways possible. As a result, for companies to achieve better performance, adoption of e-technological advancements is critical because they assist firms in making better decisions. Product life cycles are shortening as technology advances; as a result, businesses must invest in e-technology infrastructure to remain competitive by increasing market share, gaining information about competitors, remaining cost efficient, and retaining customers. Adoption of e-technology by businesses increases customer value through improved customer satisfaction, allowing businesses to be more innovative and achieve superior long-term performance (Ahmed, Ahmad, & Muhammad, 2018).

According to to study findings of Anuj and Ali (2020), technology infrastructure is a critical business model for innovation that helps firms acquire new markets and differentiate their products and services. Implementing e-technology improves business performance by increasing organizational efficiency and firm competitiveness. Business performance improves as a result of e-technology implementation, allowing businesses to increase customer satisfaction and become more competitive. Muoki (2016), embraced this, stating in their conclusion that e-technology transforms firm processes conducted within an organization as well as externally with customers. The transformation improves business performance by increasing productivity and mass customization of products and processes for customers. Furthermore, it broadens customer participation and increases customer satisfaction. Firms can scan, predict, and respond to dynamic business environments thanks to e-technology infrastructure.

Another study revealed that, e-business technology capability refers to a company's ability to use web-based technologies to communicate with suppliers and customers both inside and outside the company. It improves business performance by assisting the firm in developing operational competence and facilitating gross margin improvement. Employee productivity and operational excellence are enabled by e-technology for businesses in the twenty-first century. Implementing e-technology improves business performance by allowing for real-time exchange of accurate and timely information on product cost and demand with upstream suppliers and down-

stream customers. This has a positive effect on the firm's profitability. Jose, Yang, and Thompson (2017).

Study findings of Sheung (2014), electronic business technology is the new revolution for a company not only to create a competitive advantage over other competitors, but also to increase total sales and productivity. The rapid advancement of technology has had an impact on how businesses conduct their online operations, whether they are selling products or services. Creating value for each customer and strengthening trust between customers and companies, as well as leveraging a company's existing knowledge and creating new knowledge to favorably position them in their chosen market to achieve higher efficiency, are all critical components of developing a successful company. The ability to leverage a company's existing knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market norder to achieve higher efficiency is also critical for the development of a successful company.

Another study findings by Sánchez, Morales, and Rojas (2018), confirmed that organizations use technology to make strategic decisions in competitive global environments in order to maintain competitiveness. Firms use e-technology infrastructure as a strategic mechanism to improve communication with their customers, which improves business performance through effective organizational learning processes. They came to the conclusion that technology in any firm enables it to respond quickly to changes in the environment and find new products in the market. This is also supported by Nainaar and Masson (2018), who claim that firms are using e-technology infrastructure to stay competitive by developing new product variations, improving product and service quality, and entering new markets.

Astudy conducted concluded that e-technology infrastructure improves business performance by increasing customer satisfaction, which should be a firm's top priority in today's highly competitive environment. According to Lakhhwani et *al.* (2020), organizational success is dependent on the successful incorporation of appropriate technology into the organization. A company's overall profitability is improved by its technological infrastructure. Adoption of sustainable technologies

can result in competitive advantages, as well as increased financial performance and the ability to examine innovation. They argue that SMEs should use technology to help them compete on a global scale.

#### **2.5.4 Electronic innovation**

According to a study conducted by Chivandi, Chinomona, and Maziriri (2014), electronic innovation appears to be the only way for an organization to convert change into opportunities and thus succeed. One of the most important determinants of organizational performance has been demonstrated to be innovation. Certainly, innovation activities are carried out to achieve, among other things, production and marketing goals such as improving product quality and controlling production costs. It also aids in the consolidation of market share, the expansion of new markets, the flexibility of production, and the improvement of management performance. Horng, Wang, Hsing, and Tsai (2016), conducted research and concluded that hotel e-innovation enables them to come up with new ways and elements of efficient performance, through novel. This new hotel idea addresses issues that encourage new administration processes, mobilize support for change, increase the need to overcome challenges, and involve individuals within organizations. Furthermore, all of these concepts have the potential to contribute to innovation.

According to study findings by Al-Battaineh (2018), an innovation strategy focuses on developing winning products, which are products that are in a desirable market, target a profitable customer segment, address appropriate unmet needs, and help customers get the job done better than any competing solution. Only after a successful product or service has been developed should a company consider the activities required to deliver that product or service. Companies that want to gain a competitive advantage must have a strategy for innovation. They came to the conclusion that product innovations and functional performance were significantly and positively related (r.02). Marketing Innovations has no discernible positive effect on functional performance (r.07).

Study findings of Laban and Deya (2019), proactive businesses seize market opportunities and innovate, giving them a competitive advantage that allows them to remain market leaders. Innovation is an important part of a company's strategy because it is one of the primary ways for it to find new business opportunities. Successful innovation can have a significant impact on the financial and economic performance of a company. Their findings revealed a moderately positive relationship between Innovation Strategies and Organizational Performance, with R 0.493. Karanja, Kahuthia, and Gakenia (2018) agreed, stating that companies with a positive performance through innovation invest in more activities related to successful innovations in order to achieve more. The available markets are not growing at the same rate as companies developing similar brands of products, and the introduction of novel new products is becoming increasingly rare, as most development portfolios are not focused on innovation. The incremental impact of technological innovation on process and product helps firms compete, with the primary justification being to increase organizational value or productivity. Their study concluded that process innovation strategies had a positive influence on organizational performance, as indicated by a mean of 4.22.

Findings by Suhag, Solangi, and Lakh (2017), reached a similar conclusion, concluding, it is critical to develop an effective and efficient innovation program and make it a permanent component of a company's management programs. In practice, there are three types of innovations: product innovation, process innovation, and organizational innovation. While each type of innovation has its own set of determinants, attributes, and contributions to business performance, implementing innovations without a comprehensive approach is difficult. According to their findings, product, process, and organizational innovation all have a positive impact on organizational performance. Innovation is done as an appropriate solution to break out of a product's saturation, so that consumers have more options to use practical and as needed products. Consumers are willing to pay a higher price for an innovation, increasing company profits. In today's increasingly competitive business environment, all entrepreneurs who have entered the field of business, both products and services, compete to be the best in order to produce products that meet consumer demand.

A study conducted by Ismanu & Kusmintarti, (2019) indicated that on a regular basis, new competitors emerge with new business and product models. As a result, in order for his business to maintain a competitive advantage and survive, the entrepreneur must be able to respond and innovate. Their study's findings (p-value 0.05) indicated that innovation has a significant effect on firm performance (Ismanu & Kusmintarti, 2019). Increased global and regional competition has prompted businesses to consider how they can gain or maintain a competitive advantage through innovation, according to Canh, Liem, Thu, and Khuong (2019). A rapidly changing environment with frequent abrupt changes necessitates the development of firms' innovative capabilities. Product and process innovations have a significant positive effect on firm performance when measured by market share, but yield insignificant coefficients when measured by ROA.

This finding implies that innovation makes products/services more appealing in terms of features or price, allowing firms to maintain market share or even gain new customers. However, because innovation is a high-cost activity, achieving profitability may take longer. Product innovation generates continuous profit, which improves a company's related performance metrics. A more innovative environment also encourages the use of advanced manufacturing technology such as computer-aided design, computer-integrated manufacturing, and just-in-time systems. The use of these technologies leads to not only higher quality, but also happier customers. These modifications result in more efficient operations, which boost company profits. This was confirmed by their study findings, which revealed a positive and significant correlation between product innovation and organizational performance (p < 0.05). (Hsiu & jung, 2020).

## 2.5.5 Hotel Location

Study findings by Korir & Burugu, 2020), concluded that smart growth and development, infrastructure and network connectivity, location coherence, and digitization, are all business location factors that increase attractiveness and competitive advantage. Decisions about where to do business are critical to the success or failure of any company. Even if a company has excellent employees, high-quality products, and competitive prices, it can fail due to an inconvenient location. A study by Mim & Ferdous (2021), indicated that a company's location has a significant impact on its success. Even minor variations in location can have a significant impact on market profitability and share in a competitive business environment. Their study findings concluded that business location factors have a direct influence on competitive advantage and accounted for  $R^2$  0.533 supported this. Location is a common factor used to increase customer satisfaction and loyalty; satisfied customers expect the restaurant's location to be in an easy-to-access location. In this industry, the location of a restaurant can be crucial. So, it is to believe that a restaurant's location has a significant impact on its financial success.

According to study findings of Aznar-Alarcón, Sayeras Maspera, and Rocafort (2016), a strategic location will undoubtedly promise superior performance by the hotel in terms of revenue generation, both in the short and long term. The significance of hotel location is in product differentiation, which results in "place-sensitive products." The location of a hotel facility has a significant impact on the hotel's competitive advantage strategies in terms of financing, marketing, human resources, and customer satisfaction. The impact of location decisions on hotel performance is so significant that expected revenues and costs can be predicted.

It has the ability to influence traffic to and from the hotel, as well as occupancy rates, hotel ratings, and the type and quality of guests attracted. In this context, proximity refers to a hotel facility's proximity to its target customers and employees. In other words, it refers to how easily customers and employees can gain access to a hotel facility. The fact that there are numerous competitors emphasizes its significance; thus, accessibility should not be a deterrent to customers and other stakeholders (Chigozie & Nki, 2020).

Research findings of a study by Silva, Gerwe, & Becerra (2017), confirmed that ustomers are reminded of the existence of a restaurant by its location, which can be critical in competing in this industry. It is critical that the location is close to a highway, a successful business, and parking facilities. If a greater number of hotels are drawn to a specific geographic area because of its unique conditions, all hotels within the given location will be associated with higher profits, whether they have a corporate brand or not. The variable Central Location captures the attractiveness of the hotel's location. If the hotel is located in the city center, its value is one (Silva, Gerwe, & Becerra, 2017).

A study by Murimi, Wadongo, and Olielo (2021), agreed and stated that the location of tourist enterprises, such as hotels, is critical to the size of tourist demand and thus affects the hotel's economic efficiency and profitability. The hotel's central location raises the estimated value of its Revenue per Available Room (RevPAR). In support of this, Wangchan and Worapishet (2019), stated that travelers, whether for business or pleasure, have confirmed that hotel location is an important factor in their hotel selections and satisfaction. Hotel location is an important factor in customer loyalty because it affects customer satisfaction. The following factors influence hotel location: accessibility to points of interest, importation convenience, and surrounding environment. According to their findings, the location of a hotel had a significant positive effect on customer satisfaction (p-value <0.05) and a positive effect on customer loyalty (p-value <0.05).

According to study findings of Sidorkiewicz & Puciato (2017), location appears to be an explanatory factor for efficiency, with hotels near cities being more efficient than those in more remote locations. An appealing location is associated with the ability to generate income (demand and price level) as well as create costs (availability and production factor costs), and thus with economic effectiveness and hotel profitability. The location of business hotels should allow business tourists an easy and quick journey by personal and public transportation. As a result, these hotels should be near highways, airports, and train stations. A hotel's surroundings are also important. Interesting hotel locations and diverse infrastructure that allows for appealing leisure activities can be important factors in attracting business clients.

Research findings of Aznar, Sayeras, & Rocafor (2017), confirmed that a good location enables the hotel to charge a higher price, and demand is likely to be less elastic than in hotels located outside of the city center. Their findings indicate that location is an important factor in explaining better performance. Being near a large supply of Airbnb apartments is common for hotels in the city center, a location for which many customers are willing to pay a premium (Aznar, Sayeras, & Rocafor, 2017).

A study was done that described the positive attributes of a hotel location that cause customer satisfaction, the following indicators are observed: being close to attractions, close to city center, close to airport. Furthermore, proximity to the railway station and accessibility" benefit hotels and restaurants, and the quality of the surrounding space influences customer satisfaction. One of the most influential factors influencing reviewer satisfaction has been identified as the hotel's location. The hotel's proximity to destinations is typically measured in terms of the amount of time it takes to walk there (Aznar, Sayeras, & Rocafor, 2017).

## 2.6 Critique of empirical Literature and Research Gap

Boris (2013), concluded that the use of e-CRM in the hospitality industry provides hotels with a long-term and sustainable competitive advantage. He goes on to say that e-CRM has many advantages for the hotel, including increased guest retention rates, increased revenue and profitability, reduced internal costs, reduced marketing costs, improved customer service, and the creation of a positive hotel reputation. Furthermore, the hotel's market value increased, as did its marketing methods, business process improvement, a better understanding of guest needs, and higher employee productivity. Finally, marketing investment is protected while returns are maximized.

Sarein, Shahram, and Farhad (2012), concluded that e-CRM created higher competitive advantage for hotels because e-CRM system collects accurate and useful information based on customer needs, thus increasing the hotels competitive advantage. Furthermore, hotel managers use e-CRM systems to improve customer interactions and after-sales service processes, resulting in improved hotel performance (Shahram &Farhad, 2013).

The use of e-CRM strategies enables a hotel to build good websites, which are used as the primary consumer touch point. As a result, the hotel is able to cultivate customer loyalty. It also concluded that the success of a hotel is entirely dependent on guest satisfaction, which is primarily supported by e-CRM. The hotel also reaps significant benefits from overall e-CRM strategies, as they can reach a larger consumer base and generate higher profits. Finally, the study concludes that in order for hotels to survive in a competitive hotel market, e-CRM should be implemented because e-CRM enables hotels to understand customer patterns and offer products and services that are aligned with the needs of the customer (Almir & Anđela, 2012).

Seyed *et al* (2015), confirmed that there is a positive influence between e-CRM and customer satisfaction, as well as customer loyalty. They stated that hoteliers must focus their efforts on e-CRM in order to improve customer satisfaction and loyalty, and that e-CRM should be a continuous priority in order to improve guest satisfaction, which leads to improved hotel performance.

Benitto & Kumar (2015), concluded that e-CRM has benefits such as increased guest retention rates, increased revenue and profitability, reduced internal costs, reduced marketing costs, and improved customer service. This results in a positive hotel reputation, increased market value, improved marketing methods, and business process improvement. Finally, it leads to a better understanding of the needs of guests, increased employee productivity, and the protection of marketing investments with maximized returns. All of this adds up to a competitive advantage in the hotel industry.

Even though e-CRM provides long-term benefits to organizations as a whole, some benefit more than others from implementing it; e-CRM provides benefits to organizations by generating a large amount of information about customers (Bose, 2000). Service organizations due to their inherent characteristics of production and consumption, are inseparable elements required to build influences with customers. As a result, given that hotels receive a large amount of data about their customers, e-CRM will be ideally suited to the hotel industry, especially when implemented successfully and effectively. Such information can be transformed into useful knowledge (Hwang, Jung, & Suh, 2004; Nasution & Mavondo, 2008). To summarize, the hotel industry, like any other business sector, must be highly competitive in order to do well in the business hotel location; therefore, it is critical for it to encourage behavioral patterns of continuous re-purchase and to retain customers for a longer period of time. Thus, it is clear that by implementing e-CRM, organizations will be able to establish fruitful interactions with their customers (Parasuraman et al., 2007; Verdugo et al., 2009). Furthermore, it is recognized that rising customer acquisition costs, rising customer expectations, price-sensitive travelers, more sophisticated clients, an uncertain market, and less brand loyalty are all key factors compelling hotels to focus on e-CRM as a useful strategy. Needless to say, e-CRM is widely regarded as one of the most effective methods of facilitating the development and expansion of the customer base, which, in turn, will aid in increasing profitability and guest loyalty (Sigala & Christou, 2006; Xia, Wu, & Zhou, 2021).

Muteti and Muhoho's (2019), study on leadership practices and hotel performance in Nairobi County was solely focused on leadership practices and their impact on hotel performance. The current research focuses on the impact of e-CRM on hotel performance. Maina, Mugambi, & Waiganjo (2018), conducted a study on the impact of training on the performance of Star rated hotels in Kenya, and found that training contributed significantly to hotel performance in Kenya. This current study looks at the impact of e-CRM on hotel performance, whereas the previous study only looked at the impact of training on performance. Wambua (2014), examined the impact of customer service practices on performance in the hospitality industry: a case study of hotels in Nairobi County, and concluded that hotels should improve and implement customer orientation strategies in order to perform better. It only examined customer service as a factor influencing hotel performance, whereas the current study investigates the impact of e-CRM on hotel performance. Previous research has found that unidimensional constructs, in which hotel performance is viewed through the narrow prism of financial measurement, are more prevalent. (Elbannaa, Eidb, & Kamel, 2015). The study intends to broaden hotel measurement criteria to include nonfinancial indicators of hotel performance.

# 2.7 Summary of Literature Reviewed

The chapter focuses on the review of previous literature on influence of electronic customer relationship management on performance of Star rated hotels in Kenya in Kenya. The chapter presents specific theories to support the independent variables, moderating and dependent variables of the study. The first theory is social exchange theory which supports electronic personalization, E-SQUAL Model to support electronic service quality variable, IDIC model to support e-personalization, e-service quality, e-innovation and e-technology infrastructure. Innovation of Profits Theory supports electronic innovation and Competitive Advantage Model supports Hotel location. Empirical studies were presented based on the specific variables on the study. The studies revealed compelling arguments on the influence of Electronic Customer relationship Management on performance hence the purpose of this study which focuses on Star rated hotels in Kenya

#### **CHAPTER THREE**

# **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The study will also focus on conducting primary research, so the methodology will be outlined in this chapter. This chapter focuses on the research design, research philosophy, study population. The chapter will also cover the development of research instruments, a pilot study, the validity and reliability of the instruments, data collection methods, and data analysis.

#### 3.2 Research philosophy

According to Ojala (2015), research philosophy is a prototype capable of reinforcing research. In this philosophy, the researcher assumed an uninterested posture and was objective in data collection and analysis. Positivism holds that only factual knowledge gained through observation (the senses), including measurement, is reliable. The researcher's role in positivism philosophy is limited to data collection and interpretation using an objective approach, and research findings are usually observable and quantifiable (Wilson, 2010). Reality, according to positivists, is stable and can be observed objectively. Manipulation of independent variables against the dependent variable is used to identify and define existing relationships. This method was chosen to improve objectivity. The study used a positivist research philosophy because the data is precise and thus easily compared, resulting in reliable evidence from the responses collected via questionnaires.

#### 3.3 Research Design

This study employed a descriptive cross-sectional research design: n which you collect data from many different individuals at a single point in time. In cross-sectional research, you observe variables without influencing them. This research design is used when the problem has been well designed and where the researcher can engage in a field survey by going to the population of interest in order for the respondents to explain certain features about the problem under study. The design was therefore considered appropriate since it is more precise and accurate as it involves description of events in a carefully planned way. Descriptive research design portrays the characteristics of a population fully (Sridhar, 2010).

Descriptive research design is both quantitative and qualitative thus making it appropriate for a study that encompassed on extensively understating the e-CRM strategies and hotel performance. The approach was used in this research to establish the influence between e-CRM strategies and performance of Star rated hotels in Kenya It was necessary to use this approach because it increases the statistical reliability of the results. The qualitative data collected was quantified into numerical codes and then analyzed statistically. The study was a census.

# **3.4 Target Population**

Barnat (2015), define population as an entire group of individuals, events or objects having common observable characteristics. The population of this study will consist of one hundred and twelve (112) Star rated hotels in Kenya recognized and star ranked by Kenya Tourism Regulatory Authority (Tourism Regulatory Authority, 2018). The study targeted these hotels because they are considered the cream of the Kenyan hotel industry, and improving their performance results in improved performance of the Kenyan hotel sector as a whole. As a result, Kenya's economic performance will improve. This was a census study.

This study focused on chief operating officers or marketing manager or client relationship managers because they have adequate knowledge about the hotels emarketing strategies and relevant insights into the hotel business considering their crucial role in top management. However, to expand reach and to cater for alternative respondents in the absence of marketing managers, other managers such as general manger or their equivalents in the firm administrative structures were selected as respondents.

**Table 3.1: Population size** 

Hotel ranks/Stratum	Population
Five Star	18
Four Star	55
Three Star	39
Total	112

# **3.5 Data Collection Instruments**

Primary data according to Kothari (2010) is the data collected a fresh for the first time while secondary data is that data that has already been collected and passed through statistical process. Andre (2004) explains that primary data is data that is used for a scientific purpose for which it was collected. During this research, primary data was used for this study and was collected using questionnaires. The questionnaires included both closed and open-ended questions.

Closed ended questions were used in an effort to facilitate an easier analysis as they are in immediate usable form while the open-ended questions were used as they encouraged the respondent to give an in-depth and felt response without feeling held back in revealing of any information. With open ended questions, a respondent's response gives an insight to their feelings, background, hidden motivation, interests and decisions. Through primary, the study was able to obtain first-hand information that is more detailed hence enhancing its viability and ability to solve the research problem

Primary data according to Kothari (2010) is the data collected a fresh for the first time while secondary data is that data that has already been collected and passed through statistical process. Andre (2004) explains that primary data is data that is used for a scientific purpose for which it was collected. During this research, primary data was used for this study and was collected using questionnaires. Closed ended questions were used in an effort to facilitate an easier analysis as they are in immediate usable form while the open-ended questions were used as they encouraged the respondent to give an in-depth and felt response without feeling held back in revealing of any information. With open ended questions, a respondent's response gives an insight to their feelings, background, hidden motivation, interests and decisions. Through primary, the study was able to obtain first-hand information that is more detailed hence enhancing its viability and ability to solve the research problem.

# 3.6 Pilot Test

Before it could be administered to the sampled respondents, the questionnaire designed based on the research questions was pilot-tested to refine the questions. The goal of the pilot test was to ensure that the research instrument met the criteria and was reliable and valid in terms of providing the expected results in answering the research questions. This was accomplished by utilizing 10% of the sample size, which totaled 15 hotels. These were left out of the final study. According to Barnat (2015), in an academic work with a sample size of less than 500 respondents, using 6-10% of the sample size as the piloting sample is appropriate

#### 3.6.1 Results of the Pilot Study

A pilot test to obtain an evaluation of the validity of the questions and the probable reliability of the data had been carried out before actual data collection. Seven interviewees were randomly sampled and questionnaires were submitted. The questionnaires were then analyzed to establish whether the research instrument is reliable and valid.

The study population was made up of two-star hotels, and the respondents were marketing managers or their equivalents. The participants in the pilot study were not included in the main study. Three independent research assistants were hired to assist with data collection more efficiently. The research assistants were trained on the tools before beginning the data collection process. The researcher actively supervised the assistant researchers. Finally, the final instrument was improved based on findings and observations about individual items or variables. The pilot study was used to review the instruments for ambiguity and lack of clarity, as well as to test the items' reliability status. All of the variables' items received acceptable Cronbach's alpha ratings. This was accomplished by utilizing 10% of the sample size, which totaled 15 hotels. These were left out of the final study. According to (Barnat (2015),), when a sample size of less than 500 respondents is used, using 5% to 10% of the sample size as the piloting sample is appropriate in academic work. The pilot study resulted in a response rate of 60% (9 respondents).

Electronic personalization in e-CRM showed a Cronbach's alpha of 0.735, This falls within the excellent range and is highly accepted. Electronic service quality had Cronbach alpha of 0.857, This above the of 0.7 minimum acceptable range in the Cronbach's alpha. Electronic technology infrastructure had a Cronbach alpha of 0.725, representing implying a consistently reliable tool. Electronic innovation had a Cronbach alpha of 0.735, demonstrated a highly reliable instrument. Finally, performance had a Cronbach of 0.808. The researcher keenly, explored ways of further improving the consistency of the stem, clarification of statements and increasing the number of items in each variable.

## **3.6.1 Reliability of the Instruments**

Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. The study selected a pilot group of 19 individuals from the target populace to test the unwavering quality of the examination instruments. So as to test the unwavering quality of the instruments, inner consistency systems were applied utilizing Cronbach's Alpha.

The alpha worth ranges somewhere in the range of 0 and 1 with unwavering quality expanding with the expansion in worth. Coefficient of 0.6-0.7 is a regularly acknowledged principal guideline that shows worthy unwavering quality and 0.8 or higher demonstrated great dependability (Mugenda, 2008). The pilot data was not included in the actual study.

## **3.6.2 Validity of the Instrument**

According to Foss and Saebi (2017) validity is the degree by which the sample of test items represents the content the test is designed to measure. Content validity which was employed by this study is a measure of the degree to which data collected using a particular instrument represents a specific domain or content of a particular concept. Experts' opinions were sought where selected experts were requested to comment on the representativeness and suitability of questions and give suggestions of corrections to be made to the structure of the research tools.

To establish the validity of the research instrument, the researcher sought opinions of experts in the field of study especially the owners and managers of business firms. This helped to improve the content validity of the data that was collected. It facilitated the necessary revision and modification of the research instrument thereby enhancing validity.

## **3.6.3 Tests of Hypotheses**

T-test and F- Statistic at 5% level of significant was used to examine significance of coefficients of variables in the model. Explanatory power of e-CRM on performance of Three to Five Star Hotels for the total period of observation, adjusted coefficient of determination (R<sup>2</sup>) was performed. Also, Ordinary Least Square (OLS), simple and multiple regression analyses, Pearson correlation test was performed on data set. In addition, the study also employed Fixed and Random Effects Models for the purpose of addressing heterogeneity of the sample data (Okun & Ibadin, 2015). Breusch-Pagan test was applied to the data set. If an F-test confirms that the independent variables are jointly significant then the null hypothesis of homoscedasticity can be rejected. To test the hypothesis different tests were carried out and the results are as included Table 3.2.

Table	3.2:	Study	Hy	pothesis
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Objective	Hypothesis	Type of	Interpretation
		Analysis	
To determine the rela- tionship between e- personalization and per-	H <sub>01</sub> There is no sig- nificant relationship between e-	Pearson Corre- lation	If p-value < 0.05, Reject the null hypothesis.
formance of Star rated Hotels in Kenya.	personalization and performance of Star rated Hotels in Kenya.	Linear Regres- sion analysis.	
To assess the relation- ship between e-service quality and performance	H <sub>02</sub> There is signifi- cant relationship between e-service	Pearson Corre- lation	If p-value < 0.05, Reject the
of Star rated Hotels in Kenya.	quality and perfor- mance of Star rated Hotels in Kenya.	Linear Regres- sion analysis.	null hypothesis.
To determine the rela- tionship between e- technology infrastruc-	H <sub>03</sub> There is no sig- nificant relationship between e-	Pearson Corre- lation	If p-value < 0.05, Reject the null hypothesis.
ture and performance of Star rated Hotels in Kenya.	technology infra- structure and per- formance of Star rated Hotels in Kenya.	Linear Regres- sion analysis.	
To assess the relation- ship between e- innovation and perfor-	H <sub>04</sub> There is no sig- nificant relationship between e-	Pearson Corre- lation	If p-value < 0.05, Reject the null hypothesis.
mance of Star rated Ho- tels in Kenya.	innovation and per- formance of Star rated Hotels in Kenya.	Linear Regres- sion analysis.	
To determine the mod- erating influence of lo- cation on the relation- ship between e-CRM and performance of Star Rated Hotels in Kenya.	H <sub>05</sub> Hotel location does not moderate the relationship be- tween e-CRM and performance of Star rated Hotels in Kenya	Correlation, Moderated Mul- tiple Regression Analysis-test, t- test.	If p- value<0.05, Re- ject the null hy- pothesis.

# 3.6.4 Operationalization and Measurement of Variables

Table 3.3 contains a list of the various study variables, their indicators and the measurements to be used to estimate these variables. Constructs of each item of the variable was measured by scale as summarized in Table 3.3

Variable type	Indicator	Measurement	Adopted Source
<b></b>		Scale	•
(Independent Variable)t		Ordinal scale (5- point Likert scale)	JungKook, 2107; Lixandroiu & Mai- can, 2015.
Electronic Per-	Customer Data		
sonalization	Customer intimacy		
(Independent		Ordinal scale (5- point	Kaur (2018)
Variable)		Likert scale)	
Electronic Ser-	Efficiency		
vice Quality	Fulfilment		
	Reliability		
(Independent		Ordinal scale (5- point	Sheung's (2014)
Variable)		Likert scale)	
Electronic	Technology Systems		
Technology	Security Systems		
Infrastructure	Staff Technology skills		
(Independent		Ordinal scale (5- point	Nafula (2017)
Variable)		Likert scale)	
	Product / Service		
novation	Marketing		
	Organizational		()
(Dependent		Ordinal scale (5- point	Kaur (2018)
Variable)		Likert scale)	
Performance	Occupancy Rate		
	Online reviews		
	Customer survey		
(Moderating		Ordinal scale (5- point	
Variable)		Likert scale)	(2021)
Hotel Location	Distance from the Cen-		
	tral Business District		

## **Table 3.3: Operationalization and Measurement of Study Variables**

## **3.7 Data Analysis and Presentation**

After data collection data analysis was done. This process is important as it makes data sensible. Data analysis tool used is dependent on the type of data to be analyzed depending on whether the data is qualitative or quantitative. The quantitative data in this research was analyzed by descriptive statistics using statistical package for social sciences (SPSS). Descriptive statistics captured included mean, frequency, standard deviation and percentages to profile sample characteristics and major patterns emerging from the data. In addition to measures of central tendencies, measures of dispersion and graphical representations were used to tabulate the information. Data was presented in tables. Content analysis was used in processing of this data and results presented in prose form.

In addition, a multivariate regression model was applied to determine the relative importance of each of the four variables with respect to performance of Star rated hotels in Kenya Multiple regression is a flexible method of data analysis that may be appropriate whenever quantitative variables (the dependent) are to be examined in relationship to any other factors (expressed as independent or predictor variable). Relationships may be non-linear, independent variables may be quantitative or qualitative and one can examine the effects of a single variable or multiple variables with or without the effects of other variables taken into account (Foss & Saebi, 2017). The regression model was as follows:

## **Moderated Simple regression**

$$\begin{split} Y &= \beta_0 + \beta_i X_i + e \ (i=1, \ 2 \ 3, \ 4); \\ Y &= \beta_0 + \beta_i X_i + \beta_m M + e; \\ Y &= \beta_0 + \beta_i X_i + \beta_m M + \beta_m X_i M + e \\ \cdot \\ \textbf{Moderated Multiple regression.} \\ Y &= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \\ Y &= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_m M_+ e \end{split}$$

Where:

Y = Performance

- $X_1 =$  Electronic personalization
- $X_2$  = Electronic Service quality
- $X_3 =$  Electronic Technology infrastructure

 $X_4 = Electronic Innovation$ 

M = Moderating variable (Hotel location)

XiM =Product term/ interaction term of the moderating variable with

each of the independent variables (X1, X2, X3, X4)

 $\varepsilon = \text{Error term}$ 

# Moderation

The study adopted hierarchical regression to test three models. Model one only constituted green supply chain management practices. Model two was fitted including the moderating variable of location while model three included interaction variables between e-CRM variable and the moderator. The results of the first model generated an equation given as:

 $Y=\alpha_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\epsilon....(i)$ Where; Y is Hotel Performance

 $\alpha 0$  is the constant

 $\beta$ 1-  $\beta$ 4 are the coefficients of the independent variables

The second was adopted as follows;

 $Y = \alpha 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_4 X_7 + \epsilon....(ii)$ 

 $\alpha 0$  is the constant

 $\beta$ 1-  $\beta$ 4 are the coefficients of the independent variables

Z is the moderator (Hotel Location) and  $\varepsilon$  is the error term.

The results for the third model show the addition of interaction variables on individual variables. The final model generated the equation given by;

 $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_1 X_1 + Z + \beta_2 X_2 + Z + \beta_3 X_3 + Z + \beta_4 X_4 + \beta_4 X_$ 

ε.....(iii)

#### Where Y= Hotel Performance

 $\alpha 0$  is the constant

 $\beta$ 1- $\beta$ 4 are the coefficients of the independent variables

Z is the moderator (hotel Location) and  $\varepsilon$  is the error term.

## **3.8 Tests of Assumptions**

Regression model has several assumptions that a data set has to meet in order to give credible and reliable results. These assumptions (diagnostics), were tested to ensure that the regression model was accurate and did not give misleading results. The tests include; linearity test, homoscedasticity test, multicollinearity test, test for autocorrelation and test for normality.

#### **3.8.1 Linearity Test**

In this study, the Goodness of Fit test was employed to test for linearity. This helped in summarizing the discrepancy between the observed values and the values expected under a statistical model. In addition, ANOVA table was computed for the linear and nonlinear components of any pair of variables. If the F significance value for the nonlinear component is below the critical value (ex., < .05), then there will be significant nonlinearity (David, 2012).

#### **3.8.2 Test for Homoscedasticity**

Homoscedasticity means the relationship under investigation is the same for the entire range of the dependent variable. The test here is by graphical examination of the squared residuals. When the homoscedasticity assumption is met, residuals will form a pattern less cloud of dots. Lack of homoscedasticity is most easily seen in a standardized scatterplot. This scatterplot of the standardized predicted dependent variable (ZPR\_1 in SPSS) against the standardized residuals (ZRE\_1 in SPSS) should show a random pattern across the entire range of ZPR\_1 when, in regression, error is homoscedastic -- that is, when the regression model is equally accurate across the range of the dependent variable (David, 2012).

#### **3.8.3 Multicollinearity Test**

Multicollinearity is a statistical phenomenon in which there exists a perfect or exact relationship between the predictor variables making it difficult to come up with reliable estimates of their individual coefficients (Joshi, Kulkarni & Deshpande, 2012). The study will carry out one way to estimate multicollinearity where the variance inflation factor (VIF) will be used. The VIF assesses how much the variance of an estimated regression coefficient increases when predictors are correlated. If no factors are correlated, the VIFs will all be 1 but if the VIF is greater than 1, the regressions may be moderately correlated. A VIF between 5 and 10 indicates high correlation that may be problematic and that would require the researcher to remove highly correlated predictors from the model.

#### 3.8.4 Test for Autocorrelation

Autocorrelation is expected to be tested with the use of most widely used Durbin Watson (DW) test which is considered appropriate for this study because of the sample involve with regard to the population of the study (Joshi, Kulkarni, & Deshpande, 2012). DW test result that is around 2 was considered as no autocorrelation while its presence was confirmed if the test result is significantly different from 2.

#### **3.8.5** Normality Test

In order to assess likelihood that the data set is normally distributed, Kolmogorov-Smirnov (K-S) Test was performed. According to Ghasemi & Zahediasl (2012), K-S test is the most commonly used normality test possibly because of disadvantages of other tests and that it can easily be examined using SPSS.

#### **3.9 Ethical Considerations**

The study observed essential ethical factors in order to achieve the intended objectives. First, the respondents were told about the significance of the study and how the information they supplied would be used. To introduce the researcher to the responder and establish the need for the study, a letter from Jomo Kenyatta University of Agriculture and Technology (JKUAT) was obtained. NACOSTI granted a study permit, allowing the research data gathering to proceed. The responders were told that their information would be kept private and that it would only be used for academic purposes. Respondents were given the option of withdrawing their involvement in the study at any moment if they so desired.

#### **CHAPTER FOUR**

## **RESEARCH FINDINGS AND DISCUSSION**

#### 4.1 Introduction

This chapter presents the findings of the study on influence of electronic customer relationship management on performance of Star rated hotels in Kenya the chapter covers the pilot study results, the demographic results and the descriptive analysis of the main findings based on the variables of the study. The variables were e-personalization, e-service quality, e-technology infrastructure, e-innovation, hotel location (moderating) and hotel performance (dependent). The inferential analysis will also be covered in this chapter.

#### 4.2 Response Rate of the Research Instrument

To determine the actual number of respondents who took part in the study, the response rate for the study was analyzed. The study sample consisted of 112 respondents, who were managers from the 112 Star rated hotels in Kenya. A total of 112 questionnaires were distributed to respondents, with 90 of them being collected for analysis. According to Mugenda, this results in a response rate of 80.35 percent, which is more than 50 percent (2008).

# 4.3: Results of Pilot study

The extent to which a test measures what it is supposed to measure is referred to as its validity. The degree to which the results of data analysis accurately represent the phenomenon under study is referred to as validity (Mugenda, 2003). Face validity was determined through a review of relevant literature and peer review, as well as the application of accepted methods used in other relevant studies. The preliminary questionnaire was pre-tested for comprehension, logic, relevance, and validation with a sample of respondents from managers of two-star hotels in Nairobi and its surrounding areas to ensure content and construct validity. In the pilot data collection, a response rate of 60% was achieved, which was deemed adequate for final data collection. In the final tool, corrections were made as needed.

#### 4.3.1 Reliability Test of the Research Instrument

According to Mugenda (2012) and Sasaka et al. (2014), reliability is the ability of the research instrument to give the same answer in the same circumstances from time to time. If respondents answer a questionnaire the same way on repeated situations, then the questionnaire is said to be reliable. The research instrument was subjected to a reliability test using Cronbach's Alpha. The findings indicated that all constructs had Cronbach's Alpha values within the suggested value of between 0.7 and 0.9 thus the data collection tool was reliable (Young, 2013; Nunnally & Bernstein, 1994; Creswell (2013); Creswell & Miller, 2000; Lincoln, Lynham, & Guba, 2011). On the basis of this reliability test it was confirmed that the scales used in the study were reliable to capture the constructs. The findings of the reliability test are shown in table 4.1

## Table 4.1: Reliability Tests Results

e-CRM Practices	Reliability Cronbach's A	Remarks
E-personalization $(X_1)$	0.735	Reliable
Electronic service quality (X <sub>2</sub> )	0.857	Reliable
Electronic technology infra-	0.725	Reliable
structure (X <sub>3</sub> )		
Electronic innovation (X <sub>4</sub> )	0.735	Reliable
Hotel performance	0.808	Reliable

#### 4.3.2 Aggregation of Independent Variables

After meeting the required reliability threshold, the items corresponding to each variable were ag-aggregated by averaging them (Mean and Standard Deviation). According to the descriptive, E-personalization received the highest rating while also exhibiting the second highest variation in responses (M=4.531, SD=.5598). E-service quality (X2) had the second highest rating but the highest variation between responses (M=4.4134, SD=.60632). E-innovation (X3) had a moderate rating and moderate variation (M=3.7023, SD=.410903).

Electronic Technology Infrastructure ( $X_3$ ) received the lowest rating and also had the least variation in responses (M=3.25262, SD=.400972). According to the rating, the worst predictor is electronic technology infrastructure ( $X_3$ ), closely followed by elec-

tronic innovation. The most important predictor is e-personalization of services, which received the highest rating, closely followed by electronic service quality  $(X_2)$ . Table 4.2 illustrates the aggregation.

Variables	Ν	Mean	Std. Deviation
e-personalization $(X_1)$	86	4.531	.5598
e-service quality $(X_2)$	87	4.4134	.60632
e-technology infrastructure (X <sub>3</sub> )	87	3.25262	.40997
e-Innovation(X <sub>4</sub> )	87	3.7023	.41903
N	82		

# Table 4.2: Aggregation of Study Variables

Key: X1= e-personalization; X2 Electronic service quality; X3 = Electronic Technology infrastructure; X4= Electronic Innovation

## **4.3.3 Multi-Collinearity Results**

According to William et al. (2013), multi-collinearity is the presence of correlations between predictor variables. In severe cases of perfect correlations between predictor variables, multi-collinearity can occur, implying that a unique least squares solution to a regression analysis cannot be computed (Field, 2009). Because multi-collinearity inflates standard errors and confidence intervals, individual predictor coefficient estimates are unstable (Belsley et al., 2008).

Collinearity tests were used to perform the multi-collinearity test. The rule of thumb is that if the VIF value is between 1 and 10, there is no multi-collinearity, and if the VIF value is greater than 10, there is multi-collinearity. Some researchers, however, argue that if the VIF value is less than 4, there is very little multicollinearity and the regression analysis can be performed, whereas if the VIF is close to or greater than 10, there is extreme multicollinearity and the analysis cannot be performed because the results will be misleading. This was the study's general guideline. Table 4.3 shows that there was no multicollinearity between the independent variables and the dependent variable because the VIF values ranged from 1 to 10 and were all less than 4, indicating that the study had very little or no multicollinearity. The Pearson correlation coefficient was less than 0.8 for all variables, which supported this.

#### **Table 4.3: Multi-Collinearity Test**

Variables	Tolerance	VIF
E-personalization	.756	1.322
Electronic service quality	.739	1.353
Electronic technology infrastructure	.769	1.300
Electronic innovation	.569	1.759

## **4.3.4 Normality Tests**

One of linear regression's assumptions is that the data be normally distributed. As a result, a One-Sample Kolmogorov-Smirnov Test (KS) was performed to test the normality of the dependent variable return on assets. Many statistical procedures in parametric tests, such as correlation, regression, t-tests, and analysis of variance, are predicated on the assumption that the data is normally distributed. Zahediasl and Ghasemi (2012). The normal distribution is symmetrical about the mean and has a peak in the middle. For the tests to be reliable, the data does not have to be perfectly normally distributed. However, with large enough sample sizes (> 30 or 40), the violation of the normality assumption should not pose a significant problem (Pallant, 2007). According to Elliot and Woodward (2007), this implies that we can use parametric procedures even when the data is not normally distributed.

Ghasemi et al., (2012) agree that the Kolmogorov-Smirnov (K-S) test appears to be the most popular test for normality, but cautions that due to its low power, it should no longer be used and recommends that normality be assessed both visually and through normality-ty tests, of which the Shapiro-Wilk test is highly recommended. Such that given H0 and H1, set  $\alpha = 0.05$ , the rule is that reject H0 if P- value is less than  $\alpha$  else fail to reject H0: where:

H0: The data is normally distributed

H1: The data is not normally distributed.

All the results of all variables were given. Using Shapiro-Wilk tests of normality which is recommended by Ghasemi et al. (2012), three variables had P-values less than 0.05: X1, X2, X3 indicating normal distribution. But for X4 Pvalue =1.65

meaning it was not normally distributed. (X<sub>4</sub>) p-values >0.05. see Table 4.4

According to Field (2009), if the test is non-significant (p < 0.05), the data is significantly different from normal distribution (in other words, it is not normal), and if the test is significant (p > 0.05), the data is not significantly different from normal distribution (in other words, it is not normal). As a result, this study fails to reject the respective null hypotheses (H04) and concludes that the particular data set is not normally distributed.

Kolmogoro Statistic	v-Smir Df		Shapiro-Wil		
Statistic	Df	Sig	<b>G</b> ( ) ( )		
	= -	Sig.	Statistic	Df	Sig.
.200	82	.000	.787	82	.000
.167	82	.000	.859	82	.000
.144	82	.000	.961	82	.013
.089	82	.165	.979	82	.197
.084	82	$.200^{*}$	.979	82	.201
	.167 .144 .089	.16782.14482.08982.08482	.16782.000.14482.000.08982.165.08482.200*	.167       82       .000       .859         .144       82       .000       .961         .089       82       .165       .979         .084       82       .200*       .979	.16782.000.85982.14482.000.96182.08982.165.97982.08482.200*.97982

#### **Table 4.4: Test of Normality**

a. Lilliefors Significance Correction

However, both Pallant (2007) and Elliot and Woodward (2007), agree that parametric procedures can be used even when the data are not normally distributed. Table 4.4 shows the results of the normality test for all the variables, to test significance of departure form normality, Q-Q Plots were done and the results shown in Figures 4.4,4.5,4.6,4.7,4.8

#### 4.4 Analysis of the demographic Data

The demographic findings from the study are as herein indicated. The motive of demographic data is to establish the organizational background that corresponds with the main theme of the study. According to Creswell (2010), through background information, the researcher gains more knowledge on the flow of the respondents and how well the respondents are capable of giving the expected results as well as gaining an insight on the extent to which the responses in a study are diverse. Among the demographic information sought in this study was the designation of respondents, work experience of respondents, number or beds, nature of ownership of hotels.

## 4.4.1 Designation of Respondents

The study sought to determine the designation / professional title of the respondents. The findings as shown in Table 4.5. eighty percent (80.8) percent of those who responded were marketing managers, 12.8 percent were client relationship managers, 5.1 percent were general managers, and 1.3 percent were chief operating officers. The findings imply that most hotels do indeed have marketing managers who are responsible for marketing activities in the hotels.

#### Table 4.5: Designation

Designation	Frequency	Percent	
Client Influence Manager	10	12.8	
General Manager	4	5.1	
Marketing Manager	63	80.8	
Chief Operations Officer	1	1.3	
Total	78	100.0	

#### **4.4.2 Work experience**

Respondents were asked to provide information about their work experience in the hospitality industry. 80.8 percent of those who responded were marketing managers, with 12.2 percent having worked in the hospitality sector for more than ten years. The findings imply that most of the hotel managers have a long work experience as marketing managers and therefore were the best respondents in talking about the e-CRM strategies used by the hotels.

# 4.4.3 Number of beds

The number of beds in the respondents' hotel was requested. According to the findings, the majority of Star rated hotels in Kenya in Kenya have more than 300 beds on average (33.3%), while only a few hotels have more than 300 beds (11.9%). as shown in Table 4.6. The findings imply that the hotels are able to measure their performance in term of Bed occupancy rates.

#### Table 4.6: Number of beds

Number of beds	Frequency	Percent	
1-100 beds	25	29.8	
101-150 beds	21	25.0	
151-300 beds	28	33.3	
Over 300 beds	10	11.9	
Total	84	100.0	

# 4.4.4 Nature of ownership

Respondents were asked to describe the nature of their hotel's ownership. 81.1 percent of hotels are independently owned, while 11.1 percent are chain hotels. According to Soultana (2013), an independent hotel has no affiliation with other properties, whereas chain hotel ownership can take various forms, such as management contracts, franchises, and referral groups. One of the most important decisions in a hotel investment is whether to become a franchise or chain affiliated hotel. Certain types of hotels, depending on their market positioning and segmentation, (Raleigh,1999). The findings imply being independent hotels, they are then ultimately responsible for the hotels inclusive of marketing strategies used. See Table 4.7

## **Table 4.7: Nature of ownership**

		Frequency	Percent
Valid	Independent hotel	73	81.1
	Chain hotel	10	11.1
	Total	83	92.2
Missing	System	7	7.8
Total		90	100.0

## 4.5 Analysis of Qualitative Data

To analyze qualitative study data, an interpretive analysis approach was used. The process of closely examining qualitative studies in order to identify constructs, themes, and patterns that can be used to describe and explain issues being studied is known as interpretational analysis (Gall, Borg, & Gall, 2006).

This study's qualitative data was in the form of text responses to open-ended questionnaires. The researcher examined the properties that emerged from the text of the responses using structural analysis. Respondents were questioned about their thoughts on e-CRM in hotels. The researcher was able to identify key words and phrases used repeatedly by the respondents by reading line by line. The presence, meanings, and influences of specific words, themes, or concepts were then quantified and analyzed. The opinions of the respondents were coded, or broken down, into manageable code categories for analysis. The results were presented by classifying, summarizing, and tabulating the data in SPSS.

## 4.5.1 No practice of e-CRM

Respondents were asked to share their thoughts on why they do not use e-CRM in their hotels. Eighty-three (92.9 percent) of the 86 respondents agreed that their hotel does indeed practice e-CRM, while three (3.3 percent) respondents stated that their hotel does not practice e-CRM. Among the reasons they gave were: The majority of respondents believed that the concept of e-CRM had not been introduced to management in their respective hotels (33.3 percent). Other respondents felt they didn't need e-CRM because they usually get reviews from trip advisor (33.3 percent), while others felt they didn't need e-CRM because they interact with guests on the site (33.3 percent). This is shown in Table 4.8 below. Other researchers have identified reasons why businesses do not use e-CRM.

Statements		sponses	Percent of Cases	
	Ν	%		
The idea hasn't been brought on board to	1	33.3	1.1	
the management				
We usually get reviews from trip advisor	1	33.3	1.1	
We interact with guests on the site	1	33.3	1.1	
Total	3	100.0%	3.3%	

 Table 4.8: Reasons for not practicing e-CRM in hotels

According to Olupot *et al.* (2014), a study focusing on e-CRM adaptation in SMEs, the factors are a lack of understanding among management, a lack of knowledge among managers, limited infrastructure, limited resources, and management resistance to change. Additional factors and resons for lack of practicing e-CRM are: organizational factors-technical factors (IT infrastructure, IT training, IT

maintenance plan, IT application complexity) and organizational factors-social factors such as top management support, human resource management, size of organization. These are the primary reasons why businesses do not use e-CRM. Furthmore, other reasons influencing firm implementation of e-CRM include: organizational readiness, organizational structure (Chuchuen & Chanvarasuth, 2011).

#### 4.5.2 Capturing of customers data on arrival

The respondents were asked to share their thoughts on how frequently they collect customer data upon arrival. It aids in the retention of repeat customers for new security (4.2 percent), Enhances services, it is the hotel's procedure via the front desk system (22.2 percent), improves follow-up and feedback (11.1 percent), for marketing purposes (27.8 percent), government requirement for marketing purposes (9.7 percent), for security measures (1.4 percent), To inform customers about special offers (6.9 percent), It is a hotel policy (5.6 percent), Communication (9.7 percent) Refer to Table 4.9

According to Minghetti (2003), it is critical to capture precise customer information in order to define the hotel attributes that meet their needs, to foster innovative and tailored services, and to develop targeted marketing strategies, with the ultimate goal of acquiring and retaining valuable customers. Depending on the information and behavioral insight hotel organizations gain during the process and their ability to translate it into a coherent response, each interaction with the customer either builds or erodes value in the influence and then impacts future contacts.

According to the findings of this study, 57% of hotel managers believe that a updated customer information database could help improve guest influences and business growth. This result demonstrates that hotel managers understand the value of having accurate customer information in order to improve service delivery and, as a result, increase revenue, marketing, and sales. It can be concluded that one of the primary reasons for frequently collecting data is to collect and use the information for marketing purposes.

		Frequency	Percent	Valid Per- cent	Cumulative Percent
Valid	It helps retrieve repeat customer for new security	3	3.3	4.2	4.2
	Improves services	16	17.8	22.2	26.4
	It is the procedure of the hotel through the system at front desk	8	8.9	11.1	37.5
	Enhances follow up and feedback	20	22.2	27.8	65.3
	For marketing purposes	7	7.8	9.7	75.0
	Government requirement for marketing purposes	1	1.1	1.4	76.4
	For security measures	5	5.6	6.9	83.3
	To tell customers on spe- cial offers	1	1.1	1.4	84.7
	It is a policy of the hotel	4	4.4	5.6	90.3
	Communication	7	7.8	9.7	100.0
	Total	72	80.0	100.0	
Missing System		18	20.0		
Total		90	100.0		

#### Table 4.9: Reasons for capturing customers data on arrival

Capturing customer information is critical for defining the hotel attributes that meet customers needs, fostering innovative and tailored services, and developing targeted marketing strategies, with the ultimate goal of acquiring and retaining valuable customers. Depending on the information and behavioral insight hotel organizations gain during the process and their ability to translate it into a coherent response, each interaction with the customer either builds or erodes value in the influence and then impacts future contacts. Customer information and service requests can be collected at each "touch point" using various methods (Minghetti, 2003).

In addition to Minghetti's (2003) study, capturing customer data involves channels that use a variety of customer-facing and back-end information systems (call center, front office system, email, Internet, etc.). their study concluded that hotel managers believe that capturing customer information through a system could help improve guest influences and business growth. This finding confirms that hotel managers understand the importance of having reliable customer information in order to improve services and thus increase revenue, marketing, and sales, but there is a misunderstanding between transaction-centric and customer-centric systems.

## **4.5.3 Frequency of updating hotel information**

The respondents were requested to share their opinions on how often they up to date the hotel information. The respondents indicated as follows: Never update hotel information (1.3%) Rarely update hotel information (13.8%), Sometimes update hotel information (10.1%), Very often update hotel information (43.8%), Always (31.3%) update hotel information. See Table 4.10

These findings are supported by Jasinskas, Streimikiene, & Biruta (2016), who stated that hotels should ensure that their information is frequently updated so that it is easily accessible via the Internet while on the move, and that companies maintain an effective and transparent Internet marketing campaign. In general, it is based on Internet and Web-based tools and services that allow anyone to publish information—whether data, audio, or video—on the Web. The content is created using this information, and the online marketing campaign must have the appropriate exposure, awareness, and motivation. With this in place, it is possible to increase the number of people who know about and support the brand. According to the findings of the study, hotel information is frequently updated.

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	Never	1	1.1	1.3	1.3
	Rarely	11	12.2	13.8	15.0
	Sometimes	8	8.9	10.0	25.0
	Very often	35	38.9	43.8	68.8
	Always	25	27.8	31.3	100.0
	Total	80	88.9	100.0	
Missing	System	10	11.1		
Total	•	90	100.0		

Table 4.10: How often your hotel updates hotel information

## 4.5.4 Implementation of E-Service Quality policy should be guided by e-CRM

The respondents were asked to give their opinion on if Investment and implementation of Electronic Service Quality policy in a hotel should be guided by e-CRM. They respondent as follows: It is an easy way to reach customers (29.3%), Helps in improving services and products (27.6%) they don't have the e-CRM (1.7%), the influence helps to understand customers(17.2%), it is part of the hotel policy(1.7%), helps to know target market (1.7%), for customer satisfaction (10.3%), improves hotel image to customers (1.7%), repeat customer is improved (1.7%) for security of hotel information (1.7%), so that we have a clear outline on how to deal with feedback with guests (1.7%), update customers on ongoing promotions (1.7%), it helps to get feedback (1.7%). See table 4.11

Cronin, Brady, and Hult (2000), concluded that in the twenty-first century, companies are using the web to sell more services and products by improving communications with their customers through an alternative / electronic channel, in order to reduce costs associated with interacting with customers. Because of the importance of having a web presence as well as using the web as a center for delivering quality electronic services, electronic services are becoming increasingly important in attracting and retaining customers in businesses. Because the company now focuses on the encounters that occur before, during, and after the transaction, electronic service quality encourages repeat purchases and builds customer loyalty.

Furthermore, the quality of e-services provides valuable information to current and prospective target-market customers. It is also the extent to which a site makes effec-

tive and efficient shopping, delivery, and purchasing of goods and services possible. Customer satisfaction is a critical predictor of online customer behavior and the success of an electronic service. If users are pleased with the service provided by the online system, it is likely that they will continue to use it. With the intent to return, if customers are frustrated and disappointed with the online system, they are unlikely to return for another visit. (Zeithaml *et al.*, 2002).

				0	<b>Cumulative Per-</b>
		Frequency	Percent	Valid Percent	cent
Valid	It is an easy way to reach cus- tomers	17	18.9	29.3	29.3
	Helps in improving services and products	16	17.8	27.6	56.9
	They don't have the e-CRM	1	1.1	1.7	58.6
	The influence helps to under- stand customers	10	11.1	17.2	75.9
	It is part of the hotel policy	1	1.1	1.7	77.6
	Helps to know target market	1	1.1	1.7	79.3
	For customer satisfaction	6	6.7	10.3	89.7
	Improves hotel image to cus- tomers	1	1.1	1.7	91.4
	Repeat customer is improved	1	1.1	1.7	93.1
	For security of hotel infor- mation	1	1.1	1.7	94.8
	So that we have a clear outline on how to deal with feedback with guests	1	1.1	1.7	96.6
	Update customers on ongoing promotions	1	1.1	1.7	98.3
	It helps to get feedback	1	1.1	1.7	100.0
	Total	58	64.4	100.0	
Missing	System	32	35.6		
Total	•	90	100.0		

 Table 4.11: Investment and implementation of E-Service Quality policy guided

 by e-CRM

#### 4.5.5 Quality of electronic services in hotels

The respondents were asked to give their opinion on quality of electronic services offered in their hotel affect performance. They responded as follows: They ensure to capture and retain customers (7.4%), When they are down there is low revenue (10.3%), improves the hotel services and efficiency (38.3%), helps in marketing (1.5%), helps in communication with customers (5.9%), attracts customers (17.6%), helps in increasing revenue (7.4%), credibility among customers (2.9%). we have not

yet implemented one (1.5%), they enhance productivity (1.5%), building good influence between hotel and customers (1.5%), the electronic services are updated and checked by the ICT department (1.5%), it matters with kind of services or response to be given (1.5%), some of the customers do not access their e-mails (1.5%), many customers do not know how to use electronic service (1.5%). See table 4.12

According to Cronin, Brady, and Hult (2000), quality Internet offerings or web-site e-services are an important strategy for addressing customers in an online environment. The quality of an Internet offering is dependent on the perceived quality of the process of using the Internet. As a purchasing and, in some cases, consumption tool, as well as a measure of the perceived quality of the outcome Marketers who want to use the Internet to sell their products or services to customers should design their offerings as service offerings that customers perceive and evaluate as services.

They continue to argue that businesses should adopt customers' perspectives as a foundation for understanding the components of e-services as well as e-service quality requirements. It has been suggested that consumer behavior in an online environment may differ from that seen in the physical world. As a result, practitioners must understand and strive to meet customer needs that are amenable to fulfillment in an online environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	They ensure to capture and retain customers	5	5.6	7.4	7.4
	When they are down there is low revenue	7	7.8	10.3	17.6
	Improves the hotel ser- vices and efficiency	25	27.8	36.8	54.4
	Helps in marketing	1	1.1	1.5	55.9
	Helps in communication with customers	4	4.4	5.9	61.8
	Attracts customers	12	13.3	17.6	79.4
	Helps in increasing reve- nue	5	5.6	7.4	86.8
	Credibility among cus- tomers	2	2.2	2.9	89.7
	We have not yet imple- mented one	1	1.1	1.5	91.2
	They enhance productivity	/ 1	1.1	1.5	92.6
	Building good influence between hotel and cus- tomers	1	1.1	1.5	94.1
	The electronic services are updated and checked by the ICT department	e 1	1.1	1.5	95.6
	It matters with kind of services or response to be given	1	1.1	1.5	97.1
	Some of the customers do not access their e-mails	1	1.1	1.5	98.5
	Many customers do not know how to use electron-	1	1.1	1.5	100.0
	ic service.				
	Total	68	75.6	100.0	
Missing	System	22	24.4		
Total		90	100.0		

 Table 4.12: Quality of e-services offered in our hotel, affect performance.

## 4.5.6 Technology infrastructure in hotels.

The respondents were asked to give their opinion on whether electronic technology infrastructure in hotels enhances their performance. They respondent as follows: Easy reach of customers (22.4%), you get customer feedback (3.0%), improves the business and services (49.3%), helps in analyzing our hotel performance (7.5%),

helps in marketing (1.5%), to keep pace with the industry trends in the use of technology (1.5%), revenue generation for the hotel (3.0%), motivate staff (3.0%), attract customers (1.5%), saves time and money (3.0%), keep up with the growing technology (4.5%). See table 4.13

According to Sigala M (2011), new electronic technology in the hotel industry has also deepened the influence between hotels and their customers, as data mining of customer databases allows hotels to develop detailed customer profiles and match service offerings to the profiles. As a result of long-term profitable exchange influences, customers are offered unique offerings. It is argued that technological innovation will radically alter the nature of the hotel firm's distribution channels, redrawing the nature of the firm/customer interaction while also reshaping the nature of the firm's influences with competitors. Technological innovation, it is argued, will fundamentally alter the nature of the hotel firm's distribution channels, reshaping not only the nature of the firm/customer interaction but also the nature of the firm's influences with competitors (Nemec & Mihalic, 2007).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Easy reach of customers	15	16.7	22.4	22.4
	You get customer feed- back	- 2	2.2	3.0	25.4
	Improves the business and services	1 33	36.7	49.3	74.6
	Helps in analyzing our hotel performance	r 5	5.6	7.5	82.1
	Helps in marketing	1	1.1	1.5	83.6
	To keep pace with the in- dustry trends in the use of technology.		1.1	1.5	85.1
	Revenue generation for the hotel	r 2	2.2	3.0	88.1
	Motivate staff	2	2.2	3.0	91.0
	Attract customers	1	1.1	1.5	92.5
	Saves time and money	2	2.2	3.0	95.5
	Keep up with the growing technology	g 3	3.3	4.5	100.0
	Total	67	74.4	100.0	
Missing Fotal	System	23 <b>90</b>	25.6 <b>100.0</b>		

 Table 4.13: E-technology infrastructures in hotels enhances their performance

#### 4.5.7 Hotel location from CBD

Respondents were asked to state their hotel location in kilometers (KM) to their central business district (CBD). They responded as follows: 0-1 kilometers (13.6%), 1-3 kilometers (28.4%), 3-7 kilometers (16.0%), 7-10 kilometers (16.0%), 10 + kilometers (25.9%). Indicating that most of the Star rated hotels in Kenya in Kenya are 1-3 kilometers to their locations central business districts (CBD) See figure 4.1

Hotel location or position has a significant impact on the hotel industry because deciding where to build a hotel necessitates the availability of certain nearby tourism resources. The company's strategy will determine whether to locate business on the beach, in mountain areas to take advantage of the snow, in cities with historical features, such as monuments, or in important cities, near airports, ports, and so on. Location economies emerge when businesses are geographically concentrated, such as when they require a specific factor located in a specific geographic area or when they share suppliers and markets (Molina-Azorini, Tari, & Moli, 2015).

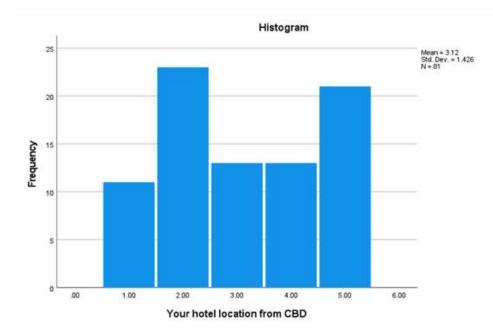


Figure 4.1: Hotel location from Central Business District (CBD)

#### 4.5.8 Distance from CBD is ideal for business

The respondents were asked to state whether the distance from their CBD was ideal for their business, they responded as follows: No (4.9%), Yes (95.1%). This indicated that the location of a hotel from the City or Central business district is key on the operations and success of the hotel. The distance has to be ideal for the hotel. See figure 4.2

An appealing hotel location is associated with the ability to generate income (demand and price level) as well as create costs (availability and production factor costs), and thus with economic effectiveness and hotel profitability. The location of business hotels should allow business tourists to travel easily and quickly by personal and public transportation. As a result, these hotels should be near highways, airports, and train stations. A hotel's surroundings are also important. An appealing environment and diverse infrastructure that allows for appealing leisure activities can be important factors in attracting business clients (Sidorkiewicz & Puciato, 2017).

Hotels and restaurants, as a service industry, are interested in locations that are close to their potential markets because they want to increase demand from potential guests. In terms of efficiency, hotels close to a potential market outperform their counterparts with poor accessibility. Customers' perceptions of a destination can be influenced by the location of a hotel, which in turn influences their destination travel choices. The significance of hotel location (in terms of proximity to/distance from specific locations, intrinsic site characteristics, and neighborhood characteristics) for product differentiation in the hospitality and tourism sectors (which produce "place-sensitive products"). Guest satisfaction, hotel revenue per available room, increased demand, and overall profitability will all be affected by the hotel's location (Alarcón , Palacín, & Maspera, 2020).

The study findings are consistent with those of Zhang and Enemark (2016), who concluded that hotels and restaurants located in city centers outperform those located elsewhere. Location in city cores and cities in general had a positive effect on hotel performance when compared to the reference category of rural areas, whereas location on an island had a negative effect on performance when compared to rural areas.

Another study that supports this finding concluded that an appealing location is associated with the ability to generate income (demand and price level) as well as create costs (availability and production factor costs), and thus with economic effectiveness and hotel profitability. The location of business hotels should allow business tourists to travel easily and quickly by personal and public transportation. As a result, these hotels should be near highways, airports, and train stations. A hotel's surroundings are also important. An appealing location and a diverse infrastructure that allows for appealing leisure activities can be important factors in attracting business clients (Sidorkiewicz & Puciato, 2017).

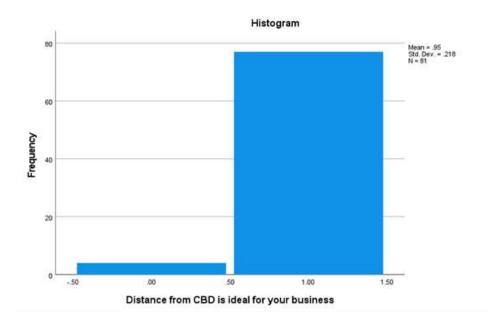


Figure 4.2: Distance from CBD is ideal for business

## 4.5.9 Practice of e-CRM

The respondents were asked to state whether their hotels practices e-CRM. 96.5 % agreed that their hotel practices e-CRM, while 3.5 % didn't practice e-CRM. See table 4.14. Reza and Akbar (2017), concluded that e-CRM, is being used in hotels and it has become the most paramount marketing evolution in the new millennium, has been highly regarded in the hotel industry. (Boris 2013), also concluded that indeed hotels are using e-CRM as a business strategy.

#### Table 4.14: Hotel practice of e-CRM

	Frequency	Percent	
No	3	3.5	
Yes	83	96.5	
Total	86	100.0	

#### **4.5.10 Frequency of Capturing Customers Data**

Respondents were asked how frequently they collect customer data upon arrival, as per the findings, the hotels always collect customer data at 31.3%. Respondents agreed at 43.8% that they collect customer data very often, while 10% of the respondents agreed that they collect customer data sometimes. The hotels that raley collect customer data were at 13.8% and 1.3% of the respondents never collect customer data. The study findings show that the frequency of the hotels to collect customer data is high.

The respondents gave they various reasons as to why frequently capture customer data at arrival, the study findings revealed that the information captured is retrieved so as to show repeat customer for new security at 4.2%. The findings reveal that captured customer data helps the hotels in improving services at 22.2%., in addition, the data captured only as a procedure of the hotel through the system at front desk at 11.1%. Moreover, the findings indicate that the data captured is used in enhancing follow up and feedback at 27.8%, as well as, the hotels frequently capture customer data to be used for marketing and communication purposes at 9.7%.

Apart from the above, the hotels capture customer data because it is a government requirement for marketing purposes at 1.4%., as well as the data captured is used for security measures at 86.9%. Additionally, the customer data is used to tell customers on special offers at 1.4.7%. in the hotels, as well as it is a policy of the hotel at 5.6%, to capture customer data. What's more is that the data is captured by the hotels so that they develop customer loyalty program at 9%. Finally, the data captured is used by the hotels as a point of reference 9% by the hotels.

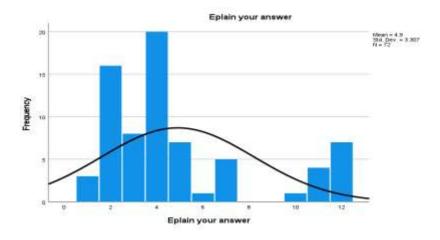
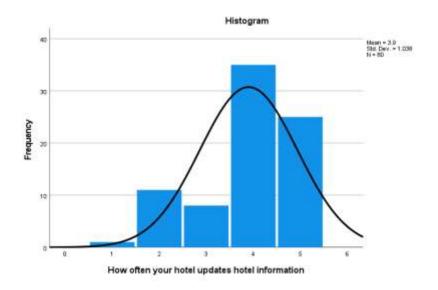


Figure 4.3: Reasons for capturing Customers Data

## **4.5.11 Updating of Hotel Information**

Respondents were asked how often they update hotel information; the findings reveal that hotels always update their information at 31.3%. Hotel information is very often updated at 43.8%, while sometimes it is updated at 10%. Moreover, hotels that rarely update their information is at 13.8% and the hotels that never update their hotel information is at 1.3%. this study concluded that indeed a majority of the hotels practice the habit of updating the hotel information.



**Figure 4.4: Updating of Hotel Information** 

### 4.5.12 Electronic Service Quality Policy should be guided by e-CRM

The respondents were asked to give their opinion on whether the investment and implementation of e-service quality policy in a hotel should be guided by e-CRM and the findings indicate that the respondents agreed. They stated at 29.3% that when this policy is guided by e-CRM, it makes it easy for the hotels to reach customers. In addition, the policy also aids the hotels in improving services and products at 27.6%.They don't have the e-CRM 1.7%, The relationship helps to understand customers 17.2%,It is part of the hotel policy 1.7%,Helps to know target market 1.7%,For customer satisfaction10.3%,Improves hotel image to customers 1.7%,Repeat customer is improved 1.7%,For security of hotel information 1.7%, So that we have a clear outline on how to deal with feedback with guests 1.7%,Update customers on ongoing promotions 1.7%,It helps to get feedback 1.7%. see figure 4.5.

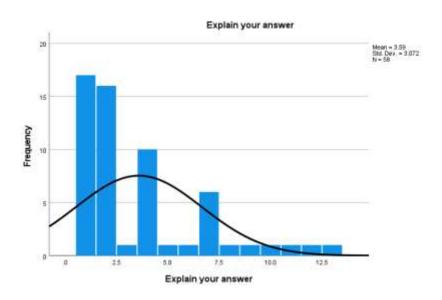
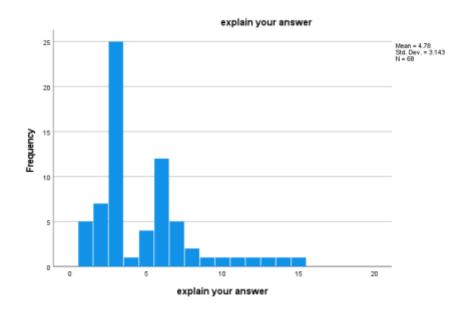


Figure 4.5: E-Service Quality Policy should be guided by e-CRM

#### 4.5.13 Quality of e-services affect performance

The respondents were asked whether the quality of e-services on the hotels lead to increased hotel performance and the findings indicate that they agreed with this statement. The study found out that e-services affects hotel performance through capturing (17.6%) and retaining customers at 7.4%, it also improves hotel performance

because it affects the hotels revenue at 10.3%. Furthermore, hotel performance is improved by e-services via improved hotel efficiency at 36.8%. e-service quality affects performance because it aids the marketing and communication in the hotels at 1.5% and 5.9%. in addition, the study found out that e-service quality enables the hotels to increase their revenue at 7.4%, findings also confirm that quality of e-services aids the hotels in gaining at 2.9%. Some hotels confirmed that they had yet to implemented an e-service quality at 2.9%, on top of this, quality of e-service quality affected hotel performance by bbuilding good relationship between hotel and customers at 1.5%, Besides this, quality of e-service quality contributed to performance because they are electronic services are updated and checked by the ICT department at 1.5%. the findings concluded that quality of e-services offered in the hotels indeed affect their performance. See Figure 4.6

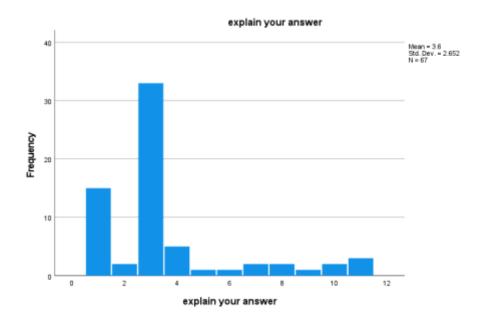


**Figure 4.6: Quality of e-Services affects Performance** 

### 4.5.14 E-technology Infrastructure affects Performance

Respondents were asked whether e-technology infrastructure in hotels enhances hotel performance and they agreed and had the following reasons. E-technology infrastructure helps the hotels in easily reaching their customers at 22.4%, furthermore it aids the hotels in getting customer feedback that is crucial for their performance at 3.0%. Apart from that e-technology enables the hotels in improving their business and ser-

vices at 49.3%, it also aids the hotels in analyzing their performance at 7.5%. etechnology hhelps in marketing at 1.5%, it also helps the hotel to keep pace with the industry trends in the use of technology at1.5%. e-technology helps the hotels in rrevenue generation at 3.0%, findings also indicate that e-technology mmotivate hotel staff at 3.0% as measure of increasing their performance. In addition, it also helps the hotels to aattract customers 1.5%, saves time and money at 3.0%, and k keep up with the growing technology at 4.5%. the study findings confirm that e-technology infrastructure does enhance hotel performance. See figure 4.7



**Figure 4.7: E-technology Infrastructure enhances Performance** 

### 4.6 Descriptive Analysis of the Findings

Descriptive analysis is intended to provide context for the study before moving on to more in-depth analysis. This was accomplished through the use of tables and graphs to present percentages, frequencies, means, and standard deviations.

The descriptive analysis of the research findings is as herein presented. This is done systematically based on the study variables which were e-personalization, e-service quality, e-technology infrastructure, e-innovation and performance. According to Waters (2014), descriptive analysis helps in describing things the way they are in a

study hence setting a clear picture of the study problem. The major descriptive statistics used herein include mean, standard deviation and percentages.

### 4.6.1 Electronic Personalization

The first objective of the study was to establish the influence of electronic personalization on performance of the Star rated hotels in Kenya the study sought to examine the role played by e-personalization on steering the hotels performance. The main aspects of e-personalization put into consideration in the study were; Physical customer data capture at entry and exist and Customer intimacy. The respondents were asked to rate their use of these aspects regarding e-personalization of services in the hotels.

#### Table 4.15: E-personalization Descriptive Analysis

	Ν	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
E-personalization	82	4.524	.5654	-1.832	.266
Performance	82	4.0144	.05583	133	.226
Valid N (listwise)	82				

According to the findings in Table 4.13, the mean for electronic personalization was 4.524, implying that the use of electronic personalization in Star rated hotels in Kenya is 4.52 percent. The findings also revealed a standard deviation of 5654, indicating that the variation in electronic personalization among Star rated hotels in Kenya is not too dispersed. Table 4.15 also shows that the skewness of electronic personalization is -1.832. This implies that the frequency distribution for electronic personalization does not deviate significantly from the norm.

According to the findings presented in Table 4.15 the mean for hotel performance was 4.0144 with a standard deviation of 0.05583. This implies that the average performance of three to five-star hotels was 4.0 percent. The findings also show that the hotel performance frequency distribution has a skewness of -1.33, indicating that it does not deviate significantly from a normal distribution. Deep (2006), contends that symmetric distributions (normally distributed) have zero skewness. This implies that

the frequency distribution for electronic personalization and hotel performance does not deviate significantly from a normal distribution.

In their study, Lixandroiu and Maican (2015) asserted that e-personalization is possible in e-commerce through the use of online marketing and digital service innovation. This provides a highly relevant, engaging, and enhanced user customer, resulting in a significant increase in conversion rates and revenue for businesses. Srinivasan, Anderson, and Ponnavolu (2002) concluded that e-personalization allows companies in the e-commerce sphere to grow and improve influences with customers by creating client profiles based on what they like and how they behave. Giving customers less information and assisting them in making wise decisions increases their loyalty and, as a result, business performance.

## 4.6.2 E-personalization by Phone calls

The respondents were asked to state how they electronically personalize communication to their customers via phone calls. 68.9% of the respondents agreed that indeed their use phone calls as a mean of electronically personalizing communication to their customers. 28.9% of them indicated that they don't use phone calls as a method of electronic communication with customers.

		Frequency	Percent
Valid	No	26	28.9
	Yes	62	68.9
	Total	88	97.8
Missing	System	2	2.2
Total	-	90	100.0

### Table 4.16: Electronic personalization through Phone calls

### 4.6.3 E-personalization by email marketing

Respondents were asked to describe how they electronically personalize communication with their customers through email marketing. 84.8 percent of respondents said they use email marketing to electronically personalize communication with their customers. This was rejected by 13.3 percent of those responded to the survey. One can draw the conclusion that email marketing is a tool used by hotels to electronically personalize communication with their customers. Refer to Table 4.17

		Frequency	Percent
Valid	No	12	13.3
	Yes	76	84.4
	Total	88	97.8
Missing	System	2	2.2
Total	-	90	100.0

### 4.6.4 Electronic personalization by Short Messages (SMS)

The respondents were asked to state how they electronically personalize communication to their customers are contacted via text messages. According to the findings, 61.1 percent of respondents do not use Short Message Service as a tool to electronically personalize communication with their customers. Only 36.7 percent said they use short messages to electronically personalize communication with customers. This resulted in the conclusion that short messages are not a tool used by hotels. See Table 4.18 for more information.

## Table 4.18: Electronic personalization through Short Message

		Frequency	Percent
Valid	No	55	61.1
	Yes	33	36.7
	Total	88	97.8
Missing	System	2	2.2
Total		90	100.0

## 4.6.5 Frequency of capturing customer's data on arrival

Respondents were asked how frequently they collect customer data upon arrival. 68.9 percent of respondents said they collect data all the time, 23.3 percent said they collect data most often, and 1.1 percent said they collect data frequently. It is possible to conclude that hotels constantly collect customer data.

		Frequency	Percent
Valid	Often	1	1.1
	Very often	21	23.3
	All the time	62	68.9
	Total	84	93.3
Missing	System	6	6.7
Total	-	90	100.0

## Table 4.19: Frequency of capturing customer's data on arrival

# 4.6.6 Use of Social Media Platforms

Further, the respondents state to what extent their hotel uses and follows up with electronic communication issues that arise, through social media platforms. 88.5 % agreed that they use Facebook for follows up on electronic communication issues that arise, 3.4% of the respondents don't use Facebook for this. On whether the use Twitter for follows up on electronic communication, 35.5% agreed but 7.1% disagreed. On the Extent to use Instagram to follows up on electronic communication issues that arise 68.9% agreed and 5.7% disagreed. Finally, on the extent to which they use LinkedIn for follows up on electronic communication issues that arise, 29% agreed and 22.1% disagreed.

Hotels used Facebook the most for following up on electronic communication issues that arose, while LinkedIn was the least used social media platform for following up on electronic communication issues that arose.

# Table 4.20: Use of Social Media Platforms

	N	LE	ME GE	VGE	Total
	%	%	% %	%	%
Extent to which your hotel uses Facebook	3.4	2.3	5.7 29.9	58.6	100.0
Extent to which your hotel uses Twitter	7.1	8.2	21.2 28.2	35.3	100.0
Extent to which your hotel uses Instagram	5.7	2.3	23.0 26.4	42.5	100.0
Extent to which your hotel uses LinkedIn	22.1	23.3	25.6 17.4	11.6	100.0

N= not at all, LE= little extent, Moderate extent, GE=great extent, VGE=very great extent.

## 4.6.7 Electronic personalization of services in the hotel industry in Kenya

Further the respondents were asked to indicate their levels of agreement on specific statements on the influence of e-personalization on hotel performance. Likert's scale

of 1 to 5 was used where 1 is strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree. The main measures for the variable were: Physical customer data capture at entry and exist. Customer intimacy (Email & Social media marketing, phone calls and short message services. These according to Onyeocha & Chinonso (2015), are the major aspects of e-personalization.

The findings are as shown in Table 4.21. A majority 79.12 % of the respondents agreed hotels regularly use social media platforms, while, 17.4 percent equally concurred hotels use social media platforms. A total of 96.5 percent had positive views that hotels regularly use social media platforms. This was also confirmed by the high mean shown (4.7), a minority (1.2%) disagreed or highly disagreed, that such a situation prevailed in the hotels.

From table 4.21, fifty-seven-point eight percent (57.8 %) were of the opinion that hotels social media platforms are personalized. The participants who strongly disagreed or disagreed, that hotels social media platforms are personalized comprised 3.6% of the total respondents. These respondents expressed counter opinion on the statement that hotels social media platforms are personalized implied that that e-personalization of social media platforms was probably not carried out carried out in 3.6% of the hotels. This was attested to by a mean score of 4.44.

As indicated by the high mean score of 4.41, 53.2% of the respondent's agreed hotels use social media platforms for interactions. While, 32.5 percent equally concurred hotels use social media platforms for interactions. A total of 88.6 percent had positive views that hotels use social media platforms for interaction purposes. A minority (1.3%) disagreed or highly disagreed, that such a situation prevailed in the hotels.

Capturing customer's e-mail address at the reception had a mean score of 4.51, while, 62.2 percent equally concurred customers email addresses are captured at the reception. A total of 95.1 percent had positive views that hotels indeed capture customers email addresses at the reception. A minority (3.6%) disagreed or highly disagreed, that hotels indeed capture customers email addresses at the reception. That hotel sends e-mails to invite guests their e-mail subscriptions were corroborated by 44.7 % of the respondents, which was supported by a mean score of 4.05.

Rarely writing follow up emails to customers had 52.4 % while calling customers for feedback had 51.2 % of the respondents. With a high mean of 3.02 respondents agreed that their hotels often use SMS for marketing purposes, this was supported by 32.2 % of respondents who strongly agreed with this.

It should be noted that the majority of the items had a standard deviation less than 1.0. Four items had a deviation greater than 1.0, and one was a purposeful control statement used by the researcher. The means of the statements were significantly higher than 4.05, indicating that respondents strongly agreed that e-personalization was an important factor in hotels.

According to a study conducted by (Sekhon., 2015), e-personalization increases both consumer loyalty/satisfaction and benefits in terms of profit for E-commerce businesses / sites. Table 4.21 demonstrates this.

Variable	SD	D	Ν	Α	SA	M*	S. D
Our hotel regularly uses social media platforms		1.2	2.3	17.4	79.1	4.74	.55
Our hotel social media platforms are constantly personalized		3.6	6.0	32.5	57.8	4.44	.769
We commonly use social media plat- forms for interactions		1.3	10.1	35.4	53.2	4.40	.725
Our hotel in several occasions cap- tures customer's e-mail address at the reception	2.4	1.2	1.2	32.9	62.2	4.51	.804
Our hotel often times sends e-mails to invite guests to our hotel's e-mail subscriptions	4.7	4.7	15.3	30.6	44.7	4.05	1.10
Our hotel rarely writes follow up e- mails	7.3	7.3	14.6	18.3	52.4	4.01	1.28
Our hotel continually calls customers pre and post service consumption for feedback	1.2	3.8	12.5	31.2	51.2	4.27	.913
Our hotel often uses SMS for market- ing purposes	20.5	15.7	21.7	25.3	16.9	3.02	1.38
Our hotel does not frequently receive feedback from customers using SMS	20.0	21.2	9.4	11.8	37.6	3.25	1.61

#### Table 4.21: E-personalization and performance

n=70 (SD = Strongly Disagree; Disagree =D; N = Neutral; A=Agreed; SA = Strongly Agreed)

#### 4.7 Electronic Service Quality

The study's second goal was to determine the impact of electronic service quality on the performance of Kenya's Star rated hotels in Kenya. The study sought to investigate the role of e-service quality in steering hotel performance. The study focused on three aspects of e-service quality: efficiency, fulfilment, and reliability. Respondents were asked to rate their use of these aspects of hotel e-service quality.

According to the findings in Table 4.22, the average for e-service quality was 4.4081, implying that the use of e-service quality in Star rated hotels in Kenya is 4.41 percent. The findings also revealed a standard deviation of.61238, indicating that the variation in e-service quality among Star rated hotels in Kenya is not overly dispersed. The results also show that the skewness of the e-service quality is -1.312. This implies that the frequency distribution for e-service quality does not deviate significantly from the norm.

The findings, as shown in Table 4.22, show that the mean for hotel performance was 4.0144, with a standard deviation of 0.05583. This implies that the average performance of three to five-star hotels was 4.0 percent. The findings also show that the hotel performance frequency distribution has a skewness of -1.33, indicating that it does not deviate significantly from a normal distribution. Deep (2006) contends that symmetric distributions (normally distributed) have zero skewness. This implies that the frequency distributions for electronic service quality and hotel performance do not deviate significantly from a normal distribution.

Respondents were also asked to rate their level of agreement with specific statements about the impact of e-service quality on hotel performance. A Likert scale of 1 to 5 was used, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating neutral, 4 indicating agree, and 5 indicating strongly agree. The variable's main measures were efficiency, fulfilment, and reliability. 79.12 percent of respondents agreed that hotels use social media platforms on a regular basis, while 17.4 percent agreed that hotels do not use social media platforms. Hotels use social media platforms on a regular basis, while 17.4 percent agreed that hotels do not use social media platforms. Hotels use social media platforms on a regular basis, according to 96.5 percent of respondents. This was also confirmed by the

high mean (4.7), with a minority (1.2 percent) disagreeing or strongly disagreeing that such a situation existed in hotels.

	Ν	Mean	Std. Deviation	Skewness		
	Statistic	Statistic	Statistic	Statistic	Std. Error	
E-service quality	82	4.4081	.61238	-1.312	.266	
Performance Valid N (listwise)	82 82	4.0144	.05583	133	.226	

 Table 4.22: E-service quality Descriptive Analysis

When asked if the services delivered via Internet platforms were quick, respondents said yes. 4.59 percent of the 30.99 percent who agreed strongly agreed on the same issue. This item returned a mean of 0.72, which is very high on the scale. To determine whether the hotels' websites are always open for business, respondents were asked to rate the statements; it was discovered that 21.74 percent were positive and agreed that such an orientation did exist in their respective hotels. Participants were asked to share their thoughts on whether promises made about services on their hotel's Internet are never kept. While 16 percent disagreed, implying that their hotels do meet their Internet promises, 16.7 percent revealed that their hotels keep their Internet promises.

The 13.8 percent who were unconcerned was cause for concern. This could imply that this was a minor issue in their hotels or that it was sensitive. The managers were questioned on the structure of their electronic pages to determine the extent to which the hotel's structure of their electronic page's launch, run smoothly, and are easy to follow. While 33.46 percent agreed, 4.36 percent strongly agreed that the structure and organization of their electronic pages was good. Over 37.82 percent of respondents agreed that their electronic pages had a good structure and organization. The managers were questioned about the accuracy of the promises made about the services being provided. The majority of managers, 37.4 percent, agreed. 28.3 percent of participants had a positive response to the element of hotel service on the website being correct the first time. While 28.85 percent of hotel managers verified their hotel, online platforms are always available.

Managers agreed on 35.9 percent of the time that their hotel's electronic platforms respond to customer requests, with a mean of 0.77. Managers agreed at 23.91 percent on quickly resolving their customers' online issues or problems. Finally, the majority of respondents agreed that customer service agents in their hotels are easily accessible by phone or other electronic means. Table 4.23 summarizes the preceding observation. Only one item had a standard deviation greater than 1.0, implying that the diversity of responses to the set of items was within expectations. This is explained in greater detail in Table 4.23

This study agrees with a study by Kaur (2018), who states that the concept of eservice quality is derived from the service quality construct, the author adds that Internet and Web technologies, online customers can have unlimited access to the information they require and may enjoy a wider scope of choices in choosing products and services with highly competitive prices. So, online business has gradually employed e-service quality as a central driving force in enhancing and sustaining their competitive advantage.

Sun et al. (2015), agreed that, enhancing customer e-service quality is essential for e-commerce companies to maintain competitive advantage. The iterative race between provider effort and user expectation pushes up e-service quality to the ultimate level that service customization or even humanization becomes the key for sustainable perform

### **Table 4.23: Electronic Service Quality and Performance**

Variable	SD	D	N	A	SA	<b>M</b> *	SD
Our hotel services delivered through	1.1	1.1	3.4	26.4	4.59	0.72	0.72
e	1.1	1.1	5.4	20.4	4.39	0.72	0.72
Internet platforms are quick				. – –			
Our hotel websites are always available for	1.1	1.1	8.0	17.2	4.59	0.79	0.79
business							
Promises made about services on our hotel	10.3	5.7	13.8	12.6	4.01	1.38	1.38
Internet are never met							
The organization and structure of our hotels	3.5	2.3	7.0	29.1	4.36	0.97	0.97
electronic pages launch and run easily and							
are easy to follow							
Our hotel promises about the services being		1.2	5.9	32.9	4.52	0.67	0.67
delivered are accurate		1.2	5.9	52.9	4.52	0.07	0.07
	1 1	2.2	17.0	24.1	4 20	0.02	0.02
Our hotel service on the website are right	1.1	2.3	17.2	24.1	4.30	0.92	0.92
the first time							
Our hotel's online platforms are available	2.3	2.3	7.0	24.4	4.45	0.90	0.90
all the time							
Our electronic platforms promptly respond	1.2	1.2	6.0	31.0	4.49	0.77	0.77
to customers' requests							
We quickly resolve customers online issues	2.3	2.3	11.5	19.5	4.41	0.95	0.95
or problems	2.0	2.5	11.0	17.0		0.70	0.75
*					4.47	0.94	0.94
Our customer service agents are easily					4.4/	0.94	0.94
accessible by telephone other electronic							
means							

n= 90 (SD = Strongly Disagree; Disagree =D; N = Neutral; A=Agreed; SA = Strongly Agreed)

### 4.8 Electronic Technology Infrastructure

The third objective of the study was to establish the influence of electronic technology infrastructure on performance of the Star rated hotels in Kenya the study sought to examine the role played by e-technology infrastructure on steering the hotels performance. The main aspects of e-technology infrastructure put into consideration in the study were; Technology Systems, Security systems and Staff technology skills.

According to the findings in Table 4.24 the average for e-technology infrastructure was 3.257, implying that the use of e-technology infrastructure in Star rated hotels in Kenya is 3.26 percent. The results also revealed a standard deviation of .410781, indicating that the variation in e-technology infrastructure among Star rated hotels in Kenya is not widely dispersed. The results also show that the skewness of the e-technology infrastructure is.623. This implies that the frequency distribution for e-technology infrastructure does not deviate significantly from the norm.

The findings, as shown in Table 4.24, show that the mean for hotel performance was 4.0144, with a standard deviation of 0.05583. This implies that the average performance of three to five-star hotels was 4.0 percent. The findings also show that the hotel performance frequency distribution has a skewness of -1.33, indicating that it does not deviate significantly from a normal distribution.

	Ν	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
E-technology	82	3.25738	.410781	.623	.266
Performance	82	4.0144	.05583	133	.226
Valid N (listwise)	82				

 Table 4.24: E- Technology Infrastructure Descriptive Analysis

According to Deep (2006), symmetric distributions (normally distributed) have a skewness of zero. This implies that the frequency distribution for electronic personalization and hotel performance does not deviate significantly from a normal distribution.

Respondents were also asked to rate their level of agreement with specific statements about the impact of e-technology infrastructure on hotel performance. A Likert scale of 1 to 5 as used, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating neutral, 4 indicating agree, and 5 indicating strongly agree. Technology Systems, Security Systems, and Staff Technology Skills were the primary measures for the variable. When asked if their hotels had adequate technological facilities, 83.1 percent agreed. With an average deviation of 0.98. Furthermore, 90.8 percent of the managers responded to the survey agreed that technology plays an important role in their hotels. Ninety-one percent of hotels described their use of technological services.

The majority of managers, or 19.7 percent of those polled, confirmed their commitment to data security and customer privacy. When participants were prodded to verify the validity of the statement that established ICT department has budgeted for upgrading security systems, it elicited from the managers with a given mean of 4.43 and 4.10, respectively. The majority, or 57 percent of the hotels, agreed that hiring highly skilled technological personnel was not expensive. Most respondents agreed that their hotels have enough technologically skilled personnel; however, managers had mixed reactions, with a mean of 4.29 and 4.11, respectively. Finally, managers agreed on 77.9 percent of hotel staff technology training. Table 4.24 shows the results of the responses.

This agrees with a study by Sheung (2014), concluded in the study that, E-business technology is the new revolution for a company not only for the sake of creating a competitive advantage among other competitors, but also to increase their total sale and productivity. The rapid growth of technology has influenced the way firms conduct their business online, no matter whether it is selling products or services. Creating value for each customer and also building stronger trust between customers and companies, the leverage company's existing knowledge and creation of new knowledge favorably positions them in their chosen market to achieve higher efficiency is also very important to develop a successful company the leverage company's existing knowledge favorably positions them in their chosen market to achieve higher efficiency is also very important to develop a successful company to develop a successful company.

Variable	SD	D	N	A	SA	<b>M</b> *	SD
Our hotel has enough technological	1.3		15.6	31.2	51.9	3.91	0.98
facilities Technology doesn't play a signifi- cant role in our hotel			5.3	15.8	75.0	3.70	1.28
Our hotel significantly uses technological services	1.2		8.1	31.4	59.3	4.16	1.03
Our hotel managers frequently are not keen on practicing data security and privacy of our customers	58.1	15.1	7.0	2.3	17.4	4.42	0.78
Our hotel has an established ICT department	1.2	6.0	4.8	22.6	65.5	4.43	0.85
Very often the cost of upgrading se- curity systems is budgeted in our ho- tel		3.5	17.4	31.4	43.0	4.10	0.93
Our hotel continually considers it costly to employ highly skilled tech- nological personnel	12.8	15.1	15.1	15.1	41.9	4.29	0.73
Constantly our hotel has enough technologically skilled personnel	1.2	2.3	15.1	30.2	51.2	4.10	0.96
Oftentimes our hotel doesn't train staff on the use of technology	8.1	4.7	9.3	15.1	62.8	3.54	1.01

 Table 4.25: Electronic Technology Infrastructure and Performance

n= 75 (SD = Strongly Disagree; Disagree =D; N = Neutral; A=Agreed; SA = Strongly Agreed)

## **4.9 Electronic Innovation**

The fourth objective of this study was to determine the impact of electronic innovation on the performance of Kenya's Star rated hotels in Kenya. The study sought to investigate the role of e-innovation in steering hotel performance. The study focused on three major aspects of e-innovation: product/service innovation, marketing innovation, and organizational innovation.

According to the findings in Table 4.245 the average for e-innovation was 3.7192, implying that the use of e-innovation in Star rated hotels in Kenya is 3.72 percent. The findings also revealed a standard deviation of .39845, indicating that the variation in e-innovation among Star rated hotels in Kenya is not widely dispersed. The results also show that the skewness of the e- Innovation is.296. This implies that the frequency distribution for e-innovation does not deviate significantly from the norm.

### Table 4.26: E- Innovation Descriptive Analysis

	Ν	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
E-innovation	82	3.7192	.39845	.296	.266
Performance	82	4.0144	.05583	133	.226
Valid N (listwise)	82				

The findings, as shown in Table 4.26 show that the mean for hotel performance was 4.0144, with a standard deviation of 0.05583. This implies that the average performance of three to five-star hotels was 4.0 percent. The findings also show that the hotel performance frequency distribution has a skewness of -1.33, indicating that it does not deviate significantly from a normal distribution. According to Deep (2006), symmetric distributions (normally distributed) have a skewness of zero. This implies that the frequency distribution for electronic personalization and hotel performance does not deviate significantly from a normal distribution.

Respondents were also asked to rate their level of agreement with specific statements about the impact of e-innovation on hotel performance. A Likert scale of 1 to 5 was used, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating neutral, 4 indicating agree, and 5 indicating strongly agree. The following were the variable's primary measures: Product/service innovation, marketing innovation, and organizational innovation are all examples of innovation.

With a standard deviation of 0.77, managers collaborated to ensure that their hotels' electronic platforms were used to innovate their organizational capabilities. The majority of managers (79.1 percent) agreed that they frequently use electronic platforms when launching new products. A sizable proportion of respondents (68.2%) stated that they use electronic platforms to develop solutions for existing products in their hotels.

At 81.4 percent and 77.9 percent, respondents agreed with the statements that they conduct electronic research for the development and improvement of existing products and that they improve existing product features electronically. Over 87.2 percent of respondents agreed that their hotels use new media techniques for electronic product marketing. 82.7 percent of respondents stated that they use new pricing methods for their services electronically in their hotels.

These findings are supported by This study supports the findings of Nafula (2017), who concluded that Study findings also echo widely accepted theoretical literature that link innovation to firm competitiveness. Enterprises can thus implement innovation to improve their competitiveness. It is however prudent that for firms to improve competitiveness, they need also to consider other factors that include firm resources especially finance. Product innovation, marketing and organizational innovation.

Marques et al (2011) stressed the fact that encouraging firms to innovate will lead to a better economic performance of firms in terms of market and financial performance. Innovation leads to a better productivity performance. In addition, Quadros et all (2001), emphasized that Innovation has been proven to be one of the most important determinants of organizational performance. Certainly, innovation activities are carried out to achieve, among others, production and marketing goals such as enhancement in product quality, production cost control, market share reinforcement, reaching new markets, production flexibility or improvement in management performance.

The majority of the managers represented, 77.5 percent, agree that they improve service delivery on their electronic platforms. 86.6 percent of hotel managers stated that their hotel uses new media techniques to market their products electronically. Only 12.3 percent disagreed with the statement that they regularly use new business practices to organize their hotel operations, while 73.9 percent agreed. 73.9 percent agreed that they consult their employees when developing new processes or operations ideas. The majority of respondents (90.8 percent) agreed that they conduct opportunity exploration electronically in their hotels see table 4.27.

Variable	SD	D	Ν	A	SA	<b>M</b> *	S. D
Continually, our hotel uses electronic plat- forms to innovate their organizational capa- bilities	1.1	1.1	6.9	33.3	57.5	3.91	0.98
Our hotel, frequently, uses electronic plat- forms while launching of new products	2.3	2.3	5.7	27.6	62.1	4.45	0.77
Regularly, our hotel uses electronic platforms in developing solutions for their existing products.	1.2	3.5	16.3	34.9	44.2	4.45	0.89
Many times, or hotels does not conduct elec- tronic research for the development & im- provement of existing products.	8.2	12.9	10.6	23.5	44.7	4.17	0.91
our hotel always improves the existing products features electronically.	1.2	4.7	12.8	26.7	54.7	3.84	1.34
Our hotel rarely doesn't use new media tech- niques for marketing their products electron- ically.	8.1	5.8	8.1	18.6	59.3	4.29	0.94
Frequently, our hotel uses new pricing meth- ods of their services electronically (e.g., dis- count systems).		5.8	7.0	38.4	48.8	4.15	1.28
Our hotels always improve service delivery on their electronic platforms.	1.2	2.5	13.6	29.6	53.1	4.30	0.84
Usually, our hotel does not use new media techniques for marketing their products electronically.	8.8	5.0	8.8	22.5	55.0	4.31	0.89
Regularly, our hotel uses new business prac- tices for organizing our operations and pro- cedures.	2.7	5.3	5.3	33.3	53.3	4.10	1.28
Our hotels frequently ask our employees for new process / operations ideas.	8.2	4.1	13.7	30.1	43.8	4.29	0.98
Our hotel significantly conducts opportunity exploration electronically.	3.8	2.5	21.5	20.3	51.9	3.97	1.22

n= 64 (SD = Strongly Disagree; Disagree =D; N = Neutral; A=Agreed; SA = Strongly Agreed)

### **4.10 Hotel Performance**

The study investigated performance of Kenya's Star rated hotels in Kenya. According to the findings in Table 4.26, the average for performance was 4.0144, implying that the performance in Star rated hotels in Kenya is 4.01%. The findings also revealed a standard deviation of .50556, indicating that the variation in performance among Star rated hotels in Kenya is not widely dispersed. The results also show that the skewness of the performance is.296. This implies that the frequency distribution for performance does not deviate significantly from the norm.

### Table 4.28: Descriptive Analysis

	Ν	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Er- ror
Performance Valid N (listwise)	82 82	4.0144	.50556	133	.266

Respondents were also asked to rate their level of agreement with specific statements about hotel performance. A Likert scale of 1 to 5 was used, with 1 indicating strongly disagree, 2 indicating disagree, 3 indicating neutral, 4 indicating agree, and 5 indicating strongly agree. The following were the variable's primary measures: Occupancy rate, Online reviews and Customer survey.

Fifty six percent of the respondents agreed that online ratings for the hotels was a crucial factor in affecting their performance at Mean of 4.43. this was also supported by respondents agreeing at 53.8 % that the hotel star ratings affect their performance. the hotel managers also agreed to the fact that business referrals to their hotels plays a major role in their performance at a mean of 4.42. the bed occupancy rate was agreed upon by respondents at 29.8 % and its use as a measure of performance was at 3.70. on receiving the post customer stay reviews this was agreed upon by the respondents at 4.10 mean and supported by 60% of the respondents agreeing to it. See Table 4.29 below.

## **Table 4.29: Hotel Performance**

Variable	SD	D	Ν	Α	SA	Μ	SD
	%	%	%	%	%	3.91	0.98
Our bed occupancy is always above our expectations	3.6	3.6	20.2	42.9	29.8	3.70	1.28
We rarely hit our performance targets	7.1	15.3	12.9	29.4	35.3	4.16	1.03
Most of our new customers are pre- ferred to us by those we have previously served	1.2	7	18.6	20.9	52.3	4.42	0.78
Our online ratings / review is high	1.1	1.1	8	33.3	56.3	4.43	0.85
Our hotel regularly receives positive post stay customers surveys	1.2	3.5	5.9	29.4	60	4.10	0.93
our advertising ROI is satisfactory	1.2	6	13.3	39.8	39.8	4.29	0.73
Our customers are always satisfied with our services	1.2		9.4	47.1	42.4	4.10	0.96
Our revenue streams / avenues have increased in the last 3 years	3.7	1.2	15.9	39	40.2	3.54	1.01
Our operating costs are relatively low compared to our ROI	5.1	7.6	30.4	41.8	15.2	3.74	1.09
We have enough budget for CSR activi- ties	2.4	12	24.1	31.3	30.1	3.69	1.32
Our advertising ROI is not satisfactory	8.5	11	22	19.5	39	4.03	1.19
Our hotel star ratings are a marketing tool that affects our performance	3.6	13.1	8.3	26.2	48.8	3.90	1.31
Our hotels organizational flexibility doesn't help to satisfy our customers nor improve performance	11	3.7	13.4	28	43.9	3.31	1.59
Our hotel star ratings are not a market- ing tool that doesn't affect our perfor- mance	19.3	18.1	13.3	10.8	38.6	4.2	1.09
Our hotels star ratings affect our sales	3.8	6.2	10	26.2	53.8	4.35	0.69
growth and our performance The average price paid per room on a given day helps us reach our financial targets			12.2	40.5	47.3	4.06	0.91
Our market share is relatively better than our competitors		4.1	26	28.8	41.1	3.91	0.98

n= 57 (SD = Strongly Disagree; Disagree =D; N = Neutral; A=Agreed; SA = Strongly Agreed)

## **4.11 Diagnostic Tests**

The study performed tests on statistical assumptions of regression and statistics used. These included tests of normality, linearity, independence, and homogeneity and multi-co linearity. When the assumptions of the linear regression model are correct, ordinary least squares (OLS) provide efficient and unbiased estimates of the parameters (Kaiser, 1974).

### 4.11.1 Reliability

Regardless of the research procedure or method used, researchers must critically evaluate the likelihood of accurately measuring what should be measured on a consistent basis. According to Orodho (2003), reliability is defined as the degree to which results are consistent over time and an accurate representation of the total population under study. If the findings of a study can be replicated using a similar methodology, the research instrument is considered reliable. Cronbach's alpha was used to assess data reliability. The coefficient alpha is an appropriate measure of variance attributable to subjects and variance attributable to subject-item interaction. Table 4.30 displays the results of the reliability test.

### Table 4.30: Reliability Tests Results

E-CRM Practices	Reliability Cronbach's A	Remarks
E-personalization(X <sub>1</sub> )	0.735	Reliable
Electronic service quality $(X_2)$	0.857	Reliable
Electronic technology infrastructure	0.725	Reliable
(X <sub>3</sub> )		
Electronic innovation (X <sub>4</sub> )	0.735	Reliable
Hotel performance	0.808	Reliable

## 4.11.2 Aggregation of Independent Variables

After meeting the required reliability threshold, the items corresponding to each variable were ag-aggregated by averaging them (Mean and Standard Deviation). According to the descriptive, E-personalization received the highest rating while also exhibiting the second highest variation in responses (M=4.531, SD=.5598). E-service quality (X2) had the second highest rating but the highest variation between responses (M=4.4134, SD=.60632). E-innovation (X3) had a moderate rating and moderate variation (M=3.7023, SD=.410903).

Electronic Technology Infrastructure ( $X_3$ ) received the lowest rating and also had the least variation in responses (M=3.25262, SD=.400972). According to the rating, the worst predictor is electronic technology infrastructure ( $X_3$ ), closely followed by electronic innovation. The most important predictor is e-personalization of services, which received the highest rating, closely followed by electronic service quality (X<sub>2</sub>). Table 4.31 illustrates the aggregation.

Variables	Ν	Mean	Std. Deviation
E-personalization $(X_1)$	86	4.531	.5598
E-service quality $(X_2)$	87	4.4134	.60632
E-technology infrastructure (X <sub>3</sub> )	87	3.25262	.40997
E-Innovation(X <sub>4</sub> )	87	3.7023	.41903
N	82		

## Table 4.31: Aggregation of Study Variables

Key: X1= e-personalization; X2 Electronic service quality; X3 = Electronic Technology infrastructure; X4= Electronic Innovation

## 4.11.3 Multi-Collinearity Test

According to William et al. (2013), multi-collinearity is the presence of correlations between predictor variables. In severe cases of perfect correlations between predictor variables, multi-collinearity can occur, implying that a unique least squares solution to a regression analysis cannot be computed (Field, 2009). Because multi-collinearity inflates standard errors and confidence intervals, individual predictor coefficient estimates are unstable (Belsley et al., 2008).

Collinearity tests were used to perform the multi-collinearity test. The rule of thumb is that if the VIF value is between 1 and 10, there is no multi-collinearity, and if the VIF value is greater than 10, there is multi-collinearity. Some researchers, however, argue that if the VIF value is less than 4, there is very little multicollinearity and the regression analysis can be performed, whereas if the VIF is close to or greater than 10, there is extreme multicollinearity and the analysis cannot be performed because the results will be misleading. This was the study's general guideline. Table 4.32 shows that there was no multicollinearity between the independent variables and the dependent variable because the VIF values ranged from 1 to 10 and were all less than 4, indicating that the study had very little or no multicollinearity. The Pearson correlation coefficient was less than 0.8 for all variables, which supported this.

### Table 4.32: Multi-Collinearity Test

Variables	Tolerance	VIF	
E-personalization	.756	1.322	
Electronic service quality	.739	1.353	
Electronic technology infrastructure	.769	1.300	
Electronic innovation	.569	1.759	

### **4.11.4 Normality Tests**

One of linear regression's assumptions is that the data be normally distributed. As a result, a One-Sample Kolmogorov-Smirnov Test (KS) was performed to test the normality of the dependent variable return on assets. Many statistical procedures in parametric tests, such as correlation, regression, t-tests, and analysis of variance, are predicated on the assumption that the data is normally distributed. Zahediasl and Ghasemi (2012). The normal distribution is symmetrical about the mean and has a peak in the middle. For the tests to be reliable, the data does not have to be perfectly normally distributed. However, with large enough sample sizes (> 30 or 40), the violation of the normality assumption should not pose a significant problem (Pallant, 2007). According to Elliot and Woodward (2007), this implies that we can use parametric procedures even when the data is not normally distributed.

Ghasemi et al., (2012) agree that the Kolmogorov-Smirnov (K-S) test appears to be the most popular test for normality, but cautions that due to its low power, it should no longer be used and recommends that normality be assessed both visually and through normality-ty tests, of which the Shapiro-Wilk test is highly recommended. Such that given H0 and H1, set  $\alpha = 0.05$ , the rule is that reject H0 if P- value is less than  $\alpha$  else fail to reject H0: where:

#### H0: The data is normally distributed

### H1: The data is not normally distributed.

All the results of all variables were given. Using Shapiro-Wilk tests of normality which is recommended by Ghasemi et al. (2012), three variables had P-values less

than 0.05: X1, X2, X3 indicating normal distribution. But for X4 Pvalue =1.65 meaning it was not normally distributed. (X<sub>4</sub>) p-values >0.05. see Table 4.33.

According to Field (2009), if the test is non-significant (p < 0.05), the data is significantly different from normal distribution (in other words, it is not normal), and if the test is significant (p > 0.05), the data is not significantly different from normal distribution (in other words, it is not normal). As a result, this study fails to reject the respective null hypotheses (H04) and concludes that the particular data set is not normally distributed. See Table 4.33

Test of Normality						
	Kolma	Kolmogorov-Smirnov <sup>a</sup>		Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
E-personalization	.200	82	.000	.787	82	.000
E-service quality	.167	82	.000	.859	82	.000
E-technology infrastr	uc144	82	.000	.961	82	.013
ture						
E- Innovation	.089	82	.165	.979	82	.197
Hotel performance	.084	82	$.200^{*}$	.979	82	.201

#### Table 4.33: Test of Normality

a. Lilliefors Significance Correction

However, both Pallant (2007) and Elliot and Woodward (2007), agree that parametric procedures can be used even when the data are not normally distributed. Table 4.29 shows the results of the normality test for all the variables, to test significance of departure form normality, Q-Q Plots were done and the results shown in Figures 4.8, 4.9. 4.10, 4.11, 4.12.

### **Normal Q-Q Plot of E-personalization**

The deviation from normalcy was minimal in the case of electronic personalization, as evidenced by the closeness to the line of fit. This indicates that the data was close to normal and could thus be used in a regression analysis. Figure 4.8 shows an example of this.

#### Normal Q-Q Plot of Personalization of services

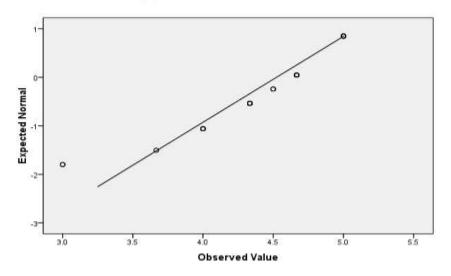


Figure 4.8: Normal Q-Q Plot of Electronic personalization

## Normal Q-Q Plot of Electronic Service Quality

The deviation from normality in Electronic Service Quality was not significant, as evidenced by the closeness to the line of fit. This indicates that the data was close to normal and could thus be used in a regression analysis. Figure 4.9 provides an illustration of this.

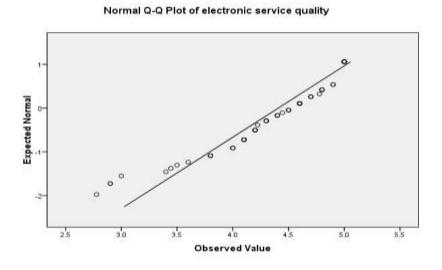


Figure 4.9: Normal Q-Q Plot of Electronic Service Quality

## Normal Q-Q Plot of Electronic Innovation

The closeness to the line of fit demonstrated that the deviation from normality in Electronic Service Quality was not significant. This indicates that the data was close to normal and thus suitable for a regression analysis. Figure 4.10 shows an example of this.



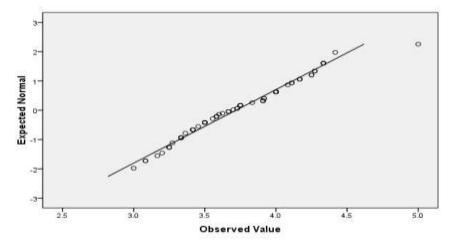


Figure 4.10: Normal Q-Q Plot of Electronic Innovation

# Normal Q-Q Plot of Electronic Technology Infrastructure

In Electronic Technology Infrastructure, the departure from normality was not much as can be seen from the approximation to the line of fit. This shows that the data was not near normal distribution and could therefore be used in a regression analysis. See Figure 4.11.

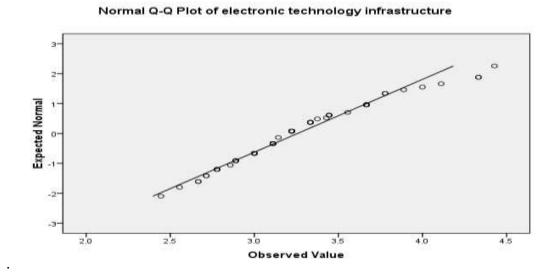


Figure 4.11: Normal Q-Q Plot of Electronic Technology Infrastructure

#### Normal Q-Q Plot of Hotel Performance (Dependent Variable)

Despite the fact that the results show that P > 0.05 for hotel performance, and thus the null hypothesis should be rejected, the Q-Q Plot shows data that is not far from the normal data approximation and can thus be used in regression analysis. Figure 4.12 provides an illustration of this.

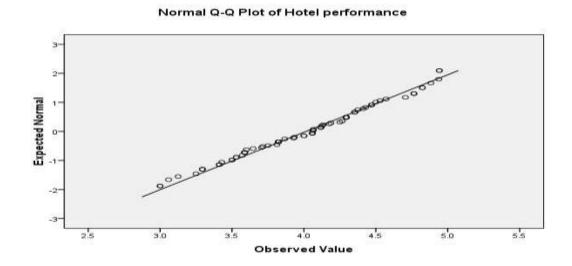


Figure 4.12: Normal Q-Q Plot of Hotel Performance

#### 4.12 Correlation Results

In order to determine the existence of influence between the variables, a correlation matrix was run. Pearson The Product Moment The correlation coefficient was used for the correlation analysis, the (r) was used to determine the linear influence between the variables of interest to the study, and the  $(r^2)$  was also meant to identify the goodness of fit. The correlation coefficient (r) produces a statistic with values ranging from -1 to 1. Muganda (2003) formalized, a value of zero indicates that there is no relationship between the two variables.

When r = (+) 1, it indicates perfect positive correlation, and when r = (-) 1, it indicates perfect negative correlation, implying that variations in the independent variable explain 100% of the variations in the dependent variable. It also means that if there is a unit change in the independent variable and a constant change in the dependent variable in the same direction, the correlation will be perfect positive (Kothari, 2004).

The correlation analysis revealed a positive correlation between e-personalization and hotel performance (r=0.454, p-value <0.001). Thus, an increase in emphasis on e-personalization in the hotel resulted in a 54.4 percent increase in overall hotel performance. See Table 4.31. The findings compare with those of (Ansari & Mela, 2003), who found out that online e-personalization has also shown a steady increase in customers' satisfaction level, e-personalization relies on assigning the right marketing effort to the right customer.

Electronic service quality was also found to be positively related to hotel performance (r=0.571, p-value< 0.001). This meant that increased use of electronic service quality resulted in a 57.1 percent increase in hotel performance. This study supports previous study by Zeithaml, Parasuraman, & Malhotra (2002), that concluded that electronic Service Quality, encourages repeat purchases, builds customer loyalty because the company now focuses on the encounters that occur before, during and after the transaction. In addition, e-service quality provides significant information to current and prospective target-market customers. It is also the degree to which a site facilitates effective and efficient shopping, delivery and purchasing of items and services. See Table 4.34

Electronic technology infrastructure had a weak positive correlation with firm performance (r = 0.274, p-value = 0.011). Azeem et al (2015) The innovative use of technology brought huge impact on banking sector and creates new interactive ways through which customers can interact with banks. Due to technological advancements many businesses are capable to perform the functions of e commerce more easily and efficiently till now and become more competitive by using the means of telecommunication networks. see Table 4.34

Electronic Innovation had a strong positive correlation with firm performance (r = 0.275, p-value = 0.010), This study supports the findings of Nafula (2017), who concluded that Study findings also echo widely accepted theoretical literature that link innovation to firm competitiveness. Enterprises can thus implement innovation to improve their competitiveness. It is however prudent that for firms to improve competitiveness, they need also to consider other factors that include firm resources especially finance. Product innovation, marketing and organizational innovation. see Table 4.34

In comparison to the other variables, the strongest correlation was found between electronic innovation and electronic service quality. Because the correlation analysis results were mostly positive, the variables were chosen for further regression analysis to test their individual contributions. Table 4.34 displays the correlation results.

		Y	X1	X2	X3	X4
Y	Pearson Correlation	1	·454**	.571 **	. 301 **	. 577 **
	Sig. (2-tailed)		.000	.000	.000	.000
	Ν	86	86	86	86	86
X1	Pearson Correlation	.454**	1	.217**	. 274**	.275**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	86	86	86	111	111
X2	Pearson Correlation	.571**	.217*	1	.254**	.468**
	Sig. (2-tailed)	.000	.000		.000	.000
	Ν	86	87	87	87	87
ζ3	Pearson Correlation	.274*	.254*	.459**	1	.301**
	Sig. (2-tailed)	.011	.018	.000		.005
	Ν	86	87	87	87	87
X4	Pearson Correlation	.275*	.468**	1	.459**	.577**
	Sig. (2-tailed)	.010	.000		.000	.000
	N	86	87	87	87	87
M	Pearson Correlation					
	Sig. (2-tailed)					
	Ν					

#### **Table 4.34: Correlation Matrix for the Study Variables**

\*\*. Correlation is significant at the 0.01 level (2 tailed).

Key: Y=Hotel Performance; X1=E-personalization, X2=Electronic service quality; X3= Electronic Technology Infrastructure; X4= Electronic Innovation

This sub-section presents the hypotheses testing of the study through regression model. Goldfarb and King (2016) describe inferential statistics and hypotheses testing as a major way towards statistically explaining the relationship between variables and thus enhancing the effectiveness and practicability of the recommendations in a study. The study was guided by five major hypotheses with four drawn from the independent variables and the dependent variable, while the fifth one drawn from the moderating variable (hotel location). These hypotheses are herein tested based on the simple regression model. The main aspects of the regression model used to unveil the hypotheses testing included the model summary, the Analysis of Variance (ANOVA) and the regression coefficients

#### 4.12.1 Eelectronic personalization and performance

 $H_0$ : There is no significant influence of Electronic Personalization on performance of Star rated hotels in Kenya in Kenya One of the study's objectives was to determine the impact of electronic personalization on the performance of three to five-Star rated hotels in Kenya. The first null hypothesis for the study was derived from this. Table 4.31 displays the model summary results. The regression model of  $X_1$  and Y was significant (F (1, 78) = 44.939, Pvalue <0.05), indicating that e-personalization is a valid predictor in the model. The R<sup>2</sup> coefficient of determination showed that the dimension e-personalization can explain 36.6 percent of hotel performance.

The adjusted R<sup>2</sup>, explained 35.7%, remaining can be explained by other factors not included in the model. The R of 0.605 shows there is strong positive correlation between extent of e-Personalization in e-CRM and hotel performance. The standard error of 0.411 shows the deviation from the line of best fit, results are shown in Table 4.35. Results are shown in Table 4.35. The study hypothesized Ho<sub>1</sub>: E-personalization does not influence performance of the Star rated hotels in Kenya the results of the survey revealed that there was positive influence between: E-personalization and performance Star rated hotels in Kenya ( $\beta$ 1=0.603, t=6.704, p-value < 0.001) and conclude that E-personalization(X<sub>1</sub>) significantly influences hotel performance (Y).

The Model equation is  $Y = 4.025 + 0.603 X_{1+} e$ 

It implies that, one (1) unit increase in the dimension of e-personalization in e-CRM leads to an increase of 0.603 increase in hotel performance index. This is displayed by Table 4.35

#### Table 4.35: E-personalization and Hotel Performance

#### **Model Summary**

				Std. Error	Change Statistics								
Model	R	R Square	Adjusted R Square	of the Es- timate	-	F Change	df1	df2	Sig. F Change				
1	.605 <sup>a</sup>	.366	.357	.41195	.366	44.939	1	78	.000				
a. Predictors: (Constant), e-Personalization													

#### ANOVA

Mode	1	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.626	1	7.626	44.939	.000ª
	Residual	13.237	78	.170		
	Total	20.863	79			
a. Pree	dictors: (Constant)	), e-Personalization				

#### Coefficients

Model		Unstandardized Co- efficients		Standardized Coefficients			Collinearity Statistics	
		В	Std. Er- ror	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	4.025	.046	·	87.362	.000		<u>.</u>
	e-Personalization	.603	.090	.605	6.704	.000	1.000	1.000

a. Dependent Variable: Hotel performance

The Pearson's Correlation Coefficient for e-personalization and hotel performance (r=0.605, p-value <0.001), was significant at 0.05 level of significance. The Regression Analysis results showed that e-personalization had a strong influence on hotel performance in Star rated hotels in Kenya for every unit increase in the extent of e-personalization in e-CRM, there was a corresponding increase in hotel performance index by 0.603. The dimension of e-personalization in e-CRM positively influences performance Star rated hotels in Kenya

JungKook (2107) supports these findings on the effect of e-personalization on hotel performance, stating that e-personalization meets customers' needs more effectively and efficiently, resulting in faster customer interactions and increased customer satisfaction. This increases the likelihood of repeat visits and, as a result, improves business performance. Furthermore, Sekhon (2015) discovered that effective e-

personalization is required to increase revenue for the company as well as user satisfaction.

Oracle Corporation (2011) found that e-personalizing the customer experience is one of the best opportunities for attracting, retaining, and building loyalty with your customers, which ultimately leads to a competitive advantage, which supports the research findings. The study findings are also consistent with the findings of (Arora & Dreze, 2008), who discovered that e-personalization is positively related to long-term advantages and higher industry profits. The study findings are also consistent with the findings of Salonen and Karjaluoto (2016), who discovered that satisfaction and loyalty are important concepts in web e-personalization because they are important drivers of business performance. In their study, there is positive support for the positive business effects of web e-personalization. Another study by Cao and Li (2007) discovered a positive correlation of web e-personalization in increasing business performance in terms of increasing both advertising and sales revenues (Ho & Bodoff, 2014).

In their study, Lixandroiu and Maican (2015) asserted that e-personalization is possible in e-commerce through the use of online marketing and digital service innovation. This provides a highly relevant, engaging, and enhanced user customer, resulting in a significant increase in conversion rates and revenue for businesses. Srinivasan, Anderson, and Ponnavolu (2002) concluded that e-personalization allows companies in the e-commerce sphere to grow and improve influences with customers by creating client profiles based on what they like and how they behave. Giving customers less information and assisting them in making wise decisions increases their loyalty and, as a result, business performance.

Furthermore, Ansari and Mela (2003) discovered that online e-personalization has shown a consistent increase in customer satisfaction level. E-personalization is based on allocating the right marketing effort to the right customer. Finally, in the use of epersonalization, (Malthouse & Elsner, 2006) had compelling evidence study conclusion that the hotel saw a significant increase in revenue and was successful in retaining its customers. They added that the benefits of e-personalization include increased customer satisfaction and profits.

#### 4.12.2 Electronic Service Quality and hotel performance

*H*<sub>o</sub>: There is no significant influence of Electronic Service Quality on performance of Star rated hotels in Kenya in Kenya

One of the objectives of the study was to establish the influence of Electronic service quality on performance of Star rated hotels in Kenya From this, the second null hypothesis for the study was drawn.

The model summary results are as shown in Table 4.32. As the findings reveal, the regression model of  $X_2$  and Y was significant (F(1, 79) = 41.633, p-value <0.001), electronic service quality is a valid predictor in the model. See Table 4.36. The Coefficient of determination  $R^2$  of 0.345 showed that 34.5% of hotel performance can be explained by the dimension of electronic service quality in e-CRM. The adjusted  $R^2$ , explained 0.337 or 33.7%, the rest can be explained by other factors not included in the model. The R of 0.587 shows there is strong positive correlation between extent of electronic service quality in e-CRM and hotel performance. The standard error of 0.4106 shows the deviation from the line of best fit results are shown in Table 4.36.

The results of the survey revealed that there was positive influence between Electronic service quality and performance of Star rated hotels in Kenya ( $\beta 2=0.488$ ,t= 6.452, p-value < 0.001). To test the influence the Regression Model fitted was  $Y = \beta 0 + \beta_2 X_2 + e$ . The null hypothesis: (Ho<sub>2</sub>): Electronic service quality does not influence performance of the Star rated hotels in Kenya in Kenya or (Ho2:  $\beta 2 = 0$ ) is therefore rejected ( $\beta 2=0.488$ ,t= 6.452, p-value <0.001) and conclude that Electronic service quality (X<sub>2</sub>) significantly influences hotel performance (Y). The Model equation is:

 $Y = 4.026 + 0.488 X_2$ 

Where, Y, is Hotel Performance; X<sub>2</sub>, is Elecronic service quality

The beta coefficient for Elecronic service quality was significant ( $\beta 2=0.488$ ,t= 6.452, p-value <0.001). It implies that , One (1) unit increase in the dimension of E-service quality in e-CRM leads to an increase of 0.488 in hotel performance index . The findings on Table 4.14 confirm that Electronic Service Quality positively influenced hotel performance ( $\beta 2=0.488$ , t= 6.452, p-value <0.001). The Regression Analysis results showed that electronic Service Quality positively influenced hotel performance in the Star rated hotels in Kenya for every unit increase in the extent of Electronic Service Quality, there was a corresponding increase in hotel performance index by 0.587. This is displayed by Table 4.36

#### Table 4.36: Electronic Service quality and performance

#### **Model Summary**

				Std. Error	Change Statistics						
Model	R	R Square	Adjusted R Square	of the Es- timate	R Square Change	F Change	df1	df2	Sig. F Change		
1	.587ª	.345	.337	.41806	.345	41.633	1	79	.000		
a. Predic	ctors: (Co	onstant),	e-service qual	lity							
ANOV	'A <sup>d</sup>										

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.276	1	7.276	41.633	.000 <sup>a</sup>
	Residual	13.807	79	.175		
	Total	21.083	80			

a. Predictors: (Constant), e-service quality

#### Coefficients

			Unstandardized Co- efficients				Collinearity Statistics	
Model		В	Std. Error	Beta	Т	Sig.	Tolerance	VIF
1	(Constant)	4.026	.046		86.674	.000		
	e-service quality	.488	.076	.587	6.452	.000	1.000	1.000

a. Dependent Variable: Hotel performance

X<sub>2</sub>= Electronic Service Quality; Y= Hotel Performance

The Pearson's Correlation Coefficient for electronic Service Quality and hotel performance (R=0.587, p-value<0.001), was significant at 0.05 level of significance. Electronic Service Quality positively influences performance among Star rated hotels in Kenya

This study agrees with a study by Kaur (2018), who states that the concept of eservice quality is derived from the service quality construct. The author adds that with Internet and Web technologies, online customers can have unlimited access to the information they require and may enjoy a broader range of options in selecting products and services with highly competitive prices. As a result, online businesses have gradually adopted e-service quality as a primary driving force in enhancing and maintaining their competitive advantage. Sun et al. (2015) agreed that improving customer e-service quality is critical for e-commerce businesses to maintain a competitive advantage. The iterative race between provider effort and user expectation raises e-service quality to the point where service customization, if not humanization, becomes essential for long-term performance.

This study backs up a previous study by Zeithaml, Parasuraman, and Malhotra (2002), which concluded that electronic Service Quality encourages repeat purchases and builds customer loyalty because the company now focuses on interactions that occur before, during, and after the transaction. Furthermore, the quality of e-services provides valuable information to current and prospective target-market customers. It is also the extent to which a site makes effective and efficient shopping, delivery, and purchasing of goods and services possible.

Customer fulfilment satisfaction is a critical predictor of online customer behavior and the success of an electronic service. If users are pleased with the service provided by the online system, it is likely that they will continue to use it. With the intent to return, if customers are frustrated and disappointed with the online system, they are unlikely to return for another visit. (Zeithaml et al., 2002; Parasuraman et al., 2002; Amphora et al., 2002). Cronin, Brady, and Hult (2000) agreed that electronic Service Quality has the potential to deliver strategic benefits while also improving operational efficiency and profitability.

#### 4.12.3 Electronic Technology infrastructure and hotel performance

 $H_o$ : There is no significant influence of Electronic Technology Infrastrucure on performance of Star rated hotels in Kenya in Kenya

One of the objectives of the study was to establish the influence of electronic technology infrastructure on performance of Star rated hotels in Kenya from this, the third null hypothesis for the study was drawn.

The model summary results are as shown in Table 4.37. As the findings reveal, the regression model of  $X_3$  and Y was significant (F (1, 79) = 7.270, p-value <0.05), between electronic technology infrastructure is a valid predictor in the model. See Table 4.37 The Coefficient of determination R<sup>2</sup> of 0. 084 or 8.4% of hotel performance can be explained by the dimension of between electronic technology infrastructures in e-CRM. The adjusted R<sup>2</sup>, explained 0.703 or 70.3%, the rest can be explained by other factors not present in the model. The R of 0.290 implies, there is low positive correlation between electronic technology infrastructure Practices in e-CRM and hotel performance. The standard error of 0.494 shows the deviation from the line of best fit results are shown in Table 4.37

The study hypothesized Ho<sub>3</sub>: Electronic technology infrastructure does not influence performance of the Star rated hotels in Kenya

The results of the survey revealed that there was significant influence between electronic technology infrastructure and performance of Star rated hotels in Kenya ( $\beta_4=0.357$ , t= 2.296, p-value < 0.05).

To test the influence, the Regression Model fitted was  $Y = \beta_0 + \beta_3 X_3 + e$ 

The null hypothesis (Ho<sub>3</sub>): Electronic technology infrastructure has no significant association on the performance of the Star rated hotels in Kenya in Kenya or (Ho<sub>3</sub>:  $\beta_3 = 0$ ) is therefore rejected ( $\beta_3=0.357.$ , t= 2.296, p-value<0.05) and conclude that the performance of Star rated hotels in Kenya in Kenya (X<sub>3</sub>) is influenced by e-technology infrastructure.

#### The Model equation is: $Y=4.027 + 0.357X_3$

Where, Y, is hotel Performance, X<sub>3</sub>, is electronic technology infrastructure

The beta coefficient for electronic technology infrastructure was significant ( $\beta_3=0.357$ , t= 2.296, p-value <0.05). It implies that, one (1) unit increase in the dimension of e-technology infrastructure Practices in e-CRM leads to an increase of 0.357 in hotels performance index. This is displayed by Table 4.37

#### Table 4.37: Electronic Technology Infrastructure and Hotel Performance

Model	Sum	mary									
				Std. Er-		Change	e Stat	istics			
		R	Adjusted R		R Square	F			Sig. F		
Model	R	Square	Square	timate	Change	Change	df1	df2	Change		
1	.290ª	.084	.073	.49435	.084	7.270	1	79	.009		
a. Pred	a. Predictors: (Constant), Electronic Technology Infrastructure										

<b>ANOVA<sup>d</sup></b>	A	N	0	V	A	d
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		Sum of		Mean		
Model		Squares	Df	Square	F	Sig.
1	Regression	1.777	1	1.777	7.270	.009 <sup>a</sup>
	Residual	19.306	79	.244		
	Total	21.083	80			
a. Predicto	ors: (Constant), El	ectronic Techr	nology Inf	rastructure		

#### Coefficients

		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics				
Mo	odel	В	Std. Error	Beta	t	Sig.	Tolerance	VIF			
1	(Constant)	4.027	.055		73.297	.000					
	E-Technology Infrastructure	.357	.132	.290	2.696	.009	1.000	1.000			
a. I	a. Dependent Variable: Hotel performance										

The findings on Table 4.29, confirm that electronic technology infrastructure did not influence hotel performance ( $\beta 2=0.357$ , t= 0.290, p-value =0.09). The Regression

Analysis results showed that electronic technology infrastructure positively influenced hotel performance in the Star rated hotels in Kenya for every unit increase in the extent of electronic technology infrastructure, there was a corresponding increase in hotel performance index by 0.290 or 29.0%. The Pearson 's Correlation Coefficient for electronic technology infrastructure and hotel performance (R=0.290, pvalue<0.001), was significant at 0.05 level of significance. Electronic technology infrastructure positively influences performance among Star rated hotels in Kenya

This is consistent with Sheung's (2014) study, which concluded that E-business technology is the new revolution for a company not only to create a competitive advantage over other competitors, but also to increase total sales and productivity. The rapid advancement of technology has had an impact on how businesses conduct their online operations, whether they are selling products or services. Creating value for each customer and strengthening trust between customers and companies, as well as leveraging a company's existing knowledge and creating new knowledge to favorably position them in their chosen market to achieve higher efficiency, are all critical components of developing a successful company. The ability to leverage a company's existing knowledge and create new knowledge to favorably position them in their chosen market in order to achieve higher efficiency is also critical for the development of a successful company.

Mehtab and colleagues (2015), The use of electronic commerce technology has a significant impact on organizational performance and efficiency. Electronic commerce is being used by businesses and firms to improve overall operational efficiency. The emergence of electronic commerce has had a significant impact on overall organizational effectiveness, and companies gain a competitive advantage by implementing electronic commerce applications. Electronic commerce technology has had a significant impact on business operations, and companies are investing heavily in e commerce applications that may lead to organizational success. Electronic commerce has a large impact on organizational performance and efficiency. Electronic commerce is being used by businesses and firms to improve the overall operational efficiency of the firm. The emergence of electronic commerce has had a

dramatic impact on overall organizational effectiveness, and companies gain a competitive advantage by implementing electronic commerce applications.

According to Azeem et al. (2015), the innovative use of technology has had a significant impact on the banking sector and has created new interactive ways for customers to interact with banks. Because of technological advancements, many businesses are now able to perform e-commerce functions more easily and efficiently, allowing them to become more competitive by utilizing telecommunication networks. Many businesses use various types of models based on their nature and operations. Organizations that do not use e-commerce applications may be at a competitive disadvantage. Electronic commerce has had a significant impact on business operations, and companies are investing heavily in e commerce applications that may lead to organizational success. Electronic commerce has a large impact on organizational performance and efficiency. Electronic commerce is being used by businesses and firms to improve the overall operational efficiency of the firm. The rise of electronic commerce has had a significant impact on overall organizational effectiveness, with companies gaining a competitive advantage by implementing electronic commerce applications.

#### 4.12.4 Eelectronic Innovation and hotel performance

There is no significant influence of ElectronicInnovation on performance of Star rated hotels in Kenya in Kenya

One of the objectives of the study was to establish the influence of Electronic Innovation on performance of Star rated hotels in Kenya from this, the fourth null hypothesis for the study was drawn. The model summary results are as shown in Table 4.38. As the findings reveal, the regression model of X<sub>4</sub> and Y was significant (F (1, 79) = 44.862, p value<0.001), electronic Innovation is a valid predictor in the model. See Table 4.38. The Coefficient of determination  $R^2$  of 0.362 or 63.2% of hotel performance can be explained by the dimension of electronic innovation in e-CRM. The adjusted  $R^2$ , explained 0.354 or 35.4%, the rest can be explained by other factors absent in the model. The R of 0.602 implies, there is strong positive correlation between extent of electronic innovation in e-CRM and hotel performance. The standard error of 0.4125 shows the deviation from the line of best fit, results are shown in Table 4.38.

The study hypothesized Ho<sub>4</sub>: Electronic innovation does not influence performance of the Star rated hotels in Kenya

The results of the survey revealed that there was positive influence Electronic innovation and performance of Star rated hotels in Kenya ( $\beta_4=0.732$ ,t= 6.698, p-value < 0.001). To test the influence the Regression Model fitted was **Y**=  $\beta$ 0 +  $\beta$ 4**X**4+ e

The null hypothesis Electronic innovation does not influence performance of the Star rated hotels in Kenya in Kenya or (Ho<sub>4</sub>:  $\beta_4 = 0$ ) is therefore rejected ( $\beta^4=0.732$ , t= 6.698, p-value <0.001) and conclude that electronic innovation (X4) significantly influences hotel performance (Y).

The Model equation is : Y=4.035+0.732X<sub>4</sub>

Where, Y, is Hotel Performance, X<sub>4</sub>, is Electronic Innovation

The beta coefficient for e-innovation was significant ( $\beta$ 4=0.732, t= 6.698, p-value <0.001). It implies that, One (1) unit increase in the dimension of e-Innovation in e-CRM leads to an increase of .732 in three to five star hotels performance index. This is displayed by Table 4.30.

		D	Adjust	Std Ennon		Chang	ge Sta	tistics	
Mod- el	R	R Squar e		Std. Error of the Es- timate	R Square	F Change	df1	df2	Sig. F Change
1	.602 <sup>a</sup>	.362	.354	.41257	.362	44.862	1	79	.000
a. Pred	lictors:	(Consta	nt), Electr	onic Innovat	tion				

#### **Model Summary**

#### **ANOVA**<sup>d</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.636	1	7.636	44.862	.000 <sup>a</sup>
	Residual	13.447	79	.170		
	Total	21.083	80			
a. Pred	ictors: (Const	ant), Electronic Innov	vation			

#### Coefficients

		Unstan Coeffic		Standard- ized Coeffi- cients			Collinea Statistic	·
Mo	odel	В	Std. Er- ror	Beta	t	Sig.	Toler- ance	VIF
1	(Constant)	4.035	.046		88.01 1	.000		
	E-Innovation	.732	.109	.602	6.698	.000	1.000	1.000
a. I	Dependent Variab	le: Hotel	performai	nce				

#### X<sub>4</sub>= Electronic Innovation; Y= Hotel Performance

The findings in Table 4.30 confirm that electronic innovation positively influenced performance  $\beta$ 4=0.732, p-value < 0.001). The Regression Analysis results showed that electronic innovation had a strong influence on performance in the Star rated hotels in Kenya for every unit increase in the practice of electronic innovation, there was a corresponding increase in hotel performance index by 7.32. The Pearson 's Correlation Coefficient for electronic innovation and hotel performance (R=0.602, p-value < 0.001), was significant at 0.05 level of significance. The extent of electronic innovation positively influences performance among Star rated hotels in Kenya

This study backs up the findings of Nafula (2017), who concluded that study findings echo widely accepted theoretical literature that links firm competitiveness to innovation. As a result, businesses can use innovation to boost their competitiveness. However, it is prudent to note that in order for firms to improve their competitiveness, they must also consider other factors such as firm resources, particularly finance. Product, marketing, and organizational innovation are all examples of innovation. Marques et al. (2011) emphasized that encouraging firms to innovate will result in improved economic performance in terms of market and financial performance. Productivity improves as a result of innovation. Furthermore, Quadros et al. (2001) emphasized that innovation has been demonstrated to be one of the most important determinants of organizational performance. Certainly, innovation activities are carried out to achieve, among other things, production and marketing goals such as improving product quality, controlling production costs, retaining market share, expanding into new markets, increasing production flexibility, or improving management performance.

In his study, Blerton (2016) concluded that e-innovation provides companies with a competitive advantage by increasing the number of online purchases and increasing customer satisfaction through time savings. All of this adds up to improved performance. Similarly Zhuang (2005) ,concluded that e-business innovation has provided new capabilities that generate value by creating more efficient markets, enabling easier access, improving value and supply chains, disrupting current pricing power, enabling mass customization, and extending reach. Firms that embrace e-business early will amass more knowledge and, as a result, will be able to compete more effectively in the new economy.

In their conclusion, they state that higher levels of product innovation are associated with higher levels of market share. Firms that are innovative, particularly those with a higher score for product and process innovation. Marketing innovations aim to better address customer needs, open up new markets, or reposition a company's product on the market in order to increase sales. Similarly, two studies concluded that innovation is one of the most important predictors of organizational performance. Certainly, innovation activities are carried out to achieve, among other things, production and marketing goals such as improving product quality, controlling production costs, retaining market share, expanding into new markets, and so on (Zhang & Enemark, 2016).

#### 4.13 Overall Regression Model

An overall regression model was carried out to establish the combined statistical relationship between the e-CRM (e-personalization, e-service quality, e-technology infrastructure, e-innovation) and the performance of Star rated hotels in Kenya in Kenya also, the overall regression model was carried out to examine the moderating effect of hotel location on the relationship between e-CRM and performance of Star rated hotels in Kenya.

#### 4.13.1 Overall Unmoderated Model

The results of the overall unmoderated model are as herein presented based on the model:

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ Where: Y = Perfromance of Star rated hotels in Kenya

 $\beta_0 = \text{Constant Term}$ 

 $\beta_1, \beta_2, \beta_3$  and  $\beta_4$  = Beta coefficients

 $X_1$ = Electronic persoanlization

X<sub>2</sub>= Electronic Service Quality

X<sub>3</sub>= Electronic technology Infrastrucure

X<sub>4</sub>= Electronic Innovation

 $\epsilon = Error term$ 

The study used multiple regression analysis to establish the joint effects of the study variables: e-personalization( $X_1$ ), e-service quality ( $X_2$ ), e-technology infrastructure ( $X_3$ ), e-innovation( $X_4$ ). aggregated together as e-CRM strategies regressed on the dependent variable, hotel performance (Y) of Star rated hotels in Kenya To test the hypothesis the following models were fitted:

#### Model: $Y = \beta 0 + \beta 1 X_1 + \beta 2 X_2 + \beta 3 X_3 + \beta 4 X_4 + e$

In the joint model, all the variables were valid predictors of the model, (p-value< (0.001). The role of some of the independent variables diminished in the presence of others.

The study hypothesized that the e-CRM: (e-personalization, e-service quality, etechnology infrastructure, e-innovation, ) There is no significant joint influence of e-CRM varables on the performance of Star rated hotels in Kenya

The results of the survey reveal that there was positive influence between e-CRM, (epersonalization, e-service quality, e-technology infrastructure, e-innovation) and performance of Star rated hotels in Kenya

#### The Regression Model is Y= 4.012+0.368X1+0.266X2+0.026X3+0.305X4

The results are in form of the model summary, the Analysis of Variance (ANOVA) and the regression coefficients. Table 4.35 shows the model Summary for the overall unmoderated model. As the findings portray, the  $R^2$  for the model was 0.545 and implication that the combined effect of e-personalization, e-service quality, etechnology infrastructure, e-innovation would lead to up to 54.5% variations in the performance of Star rated hotels in Kenya in Kenya

Mo	del	R R	Square	Adjusted R Square	Std. Error Estima	
1		738a	.545	.523		.35436
a.	Predictors:	(Constant),	E-Innovation,	, e-Personaliza	tion e-Tec	hnology

 Table 4.39: Model Summary (Overall Unmodareted Model)

Infrastructure, e-service quality

The ANOVA results on Table 4.39 shows that the F-statistic for the model was significant (F(4,81) = 24.291, Pvalue < 0.001).

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.201	4	3.050	24.291	.000 <sup>a</sup>
	Residual	10.171	81	.126		
	Total	22.372	85			

**ANOVA Results (Overall Unmoderated model)** 

a. Predictors: (Constant), E-innovation, e-Personalization, E-Technology Infrastructure, e- service quality

b. Dependent Variable: Hotel performance

Regression analysis results revealed that e-personalization had positive significant influence with hotel performance, when the effect of others variables is controlled (Ho<sub>1</sub>:  $\beta_1 \neq 0$ ), since, t= 4.235, < 0.001). Null hypothesis is rejected and conclude that e-personalization(X<sub>1</sub>) has a significant influence on hotel performance (Y). It means a unit increase in the extent of e-personalization led to increase of 0.368 in performance in the Star rated hotels in Kenya, when the effect of others variables are controlled.

Electronic service quality had positive significant effect on hotel performance, when the effect of others variables is controlled (Ho<sub>2</sub>:  $\beta_2 = 0$ ), since, t= 3.623, p-value < 0.001). We reject the null hypothesis and conclude that e-service quality (X<sub>2</sub>) has a significant influence on hotel performance (Y). It means a unit increase in the extent of e-service quality led to an increase of 0.266 in performance in the Star rated hotels in Kenya, when the effect of others variables is controlled.

Electronic technology infrastructure had positive and significant effect on hotel performance, when the effect of others variables is controlled (Ho<sub>2</sub>:  $\beta_3 = 0$ ), since, t= 0.245, p-value <0.05). We reject the null hypothesis and conclude that e-technology infrastructure (X<sub>3</sub>) has an significant influence on hotel performance (Y).

Electronic innovation had positive and significant effect on hotel performance, when the effect of others variables is controlled (Ho<sub>2</sub>:  $\beta_4 = 0$ ), since, t= 0.244, p-value > 0.05. We reject the null hypothesis and conclude that e-innovation (X<sub>4</sub>) has an significant influence on hotel performance (Y). It means a unit increase in the extent of e-innovation led to an increased 0.305 in performance in the Star rated hotels in Kenya, when the effect of others variables is controlled. This is depicted in the Table 4.40.

Μ	odel	Unstandardize d Coefficients		Standardized Coefficients			Collinearity Statistics	
		В	Std. Error	Beta	t	Sig.	Toleranc e	VIF
1	(Constant)	4.012	.038		104.90 9	.000		
	<b>E</b> -Personalization	.368	.087	.365	4.235	.000	.756	1.322
	e-service quality	.266	.073	.316	3.623	.001	.739	1.353
	E-technology Infrastructure	.026	.106	.021	.245	.807	.769	1.300
	E- Innovation	.305	.125	.243	2.441	.017	.569	1.759

 Table 4.40: Regression Coefficients (Overall Unmoderated model )

Dependent Variable: Hotel Performanc

## Discussion of the overal Unmoderated model (Joint e-CRM and Hotel Performance) Summary

The fundamental objective of the study was to determine the influence between e-CRM (e-Personalization, e-service quality, e-technology infrastructure and einnovation) and performance of Kenya's Star rated hotels in Kenya. It was widely believed that if a hotel has emphasized a wide of array of e-CRM, it will be able to impact positively on its bottom line and obtain positive performance. In the regression results, however, e-CRM when disaggregated reveal mixed results.

In the joint model, all the variables were valid predictors of the model, (p-value<0.00). E-personalization ( $\beta$ = .368, p-value <.000) had a positive significant influence with hotel, while e-service quality ( $\beta$ 2=.266, p-value <.001) exhibited positive significant influence with hotel performance in the Star rated hotels in Kenya Electronic technology infrastructure ( $\beta$ 3 = 0.26, p-value 0.807) similarly, showed an insignificant influence with hotel performance among three to five-Star rated hotels in Kenya. Electronic innovation ( $\beta$ 4 = .305, p- value <0.05) similarly, indicated positive and significant influence with performance of three to five-Star rated hotels in Kenya.

Electronic personalization (Ho<sub>1</sub>:  $\beta_1 \neq 0$ ), since, t= 4.235, p-value <.001). showed positive and significant effect on firm performance. It means that a unit increase in the dimension of e-personalization in e-CRM, leads to increase in hotel performance index by 0.368. The study findings support those This result on the effect of epersonalization on hotel performance have been supported by (JungKook 2107), who found a significant influence between e-personalization and performance. He explained that e-personalization meets customer's needs more effectively and efficiently, faster customer interactions increasing customer satisfaction. This improves the likelihood of repeat visits, hence improved business performance.

Oracle Corporation (2011) found that e-personalizing the customer experience is one of the best opportunities for attracting, retaining, and building loyalty with your customers, which ultimately leads to a competitive advantage, which supports the research findings. The study findings are also consistent with the findings of Arora and Dreze (2008), who discovered that e-personalization is positively related to long-term advantages and higher industry profits.

The study findings are also consistent with the findings of Salonen and Karjaluoto (2016), who discovered that satisfaction and loyalty are important concepts in web epersonalization because they are important drivers of business performance. In their study, there is positive support for the positive business effects of web epersonalization. Another study by Cao & Li (2007), Ho & Bodoff (2014), discovered a positive correlation of web e-personalization in increasing business performance in terms of increasing both advertising and sales revenues.

Electronic service quality (Ho<sub>2</sub>:  $\beta_2 = 0$ ), since, t= 3.623, p-value =<0.001. showed positive and significant effect on firm performance. It means that a unit increase in the dimension of e-service quality in e-CRM, leads to increase in hotel performance index by 0.266. These results are also supported by Kaur (2018), who states that the concept of e-service quality is derived from the service quality construct, the author adds that Internet and Web technologies, online customers can have unlimited access to the information they require and may enjoy a wider scope of choices in choosing products and services with highly competitive prices. So, online business have

gradually employed e-service quality as a central driving force in enhancing and sustaining their competitive advantage.

Sun et al. (2015) agreed that improving customer e-service quality is critical for ecommerce businesses to maintain a competitive advantage. The iterative race between provider effort and user expectation raises e-service quality to the point where service customization, if not humanization, becomes essential for long-term performance. This study backs up a previous study by Zeithaml, Parasuraman, and Malhotra (2002), which concluded that electronic Service Quality encourages repeat purchases and builds customer loyalty because the company now focuses on interactions that occur before, during, and after the transaction. Furthermore, the quality of e-services provides valuable information to current and prospective targetmarket customers. It is also the extent to which a site makes effective and efficient shopping, delivery, and purchasing of goods and services possible.

Electronic technology infrastructure (Ho<sub>2</sub>:  $\beta_3 = 0$ ), since, t= 0.245, p-value =.0.807), showed positive and insignificant effect on hotel performance.

Electronic innovation (Ho<sub>2</sub>:  $\beta_4 = 0$ ), since, t= 0.244, p-value =.0.017). Showed positive and significant effect on firm performance. It means that a unit increase in the dimension of e- innovation in e-CRM, leads to increase in hotel performance index by 0.305.

This is supported by the findings of Nafula (2017), who concluded that firm competitiveness is linked to innovation. As a result, businesses can use innovation to boost their competitiveness. However, it is prudent to note that in order for firms to improve their competitiveness, they must also consider other factors such as firm resources, particularly finance, product innovation, marketing, and organizational innovation. Marques et al. (2011) emphasized that encouraging firms to innovate will result in improved economic performance in terms of market and financial performance. Productivity improves as a result of innovation. Furthermore, Quadros et al. (2001) emphasized that innovation has been demonstrated to be one of the most important determinants of organizational performance. Certainly, innovation activities are carried out to achieve, among other things, production and marketing

goals such as improving product quality, controlling production costs, retaining market share, expanding into new markets, increasing production flexibility, or improving management performance.

Blerton (2016) concluded in his study that e-innovation provides a competitive advantage for businesses by increasing the number of online purchases and increasing customer satisfaction through time savings. All of this adds up to improved performance. Similarly, Zhuang (2005) concluded that e-business innovation has provided new capabilities that generate value by creating more efficient markets, enabling easier access, improving value and supply chains, disrupting current pricing power, enabling mass customization, and extending reach, flexibility, or improving management performance (Gunday, Ulusoy, & Kilic, 2011).

In conclusion, the most significant relationship was seen in e-innovation: where one unit increase in e-innovation led to an increase of .732 perfromance index of Star rated hotels in Kenya The other most significant relationship was in e-personalization, where one unit increase in e-personalization led to an increase of .603 perfromance index of Star rated hotels in Kenya.

#### 4.13.2. Overall moderated Regression per Variable

The study sought to establish the Moderation effect of Hotel location on the influence between e-CRM and Performance of Three to Five Star Hotels in Kenya. To test the moderation, each of the study variables were examined individually against hotel location (moderator) as a predictor and also with the interaction term. Moderation Effect of Hotel location on the influence between e-CRM and Performance of Three to Five Star Hotels in Kenya was also tested in the overall model.

Under this section regression analysis was run in order to validate whether hotel location influenced the influence between e-personalization and hotel performance. The study hypothesized that:

## Location moderating influence of the relationship between e-personalization and performance of Star rated Hotels in Kenya

To test the hypothesis the following models were fitted:

Model 1:  $Y = \beta_0 + \beta_1 X_1 + e$ 

Model 2:  $Y = \beta_0 + \beta_1 X_1 + \beta_M M + e$ 

#### Model 3: $Y = \beta_0 + \beta_1 X_1 + \beta_M M + \beta_{1M} X_1 M + e$

The three models were all significant (p-value < 0.001 in all the three cases), Table 4.41 refers. The Coefficient of Determination ( $\mathbb{R}^2$ ) for the first model was .366, see Table 4.41 meaning that e-personalization, on its own, contributed 36.6% to the change in the performance of the Three to Five Star Hotels. However, the nature of this influence between e-personalization and the performance of Kenya three to five stat hotels changed significantly with the introduction of hotel location a predictor. Table 4.41 indicates that the,  $\mathbb{R}^2$  before the introduction of hotel location was .366. However, upon the introduction of hotel location as predictor, the  $\mathbb{R}^2$  significantly changed from .366 (36.6%) to .376 (37.6%) an increase of 0.11. This means that e-personalization with hotel location can, explain up to 37.6 % of the performance of Kenya Three to Five Star Hotels. With addition of the interaction term (X1\*M), the model further improved albeit marginally to R2 of .382, an increase of 0.006, however the model became insignificant (p- value=0.411).

On the moderating effect of M on the influence between  $X_1$  and Y, all the three models were found to be significant (p-value, <0.05, p-value <0.05; and p-value <0.05 respectively). The F Change for  $X_1$  was significant (F Change = 44.395, p–value <0.05), implying that, X1 significantly influences Y as discussed earlier.

On adding M (Hotel location) as a predictor to the model containing  $X_1$ , the F Change reduced substantially but was still significant (F Change =1.329, p- value = .253). With the introduction of the interaction term (X1M) to this model, the model deteriorated and became insignificant, revealing (F Change =.684, p-value=.411). This implied that M (hotel location) has some predictive value but does not moderate the influence between e-personalization( $X_1$ ) and hotel performance (Y). The equation of the models is as follows:

Model 1: Y= 4.025+.603 X<sub>1</sub>

#### Model 2: Y= 3.981+.585 X<sub>1</sub>+.109 M

#### Model 3: Y= 3.977+.530X<sub>1</sub>+.100M+.159 X<sub>1</sub>M

Models given on page were fitted Regression results are shown in Table 4.21.

The beta for e-personalization in Model 1 was .603 ( $\beta$ =.603, t= 6.704, p-value<0.001), that e-personalization alone contributed, .603 to performance of hotels. In Model 2, when hotel location was combined with e-personalization and hotel performance, the beta reduced from ( $\beta$ =.603, t= 6.404, p-value<0.001) to ( $\beta$ =.583, t=value=6.614, p-value < 0.001) hence statistically significant. Hotel location beta was ( $\beta$ =.109, t=1.513, p- value =.253).

Table 4.41: Location moderating influence on the relationship between e-	
personalization and hotel Performance	

Model S	Model Summary											
Model	R	R	Adjusted	Std.	Change Statistics							
		Square	R	Error of R	F	df1	df2	Sig. F				
			Square	The Es- Square	Change			Change				
				timate Change								
1	.605 <sup>a</sup>	.366	.357	.41195 .366	44.939	1	78	.000				
2	.613 <sup>b</sup>	.376	.360	.41108 .011	1.329	1	77	.253				
3	.618 <sup>c</sup>	.382	.357	.41193 .006	.684	1	76	.411				

a. Predictors: (Constant), X1

b. Predictors: (Constant), X1, M

c. Predictors: (Constant), X1,M, X1M

#### **ANOVA**<sup>d</sup>

Μ	odel	Sum of Squares	Df	Mean Square		F	Sig.	
1	Regression	7.626		1	7.726	44.393	$.000^{a}$	
	Residual	13.237		78	.170			
	Total	20.863		79				
2	Regression	7.851		2	3.925	23.299	$.000^{b}$	
	Residual	13.012		77	.169			
	Total	2.0863		79				
3	Regression	7.967		3	2.656	15.650	.000 <sup>c</sup>	
	Residual	12.896		76	.170			
	Total	20.863		79				

a) Predictors: (Constant), X1

b) Predictors: (Constant), X1, M

c) Predictors: (Constant), X1, M, X1M

d) Dependent Variable: Hotel Performance

#### Coefficient

Model		Unstan Coeffic	dardized cients		andardized Coefficients		Collinearity Statistics	
		В	Std. Error	Beta	Т	Sig.	Tolerance	VIF
1	(Constant)	4.025	.046		87.362	.000		
	X1	.603	.090	.605	6.704	.000	1.000	1.000
2	(Constant)	3.981	.060		66.119	.000		
	X1	.585	.091	.586	6.614	.000	.970	1.031
	Μ	.109	.095	.105	1.153	.253	.970	1.031
3	(Constant)	3.977	.060		65.791	.000		
	X1	.530	.113	.531	4.697	.000	.635	1.574
	Μ	.100	.096	.096	1.044	.300	.956	1.046
	X1M	.159	.112	.096	.827	.411	.630	1.588

a. Dependent Variable: Hotel Performance

X<sub>1</sub>=e-personalization; M=hotel location, X<sub>1</sub>M=Interaction

It was concluded that hotel location as a predictor, was significant in the model. In Model 3, the introduction of the interaction term (X1\*M) saw a reduced beta for e-personalization ( $\beta$ =.530, t=4.697, p-value<0.001). This was found to be positive and significant. With the addition of the interaction term, it was observed that, hotel location was also not enriched and positive and insignificant results ( $\beta$ =.100, t=1.044, p-value=.300). However, the interaction term(X1\*M) showed negative and significant effects ( $\beta$ = 1.59, t= 1.827, p-value =.411). This validated the views that hotel loca-

tion does not moderate the influence between e-personalization and hotel performance in the three to five-star hotels in Kenya.

This finding backs up the findings of Wei et al. (2001), who concluded in their study that location is always the most important factor influencing hotel performance. Among other things, hotel location (29.9 percent). They also discovered that the location of the hotel was more important than marketing managers had anticipated. This finding supports the findings of Wei et al. (2001), who concluded that location is always the most important factor influencing hotel performance in their study. Among other things, the location of the hotel (29.9 percent). They also discovered that the hotel's location was more important than marketing executives had anticipated.

Yang, Cao, et al. (2017) found that hotel location, diversification expansion rate, and foreign ownership/operation are significant moderating factors determining the effect of product diversification in a contradictory study. Hotels located outside of the city center, in particular.

According to Du (2015), empirical evidence suggests that hotel location has a significant impact on hotel performance and characteristics. He goes on to say that hotels with higher performance are closer to airports and highways, with easy access to subway stations and parking lots. Hotels with better performance, on the other hand, are located further away from attractions and are less influenced by competition factors. This study is also supported by the findings of Schuckert et al. (2015), who discovered that an ideal hotel location is associated with higher accommodation demand, better firm performance and guest satisfaction, and a lower failure rate in their study. It is supported by empirical evidence from a study conducted by Ainhoa and Gutiérrez (2006) that hotel location decision is critical to a hotel's success due to the high costs associated with hotel construction and acquisition.

Furthermore, these findings are similar to those of Yang (2012), who found that hotel location is of primary importance in the hotel industry because it determines proximity and convenience to points of tourist interest or business activity. Proximity to competitors in highly localized competitive rely heavily on an effective location strategy to succeed in the competition to attract hotel guests to rent their rooms. Finally, Nicolau J. L. (2002), concluded and supported the findings of this study by stating that a strategic location will undoubtedly promise superior performance by the hotel in terms of revenue generation, both in the short and long term.

## Location moderating influence on the relationship between e-service quality and performance.

Under this section regression analysis was run in order to validate location influenced the influence between e-service quality and hotel Performance. The study hypothesized that: Ho5(a2) Hotel location has no significant moderating effect on electronic service quality and performance of Three to Five Star Hotels in Kenya.

The three models were all significant (p-value <0.001), refer to Table 4.42. The Coefficient of Determination (R2) for the first model was .345, see Table 4.42 meaning that e-service quality, on its own, contributed 34.5% to the change in the performance of the Three to Five Star Hotels. However, the nature of this influence between e-service quality and the performance of Three to Five Star Hotels changed substantially, with the introduction of hotel location as a predictor.

Table 4.42 indicates that the, R2 before the introduction of hotel location was 0.345. However, upon the introduction of hotel location as predictor, the R2 significantly changed from .345 (34.5%) to .350 (35%) an increase of 0.005 and was still significant, This means that e-service quality with hotel location can explain up to 35 % of the performance of Three to Five Star Hotels. With addition of the interaction term (X2\*M), the model further improved albeit marginally to R2 of .358, an increase of 0.008, however the model became insignificant (p-value=0.337). see Table 4.42

On the moderating effect of M on the influence between  $X_2$  and Y, all the three models were found to be significant (p-value <0.001). The F Change for  $X_2$  was significant (F Change=41.633, p-value=0.00.), implying that,  $X^2$  significantly influences Y as discussed earlier. On adding M (hotel location) as a predictor to the model containing  $X_2$ , the F Change reduced substantially, however the predictor, remained sig-

nificant (F Change=.899, p-value =.441). With the introduction of the interaction term (X1M) to this model, the increased and became insignificant, revealing (F Change =.934, p-value=.337). This implied that M (hotel location) does not moderate the influence between e-service quality ( $X_2$ ) and hotel performance (Y). The equation of the models is as follows:

Model 1: Y= 4.026+.488X2 Model 2: Y= 3.995+.475X2+.075M Model 3: Y= 3.988+.408X2+.069M+.151X2M

Table 4.42: Location moderating influence on the relationship between e-servicequality and Hotel Performance Model Summary

Model	R	R	Adjusted	Std.	Change Statistics				
		Squar	e R	Error of	R	F	df1	df2	Sig. F
		•	Square	The	Square	Change			Change
				Estimate	Change				
1	.587 <sup>a</sup>	.345	.337	.41806	.345	41.633	1	79	.002
2	.592 <sup>b</sup>	.350	.333	.41912	.005	.899	1	78	.441
3	.598°	.358	.333	.41930	.008	.934	1	77	.337

**Model Summary** 

a. Predictors: (Constant), X2

b. Predictors: (Constant), X2, M

Predictors: (Constant), X2, M, X2M

ANO	VA <sup>d</sup>					
Mode	el	Sum of S	Squares	Df Mean Square	F	Sig.
1	Regression	7.726	1	7.726	41.633	.000 <sup>a</sup>
	Residual	13.807	79	.175		
	Total	21.083	80			.000 <sup>b</sup>
2	Regression	7.381	2	3.691	21.010	
	Residual	13.702	78	.176		
	Total	21.083	70			.000 <sup>c</sup>
3	Regression	7.546	3	2.515	14.306	
	Residual	15.537	77	.176		
	Total	21.083	80			

a. Predictors: (Constant), X2

b. Predictors: (Constant), X2, M

c. Predictors: (Constant), X2, M, X2M

d. Dependent Variable: Hotel Performance

Model		Unstandardized Coefficients		StandardizedT Coefficients		Sig.	Collinearity Statistics	
		В	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.026	.046		86.674	.000		
	X2c	.488	.076	.587	6.452	.000	1.000	1.000
2	(Constant)	3.995	.062		64.799	.000		
	X2c	.475	.077	.573	6.136	.000	.957	1.045
	Μ	.075	.096	.072	.774	.441	.957	1.045
3	(Constant)	3.988	.062		64.231	.000		
	X2c	.408	.104	.492	3.923	.000	.531	1.884
	Μ	.069	.097	.066	.709	.480	.953	1.049
	X2M	.151	.156	.121	.966	.337	.535	1.869

X2= Electronic Service Quality; M=Hotel location; X2M=Interaction Term

The beta for e-service quality in Model 1 was .488 ( $\beta$ =.488, t= 6.452, p-value .441), that e-service quality alone contributed, .488 to performance of hotels. In Model 2, when hotel location as combined with e-service quality and hotel performance, the beta reduced from ( $\beta$ =.488, t= 6.452, p-value<0.001) to ( $\beta$ =.475, t=value=6136, p-value < 0.001) hence statistically insignificant. Hotel location beta was ( $\beta$  =.075, t=.774, p- value =.441).

It was concluded that hotel location as a predictor, was significant in the model. In Model 3, the introduction of the interaction term (X1\*M) saw a reduced beta for e-service quality ( $\beta$ =.408, t=3.923, p-value < 0.000). This was found to be positive and significant. With the addition of the interaction term, it was observed that, hotel location was also not enriched and positive and insignificant results ( $\beta$ =.0.69, t=0.709, p-value=.480). However, the interaction term(X1\*M) showed positive and insignificant effects ( $\beta$ = .151, t= .966, p-value=.337). This validated the views that hotel location does not moderate the influence between e-service quality and hotel performance in the three to five-star hotels in Kenya.

While it is widely accepted that electronic service quality improves firm performance, Sun et al. (2015) agreed that improving customer e-service quality is critical for e-commerce companies to maintain a competitive advantage. The iterative race between provider effort and user expectation raises e-service quality to the point where service customization, if not humanization, becomes essential for long-term performance.

(Minai, 2011) concluded in their research findings that hotel location strongly moderates the influence between external factors and firm performance. It also implies that firms that are strategically located are more likely to outperform firms that are not strategically located.

Another study that agrees that location is a moderating variable to firm performance was conducted by (Kala & Guanghua (2010), who reported that domestic firms' strategic location aided them in achieving positive performance. As a result, hotel location has provided domestic firms with a powerful force to prosper and succeed in their operations. They also stated that hotel location has aided firms in terms of sustainability and performance.

## Location moderating influence on the relationship between e-Technology Infrastructure and performance.

Under this section regression analysis was run in order to validate whether hotel location influenced the influence between electronic Technology Infrastructure and Hotel Performance. The study hypothesized that:

 $Ho5_{(a3)}$  Hotel location has no significant moderating effect on the influence between electronic Technology Infrastructure and Performance of Three to Five Star Hotels in in Kenya.

To test the hypothesis the following models were fitted:

Model 1:  $Y = \beta_0 + \beta_3 X_{3+} e$ Model 2:  $Y = \beta_0 + \beta_3 X_{3+} \beta_M M + e$ Model 3:  $Y = \beta_0 + \beta_3 X_3 + \beta_{3M} X_3 M + e$ 

The three models were all not significant (p-value >0.001 in all the three models), refer to Table 4.43. The Coefficient of Determination ( $\mathbb{R}^2$ ) for the first model was

.084, see Table 4.43 meaning that electronic Technology Infrastructure, on its own, contributed 84% to the change in the performance of the Three to Five Star Hotels in in Kenya. However, the nature of this influence between electronic Technology Infrastructure and the performance of Three to Five Star Hotels in in Kenya changed substantially, with the introduction of hotel location as a predictor. Table 4.43 indicates that the,  $R^2$  before the introduction of hotel location was .084.

However, upon the introduction of hotel location as predictor, the  $R^2$  significantly changed from .084 (84%) to .126 (12.6%) a decrease of 0.714 and became insignificant. This means that electronic Technology Infrastructure with hotel location can't explain the performance of Three to Five Star Hotels in in Kenya. With addition of the interaction term (X<sub>2</sub>\*M), the model changed at ( $R^2$ , 0.145) and became insignificant (p-value=0.190).

On the moderating effect of M (Hotel location) on the influence between  $X_3$  and Y, model 1 and model 3 were found insignificant (p-value >0.001 in all cases), but model 2 was significant p-value 0.05. The F Change for  $X_3$  was not significant (F Change=7.720, p–value 0.009), implying that,  $X_3$  doesn't significantly influences Y as discussed earlier.

On adding M (hotel location) as a predictor to the model containing X<sub>3</sub>, the F Change reduced considerably, and the model also became insignificant (F Change=3.687, p– value = 0.058). With the introduction of the interaction term (X<sub>1</sub>M) to this model, the model remained the same and became insignificant (F Change =1.729, p– value=.192). This implied that M (hotel location) has some predictive value, but does not moderate the influence between electronic Technology Infrastructure (X<sub>3</sub>) and hotel performance (Y). The equation of the models is as follows:

Model 1: Y= 4.027+.357X<sub>3</sub>

Model 2: Y= 3.938+.367X<sub>3</sub>+.210M

#### Model 3: Y= 3.942+.175X<sub>3</sub>+.208M+.343X<sub>3</sub>M

The models are detailed is Table 4.39

# Table 4.43: Location moderating Effect on the relationship between e-Technology Infrastructure and performance

Model R		R	Adjusted R Square	Std. Error of the Esti- mate	Change Statistics					
		Square			R Square	F	df1	df2	Sig. F	
					Change	Change		Change		
1	.290ª	.084	.073	.49435	.084	7.270	1	79	.009	
2	.354 <sup>b</sup>	.126	.103	.48616	.041	3.687	1	78	.058	
3	.381°	.145	.111	.48390	.019	1.729	1	77	.192	

**Model Summary** 

a. Predictors: (Constant), Electronic Technology Infrastructure

b. Predictors: (Constant), Electronic Technology Infrastructure, Location

c. Predictors: (Constant), Electronic Technology Infrastructure, Location, Electronic Technology Infrastructure\*location

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.777	1	1.777	7.270	.009a
	Residual	19.306	79	.244		
	Total	21.083	80			
2	Regression	2.648	2	1.324	5.602	.005b
	Residual	18.435	78	.236		
	Total	21.083	80			
3	Regression	3.053	3	1.018	4.346	.007c
	Residual	18.030	77	.234		
	Total	21.083	80			

a. Predictors: (Constant), X3

b. Predictors: (Constant), X3, Hotel location

c. Predictors: (Constant), X3, Hotel location, X3M

d. Dependent Variable: Hotel Performance

The beta for e-technology infrastructure in Model 1 was 0.357 ( $\beta$ =.357, t= 2.969, p-value 0.009), that technology infrastructure alone contributed, .357 to performance of hotels. In Model 2, when hotel location was combined with e-technology infrastructure and hotel performance, the beta reduced from ( $\beta$ =.357, t= 2.969, p-value 0.009) to ( $\beta$ =.367, t=value=2.281, p-value < 0.006) hence statistically insignificant. Hotel location beta was ( $\beta$  =.210, t=1.920, p- value =.058).

It was concluded that hotel location as a predictor, was insignificant in the model. In Model 3, the introduction of the interaction term (X1\*M) saw a reduced beta for e-

service quality ( $\beta$ =.175, t=.894, p-value=0.374). This was found to be positive and insignificant. With the addition of the interaction term, it was observed that, hotel location was also not enriched and positive and insignificant results ( $\beta$ =.208, t=1.911, p-value=.060). However, the interaction term(X1\*M) showed positive and insignificant effects ( $\beta$ =.343, t= 1.315, p-value=.192). This validated the views that hotel location does not moderate the influence between e-technology infrastructure and hotel performance in the three to five-star hotels in Kenya.

This conclusion is supported by Adenwala (2014), who concluded that ecommerce technology is a driving force of change that provides opportunities for greater efficiencies and integration for improved guest services. E-technology has become a tourism business activity in strategic resource development and is viewed as a tool to increase competitiveness. By improving their business's performance by improving service quality, lowering costs, and shortening time to market. Furthermore, he emphasizes that e-commerce technology improves the speed and efficiency with which tourism industry information is processed, stored, retrieved, distributed, and otherwise manipulated.

Sheung (2014) concluded in her study that e-business technology is the new revolution for a company not only to gain a competitive advantage over other competitors, but also to increase total sales and productivity. The rapid advancement of technology has had an impact on how businesses conduct their online operations, whether they are selling products or services. Creating value for each customer and strengthening trust between customers and companies, as well as leveraging a company's existing knowledge and creating new knowledge to favorably position them in their chosen market to achieve higher efficiency, are all critical components of developing a successful company. The ability to leverage a company's existing knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market new knowledge to favorably position them in their chosen market norder to achieve higher efficiency is also critical for the development of a successful company.

### Location moderating effect on the relationship between e- Innovation and Hotel Performance

Under this section regression analysis was run in order to validate whether hotel location influenced Electronic Innovation and Hotel Performance. The study hypothesized that:

Ho  $5_{(a4)}$  Hotel location has no significant moderating effect on Electronic Innovation and Performance of Three to Five Star Hotels in Kenya.

To test the hypothesis, the following models were fitted:

Model 1:  $Y = \beta_0 + \beta_4 X_4 + e$ 

Model 2:  $Y = \beta_0 + \beta_4 X_4 + \beta_M M + e$ 

#### Model 3: $Y = \beta_0 + \beta_4 X_4 + \beta_M M + \beta_{4M} X_4 M + e$

The three models were all significant (p-value <0.001 in all the three models), refer to Table 4.44. The Coefficient of Determination ( $\mathbb{R}^2$ ) for the first model was .362 see Table 4.44 meaning that Electronic Innovation, on its own, contributed 36.2% to the change in the performance of Three to Five Star Hotels in Kenya. However, the nature of this influence between Electronic Innovation and the performance of Three to Five Star Hotels in Kenya changed, with the introduction of hotel location as a predictor. Table 4.36 where upon, the introduction of hotel location as a predictor, the  $\mathbb{R}^2$  significantly changed from 0.362 (36.2%) to .369 (36.9%) an increase of 0.007 and became insignificant. This means that Electronic Innovation with hotel location can explain up to 36.9 % of the performance Three to Five Star Hotels in Kenya. With addition of the interaction term ( $X_2*M$ ), the model increased to ( $\mathbb{R}^2$ . 0.370) and became insignificant (p-value=0.017) See Table 4.44.

On the moderating effect of M on the influence between  $X_4$  and Y, all the three models were found to be significant (p-value < 0.001 in all cases). The F Change for  $X_4$  was significant (F Change=44.862, p–value <0.001), implying that,  $X_4$  significantly influences Y as discussed earlier.

On adding M (hotel location) as a predictor to the model containing X<sub>4</sub>, the F Change diminished considerably, and the model also became insignificant (F Change=.877, p-value = 0.349). With the introduction of the interaction term (X<sub>4</sub>M) to this model, the model changed and became insignificant (F Change =0.017, p-value=.896). This implied that M (hotel location) has some predictive value, but does not moderate the influence between Electronic Innovation (X<sub>4</sub>) and hotel performance (Y). The equation of the models is as follows:

Model 1: Y= 4.035+.732X4

Model 2: Y= 3.998+.7134+.089M

Model 3: Y= 3.999+.729X4+.084M-0.29X4M

Regression models are displayed in Table 4.44

Cable 4.44: The Moderating Effect of hotel location on Electronic Innovation
and Hotel Performance.

Model	R	R	AdjustedStd. Er-			Change statistics					
		Square	R Square			R Square				Sig. F	
				timate		Chang	ge	df1	df2	Change	
1	.602ª	.362	.354	.41257		.362	44.862	1	79	.000	
2	.608 <sup>b</sup>	.369	.353	.41287		.007	.887	1	78	.349	
3	.608 <sup>c</sup>	.370	.345	.41549		.000	.017	1	77	.896	

Model summary

a. Predictors: (Constant), X4

b. Predictors: (Constant), X4, Hotel location

c. Predictors: (Constant), X4,Hotel location

ANOVA <sup>d</sup>									
Model		Sum of Squares	Df	Mean Square	F	Sig.			
1	Regression	7.636	1	7.636	44.862	.000a			
	Residual	13.447	79	.170					
	Total	21.083	80						
2	Regression	7.787	2	3.894	22.842	.000b			
	Residual	13.296	78	.170					
	Total	21.083	80						
3	Regression	7.790	3	2.597	15.042	.000c			
	Residual	13.293	77	.173					
	Total	21.083	80						

a. Predictors: (Constant), X4

b. Predictors: (Constant), X4, Firm Size

c. Predictors: (Constant), X4, Firm Size, X4M

d. Dependent Variable: Firm Performance

# Coefficients

Model		Unstandardized Coefficients		l Standardized Coefficients	Т	Sig.	Collinearity Statistics		
		B	Std. Error	Beta	-	Τ	toleranc	e VIF	
1	(Constant)	4.035	.046		88.011	.000			
	X4	.732	.109	.602	6.698	.000	1.000	1.000	
2	(Constant)	3.998	.061		65.796	.000			
	X4	.713	.111	.586	6.418	.000	.968	1.033	
	hotel loca	ı089	.094	.086	.942	.349	.968	1.033	
3	(Constant)	3.999	.062		64.764	.000			
	X4	.729	.163	.599	4.480	.000	.458	2.185	
	hotel loca	ı089	.095	.086	.936	.352	.968	1.033	
	X4M	029	.224	017	131	.896	.465	2.151	

a. Dependent Variable: Hotel Performance

X4= Electronic innovation; M=Hotel location; X4M=Interaction Term

The beta for e-innovation in Model 1 was 4.035 ( $\beta$ =.732, t= 6.698, p-value 0.000), that e-innovation alone contributed, .357 to performance of hotels. In Model 2, when hotel location was combined e-innovation and hotel performance, the beta reduced

from ( $\beta$ =.732, t= 6.698, p-value 0.000) to ( $\beta$ =.713, t=value=6.418, p-value < 0.000) hence statistically significant. Hotel location beta was ( $\beta$  =.089, t= .942, p- value =.349).

It was concluded that hotel location as a predictor, was insignificant in the model. In Model 3, the introduction of the interaction term (X1\*M) saw a reduced beta for e-innovation ( $\beta$ =.729, t=4.480, p-value=0.000). This was found to be positive and significant. With the addition of the interaction term, it was observed that, hotel location was also not enriched and positive and insignificant results ( $\beta$ =.089, t=.936, p-value=.352). However, the interaction term(X1\*M) showed negative and insignificant effects ( $\beta$ = -.029, t=-.131, p-value=.896). This validated the views that hotel location does not moderate the influence between e-innovation and hotel performance in the three to five-star hotels in Kenya.

This backs up Nafula's (2017) findings, which discovered widely accepted theoretical literature linking innovation to firm competitiveness. As a result, businesses can use innovation to boost their competitiveness. However, it is prudent to note that in order for firms to improve their competitiveness, they must also consider other factors such as firm resources, particularly finance. Product, marketing, and organizational innovation are all examples of innovation.

Marques et al. (2011) emphasized that encouraging firms to innovate will result in improved economic performance in terms of market and financial performance. Productivity improves as a result of innovation. Furthermore, Quadros et al. (2001) emphasized that innovation has been demonstrated to be one of the most important determinants of organizational performance. Certainly, innovation activities are carried out to achieve, among other things, production and marketing goals such as improving product quality, controlling production costs, retaining market share, expanding into new markets, increasing production flexibility, or improving management performance.

# 4.13.3 Overall Moderated Model

 $H_o$ : There is no significant moderating effect of hotel location on the relationship between e-CRM and Performance of Star rated hotels in Kenya in Kenya

The study aimed to investigate the moderating effect of hotel location on the relationship between e-CRM and performance of Star rated hotels in Kenya in Kenya ( $H_{05}$ ). The effect of the moderating variable (hotel location) was investigated in this study( $X_5$ ) by first determining whether it had any direct influence on hotel performance by regressing it as an independent variable and then determining whether it had an interaction effect on the relationship between e-CRM variables (epersonalization, e-service quality, e-technology infrastructure, e-innovation) and performance.

On the moderating effect of M on the influence, all the three models were found to be significant (p-value < 0.001 in all cases). The F Change was significant (F Change=24.324, p-value <0.001), implying that,  $X_5$  significantly influences Y as discussed earlier.

On adding M (hotel location) as a predictor to the model, the F Change diminished considerably, and the model became insignificant (F Change .062, p–value >0.001. With the introduction of the interaction term (M) to this model, the model changed and became insignificant (F Change = .981, p–value > 0.001. This implied that M (hotel location) has some predictive value, but does not moderate the influence between e-CRM (X5) and hotel performance (Y).

The three models were all significant (p-value <0.001 in all the three models), refer to Table 4.45. The Coefficient of Determination ( $R^2$ ) for the first model was .565 see Table 4.45 meaning that the e-CRM, on its own, contributed 56.5 % to the change in the performance of Star rated hotels in Kenya However, the nature of the moderating effect of hotel location on the influence between e-CRM and performance of the hotels, with the introduction of hotel location as a predictor, Table 4.45, hotel location as a predictor, the  $R^2$  significantly was .565 (56.5%) and was insignificant. With addition of the interaction term (X<sub>2</sub>\*M), the model increased to ( $\mathbb{R}^{2}$ , 0.588) and became insignificant p-value > 0.00. See Table 4.45.

# Table 4.45: Model summary (overall moderated)

				Std. Error	Change Statistics				
Model	R	R Square	0	of the Es- timate	R Square Change		df1	df2	Sig.F Change
1	.751 <sup>a</sup>	.565	.541	.34797	.565	24.324	4	75	.000
2	.752 <sup>b</sup>	.565	.536	.35017	.000	.062	1	74	.803
3	.767 <sup>c</sup>	.588	.535	.35035	.023	.981	4	70	.424

#### Model summary

a. Predictors: (Constant), e-Innovation, e-service quality, e-Technology Infrastructure, e-Personalization

b. Predictors: (Constant), e-Innovation, e-service quality, e-Technology Infrastructure, e-Personalization, Location predictors: (Constant), e-Innovation, e-service quality, e-Technology Infrastructure, e-Personalization, Location, e-Personalization \*Location, e-service quality\*location, e- Technology Infrastructure\*location, e-Innovation\*location

	Sum o	f	Mean		
Model	Squares	Df	Square	F	Sig.
1 Regression	11.781	4	2.945	24.324	.000 <sup>a</sup>
Residual	9.081	75	.121		
Total	20.863	79			
2 Regression	11.789	5	2.358	19.229	.000 <sup>b</sup>
Residual	9.074	74	.123		
Total	20.863	79			
3 Regression	12.271	9	1.363	11.107	.000 <sup>c</sup>
Residual	8.592	70	.123		
Total	20.863	79			

#### **ANOVA Results (Overall Moderated)**

a. Predictors: (Constant), E-Innovation, e-service quality, E-technology Infrastructure, e-Personalization

b. Predictors: (Constant), E-Innovation, e-service quality, E-Technology Infrastructure, e-Personalization, Location

c. Predictors: (Constant), E- Innovation, e-service quality, E-Technology Infrastructure, e-Personalization, Location, e-Personalization\*Location, e-service quality\*location, -Technology Infrastructure\*location, E- Innovation\*location

Dependent Variable: Hotel performance

	Unstanda ficients	rdized Coef-		Standardized T Coefficients		Collinearity Sta- tistics	
-	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	4.027	.039		103.451	.000	·	-
e-Personalization	.345	.089	.346	3.871	.000	.727	1.375
e- service quality	.273	.073	.331	3.741	.000	.743	1.346
E-technology Infrastructure	e005	.106	004	043	.966	.766	1.306
E- Innovation	.338	.128	.270	2.629	.010	.550	1.817
2 (Constant)	4.018	.052		77.038	.000		
e-Personalization	.344	.090	.345	3.828	.000	.725	1.379
e-service quality	.271	.074	.328	3.662	.000	.733	1.365
e-Technology Infrastructur	e .000	.109	.000	.004	.997	.740	1.352
e- Innovation	.332	.131	.265	2.529	.014	.534	1.874
Location	.021	.084	.020	.250	.803	.903	1.107
3 (Constant)	4.027	.053		75.931	.000		
e-Personalization	.349	.107	.350	3.267	.002	.513	1.950
e- service quality	.187	.098	.226	1.897	.062	.415	2.408
e-Technology Infrastructur	e219	.164	179	-1.337	.186	.326	3.064
e-Innovation	.506	.181	.404	2.789	.007	.280	3.572
Location	.020	.084	.019	.238	.813	.890	1.124
e-personalization*Location	n002	.198	001	009	.993	.430	2.325
e-service quality*location	.149	.153	.120	.976	.332	.390	2.562
E-technology Infrastruc- ture*location	.365	.223	.224	1.636	.106	.315	3.171
E-Innovation*location	322	.268	179	-1.203	.233	.266	3.753

**Regression Coefficients (Overall Moderated)** 

a. Dependent Variable: Hotel performance

The beta for e-CRM in Model 1 was 4.027 (e-personalization positively significant with  $\beta$ =.345, t= 3.847, p-value 0.000), e-service quality positively significant with  $\beta$ =.273, t= 3.741, p-value 0.000, e-technology infrastructure negatively insignificant with  $\beta$ =. -0.005, t=-0.43, p-value 0.966, e-innovation positively significant with  $\beta$ =.338, t= 2.629, p-value 0.010.

In Model 2, The beta for e-CRM in Model 2 was 4.018 (e-personalization positively significant with  $\beta$ =.344, t= 3.828, p-value 0.000), e-service quality positively significant with  $\beta$ =.271, t= 3.662, p-value 0.000, e-technology infrastructure negatively insignificant with  $\beta$ =. -0.000, t=-0.004, p-value 0.997, e-innovation positively significant with  $\beta$ =.332, t= 2.529, p-value 0.014. Hotel location was insignificant with  $\beta$ =.021, t= .250, p-value 0.803.

In Model 3, the beta for e-CRM in Model 3 was 4.027 (e-personalization positively significant with  $\beta$ =.349, t= 3.267, p-value 0.002), e-service quality positively significant with  $\beta$ =.187, t= 1.897, p-value 0.0602, e-technology infrastructure negatively insignificant with  $\beta$ =. -219, t=-1.337, p-value 0.186, e-innovation positively significant with  $\beta$ =.506, t= 2.789, p-value 0.007. Hotel location was insignificant with  $\beta$ =.020, t= .238, p-value 0.813.

With the introduction of the interaction term (X1\*M) saw the beta for e-CRM in Model 3 (e-personalization negatively insignificant with  $\beta$ =-0.002, t= -0.009, p-value 0.993), e-service quality positively significant with  $\beta$ =.149, t= .976, p-value 0.332, e-technology infrastructure positively significant with  $\beta$ =.365, t=1.636, p-value 0.106, e-innovation positively negatively significant with  $\beta$ =-.322, t= -1.203, p-value 0.233. Concluding that there is no moderating effect of hotel location on the influence between e-CRM and hotel performance

Except in coastal areas, Zhang and Enemark (2016) concluded that hotel location variables are significant. Location in city cores and cities in general had a positive effect on hotel performance when compared to the reference category of rural areas, whereas location on an island had a negative effect on performance when compared to rural areas. However, once the location variables are included, the variable loses significance. They continue to state that location, with the exception of city cores, is important, but with negative signs. This demonstrates that location is important for restaurant businesses.

The negative moderating effects of location variables revealed that restaurant businesses perform worse in general when they are not located in a city center or when compared to those in rural areas (the reference category). The geographical location of the two types of businesses shows diametrically opposed signs. While location in cities and city cores has a positive effect on hotel performance, location in cities has a negative impact on restaurant performance when compared to rural areas. However, hotels and restaurants on islands performed worse than those in other locations. The location factor produced an intriguing result, revealing a significant difference between the two sectors (Zhang & Enemark, 2016). Mohammad and Dereje (2018) discovered that when moderating variables such as business sector and venture location are added to the main effect and control variables, the main effect and control variables become more powerful. When moderators are added to this model, the constant rises from 1.539 to 1.739. This means that the moderators improve the influence of the independent variables. The location also moderates the relationship between EO and venture performance in a positive way.

# 4.14 Summary of findings

This chapter presented the findings of the study of electronic customer relationship management on performance of Star rated hotels in Kenya the pilot study results indicated that research instrument met the criteria and it was reliable and valid to give the expected results as far as answering the research questions was concerned. The chapter also presented the demographic results and the descriptive analysis of the main findings based on the variables of the study. The variables were epersonalization, e-service quality, e-technology infrastructure, e-innovation, hotel location (moderating) and hotel performance (dependent).

## **CHAPTER FIVE**

# SUMMARY, CONCLUSION AND RECOMMENDATION

#### **5.1 Introduction**

This chapter highlights the summary of the study findings as guided by the specific objectives of the study, the conclusions, as well as policy recommendations and directions into new research vistas drawn from the study findings. The study sought to determine influence of Electronic Customer Relationship Management on Performance of Star rated hotels in Kenya Specifically, the study aimed to determine the relationship between electronic personalization on the performance of the hotels in Kenya, to establish the relationship between electronic service quality on performance of Star rated hotels in Kenya To find out the relationship between electronic technology infrastructure on performance of Star rated hotels in Kenya, to establish between electronic innovation on the performance Star rated hotels in Kenya And finally to determine the moderating influence of location on the relationship between se-CRM Star rated hotels in Kenya in Kenya

## **5.2 Summary of the Findings**

The study sought to determine the impact of e-CRM on the performance of Kenya's Star rated hotels in Kenya. The study specifically sought to assess the influence of e-personalization on the performance of Star rated hotels in Kenya in Kenya, to determine the influence of e-service quality on the performance of Star rated hotels in Kenya in Kenya, to determine the influence of e-technology infrastructure on the performance of Star rated hotels in Kenya in Kenya, to determine the influence of e-technology infrastructure on the performance of Star rated hotels in Kenya in Kenya, and to assess the influence of e-innovation on the performance of Star rated hotels in Kenya.

The study received responses from 80 percent of the 112 people who took part in it. 70 percent of those who responded were marketing managers, with 12.2 percent having worked in the hospitality industry for more than ten years. At 12.2 percent, the majority of the hotels had been in operation for 10 to 11 years. In terms of hotel

ownership, independent hotels accounted for 81.1 percent, while chain hotels accounted for 11.1 percent. Thirty-one percent of the hotels had 100-300 beds.

## **5.2.1 Electronic Personalization and Performance**

The overall objective of the study was to establish the relationship between electronic customer relationship on performance of Star rated hotels in Kenya the first objective of the study was to determine the relationship between electronic personalization on performance of Star rated hotels in Kenya Electronic personalization was measured using physical capture of customer data ant entry and customer intimacy. The results of descriptive analysis revealed that majority of the hotels respondents agreed and strongly agreed with the statement on their hotels involvement in electronic personalization. The finding further implied that majority of the hotels in Kenya were using electronic personalization, the correlation test results revealed a positive and significant association between electronic personalization on performance of Star rated hotels in Kenya

The findings implied that when electronic personalization increases, the performance of the Star rated hotels in Kenya in Kenya will likely increase since they had a positive and significant association as shown by the correlation results. The findings of regression analysis further confirmed that there existed a positive and significant relationship between electronic personalization on performance measured by ANOVA of the Five-to-five-Star rated hotels in Kenya. The coefficient of electronic personalization was found to be significantly at 5% significance level indicating electronic personalization significantly influenced performance of Star rated hotels in Kenya the study rejected the null hypothesis that electronic personalization does not have a significant relationship with performance of Star rated hotels in Kenya

## **5.2.2 Electronic Service Quality and Performance**

The overall objective of the study was to establish the relationship between electronic customer relationship on performance of Star rated hotels in Kenya the second objective of the study was to determine the relationship between electronic service quality on performance of Star rated hotels in Kenya Electronic service quality was measured using reliability, fulfilment and efficiency. The results of descriptive analysis revealed that majority of the hotels respondents agreed and strongly agreed with the statement on their hotels involvement in electronic service quality. The finding further implied that majority of the hotels in Kenya were using electronic service quality, the correlation test results revealed a positive and significant association between electronic service quality on performance of Star rated hotels in Kenya

The findings implied that when electronic service quality increases, the performance of the Star rated hotels in Kenya in Kenya will likely increase since they had a positive and significant association as shown by the correlation results. The findings of regression analysis further confirmed that there existed a positive and significant relationship between electronic service quality on performance measured by ANOVA of the Five-to-five Star rated hotels in Kenya. The coefficient of electronic service quality was found to be significantly at 5% significance level indicating electronic service quality significantly influenced performance of Star rated hotels in Kenya the study rejected the null hypothesis that electronic service quality does not have a significant relationship with performance of Star rated hotels in Kenya

# 5.2.3 Electronic Technology Infrastructure and Performance

The overall objective of the study was to establish the relationship between electronic customer relationship on performance of Star rated hotels in Kenya the third objective of the study was to determine the relationship between electronic technology infrastructure on performance of Star rated hotels in Kenya Electronic technology infrastructure was measured using systems, security systema and staff technology skills. The results of descriptive analysis revealed that majority of the hotels respondents agreed and strongly agreed with the statement on their hotels involvement in electronic technology infrastructure. The finding further implied that majority of the hotels in Kenya were using electronic technology infrastructure, the correlation test results revealed a positive and significant association between electronic technology infrastructure on performance of Star rated hotels in Kenya

The findings implied that when electronic technology infrastructure increases, the performance of the Star rated hotels in Kenya in Kenya will likely increase since

they had a positive and significant association as shown by the correlation results. The findings of regression analysis further confirmed that there existed a positive and significant relationship between electronic technology infrastructure on performance measured by ANOVA of the Star rated hotels in Kenya. The coefficient of electronic technology infrastructure was found to be significantly at 5% significance level indicating electronic technology infrastructure significantly influenced performance of Star rated hotels in Kenya the study rejected the null hypothesis that electronic personalization does not have a significant relationship with performance of Star rated hotels in Kenya

# 5.2.4 Electronic Innovation and Performance

The overall objective of the study was to establish the relationship between electronic customer relationship on performance of Star rated hotels in Kenya The fourth objective of the study was to determine the relationship between electronic innovation on performance of Star rated hotels in Kenya Electronic innovation was measured using product or service innovation, marketing innovation and organizational innovation. The results of descriptive analysis revealed that majority of the hotels respondents agreed and strongly agreed with the statement on their hotels involvement in electronic innovation. The finding further implied that majority of the hotels in Kenya were using electronic innovation, the correlation test results revealed a positive and significant association between electronic innovation on performance of Star rated hotels in Kenya

The findings implied that when electronic innovation increases, the performance of the Star rated hotels in Kenya in Kenya will likely increase since they had a positive and significant association as shown by the correlation results. The findings of regression analysis further confirmed that there existed a positive and significant relationship between electronic innovation on performance measured by ANOVA of the Three-to-Five-Star rated hotels in Kenya. The coefficient of electronic innovation was found to be significantly at 5% significance level indicating electronic innovation significantly influenced performance of Star rated hotels in Kenya the study rejected the null hypothesis that electronic innovation does not have a significant relationship with performance of Star rated hotels in Kenya

# **5.2.5 Hotel Location**

The overall objective of the study was to establish the relationship between electronic customer relationship on performance of Star rated hotels in Kenya The fifth objective was to determine the moderating effect of hotel location on the relationship between e-CRM and Performance of Star rated hotels in Kenya The effect of the moderating variable (hotel location) was investigated in this study( $X_5$ ) by first determining whether it had any direct influence on hotel performance by regressing it as an independent variable and then determining whether it had an interaction effect on the relationship between e-CRM variables (e-personalization, e-service quality, etechnology infrastructure, e-innovation) and performance. The study findings revealed that hotel location has some predictive value, but does not moderate the influence between e-CRM and hotel performance

# 5.3 Conclusions of the Study

# H<sub>01</sub>: There is no significant relationship between E-personalization and performance of the Star rated hotels in Kenya

The null hypothesis is rejected which implies that, one (1) unit increase in the dimension of e-personalization in e-CRM leads to an increase of 0.603 increase in hotel performance index. The study then concludes that E-personalization significantly influences hotel performance. Electronic personalization plays a critical role in today's information and technology-driven market and business environment, which is characterized by shifting sands of globalization and dynamism. Long-term identification of customer information, storage of purchase lists, and the ability to track and log each customer's navigation actions allow organizations to survive and succeed.

Electronic personalization allows a company to suggest products or services that customers are interested in, which increases both consumer loyalty/satisfaction and benefits in terms of profits. Electronic personalization aids in anticipating the needs of customers. Theory tested for e- personalization was, The Social Exchange Theory Homans' (1961), which the study finds it in line with other previous research and validates the method used in previous research.

# H<sub>02</sub>: There is no significant relationship between e-service quality and performance of the Star rated hotels in Kenya

The null hypothesis is rejected, which implies that one unit increase in the dimension of E-service quality in e-CRM leads to an increase of 0.488 in hotel performance index, which the findings concludes that electronic service quality significantly influences hotel performance. The study concludes that e-service quality ensures that businesses practice customer service while providing goods and services to customers. E-service quality also enables businesses to meet the needs of their customers by emphasizing correct and accurate order delivery to them.

As a result of increased customer satisfaction, businesses are able to perform well. The study concludes that through e-service quality dimension, order fulfillment of e-service quality allows repeat customers who are willing to recommend the services to others. Theory tested for e- service quality is, E-S-QUAL is a scale proposed by Parasuraman *et al.* (2005), which the study finds it in line with other previous research and validates the method used in previous research.

# H<sub>03</sub>: There is no significant relationship between E-technology infrastructure and performance of the Star rated hotels in Kenya

The study null hypothesis is rejected, which implies that, one unit increase in the dimension of e-technology infrastructure practices in e-CRM leads to an increase of 0.357, in hotel performance index. The study concludes that e-technology infrastructure significantly influences hotel performance. Study findings conclude that new electronic technology in the hotel industry has also deepened the influence between hotels and their customers, as data mining of customer data-bases allows hotels. To develop in-depth customer profiles and match service offerings based on the profiles. As a result of long-term profitable exchange influences, customers are offered unique offerings, therefore firms should have electronic technological innovation because it positively alters nature of company's distribution channels, thereby redrawing the firm/customer relationship. Model tested for e- technology infrastructure is Identify, Differentiate, Interact and Customize (IDIC) Model. Which the study concludes the model is line with other previous research and validates the method used in previous research.

# H<sub>04</sub>: There is no significant relationship between of E-innovation and performance of the Star rated hotels in Kenya

The study null hypothesis is rejected, which implies that, one unit increase in the dimension of e-innovation practices in e-CRM leads to an increase of 0.357 in hotels performance index. The study concludes that e-innovation significantly influences hotel performance. In conclusion, with a greater emphasis on e-innovation, companies can gain a competitive advantage by increasing the number of online purchases and increasing customer satisfaction through time savings. Electronic innovation has been shown to be a significant predictor of organizational performance. Certainly, innovation activities are carried out to achieve, among other things, production and marketing goals such as improving product quality and controlling production costs.

As a form of e-innovation, hotels frequently use their electronic platforms when launching new products. They also use their electronic platforms to create solutions for existing products. This is the foundation for their e-innovation, which has improved their performance. Theory tested for e-innovation is Innovation Theory of Profits Schumpeter, (1934), which the study concludes the model is line with other previous research and validates the method used in previous research.

# Ho<sub>5:</sub> There is no significant moderating relationship between e-CRM and performance of the Star rated hotels in Kenya

The study fails to reject the null hypothesis, hotel location has some predictive value, but does not moderate the influence between e-CRM and hotel performance. Theory tested for hotel location is Competitive Advantage Model, Fama (1970). Empirical research for this study revealed that location as a moderator produced conflicting empirical findings. Some studies agreed that location is statistically significant to performance, while other disagreed with the findings. This study concludes that location has no moderating effect on the relationship between e-CRM mad performance.

In conclusion, the study indicates that the use of e-CRM has a positive impact on companies' bottom lines, resulting in positive performance outcomes. Firms should use e-CRM as an effective means of developing and expanding their customer base, which aids in increasing profitability and guest loyalty.

# 5.4 Recommendation for Policy and Practice

The study was mainly based on the Identify, Differentiate, Interact and Customize (IDIC) Model, coupled with the Social Exchange Theory, Innovation of Profits Theory, Competitive Advantage Model and E-SQUAL Model. Non-financial parameters of hotel performance were assessed. The findings revealed that e-CRM dimensions were positive and significant factors in hotel performance. Each of the e-CRM dimensions on their own was positively related to performance in the Three to Star rated hotels in Kenya, implying that they contributed to hotel performance. Based on the findings, the study makes following specific policy recommendations:

The study recommends that top management fully participate in implementing epersonalization; empirical evidence from this study indicates that e-personalization has a significant effect on Star rated hotels in Kenya Hotel performance. Thus, the findings of this study provide a valuable reference for top hotels in Kenya in terms of implementing e-personalization, which will assist them in achieving competitiveness and improving their performance. According to the literature, using social media platforms on a regular basis is a major consideration in industries in Kenya. As a result, the study recommends that managers of Star rated hotels in Kenya in Kenya deepen their engagement in using social media platforms as a method of epersonalization. It is also suggested that Star rated hotels in Kenya use social media platforms as an interaction tool with their customers on a regular basis. Similarly, the study emphasizes that hotel managers should prioritize e-service quality because it has been shown to have the greatest impact performance. Hotels that use e-service quality must also ensure that the promises they make about the services they provide are accurate. And that the services provided by Internet platforms are quick.

The study also suggests that hotels make use of e-technology infrastructure. To benefit from this, Star rated hotels in Kenya should ensure that they have adequate technological facilities. Furthermore, the Star rated hotels in Kenya hotel should hire staff with adequate technological skills. According to the study, hotels should use einnovation to gain a competitive advantage by increasing their competitive advantage. Hotels can accomplish this by frequently utilizing electronic platforms when launching new products and improving service delivery on their electronic platforms. This will assist Star rated hotels in Kenya in increasing the number of online purchases and increasing customer satisfaction by saving time. Electronic innovation assists hotels in improving production, marketing goals such as product quality enhancement and cost control, and developing solutions for their existing products, resulting in improved hotel performance.

According to the study, hotel managers should use e-CRM strategies to improve their performance. Hotel managers should also use e-CRM to help them facilitate, develop, and expand their customer base. Hotel managers should use e-CRM to increase profitability by managing deep and long-lasting influences in customer acquisition, development, and retention. They should also use e-CRM to better understand customer behavior by anticipating their needs, resulting in profitable customer influences and lower operating costs. According to the findings of this study, hotel location has no moderating effect on the relationship between e-CRM and hotel performance.

The study was primarily based on the Identification, Differentiate, Interact, and Customize (IDIC) Model, in conjunction with the Social Exchange Theory, E-service Quality Theory, Profit Innovation Theory, and Competitive Advantage Theory. According to the findings, e-CRM is a positive and significant factor in hotel performance. Electronic personalization was related to performance in Kenyan Star rated hotels in Kenya, e-service quality was related to performance in Kenyan Star rated hotels in Kenya, e-technology infrastructure was related to performance in Kenyan Star rated hotels in Kenya, and e-innovation was related to performance in Kenyan Star rated hotels in Kenya. All of this is useful in identifying customers, differentiating customers, interacting with customers, and customizing customer communication. The study also discovered that hotel location had no significant moderating effect on the relationship between e-CRM and performance of Kenya's three to fivestar hotels.

# 5.5 Areas for Further Research

Although this study provides insight into e-CRM and its impact on the performance of Star rated hotels in Kenya in Kenya, several areas remain unclear and require further research. First, descriptive analysis was used in the study. As a result, the researcher suggests that other researchers use other methods to obtain more time elastic data in order to analyze the phenomena of e-CRM and performance in the hotel sector. The current study was conducted in Kenya; the findings of this study should be replicated in other developing economies to see if there are differences in the application of e-CRM. In addition, the study only looked at hotels; other researchers may look at other sectors of the economy.

Because the current study only used hotel location as a moderating variable, the conceptual model of this study can be expanded to include other aspects of external environmental factors. This study's findings on the moderating effect of hotel location on the influence of e-CRM on hotel performance revealed no significant moderating effect. Future research may replicate this variable in a similar study to see if the results differ from the current ones. Furthermore, because the study used non-financial performance measures, future researchers should consider using financial measures of firm performance and analyzing hotel performance based on actual financial measures.

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#### APPENDICES

#### **Appendix I: Questionnaire**

Dear respondent, my name is Sylvia Mukenyi pursuing a PhD in Business Administration –Marketing student at Jomo Kenyatta University. As part of my course requirements, I am conducting research: influence of electronic Customer Relationship Management on performance of three to five-Star rated hotels in Kenya. I would appreciate you answering the following questions. The data collected from this survey will be used for education and research purposes only. Your participation is completely voluntary and anonymous. It is my firm statement that the information will be kept strictly confidential.

#### Section 1: BIO DATA

This questionnaire you are required to fill. Please read carefully and give appropriate answers by ticking or  $\Box$  filling the blank spaces.

The information obtained in this questionnaire will be treated with utmost confidentiality.

#### Part 1: Background General Information

- 1. Name of the Hotel.....
- **2.** Professional title/Designation.  $\Box$  Chief operating officer  $\Box$  Marketing Manager

 $\Box$  General Manager  $\Box$  Client influence manager  $\Box$  Other ..... specify

- 3. Years of work experience in hospitality sector operations.....
- 4. Kindly indicate the number of beds in your hotel:

 $\Box$  1-100 beds  $\Box$  101-150 beds  $\Box$  151-300 beds  $\Box$  More than 300 beds

**5.** What is the ownership of your hotel?  $\Box$  Chain hotel  $\Box$  independent hotel

Electronic Customer Relationship Management (e-CRM) is defined as marketing activities, techniques, and tools conveyed on the web with the objective of finding, constructing, and enhancing long-term customer influence with customers.

7. Does your hotel practice electronic Customer Relationship Management (e-CRM)

 $\Box$  Yes  $\Box$  No

If your answer is No, kindly explain your answer which shall be useful to the hotel industry and the research:

#### **PART 2: Electronic personalization**

1. How do you electronically personalize communication to your customers?

□ Social Media Marketing □ Email Marketing □ Phone Calls □ Short messages

2. How frequent does your hotel capture customer's data on arrival?

Please explain your answer:

3. From the following Social Media Platforms, to what extent does your hotel use and follow up with electronic communication issues that arise, please tick as appropriate in the boxes using a tick (√) use Very great extent (VGE), Great extent (GE), Moderate extent (ME), little extent (LE), Not at all(N)

	VGE	GE	ME	LE	Ν
Facebook					
Twitter					
Instagram					
LinkedIn					

4. To what extent do you agree with the following statements regarding e-personalization of services in the hotel industry in Kenya. Kindly respond with the response that matches your opinion. Please tick as appropriate in the boxes using a tick (√) Use scale: Strongly Agree (SA), Agree (A), Neither Disagree or Agree /Neutral (N), Disagree(D); Strongly Disagree (SD)

	SA	A	Ν	D	SD
a. Our hotel regularly uses social media platforms.					
b. Our hotels social media platforms are constantly person- alized					
c. We commonly use media platforms for interactions.					
d. Our hotel in several occasions, capture customers email addresses at the reception.					
e. Our hotel oftentimes sends emails to invite guests to ho- tels email subscription.					

f. Our hotel rarely writes follow up emails			
g. Our hotel continually calls customer's pre and post service consumption for feedback.			
h. Our hotel often uses SMS, for marketing purposes.			
I. Our hotel does not frequently receive feedback from cus- tomers using SMS.			

5. How often does your hotel update the hotel information?

**6.** To what extent do you agree with the following "E-personalization affect performance of your hotel" Use scale: Always (A), Very Often (VO), Sometimes(S), Rarely(R), and Never (N)

	A	VO	S	R	Ν
a. We frequently use Social Media Marketing.					
b. Our hotel repeatedly doesn't use Email Marketing.					
c. Our hotel generally uses Phone calls, for customer follow up.					
d. Our hotel many times uses SMS to communicate to customers.					

# **Part 3: Electronic Service Quality**

**7**. Investment and implementation of Electronic Service Quality policy in a hotel should be guided by Electronic Customer Relationship Management.

Please explain your answer.....

**8**. To what extent do you agree with the following statement on use of electronic service quality in your hotel? Use scale: Strongly Agree (**SA**), Agree (**A**), Neither Disagree or Agree /Neutral (**N**), Disagree(**D**); Strongly Disagree (**SD**)

	SA	A	Ν	D	SD
a. Our hotel services delivered through Internet platforms are quick.					
b. Our Hotel websites are always available for business.					
c. Promises made about services on our hotel Internet are never met.					
d. The organization and structure of our hotel's electronic pages launch and run easily and are easy to follow					
e. Our hotel promises about the services being delivered are accurate.					
f. Our hotel service on the website is right the first time					
g. Our Hotel's online platforms are available all the time.					
h. Our electronic platforms promptly respond to customer requests.					
I. We quickly resolve customer's online issues or prob- lems.					
j. Our Customer services agents are easily accessible by telephone/other electronic means.					

**9.** Quality of electronic services offered in our hotel, affect performance, please explain your answer:

# Part 4: Electronic Technology Infrastructure

10. These statements regarding technology in the hotel industry in Kenya. Use scale Kindly respond with the response that matches your opinion. Please tick as appropriate in the boxes using a tick ( $\sqrt{}$ ). Use scale: Strongly Agree (SA), Agree (A), Neither Disagree or Agree /Neutral (N), Disagree(D); Strongly Disagree (SD)

	SA	A	Ν	D	SD
a) Our hotel has enough technological facilities.					

b) Technology doesn't play a significant role in our ho- tel.			
c) Our hotel significantly uses technological services.			
d) Our hotel managers frequently are not keen on prac- ticing data security and privacy of their customers.			
e) Our hotel has an established ICT department.			
f) Very often, the cost of upgrading security systems is budgeted in our hotel.			
g) Our hotels continually, considers it costly to employ highly skilled technological personnel.			
h) Constantly, our hotel has enough technologically skilled personnel.			
i) Oftentimes, our hotel does not train staff on the use of technology.			

**11**. Electronic technology infrastructure in hotels enhances their performance. please explain your answer.....

# **Part 4: Electronic Innovation**

12. These statements regard innovation in the hotel industry in Kenya. Use scale: Strongly Agree (SA), Agree (A), Neither Disagree or Agree /Neutral (N), Disagree (D); Strongly Disagree (SD). Kindly respond with the response that matches your opinion. Please tick as appropriate in the boxes using a tick ( $\sqrt{}$ ).

	SA	A	Ν	D	SD
a) Continually, our hotel uses electronic platforms to in- novate their organizational capabilities					
b) Our hotel, frequently, uses electronic platforms while launching of new products					
c) Regularly, our hotel uses electronic platforms in devel- oping solutions for their existing products.					
d) Many times, or hotels does not conduct electronic re- search for the development & improvement of existing products.					

# 13. Hotel location

What is your hotel location from CBD? Please tick as appropriate in the boxes using a tick ( $\sqrt{}$ ).

- 0-1 Kilometer [], 1-3 Kilometer [], 3-7 Kilometer [], 7-10 Kilometer [], 10 + Kilometer
- **14**. The distance from CBD is ideal for your business

 $\Box$  Yes  $\Box$  No

# **Part 5: Hotel Performance**

**15.** To what extent do you agree with the following statements on hotel performance variables in your hotel? Use scale: Strongly Agree (**SA**), Agree (**A**), Neither Disagree or Agree /Neutral (**N**), Disagree(**D**); Strongly Disagree (**SD**)

	SA	А	N	D	SD
a. Our bed occupancy is always above our expectations					
b. We rarely hit our performance targets					
c. Most of our new customers are referred to us by those we have previously served					
d. Our online ratings/ reviews are high.					
e. Our hotel regularly receives positive post-stay cus- tomer surveys.					
f. Our advertising ROI is satisfactory.					
g. Our customers are always satisfied with our services.					
h. Our revenue streams have increased in the last 3 years					
i. Our operating costs are relatively low compared to our ROI.					
j. we have enough budget for CSR activities.					
k. Our advertising ROI is not satisfactory.					
1. Our hotel star ratings is a marketing tool that affects their performance.					
m. Our hotels organizational flexibility doesn't help to satisfy our customers, nor improve performance.					
n. Our hotel star ratings is not a marketing tool that affects our performance.					
o. Our hotel star ratings affect our sales growth and our performance.					
p. The average price paid per room on a given day, helps us reach our financial targets.					
q. Our market share is relatively better than our compet- itors.					

16. These statements regard influence of e-CRM on hotel performance in Kenya. Please tick as appropriate in the boxes using a tick ( $\sqrt{}$ ). Use scale: Strongly Agree (SA), Agree (A), Neither Disagree or Agree /Neutral (N), Disagree(D); Strongly Disagree (SD)

	SA	А	N	D	SD
a) Physical capturing of customer data at entry and exist helps hotels in retaining customers.					
b) Maintaining Customer intimacy through: (Email, So- cial media Marketing, phone calls and short message ser- vices) creates customer loyalty.					
c) Efficiency of hotels electronic platforms, from their accessibility, customers finding their desired product and information associated with it, enhances hotel performance.					
d) Hotel customers are fulfilled with promises made about the service and its promised delivery time on hotels electronic platforms, hence increasing performance of the hotel.					
e) electronic platforms of hotels give accurate infor- mation to customers enhancing customer interacts and hotel performance.					
f) Investment on technology Systems by hotels doesn't increases customer service levels and customer loyalty.					
g) Hotel are keen on practicing customer's data security and privacy derived from technological systems, result- ing to increased customer loyalty					
h) Hotels employ enough technology skilled staff and trains other staff members, resulting to increased customer satisfaction due to how they are handled by the technological staff.					
i) Hotels research and improve their existing Product / services and communicate this to their customers through electronic platforms, increasing customer retention.					
j) Hotels use new media/ electronic platforms in market- ing their products and services to customers, resulting to increased hotel performance.					
k) Hotels use new business practices for organizing their operations, leading to improved customer satisfaction.					
1) Hotel location from CBD doesn't impact on the choice of					

marketing strategies to be used, nor their performance.			

# Appendix II: List of Hotels

5 STAR HO- TELS	VOCAT HOTEL		TOWN HOTEL	LODGES	TENT ED CAM PS	VILLAS, COT- RES- TAGES & TAU- APARTMENT'S RANTS
Nairobi	Region		Villa Rosa Ker Hemingway Sankara Nai Fairmont Th The Sarova Radisson B Dusit D2. Tribe Hotel. The Boma N Intercontine	's Nairobi. robi. le Norfolk. Stanley. lu Hotel Nai Nairobi.		
COAS	T REGI Leopar Swahil Beach sort	d Beac i	h Resort and	Spa		Medina Palms Suites and Villas
SOU TH RIFT & NYAN GION	ZA	RE-	Enashipai Resort and Spa	Mara Serena Safari Lodge	Lake Camp Olare N	Elmentaita Serena Mara Kempinski

4 STAR HO- TELS	VOCATION HOTEL	TOWN HOTEL	LODGES	TENT ED CAM PS	VILLAS, COT- TAGES & APARTMENT'S	RES- TAU- RANTS		
NAIRO GION	DBI RE-	Crowne P Ole Seren House of T Weston H Southern Sun May fair Nairco bi Fairview I Sarova Pa Silver Spr Hilton Ho Nairobi sa	i Hotel Waine otel /- Windsor C Hotel nafric ings Hotel tel	olf Hote	l and Country Clu	Carni- vore Restau- rant		
COAST	<b>FREGION</b>		nglish Point y Beach Club		Msambweni Beach House and Private Vil-			
	Lantana Galu Silver Palm S Voyager Beach Re-	Beach. la						
	Serena Beach Re- sort and Spa	Sarova White Sands Beach Resort and Spa Diani Reef Beach Resort & Spa						
	Sort and Opt	Leisure Lodge Beach & Golf Resort Baobab Beach Resort & Spa						

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# SOUTH RIFT NYANZA RE-GION

Boma Inn Eldoret	
Masai	
Fairmont Mara	
Mara Safa- Sopa	
ri Club Lodge	Governors'' Ilmoran Camp.
	Sarova Shaba Gane Lodge
	Ashnil Aruba Lodge
Olarro	
Lodge	Ashnil Mara Camp
Sunbird I	Lodge
	gai Wilderness Lodge.
Keekorok	
Lodge	Mara Explorer Camp.
q	Samburu Intrepids Camp
Sarova Lion	
Game	
Lodge	Sarova Mara Game Camp
Louge Lake Na	<b>▲</b>
kuru	
Sopa	
Lodge	Amboseli Serena Lodge
Acacia Premier Hotel	
Sentrim	
Elemen-	
taita	DBA Mara West Tented
Lodge	Camp
Naivasha	1
Kongoni	
Lodge	Little Governors' Camp
Lake Nai	vasha Sawela Lodge
	Sweetwater's Serena Camp and Ol
	Pejeta House
3 StarVocationTown Ho-Ho-HoteltelLodges	Tent Villas, Cot- Restau- ed tages, Apart- rants

tels			Cam ps	ment's	
Nairobi Region Kenya Com Marble Arch Sports View	Boma Inn N The Clarion fort Suites n Hotel				
Hotel Kasa rani		Portico Hotel.	Kibo S	afari Camp	
Coast Region				JacyJoka Apartments	
	Indian Ocean Beach Resort				
	Bahari Beac Crystal Bay sort	Mnarani C	lub Azul N	Sea Resort Iargarita Beach Resort.	
		tei.	Isinya	Resorts.	
Central, Upper East	ern& South R	Bollywood Sandies Tropical Village <b>ift Region</b>	Bites	n Tsavo East Camp	
Diamond		8			
Dream Dream of	Mountain f Breeze				
Africa	Ltd.	Lake Nakuru Flamingo Lodge Amboseli Sopa Lodge ikweta Safari Camp			
	The Vic Ho Hotel Nyako		IKWEta	i Sarari Camp	
	ý	Jambo Impala Eco Lodge			
South Rift Nyanza	Hatal Catha		Calcana	ni Coma	
	Hotel Catha Kisumu Hot	tel Mara Simba	Tipilik	ni Camp wani Mara Camp	
		Lodge		ary Olonana Camp	
		Lake Naiva Lake Naiva		U	

(Tourism Regulatory Authority, 2018)