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Influence of Technology and ICT Policies on Hotel Guest Satisfaction in the Hotel Industry: A Case of 4 and 5 Star Rated Hotels in Nairobi City County

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Abstract

The adoption of ICT in the hospitality industry is important in the development of business, minimizing costs and the generation of revenue as well as to reach more customers. Across the world, the use of technology and information and communication technologies (ICT) in the hospitality industry has significantly impacted the way hotels operate and the way they provide services to their guests. In the wake of turbulence in the hospitality industry especially as a result of the Covid-19 pandemic that reduced disposable income as well as crippling travel and tourism around the planet, hotels need to lower their operation costs, find ways of increasing their revenue as well as enhancing guest satisfaction. The study sought to establish the effect of technology and ICT policies on 4 and 5 star hotels in Nairobi City County. Specifically, the study sought to establish the effects of property management systems on guest satisfaction in 4 and 5 star hotels in Nairobi Kenya; to examine the effect of online booking platforms on guest satisfaction in 4 and 5 star hotels in Nairobi Kenya; to determine the effect of in-room technology on guest satisfaction in 4 and 5 star hotels in Nairobi Kenya and to establish the effect of customer relationship management systems on guest satisfaction in 4 and 5 star hotels in Nairobi Kenya. The study was guided by the Technology Acceptance Model (TAM) and the Resource Based View Theory. The target population was 4583 staff from 24 four and five star hotels in Nairobi. Stratified random sampling was used to choose a sample size of 368 employees. The data was collected using structured questionnaires for the employees. The questionnaires were administered through google online questionnaire. Regression analysis was conducted to establish the relationship between the variables. The results were presented in graphs and tables. The study used a multiple regression model to show the relationship between the study variables. The findings revealed an R squared coefficient of 0.643 and adjusted R squared of 0.618 at 95% significance level, implying that the technology and ICT policies adopted in the study (Property Management Systems, Online booking platforms, In-Room Technology, Customer Relationship Management Systems) jointly explained 64.3 percent of the variation in guest satisfaction in four and five star hotels in Nairobi City County. The study also found that property management systems had a positive and significant effect on

guest satisfaction in four and five star hotels in Nairobi City County (β =.357, p=.013<.05); online booking platforms had a positive and significant effect on guest satisfaction in four and five star hotels in Nairobi City County (β =.427, p=.005<.05); in-room technology had a positive and significant effect on guest satisfaction in four and five star hotels in Nairobi City County (β =.322, p=.003>.05) and finally the study found that customer relationship management systems as an aspect of technology and ICT policies had a positive and significant effect on guest satisfaction in four and five star hotels in Nairobi City County(β =.383, p=.000<.05). The study concluded that technology and ICT policies had a positive and significant effect on guest satisfaction in four and five star hotels in Nairobi City County. The study thus recommended that four and five star hotels in Nairobi City County should consider adopting technology and ICT policies such as Property Management Systems, Online booking platforms, In-Room Technology, Customer Relationship Management Systems and others as ways of enhancing guest satisfaction.

Keywords: *Technology, Guest Satisfaction, ICT Policies*

1.1 Background of the Study

ICT is an acronym for Information and Communication Technology. This involves all the communication technology that integrates the use of software, computers, middleware, storage as well as audiovisual devices (Vu, Hanafizadeh & Bohlin, 2020). This technology enables users to store, access, manipulate and transmit information in digital form from one place to another. The adoption of ICT in the hospitality industry is important in the development of business, minimizing costs and the generation of revenue as well as to reach more customers (Khatri, 2019). Across the world, the use of technology and information and communication technologies (ICT) in the hospitality industry has significantly impacted the way hotels operate and the way they provide services to their guests. The use of technology and information and communication technologies (ICT) in the hotel industry has grown significantly in recent years, and these advancements have had a significant impact on guest satisfaction (Jalilvand, Pool, Khodadadi & Sharifi, 2019).

One of the main ways that technology has influenced guest satisfaction in the hotel industry is through the use of online booking platforms and websites. These platforms make it easier for guests to find and book rooms, and they also allow guests to read reviews and compare prices before making a decision (Verma & Thakur, 2022). In addition, hotels have begun to offer mobile apps that allow guests to check-in, access their room keys, and make requests for services such as housekeeping or room service (Dalgic & Birdir, 2020). Another way that technology has impacted guest satisfaction is through the use of in-room amenities such as smart TVs, high-speed internet, and streaming services (Zhang, Tavitiyaman & Tsang, 2022).

These amenities allow guests to stay connected and entertained during their stay, and they are often seen as important factors in the decision to book a hotel room (Park, Lee, Back & DeFranco, 2022). ICT policies also play a role in guest satisfaction in the hotel industry. For example, hotels may have policies in place to ensure the security and privacy of guests' personal and financial information (Mohamed, 2020). These policies can help guests feel more secure when booking and staying at a hotel. Overall, the use of technology and ICT policies has had a positive impact on guest satisfaction in the hotel industry. By making it easier to book rooms, stay connected, and feel secure, technology and ICT policies have helped hotels to provide a better experience for their guests (Ordóñez, et al., 2022).

1.2 Statement of the Problem

In order for the hotel industry to deliver quality services to their customers, it is important for them not only to meet but to exceed the expectations of their customers (Ali et al., 2021). Every organization seeks to establish the satisfaction levels of their customers with regards to their experiences. Customer satisfaction level is determined by a number of service quality dimensions (Vujić, ĐorĎević & Lakićević, 2019). Due to the increasingly competitive market, it is important for players in the hospitality industry to evaluate their customer satisfaction (Mutuku & Wambua, 2019).

According to Sidbewendin, Ojore and Egunjobi (2020), guest satisfaction is important if a hotel is to operate successfully. Guest satisfaction enhances the loyalty of guests. Guests who seek accommodation expect the best form the respective hotels they visit with regards to service delivery. This is partly because hotels and the hospitality industry in general have come to the realization that there is not an infinite customer base and as such they should seek to enhance the satisfaction levels of their customers in a bid to make them return in future (Myo, Khalifa & Aye, 2019). Maintaining a loyal customer base has become more apparent in recent times. As such, guest satisfaction is now a key factor that hotels must consider as a way of maintaining loyalty in the long run (Mokhtar & Sjahruddin, 2019). In addition, the Covid-19 pandemic further highlighted the need for hotels to prioritize their sustainability given the shocks that the hospitality industry suffered as a whole (Jones & Comfort, 2020). The hospitality industry us considered to be one of the biggest and fastest growing industries and as such is a key source of income and livelihood to millions of people around the world (Davahli et al., , 2020).

This is more apparent particularly in countries such as Kenya where tourism and hospitality plays a significant role in the creation of employment and contributes to the country's GDP (Gunduz & Agayi, 2021). In order to ensure that the performance levels remain high, guest satisfaction is essential. Guest satisfaction can be indicated through the loyalty of customers as well as the continuous flow of customers. By enhancing guest satisfaction levels, hotels are able to create strong brands, increase their market share and improve their profitability levels (Khalayleh & Al-Hawary, 2022).

In the wake of turbulence in the hospitality industry especially as a result of the Covid-19 pandemic that reduced disposable income as well as crippling travel and tourism around the planet, hotels need to lower their operation costs, find ways of increasing their revenue as well as enhancing guest satisfaction (Girija, Sharma & Kaushal, 2022). In addition, most hotels had to tighten internal measures of control in order to adopt low costs. One such method of reducing costs and improving guest satisfaction is the adoption of ICT in the hospitality industry (Moreno & Tejada, 2019). While there exists a growing body of literature on guest satisfaction among hotels in Kenya, there is still scant literature on the influence of technology and ICT policies on hotel guest satisfaction in hotel industry. As such, this study sought to assess the effect of technology and ICT policies on 4 and 5 star hotels in Nairobi City County.

1.3 Research Objectives

i. To establish the effects of property management systems on guest satisfaction in 4 and 5 star hotels in Nairobi Kenya.
ii. To examine the effect of online booking platforms on guest satisfaction in 4 and 5 star hotels in Nairobi Kenya.
iii. To determine the effect of in-room technology on guest satisfaction in 4 and 5 star hotels in Nairobi Kenya.
iv. To establish the effect of customer relationship management systems on guest satisfaction in 4 and 5 star hotels in Nairobi Kenya.

1.4 Research Questions

i. What is the effect of property management systems on guest satisfaction in 4 and 5 star hotels in Nairobi, Kenya?
ii. How does online booking platforms affect the guest satisfaction of 4 and 5 star hotels in Nairobi, Kenya?
iii. Wat is the effect of in-room technology on the guest satisfaction of 4 and 5 star hotels in Nairobi, Kenya?
iv. To what extent does customer relationship management systems affect guest satisfaction of 4 and 5 star hotels in Nairobi, Kenya?

2.0 Literature Review

This part reviews previous studies related to the use of technology and ICT policies on 4 and 5 star hotels in Nairobi City County. This includes the theoretical literature and empirical literature.

2.1 Theoretical Review

The study was guided by the Technology Acceptance Model (TAM) and the Resource Based View Theory.

2.1.1 Technology Acceptance Model

The Technology Acceptance Model (TAM) is a theoretical model that explains how people come to accept and use new technologies. The model was developed in the 1980s by Davis, Bagozzi, and Warshaw and has been widely used to predict and understand people's adoption and use of new technologies (Granić & Marangunić, 2019). According to the model, the acceptance and use of a new technology depend on two main factors: perceived usefulness and perceived ease of use. Perceived usefulness refers to the extent to which a person believes that using a technology will enhance their job performance or daily life. Perceived ease of use, on the other hand, refers to the extent to which a person believes that using the technology is simple and convenient (Kemp, Palmer & Strelan, 2019).

TAM suggests that people's attitudes toward a new technology are formed based on their perceptions of these two factors. If a person believes that a technology is useful and easy to use, they are more likely to have a positive attitude toward it and be willing to adopt and use it. On the other hand, if a person perceives a technology as not useful or difficult to use, they are less likely to have a positive attitude and be unwilling to adopt it (Kamal, Shafiq & Kakria, 2020).

In addition to perceived usefulness and ease of use, TAM also includes two other factors that can influence the acceptance and use of a technology: behavioral intention to use and actual use. Behavioral intention to use refers to a person's desire to use a technology, while actual use refers to the extent to which a person actually uses the technology (Sukendro et al., 2020). Overall, TAM provides a useful framework for understanding and predicting people's adoption and use of new technologies. It highlights the importance of perceived usefulness and ease of use in driving people's attitudes and behaviors toward new technologies, and can be used to guide the design and implementation of technology-based systems and products (Mohamad, Hanafiah & Radzi, 2021). The model is applicable to the current study since it shows the need for hotels in Nairobi to adopt technology and ICT in their operations as a way of enhancing performance and hence sustainability by improving their services. By enhancing the services provided to their guests, 4 and 5 star hotels in Nairobi can enhance guest satisfaction levels.

2.1.2 Resource Based View Theory

The resource-based view (RBV) is a management theory that suggests that a firm's internal resources and capabilities are the key determinants of its success. According to this view, a firm's resources and capabilities are the primary drivers of its performance and competitive advantage (Dubey et al., 2019). The RBV suggests that a firm's resources and capabilities should be carefully managed and nurtured in order to sustain competitive advantage. This includes things like a firm's human resources, intellectual property, and physical assets. By developing and leveraging its unique resources and capabilities, a firm can create value for its customers and differentiate itself from its competitors (Ab et al., 2020).

One of the key ideas behind the RBV is that a firm's resources and capabilities should be rare, valuable, inimitable, and non-substitutable. In other words, they should be difficult for competitors to imitate or replicate, and should provide a unique benefit to the firm and its customers (Cuthbertson & Furseth, 2022). The RBV is applicable in this study since hotels and the hospitality industry in general can adopt technology as a way of enhancing their sustainability by reducing costs and becoming more efficient in their operations. The researcher considers technology as a valuable resource that hotels can use to become more competitive and sustainable in the modern competitive market.

2.2 Empirical Review

2.2.1 Property Management Systems and Guest Satisfaction

A property management system (PMS) is a software application that helps hotels, vacation rentals, and other accommodations manage their daily operations, including reservations, guest check-ins and check-outs, room assignments, and billing (Afthanorhan, et al., 2019). A PMS can also help with tasks such as housekeeping, maintenance, and rate management. Guest satisfaction is an important aspect of running a successful accommodation business. A PMS can help improve guest satisfaction by streamlining the check-in process, making it easier for guests to book and pay for their stay, and providing a range of amenities and services. Some PMSs also offer customer

relationship management (CRM) features, which can help hotels and other accommodations track and respond to guest feedback and preferences (Iglesias, Markovic & Rialp, 2019).

There are many PMS options available, so it is important for accommodations to research and compare different systems to find one that meets their specific needs and budget. Some things to consider when evaluating PMSs include: Ease of use such that A PMS should be easy to navigate and use, both for the accommodation staff and for guests (Cai, Hong, Xu, Gao, Wang & Chi, 2020). Integration with other systems in that it is often helpful for a PMS to integrate with other systems that an accommodation uses, such as a booking engine, a channel manager, or a point-of-sale system. In addition, it is important to choose a PMS with reliable customer support, so that any issues or questions can be quickly resolved. The next thing to consider is the scalability (Le, Le Tuan & Tuan, 2019). A PMS should be able to handle the current and future needs of the accommodation, including the ability to manage multiple properties. Finally, the cost of a PMS should be considered in relation to the value it provides to the business (Leung, 2019).

2.2.2 Online Booking Platforms and Guest Satisfaction

Online booking platforms are websites or apps that allow guests to search for and book accommodations, such as hotels, vacation rentals, and bed and breakfasts. These platforms provide a convenient way for guests to find and book accommodations, and they often offer a wide range of options to choose from (Kitsios et al., 2021). Guest satisfaction is an important consideration for online booking platforms. In order to attract and retain customers, these platforms need to provide a seamless and hassle-free booking experience. This includes making it easy for guests to search for and compare accommodations, providing accurate and up-to-date information about the properties, and offering secure and reliable payment options (Moreno-Perdigon, Guzman-Perez & Mesa, 2021).

Online booking platforms may also offer additional services or amenities to enhance the guest experience, such as mobile check-in, loyalty programs, or travel insurance. Some platforms also offer customer service and support to help guests with any issues or questions that may arise during their stay. Overall, the success of an online booking platform is largely dependent on its ability to provide a positive and convenient booking experience for guests. By meeting the needs and expectations of their customers, these platforms can help increase guest satisfaction and build brand loyalty (Vo, Chovancová & Tri, 2020).

2.2.3 In-Room Technology and Guest Satisfaction

In-room technology refers to the electronic devices and systems that are available in hotel rooms for the convenience and enjoyment of guests. This can include televisions, internet connectivity, room control systems, and other amenities (Alemayehu, 2020).There is evidence to suggest that in-room technology can have a positive impact on guest satisfaction. For example, a study published in the Journal of Hospitality and Tourism Technology found that the availability of in-room technology was positively correlated with guest satisfaction, particularly for younger guests (Ali et al., 2022).

Additionally, the use of in-room technology has been shown to enhance the overall guest experience and increase the likelihood of return visits (Kim, Lee & Han, 2022). However, it is important to note that in-room technology is just one aspect of the guest experience, and that other factors such as the cleanliness of the room, the friendliness of the staff, and the overall quality of the hotel can also have a significant impact on guest satisfaction.

2.2.4 Customer Relationship Management Systems and Guest Satisfaction

CRM systems can have a positive impact on guest satisfaction by helping businesses manage and analyze customer interactions and data, and by providing tools to develop more personalized and effective marketing and customer service strategies (Dewnarain, Ramkissoon& Mavondo, 2021). For example, a CRM system can be used to track guest preferences and history, such as past stays, room preferences, and special requests. This information can be used to create more personalized and tailored experiences for guests, which can increase their satisfaction (Tuncalı Yaman & Başeğmez, 2023).

Additionally, CRM systems can help businesses streamline and improve their customer service processes, such as by providing a centralized location for storing customer information and tracking customer inquiries and issues. This can make it easier for businesses to respond to customer needs and resolve any problems that may arise, which can also contribute to higher levels of guest satisfaction (Afaq, Gaur & Singh, 2022). Overall, the use of a CRM system can be a valuable tool for businesses looking to improve their customer relationships and drive guest satisfaction.

3.0 Research Methodology

The study used a questionnaire to gather information from hotel staff. The questionnaire was issued online through google form questionnaires. This was preferred since it was easy to administer and could easily be filled by the respondents. The Statistical Package for Social Sciences (SPSS) was used to code, examine and generate the quantitative report. This research study adopted both the descriptive research design and explanatory research design. The descriptive research study design is made use of when gathering data concerning people's perspectives, points of views and habits (Patten & Newhart, 2017). Besides, the explanatory research design was also considered appropriate for the study since the researcher aimed at explaining the casual relationship of the variables. Hence the explanatory research design was suitable. The targeted population was 4583 staff from 24 four and five star hotels in Nairobi as shown in the table below.

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Table 3.1: Target Population

Hotel	**No. of Staff**
Intercontinental Nairobi	166
Radisson Blu Hotel Nairobi	193
The Sarova Stanley	243
Villa Rosa Kempinski	233
Fairmont The Norfolk	143
Sankara Nairobi	172
The Boma Nairobi	152
Crowne Plaza Nairobi Airport	142
Tribe Hotel	237
Dusit D2	218
Hemingway's Nairobi	201
Crowne Plaza	232
City Lodge Hotel At Two Rivers	203
Southern Sun Mayfair Nairobi	245
Eka Hotel	205
Sarova Panafric Hotel	198
Silver Springs Hotel	186
Nairobi Safari Club	205
The Panari Hotel, Nairobi	199
Ole Sereni Hotel	224
Windsor Golf Hotel and Country Club	142
Fairview Hotel	185
Weston Hotel	151
Golden Tulip Westlands	108
Total	**4583**

The researcher used a questionnaire to collect data from the staff a SPSS was used to code, analyze and generate the quantitative and descriptive report. Stratified random sampling was used to select a sample size using Yamane's formula. The study's sample size was therefore:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = sample size

N = population size

e = the level of precision

1 = Constant

n =4583/ 1+ 4583$(0.05)^2$

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= 368 hotel employees

The sample size of the study was therefore made of 368 hotel staff.

Table 3.2: Sample Size

Hotel	**No. of Staff**
Intercontinental Nairobi	13
Radisson Blu Hotel Nairobi	15
The Sarova Stanley	20
Villa Rosa Kempinski	19
Fairmont The Norfolk	11
Sankara Nairobi	14
The Boma Nairobi	12
Crowne Plaza Nairobi Airport	11
Tribe Hotel	19
Dusit D2	18
Hemingway's Nairobi	16
Crowne Plaza	19
City Lodge Hotel At Two Rivers	16
Southern Sun Mayfair Nairobi	20
Eka Hotel	16
Sarova Panafric Hotel	16
Silver Springs Hotel	15
Nairobi Safari Club	16
The Panari Hotel, Nairobi	16
Ole Sereni Hotel	18
Windsor Golf Hotel and Country Club	11
Fairview Hotel	15
Weston Hotel	12
Golden Tulip Westlands	10
Total	**368**

4.1 Results and Presentation

The response rate for the study was established in order to ascertain the representation and the quality of responses for conclusion of the study. The response rate is as shown in table 4.1 below.

Table 4.1: Response Rate

Category	**Responded**	**Did not Respond**	**Response Rate**
Employees	325	43	88.3

From the results in Table 4.1, it is shown that out of the 368 questionnaires administered to the staff, 325 of them were dully filled and returned, translating into a response rate of 88.3 percent. This response rate were way above the conventionally acceptable rate for surveys. In earlier local

doctoral studies, it was stated that the average response rate for empirical studies was 65% of the sample (Baruch, 1999). Similarly, this was in line with Orodho (2009) who observed that a response rate above 50% contributes towards gathering of sufficient data that could be generalized to represent the opinions of respondents about the study problem in the target population. Given the general response rate of 88.3%, the results can therefore be generalized and considered representative of the population.

4.2 Inferential Analysis

The study conducted both correlation and regression correlation analysis to ascertain the association between the study variables of property management systems, online booking platforms, in-room technology and customer relationship management systems and guest satisfaction among 4 and 5 star hotels in Nairobi City County. The correlation coefficient was computed and used to test whether there existed interdependency between the independent variables and whether the independent variables were associated with the dependent variable. The results for the correlation in the study are as presented in Table 4.8 below.

Table 4.2: Correlation Analysis

		Guest Satisfaction	Property Management Svstems	Online Booking Platforms	In-Room Technology	Customer Relationship Management Systems
Guest Satisfaction	Pearson Correlation	1.000				
	Sig. (2-tailed)					
Property Management Systems	Pearson Correlation	.705**	1.000			
	Sig. (2-tailed)	0.000				
Online Booking Platforms	Pearson Correlation	.558**	.536**	1.000		
	Sig. (2-tailed)	0.000	0.000			
In-Room Technology	Pearson Correlation	.520**	.412**	.334**	1.000	
	Sig. (2-tailed)	0.000	0.000	0.000		
Customer Relationship Management Systems	Pearson Correlation	.606**	.615**	.434**	.548**	1.000
	Sig. (2-tailed)	0.000	0.000	0.001	0.000	

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

Researcher (2022)

The correlation analysis results in Table 4.2 show that there was a strong positive and significant association between property management systems and guest satisfaction in four and five star

hotels in Nairobi (r=0.705, p<0.05) at 5% level of significance. This implies that an improvement in property management systems in four and five star hotels in Nairobi results into an improvement in guest satisfaction.

The study also found a strong positive and significant association between online booking platforms and guest satisfaction in four and five star hotels in Nairobi (r=0.558, p<0.05) at 5% level of significance. This implies that an improvement or increase in online booking platforms results into an improvement in and guest satisfaction in four and five star hotels in Nairobi.

In addition, the study found a strong positive and significant association between in-room technology and guest satisfaction in four and five star hotels in Nairobi (r=0.520, p<0.05) at 5% level of significance. Finally, the study found that there was a strong positive and significant association between Customer Relationship Management Systems and guest satisfaction in four and five star hotels in Nairobi(r=0.606, p<0.05) at 5% level of significance. This implies that an improvement in Customer Relationship Management Systems results into an improvement in the guest satisfaction among four and five star hotels in Nairobi

Regression Analysis

Regression analysis is a set of statistical methods used to estimate of relationships between a dependent variable and one or more independent variables. In this study regression analysis was conducted to establish the statistical significance and relationship between the independent variables and guest satisfaction in four and five star hotels in Nairobi. This section provides regression results on the effect of technology and ICT policies on 4 and 5 star hotels in Nairobi City County. The model summary, ANOVA and regression of coefficient results are presented in the Tables below.

Table 4.3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.823a	0.643	0.618	0.473987

a Predictors: (Constant), Property Management Systems, Online booking platforms, In-Room Technology, Customer Relationship Management Systems

Source: Researcher (2022)

The results in Table 4.3 show that the coefficient of determination (R Square) is 0.643 and adjusted R squared of 0.618 at 95% significance level. The R squared of 0.643 implies that the technology and ICT policies adopted in this study (Property Management Systems, Online booking platforms, In-Room Technology, Customer Relationship Management Systems) jointly explains 64.3 percent of the variation in guest satisfaction in four and five star hotels in Nairobi City County. The remaining 35.7 percent of the variation in the dependent variable can be explained by other factors which were not included in the current study.

Table 4.4: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	31.8	4	7.95	25.149	.000[b]
	Residual	12.539	47	0.267		
	Total	44.339	51			

a. Dependent Variable: Guest Satisfaction
b. Predictors: (Constant), Property Management Systems, Online booking platforms, In-Room Technology, Customer Relationship Management Systems

Source: Researcher (2022)

Table 4.4 presents the ANOVA results. The results show that the model was statistically significant in explaining the influence of technology and ICT policies on guest satisfaction in four and five star hotels in Nairobi City County as indicated by the p-value of 0.000<0.05.

Table 4.5: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	0.216	0.376		-0.364	0.709
	Property Management Systems	0.357	0.129	0.31	2.767	0.013
	Online Boking Platforms	0.427	0.211	0.231	2.033	0.005
	In-Room Technology	0.322	0.123	0.199	2.618	0.003
	Customer Relationship Management Systems	0.383	0.148	0.26	2.588	0.000

a. Dependent Variable: Satisfaction

Source: Field Data, 2021

The regression model therefore became;

$$\mathbf{Y = 0.216 + 0.357X_1+0.427X_2+0.322X_3+ 0.383X_4}$$

Where:
Y= Guest Satisfaction
X_1= Property Management Systems
X_2= Online Booking Platforms
X_3= In-Room Technology
X_4= Customer Relationship Management Systems

Regression coefficients in Table 4.6 show that property management systems as an aspect of technology and ICT policies had a positive and significant effect on guest satisfaction in four and five star hotels in Nairobi City County (β =.357, p=.013<.05). This was supported by a calculated t-statistic of 2.767 that was greater than the critical t-statistic of 1.96 further confirming the significance. The result implies that, a unit improvement in property management systems results in an improvement in performance by 0.357 units. The result further implies that property management systems significantly affect the guest satisfaction in four and five star hotels in Nairobi City County.

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The study also found that online booking platforms had a positive and significant effect on guest satisfaction in four and five star hotels in Nairobi City County (β =.427, p=.005<.05). This was supported by a calculated t-statistic of 2.033 that was greater than the critical t-statistic of 1.96 further confirming the significance. The result implies that, a unit improvement in online booking platforms results into an improvement in guest satisfaction by 0.427 units. The results implies further that online booking platforms as a practice of technology and ICT policies significantly affects guest satisfaction.

In addition, the study found that in-room technology had a positive and significant effect on guest satisfaction in four and five star hotels in Nairobi City County (β =.322, p=.003>.05). This was supported by a calculated t-statistic of 2.618 that was more than the critical t-statistic of 1.96 further confirming the significance. The result implies that, a unit improvement in in-room technology results into an improvement in guest satisfaction by 0.322 units. The results implies further that in-room technology significantly affects the guest satisfaction in four and five star hotels in Nairobi.

Finally, the study found that customer relationship management systems as an aspect of technology and ICT policies had a positive and significant effect on guest satisfaction in four and five star hotels in Nairobi City County(β =.383, p=.000<.05). This was supported by a calculated t-statistic of 2.588 that was greater than the critical t-statistic of 1.96 further confirming the significance. The result implies that, a unit improvement in customer relationship management systems results into an improvement in guest satisfaction by 0.383 units. The results imply further that that customer relationship management systems as an aspect of technology and ICT policiessignificantly affects the guest satisfaction in four and five star hotels in Nairobi City County.

5.1 Conclusions

The study found that the technology and ICT policies adopted in the study positively and significantly affect guest satisfaction among four and five star hotels in Nairobi County. Specifically, property management systems, online booking platforms, in-room technology as well as customer relationship management systems were each found to have a positive and significant effect on the level of satisfaction displayed by guests in the four and five star hotels in Nairobi City County.

5.2 Recommendations

Based on the findings of this paper, the researcher recommends that hotels in Nairobi should implement a property management system (PMS) to streamline reservations, guest check-ins and check-outs, room assignments, and billing. In addition, these hotels should also offer online booking through their own websites as well as through other third-party travel sites. Hotels in Nairobi should also adopt a customer relationship management (CRM) system to manage customer data and communication as well as use a central reservation system (CRS) to manage room inventory and rates across multiple booking channels. Further, the study recommends that four and five star hotels in Nairobi City County should consider using a revenue management system (RMS) to optimize room pricing based on demand and availability.

Moreover, hotels should offer high-speed internet access to guests, either for a fee or as a complimentary amenity in order to boost their satisfaction levels while at the hotel. Four and five star hotels in Nairobi should also implement a mobile app for guests to access hotel information

and services, such as room service and concierge assistance where possible. Additionally, these hotels should use social media and email marketing to reach out to and engage with guests. Moreover, hotels should make use of data analytics to track and understand guest behavior and preferences as a way of improving the guest experience. Finally, the study recommends that four and five star hotels in Nairobi should invest in training and support for staff to ensure they are comfortable and competent using technology and ICT tools.

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