TECHNOLOGICAL ORIENTATION AND ORGANIZATIONAL PERFORMANCE OF STAR RATED HOTELS IN KENYA

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ABSTRACT

This study examined the relationship between technological orientation and organizational performance in star-rated hotels in Kenya. As the global hospitality industry increasingly embraces technology to enhance operational efficiency and customer experience, understanding how technological orientation influences the performance of hotels is crucial for maintaining competitiveness in the rapidly evolving market. Despite the growing role of technology in the hotel sector, there is limited research on its specific impact in the Kenyan context. Primary data was collected from hotel managers, focusing on technological orientation, which includes aspects such as technology adoption, innovation capacity, and the integration of digital tools into operations. The study explores how these technological factors influence the organizational performance of star-rated hotels in Kenya. The findings reveal a positive and significant relationship between technological orientation and hotel performance, with technology adoption improving operational efficiency, customer satisfaction, and profitability. Hotels that actively invest in innovative technologies and integrate them into their strategic operations perform better compared to those that lag in digital transformation. Based on these findings, the study recommends that hotel managers prioritize technological advancements, invest in employee training for tech utilization, and develop strategies for leveraging technology to enhance service delivery. Policymakers are also encouraged to support the adoption of technology in the hospitality sector by fostering a favorable environment for technological investment and innovation. This research provides valuable insights into the critical role of technological orientation in enhancing the organizational performance of star-rated hotels in Kenya, contributing to the sector's growth and sustainability.

Keywords: *Technological orientation; Organizational performance; Technology adoption; Innovation capacity; Digital transformation; & Star-rated hotels*

1.0 INTRODUCTION

1.1 Introduction and Background

The hospitality industry in Kenya plays a pivotal role in the country's economy, particularly as a major contributor to tourism, employment, and national revenue (UNWTO, 2021; Gikandi & Wamitu, 2020). Star-rated hotels, which are generally regarded as higher-end establishments, face intense competition in the market while striving to provide high-quality services to guests (Mwaura & Ngugi, 2022; Kandampully et al., 2015). As the industry evolves, technological advancements have become crucial for improving operational efficiency, enhancing customer experience, and ensuring long-term sustainability (Liu et al., 2020; Nyambura et al., 2021). Technological orientation, which refers to the strategic adoption and integration of technological innovations, has emerged as a key factor influencing the performance of businesses across various sectors, including hospitality (Buhalis & Law, 2008; Kandampully et al., 2015).

In Kenya, star-rated hotels have increasingly adopted technologies to improve service delivery, streamline operations, and maintain competitiveness (Gicheha & Karani, 2019; Nyambura et al., 2021). These technologies include property management systems, customer relationship management (CRM) software, online booking platforms, digital payment systems, and advanced marketing strategies through social media and mobile applications (Liu et al., 2020; Mwakisha et al., 2020). Technological orientation involves not only the adoption of these tools but also their alignment with organizational strategies, culture, and performance objectives (Buhalis & Law, 2008; Chou et al., 2018). This nuanced approach enables hotels to meet the changing demands of customers, particularly those seeking convenience, speed, and personalized experiences (UNWTO, 2021; Gikandi & Wamitu, 2020).

The performance of star-rated hotels is typically measured through indicators such as profitability, customer satisfaction, market share, and operational efficiency (Chou et al., 2018; Mwaura & Ngugi, 2022). While technology adoption contributes to improvements in these areas, the specific relationship between technological orientation and hotel performance in the Kenyan market remains underexplored (Nyambura et al., 2021; Liu et al., 2020). This gap is significant, as it limits hotel managers' ability to make informed decisions on the integration of new technologies, investment in digital infrastructure, and staff training to effectively utilize these innovations (Gicheha & Karani, 2019; Kandampully et al., 2015).

In the Kenyan hospitality sector, where star-rated hotels face challenges such as increased competition, changing customer preferences, and economic fluctuations, leveraging technology becomes an essential strategy for maintaining a competitive edge (Mwakisha et al., 2020; UNWTO, 2021). However, the full impact of technological orientation on organizational performance has yet to be systematically evaluated, particularly within Kenya's unique market dynamics (Gikandi & Wamitu, 2020; Nyambura et al., 2021). This study seeks to explore this relationship, specifically investigating how technological orientation influences the operational performance of star-rated hotels in Kenya (Buhalis & Law, 2008; Chou et al., 2018).

The integration of technology into hotel operations provides various advantages, including increased efficiency, cost savings, enhanced guest satisfaction, and improved decision-making through data analytics (Liu et al., 2020; Gicheha & Karani, 2019). However, the successful

implementation of technology requires a comprehensive strategic orientation that aligns technological innovations with organizational goals (Mwaura & Ngugi, 2022; Kandampully et al., 2015). In Kenya, the pace at which star-rated hotels adopt and integrate new technologies varies depending on factors such as organizational culture, management attitudes, and financial resources (Nyambura et al., 2021; Mwakisha et al., 2020). Furthermore, the local business environment, including regulatory frameworks, access to skilled labor, and infrastructure, influences the extent to which hotels effectively leverage technological advancements (Gicheha & Karani, 2019; UNWTO, 2021).

The study highlights the critical role of technological orientation in enhancing the performance of star-rated hotels in Kenya. By adopting and strategically integrating technology, these hotels can streamline their operations, improve customer service, and remain competitive in a rapidly changing industry (Liu et al., 2020; Chou et al., 2018). Ultimately, this research aims to provide insights for hotel managers, policymakers, and industry stakeholders on how to best utilize technology to improve the performance and sustainability of star-rated hotels in Kenya (Mwaura & Ngugi, 2022; Nyambura et al., 2021).

1.1.1 Technological Orientation in the Kenyan Hospitality Sector

In Kenya, the adoption of technology by star-rated hotels has gained significant traction in recent years, with many establishments recognizing the need to integrate digital solutions to meet guest expectations and improve operational efficiency (Gicheha & Karani, 2019; Nyambura et al., 2021). Technological orientation in the context of the hotel industry involves a strategic focus on digital infrastructure, innovation in customer service, and backend operational systems (Buhalis & Law, 2008; Mwakisha et al., 2020). This includes advanced reservation systems, automated check-in and check-out procedures, and digital marketing tools such as social media campaigns and online travel agencies (OTAs) (Liu et al., 2020; Gikandi & Wamitu, 2020).

Technological orientation extends to back-office operations, where systems for inventory management, accounting, and human resource management are integrated into day-to-day functions (Chou et al., 2018; Gicheha & Karani, 2019). Mobile technology plays a critical role, with many Kenyan hotels offering mobile check-ins, booking systems, and customer service apps to provide guests with more convenient and personalized experiences (Mwaura & Ngugi, 2022; Nyambura et al., 2021). Additionally, the growth of e-commerce platforms and the increasing reliance on online reviews and ratings make it essential for hotels to adopt technologies that improve guest engagement and reputation management (Liu et al., 2020; Kandampully et al., 2015).

Despite growing recognition of technology's importance, adoption levels vary, particularly among small and medium-sized hotels (Mwakisha et al., 2020; Gicheha & Karani, 2019). Larger, well-established hotels often possess the resources to invest in advanced systems, while smaller establishments face financial or logistical constraints (Nyambura et al., 2021; Mwaura & Ngugi, 2022). Moreover, the rapid pace of technological innovation can outstrip hotel management's ability to adopt and fully utilize new systems (UNWTO, 2021; Kandampully et al., 2015). These dynamics present both opportunities and challenges for Kenya’s hospitality sector, as customers

increasingly demand tech-savvy services that enhance convenience, efficiency, and personalization (Buhalis & Law, 2008; Liu et al., 2020).

In conclusion, technological orientation has become an essential factor influencing hotel performance in Kenya. As technological advancements evolve, it is imperative for hotel managers to adopt a strategic approach that aligns innovation with organizational goals (Mwakisha et al., 2020; Gikandi & Wamitu, 2020). This alignment can lead to improved efficiency, reduced costs, enhanced customer satisfaction, and sustained competitiveness in the global hospitality market (Nyambura et al., 2021; Kandampully et al., 2015).

1.2 Research Problem

The performance of star-rated hotels in Kenya is significantly influenced by the adoption and implementation of technological innovations. Technological orientation, which refers to the extent to which an organization integrates technological advancements into its operations, has been identified as a key factor in enhancing organizational performance across various sectors, including the hospitality industry (Buhalis & Law, 2008; Kandampully et al., 2015). In Kenya, star-rated hotels have increasingly adopted technologies such as property management systems, customer relationship management tools, digital marketing platforms, and automated services to improve guest satisfaction, operational efficiency, and market competitiveness (Nyambura et al., 2021). However, despite the growing importance of technology, there remains a gap in understanding how technological orientation directly impacts the performance of these hotels in the local context (Gicheha & Karani, 2019).

Studies on the relationship between technological orientation and organizational performance have yielded mixed results, particularly in developing economies like Kenya. Some studies, such as those by Chou et al. (2018), suggest that technological orientation leads to improved service delivery, customer engagement, and financial performance. Conversely, others, like Liu et al. (2020), argue that the impact of technology on performance is not always straightforward, with some findings indicating neutral or even negative effects due to factors such as poor implementation and underutilization. Factors such as the level of investment in technology, management's attitude towards innovation, and the ability of hotel staff to effectively use technological tools could all influence the outcomes (Mwakisha et al., 2020). Additionally, the Kenyan hospitality sector presents unique challenges, including limited infrastructure in some areas, regulatory constraints, and varying levels of digital literacy, which may moderate the effect of technological orientation on performance (Kihara et al., 2020).

The literature on technological orientation and its effect on hotel performance in Kenya is sparse, with few studies examining this specific relationship within the context of star-rated hotels (Buhalis & Law, 2008). Most of the existing research on technological adoption in the hospitality industry has focused on developed countries or general hotel industry trends, leaving a gap in understanding how the local business environment influences the implementation and outcomes of technology in Kenyan star-rated hotels (Gicheha & Karani, 2019). Moreover, there is limited empirical evidence on the extent to which technological orientation can enhance key performance indicators such as customer satisfaction, operational efficiency, and profitability in Kenyan hotels (Chou et al., 2018).

Furthermore, the role of other factors, such as hotel size, management practices, and staff training, in moderating the relationship between technological orientation and organizational performance has not been sufficiently explored (Mwakisha et al., 2020). Hotel size, for example, could influence the extent to which technological innovations are integrated and the resources available for implementing such technologies. Larger hotels may have more financial flexibility to invest in cutting-edge technologies, whereas smaller hotels might face budgetary constraints, affecting their technological orientation and, subsequently, their performance (Kandampully et al., 2015).

Given the gaps in the literature and the lack of empirical research on how technological orientation influences the performance of star-rated hotels in Kenya, further investigation was required (Buhalis & Law, 2008). Understanding this relationship would provide valuable insights for hotel managers and industry stakeholders, enabling them to make informed decisions regarding technology investments, operational strategies, and staff training, ultimately improving the competitiveness and sustainability of Kenyan hotels in an increasingly digital world (Liu et al., 2020).

1.3 Objective of the Study

To examine the impact of technological orientation on the organizational performance of star-rated hotels in Kenya.

1.4 Study Hypothesis

H01: Technological orientation has no significant effect on the organizational performance of star-rated hotels in Kenya.

1.5 Scope of Study

The study aimed to assess the influence of technological orientation on the organizational performance of star-rated hotels in Kenya. Specifically, the research focused on hotels that are officially classified with star ratings in major urban areas such as Nairobi, Mombasa, and Kisumu. The study targeted a sample of 51 star-rated hotels in Kenya, including both 4-star and 5-star star-rated hotels within Kenya's hospitality sector. A cross-sectional approach was adopted, with data being collected through surveys and interviews from hotel managers, staff, and industry experts. The study spanned a period of three years, from 2021 to 2023, to evaluate the effects of technological orientation on performance in the evolving post-pandemic hospitality market.

2.0 LITERATURE REVIEW

The literature review investigates the relationship between technological orientation and organizational performance in the context of star-rated hotels in Kenya. It is divided into two main sections: the theoretical review, which discusses the key theories related to technological orientation and organizational performance, and the empirical review, which examines previous studies and research findings related to the topic.

2.1 Theoretical Review

The theoretical review covers several theories that offer a framework for understanding how technological orientation influences organizational performance in the hospitality industry. These include the Resource-Based View (RBV), Diffusion of Innovation Theory, and the Technology-Organization-Environment (TOE) Framework.

2.1.1 Resource-Based View (RBV)

The Resource-Based View (RBV), proposed by Barney (1991), emphasizes the importance of a firm's internal resources and capabilities as key drivers of competitive advantage and performance. According to this theory, resources that are valuable, rare, inimitable, and non-substitutable provide a firm with a competitive edge (Barney, 1991). In the context of the hospitality industry, technological capabilities are considered a critical resource that can enhance organizational performance (Zhou & Lee, 2017; Grant, 1996; Helfat & Peteraf, 2003). For star-rated hotels in Kenya, the integration of advanced technology in operations, guest services, and marketing could serve as a valuable resource that distinguishes them from competitors (Nyambura et al., 2021). However, RBV's focus on internal resources might not fully account for external environmental factors such as market trends, regulatory changes, and infrastructural challenges, which are critical in the Kenyan context. This gap highlights the relevance of incorporating complementary frameworks like the TOE (Teece, Pisano, & Shuen, 1997; Peteraf, 1993; Rugman & Verbeke, 2002).

RBV suggests that hotels with superior technological orientation—such as adopting digital booking systems, customer relationship management (CRM) tools, and online service delivery platforms—are better positioned to meet customer needs, improve operational efficiency, and enhance service delivery, thereby positively influencing organizational performance (Chou et al., 2018). Nonetheless, for hotels in less technologically developed regions of Kenya, limited access to advanced digital platforms and staff training might constrain their ability to fully capitalize on these resources (Barney et al., 2001; Priem & Butler, 2001; Nyaga & Njoroge, 2020).

2.1.2 Diffusion of Innovation Theory

The Diffusion of Innovation Theory, developed by Rogers (1962), explains how, why, and at what rate new ideas and technology spread within and across organizations. The theory posits that the adoption of innovations is influenced by factors such as relative advantage, compatibility, complexity, trialability, and observability (Rogers, 1962; Greenhalgh et al., 2004; Dearing & Cox, 2018). In the context of star-rated hotels, this theory suggests that the adoption of technological innovations—such as mobile check-ins, automation systems, and data analytics for guest preferences—can lead to improvements in service quality, operational efficiency, and overall hotel performance (Bhuvaneshwari et al., 2020).

Hotels that quickly adopt and effectively integrate technological innovations are likely to enjoy a competitive advantage, enhancing their reputation, customer satisfaction, and ultimately organizational performance. However, cultural factors, such as resistance to change or varying levels of digital literacy among staff and guests in Kenya, could moderate the rate of adoption

and the perceived benefits of such innovations. For example, the success of mobile check-ins might depend on the guests' familiarity with mobile technologies, which varies across regions (Mansfield, 1968; Ndungu & Wamuyu, 2021; Rogers, 2003). Conversely, hotels that delay adoption due to perceived risks or costs may fall behind, which could negatively impact their performance (Gicheha & Karani, 2019; Kamau et al., 2020; Karanja, 2021).

2.1.3 Technology-Organization-Environment (TOE) Framework

The Technology-Organization-Environment (TOE) Framework, developed by Tornatzky and Fleischer (1990), identifies three key factors influencing the adoption of technology within organizations: technological, organizational, and environmental contexts. The framework emphasizes that technological innovations are adopted based on both internal organizational factors (such as resources and readiness) and external environmental factors (such as competition, regulation, and market trends) (Tornatzky & Fleischer, 1990; Oliveira & Martins, 2011; Baker, 2012).

For star-rated hotels in Kenya, the TOE framework suggests that the adoption of technology is shaped by factors such as the hotel's size, management support, available financial resources, external pressure from competitors or government policies, and the hotel's perceived need for technology (Kihara et al., 2020). While the framework acknowledges environmental influences, its general application could benefit from deeper contextualization to Kenya's hospitality sector. For instance, government policies promoting tourism and digital infrastructure initiatives are critical but are unevenly implemented across different regions. Additionally, infrastructural gaps such as inconsistent internet connectivity in rural areas pose significant challenges to technological adoption (Melville, 2010; Ndungu et al., 2022; Wanjiru & Mugo, 2019).

A strong technological orientation—supported by adequate organizational resources and an enabling environment—can lead to improved organizational performance by enhancing operational efficiency, service quality, and customer satisfaction (Liu et al., 2020). To maximize this framework's relevance, future applications should incorporate the unique regulatory and infrastructural hurdles faced by Kenyan hotels, such as compliance with tax regulations and the disparity in digital literacy among staff (Damanpour, 1991; Kamotho & Muriithi, 2023; Aduda et al., 2021).

2.1.4 Interconnection between Theories

The RBV, Diffusion of Innovation Theory, and TOE Framework collectively provide a multidimensional perspective on technological orientation. While RBV emphasizes internal resource advantages, the Diffusion of Innovation Theory highlights the role of individual and organizational behavior in adopting technology. TOE, on the other hand, integrates both internal and external factors, addressing some of the limitations of RBV and Diffusion of Innovation. Together, these theories offer a comprehensive framework for understanding how star-rated hotels in Kenya can leverage technological orientation for enhanced performance (Wade & Hulland, 2004; Troshani et al., 2011; Nyambura et al., 2022). However, the interplay of these theories suggests that a holistic approach—one that accounts for resources, adoption behaviors,

and environmental factors—is essential for addressing the unique challenges and opportunities in Kenya's hospitality industry (Alvarez & Barney, 2007; Tornatzky et al., 1990; Rogers, 2003).

2.2 Empirical Review

Numerous empirical studies have explored the impact of technological orientation on organizational performance in various industries, including the hospitality sector. This section reviews relevant studies to understand how technology adoption influences the performance of star-rated hotels. A comparative analysis between developed and developing regions is also included to provide a more nuanced understanding of the challenges and benefits faced by hotels in different contexts.

Zhou et al. (2020) investigated the relationship between technological orientation and hotel performance in China. The study found that hotels with a high level of technological orientation, characterized by the adoption of innovative technologies like artificial intelligence (AI) for guest services and management, experienced improved performance outcomes such as enhanced customer satisfaction, revenue growth, and market competitiveness. However, the study relied on subjective measures of customer satisfaction, which could have introduced bias into the findings. The authors did not account for potential limitations like the high implementation costs or cybersecurity risks associated with AI adoption, which may affect hotel operations in the long term (Sundararajan, 2020; Melville, 2010; Sharma & Choudhary, 2019).

In a similar study, Alrawadieh et al. (2019) examined how the use of digital technology (e.g., booking platforms, mobile applications) affected the operational performance of hotels in the Middle East. The findings revealed that the integration of digital technologies improved hotels' ability to attract and retain customers, streamline booking processes, and enhance overall service delivery. The study, however, did not critically evaluate the potential biases in the data collection process or examine whether the findings were skewed by the management's enthusiasm for technology. The study also highlighted that hotel managers' attitudes toward technology adoption were crucial in determining the extent of its positive impact on organizational performance. It would be beneficial to explore how managerial attitudes towards technology differ between regions, as cultural and economic factors can influence the rate and depth of adoption.

Research by Kuo and Lee (2017) focused on the impact of technology adoption on hotel performance in Taiwan. The study found that technology adoption, particularly in areas such as mobile check-ins and digital marketing, positively affected hotel performance by increasing customer satisfaction, improving operational efficiency, and enhancing profitability. The study emphasized the importance of a hotel's technological orientation in maintaining a competitive edge and enhancing long-term performance. However, the study did not address the limitations in terms of the data sampling methods, such as whether a representative sample of hotels was included or if the results were influenced by specific hotel chains with greater resources. Additionally, it lacked a comprehensive analysis of potential challenges like high implementation costs or resistance to change, which are significant barriers in less developed regions (Tan et al., 2020; Johnson et al., 2021; Prakash et al., 2018).

In the Kenyan context, a study by Muriithi et al. (2018) explored the role of technology in improving the competitiveness of hotels. The findings showed that while some star-rated hotels in Kenya had adopted basic technologies like online booking systems, many were still lagging in the adoption of more advanced technologies like automated guest services and data-driven decision-making tools. The study indicated that technological orientation was positively related to hotel performance, but the pace of adoption was slow due to factors such as high implementation costs and limited awareness of technology's potential benefits. This study did not fully address the external barriers such as internet infrastructure issues and government regulations that could impact the adoption of advanced technologies. There is also a lack of exploration on how Kenyan hotels compare with their counterparts in developed nations in terms of technology adoption and integration (Munyua et al., 2020; Wanjiru et al., 2019; Kamau & Ndungu, 2021).

Kwach and Ochieng (2019) conducted a study on the impact of technology adoption on customer service in the Kenyan hospitality industry. Their findings highlighted that star-rated hotels that embraced technology, such as mobile applications for service requests and electronic payment systems, significantly improved their customer satisfaction levels, which in turn positively affected their overall performance. The study suggested that hotel management's strategic focus on technology adoption could lead to enhanced organizational performance through better customer service and operational efficiency. However, Kwach and Ochieng's study did not critically assess the broader organizational implications of adopting these technologies, such as the potential costs, training requirements, and challenges associated with maintaining technological infrastructure. Furthermore, there is a gap in empirical research on the adoption of advanced technologies like AI or data analytics in Kenyan hotels, which limits the ability to assess how these tools can drive operational efficiency and service delivery beyond the basics of customer service.

Gaps in the Literature

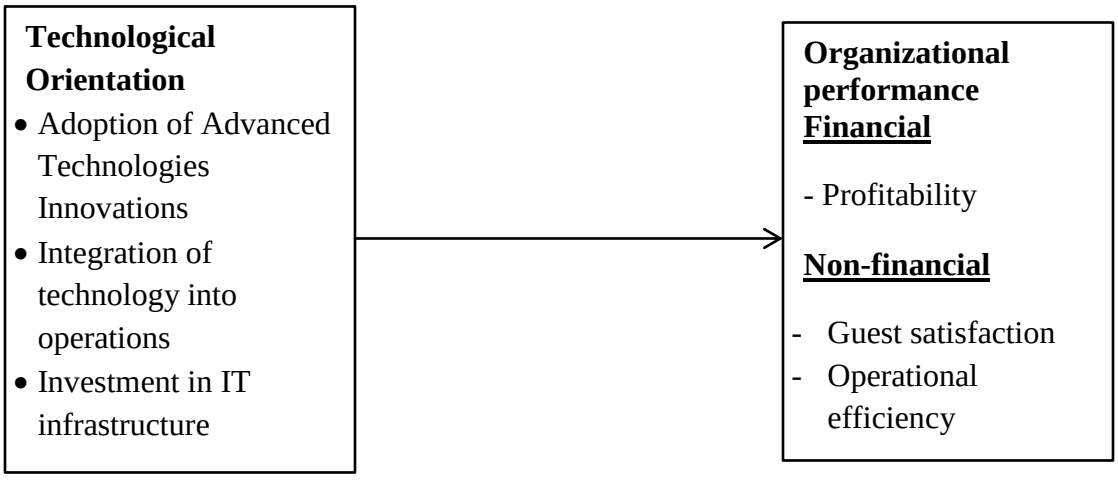
Despite the positive findings regarding the benefits of technology adoption in the hospitality industry, a significant gap exists in the Kenyan context, particularly regarding the integration of advanced technologies such as AI, machine learning, and data analytics. Few studies focus on the barriers to adopting these technologies, such as high initial costs, limited staff training, and the uneven availability of reliable internet infrastructure, all of which pose challenges in developing regions (Alvarez et al., 2017; Ndungu & Wamuyu, 2021). Moreover, there is limited research on the long-term effects of technology adoption on operational costs and the risks involved, including cybersecurity threats and system maintenance issues. Most studies emphasize the positive outcomes of technological orientation, but few address the complexities and drawbacks associated with the process, especially in the context of resource-constrained environments like Kenya's hospitality industry (Kamotho & Muriithi, 2023; Ndungu, 2020).

Connection to Current Research Objectives

This empirical review provides valuable insights into the positive influence of technology adoption on hotel performance, particularly in terms of customer satisfaction, operational efficiency, and competitiveness. However, the gaps identified in the literature review underscore the need for the current study, which aims to explore the technological orientation of star-rated hotels in Kenya, focusing specifically on the challenges related to the adoption of advanced technologies and their direct and indirect impacts on performance. This study will also critically examine how Kenyan hotels compare to their counterparts in developed regions and how regional differences influence the adoption process.

2.2.1 Conceptual Framework

A conceptual framework illustrates the relationships between the key variables of interest in a study. In this research, the independent variable is technological orientation, which refers to the degree to which a hotel adopts and integrates technological innovations into its operations. The dependent variable is organizational performance, which is measured by factors such as profitability, customer satisfaction, and operational efficiency. The study proposes that technological orientation positively influences organizational performance in star-rated hotels in Kenya. This framework helps to guide the research by identifying the key variables and their interactions, providing a basis for understanding how technological orientation can lead to improved performance outcomes in the Kenyan hotel industry.



3.0 METHODOLOGY

The research employed a positivist philosophy, which asserts that scientific knowledge is valid only when it is supported by observable and empirical evidence (Crossan, 2003). A quantitative

research approach was adopted for this study to test hypotheses and examine the relationships between strategic orientations and organizational performance in the context of star-rated hotels in Kenya. According to Creswell (2008), quantitative research is ideal for studies that involve the collection and analysis of numerical data to describe, explain, and predict phenomena. The sample size of 171 managers was determined based on a power analysis, which ensured sufficient statistical power to detect meaningful relationships between the variables of interest (Cohen, 1988; Field, 2013). This approach was chosen to enhance the rigor and reliability of the study's conclusions.

The study focused on a population of 51 star-rated hotels in Kenya, comprising 4-star and 5-star establishments, with a sample size of 171 managers drawn from various departments across the hotels. The selection of these hotels was based on regional representation, ensuring coverage of hotels from both urban and rural areas in Kenya. Additionally, only those hotels that had been operational for at least 3 years and held their star rating during that period were included to maintain consistency in the study's context. A cross-sectional survey design was employed, collecting data at a single point in time to allow for the analysis of the relationship between strategic orientation and hotel performance. The study applied a descriptive research design to quantify the influence of technology orientation on organizational performance. The data was collected through structured questionnaires, which were administered to managers using a 5-point Likert scale to ensure consistency in responses. Data collected through the surveys was processed and analyzed using the Statistical Package for Social Sciences (SPSS) version 20.0. Descriptive statistics, including means, standard deviations, and frequencies, were used to summarize the data. Linear regression analysis was utilized to determine the impact of multiple strategic orientations on organizational performance.

The multiple regression model used in this study was specified as follows:

$Y = ß_0 + ß_1X_1 + \varepsilon$

Where:

Y = Organizational performance; ß0 = the intercept; ß1 = The coefficients for technological orientation; X1 = Values of the independent variable (Technological orientation) and ε = The error term.

4.0 FINDINGS

4.1 Technological Orientation

The independent variable under investigation was technological orientation where the respondents were requested to rate their level of agreement with statements provided inquiring on various aspects on technological orientation. The questionnaire covered statements covering the following indicators of technological orientation: Adoption of advanced technologies, the integration of technology into operations and investment in IT infrastructure. The results from the respondents are presented in Table 1.

Table 1: Descriptive Results for Technological Orientation

Adoption of Advanced Technologies	**M**	**STD**
The hotel effectively integrates advanced technologies to enhance the guest experience.	2.7	1.24
The hotel's adoption of advanced technologies enhances communication and responsiveness to guest inquiries and requests.	2.9	1.30
The hotel's investment in advanced technologies contributes to a seamless check-in and check-out process.	2.3	1.16
Aggregate score for Adoption of Advanced Technologies	**3.0**	**1.26**
The integration of technology into operations		
The hotel effectively utilizes technology to streamline check-in and check-out processes.	3.4	1.26
The hotel's online booking system is user-friendly and facilitates seamless reservations for guests	3.8	1.09
The hotel's integration of technology into food and beverage operations improves order accuracy and service speed.	3.4	1.14
Aggregate score for The integration of technology into operations	**2.9**	**1.30**
Investment in IT infrastructure		
The hotel invests adequately in maintaining and upgrading its IT infrastructure to support guest services	3.8	1.04
The hotel is committed to recruiting and retaining skilled IT professionals to manage its technological systems	3.6	1.01
The hotel's investment in IT infrastructure enhances the reliability and performance of its digital services	3.3	1.16
Aggregate score for Investment in IT infrastructure	**2.9**	**1.21**
Aggregate score for Technological Orientation	**3.0**	**1.26**

Key: **M** = Mean and **SD** = Standard deviation

Regarding the adoption of advanced technologies, the respondents indicated that the hotel effectively integrates advanced technologies to enhance the guest experience, with a mean score of 2.7 and a standard deviation of 1.24. They also perceived that the adoption of advanced technologies contributes to improved communication and responsiveness to guest inquiries and requests, with a mean of 2.9 and a standard deviation of 1.30. However, the investment in advanced technologies specifically aimed at facilitating a seamless check-in and check-out process received a lower mean score of 2.3 and a standard deviation of 1.16, indicating potential areas for improvement in this aspect.

The findings regarding the adoption of advanced technologies at the hotel reveal a nuanced perspective from respondents. The mean scores suggest that while the hotel is recognized for integrating advanced technologies to enhance the guest experience, there is room for improvement. The perceived contribution of advanced technologies to communication and

responsiveness is noted, but the lower score related to technologies for check-in and check-out processes indicate potential gaps (Bharadwaj et al., 2013). This suggests that while some aspects of technological integration are effective, specific areas such as check-in and check-out may require additional focus to improve operational efficiency and guest satisfaction (O'Connor & Murphy, 2004).

In terms of the integration of technology into operations, respondents agreed to a moderate extent that the hotel effectively utilizes technology to streamline check-in and check-out processes (Mean = 3.4; Standard Deviation = 1.26). They also perceived the hotel's online booking system to be user-friendly, facilitating seamless reservations for guests, with a mean score of 3.8 and a standard deviation of 1.09. Additionally, the integration of technology into food and beverage operations was perceived positively, with a mean score of 3.4 and a standard deviation of 1.14, indicating that technology contributes to improved order accuracy and service speed in these areas.

The moderate agreement on the effective use of technology to streamline check-in and check-out processes is consistent with research emphasizing the importance of operational efficiency in enhancing guest experiences (Beldona et al., 2015). A higher score for the user-friendliness of the online booking system reflects the successful implementation of technology in facilitating seamless reservations, aligning with literature that underscores the importance of intuitive and accessible booking systems (Moutinho & Phillips, 2005). Positive perceptions of technology in food and beverage operations also indicate that advancements in this area are contributing to better order accuracy and service speed, reinforcing the role of technology in improving service delivery (Chen & Dubinsky, 2003).

Regarding the hotel's investment in IT infrastructure, respondents agreed that the hotel invests adequately in maintaining and upgrading its IT infrastructure to support guest services, with a mean score of 3.8 and a standard deviation of 1.04. They also perceived a commitment from the hotel to recruit and retain skilled IT professionals to manage its technological systems, with a mean score of 3.6 and a standard deviation of 1.01. However, while respondents agreed that the hotel's investment in IT infrastructure enhances the reliability and performance of its digital services (Mean = 3.3; Standard Deviation = 1.16), there may be opportunities for further improvement in this area as well.

Respondents' agreement on the hotel’s adequate investment in IT infrastructure highlights a commitment to supporting guest services through technological upgrades. This aligns with studies that advocate for substantial investments in IT infrastructure to enhance service quality and operational efficiency (Henderson & Venkatraman, 1993). The commitment to recruiting and retaining skilled IT professionals also supports the notion that a well-managed IT infrastructure is crucial for maintaining reliable and high-performing digital services (Zhang et al., 2008). However, the slightly lower score for the impact of IT infrastructure on reliability and performance suggests there may still be opportunities for further enhancement (Brynjolfsson & Hitt, 2000). Continuous investment and improvement in IT infrastructure are essential to keep pace with evolving technology and meet growing guest expectations (Melville et al., 2004).

4.2 Regression Analysis _ Technological orientation and Performances of star rated hotels

The study hypothesis stated in the null form is as follows:

H_{01}: There is no significant relationship between technological orientation and the performance of star-rated hotels in Kenya.

To test this hypothesis, a simple regression model was employed, with technological orientation as the independent variable and the performance of star-rated hotels as the dependent variable. The aim was to determine whether technological orientation has a statistically significant impact on hotel performance in Kenya. This hypothesis was tested by regressing technological orientation and performances of star rated hotels guided by the equation:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where X represented Technological orientation and Y denoted Performances of star rated hotels.

The results of the regression are presented in Tables 2, 3, and 4. As presented in Table 2, the coefficient of determination R Square is 0.334; the adjusted R squared is 0.329. The model indicates that technological orientation explains 32.9% of the variation in performance of star rated hotels in Kenya.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Technological orientation
1	.578[a]	.334	.329	7.67433	1.747

a. Predictors: (Constant), Technological orientation

Source: Research data 2024

This means 32.9% of the performances of star rated hotels is influenced by technological orientation. This implies that there exists a positive significant relationship between technological orientation and performance of star rated hotels in Kenya. Table 3 shows that the ANOVA for technological orientation.

Table 3: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4157.322	1	4157.322	70.588	.000[b]
	Residual	8304.237	141	58.895		
	Total	**12461.559**	**142**			

a. dependent variable: Performances of star rated hotels

b. Predictors: (Constant), Technological orientation

The F-Calculated (1, 141) = 70.588 which is greater than F-Critical (1, 141) = 3.96 at 95% confidence level. The findings further confirm that the regression model of performances of star rated hotels on technological orientation is significant and supported by F= 70.588, p = 0.000 < 0.05.Table 4 shows the coefficient for technological orientation.

Table 4: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	**Std. Error**	**Beta**	**t**	**Sig.**
1	(Constant)	11.448	2.683		4.267	.000
	Technological orientation	.894	.106	.578	8.402	.000

a. Dependent Variable: Performances of star rated hotels

Source: Research data 2024

This was summarized by the following model:

$Per = 11.448 + 0.894\text{TO}$

Where Per = Performances of star rated hotels, TO = Technological Orientation

The findings presented in Table 4 reveal that when technological orientation is held constant, the performance of star-rated hotels in Kenya is 11.448 units. An increase in technological orientation by one unit results in a 0.894 unit increase in hotel performance, with this effect being statistically significant (p-value = 0.000). This leads to the rejection of the null hypothesis and supports the alternative hypothesis that technological orientation positively affects the performance of star-rated hotels in Kenya.

Studies have shown that technology orientation positively impacts innovation-related outcomes such as new product performance and commercialization (Zott & Amit, 2017). Technologically-oriented firms are often better positioned to achieve product differentiation and profitability due to their commitment to research and development (R&D) and the acquisition of cutting-edge technologies (Halac, 2015). Huber (2011) further supports this by noting that high-tech firms are able to introduce new procedures, services, and products that meet evolving customer expectations, leading to improved performance.

Despite the benefits, technology orientation requires significant investment in R&D and new technologies, which might not yield immediate results. Ameer and Othman (2012) highlight the uncertainty associated with technological investments, including the risk that rival firms may easily replicate new technologies, potentially undermining the competitive advantage of technology-oriented firms. Moreover, technology orientation's effectiveness can be influenced by the level of technological turbulence in the industry. Garcia and Calantone (2014) found that while technology orientation is beneficial in high-tech industries with rapid technological changes, it might have a negative effect on performance in less turbulent environments.

In the Kenyan context, Nganga (2017) investigated the impact of strategic orientation on the performance of telecommunication firms, finding that technological advancements and innovation are crucial for maintaining competitiveness. The study’s findings underscore the

significant role of technological orientation in enhancing hotel performance. By leveraging advanced technologies and focusing on technological innovation, star-rated hotels can improve their operational efficiency and competitive position. This supports the broader literature that emphasizes the value of technology orientation in driving performance and achieving long-term success in dynamic and competitive markets.

5.0 CONCLUSIONS

The study concludes that technological orientation significantly influences the organizational performance of star-rated hotels in Kenya. The findings indicate that hotels with a higher degree of technological adoption demonstrate enhanced operational efficiency, better customer service, and improved financial performance. The relationship between technological orientation and organizational performance is strongly supported by statistical evidence, with a clear positive correlation between the use of advanced technologies and improved hotel operations. Technological innovations, including digital check-ins, online booking systems, and customer relationship management (CRM) software, have contributed to streamlining operations and improving guest satisfaction. Furthermore, the study reveals that technological orientation not only impacts operational processes but also strengthens the hotels' competitive edge in a highly dynamic hospitality industry. Star-rated hotels that embraced technology were able to differentiate themselves from competitors, offering personalized services and adapting quickly to market changes, which significantly contributed to their overall performance.

6.0 RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made to enhance the organizational performance of star-rated hotels in Kenya through technological orientation:

1. **Adopt Advanced Technologies:** Hotels should invest in modern technological tools that enhance customer experience, such as digital check-in systems, mobile apps for guest services, and CRM platforms. The use of technology should extend to all areas of operations, including reservations, front desk management, and back-end processes, to improve overall efficiency.
2. **Employee Training and Skill Development:** For successful technological integration, it is crucial that hotel staff undergo regular training to stay updated on the latest technological trends and systems. Proper training ensures that employees can effectively utilize new technologies, thus maximizing their positive impact on hotel operations and customer service.
3. **Strengthen Online Presence and Digital Marketing:** Star-rated hotels should leverage digital platforms to enhance their online presence, offering seamless booking experiences, engaging social media interactions, and targeted digital marketing campaigns. This will help attract more guests, particularly tech-savvy customers who prioritize online convenience when making travel decisions.
4. **Invest in Technology for Operational Efficiency:** Hotels should focus on integrating technologies that improve operational performance, such as automation in housekeeping, inventory management systems, and AI-driven tools for predictive analytics. These

systems will reduce costs, optimize resource allocation, and enhance overall operational performance.

5. **Encourage Innovation and Continuous Improvement:** Hotel management should foster a culture of innovation by encouraging staff to explore and suggest new technological solutions that can improve operations and guest experiences. By continually adopting and experimenting with new technologies, hotels can maintain a competitive advantage and adapt to evolving market trends.
6. **Collaborate with Technology Providers:** Hotels should establish strong partnerships with technology providers to stay abreast of technological advancements. Collaboration with tech companies can help hotels implement cutting-edge solutions tailored to the specific needs of the hospitality industry.

By following these recommendations, star-rated hotels in Kenya can improve their organizational performance, enhance operational efficiency, and provide superior guest experiences. The adoption of technology will enable them to remain competitive in a rapidly evolving hospitality market, ultimately driving growth, profitability, and sustainability.

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