LEVERAGING PRODUCT INNOVATION FOR ENHANCED SERVICE QUALITY

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Abstract

The hotel industry in Kenya makes remarkable contribution to the Gross Domestic Product, employment creation and is inextricably connected to other sectors of the economy. In the last few years, the volatility, uncertainty, complexity and ambiguity that has characterised the business landscape as demonstrated recently by the COVID-19 global pandemic has occasioned concerns over reliability, tangibility, responsiveness and assurance of the customer value delivery system in the hotel industry. Product innovation is one of the most unique ways of improving a business profit as well as organizational service quality. Apart from enhancing product quality, it also ensures cost reduction which are good for sustainability of business operations. The power that product innovation has when it comes to business growth and sustainability cannot be denied. Further, it ensures the organization competitiveness is improved and its market presence is felt. Organizations that want to get hold of a bigger market share use constant products innovation strategy because it leads to improved service quality which attracts different customers that have unique needs. In light of this, this study examined the effect of product innovation on service quality in Serena Hotels, Kenya. The study adopted descriptive research design. The heads of functional areas formed the unit of observation and constituted a population of 590 subjects from which a sample of 176 management staff were selected through stratified proportionate sampling method. Primary data was collected using

structured questionnaire. A pilot study was executed to assess the feasibility of the research instrument for gathering the required data. Descriptive attributes of the sample were analysed using frequency count, sample mean and standard deviation. Linear regression analysis was performed to determine the causal link between product innovation and service quality. Product innovation was determined to have a positive causal link to service quality. This indicates a substantial impact of product innovation on enhancing service quality. The head of marketing division at Serena Hotels should ensure sufficient resources are committed towards improvement of product attributes on the basis of in-depth understanding of customers' needs. In addition, the procurement division should ensure raw materials received from suppliers are high quality in line with customer value proposition. Quality audits should be strengthened to enforce compliance and minimise the variance in product performance.

Keywords: Innovation, Product Innovation, Service Quality Marketing, Competitive Advantage

INTRODUCTION

Globalization and the development of information-communication technology have had an impact on the operation of economic activities. Change is rapidly occurring across all dimensions, whether at the national or global levels of the economy. Therefore, the competitive nature of industries demands a corresponding response from the management process. Therefore, it is imperative that companies build up their competitiveness to perpetuate the trend. It has been observed that firms are increasingly becoming interested in enhancing their understanding of the dynamism in customers' behaviour, taste and preferences and its implications on product design and improvement (Abdi & Kinyua, 2018; Mugambi & Kinyua, 2020; Carraresi, Aibisu & Mamaqi, 2022; Mwarenge & Kinyua, 2022; Nzomo, Kinyua & Mwasiaji, 2023; Wanyoike & Kinyua, 2025). Taking this into consideration, service quality has been regarded as an important operating objective, especially for organizations in the services sector (Banterie, 2020; Legeny & Kinyua, 2023).

Knowledge management play a key role in enhancing an organization's product innovation capability, development of differential advantage and engenders desirable organizational outcomes (Chebiego, Kinyua & Muchemi, 2021). Effective knowledge management strategies enable an enterprise to leverage internal and external knowledge sources, promote learning and drive innovation initiatives that facilitates alignment of the firm's value chain activities (Kinyua, 2015, Kinyua, Muathe & Kilika, 2015; Argote & Ingram, 2020). Knowledge creation is fundamental to innovation as new ideas and solutions emerge from the synthesis of existing knowledge (Nonaka & Takeuchi, 2018; Gatuyu & Kinyua, 2020).

Knowledge management practices that encourage knowledge creation, such as encouraging collaboration, experimentation and dialogue can stimulate product innovation by providing a fertile ground for idea generation and exploration (Choo, 2020). Effective utilization of knowledge is crucial for translating innovative ideas into tangible outcomes. By capturing and disseminating lessons learned from past innovations, organizations can avoid reinventing the wheel and accelerate the place of innovation (Von Krogh & Ichijo, 2020). Moreover, through execution of knowledge management strategies, organizations leverage on innovation in their pursuit for sustainable competitive advantage.

A product innovation capability is the use of a new product that is also improved in terms of its traits and use such as having notable improved materials, components, technical specifications, user friendliness, software among other notable traits (Morone & Testa, 2014). Morone and Testa (2014) noted that product innovation is the use of a new and enhanced product or service that is an improvement in the currently offered product. Camison and Lopez (2010) points out that product innovation does not only enhance the products quality but also reduces cost. Further, it ensures the organization competitiveness is improved and its market presence is felt. Constantly improved products are very important for organizations that are seeking continuous growth and enhanced performance (Bayus, Erickson & Jacobson, 2013). Product innovation has been used frequently by new organizations entering different markets as it allows them to attract different customers very fast and meet their unique needs (Hult, 2014). Further, organizations that want to get hold of a bigger market share use this strategy since it attracts different customers that have unique needs (Oke, 2017).

It's crucial to recognize that product innovation fosters is critical ingredient for maintaining the required match between the firm's customer value proposition and the evolving needs of customers (Barney, 1991; Muithya, Muathe & Kinyua, 2021). The truth is, more often than not, product advancement can be done better if it is done hand in hand with certain process enhancements. In fact, the vision for innovation should in one way or another be aligned with the organizational goals and objectives. This tight coupling between strategic objectives and product innovation makes it a critical enabler of strategies. Strategic intent, which refers to means through which firms set long-term direction through mission, vision, objectives, policies and core values is critically important for firms wishing to win in the long run (Obonyo, 2020). Without a clear strategic purpose, companies face challenges in establishing precise objectives and actively working towards them, resulting in subpar performance (Seepana, Paulraj & Huq, 2020). Odita and Bello (2015I The strategic intent of a given enterprise should prioritize product and service innovation as the primary objective of any firm is to increase customers' and stakeholders' value in a more relatively more effective manner than the

competition (Gabow & Kinyua, 2018; Wanjiku, Kinyua & Kahuthia, 2020; Nyaga & Kinyua, 2022).

Statement of the Problem

The hotel industry in Kenya makes remarkable contribution to the Gross Domestic Product, employment creation and is inextricably connected to other sectors of the economy (Kitur & Kinyua, 2020). The World Travel and Tourism Council has estimated that the overall contribution, including direct, indirect, and induced impacts, was 10.3% of world GDP for the year 2019; provided livelihood to as many as 330 million people through employment; and sourced US$ 1.7 trillion through international visitor exports, which formed 6.8% of the total exports that year. Furthermore, tourism contributed 28.3% to overall service export earnings and 4.3% to total investment, with a capital investment of US$948 billion (Kinyua, Muchemi & Kiiru, 2021). The industry is located in a highly competitive and relatively sensitive to the volatility of conditions in the business environment (Johnson & Scholes, 2022). In recent times, the industry has faced significant service quality related challenges, and more so in the aftermath of the disruption occasioned by the COVID-19 pandemic and the ongoing geopolitical tensions and conflicts at the global level. Such disruptions in business environment have been blamed for unfavourable fluctuations in tourist bookings, and attendant concerns over reliability, tangibility, responsiveness and assurance of the customer value delivery system in the hotel industry (Kitur & Kinyua, 2020; Kariuki, Kinyua & Waithaka, 2024).

Empirical literature presents adequate evidence that product innovation is vital in all organizations irrespective of their sector in order to survive and continue to be competitive (Therrien, Doloreux & Chamberlin, 2015; Aaker, 2016). The research work by Gunday, Ulusoy, Kilic, and Alpkan (2017) on the effect of product innovation on the firm service quality in the manufacturing industry in Turkey, revealed product innovation to have had a momentous effect on the service quality of companies in the industry. Whereas the findings and conclusion of this study are relevant for the Turkish manufacturing industry, their implications to service quality in Serena Hotels would require a matching empirical inquiry. Ngirigacha and Bwisa (2013) carried out research on the relevance of product innovation on service quality in Small and Medium Enterprises in Kenya. The findings showed a notable and positive relationship linking the two research variables. Even though such findings and conclusions are very insightful for the surveyed Small and Medium Enterprises, they cannot be generalized to the context of Serena Hotels. On account of this, this study examined the effect of product innovation on service quality in Serena Hotels operating in Kenya.

THEORETICAL REVIEW

Serviqual model and diffusion of innovation theory were reviewed as the theoretical basis for the concepts product innovation and service quality, and for underpinning the proposed causal link between these two research variables.

Servqual Model

The SERVQUAL Model was proposed by Parasuraman, Zeithaml, and Berry in the 1980s and has ever since been widely used in the general service sectors, including hospitality, health, retail, and banking services (Parasuraman, Zeithaml, & Berry, 1985). The SERVQUAL Model is considered as an integral part of a model for evaluating service quality based on customers' perceptions of the services offered, besides customers' expectations. Due to such a miscellaneous nature of consumer perception of service quality, there are various dimensions that have been suggested (Brady & Cronin, 2011). Initially, Parasuraman (1988) proposed ten dimensions: access, credibility, competence, reliability, security, customer understanding, tangible aspects, courtesy, and communication. However, these were later condensed into five key dimensions encompassing organizational credibility, communication sensitivity, professional trustworthiness, uses of positive and assertive language, and physical environment. However, some authors have pointed out the fact that such constructs can be used across all service sectors of industry (Finn & Lamb, 2011; Cronin & Taylor, 2014).

Accordingly, measurement of quality in services is considered as abstract, multifactorial, complex and intangible and is viewed as the degree to which the attributes of a service are varied in the light of the attributes that are customers value (Rolo, *et al.*, 2023). There is a widely share views that the SERVQUAL model is a suitable approach for measuring service quality in various sectors of the economy but recommends the need for careful determination of the set of dimensions that fit to that particular service being measured in order to assure reliable and valid results (Ladhari, 2009). Although Service quality consists in assurance, reliability, empathy, tangibility and responsiveness dimensions, it can be broadly categorised into technical and functional qualities (Mukhles, 2017). Fostering product innovation has potential to yield tangible, reliable and responsive services that would build a sense of assurance amongst the customers. Therefore, this model is relevant for explaining service quality on the basis of product innovation.

Diffusion of Innovation Theory

The theory of diffusion of innovation, formulated by Rogers (1962), elucidates the process by which a concept or product gradually advances traction and spreads among a

targeted social system or population. According to this theory, when a new service or good is introduced, it does not gain acceptance immediately within the population. The acceptance of an innovation gradually spreads from one segment of the population to another through a process known as diffusion. This process involves the acceptance of the innovation by different groups within the population, including laggards, late adopters, late majority, early majority, and innovators. Innovators, who often include inventors and risk-takers, are the first to adopt new technology.

Early adopters, typically occupying leadership positions within organizations, recognize the importance of change and are eager to try out innovative solutions. The early majority is a group of individuals who adopt new technology before the majority of the population and require little persuasion to accept new innovations. The late majority refers to individuals who only embrace new innovations after they have been widely accepted and approved by the majority. On the other hand, laggards are conservative individuals who only adopt technology when pressured by society or when it becomes necessary for them (Rogers, 2003). According to LaMorte (2016), this theory highlights that innovation is adopted when it provides a clear advantage compared to existing products or services, offers ease of use, and demonstrates tangible results.

This theory of innovation diffusion delves into the adoption of technology or innovation within institutions and the speed at which it is embraced. This mostly depends on the decision-makers present and their desire to adopt technology swiftly. Adopting technology, such as online registration systems that facilitate operational simplification, is necessary for Serena Hotels Kenya to improve delivery of services. The theory is crucial for generating useful insights on the process of adopting product innovations that can be leveraged in the conception and execution of intervention for accelerating the infusion of new ideas drawing from the changes in the business environment.

EMPIRICAL REVIEW

The analysis of previous publications suggests that value creation is a key determinant of organizational service improvement through product innovation. Resource-based theory posits that the degree of organizational performance enhancement is defined primarily by managing and exploiting the organization's specific resources and capabilities. Higher performance can thus be realized through the delivery of innovative products that are of high quality. These capabilities, therefore, if well managed and controlled, help organizations add value to their products and enhance brand image.

Product innovation is a critical factor for every organization, greatly enhancing its performance (Aaker, 2016). Significantly, the adoption of new innovative products can help create business value and increase profit compared to firms that emphasize product innovation less. In Kingsland's (2017) views, the application of unique product attributes leads to enhanced profitability for the firms as well as the quality of the services they provide. According to Davcik (2013), improving various types of product innovation helps organizations improve the quality-of-service delivery. Further, Tan, Mavondo, and Worthington (2015) posited that resource-based theory offers a good explanation of the association between service quality and product innovation; they pointed out that the ability of a firm to offer good and unique products is a pointer to its capacity to offer good service to its customers.

Hussain (2013) analyzed the correlation between product innovation and relationship quality and established that this correlation is positive. Stock (2014) argued that product innovation, defined as the firm's capacity to introduce new features into the product, is a vital tool for improving services. Further, Dimyati (2017) reviewed the effect of product innovation on service quality in Indonesian manufacturing firms and noted that the two variables were positively correlated. Therefore, firms that were known for leadership in launching new products had better outcomes than the other firms in the industry. Bearing in mind the implications of the disparities in business conditions, the empirical findings cannot be relevant to product innovation and service quality in Serena Hotels.

Kuncoro and Suriani (2018), for example, determined the impact of product innovation on the competitive advantage of rabbit meat merchants. Eligible merchants responded to questionnaires from a population of 110 merchants, and they used structural equation modeling with partial least squares for data analysis. According to their study, the competitiveness of companies was statistically and significantly correlated with product innovation. In addition, it was established that product innovation has a direct and significant relationship as a determinant of market driving, which can support sustainable competitiveness. It is necessary to note that the conclusion made in the study are specific to the surveyed rabbit meat merchants and cannot be generalized to the operations of Serena Hotels due inherent differences in the operating and general environment.

CONCEPTUAL FRAMEWORK & HYPOTHESES

From the foregoing review of existing literature and identification of the research gaps thereof, a hypothetical relationship between product innovation and service quality was developed as shown in the Figure 1.
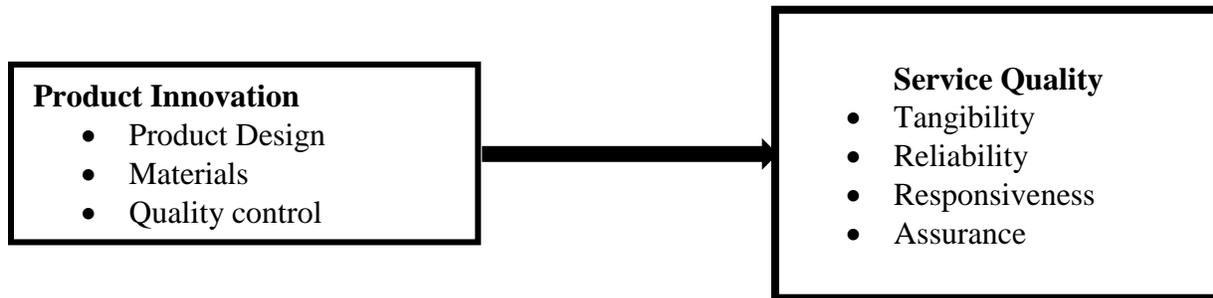
| **Product Innovation**
• Product Design
• Materials
• Quality control | → | **Service Quality**
• Tangibility
• Reliability
• Responsiveness
• Assurance |

Figure 1: Conceptual Framework

The research hypotheses of this study were;

H_0: *Product Innovation has no significant effect on service quality in Serena Hotels, Kenya.*

H_1: *Product innovation has a significant effect on service quality in Serena Hotels, Kenya.*

RESEARCH METHODOLOGY

A quantitative approach was adopted for this study to aid in the evaluation of the causal link between product innovation and service quality.

Research Design

A research design is a plan or procedure for conducting research with the overall goal of balancing costs and methods in relation to the research proposal. It provides a guide for addressing the research questions, as it logically positions the various aspects of the study (Mishra & Alok, 2011). Therefore, for this study, explanatory research design was adopted bearing in mind that it deals with establishing causal relationships between research variables rather than mere association between research variables (Edmonds & Kennedy, 2016). Consequently, this explanatory research design aided the analysis of the effect of product innovation on service quality using field data.

Target Population

According to Creswell (2014), the target population is the set of individuals who essentially are viewed to possess the information regarding the research phenomena at the core of a given study. The survey gathered data on product innovation and service quality from the heads of functional areas in Nairobi Serena Hotel, Serena Beach Resort and Mara Serena Safari Lodge. These three branches operate as strategic business units under Serena Hotels Kenya and therefore managed as distinct profit centres. The functional areas of operations, sales and marketing, finance, and customer care divisions were chosen because of their high

degree of involvement in the process of making and execution of product related decisions that have bearing on service quality. The distribution of the population is shown in Table 1.

Table 1: Distribution of Target Population

Functional Area	Nairobi Serena Hotel	Serena Beach Resort	Mara Serena Safari Lodge	Total	Percentage
Sales & Marketing	13	14	18	45	7.6%
Finance	21	25	27	73	12.4%
Operations	124	138	156	418	70.8%
Customer care	18	20	16	54	9.2%
Total	**176**	**197**	**217**	**590**	**100%**

Source: Serena Hotel Kenya (2024)

It can be observed that staff in the operations divisions with 70.8% comprised the majority of the subjects amongst the four divisions. On the other hand, sales and marketing staff had the smallest contribution of 7.6% to the population of the study. Furthermore, the staff in finance and customer care divisions contributed 12.4% and 9.2% respectively to the overall population size.

Selection of the Sample

Mugenda and Mugenda (2003) while emphasizing the need for determining an appropriate sample for facilitating fair representation of the population proposes that any proportion between 10% and 30% of the population as appropriate for purposes of sample survey. However, Creswell (2014), recommends a sample size ranging between 20% and 30% of the population of study for deductive research. In light of this, a sample of 30% was selected from the population using stratified proportionate sampling technique as shown in Table 2.

Table 2: Distribution of Target Population

Functional Area	Sampling Factor	Nairobi Serena Hotel	Serena Beach Resort	Mara Serena Safari Lodge	Total	%
Sales & Marketing	0.30	4	4	5	13	7.4%
Finance	0.30	6	8	8	22	12.5%
Operations	0.30	37	41	47	125	71.1%
Customer care	0.30	5	6	5	16	9.0%
Total		**52**	**59**	**65**	**176**	**100%**

Source: Serena Hotel Kenya (2024)

Notably, a proportion of 30% was selected from the population in each of the four division in the three branches of Serena Hotels. Taking this into consideration, the majority of

125 subjects were selected from the operations division whereas a minority of 16 subjects were drawn from the customer care division. Furthermore, 22 and 13 subjects in the chosen sample were drawn from the finance and, sales and marketing divisions respectively.

Instrument for Collecting Data

Structured questionnaire constructed on five-point Likert scale was used to collect quantitative data in regarding product innovation and service quality from the selected sample. The questionnaire had set of related closed-ended questions for each of the key research variables besides the information on the demographic attributes of the respondents. The questionnaire was organized into sections for general information, product innovation information and service quality information.

Validity for Research Instruments

The study sought to determine the validity of the questionnaire. content and construct validity were tested. Oluwatayo (2012) defines content validity as an objective evaluation of the test's credibility in terms of intelligibility, comparability, practicability, simplicity, and legibility. The instrument was subjected to the assessment of strategic management experts and their views were incorporated in the revision of the questionnaire. Construct validity, as asserted by Straub, *et al.* (2004), is the extent to which test items cover the entire spectrum of the content domain to which the test is meant to be applicable. Thorough and extensive review of literature on product innovation and service quality ensured content and construct validity of the research instrument.

Reliability

Instrument's reliability refers to extent where a procedure can be repeated several times and still produce similar results (Babbie, 2010). Cronbach Alpha model was used to assess the internal consistency of the set of items adopted for each research variable. According to Sekaran (2006), any set of values exceeding 0.70 reveal a high correlation and considered satisfactory for confirming reliability of the research instrument. The results of reliability analysis are shown in Table 3.

Table 3: Statistics for Reliability Test

Research Construct	Number of Test Items	Cronbach Alpha Coefficients	Decision
Product Innovation	4	0.833	Accept
Service Quality	4	0.786	Accept

As may be noted, product innovation recorded a Cronbach Alpha of 0.833, whereas service quality had an index of 0.786. Comparatively, the value of Cronbach Alpha index reported for the two research variables exceeded the recommended minimum value of 0.70 and as such the research instrument was considered to be reliable for gathering the required data.

Data Collection Procedure

The questionnaires were distributed amongst the 176 subjects selected for this study. The research participants were accorded a period of two weeks within which they were required to respond to the questions in the research instrument. Contact persons were established in the three branches of Serena Hotels Kenya to facilitates subsequent follow up. Frequent follow-up was instituted to ensure a high response rate.

Data Analysis

According, the data gathered from field was carefully coded, keyed in, inspected for possible mistakes, and cleaned up in preparation for conducting required statistical analysis. Frequency counts, percentages, sample means and sample standard deviations were analysed to understand the characteristics of the sample from which the data was gathered. Further, the causal relation between product innovation and service quality was analysed using simple linear regression as shown in equation (i).

$Y = \beta_0 + \beta_1 X + e$ …………………….. *(i)*

Where;

Y = Service quality

X = Product innovation

β_0 = Y-intercept

β_1 = Slope of the regression line

e = Error term

Decision on inferential analysis was based on 95% level of confidence and 5% level of significance.

FINDINGS AND DISCUSSION

Response Rate

The researcher administered 176 questionnaires to the selected staff in the functional areas of operations, sales and marketing, finance, and customer care. The valid questionnaire t received were 121. The results of analysis of response rate are shown in Figure 2.
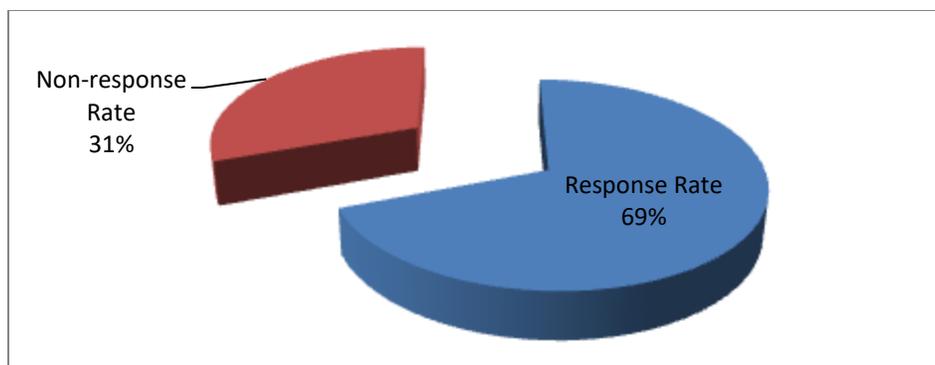
Figure 1: Response Rate

The response rate for this study was 69% whereas the non-response rate was 31%. Accordingly, Kothari (2008) proposes a response rate exceeding 50% as acceptable for descriptive survey recommends a response rate of at least 65% as most appropriate for generalisation of findings. In light of this, the response rate of 69% was appropriate for regression analysis.

Descriptive Statistics

The measures of central tendency and dispersion were analysed to understand the characteristic of responses gathered on product innovation and service quality. In particular, sample mean and sample standard deviation were analysed and their implications discussed.

Product Innovation

Product innovation was measured on the basis of product design, materials and quality control. Responses given by respondents on the set of items constructed on indicators adopted for product design were analysed as presented on Table 3.

Table 3: Descriptive Statistics on Product Innovation

	n	Mean	Std. Deviation
How important do you consider product innovation in enhancing overall service quality	121	4.52	.68
In your experience, product design influence customer satisfaction	121	4.21	.89
Investing in product materials positively affects customer loyalty	121	4.53	.54
Quality control contributes to gaining a competitive edge in the market regarding service quality	121	4.12	.99
Aggregate Score		**4.34**	**0.78**

The aggregate sample mean score reported was 4.34 with a corresponding sample standard deviation of 0.78. The aggregate mean response signified the participants generally agreed that the product innovation practices were considered critical in the creation of value in the surveyed hotels. The corresponding low aggregate sample standard deviation demonstrated that the responses drawn on product innovation were clustered around the mean response. It was noted that investment in product materials had the highest sample mean of 4.53 whereas quality control recorded the lowest sample mean of 4.12. The relevance of product innovation and product design has sample means of 4.52 and 4.21 respectively. The sample means recorded for the different items of product innovation demonstrated that there was agreement amongst participants that distinct aspects characterized the phenomenon of product innovation and were valued aspects of the value creation process in Serena Hotels Kenya. Furthermore, the recorded sample standard deviation ranged between 0.54 and 0.99, implying low level of variability amongst the responses gathered in the survey. Therefore, the sample mean for this survey was suitable for making inferences about the population mean regarding product innovation.

Service Quality

Service quality was measured on the basis of tangibility, reliability, responsiveness and assurance. Responses given by respondents on the set of items constructed on indicators adopted for service quality were analysed as presented on Table 4.

Table 4: Service Quality

	n	Mean	Std. Deviation
Workers are fast in responding to consumer's needs	121	4.14	.99
The company is highly adaptable to accommodate customer changing needs	121	4.03	1.01
How would you rate physical facilities provided by the service provider	121	4.34	.85
The sale canter is easily contacted by customers	121	3.71	1.28
Aggregate Score		**4.06**	**1.04**

The aggregate sample mean score reported for service quality was 4.06 with a corresponding sample standard deviation of 1.04. The aggregate mean response signified the there was general agreement amongst participants that the service quality was a valued outcome in the surveyed hotels. The corresponding aggregate sample standard deviation translated to coefficient of variation of 2.6 percent, signifying low level of variability of the aggregate responses for service quality. It was further observed that aspects that the sale canter is easily contacted by customers attained the lowest sample mean of 3.71, whereas the

highest mean of 4.34 was associated with the aspect regarding the rating of the physical facilities. Additionally, adaptability to customers' needs and the responsiveness of the workers had sample means of 4.03 and 4.14 respectively. The highest standard deviation of 1.01 was associated with a mean of 4.03 translating to low variability of 25 percent. Contrastingly, the lowest standard deviation of 0.99 was associated with a mean of 4.14 equally translating to a low variability of 24 percent. Therefore, the sample mean for this survey was suitable for making inferences about the population mean regarding service quality.

Linear Regression

Linear regression analysis was used to assess the nature of the relationship between product innovation and service quality in Serena Hotels, Kenya. The results were summarised in Table 5.

Table 5: Regression Results

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.942[a]	.888	.881	.24835

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	26.325	1	8.775	142.276	.000[b]
	Residual	3.330	119	.062		
	Total	29.655	120			

	Unstandardized Coefficients		Standardized Coefficients		
	β	Std. Error	Beta	t	Sig.
Constant	.822	.278		2.959	.005
Product Innovation	.682	.074	.788	9.253	.000

a. **Dependent Variable: Service Quality**
b. **Predictors: (Constant), Product Innovation**

The model summary demonstrates that product innovation accounted for 88.8 percent of variation on service quality. However, 11.2 percent of variation in service quality was accounted for by other factors that were not included in this survey. Moreover, the estimated model of service quality was significant as indicated by the F-statistics of 142.276 and a p-value of 0.001. In particular, the survey data resulted in the estimation of model (ii).

Service Quality= 0.822 + 0.788 Product Innovation

According to the results, product innovation has a significant effect on service quality in Serena Hotels, Kenya (β_1=0.788, p-value = 0.002). In particular, a unit increase in product innovation accounts for an increase of 0.788 in service quality in Serena Hotels Kenya. The findings of the study support the postulates of diffusion of innovation theory that highlights that

innovation is adopted when it provides a clear advantage compared to existing products or services, offers ease of use, and demonstrates tangible results (LaMorte, 2016). This theory of innovation diffusion delves into the adoption of technology or innovation within institutions and the speed at which it is embraced. This mostly depends on the decision-makers present and their desire to adopt technology swiftly.

Further, the findings are in line with the findings of Aaker, (2016) to the effect that adoption of new innovative products can help create business value and increase profit compared to firms that emphasize product innovation less. Further, the findings are consistent with confirmation made by Kingsland's (2017) that application of unique product attributes leads to enhanced profitability for the firms as well as the quality of the services they provide. The findings of the study were also in agreement with the observations made by Kuncoro and Suriani (2018) that product innovation is an imperative for service quality and sustained competitiveness.

CONCLUSION AND RECOMMENDATIONS

Product innovation was found to have a positive effect on service quality. It is recommended that significant level of commitment of corporate resources should be made to foster product development endeavours intended to yield appealing product features. The head of marketing division at Serena Hotels should ensure sufficient resources are committed towards improvement of product attributes on the basis of in-depth understanding of customers' needs. In addition, the procurement division should ensure raw materials received from suppliers are high quality in line with customer value proposition. Quality audits should be strengthened to enforce compliance and minimise the variance in product performance.

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