

## Relationship Between Employee Innovativeness and Perceived Service Quality by Government Ministries in Kenya

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### Abstract

Entrepreneurial behaviour is the willingness to render a service to a Kenyan citizen in a pleasant, satisfying manner. It can also be as involving as rebelling against an existing political regime and starting a new nation. In government ministries in Kenya, entrepreneurial behaviour can surface in the form of a government officer discharging their duties in a different and valuable way from the norm. It is against this background that this study sought to establish the influence of employees' innovativeness on perceived service quality by government ministries in Kenya. The specific objective was to analyze the influence of employee innovativeness on perceived service quality by government ministries in Kenya. The study adopted descriptive survey research design. This being a census study; all the executive officers of every ministry were selected to take part in the study as they are perceived to be knowledgeable on the issues under study and for which they are either responsible for their execution or they personally execute them. The questionnaire was pre-tested on pilot respondents who were not part of the study respondents but who were knowledgeable in the study aspects in order to ensure their validity and relevance. The data collected was analyzed using descriptive and inferential statistics. Cronbach's alpha coefficient was used to measure the reliability of the scale, which was used to assess the interval consistency among the research instrument items. The regression results showed that employee innovativeness had significant and positive effect on perceived service quality by government ministries in Kenya. The study recommends that government ministries in Kenya should, therefore, strive to improve on their employees' innovativeness because it was found to have a significant and positive effect on perceived service quality by government ministries in Kenya.

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**Keywords:** Employee Innovativeness, Perceived Service Quality, Government Ministries, Kenya

### 1.1 Background of the study

A major concern for the government of Kenya today is how delivery of quality services by government ministries can be achieved and sustained. The level of accountability among public officials in the management of public affairs has consistently declined since independence. At the same time the efficient and effective delivery of public services to the ordinary Kenyan has continuously deteriorated as evidenced by perennial public complaints about substandard services by the government. There is hence an urgent need for senior government employees who can give new dimensions to managing government ministries in Kenya in order to deliver quality service to the public of Kenya. The government structure put in place in 2013 is indicative of the government's commitment to address this urgent need. Government ministries have been known to offer substandard services to Kenyans, a factor that led to the introduction of performance contracts in government ministries and other government institutions in 2004 Kogei, Magugui, Yano, Chepkemei and Chebet (2013). Globalization and modernization of service delivery systems have too created an increasingly dynamic and competitive work environment. This has resulted to high demand for demonstration of competency by employees in the application of knowledge, skills and experience in work performance and results.

Entrepreneurial behavior has been defined as the study of human behavior involved in identifying and exploiting opportunities through creating and developing new ventures (Bird & Schjoedt, 2009) as well as exploring and creating opportunities while in the process of emerging organizations (Gartner, Carter, & Reynolds, 2010). Entrepreneurial behavior is also increasingly recognized as a proponent to social change and facilitating innovation within established organizations (Kuratko, Ireland, Covin, & Hornsby, 2005). This study

will adopt definition of entrepreneurial behaviour by Kuratko, Ireland, Covin and Hornsby (2005) as, facilitating innovation within established organizations which in this study are government ministries. Employees' innovativeness can be as simple as the willingness to render a service to a Kenyan citizen in a pleasant, satisfying manner or as involving as rebelling against an existing political regime and starting a new nation. In government ministries in Kenya, employees' innovativeness can surface in the form of a government officer discharging their duties in a different and valuable way from the norm.

Thus, this research focused on the utility of the concept of employees' innovativeness in government ministries in delivery of perceived service quality to the public of Kenya. The study tried to examine the usefulness of adopting an employees' innovativeness in government ministries in Kenya.

## 1.2 Statement of the problem

Although government ministries and other government departments in Kenya have been re-organized with a view to attaining agile, anticipatory, problem-solving bodies which can deliver value to the public, the factors contributing to such value and their sustenance have not been investigated. While studies done in other countries indicate a relationship between employees' innovativeness in government organizations and quality service delivery to the public (Morris & Kuratko, 2002; Windrum, 2008; Kreiser *et al.* 2002) there is little research to this effect in Kenya. The aim of this study therefore, was to explore and examine how employees' innovativeness of employees of government ministries of Kenya may influence delivery of perceived service quality to the public that they are intended to serve.

## 1.3 Objective of the study:

The objective of this study was to assess the relationship between employees' innovativeness of government ministries' employees and perceived service quality in government ministries Kenya.

## 1.4 Hypotheses

H<sub>01</sub>: There is no statistically significant relationship between employee innovativeness and perceived service quality by government ministries in Kenya.

## 2.1 Theoretical Review

### 2.1.1 Diffusion of Innovation Theory

The Diffusion of Innovation Theory was first discussed historically in 1903 by the French sociologist Gabriel Tarde (Toews, 2003) who plotted the original S-shaped diffusion curve, followed by Ryan and Gross (1943) who introduced the adopter categories that were later used in the current theory popularized by Everett Rogers in 2003. Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. Diffusion is a special type of communication concerned with the spread of messages that are perceived as new ideas. An innovation, simply put, is "an idea perceived as new by the individual." An innovation is an idea, practice, or object that is perceived as new by an individual or other unit of adoption. The characteristics of an innovation, as perceived by the members of a social system, determine its rate of adoption. The four main elements in the diffusion of new ideas are:

- a) The innovation
- b) Communication channels
- c) Time
- d) The social system (context)

#### a). The innovation

The characteristics which determine an innovation's rate of adoption are:

- i. Relative advantage
- ii. Compatibility
- iii. Complexity
- iv. Trialability
- v. Observability to those people within the social system.

Relative advantage is the degree to which an innovation is perceived as better than the idea it supersedes. The degree of relative advantage may be measured in economic terms, but social prestige, convenience, and satisfaction are also important factors. It does not matter so much if an innovation has a great deal of objective advantage. What does matter is whether an individual perceives the innovation as advantageous. The greater the perceived relative advantage of an innovation, the more rapid its rate of adoption will be.

Compatibility is the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters. An idea that is incompatible with the values and norms of a social system will not be adopted as rapidly as an innovation that is compatible. The adoption of an incompatible innovation often requires the prior adoption of a new value system, which is a relatively slow

process.

Complexity explains the degree to which an innovation is perceived as difficult to understand and use. Some innovations are readily understood by most members of a social system; others are more complicated and will be adopted more slowly. New ideas that are simpler to understand are adopted more rapidly than innovations that require the adopter to develop new skills and understandings.

Triability is the degree to which an innovation may be experimented with on a limited basis. New ideas that can be tried on the installment plan will generally be adopted more quickly than innovations that are not divisible. An innovation that is triability represents less uncertainty to the individual who is considering it for adoption, who can learn by doing.

Observability is the degree to which the results of an innovation are visible to others. The easier it is for individuals to see the results of an innovation, the more likely they are to adopt it. Such visibility stimulates peer discussion of a new idea, as friends and neighbors of an adopter often request innovation-evaluation information about it.

### **b. Communication**

Communication is the process by which participants create and share information with one another in order to reach a mutual understanding. A communication channel is the means by which messages get from one individual to another. Mass media channels are more effective in creating knowledge of innovations, whereas interpersonal channels are more effective in forming and changing attitudes toward a new idea, and thus in influencing the decision to adopt or reject a new idea. Most individuals evaluate an innovation, not on the basis of scientific research by experts, but through the subjective evaluations of near-peers who have adopted the innovation.

### **c. Time**

The time dimension is involved in diffusion in three ways:

#### **i. Innovative-decision Process**

First, time is involved in the innovation-decision process. The **innovation decision** process is the mental process through which an individual (or other decision making unit) passes from first knowledge of an innovation to forming an attitude toward the innovation, to a decision to adopt or reject, to implementation of the new idea, and to confirmation of this decision. An individual seeks information at various stages in the innovation-decision process in order to decrease uncertainty about an innovation's expected consequences. Given that decisions are not authoritative or collective, each member of the social system faces his/her own innovation-decision that follows a 5-step process as stated below:

5-Step Process:

- |                    |                                                                                       |
|--------------------|---------------------------------------------------------------------------------------|
| (1) Knowledge      | person becomes aware of an innovation and has some idea of how it functions.          |
| (2) Persuasion     | person forms a favorable or unfavorable attitude toward the innovation.               |
| (3) Decision       | person engages in activities that lead to a choice to adopt or reject the Innovation. |
| (4) Implementation | person puts an innovation into use.                                                   |
| (5) Confirmation   | person evaluates the results of an innovation-decision already made.                  |

The most striking feature of diffusion theory is that, for most members of a social system, the innovation-decision depends heavily on the innovation-decisions of the other members of the system. This would be of great importance to government ministries in Kenya in helping to enhance an innovation culture in the ministries.

#### **ii) Innovativeness of an individual**

The second way in which time is involved in diffusion is in the **innovativeness** of an individual or other unit of adoption. **Innovativeness** is the degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than other members of a social system. There are five adopter categories, or classifications of the members of a social system on the basis on their innovativeness:

- (a) Innovators – 2.5%
- (b) Early adopters – 13.5%
- (c) Early majority – 34%
- (d) Late majority – 34%
- (e) Laggards – 16%

These are the first 2.5 percent of the individuals in a system to adopt an innovation. Venturesomeness is almost an obsession with innovators. This interest in new ideas leads them out of a local circle of peer networks and into more cosmopolite social relationships. Communication patterns and friendships among a clique of innovators are common, even though the geographical distance between the innovators may be considerable. Being an innovator has several prerequisites. Control of substantial financial resources is helpful to absorb the possible loss from an unprofitable innovation. The ability to understand and apply complex technical knowledge is also needed. The innovator must be able to cope with a high degree of uncertainty about an innovation at the

time of adoption. While an innovator may not be respected by the other members of a social system, the innovator plays an important role in the diffusion process: That of launching the new idea in the system by importing the innovation from outside of the system's boundaries. Thus, the innovator plays a gate-keeping role in the flow of new ideas into a system.

They are next 13.5 percent of the individuals in a system to adopt an innovation. Early adopters are a more integrated part of the local system than are innovators. Whereas innovators are cosmopolites, early adopters are localities. This adopter category, is more than any other, has the greatest degree of opinion leadership in most systems. Potential adopters look to early adopters for advice and information about the innovation. This adopter category is generally sought by change agents as a local missionary for speeding the diffusion process. Because early adopters are not too far ahead of the average individual in innovativeness, they serve as a role-model for many other members of a social system. The early adopter is respected by his or her peers, and is the embodiment of successful, discrete use of new ideas. The early adopter knows that to continue to earn this esteem of colleagues and to maintain a central position in the communication networks of the system; he or she must make judicious innovation-decisions. The early adopter decreases uncertainty about a new idea by adopting it, and then conveying a subjective evaluation of the innovation to near-peers through interpersonal networks.

It is the next 34 percent of the individuals in a system to adopt an innovation. The early majority adopt new ideas just before the average member of a system. The early majority interacts frequently with their peers, but seldom holds positions of opinion leadership in a system. The early majority's unique position between the very early and the relatively late to adopt makes them an important link in the diffusion process. They provide interconnectedness in the system's interpersonal networks. The early majority are one of the two most numerous adopter categories, making up one third of the members of a system. The early majority may deliberate for some time before completely adopting a new idea. "Be not the first by which the new is tried, nor the last to lay the old aside," fits the thinking of the early majority. They follow with deliberate willingness in adopting innovations, but seldom lead.

Late majority is the next 34 percent of the individuals in a system to adopt an innovation. The late majority adopt new ideas just after the average member of a system. Like the early majority, the late majority make up one-third of the members of a system. Adoption may be the result of increasing network pressures from peers. Innovations are approached with a skeptical and cautious air, and the late majority do not adopt until most others in their system have done so. The weight of system norms must definitely favor an innovation before the late majority are convinced. The pressure of peers is necessary to motivate adoption. Their relatively scarce resources mean that most of the uncertainty about a new idea must be removed before the late majority feel that it is safe to adopt.

Are the last 16 percent of the individuals in a system to adopt an innovation. They possess almost no opinion leadership. Laggards are the most localite in their outlook of all adopter categories; many are near isolates in the social networks of their system. The point of reference for the laggard is the past. Decisions are often made in terms of what has been done previously. Laggards tend to be suspicious of innovations and change agents. Resistance to innovations on the part of laggards may be entirely rational from the laggard's viewpoint, as their resources are limited and they must be certain that a new idea will not fail before they can adopt.

### iii) **Rate of Adoption**

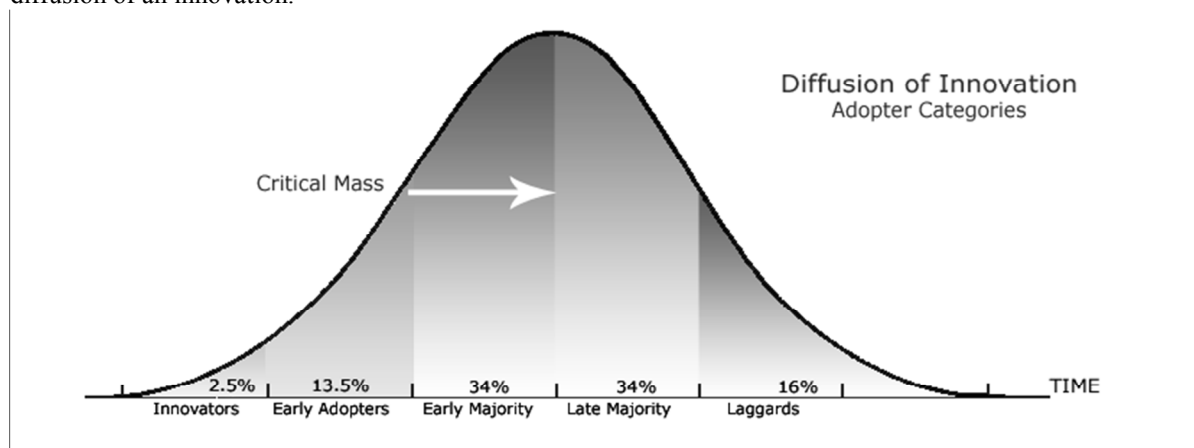
The third way in which time is involved in diffusion is in rate of adoption. The rate of adoption is the relative speed with which an innovation is adopted by members of a social system. The rate of adoption is usually measured as the number of members of the system that adopt the innovation in a given time period. As shown previously, an innovation's rate of adoption is influenced by the five perceived attributes of an innovation.

#### **2.1.2 The social system**

The fourth main element in the diffusion of new ideas is the social system. A social system is defined as a set of interrelated units that are engaged in joint problem-solving to accomplish a common goal. The members or units of a social system may be individuals, informal groups, organizations, and/or sub systems. The social system constitutes a boundary within which an innovation diffuses. How the system's social structure affects diffusion has been studied. A second area of research involved how norms affect diffusion. Norms are the established behavior patterns for the members of a social system. A third area of research has had to do with opinion leadership, the degree to which an individual is able to influence informally other individuals' attitudes or overt behavior in a desired way with relative frequency. A change agent is an individual who attempts to influence clients' innovation-decisions in a direction that is deemed desirable by a change agency.

A final crucial concept in understanding the nature of the diffusion process is the critical mass, which occurs at the point at which enough individuals have adopted an innovation that the innovation's further rate of adoption becomes self-sustaining (the shaded area in Figure 1.2 depicts the critical mass). The concept of the critical mass implies that outreach activities should be concentrated on getting the use of the innovation to the point of critical mass. These efforts should be focused on the early adopters, the 13.5 percent of the individuals

in the system to adopt an innovation after the innovators have introduced the new idea into the system. Early adopters are often opinion leaders, and serve as role-models for many other members of the social system. Early adopters are instrumental in getting an innovation to the point of critical mass, and hence, in the successful diffusion of an innovation.

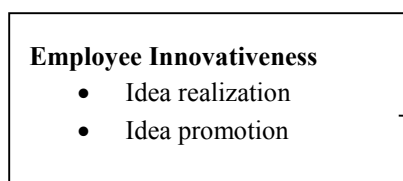


**Fig. 1.2 - Adopter categorization on the basis of innovativeness**

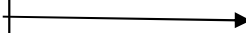
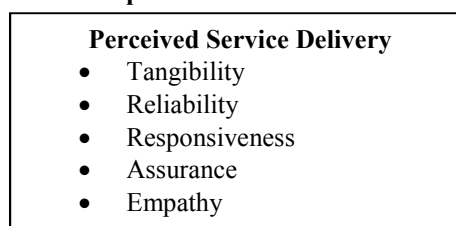
Government ministries could use this model as a valuable change model for guiding adoption of employee innovativeness in their work culture. The model will be instrumental in helping government ministries to understand how employee innovativeness can be modified and presented in ways that meet the needs of all employees who adopt innovative behaviour. The model will enhance the government’s understanding of the various elements of new ideas diffusion and thereby give the various elements that support and resources that they may require to effectively contribution to the whole process of new idea diffusion.

**The conceptual Framework**

**Independent variable**



**Dependent variable**



**3.1 Methodology and Design**

The study used descriptive correlational research design as it sought to describe and evaluate the relationships among the study variables namely employees’ entrepreneurial behavior, quality service delivery and moderating factors. According to Kothari (2010) a research design is the arrangement of conditions for collection, measurement and analysis of data that aims to combine relevance to the research purpose. Descriptive correlational survey research design allows the researcher to describe and evaluate the relationship between the study variables which are associated with the problem. Correlational survey design also allows a researcher to measure the research variables by asking respondents’ questions and then examining their relationship O’Connor (2011). The study also used cross sectional design in that it cut across all the government ministries in Kenya. Cross-sectional studies have been found by Raman and Kumar (2008) to be robust for effects of relationship studies. Therefore, this study was a cross-sectional research since the research respondents were interviewed only once and it was more of a snap shot or one-shot study.

**3.2 Population**

According to Pole and Lampard (2002), a target population is classified as all the members of a given group to which the investigation is related, whereas the accessible population is looked at in terms of those elements in the target population within the reach of the study. This was a census study since all the eighteen government ministries in Kenya were studied. According to Marino (2003); in circumstances where the sample is whole, the result of a given study will be a census. According to Kenya Gazette (2013) there are 18 ministries in Kenya and every ministry has four executive officers. The four executive officers of every ministry were selected to take part in the study as key informants because they are perceived to be knowledgeable on the issues under study and for which they are either responsible for their execution or they personally execute them.

**Table 3.1: Population of Study**

Category	Population
Number of Government Ministries	18
Number of Executive Officers per Ministry	4
<b>TOTAL</b>	<b>72</b>

### 3.3 Data Collection Instruments

The data collection instruments in this study were a questionnaire and interview. The researcher collected both primary and secondary data for this study. Primary data was collected through the use of key informant method using a self-administered semi-structured questionnaire (Appendix B) and interview, which was conducted by the researcher herself (Appendix C). The researcher interviewed executive officers (administration) to further investigate their responses (McNamara, 1999). 12 Interview questions were used to gather data on size of ministry, nature of work, employee innovativeness, employee pro-activeness, employee risk-taking, information communication technology and service quality. Interviews in this study was to allow for significant probing vis-à-vis a two-way communication that would provide in-depth descriptions of areas discussed. The researcher recorded the data from the interview using note-taking method. All the executive officers of every ministry were selected to take part in the study as they were perceived to be knowledgeable on the issues under study and for which they were either responsible for the execution or they personally executed. The views of key informants are widely used in marketing and business related studies (O'sullivan & Abela, 2007). Secondary data on the other hand, was obtained from the already written literature on the government ministries which was used to cross-validate and check the consistency of the questionnaire responses. Documentary analysis was also used to gather background information by reviewing literature relevant to the study. This involved a review of secondary data from sources such as books, journals, ministerial reports, ministries' operation plans and Strategic Plans (SP) and other relevant documents from authoritative sources on the topic under study, 'Drop and pick' technique was used to administer the questionnaire by the researcher personally.

### 3.4 Data Analysis

The questionnaires were administered to all the 18 government ministries. The researcher edited them to ensure their completeness and consistency, Coding and classification then followed to ensure sufficient analysis. The data was entered and analyzed by simple descriptive analysis using statistical package for social scientists (SPSS, version twenty one (21), computer software to generate cumulative frequencies and percentages. The data was analyzed using both descriptive and inferential statistics. The software package was chosen because it is the most used package for analyzing survey data. Besides being the most used package, the software has the advantage of being user friendly (Mugenda, 2003).

#### 3.4.1 Qualitative Analysis

Qualitative data was analyzed qualitatively and more specifically, the data which could not be measured using scientific methods. Qualitative data dealt with descriptions of data that could be observed but could not be measured. In this study direct observation of service quality by government ministries was done and the relevant documents including the internet were scrutinized. The researcher analyzed research information gathered from interviews with Executive Officers (Administration) to establish patterns created by words, phrases, views, and attitudes to form a theme, and to which numbers were assigned to make them measurable.

#### 3.4.2 Quantitative Analysis

Quantitative data was analyzed using both the descriptive and inferential statistics. Descriptive statistics was used to deduce any patterns, averages and dispersions in the variables. They included measure of locations (mean) and measure of dispersions (standard error mean). These measures were used to describe the characteristics of the collected data. Inferential statistics was used to determine the relationship between the study variables and these inferential statistics including correlation, analysis of variance (ANOVA) and regression. These were used to assess the association among the study variables and test the hypotheses at 95 percent confidence level (level of significance,  $\alpha = 0.05$ ). The relationship between entrepreneurial behavior, perceived quality service, control variable and moderating factors in government ministries was expected to follow a regression model of the nature:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where:

Y = dependent variable (perceived service delivery).

$\beta_0$  = Constant or intercept which is the value of dependent variable when all the independent variables are zero.

$\beta_{1-4}$  = Regression coefficient for each independent variable.

- $X_1$  = Employee innovativeness
- $X_2$  = Employee pro-activeness
- $X_3$  = Employee risk taking
- $B_4X_4$  = Work environment (Moderating Variable)
- $\epsilon$  = Stochastic or disturbance term or error term.

#### 4.1 Study Findings

Employee Innovativeness was assessed by nine statements and Table 4.1 presents the relevant result which shows that on the scale of 1 to 5 (where 5= the greatest extent and 1 is the lowest extent).

**Table 4.1 Intensity of Employee Innovativeness on Perceived Service Quality**

Employee Innovativeness	N	Mean	Std.		
			Deviation	Min	Max
Employees in my ministry are allowed to suggest new and better ways of serving the public.	72	3.550	.243	3.307	3.793
The ministry encourages employee innovativeness.	72	3.730	.134	3.596	3.864
My ministry is quick to use new methods.	72	3.750	.089	3.661	3.839
In my ministry, developing one's own ideas is encouraged for the improvement of the public sector.	72	3.700	.144	3.556	3.844
Senior Public Officers in my ministry are aware and very receptive to employees' ideas and suggestions from employees.	72	3.810	.029	3.781	3.839
Promotion, salary increment, or commendation usually follows the development of new and innovative ideas.	72	3.400	.280	3.120	3.680
Money is often available to get new project ideas off the ground.	72	3.150	.013	3.137	3.163
Individuals with successful innovative projects receive additional reward and compensation for their ideas and efforts beyond the standard reward system.	72	3.250	.993	2.257	4.243
Senior managers encourage innovators to bend rules and rigid procedures in order to keep promising ideas on track.	72	3.254	.993	2.261	4.247
Overall mean score=3.510					

Key: 1= Lowest extent; 2= Lower extent; 3= Indifference; 4= Great extent; 5= Greatest extent

The study results revealed that senior public officers in respondent's ministry are aware and very receptive to employees' ideas and suggestions from employees. It had the highest mean score of 3.810 followed by the respondent's ministry is quick to use new methods with a mean score of 3.750. However, money is often available to get new project ideas off the ground (mean 3.150) and individuals with successful innovative projects receive additional reward and compensation for their ideas and efforts beyond the standard reward system (mean 3.250) had moderate intensity. Overall mean of the employee innovativeness was considerably high (mean 3.510).

#### 4.2 Perceived Service Quality

The perceived service quality was assessed through tangibility, reliability, responsiveness, assurance and empathy and this is presented in Table 4.2.

**Table 4.2 Perceived Service Quality**

Perceived Service Quality	N	Mean	Std. Deviation	Min.	Max.
Tangibility	72	4.452	.071	4.381	4.523
Reliability	72	2.950	.657	2.203	3.607
Responsiveness	72	3.050	.687	2.363	3.737
Assurance	72	4.050	.203	3.847	4.253
Empathy	72	2.400	.743	1.657	3.143
Overall mean score=3.380					

Key: 1= Lowest extent; 2= Lower extent; 3= Indifference; 4= Great extent; 5= Greatest extent

The results in Table 4.2 show that tangibility had the highest mean score (Mean 4.452) and it was followed by assurance (mean 4.050). However, Responsiveness (mean 3.050) and Reliability (mean 2.950) all had moderate intensity. Overall, the intensity of perceived service quality measures was considerably high (mean 3.380).

#### 4.3 Correlation Analyses

Pearson product moment correlation analysis was conducted to establish the relationship between the study variables. The following section presents the correlation analysis results between employee innovativeness and perceived service quality.

### 4.3.1 Correlation between Employee Innovativeness and Perceived Service Quality

The strength of the relationship between employee innovativeness and perceived service quality was determined using Pearson product moment correlation. As shown in Table 4.3 below, there is a positive correlation between all the measures of employee innovativeness and perceived service quality and some of them had significant and positive correlation with perceived service quality even at 99% confidence level  $p < 0.01$  level (2-tailed).

**Table 4.3 Correlation Results of Employee Innovativeness and Perceived Service Quality**

Employee innovativeness	Perceived service quality	The ministry encourages employee innovativeness.	In my ministry, developing one's own ideas is encouraged for the improvement of the public sector.	Senior Public Officers in my ministry are aware employees' ideas and suggestions.	Promotion, salary follows the development of new and innovative ideas.	Money is often available to get new project ideas off the ground.	Individuals with successful innovative projects receive additional reward and compensation.
Perceived service quality	1						
The ministry encourages employee innovativeness.	.324*	1					
My ministry is quick to use new methods.	.361*	.430*	1				
In my ministry, developing one's own ideas is encouraged for the improvement of the public sector.	.736*	.428*	.396*	1			
Senior Public Officers in my ministry are aware employees' ideas and suggestions.	.624**	.236*	.284*	.289*	1		
Promotion, salary follows the development of new and innovative ideas.	.289*	.269*	.356*	.523*	.230*	1	
Money is often available to get new project ideas off the ground.	.634**	.324*	.430*	.356*	.523*	.289**	1

\*\*  $p < 0.01$  level (2-tailed), \*  $p < 0.05$  level (2-tailed).

To test for multicollinearity, the correlation between the independent variables was considered. According to Cooper and Schindler (2003) multicollinearity problem occurs if the correlation coefficient between any two independent variables is greater than 0.8. As is evident from the results in Table 4.3, all the coefficients were below 0.8.

### 4.4 Hypotheses Testing

The objective of the study was to establish the relationship between employee innovativeness and perceived service quality by government ministries in Kenya. The study had postulated that the relationship between employee innovativeness and perceived service quality by government ministries in Kenya was not statistically significant. The aggregate mean score of perceived service quality (dependent variable) were regressed on the aggregate mean score of employee innovativeness (Independent variable) and the relevant results presented in Table 4.4.



**Table 4.4 Regression Results for Employee Innovativeness and Perceived Service Quality**

**a) Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.429(a)	.184	.224	.07821

a Predictors: (Constant), Employee innovativeness

b Dependent Variable: Perceived service quality.

**ANOVA(b)**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.829	1	.276	.452	.025(a)
	Residual	3.671	71	.612		
	Total	4.500	72			

a Predictors: (Constant), Employee innovativeness

b Dependent Variable: Perceived service quality.

**c) Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	3.916	5.993		5.155	.004
	Employee innovativeness	.209	1.637	.429	2.571	.000

a Dependent Variable: Perceived service quality

Lever of significance,  $\alpha = 0.05$

The study results revealed a statistically significant positive linear relationship between employee innovativeness and perceived service quality ( $\beta = .429$ ,  $p$ -value = 0.025). The relationship was statistically significant because the  $p$ -value is less than the set value of 0.05 ( $p$  – value = 0.025). The regression results also showed that employee innovativeness had explanatory power on perceived service quality by government ministries in Kenya in that it accounted for 18.4 percent of its variability (R square = 0.184) hence the study rejected hypothesis  $H_{01}$ . At the individual level, all the indicators of employee innovativeness had positive and significant effect on perceived service quality since the ANOVA results show that the relationship between employee innovativeness and perceived service quality had a  $p$ -value of 0.025 which is less the 0.05.

Arising from the results in Table 4.4, the resulting simple linear regression model that can be used to predict the level of perceived service quality by government ministries in Kenya for a one standard deviation improvement in employee innovativeness can be expressed as:

$$PSQ = 4.916 + 0.429EI$$

Where:

EI is the employee innovativeness

PSQ = perceived service quality

$\varepsilon$  is the error term- random variation due to other unmeasured factors.

The standardized beta coefficient 0.429 represents the expected improvement in perceived service quality for a unit standard deviation improvement in employee innovativeness. This means that, holding other factors constant, a one standard deviation improvement in employee innovativeness would raise the level of perceived service quality by a factor of approximately 0.429 of a standard deviation. This is in agreement with Mutlu (2004) in his study, “Line managers’ influence on innovative behavior of employees” conducted at the University of Twente, Netherlands quotes Rosenberg, 2004 that innovation supports a long list of company goals, like increased profitability, higher revenue, costs containment and greater market share. Innovation means growth and the proof is in the numbers. The study affirms the fact that innovation is important to companies in order to grow.

**4.5 Discussion**

The study has found out that there was a statistically significant positive linear relationship between employee innovativeness and perceived service quality ( $\beta = .429$ ,  $p$ -value = 0.025). The relationship was statistically significant because the  $p$ -value is less than the set value of 0.05 ( $p$  – value = 0.025) and this concurs with Parzefall *et al* (2008) study on employee innovativeness in organizations, where their study provided information on the level of service quality offered by hotels in Pretoria. The aim and objectives were to measure the current

level of service quality offered by the hotels, to identify any shortcomings with regard to service quality and to highlight areas which hotels needed to focus to ensure quality service. The study provides a better understanding of the organizational, job, team and individual factors and processes that assist organizations in supporting employee innovativeness and developing better insights into how organizational performance can be enhanced. The study appreciates that in order to produce technical and product innovations, there needs to be processes and administrative human resource management innovations that enable support of employees.

### 5.1 Summary of the Findings

The study sought to establish the relationship between employee innovativeness and perceived service quality by government ministries in Kenya. The study found out that there is relationship between employee innovativeness and perceived service quality by government ministries in Kenya and this concurs with De Jong and Den Hartog, (2008) whose study concludes that innovative employee behavior is desirable and that it is important that line managers make employees know that innovative behavior is desirable and also make sure that the climate is innovative. Mutlu (2014), appreciates that both psychological and organizational climates are crucial in creating innovative behaviours among employees.

### 5.2 Conclusion

Based on the results obtained from the results of the study, the study concluded that there was a relationship between employee innovativeness and perceived service quality by government ministries in Kenya and the relationship was positive and statistically significant ( $p < 0.05$ ). This means that government ministries should make efforts to encourage employee innovations because it has been found by this study that employee innovativeness has a positive effect on perceived service quality by government ministries in Kenya.

### 5.4 Recommendation

Based on the findings and conclusions of the study, the following recommendations were made: The study recommends that the government ministries in Kenya should therefore strive to improve on their entrepreneurial behaviour because it has been found to have a significant and positive effect on perceived service quality by government ministries in Kenya.

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