Assessment of the joint influence of customer information management, hotel personnel characteristics and usage of technology on patronage of hotels in Akwa Ibom State

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ABSTRACT

The study sought to investigate the joint influence of customer information management, hotel personnel characteristics and usage of technology on patronage of hotels in Akwa Ibom State. The study made use of survey design. The study area was Akwa Ibom State. The Population for this study consisted of all the people in Akwa Ibom State of Nigeria who have at one time or the other made a choice of hotel reservation. This is irrespective of the demographic variables or social status. The population of the hotels is made up of all registered three (3) star categories of hotels in the three senatorial districts. A pilot survey revealed that there are twenty-one registered three (3) star categories of hotels across the three senatorial districts. The sample size of 39 represents the number of respondents from each hotel. In all the senatorial district a total number of 819 respondents were contacted from the 21 hotels in the three senatorial districts. The sample procedure for selecting the respondents was the Convenience sample method. The main instrument used for the study is a research questionnaire titled "Customer Relationship Management in Hospitality Industry Questionnaire (CRMHIQ). The research instrument was subjected to validity test by the supervisor and other experts in the field of study. The Cronbach's alpha (coefficient alpha) was used in testing the reliability of the instrument. This was done using Statistical Package for Social Science (SPSS) to calculate the coefficient alpha. Alpha levels of 0 .80 to 0.89 were considered good. Based on the findings of the research work, it was concluded that few hotels in Akwa Ibom State practice customer relationship management while most hotels do not practice it. Patronage of hotels in Akwa Ibom state is significantly related to technology. One of the recommendations made was that The management of hotels should consider the need to have adequate knowledge of the customer data and manage them effectively as well as organising workshop for their workers on how to improve upon their attitude towards customers for continued patronage.

KEYWORDS: Customer information management, usage of technology, Patronage, hotel personnel characteristics

Introduction

Customer satisfaction is a business philosophy which creates value for customers, anticipates and manages their expectations, and demonstrates ability and their responsibility to satisfy their needs, (Domininic and Guzzo, 2010). Quality of service and customer satisfaction is critical factors for the success of any business (Groonoos, 1990). Valdani (2009) points out that "enterprises exist because they have a customer to serve". The key to achieving sustainable

advantage lies in delivering high quality service that results in satisfied customers (Shemwell *et al.*, 1998). To win customers and encourage them to stay loyal or repurchase the service, companies must meet and satisfy customer needs by not being only reactive but proactive. They should also be interested in finding new ways and means to satisfy the customers. Most companies are aiming for good customer relationship which means better service to the customer thereby preventing the customer from being promiscuous. A lot of companies are not just attracting customers, but are working at building long-term relationships with them (both local and foreign customers). It is worthy to note that there are other variables that can affect hotel patronage like quality of service, hotel reputation, physical environment, security consideration to mention but a few. This work explores customer relationship management impact on the patronage of hotels in Akwa Ibom state.

Customer relationship management systems are customer relationship management platforms. The goal of Customer relationship management is to track, record, store in data bases and manage customer information in a way that increase customer relations. Hotels cannot be left out of Customer relationship management given the number of customer they interact with on daily basis and their importance to the economy. Hotel business is one of the fastest growing businesses in Akwa Ibom state, apart from its primary function of providing accommodation for tourist; it is a source of revenue generation for the state government and growth of the economy of the country. Therefore, effective management of these customers is of paramount importance hence this study of customer relationship management in hotels in Akwa Ibom State.

Statement of the Problem

Modern Customer relationship management strategy is all about capturing customers' heart and share more than his mind share by offering a differentiating value preposition through various innovative ideas. The failure rate of customer relationship is high in the hospitality industry; therefore, this material will serve as a useful tool for the adaptation of proper customer relationship management in the hospitality industry. It is on this ground that the researcher aims at finding the influence of customer relationship management on the patronage of hotels in Akwa Ibom State.

Objective of the Study

The main objective of this study is to investigate the influence of customer relationship management on the patronage of hotels in Akwa Ibom State. Other specific objectives are to:

1.   Examine how technology relates to patronage of Hotels in Akwa Ibom State

2.   Investigate the joint influence of customer information management, hotel personnel characteristics and usage of technology on patronage of hotels in Akwa Ibom State.

Research Questions

1.   How does the technology impact on patronage of hotels in Akwa Ibom State?

2.   Is there any relationship between customer information management, hotel personnel characteristics and the technology on one hand and patronage of hotels in Akwa Ibom State on the other hand?

Hypothesis

$H0_1$: Patronage of hotels in Akwa Ibom state is not significantly related to technology.

$H0_2$: There is no joint influence of customer information management, hotel personnel characteristics, technology and patronage of hotels in Akwa Ibom State.

Literature Review

Information and Communication Technology (ICT) Role

Like many new technologies, customer relationship management has been accompanied by vendor hype and stories of implementation failure. Chaffy (2003) presents a three stage model of customer relationship management which shows how customer relationships can be managed. His model proposes that customers are first acquired via clear communication of a powerful value proposition. They are retained via good service, and the relationship extended via the delivery of tailored products/services to clearly defined customer segments. This view means that customer relationship management uses information and communications technology (ICT) to gather data, which can then be analysed to provide the information required to create a more personal interaction with the customer (Swift, 2001). From an operations perspective, Bose (2002) pointed out that customer relationship management is an integration of technologies and business processes that are adopted to satisfy the needs of a customer during any given interaction. Whilst the potential benefits are attractive, customer relationship management implementation must be managed carefully to deliver results (Swift, 2001).

Data warehouse and data mining are the most popular and highly needed systems for providing customer relationship management capabilities or else for defining, developing and managing "segment of one". This is because by helping to wade through volumes of information ad decipher meaning, patterns and relationships from many seemingly unrelated bits of data, they are necessary and valuable tools for trying to determine customer demographics, buying patterns, market segments, contribution margins, customer lifetime, etc. ICT is an instrument for gathering and storing customer data (e.g. EPOS system, website analysis IBM systems), providing ways for one to one interactions. E.g. website, call centre, kiosks etc., as well as identifying ways for disseminating and accessing information across the organization. However, to achieve the latter, a new ICT infrastructure is required that would enable the creation of consolidated customer databases and overcome limitations created by functional isolated digital "field-dooms".

Customer Relationship Management Technologies

Customer relationship management technologies are rapidly evolving and are providing companies a collection of tools to use in order to enhance their customer relationships. According to Stone (2000) there are two main forces that influence the need for customer relationship management technologies to support the completion of customer relationship management, see below: -

(a)   The need for higher quality in customer relationship management in order to meet the needs of the customers relationship management systems are increasingly being used to arrange companies' resources in a proper order.

(b)   The need for greater productivity in customer relationship management. Customer relationship management systems are given the possibility to automate work previously done by hand (Stone, 2000). According Trepper (2000) there are three crucial requirements that need to be fulfilled by customer relationship management system. These are: -

(1)   Provide a consistent and unified view of each customer for every interaction.

(2)   Provide the customer with a complete view of the company, irrespective of how the customer contacts the company.

(3)   Enable the sales, marketing and service staff to perform their tasks more like a team, leading to reduced costs and increased efficiency (Trepper, 2000).

Functional Categories of Customer Relationship Management Technology

The customer relationship management technologies can be divided into three functional categories, operational customer relationship management, analytical customer relationship management, and collaborative customer relationship management (Trepper, 2000).

Operational Customer Relationship Management

This category includes customer facing applications that integrate font, back, and mobile offices, with the purpose to increase the efficiency of customer interactions (Trepper, 2000). This involves automating business operations processes, such as order management, customer service, marketing automation, sales force automation, and field service. In order to succeed employees must have the right skills and the company must have a customer centric focus (Lawrence, 2001).

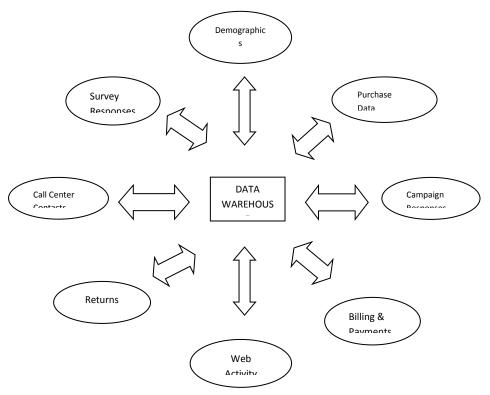**Analytical Customer Relationship Management**

This category involves applications that analyze customer data generated by operational tools (Trepper, 2000). The data is often stored in a data warehouse, which can be described as a large repository of corporate data, the data stored in the data warehouse shall give the company information that will allow them to provide value to their customers (Dyche, 2002). Hence, it is crucial to capture the right data, a process must be accomplished with great customer care and understanding (Newell, 2000). A data warehouse in more detailed described below.

Data Warehouse

In order to provide a complete customer profile, or as Dyche (2002) states "a single version of the truth", all data must be stored in a centralized cross functional database. The database is called a data warehouse, where current and historic information moves in and out. The data can be collected from internal company sources. A data warehouse can store large amounts of data, which enables a company to compare customer behavior over time (Dyche, 2002). The data warehouse constitutes an important part of customer relationship management, since integrated data is necessary in order to make the right decisions on how to serve the customers. If the data is necessary in order to make the right decisions on how to serve the customers. If the data is not

integrated the view of the customer relationships is based on a subset of the customers' actual interactions with the company, resulting in a false view of the customer.

Integrated customers on a warehouse (Dyche, 2002)

Customer Relationship Management and Customer Loyalty

The customer is god (Bose, 2002), an effective customer relationship management is able to please this god by placing him at the level that makes your business customer centric in the most practical sense. Customer satisfaction and loyalty occurs since customers find each company to be more responsive and more in touch with their specific needs. The topic of loyalty has received increased attention in tourism and hospitality research in recent years (Bowen and Shoemaker, 1998). Research on loyalty in general, however, dates back much earlier. For an organization, loyal customers are the most profitable types of customers since they tend to spend more over a long time period. The "lifetime" value of loyal customers can be enormous (Reichheld and Sasser, 1990). At the same time costs can be substantially decreased. Furthermore, loyal customers represent a source of positive word of mouth communication, often resulting in referral business. For a customer, on the other side, loyalty to one organization reduces the risk of service variability, allows for the development of a social rapport with the provider, and the customization of services to his/her specification (Berry, 1995). As Berry said loyalty can be divided, for example, into levels based on purchase frequency, visit frequency, customer recommendations, product recognition, and deal periods. Levels can be represented numerically by classifications such as: -

(1)   Suspect: Person who hasn't purchased yet registered as a customer.

(2)   Prospect: Person who hasn't purchased but inquired about a product with a higher degree of interest.

(3)   First Time Customer: Person who has purchased a first time

(4)   Repeat Customer: Person who has purchased more than once

(5)   Client: Person who has purchased numerous times, especially over different products within those available from the company.

(6)   Advocate Customer: A client who furthers the relationship by recommending other customer.

(7)   Disqualified Prospect: A person whose interest or activity indicates less than arranged count as a suspect prospect.

(8)   Inactive Customer: A person who has no purchase activity over a pre-determined window of time falls outside the window of measurement indicative of a first time customer or repeat customer.

(9)   Inactive Client: A person who has no purchase activity over a predetermined window of time, which falls outside the window of measurement indicative of an advocate or client.

Hotel Personnel Attitude and Their Role in Crm

Attitude is evaluative statements or judgments concerning objects, people or events either favorable or unfavorable. They reflect how we feel about something. When I say "I like my job", I am expressing my attitude about work.

The Components of an Attitude

Affective Component: The opinion or belief segment of an attitude.

Behavioral Component: An intention to behave in certain way toward someone or something.

There are thousands of personnel attitudes; this work focuses attention on work related attitudes. These tap positive or negative evaluations that employees hold about aspects of their work.

Job Satisfaction: A positive feeling about one's job resulting from an evaluation of his characteristics. A person with a high level of job satisfaction holds positive feeling about his/her job, while a person with low level holds negative feelings.

Job Involvement: The degree, to which a person identifies with a job, actively participates in it, and considers performance important to self worth.

Job involvement is related to job satisfaction which measures the degree to which people identify psychologically with their job and considered their perceived performance important to self worth.

Organizational Commitment: The degree to which an employee identifies with a particular organization and it goals and wishes to maintain membership in the organization.

Perceived Organizational Support: The degree to which employee believes an organization values their contribution and cares about their well-being.

Employee Engagement: An individual's involvement with satisfaction with enthusiasm for the work he or she does.

Methods

This study made use of survey design. Akwa Ibom State was adopted as the study area.The State is made of 31 local government areas with Uyo as the State capital. There are three senatorial districts namely, Uyo, Eket and Ikot Ekpene. The Population for this study consisted of all the people in Akwa Ibom state of Nigeria who have at one time or the other made a choice of hotel reservation. This is irrespective of the demographic variables or social status. The population of the hotels is made up of all registered three (3) star categories of hotels in the three senatorial districts. A pilot survey revealed that there are twenty-one registered three (3) star categories of hotels across the three senatorial districts. Given the largeness of the population, it was practically impossible to use the whole population for the study. To this end, a sample of the population was selected to represent the population. The sample size of 39 represents the number of respondents from each hotel. In all the senatorial district a total number of 819 respondents were contacted from the 21 hotels in the three senatorial districts. The sample procedure for selecting the respondents was the Convenience sample method. The main instrument used for the study is a research questionnaire titled "Customer Relationship Management in Hospitality Industry Questionnaire (CRMHIQ). The research instrument was subjected to validity test by the supervisor and other experts in the field of study. The Cronbach's alpha (coefficient alpha) was used in testing the reliability of the instrument. This was done using Statistical Package for Social Science (SPSS) to calculate the coefficient alpha. Alpha levels of 0 .80 to 0.89 were considered good. The data from this study was first assembled, edited and coded in preparation for analysis. The study required the use of multivariate analysis because it involves more than two variables. With this, the study employed the multiple regression model in analyzing the data.

Results and Discussion

Research Question One: The research question sought to find out if the hotel use of information technology impacts on patronage of hotels. In order to answer the research question, descriptive analysis was performed on the data collected as shown in table 1.

Table 1: Descriptive analysis of the extent to which the hotel use information technology impact on patronage of hotels in Akwa Ibom State

Variable	N	Arithmetic mean	Expected mean	R	Remarks
Hotel use information technology		22.17	22.5		
	900			0.86*	*Strong to Perfect Relationship
Patronage of hotels in Akwa Ibom State		20.39	17.5		

Source: Field Survey

Table 1 presents the result of the descriptive statistics of the extent to which hotel use information technology impact on patronage of hotels in Akwa Ibom State. The two variables were observed to have strong to perfect relationship at 86%. The arithmetic mean for hotel use of information technology 22.17 was observed to be greater than the expected mean score of 22.5. In addition to that, the arithmetic mean as regards patronage of hotels 20.39 was observed to be higher than the expected mean score of 17.5. The result therefore means that there is remarkable

relationship between hotel use information technology and patronage of hotels in Akwa Ibom State.

Research Question Two: The research question sought to find out if there is any relationship between customer information management, hotel personnel characteristics and the technology on one hand and patronage of hotels in Akwa Ibom State. In order to answer the research question, descriptive analysis was performed on the data collected (see table 2).

Table 2: Descriptive analysis of the relationship between relationship between customer information management, hotel personnel characteristics and the technology on one hand and patronage of hotels in Akwa Ibom

Variable	N	Arithmetic mean	Expected mean	R	Remarks
Customer information management	900	18.11	15	0.86*	*Strong to Perfect Relationship
Patronage of hotels in Akwa Ibom State		20.39	17.5		
Hotel personnel characteristics	900	17.77	12.5	0. 85*	*Strong to Perfect Relationship
Patronage of hotels in Akwa Ibom State		20.39	17.5		
Hotel use information technology	900	22.17	22.5	0.86*	*Strong to Perfect Relationship
Patronage of hotels in Akwa Ibom State		20.39	17.5		

Source: Field Survey

Table 2 presents the result of the descriptive statistics of theextent to which hotel use information technology impact on patronage of hotels. The three independent variables (Customer information data management, Hotel personnel and Hotel use information technology) were each observed to have strong to perfect relationship at 86%, 85% and 86% respectively with the dependent variable (Patronage of hotels in Akwa Ibom State). The arithmetic mean for customer information data management, hotel personnel and for hotel use information technology (17.77, 18.11 and 22.17) were observed to be greater than the expected mean score of (15, 12.5 and 22.5 respectively). In addition to that, the arithmetic mean as regards patronage of hotels 20.39 was

observed to be higher than the expected mean score of 17.5. The result therefore means that there is remarkable relationship between information data management, hotel personnel, usage of information technology and Patronage of hotels in Akwa Ibom State.

Hypothesis One: The null hypothesis states that patronage of hotels in Akwa Ibom state is not significantly related to technology. In order to test the hypothesis simple regression analysis was performed on the data, (see table 3).

TABLE 3: Regression analysis of the relationship between patronage of hotels in Akwa Ibom State and the usage of technology.

Model	R	R Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.86	0.74	0.74	0.83	0.74

*Significant at 0.05 level; df= 898; N= 900; critical R-value = 0.088

The table shows that the calculated R-value 0.86 was greater than the critical R-value of 0.088 at 0.5 alpha level with 898 degree of freedom. The R-square value of 0.74 predicts 74% relationship between relationship between patronage of hotels in Akwa Ibom State and the usage of technology. This rate of percentage is highly positive and therefore means that there is significant relationship between patronage of hotels in Akwa Ibom State and the usage of technology. It was also deemed necessary to find out the extent of the variance of each class of independent variable as responded by each respondent (see table 4).

Table 4: Analysis of variance of the relationship between patronage of hotels in Akwa Ibom State and the usage of technology.

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1795.47	1	1795.47	2607.16	.000b
Residual	618.42	898	0.69		
Total	2413.89	899			

The above table presents the calculated F-value as (2607.16) and the computer critical f-value as (.000). Being that the computer critical f-value (000) is below the probability level of 0.05, the result therefore means that there is significant relationship between patronage of hotels in Akwa Ibom State and the usage of technology.

Hypothesis Two: The null hypothesis states that there is no joint influence of customer information management, hotel personnel characteristics, technology and patronage of hotels in Akwa Ibom State. In order to test the hypothesis multiple regression analysis was performed on the data, (see table 5).

TABLE 5: Multiple regression of the joint influence of customer information management, hotel personnel characteristics, technology and patronage of hotels in Akwa Ibom State

Model	R	R Square	Adjusted R Square	Std. error of the Estimate	R Square Change

| 1 | 0.97 | 0.93 | 0.93 | 0.422 | 0.93 |

***Significant at 0.05 level; df= 898; N= 900; critical R-value = 0.088**

The table shows that the calculated R-value 0.97 was greater than the critical R-value of 0.088 at 0.5 alpha level with 898 degree of freedom. The R-square value of 0.93 predicts 93% joint influence of customer information management, hotel personnel characteristics, technology and patronage of hotels in Akwa Ibom State. This rate of percentage is highly positive and therefore means that there is significant joint influence of customer information management, hotel personnel characteristics, technology and patronage of hotels in Akwa Ibom State. It was also deemed necessary to find out the extent of the variance of each class of independent variable as responded by each respondent (see table 6).

Table 6: Analysis of variance of the joint influence of customer information management, hotel personnel characteristics, technology and patronage of hotels in Akwa Ibom State

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2254.42	3	751.47	4222.14	.000b
Residual	159.47	896	0.18		
Total	2413.89	899			

The above table presents the calculated F-value as (4222.14) and the computer critical f-value as (.000). Being that the computer critical f-value (000) is below the probability level of 0.05, the result therefore means that there is significant joint influence of customer information management, hotel personnel characteristics, technology and patronage of hotels in Akwa Ibom State.

Discussion of Findings

The result of the data analysis in table 3 was significant due to the fact that the calculated R-value 0.86 was greater than the critical R-value of 0.088 at 0.05 level with 898 degree of freedom. The result implies that there is significant relationship between patronage of hotels in Akwa Ibom State and the usage of technology. The result therefore is in agreement with the opinion of many other researchers and experts on the subject matter. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

The result of the data analysis in table 5 was significant due to the fact that the calculated R-value 0.97 was greater than the critical R-value of 0.088 at 0.05 level with 898 degree of freedom. The result implies that there is significant joint influence of customer information management, hotel personnel characteristics, technology and patronage of hotels in Akwa Ibom State. The result therefore is in agreed with the agreement of many other researchers and expert. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

Conclusion

Based on the findings of the research work, it was concluded that few hotels in Akwa Ibom State practice customer relationship management while most hotels do not practice it. Patronage of hotels in Akwa Ibom state is significantly related to technology. There is significant relationship between hotel personnel characteristics and patronage of hotels in Akwa Ibom State. There is joint influence of customer information management, hotel personnel characteristics, technology and patronage of hotels in Akwa Ibom State.

Recommendation

1. The management of hotels should consider the need to have adequate knowledge of the customer data and manage them effectively for ease of referral purpose as well as organising workshop for their workers on how to improve upon their attitude towards customers for continued patronage.

2. The workers should build positive characters that portray the organisation they work for continuous patronage.

3. Customers should be made to see the hotels as a home away from home by making sure the accommodation is comfortable.

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