

ANALYSING KEY PERFORMANCE INDICATORS FOR IMPROVING CRM IN AIRLINES SECTOR

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Introduction

The origins of CRM can be traced to the relationship-marketing literature. Introduced by Leonard Berry in the early 1980s, the concept of relationship marketing was defined as attracting, maintaining, and enhancing customer relationships (Berry, 2002). Kotler et al. (1999) define CRM as retaining current customers and building profitable, long-term relationships with them. Day (2002) conceptualized CRM as a firm capability that results from a focus on three organizational components working in concert with each other: an organizational orientation that makes customer retention a priority; a configuration that includes the structure of the organization, its processes for personalizing product offerings, and its incentives for building relationships; and information about customers that is in-depth, relevant, and available in all parts of the company.

CUSTOMER SATISFACTION AND CRM IN THE AIRLINE INDUSTRY

Anderson, Klein Pearo and Widener (2008:370), and Cheng, Chen and Chang (2008:487) state that the airline industry creates the perfect setting to study customer satisfaction and customer relationship management due to the number of service encounters passengers are involved in during their flight and since it is in the best interest of the airline to form a long-term relationship with customers. Atalik, Kampüsü and Turkey (2009:158), Li and Petrick (2008:239), and Boland, Morrison and O'Neill (2002:1-4) explain that CRM has become vital to the airline industry for airlines to gain a competitive advantage. A problem with the airline industry is that many airlines place an emphasis on cost reductions rather than considering customer service and customer satisfaction. Furthermore, many services provided by airlines are indistinguishable from one airline to the next, necessitating the need for airlines to find some other way of gaining a competitive advantage. CRM provides airlines with a basis of how to achieve long-term relationships and growth, while still achieving operational efficiency. Nadiri, Hussain, Ekiz and Erdoğan (2008:266), and Chang and Yeh (2002:166) state that due to the competitive nature of the airline industry, the only way in which airlines can remain competitive is by ensuring that customers are satisfied with the

service encounter by exceeding customer expectations and by developing long-term relationships with these customers.

Meaning of CRM (CUSTOMER RELATIONSHIP MANAGEMENT)

Customer Relationship Management (CRM) is the disciplined application of customer information to build customer relationships through:

- Continually refining insights into customer needs, habits, and economics
- Developing targeted and tailored value propositions based on those inputs
- Strategically focusing business resources on activities that build long-term customer and economic value

Definition of CRM (CUSTOMER RELATIONSHIP MANAGEMENT)

Li and petrick (2008:237) and Jobber (2004:796-797) explain that through CRM, businesses are able to focus on existing customers rather than on attracting new customers CRM furthermore aids businesses in retaining existing customers and improving the quality of the relationship between business and customers.

OBJECTIVE OF THE STUDY

Primary objectives:

- To determine the key performance indicators for improving customer relationship with special reference to “Air India”

Secondary objective:

- To study customer satisfaction level towards services of Air India

NEED FOR THE STUDY

There are lot of study conducted on customer relationship, very recent time customer relationship factors such as brand loyalty, perceived quality, customer satisfaction, customer relationship management are discussed more in particular these factors are taken in this study.

There exist needs to determine the customer relationship which is important in Airlines.

SIGNIFICANT OF THE STUDY

Customer relationship has receive greater importance in airlines there are very few studies as explained the customer relationship in airlines but this research was through related for many unique factors and evaluate the success of the customer relationship.

REVIEW OF LITERATURE

CHING-FU CHEN and WEN-SHIANG TSENG (2010) the study explored customer-based Airline Brand Equity: Evidence from Taiwan. Explore the inter-relationships among the components of perceptual brand equity, i.e., brand awareness, brand image, and perceived quality in the airline industry; second, investigate the influences of components of perceptual brand equity on brand loyalty based on the perception-behavior causal hypothesis; and third, examine the relationships between the components of brand equity, perceptual and behavioral, and overall brand equity. This research uses a sample of data collected from Taiwanese air passengers who take international flights by a questionnaire survey in order to conduct the empirical analysis. The structural model between constructs is constructed and examined by employing the structural equation modeling (SEM) approach. A self-administered questionnaire survey was conducted at Taiwan International Airport in Taiwan during February 2008. This study adopts the convenience sampling approach due to an unknown population of air passengers.

Pierre Mostert, Christine De Meyer (2010) analysed the study on Building customer relationships as retention strategy in the South African domestic passenger airline industry determine the effect which a strategy of building relationships with customers has on customer satisfaction, loyalty and ultimately retention in the South African domestic passenger airline industry and also consider the influence of service failures on passengers' relationships with airlines, as this negative outcome from service delivery could adversely influence customer retention in the airline industry. A total of 324 questionnaires is be used and most of the respondents flew with South African Airlines. Respondents were asked to indicate whether the domestic airlines they fly with most often were trying to form relationships with them and also whether they have formed a relationship with these airlines. Findings from this study suggest that, although the majority of respondents indicated that domestic South African airlines are trying to form relationships with them, somewhat less than half have actually formed such a relationship.

C.F. De Meyer, P.G. Mostert (2001) The study influenced of passenger satisfaction on relationship formation in the South African domestic airline industry determine whether the satisfaction levels of passengers flying with domestic airlines in South Africa influence whether or not passengers form long-term relationships with the domestic airline they most often fly with. The questionnaires consisted of open- and closed ended questions and were specifically aimed to determine which service elements respondents consider important when selecting an airline, whether they are satisfied with the services provided by the domestic airline they fly with most often and whether they had formed a long-term relationship with that domestic airline. 405 questionnaires were distributed to passengers flying with various domestic airlines during the two-week period. The questionnaire aimed to determine which of 26 listed service elements were important to respondents when selecting an airline and whether they were satisfied with the services

provided by the domestic airline they fly with most often. Results from this study indicated that slightly more respondents were satisfied with the overall service provided by the domestic airline they fly with most often than those who were dissatisfied.

Philemon Oyewole, Muthulakshmi Sankaran, Pravat Choudhury (2007) determined Marketing airline services in Malaysia a Consumer Satisfaction orientation approach study deals with the problem of customer satisfaction in the airline industry with special reference to the developing country of Malaysia. Factors influencing customer satisfaction were explored through a questionnaire-survey of airline passengers at Kuala-Lumpur international airport, Malaysia. Data was obtained through a questionnaire survey of passengers touching Kuala Lumpur international airport, Malaysia. In order to get a clear picture of the perceptions of the air travelling public, the sample was made to include all adult age groups and mainly those who fly often and also decided that about 600 samples of passengers from different cross-sections of the society could be approached to take part in the Questionnaire-Survey. In the present research study, the passengers' responses have generated a few ideas, which are presented as suggestions that may be considered by the airlines for implementation.

RESEARCH METHODOLOGY

Hypotheses Developed

CHI-SQUARE:

Null hypothesis (H₀): There is no significant association between mode of registering complaints/suggestions with customer satisfaction and customer relationship management.

Alternative hypothesis (H₁): There is a significant association between mode of registering complaints/suggestions with customer satisfaction and customer relationship management

t-TEST:

Null hypothesis (H₀): There is no significant relationship between various variables such as Brand Loyalty, Perceived Quality, Customer Satisfaction and Customer Relationship Management .

Alternative hypothesis (H₁): There is a significant relationship between various variables such as Brand Loyalty, Perceived Quality, Customer Satisfaction and Customer Relationship Management

STEP-WISE MULTIPLE REGRESSION

Null hypothesis H₀: There is no significant difference among the dimensions of the variables as a predictor in Explaining key performance indicators for improving Customer Relationship Management.

Alternative hypothesis H₁ : There exists significant difference among the dimensions of the variables as a predictor in explaining key performance indicators for improving Customer Relationship Management.

THE QUESTIONNAIRE CONTENT**INDEPENDENT VARIABLE:**

1. **Brand Loyalty : 3 Questions (Aaker 1996 and Yoo et al., 2000)**
2. **Perceived Quality : 8 Questions (Park 200) and Park, Roberston and Wu 2004)**
3. **Customer Satisfaction: 6 Questions (Bitauld et al., and Smith 1999 and Pilling 2000)**
Customer Relationship Management: 7 Question (Anderson,s, Klein Pearo, L. and Widener S.K. (2008))

DEPENDENT VARIABLE:

Customer Relationship Management: 7 Question (Anderson,s, Klein pearo, L. and Widener S.K. (2008))

DATA ANALYSIS:

Data analysis is a process of gathering, modeling, and transforming data with the goal of highlighting useful information, suggesting conclusions, and supporting decision-making. Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, in different business, science and social science domains. Analysis means the computation of certain indices or measures along with searching for patterns of relationship that exist among data groups. It helps in testing the hypothesis for drawing inference. So, data analysis is a crucial event in any research project, because the inferences are made only based on the result of the analysis.

RELIABILITY ANALYSIS:**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Number of Items
0.719	0.740	24

Source: (Primary data)

Inference:

The reliability of the determinants/factors is ascertained y finding the inter coincidence of using cronbach's coefficient alpha a shown the values where above 0.5 indicating high measure of internal coincidence of overall good reliability (Nunnaly,1978) construct validity extent to which a scale measures a variable of interest and can be assist by factor analysis. The higher the alpha value obtained the high internal coincidence to the scale used in the study.

FACTOR ANALYSIS:

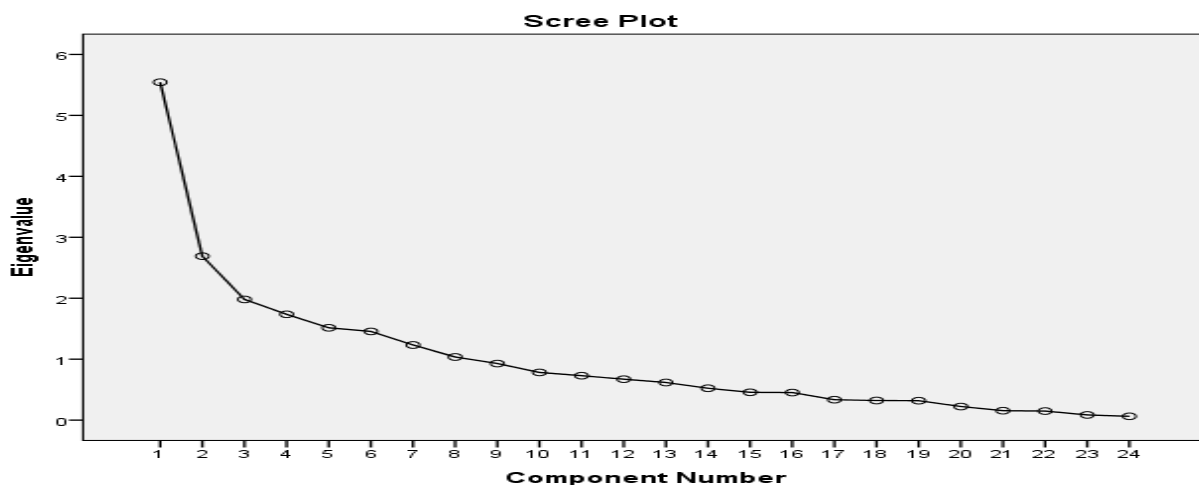
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.760
Approx. Chi-Square		1013.852
Bartlett's Test of Sphericity	Df	276
	Sig.	0.000

Source: (Primary data)

This analysis was conducted by using Principal component’s method with varimax rotation. The rotation revealed 4 factors with Eigen value greater than 1 and factor loading exceed ± 0.71 explaining 61 percent of total variance for analyzing the key performance indicators for improving CRM in Airlines Sector

Chart:4:3:1



Source: (Primary data)

Inference:

The Kaiser Meyer Olkin (KMO) measures sampling used in factor analysis to examine appropriateness of factor analysis high values (0.5to1.0) indicates that factor analysis values below is appropriate. Values below 0.5 imply that factor analysis may not be appropriate for this study kmo value 0.760 rounded 0.8 is considerate at fairly good its significance less than 0.005.

Chi Square:

Chi-square is a statistical test commonly used to compare observed data with data we would expect to obtain according to a specific hypothesis. In chi-square test, the null hypothesis means that there is no significant difference between the expected and observed result.

Association between mode of registering complaints/suggestions and customer satisfaction and customer relationship management

Null hypothesis (H₀): There is no significant association between mode of registering complaints/suggestions with customer satisfaction and customer relationship management.

Alternative hypothesis (H₁): There is a significant association between mode of registering complaints/suggestions with customer satisfaction and customer relationship management

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	70.591 ^a	36	0.000
Likelihood Ratio	79.229	36	0.000
Linear-by-Linear Association	10.275	1	0.001
N of Valid Cases	90		

a. 48 cells (96.0%) have expected count less than 5. The minimum expected count is .09.

Source: (Primary data)

Inference:

Significant value is less than 0.05, H₀ is rejected. Hence there is a significant connection between mode of registering complaints/suggestions and customer satisfaction and customer relationship management mean. So if the increase in the quality of registering complaints/suggestions and customer satisfaction there will lead to greater customer relationship or customer relationship management.

t-TEST:

Null hypothesis (H₀): There is no significant relationship between various variables such as Brand Loyalty, Perceived Quality, Customer Satisfaction and Customer Relationship Management.

Alternative hypothesis (H₁): There is a significant relationship between various variables such as Brand Loyalty, Perceived Quality, Customer Satisfaction and Customer Relationship Management

One-Sample Test

	Test Value = 0					
	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
BL	59.625	89	0.000	3.80741	3.6805	3.9343
PQ	36.942	89	0.000	2.45139	2.3195	2.5832
CS	59.110	89	0.000	3.47593	3.3591	3.5928
CRM	84.801	89	0.000	2.75714	2.6925	2.8217

Source: (Primary data)

INFERENCE:

Significant value is less than 0.5, H₀ is rejected and H₁ is accepted hence there is a significant relationship between various variables such as Brand Loyalty, Perceived Quality, Customer Satisfaction and Customer Relationship Management. There is significant relationship between various variable Brand Loyalty, Perceived Quality, Customer Satisfaction and Customer Relationship Management.

CORRELATION:

		BL	PQ	CS	CRM
Pearson Correlation	BL	1.0			
	PQ	0.67	1.00		
	CS	0.33	0.43	1.00	
	CRM	0.18	0.090	0.05	1.00

Source: (Primary data)

Correlation is significant at 0.01 level two tailed

Correlation is significant at 0.05 level two tailed

Inference:

The above table shows the inter correlation for all the constructs reveals that Brand Loyalty had positive correlation with Perceived Quality, Customer Satisfaction Customer Relationship Management that is post related to Perceived Quality (0.672) which is statistic significant at 0.01 followed by Customer Satisfaction (0.438) which is significant at 0.01 followed by Customer Relationship Management (0.050) which is statistic significant at 0.01.

STEP-WISE MULTIPLE REGRESSION

H₀: There is no significant difference among the dimensions of the variables as a predictor in explaining analyzing the key performance indicators for improving CRM in Airlines Sector

H₁: There exists significant difference among the dimensions of the variables as a predictor in explaining analyzing the key performance indicators for improving CRM in Airlines Sector

REGRESSION:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin - Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.686	0.470	0.452	0.44856	0.470	25.444	3	86	0.000	1.665

a. Predictors: (Constant), CRM, CS, PQ

b. Dependent Variable: BL

The model indicates a strong predictor of the dependent variable with multiple determination factor R square (Goodness of fit) value of 0.452, F-value 25.444 (p<0.01). Factor R of multiple cross-correlation 67 percent shows high cross correlation. The table illustrates the results of the step-wise multiple regression for Customer Relationship Management variables.

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.358	3	5.119	25.444	0.000 ^b
	Residual	17.304	86	.201		
	Total	32.662	89			

a. Dependent Variable: B

b. Predictors: (Constant), CRM, CS, PQ

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.762	0.521		5.299	0.000
	PQ	0.609	0.085	0.633	7.190	0.000
	CS	0.070	0.095	0.065	0.735	0.464
	CRM	0.250	0.156	0.128	1.610	0.111

a. Dependent Variable: BL

Significant *p<0.05 ** p<0.01

From the Regression Analysis the regression equation was derived.

$$Y = \alpha + x_1 PO + x_2 CS + x_3 CRM + \epsilon$$

$$Y = 2.76 + 0.609 (x_1) + 0.07 (x_2) + 0.250 (x_3) + \epsilon$$

In the equation all factors that are multiplied with variables are positive. The Standardized Beta Coefficients give a measure of the contribution of each variable. The beta score signifies the positive relationship between each of the predictor variables.

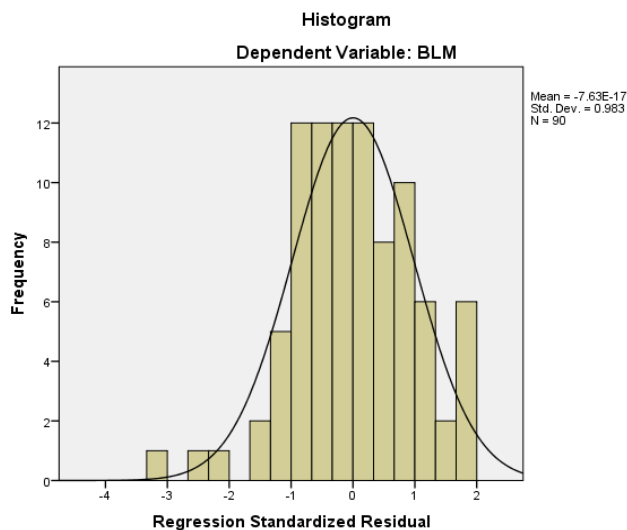
There exists significant difference among the dimensions of the variables as a predictor in explaining analyzing the key performance indicators for improving CRM in Airlines Sector

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.8940	4.6635	3.8074	.41541	90
Residual	1.41686	.85913	.00000	.44093	90
Std. Predicted Value	2.199	2.061	.000	1.000	90
Std. Residual	3.159	1.915	.000	.983	90

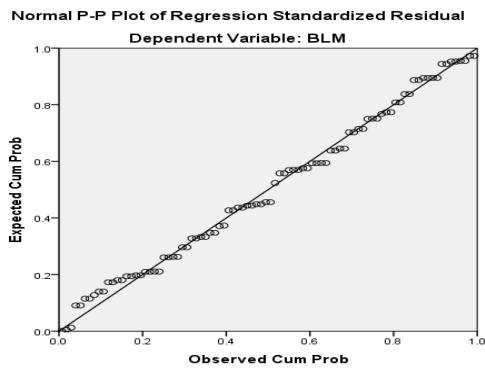
a. Dependent Variable: BL

Chart



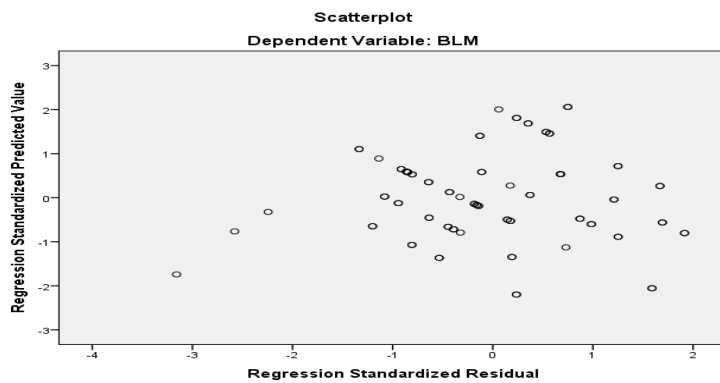
Source: (Primary data)

Chart



Source: (Primary data)

Chart



Source: (Primary data)

FINDINGS

Chi-Square Test

There is a significant connection between mode of registering complaints/suggestions with customer satisfaction and customer relationship management mean.

t-Test:

There is significant relationship between various variables such as Brand Loyalty, Perceived Quality, Customer Satisfaction and Customer Relationship Management.

Multiple Regression

There exists significant difference among the dimensions of the variables as a predictor in explaining analyzing the key performance indicators for improving CRM in Airlines Sector

SUGGESTIONS AND RECOMMENDATION

1. The organization can make arrangements to increase the satisfaction of Customers in order to increase or maintain long term relationship with Customers.

2. Company has to take initiative actions in order to increase the satisfaction towards the overall experience of customers.
3. The company has to identify the factors that contribute towards the satisfaction and proper steps should be taken in maintaining, the satisfaction level at higher degree.
4. According to the survey most of the respondents are in the need of the improvement in Seating comfort, Promptness and accuracy of baggage delivery, Convenient flight schedule Company has to take required action to improve the above services.
5. Company need to think about the customer and they need to fulfill the Customer expectation.
6. Company need to provide a value added service to the customer.

CONCLUSION

The study concludes that though most of the customers are satisfied with the services and performance but many still need improvement in services provided by the company. So company has to take all necessary actions to improve services in Airlines Sector. Many respondents or Customers are satisfied with prices offered by Airlines Sector and many respondents feel excellent about the company safety records. Customers who more satisfied with company overall performance and services have formed long term relationship with company so company has to focus on factors which lead to overall customer satisfaction.

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