ANALYSIS OF CRM PROGRAMS PRACTICED BY PASSENGERS’ AIRLINE INDUSTRY OF INDIA AND ITS IMPACT ON CUSTOMER SATISFACTION AND LOYALTY

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ABSTRACT

Because of immense competition in today’s business market, the organizations are struggling to apply different marketing strategies and programs to gain more market share and acquire more customers on one hand, and to make them satisfies and loyal to their company, on the other hand. Therefore they can ensure long lasting relationship with their customers and create barriers in front of customer’s brand switch. Application of CRM as continuous marketing program has gained great importance recently. Through application of CRM organizations gain knowledge regarding their customers and transmit this knowledge to company offer to fulfill the needs of customers and satisfy them. Airlines’ effort to provide better loyalty programs and customization of service, besides making relationship with them can help to create customer satisfaction as prerequisite of loyalty.

Keywords: CRM, loyalty, satisfaction, customization.
INTRODUCTION:

Companies have changed their business strategies tremendously because of environmental changes affecting all industries recently. Focusing on customers as the main parameter in all businesses and based on shifting from product oriented to market oriented industry. As a result of this, competition has increased between the companies in the market, where each company has to work out a strong up-dated competitive strategy if they want to stay in the business (Lindbom & Jonsson, 1992). Moreover, a key driver of this change is the advent of CRM which is underpinned by information and communication technologies (Ryals & Knox, 2001). By using information and communication technology, businesses are trying to get closer to the customer so that they can create long-term relationships and gain more knowledge from and about the customers. Firms are embracing CRM as a major element of business strategy, because technological applications permit a precise segmentation, profiling and targeting of customers and competitive pressures require a customer-centric culture (Gurau, Ranchhod, &Hackney, 2003). The goal of service companies including airlines is to develop services which attract and keep customers who are satisfied, loyal and speak well of the airline (Gustafsson et al, 1999). Organizations and companies should also notice that they will be more successful if they concentrate on acquiring and sustaining a share of each customer rather than a share of the entire market (Park & Kim, 2003). Recognition of competitors as main environmental issue and considering the current competition in business world has become the main struggling field for the airlines.

CRM is an essential component of the corporate strategy of airline companies to differentiate themselves from competitors in the eyes of the customer (Boland et al., 2002). CRM is an evolving management topic which most business firms are focusing on as a competitive advantage strategy and tool (Khalifa & Liu, 2003; Ngai, 2005), and airline industries are employing this strategy to individualize their service offer, create better communicational channels with customers and ensure higher quality offer to crate satisfaction of customers as the base of loyalty.

REVIEW OF LITERATURE:

CRM:

Andrade (2003) believes CRM is based on the ability to facilitate communication and decision-making to provide consistent, high-quality, and cost-effective services to all stakeholders. Form individualized service perspective; CRM is a concept that enables an organization to tailor specific products or services to each individual customer. In the most advanced scenario, CRM may be used to create a personalized, one-to-one experience that will give the individual customer a sense of being cared for, thus opening up new marketing opportunities based on the preferences and history of the customer (Wilson, et al., 2002).

CRM is a set of business processes and overall policies designed to capture, retain and provide service to customers (Scott, 2001), or a coherent and complete set of processes and technologies for managing relationships with current and potential customers and associates of the company, using the marketing, sales and service departments, regardless of the channel of communication (Injazz and Karen, 2004). According to Swift (2001), CRM is a process designed to collect data related to customers, to grasp features of customers, and to apply those qualities in specific marketing activities. Consider the following summary from Peelen (2005) supplemented by other sources as mentioned. CRM is:

1. A comprehensive development process
2. Customer differentiation
3. Data warehousing and mining
4. The core business strategy
5. Integrated collaboration
7. A total company reorientation (Buttle, 2005)
8. Customization in products or services (Sharp, 2003)
9. Building mutual value (Peele, 2005; Targetbase, 2001)
10. Building customer equity (Gupta and Lehman, 2005; Shaw, 2001)

BENEFITS OF CRM:

CRM results in so many benefits for both parties involved in business as declared by different experts and authors. CRM improves sales force efficiency and effectiveness (Croteau and Li, 2003; Jones,Brown, Zoltners, and Weitz, 2005; Jones, Stevens, and Chonko , 2005; Jones, Sundaram and Chin,2002; Leight and Taner , 2004; Rivers and Dart, 1999; Sabri , 2003), Reduces cost to serve (Buttle, 2004 ; Zikmund, McLeod, and Gilbert,
2003), increases customer satisfaction and loyalty (Buttle, 2004; Parvatiyar and Sheth, 2000-2001, Verhoef, 2003; Zikmund, McLeod, and Gilbert, 2003), increases data sharing across selling organization(Chen and Popovich, 2003; Leight and Taner, 2004; Rigby and Ledingham, 2004), improves customer service (Chen and Popovich, 2003), improves cross selling and up selling(Chen and Popovich, 2003; Parvatiyar and Sheth, 2000, 2001), improves customer segmentation and targeting (Chen and Popovich, 2003; Parvatiyar and Sheth, 2000, 2001; Reineartz, Krafft and Hoyer, 2004 ; Tanner, Ahearn, Leigh, Mason, and Moncrief, 2005), enables better personalization of marketing efforts (Chen and Popovich , 2003; Croteau and Li, 2003; Jones,Brown, Zoltners, and Weitz , 2005; Sabri, 2003; Sheth, Sisodia and Sharma, 2000; Thomas, Reinart and Kumar , 2004; Zikmund, McLeod, and Gilbert, 2003), provides better self-service options for customers and improves buyer-seller integration (Chen and Popovich, 2003), improves supply-chain planning and efficiency (Eggert, Uлага, and Schultz, 2006; Spekman and Carraway, 2006), improves ability to find, obtain and keep customers and enhances ability to create long-term partnership (Jones, Stevens, and Chonko, 2005; Jones,Brown, Zoltners, and Weitz , 2005; Tanner, Ahearn, Leigh, Mason, and Moncrief, 2005; Winer, 2001), improves pricing (Jones, Sundaram and Chin, 2002; Park and Kim, 2003; Reineartz, Krafft and Hoyer, 2004; Rivers and Dart, 1999; Wilson, Daniel, and McDonald, 2002), improvements product differentiation (Park and Kim, 2003), reduces administration duties (Rivers and Dart, 1999), enhances product development (Sabri, 2003), enhances decision making (Spekman and Carraway, 2006), improves and coordinates communication (Jones, Stevens, and Chonko, 2005; Tanner, Ahearn, Leigh, Mason, and Moncrief, 2005), enables companies to win-back lost customers (Thomas, Blattberg, and Fox, 2004; Rigby and Ledingham , 2004), enables co-branding, joint-marketing and strategic alliances (Parvatiyar and Sheth , 2000- 2001), and improves retention efforts (Rigby and Ledingham, 2004; Zikmund, McLeod, and Gilbert, 2003).

CRM ESSENCE OF AIRLINE INDUSTRY:

As mentioned earlier in current economic situation where airlines try to overcome the costs, gain profit, differentiate their offer, individualize their service and apply effective communicational channels to crate loyal customers, CRM as a strategic and continuous program would support the mentioned objectives of the company. Also, customers’ demands and expectations are changing in today’s world, in the airline industry many of the airline companies have lost track of the true needs and wants of their passengers and are sticking to the outdated views of what airline services are all about (Gustafsson et al., 1999). Many airline managers think of passenger needs from their own perspective so their immediate focus is on cost reductions in driving to more efficient operations, keeping customers at a least priority in their strategic planning programs. But the customer should not be ignored (Boland, Morrison and O’Neill, 2002).

Airlines are recognizing that CRM is a long term investment, with the true benefits earned through profitable lifelong customer relationships (Boland, Morrison and O’Neill, 2002). CRM comprises the acquisition and deployment of knowledge about customers to enable the airline to sell more of their product and service more efficiently (Flanagan and Sadie, 1998).

CRM AND CUSTOMER SATISFACTION AND LOYALTY:

Satisfaction is a measure of how well a customer's expectations are met while customer loyalty is a measure of how likely a customer is to repurchase and engage in relationship activities. But it is very important that companies are aware of that a loyal and satisfied customer can very easily change to a competitor if they are offered a better value or quality. There is no guarantee that a satisfied customer will return to the company but it is almost certain that a dissatisfied customer will not return (McIlroy et al., 2000).

Kotler (2000) defined satisfaction as a person’s feelings of pleasure or disappointment resulting from comparing a product’s perceived performance (or outcome) in relation to his or her expectations. When customers become satisfied about the value that is offered and sometimes his or her expectation is met and exceeded, can generate many benefits for a firm (Bateson and Hoffman, 2002). According to them, positive word-of-mouth coming from existing and satisfied customers sometimes can translate into more new customers coming to the firm. Also, satisfied current customers often buy more products more frequently and are less likely to defect to competitors than are dissatisfied customers. According to Bateson and Hoffman (2002) firms that have high degree of customer satisfaction, also seem to have the capacity to shield off competition particularly price competition.

Dowling et al. (2003) define customer loyalty as “a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing despite situational influences and marketing efforts having the potential to cause switching behavior”. A loyal customer can mean a consistent source of revenue over a period of many years. However, this loyalty cannot be taken for granted. It will continue only as long as the customer feels they are receiving better value than they
would obtain from another supplier (McIlroy et al., 2000). In order to satisfy the customer the company therefore has to know their customers and their needs in order to give them what they want. But even then the company might lose the customer because a satisfied customer is not always loyal but if you have a customer that is dissatisfied you can be sure that they will look for new alternatives (Blomqvist et al., 2004).

RESEARCH DESIGN AND METHODOLOGY:

The main objective of this research is to identify main CRM factors that influence customer satisfaction and loyalty, and to analyze the relationship between these factors and two parameters of satisfaction and loyalty. In this study, researchers have adopted survey method, according to which a questionnaire was designed as a tool to collect primary data from 900 passengers of airlines across the country. For analyzing the factors under CRM, 58 statements were formed, according to which, passengers were asked to rate each statement based on 7 point likert scale.

Also specific attributes were designed to analyze the satisfaction level and loyalty level of each passenger. To form and name the factors, researchers applied factor analysis to classify the statements or variables under main factors. And after that, to analyze the relationship between these factors and satisfaction and loyalty of passengers, multiple regression analysis was employed. The following figure reflects the research model.

![Research model](image)

DEFINITION OF VARIABLES:

Statements from 1 to 58 are named X1 to X58 which were entered to factor analysis. After defining factors these variables were treated as independent variables whereas satisfaction or Y1 and Loyalty or Y2 were defined as dependant variables.

HYPOTHESIS FORMULATION:

One of the major objectives of this research is to find out how application of CRM program affects passengers’ satisfaction. So based on this objective the first hypothesis was formulated as:

**H1**: Application of CRM program in passenger’s airline industry of India is strongly and positively associated with passenger’s satisfaction.

CRM struggles to make create long lasting relationship between the organizations and customers. Airlines are doing a great effort to make their customers loyal to them. So, second hypothesis is formulated as:

**H2**: Application of CRM program in passenger’s airline industry of India is strongly and positively associated with passenger’s loyalty.

Since, the study is among different airlines, and each airline is employing different aspects of CRM in their business decisions, the third hypothesis is formulated as:

**H3**: If passengers are of different airlines’ customers then their satisfaction level of over-all service that the airline provided will be significantly different.

INSTRUMENT DESIGN:

To analyze CRM program, the questionnaire was developed. We developed a questionnaire including 58 statements as independent variables to be classified under CRM factors, and 11 attributes to evaluate customer satisfaction about the airline service, besides 8 attributes to analyze loyalty to the airline. Also, demographic information of passengers was collected.

SAMPLE AND DATA COLLECTION:

Since the study aims to evaluate CRM factors and influence of those factors on customer satisfaction and loyalty in the passengers’ airline industry, the data were collected from the passengers of the airlines in India. All the respondents were passengers using national airlines of India. Total of 840 questionnaires were collected.
DATA ANALYSIS & HYPOTHESIS TESTING:

Application of factor analysis resulted in identification of 7 major factors under CRM. Variables X25, X31, X32, X33, X34, X35, X36, X37 up to X51 are classified under factor 1. Variables X16, X17, X18, X19, X20, X21, X22, X23, X24, X26, X27, X28, X29, and X30 are classified under factor 2. Variables X4, X5, X6, X7, X8, X9 and X10 are classified under factor 3. Variables X54, X55, X56, X57 and X58 are classified under factor 4. Variables X11, X12, X13, and X14 fell under factor 5. Variables X52 and X53 are classified under factor 6. Variables X1, X2, X3 and X15 fell under factor 7. According to vast literature review and knowledge of researchers, besides similarities of the attributes under each factor, these factors were named as followings (Table 1-8):

TABLE 1-8: FACTORS UNDER CRM INFLUENCING CUSTOMER SATISFACTION AND LOYALTY

<table>
<thead>
<tr>
<th>No.</th>
<th>Factor</th>
<th>Factor Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Factor 1</td>
<td>Service quality</td>
</tr>
<tr>
<td>2</td>
<td>Factor 2</td>
<td>Trust</td>
</tr>
<tr>
<td>3</td>
<td>Factor 3</td>
<td>Communication</td>
</tr>
<tr>
<td>4</td>
<td>Factor 4</td>
<td>Customization</td>
</tr>
<tr>
<td>5</td>
<td>Factor 5</td>
<td>Commitment</td>
</tr>
<tr>
<td>6</td>
<td>Factor 6</td>
<td>Flight patterns</td>
</tr>
<tr>
<td>7</td>
<td>Factor 7</td>
<td>Involvement</td>
</tr>
</tbody>
</table>

In the next part of analysis multiple regression analysis is employed to analyze the relationship between these seven factors and passengers’ satisfaction and loyalty as well. For applying such analysis these seven factors namely; trust, communication, customization, commitment, flight patterns, service quality and involvement were assumed as independent variable and passengers’ satisfaction and loyalty were assumed as dependant variable. Multiple regression analysis is done at 95% significance level. According to multiple regression analysis seven factors were entered to analysis as independent factors F1, F2,F3, F4, F5, F6 and F7. R² of .643 was obtained, which shows strong relationship between the mentioned factors and satisfaction of passengers (Table2-8). It declares that almost 65% of changes in satisfaction level of passengers is a result of effect from mentioned seven factors under CRM.

Table 2-8: MODEL SUMMARY

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.802</td>
<td>.643</td>
<td>.645</td>
<td>.79722</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), F7, F6, F2, F5, F3, F4, F1

According to MRA Coefficients for each factor is obtained, which for factor1 or service quality is .124, for factor 2 or trust is .339, for factor 3 or communication is .146, for factor 4 or customization is .148, for factor 5 or commitment is .148, for factor 6 or flight patterns is -.085 and finally for factor 7 or involvement is -.071. Only F1 is individually not significant at 95% level of confidence. From the analysis of variance table (3-8), the significance of F is .000, indicating model is statistically significant at a confidence level of 99.999%. Analysis results in an equation which states the relationship between mentioned variables. The equation is as follows:

Y = 1.464+.124F1+.339F2+.146F3+.148F4+.148F5-.085F6-.071F7

So, according to above analysis, hypothesis one is accepted.

Table 3-8: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>526.322</td>
<td>7</td>
<td>75.189</td>
<td>118.302</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>528.791</td>
<td>832</td>
<td>.636</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1055.113</td>
<td>839</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), F7, F6, F2, F5, F3, F4, F1
b. Dependent Variable: Satisfaction Level

to analyze the relationship between seven factors under CRM and loyalty of passengers, similarly, these factors were entered to multiple regression analysis as independent variables and loyalty was entered as dependant variable. Multiple regression analysis was done at 95% significance level. R² obtained is .705 that shows strong relationship between the entered factors and loyalty. It declares that 75% of changes happening on
loyalty level is the result of changes in these factors (Table 4-8). According to ANOVA table of multiple regression analysis the significance of $F$ is .000 that indicates the model is statistically significant at a confidence level of 99.999%. The coefficients for each factor are as follows: for factor 1 or service quality is .350, for factor 2 or trust is .148, for factor 3 or communication is -.057, for factor 4 or customization is .114, for factor 5 or commitment is .204, for factor 6 or flight patterns is .218 and finally for factor 7 or involvement is -.151. Also, t-test value for the significance of individual independent variable indicates the significance level at 95% confidence level. According to this all independent variables are statistically significant with the value less than 0.05, except F3 with the value of 0.217 which means this variable is individually not significant.

**Table 4-8: MODEL SUMMARY**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.840$^a$</td>
<td>.705</td>
<td>.702</td>
<td>.84623</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), F7, F6, F2, F5, F3, F4, F1

**Table 5-8: ANOVA b**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>641.539</td>
<td>7</td>
<td>91.648</td>
<td>127.983</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>595.794</td>
<td>832</td>
<td>.716</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1237.333</td>
<td>839</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), F7, F6, F2, F5, F3, F4, F1

b. Dependent Variable: Loyalty

Analysis results in an equation which states the relationship between mentioned variables. The equation is as follows:

$$ Y = 622+.350F1+.148F2-.057F3+.114F4+.204F5+.218F6-.151F7 $$

Finally, according to analysis done above, it can be concluded that CRM affects passengers loyalty directly and positively, therefore hypothesis two is accepted.

To test the third hypothesis, researchers have applied chi-square test to analyze the relationship between the kind of airline passengers travel with, and the satisfaction level of overall service that each airline has provide. Table (6-8) shows the result of chi-square test.

**Table 6-8: CHI-SQUARE TESTS**

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>205.791$^a$</td>
<td>36</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>212.597</td>
<td>36</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.090</td>
<td>1</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>840</td>
<td></td>
</tr>
</tbody>
</table>

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

According to Pearson’s $R$ value which is .764, it can be concluded that difference between the airlines regarding the overall service that they have provided is statistically significant (7-8) and there is strong association between the type of airline and overall service satisfaction level. So, in conclusion, the difference is statistically significant and therefore, the hypothesis three is accepted.

**Table 7-8: SYMMETRIC MEASURES**

<table>
<thead>
<tr>
<th>Value</th>
<th>Asymp. Std. Error$^a$</th>
<th>Approx. T$^b$</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interval by Interval</td>
<td>Pearson's R</td>
<td>.010</td>
<td>.037</td>
</tr>
<tr>
<td>Ordinal by Ordinal</td>
<td>Spearman Correlation</td>
<td>.082</td>
<td>.036</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>840</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.
CONCLUSION:
Application of CRM program in passenger’s airline industry affects customer satisfaction and directly influences satisfaction level among customers. CRM causes higher loyalty of passengers and makes barrier in front of customer switch. Customization of service, communicational efforts by the airline, having trust in the airline, commitment of airline to promised service offer and better service quality are main factors influencing customer satisfaction and loyalty.
Airlines should struggle to gain as much knowledge as possible to understand the real needs of customers and fulfill them for creating longer relationships and making them satisfied and loyal.

REFERENCES: