The Application of Internet Technology, Imperatives in Enhancing Customer Relations an Empirical Study in Iran

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Abstract. In these days we are living in technology as well as electronic area and as the times goes on new technology comes one after another and customers are getting more powerful than retailers. Customers not only demanded for higher quality products with lower prices, but at the same time they put their feet down for greater level of customer service. However, most companies in Iran fail to keep up with the increasing customer expectation. Many companies are having trouble in retaining their existing customers especially in the Internet commerce environment because of their dissatisfaction. It is also getting even harder to create customer that are loyal to a particular company these days. This is due to the scarcity of well-built relationship between companies and their customers. In this study we found out that Internet technology plays a very important role in managing customer relations. Internet technology does not only improve the customer service but more importantly it can give value and good experience to the customers that will boost customer satisfaction and it leads to customer loyalty.

Keywords: Internet Technology in CRM, Customer Satisfaction, customer retention and customer loyalty.

1. Introduction

Because of the importance of loyalty in the online commerce there is interest in business forums and in the academic community there is a call for studies that will help us to understand how consumer loyalty is formed in greater detail. (Luis Casaloto et al., 2008) Probably some of the most important factors to explain the building of Internet loyalty are usability and satisfaction. Beside that also, consumer familiarity may play a significant role on consumer behavior. And by increasing globalization in the world economies which has made many opportunities for marketers at the same time; this has also intensified competition among businesses so that many companies are looking towards unconventional forms of marketing. Marketing through the internet is one such unconventional form of marketing that many companies have resorted to. (Nikhashemi et al., 2011). The internet is consulted globally by people on a daily basis. By growing in a number of internet users and much potential opportunity which is incorporated in online business, business
people are eager to conduct business through online. (Hsin Chang et al., 2008). And we know in such rapid growing in using of internet as tool of communication and marketing, Iran also has been one of the great user of internet in middle east countries according to the world statistic Iran has got over 75 million population and it has more than 36 million internet users which covered 46.9 percent of its population (http://www.internetworldstats.com). Since in the early age of commerce, meeting consumer satisfaction has been the main focus for many businesses in order to become profitable. Many researchers have found various factors that can make consumer satisfy. Actually, the online environment offers more opportunities for interactive and personalized marketing that may effect on customer satisfaction due to that consumer satisfaction are becoming common and no longer create competitive advantage to the online businesses. Hence, this makes a well-implemented customer relationship management (CRM) to become the key differentiator for businesses. Ever since the influential study by Reichheld and Asser (1990), that indicated the large impact on profitability of small increases in customer retention rates, the marketing community has become conscious of the need to manage customer relationships in the long term as well aspire or to the first sale.(H. Wilson et al., 2007)

2. Literature Review

Several studies have been conducted in order to find out which factors have influence on consumer a behavior as well as attitude to be loyal customer as a result we have taken three utmost important factor which namely are; usage of internet in enhancing CRM, customer satisfaction, customer retention and customer loyalty which customer retention and customer satisfaction are playing as innerving factors. Each factors has incorporated other factors which effected by them.

2.1. The Usage of Internet in CRM

The rate of technological change in the marketing environment is utmost important factor that influence on relationship-marketing success (Zineldin, 2000). The Internet especially has been changing so rapidly and has been providing so many advanced technologies for doing businesses to manage customer relationships in an organized and right way. Since relationships can be obtain through customer services which provide one-to-one marketing and ongoing interactions, it is critical for any company to pay close attention on delivering excellent customer service by influential communication tools at any time and continuously improve their customer support to ensure long-lasting relationships with their existing customers. Therefore in this area of Internet, Internet technology plays a significant role in increasing customer service levels by providing new sort of service delivery, strengthen customer intimacy, responding faster to customers’ needs and affording customers the opportunity to help themselves. (Mulligan and Gordon, 2002). Some Internet technologies that contribute in enhancing CRM are mostly communication tools which is using in providing customer service, which includes intelligent e-mail system, voice through Internet Protocol (VoIP), voice recognition equipped interactive voice response (IVR), IP-based call centers and other web capabilities like web chat, web callback and video conferencing and some other tools which are coming day by day. There are also other non-communication tools like order tracking system, personalized web pages and web forms that gives to the customer good experience.

2.2. Satisfaction on the Internet

Different people possess different expectation and perception in regarding of internet as tool to do their daily purchase online. Due to that many of companies now days are more interested to use internet as retail channel, here is where customer satisfaction from the net has become main focus for the companies.so some of the main factors which are contributing with satisfaction are mentioned below:

2.2.1 Security

For all the businesses transacted online, internet security has become a main concern. Information security has been one of the significant factors for ensuring wide participation in the society (Nikhashemi et al 2011). Security is one of the utmost important challenging issues facing the internet based merchant today, moreover , it is the most popular topic in electronic commerce and frequently has been written about it by
researchers such as Jeong and Lambert (2001), Szymanski and Hise (2000) as well as Melta and Shah Z(2001).

2.2.2 Ease of Use

Perceived ease-of-use is defined as "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989, p. 320). The perceive ease-of-use has a influential impact on a person's online shopping channel preference and satisfaction (Devaraj et al. 2002). Because of many online user like to enjoy convenience and more control through online transaction plenty of companies have added many feature to their websites to make it easy to use for their customers. (Dong Jon Kim et al., 2006).

2.2.3 Service & Information Quality

Quality has defined as fitness for use, or to what extent it can meet up the consumer satisfaction or serves the purposes of consumers (Beverly et al., 2002). Customer service is one of the key factors of organizational processes which companies perform seeing the growing competition and for attracting entrepreneurial opportunities for boosting profitability and better access to the market and increasing the customer satisfaction and loyalty level (Calif, 1987). The services which are available on the Internet composed of customer support before, after and during any online transactions or activities. And Satisfaction with the quality of these services which is provided by the company can be measured by considering some characteristics. One of the significant attribute is the performance of the services itself, which relates to how good the services are provided to the customer. Janda, Trochia and Gwinner (2002) include transaction efficiency and delivery fulfillment as components of the performance dimension. Speedy transmission that reduces time and cost will obviously contribute to customer satisfaction.

2.3. Customer Retention (Satisfaction Actually Leads to Retention not Loyalty)

Many researches have been done in the field of consumer satisfaction and some claim that if the consumer be satisfied they will be loyal. Riel, Lijander, Lemmink and Streukens (2002) point out that consumer satisfaction with online support and satisfaction with the core service will both helps to the creation of desired behavioral intentions, in the form of loyalty. Bolton and Drew (1991) and Rust, Zeithaml and Lemon (2000) argue that the relationship between satisfaction and loyalty is positive.

2.3.1 Rewards Contributes with Customer Retention

Actually reward program is a kind of strategy which we are using to retain our customer retention also depends on the regular rewards programs that we are applying to retain our customer (Winer 2011) Rewards programs allow customers to collect points for every purchase or visits to websites, which are redeemable for free gifts and cash rebates. Stum and Thiry (1991) agree that point system help the companies to retain their customers.

2.3.2 Customization

Another factor which is contributing to customer retention is customization. Customization can be defined as a new perspective in competition to fulfill each customer’s needs without sacrificing efficiency or cost. (Ki-Chan Kim et al., 2002). The main peruse of customization is to provide for any customer with products and services to meet up his satisfaction and needs.

2.3.3 Online Community

Another critical factor that can help companies in retaining their customers is by push them to make up their own online community. According to Sands (2003), online community is one e-group where the members receive the messages or emails posted and replied by other members in the group. By this community, customers are able to make relationships with the company and other customers who are in touch with the company, therefore having their online chat buddies. Providing customers with experience interacting with online community and interest group membership encourage them to return to the site.
(Singh, 2002). In fact, according to Winer (2001), online community can build an environment that makes it more difficult to leave their online chat buddies or so called “family”. This can be considered as one switching barriers for customers.

2.3.4 Online and Offline Integration Channel

Finally, another possible driver of customer retention is the integration between offline and online channels. In the early age, customer-centered companies have been focusing on the traditional channels in providing front-office customer support via telephone, fax and snail mails. Even online businesses at that time use the offline channels to provide customer service. As time passes by, more companies are recognizing the power of Internet and started to utilize the Internet as a medium to deliver customer services. However, most companies, especially the bricks-and-clicks company are ignoring the integration both online and offline channels in their business strategies. Most companies are having two channels that are managed separately and do not complement each other. In fact, the management teams of the two channels are competing instead of co-operating with each other. Sales from both channels are not integrated, operating systems are not in sync and results are not being tracked (Fitzpatrick, 2000).

2.4. Relationship as basic Building Block of Loyalty

Oliver (1999) defined customer loyalty as a “deeply commitment that the customer have to re-purchase a preferred product/service consistently in the future, as a result it would cause repetitive same brand set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior”(Kwek Choon Ling et al., 2011). CRM is a unique marketing strategy that incorporated integration between technology, process and all business activities which are around the customers and they are dealing with. (Anton, 1996, Anton and Hoeck, 2002). Some factors which contributing with customer loyalty have mentioned below:

2.4.1 Trust

In e-commerce, trust refers to the online consumers’ beliefs and expectations about trust-related characteristics of the online sellers (Nikhashemi et al., 2011). Various studies have advocated the relationship between trust and customer loyalty (Kwek Choon Ling 2011). Chaudhuri and Holbrook (2001) back up that trust will contributes to reduce uncertainty in consumers if they reach to the pint of certainty of their trusted brand.

2.4.2 Experience

The other key driver of loyalty is good experience which is perceived by customers based on their experiences. Emotional component of satisfaction serves as a good predictor of loyalty. Yu and Dean (2001). Mittal and Lassar (1998) have address that emotional benefit can give superior experience to the customer and switch them to loyal customer.

2.4.3 Value Added Service

Other possible factors of loyalty is the value added service like allowing valued customers to take advantage of the company’s system and gain benefit from it. By doing so, customers can access relevant historical data pertaining to accounts information and run analysis in order to understand their own spending patterns or product performance. These transparent companies shall be willingly to share its resources for benefits of the customers and itself. With this openness policy provided to the customers, the relationships between the company and their valuable customers can be further enhanced, thus increasing the customer loyalty. However, no literature on this issue is found and shall be investigated further in this research.

3. Research Methodology

A total of 320 sample sizes are found to be adequate for this study, which we have received 300 of them from Sabzevar Azad University students, public and private office as well as colleges that is located in
Sabzevar Khorasan Province of Iran in 21 of September. Each of the responses received was screened for errors, incomplete and missing responses. Efforts were also taken to contact the affected respondents through e-mail for clarification and corrections, especially on the missing or blank responses. The responses that had a few blank answers and which involve 5-point interval-scaled questions were assigned with a mid-point scale of 3. After the selection process was carried out, only 288 responses were considered complete and valid for data analysis. This represents a success rate of 93%, which is considered to be good in view of time and cost constraints.

3.1. Research Frame Work of Study

Figure 1 shows the theoretical framework of this study. It can be seen that the dependent variable is customer loyalty. Whereas, the independent variable could be usage of internet in CRM and we have got to intervening variable namely are customer retention and customer satisfaction.

3.2. Hypothesis of Study

A hypothesis is a logically conjectured relationship between two or more variables expressed in a form of a testable statement. Based on the theoretical framework constructed above, six hypotheses are formulated for this study.

H10: There is no significant positive relationship between Internet technology in Customer Relationship Management (CRM) and customer retention.

H1A: There is a significant positive relationship between Internet technology in Customer Relationship Management (CRM) and customer retention.

H20: There is no significant positive relationship between Internet technology in Customer Relationship Management (CRM) and customer satisfaction.

H2A: There is a significant positive relationship between Internet technologies in Customer Relationship Management (CRM) and customer satisfaction.

H30: There is no significant positive relationship between Internet technology in Customer Relationship Management (CRM) and customer loyalty

H3A: There is a significant positive relationship between Internet technology in Customer Relationship Management (CRM) and customer loyalty

H40: There is no significant positive relationship between customer retention and customer loyalty.

H4A: There is a significant positive relationship between customer retention and customer loyalty.

H50: There is no significant positive relationship between customer satisfaction and customer retention.

H5A: There is a significant positive relationship between customer satisfaction and customer retention.

H60: There is no significant positive relationship between customer satisfaction and customer loyalty.

H6A: There is a significant positive relationship between customer satisfaction and customer loyalty.

4. Result &Discussion
4.1. Reliability Test
Cronbach’s alpha (\(\alpha\)) analysis was employed to test the Reliability coefficient. Since, Cronbach alpha is commonly used method to measure the reliability for a set of two or more construct where alpha coefficient values range between 0 and 1. Higher values indicate higher reliability among the indicators. Hence, 1 is the highest value that can be achieved (Table 1). According to the results of Cronbach alpha test total scale of reliability for this study varied from .841 to .942. This result indicated an overall higher reliability factor. As a result, reliability of this study is substantial, as the highest reliability value that can be achieved is 1.0.

Table 1: Output from Reliability Analysis

<table>
<thead>
<tr>
<th>Scale</th>
<th>No. of Items</th>
<th>Alpha</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet technology in CRM</td>
<td>21</td>
<td>0.841</td>
<td>74.97</td>
<td>9.94</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>28</td>
<td>0.954</td>
<td>102.8</td>
<td>18.2</td>
</tr>
<tr>
<td>Customer retention</td>
<td>28</td>
<td>0.943</td>
<td>97.15</td>
<td>17.0</td>
</tr>
<tr>
<td>Customer loyalty</td>
<td>18</td>
<td>0.942</td>
<td>66.36</td>
<td>10.9</td>
</tr>
</tbody>
</table>

4.2. Factor Analysis for Customer Satisfaction
Factor analysis has been employed to explore the underlying factors associated with 28 items by using Principal Component Analysis (PCA). Based on table 2, five factors are extracted using the Oblimin rotation method that converges after 14 iterations. The factors are found to significantly explain the pattern of correlations within its set of variables since it have Kaiser-Meyer-Olkin (KMO) value of 0.921, as a measure of sampling adequacy which is above 0.7 with Bartlett’s test of sphericity value of zero. The finding of customer satisfaction analysis indicated that each of 5 dimensions (security, product and service, ease of use, product and service quality and information quality) was homogenously loaded in different factor, which means each of them contributes with customer satisfaction and related to customer satisfaction.

4.3. Factor Analysis for Customer Retention
Based on customer retention factor analysis, result shows that five factors are extracted using the Oblimin rotation method that converges after 11 iterations. The factors are found to significantly explain the pattern of correlations within its set of variables since it have Kaiser-Meyer-Olkin (KMO value of 0.913, as a measure of sampling adequacy which is above 0.7 with Bartlett’s test of sphericity value of zero. The finding of customer retention analysis indicated that each of 5 dimensions (Customer Service Quality, Online Community, reward, personalization and online, offline integration) was homogenously loaded in different factor, which means each of them contributes with customer retention and related to customer retention.

4.4. Factor Analysis for Customer Loyalty
Based on results above, four factors are extracted using the Oblimin rotation method that converges after 11 iterations. The factors are found to significantly explain the pattern of correlations within its set of variables since it have Kaiser-Meyer-Olkin (KMO) value of 0.921, as a measure of sampling adequacy which is above 0.7 with Bartlett’s test of sphericity value of zero. From the reliability test conducted on this factor, it shows that all the three items contributing to emotional benefit or let say good experience factor are reliable since the Cronbach’s Alpha coefficient obtained is 0.853, which is above 0.7. This indicates that all the items strongly hang together and measure the same underlying constructs.

4.5. Correlation Analysis
This part analysis shows the result for correlation analyses that are carried out for four variables, which are Internet technology in CRM, customer satisfaction, retention and loyalty on the Internet. Table 4 below summarizes the results of the correlation analyses between the variables:

Table 4. Correlation Analyses between Independent and Dependent Variables
From Table 4 above, it shows that all the variables are positively correlated since there are no negative signs present for each correlation coefficient. All correlations are statistically significant as all the significance values for each correlation are equal to zero. This indicates that relationships between the independent and dependent variables exist.

4.6. Simple Regression

This part addresses the results for regression analyses of the four variables examined in this study. This analysis enables the hypotheses testing process whereby the results achieved shall be used to decide which hypothesis to be accepted or rejected. Table 5 below summarizes the results of the regression analyses between the variables:

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Customer satisfaction</td>
<td>Customer retention</td>
<td>Customer loyalty</td>
</tr>
<tr>
<td>Internet technology in CRM</td>
<td>Correlation Coefficient</td>
<td>0.657</td>
<td>0.737</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>Correlation Coefficient</td>
<td></td>
<td>0.704</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Customer retention</td>
<td>Correlation Coefficient</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
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</tbody>
</table>

Based on the results which we have obtained in table 5, we can say that each independent variable is making a statistically significant unique contribution to the dependent variables since all the significant value is zero. With beta coefficient of 0.655, Internet technology in CRM is found to provide strong contribution in explaining 42.8 percent of the variance in customer satisfaction on the Internet. Internet technology in CRM provides even a stronger contribution to the prediction to customer retention on the Internet with beta value of 0.731 where it explains 53.5 percent of the variance in the dependent variable. Internet technology in CRM is also found to provide high contribution to the prediction of customer loyalty on the Internet where its beta coefficient is 0.698. This indicates that Internet technology in CRM has large impact on customer loyalty on the Internet where 48.7 percent of variation in dependent variable is explained by the independent variable. Customer satisfaction on the Internet has strong significant impact on customer retention on the Internet with high beta coefficient of 0.701 where it explains 49.2 percent of the variance in the dependent variable. However, although the relationship between customer satisfaction and loyalty on the Internet is significant, satisfaction has less contribution to the prediction of loyalty since only 39.7 percent of the variance in the dependent variable can be explained by the independent variable. This indicates that customer satisfaction on the Internet predicts customer retention better than it can predict customer loyalty. Finally, based on the result, customer retention on the Internet explains 49.6 percent of the variance in customer loyalty on the Internet with beta value of 0.704. This indicates that customer retention on the Internet is a better predictor for customer loyalty as compared to customer satisfaction.

4.7. Hypothesis testing Summarize

From the analysis, it is proved that the all item which have used in the questionnaire are reliable. We can conclude that all the null hypotheses need to be rejected. This is because the independent variable in each
hypothesis is found to have positive significant relationship with the respective dependent variable. However, the strength of the relationship varies for every hypothesis. Internet technology in CRM has strong significant relationship with customer satisfaction and even stronger relationship with customer retention on the Internet and customer loyalty on the Internet as a result, it can be concluded that utilization of Internet technology in CRM can contribute on customer retention and loyalty. Customer satisfaction on the Internet also has strong relationship with customer retention on the Internet, but poor relationship with customer loyalty on the Internet. On the other hand, customer retention has strong significant relationship with customer loyalty on the Internet. This indicates that customer satisfaction on the Internet strongly influences customer retention, whereas customer retention can affect customer loyalty on the Internet.

5. Conclusion

As a conclusion, this study has proven that Internet technology can play a very significant role in managing customer relations. This study has presented various Internet technologies that can be utilized in Customer Relationship Management (CRM) in order to build a profitable customer-centric business model. Internet technology does not only improve the customer service but more importantly it can deliver value to the customers that will boost customer retention rate and customer loyalty on the Internet. Internet technology also increases the level of customer satisfaction on the Internet, which finally contribute to customer retention rate. This study also figure out that customer satisfaction does not necessarily contribute to customer loyalty, but customer retention absolutely will lead to customer loyalty on the Internet.

6. References


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