Building Consumer Loyalty - Challenge for Global E-
healthcare Organizations

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Abstract

In this study authors provide a conceptual investigation regarding the role of consumer loyalty for e-healthcare organisations. The main aim of the article is to identify the level of consumer loyalty and factors which determine this phenomenon. Further the paper suggests a consumer loyalty model on e-healthcare market. The survey was conducted using structured questionnaire. Scale to measure each of factors in the model were developed based on previous literature and using existing scales where possible. A total of 1000 questionnaires were distributed by the Internet to the patients. The results demonstrated that level of consumer loyalty towards e-healthcare organizations is relatively low - lower than what it is, towards traditional healthcare institutions. The most important factors determining consumer loyalty in this market are: trust on e-healthcare institutions, satisfaction from e-medical services and technological factors, like security and privacy. Results of research can be applied by managers of e-healthcare organizations, particularly by departments responsible for establishing relationship with patients and IT units that are involved in the process of developing new electronic marketing channels. The target audience can be characterized as all researchers and practitioners interested in health care services and marketing issues

Key words: Consumer loyalty, satisfaction, trust, e-healthcare

INTRODUCTION

Internet technologies are the most popular means of communicating with other people, gathering information, purchasing goods and exploring services. Over the past decade, the number of studies about the Internet have grown dramatically. Some of them focus on particular websites, while others concentrate on the use of the Internet by particular social groups. In this article the authors want to focus on medicine sector, which is very important for all humans. This sector also uses the Internet as a tool for creating virtual organizations and providing services for customers. Moreover, customer loyalty is one of the crucial factors in the development of medicine service sector. The development of the Internet and the World Wide Web (WWW) has provided a new area for development and has also offered newer tools for the development of more flexible...
services for medical (not only administrative) applications. New possibilities are being used for the creation of Internet-based signal analysis, decision support and marketing activities, as well as virtual organizations. Nowadays, customers have easy access to e-services. However, the introduction of such services into the market can be successful only if the customers are satisfied with the offered services and have trust in them.

CONCEPTUAL BACKGROUND

The growth in e-services has been stupendous over the last few years. Consumers are becoming more willing to use e-services, which opens up a completely new area of activity and competition for companies offering these types of services. Hence, the question arises: What influences consumer purchase decisions and what is the role of loyalty in the whole process?

One of the major differences between Business-to-Consumer internet-based services (B2C e-services) and the more traditional types of customer services is that websites of e-services frequently lack human presence. This lack of a social presence may impede the growth of B2C by hindering the development of customer relationship with the service provider. Human interactions, or at least the belief that the system has the characteristics of social presence, is considered critical in the creation of loyalty.

Consumer loyalty in the service market can be described as a definite attitude and relation developed by the consumer towards his or her service-provider. This relation is based on durability, long-term cooperation and acceptance of conditions of offered services (Harris, 2010). Consumer loyalty, or “attachment” to a financial institution, is a sign of mutual understanding and cooperation between the two. The development of consumer loyalty (faithfulness) is a goal achieved through a set of marketing activities. Being loyal, in turn, is “rewarded” with preferential purchase conditions. A loyal consumer is the one who is attached to his or her institution, who is indifferent to competitors’ incentives (so called “difficult-to-gain” customer) and who, according to some earlier arrangements, represents interests of his or her institution (Schiffman and Kanuk, 2010). Consumer loyalty on the market means full acceptance of the market offer provided by a particular organization. Such an attitude evolves through emotional experience and a certain state of consciousness (Doole et al, 2005).

The consumer becomes loyal to an institution if its service ensures him or her positive feelings. This loyalty is additionally strengthened by respect and recognition shown to a consumer, whereby an institution is perceived...
as honest and righteous (Dubois, 2011). Furthermore, providing competent customer service and meeting consumer needs or expectations also positively affects consumer loyalty. However, if anything disturbs consumer’s positive perception of a definite service or an institution, the level of loyalty deteriorates.

Consumer loyalty can stem from two types of reasons: rational-functional and emotional-symbolic (Blythe, 1997). The first type refers to the analysis of consumer loyalty based on a functional aspect of a service and is connected with the evaluation of all “pros” and “cons” of a purchase. The second type comes from the customer’s feelings and values which he or she tries to find in a particular service. The emotional-symbolic aspect is of great significance to loyal customers and of little importance to disloyal ones. Moreover, the reasons that significantly differentiate loyal consumers from disloyal ones refer mainly to social and interpersonal aspects. In other words, through a purchase of a certain service, loyal consumers want to convey some information about themselves to other consumers. Consequently, they highly evaluate the symbolic value of a definite service. Nevertheless, it is noteworthy that in the case of some rational-functional reasons both consumer groups (loyal and disloyal) have obtained similar results. Both loyal and disloyal customers admit that a utility value price as well as and comfort are the main reasons for which they buy a service (Graham, 2010).

One can presume that despite similar results, the reasons may be derived from two different sources. Loyal consumers may refer to these reasons as convictions on a preferred service. For disloyal consumers the most important reasons constitute a set of criteria according to which they make a decision about a service without getting attached to it (Solomon, et al, 2010).

Loyalty itself is a major issue affecting the phenomenal growth rate of e-commerce, according to industry sources and recent academic studies (Gefen and Straub, 2003). Loyalty is a prerequisite for many business interactions (Dasgupta, 1988) because of the way it reduces the uncertainty that is created by dependency on others (Luhmann, 1979). Loyalty is especially important in an online environment when all that consumers have to go by is a computer system embedded in web pages (Gefen and Straub, 2003).

Loyalty is an important aspect in commerce, in general, because of the inherent uncertainty created by the need to depend upon others in many types of commerce interactions (Fukuyama, 1996) and the resulting possibility of encountering opportunistic behaviour, such as vendors
candidly veiling all the appropriate risks (Williamson, 1995) or behaving in an unpredictable manner (Luhmann, 1979). The same applies to e-commerce, wherein consumers need to depend upon often unknown e-vendors who may resort to opportunistic behaviour (Gefen and Straub, 2003).

The present study examines consumer loyalty with reference to the use of e-service websites. Healthcare sector was chosen as subject of analysis. This choice was deliberate, as, on the one hand, the focus was put on a sector characterized by great resource asymmetry in the relation: Business to Customer (B2C); on the other hand, authors wanted to concentrate on a sector which has required degree of concentration, frequency of customer-organization contacts and customers’ freedom in the choice of a service provider.

The evolution of the Internet within last years and the continuous advances in electronic commerce and communication provide exciting opportunities to implement a powerful framework of resources, tools and applications that revolutionize ways in which healthcare organizations interact with their patients, as well as deliver and manage medical services (Nazi, 2005). Internet-based healthcare is the application of information and communication technologies across the whole range of healthcare functions. It covers everything from electronic prescriptions and computerized medical records to the use of new systems and services that cut waiting times and reduce data errors. Managing the benefits of internet promises to simplify and reduce costs for employers and bring more choices and control (Doole et al, 2005). The development and implementation of web-enabled communication, patient services and other e-health initiatives are increasingly important in maintaining competitive advantage and to compete for market share. More importantly, the value added for patients by facilitating access to information and resources is expected to improve the quality of services, speed of treatment and can potentially rationalize management of administrative processes (Nazi, 2005).

According to the character of their activity, all healthcare organizations (HCOs) offering services through the internet can be divided into (Chmielarz, 1999):

- Internet HCOs with traditional outlets – they use Internet as alternative distribution channel; patients have access to services in traditional branches, through the Internet and other electronic channels (Model I);
- HCOs operating only by means of Internet – these are virtual HCOs.
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Nowadays HCOs which offer services in traditional branches and support their activities with Internet (Model I) are most popular in the Polish market. They have competitive advantage in market compared to other HCOs because they have already been operating with big number of patients (mostly loyal ones). Model II has a complementary role in market, whereas Model III is less popular and constitutes transitory form of Internet organization.

There are many definitions of e-health. Nevertheless, it can be assumed that e-health is an emerging field at intersection of medical information technologies, public health and business. E-health refers to health services and information delivered or enhanced through Internet and related technologies (Eysenbach, 2001). The growth of e-health systems is related to the evolution of Internet. As Internet is becoming more widespread, friendlier and faster, the range of its uses is widening (Kosinskanslowski, , 2004).

The development of e-health in academia is scarce and is a new issue for discussion and analysis (Alvarez, 2003). It offers means to draw together governments, organizations and professionals in collaborative partnerships, in ways that were not possible before. For instance, e-procurement has helped many companies reduce their procurement costs while increasing their supply chain performance, and ultimately, their overall performance (Quesda, 2004). Numerous stakeholders, including consumers, clinicians, administrators and politicians, are already actively involved in e-health initiatives (Alvarez, 2003). E-health facilitates primary and community care and provides information on conditions which require immediate emergency treatment via virtual clinics. Also, e-health has the potential to supplement traditional delivery of services and channels of communication in ways that extend the HCO managers’ ability to meet patient needs. Benefits include enhanced access to information and resources, empowerment of patients to make informed healthcare decisions, streamlined organizational processes and transactions, as well as improved quality, value, and growing patient satisfaction. However, a diverse array of factors affect the development and implementation of e-health initiatives.

without traditional branches; patients have access to services only through the internet or other electronic channels (Model II).

- Internet HCOs created by traditional HCOs but operating separately – there is no relation between services offered through Internet and traditional branches (Model III).
and applications (Nazi, 2005) including: teleradiology, telepsychiatry, telepathology, teledermatology or home telecare.

RESEARCH MODEL AND HYPOTHESES

In a later part of the paper, the authors focus on medical organizations representing Model I, where internet organizations are combined with traditional outlets. These use internet as an alternative distribution channel and consumers have access to services in a branch, through the internet and through other electronic channels. Models II and III are treated as fully virtual organizations (VOs). The notion of trust is considered with reference to the analyzed model (Model I).

In such a structure, with its variety of historical and new ties, the antecedents for loyalty-building behaviours are based on a common belief that individuals or groups will act in good faith to fulfil commitments, demonstrate honesty in negotiations and refrain from excessively taking advantage (Cummings and Bromiley, 1996). Additionally, the need to rely on a variety of artificial communication media can affect the process and formation of confidence building in members within the network. Moreover, it is possible that remote workers’ expectations will be more personal and idiosyncratic – being constructed in a social vacuum – as they will be isolated from the usual benchmarks of the conventional organizational structure, relationship and practice (Crossman and Lee-Kelley, 2004).

While there is an abundance of literary works on loyalty in sociology, psychology, management and even journals of economics, relatively little is specifically related to organizations with typical structures and spatial-temporal relationships. In this study, the authors concentrate mainly on customer loyalty.

Literature studies prove that loyalty is determined by an array of other factor groups. A very important group relates to attributes of an organization (a traditional form of functioning) offering e-services and comprises factors such as reputation of an organization or its perceived size (Jarvenpaa et al, 2000). Another group refers to experiences with previously purchased services (traditional) and includes the level of satisfaction and trust - developed as a result of previous contacts with a definite organization (Papapoulou et al, 2001).

The latter part of the paper is focused on this factor group and on the analysis of the factor’s influence on the level of loyalty to organizations providing e-services. The experience in the use of services, which were previously provided by traditional organizations, especially institutions of public confidence such as medical institutions, has a considerable influence
over the level of loyalty towards these organizations and guarantees purchase of services provided by these institutions (Brown et al, 1996). Several studies have demonstrated the effect of satisfaction on customer loyalty (Loveman, 1998; Brown et al, 1996; Croin & Taylor, 1992; Rust & Zahorik, 1993). However brand trust is postulated to affect customer loyalty directly, in the absence of effects on a satisfaction construct (Gommans et al, 2001). Some researchers have reported that trust is not directly related to loyalty (Sirdeshmukh et al, 2002), but others say that trust is regarded as a precondition for an increased relationship commitment (Miettila and Moller, 1990). High satisfaction can lead to high trust in a service provider, but without the involvement of any emotional commitment (Moorman et al, 1993). While trust is necessary for an increased relationship commitment, trust by itself is no guarantee of repeat business or loyalty (Garbarino and Johnson, 1999). This implies that mere trust in a service provider is not sufficient to increase one’s commitment to a particular organization (Hocutt, 1998). There must be something that mediates the relationship between trust and relationship commitment. The consumer can trust that an organization will do what it says, but still may not be loyal to that particular organization. This leads the authors to propose the following:

**H1:** Consumer’s satisfaction with healthcare services positively influences his/her loyalty to e-services.

**H2:** Consumer’s trust in e-healthcare services is positively related to his/her loyalty to e-services.

**H3:** Consumer’s loyalty to traditional healthcare services is positively related to his/her loyalty to e-services.

It should be borne in mind that the gained loyalty is determined by the level of perceived risk connected with the purchase of e-services and the level of consumer trust towards these organizations. From this point of view, trust is considered to be a necessary mediating variable between satisfaction and customer loyalty (Morgan and Hunt, 1994). They reported that trust and commitment are key mediating constructs in successful relationships. Interestingly, several researchers have also found a positive relationship between trust and satisfaction (Gummerus et al, 2004). This finding can also be explained by another research into value, where trust in a service provider reduced the perceived level of risk, resulting in an increase in perceived value, and consequently in greater satisfaction (Hocutt, 1998). The research also shows a significant and positive relationship.
between post-complaint satisfaction and trust, emphasizing the central role of satisfaction with conflict handling in the promotion (or reduction) of trust between the parties involved (Tax et al, 1998). This is due to the notion that, when a consumer perceives a company’s performance as fair and satisfactory, his/her feelings of trust (in the company) tend to be strengthened. Based on this logic, the following is proposed:

H4: Consumer’s satisfaction with e-healthcare services is positively related to his/her trust in e-healthcare organization.

Several studies have also shown a favourable effect of customer trust in traditional organizations (firms) on customer trust in virtual organizations (Otto, 2003; Dado 2003; Karcz & Bajdak 2005). This is connected with a brand value which is based on strong and unique brand associations related to attributes and benefits of service and/or corporate values (Biel, 1992; Keller, 1993; Aaker, 1996) or the perception of a company as being innovative and dynamic (Kalkman and Peters, 2003). This brings us to this hypothesis:

H5: Consumer’s trust in a traditional healthcare organization is positively related to his/her trust in e-healthcare organization.

Given the theoretical background and established hypotheses, Figure 1 presents a theoretical model for investigating customer loyalty in e-healthcare sectors.

![Figure 1: A hypothesized model of consumer trust in e-healthcare](http://www.novapdf.com)
RESEARCH METHODS

In order to empirically test the hypothesized model of consumer loyalty in e-healthcare services a survey was conducted with the use of a structured questionnaire. The questionnaire was designed with the use of a Likert scale that referred to individual factors included in the model of loyalty in e-healthcare services. Scales to measure each factor in the model were developed on the basis of previous literature, and where possible, the already existing scales were used. In particular, measures of consumer satisfaction were based on three items (Croin & Taylor, 1992; Bitner, 1990; Wirtz, 2001), six items of consumer trust each for traditional and virtual healthcare service organizations (Sirdeshmukh et al, 2002, Doney & Cannon, 1997; Price & Arnould, 1999; Andreassen & Lindestad 1998), and finally four items for consumers loyalty to both traditional and e-healthcare organization (Zeithaml et al, 1996). After the questionnaire preparation, the measurements were submitted for evaluation by three experts – marketing and statistic professors – in terms of wording/meaning and consistency.

The survey was conducted in Poland, which is a representative model for transforming countries in Europe (Kedzior and Karcz, 1998). The research was carried out on a sample of patients (Matysiewicz, 2005). Total of eight hundred questionnaires were distributed through the Internet to the patients. After the collection, all questionnaires were subject to screening and verification. As a result, 509 questionnaires were approved for further analyses.

Further on, the construct validity of model scales was evaluated by means of the Confirmatory Factor Analysis (CFA) of the pooled data from seven aspects. The CFA was conducted with AMOS ver. 3.6. (Arbrukle, 1997). The Chi-square value was significant (Chi-square = 602.272, df = 89, p < 0.001), which might be an artefact of the sample size, thus other fit indexes are more indicative. Table 1 presents common fit indexes, guidelines regarding the index recommended values and index values for CFA models. The indexes show a good overall fit to the data.
Table 1: Goodness-of-Fit Statistics for research model

<table>
<thead>
<tr>
<th>No.</th>
<th>Goodness-of-Fit Statistics</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$\chi^2$</td>
<td>602.272 (p&lt;0.001)</td>
</tr>
<tr>
<td>2</td>
<td>DF</td>
<td>89</td>
</tr>
<tr>
<td>3</td>
<td>GFI</td>
<td>0.928</td>
</tr>
<tr>
<td>4</td>
<td>AGFI</td>
<td>0.917</td>
</tr>
<tr>
<td>5</td>
<td>CFI</td>
<td>0.974</td>
</tr>
<tr>
<td>6</td>
<td>NFI</td>
<td>0.969</td>
</tr>
<tr>
<td>7</td>
<td>RMSEA</td>
<td>0.069</td>
</tr>
</tbody>
</table>

For construct validity, the authors examined the factor loadings of model variable items on their underlying constructs. The loadings of fourteen of the twenty-three model variable items were above 0.7. Five other model variables had loadings of 0.6, again indicating a good fit of the measurement model (Chin, 1988). The four loadings were under 0.5. Therefore, these variable items were removed from further analysis.

MAIN RESULTS AND DISCUSSION

The hypotheses were subjected to examination basically by levels of adjustment of the theoretical model and by the significance and magnitude of estimated regression coefficients (Hair et al, 1998; Gatnar & Walesiak, 2004).
### Table 2: Estimated coefficients in consumer loyalty to e-healthcare organization model

<table>
<thead>
<tr>
<th>Relationship in model</th>
<th>Standardized regression coefficient</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variable:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer loyalty to e-healthcare</td>
<td>R² = 0.71</td>
<td></td>
</tr>
<tr>
<td>- satisfaction with e-healthcare</td>
<td>0.74 (7.32)</td>
<td>H₁</td>
</tr>
<tr>
<td>- trust to e-healthcare institution</td>
<td>0.79 (6.05)</td>
<td>H₂</td>
</tr>
<tr>
<td>- loyalty to traditional healthcare</td>
<td>0.60 (5.24)</td>
<td>H₃</td>
</tr>
<tr>
<td><strong>Dependent variable:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer trust to e-healthcare</td>
<td>R² = 0.82</td>
<td></td>
</tr>
<tr>
<td>- satisfaction with e-healthcare</td>
<td>0.66 (5.94)</td>
<td>H₄</td>
</tr>
<tr>
<td>- trust to traditional healthcare</td>
<td>0.70 (6.28)</td>
<td>H₅</td>
</tr>
</tbody>
</table>

a – estimates presented come from ERLS using EQS  
b – t-values in parenthesis. Based on one-tailed test: t-values > 1.65, p<0.05; e t-values > 2.33, p<0.01. Coefficients in bold are statistically significant.

The results provide support for all four relationships specified in our theoretical model. These relations reflect the impact of satisfaction with e-healthcare services on loyalty to e-healthcare institutions, trust in e-healthcare intuition on loyalty to e-healthcare institutions, trust in traditional healthcare institution on loyalty to e-healthcare, satisfaction with e-healthcare services on trust in e-healthcare institutions, and trust in traditional medicine institutions on trust in e-healthcare institutions.

The findings support hypotheses H1, H2 and H3, according to which consumer satisfaction with e-healthcare institutions, consumer trust in e-healthcare and consumer loyalty to traditional healthcare institutions have an impact on consumer loyalty to e-healthcare. An R² of 0.71 suggests that three constructs – satisfaction, trust, and loyalty to traditional institutions – determine variations in consumer loyalty to e-healthcare. The impact of trust in e-healthcare (0.79) on consumer loyalty results in consumers’ belief that the institution will have a consistent and competent performance in future. The impact of loyalty to traditional healthcare institutions has the weakest influence on loyalty to e-healthcare (0.6). The results confirm hypotheses H4 and H5, according to which consumer satisfaction with e-healthcare services and consumer trust in traditional healthcare institutions...
have an effect on trust in e-healthcare institution. In addition, Table 2 shows the explained variation (R²) for each dependent variable in the model. An R² of 0.82 indicates that two constructs – satisfaction and trust in traditional healthcare institutions – greatly determine the variation in consumer trust in e-healthcare institutions. However, the trust in traditional healthcare institutions has a stronger impact on trust in e-healthcare than satisfaction (0.7 and 0.66).

IMPLICATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The study results support both the model presented in Figure 1 and the hypotheses regarding the directional linkages between the model variables. The research shows that customer loyalty to e-healthcare in Poland is relatively low. The current level of loyalty to e-healthcare institutions is a consequence of the higher level of customer satisfaction with e-healthcare and great trust in traditional healthcare institutions. It should be emphasized that the level of consumer loyalty to traditional healthcare institutions is higher in comparison to e-healthcare service providers. This is due to poor market education and a less developed virtual market in Poland. It is also worth underlining the fact that customer trust in e-healthcare institutions are positively related to customer loyalty in e-healthcare market.

Bearing in mind the above-presented facts, it can be concluded that the model holds value for e-healthcare services sector. From the academic point of view, our research examines some relevant issues in the field of the considered knowledge. These issues concern, among others, the role of trust in traditional and e-healthcare institutions as well as the role of satisfaction from e-healthcare in creating trust in virtual ones. From the managerial perspective, the present study brings several contributions to marketing professionals. The findings of this study indicate that e-healthcare institutions have successfully focused on the creation and maintenance of long-term relationships, implied in the treatment of consumers. The investments made in increasing consumer loyalty in traditional healthcare institution will be less efficient than investment in customer trust in e-healthcare institutions and will strengthen the relationship between consumers and service companies.

Nonetheless, it should be remembered that this research has some limitations, which, however, can be turned into opportunities for future research. The key limitation of this study refers to the choice of healthcare sectors, which are characterized by the highest level of customer retention and by the greatest involvement on the part of consumers. Apart from that, the authors have taken into consideration a limited number of determinants of loyalty in e-healthcare. Other determinants (cognitive or affective) or moderating variables can also influence this loyalty in e-healthcare.
Moreover, loyalty in e-healthcare may include aspects other than those considered in this research. In addition, the research was conducted only in Poland, which constitutes a representative model for a country in transition. Loyalty in e-healthcare may be different in other countries. We believe that a future focus on a different service context, on the role of various determinants, as well as on cross-country population, will contribute to a better understanding of loyalty in e-healthcare.

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