



Empirical Evidence of Predictors of Customer Trust in Online Healthcare System in India

R. Thiru Murugan

Ph. D Scholar, School of Business Leadership and Management, Karunya University, Coimbatore, Tamil Nadu, India

Dr. J Clement Sudhakar

Associate Professor in Marketing Area, School of Business Leadership and Management, Karunya University, Coimbatore, Tamil Nadu, India

ABSTRACT

Internet, albeit making human life sophisticated, has become indispensable part in sustenance of vital system like healthcare. Since Online Healthcare System (OHCS) is growing rapidly, it is the responsibility of the service provider to build trust in the mindset of the customers. This article analyses the predictors of customer trust in OHCS. By using stratified random sampling technique a survey had been taken from 296 respondents in Coimbatore city, Tamil Nadu. Exploratory Factor Analysis and Multiple Regression Analysis were used to lucidly identify the factors influencing the OHC

KEYWORDS : Online Healthcare System, Online trust, Customer trust, Empirical evidence.

Introduction

In the past two decades information technology growth has made a revolution in India. As part of this phenomenon, Online Health Care System (OHCS) refers to the list of services like health records, online advice etc... provided through internet by the hospitals increasingly become paramount facet of Indian Health Care Sector. In the burgeoning population, Government is indeed finding it difficult to provide health care to all the sect of people. OHCS alternatively develops a good relationship with customers cutting across geographical barriers. The main advantage of OHCS is ability to provide access to information securely at affordable cost. It delivers communication efficacy and greater information exchange between the service provider and the customer (Peterson et al., 1997).

Theoretical Background

Considering OHCS as an alternative to traditional health system, it is imperative for the service provider to seed trust in the customers mind. Trust paves a way to build long term relationship between customer and health service provider (Anderson and Weitz, 1989). Trust acts as a lubricant to develop enduring affiliation towards the OHCS service provider (Rappa, 2002). In this backdrop, this study aims to determine key antecedents that influence the customer trust in OHCS in India.

Review of Literature

Customer

Customer as any person, client, supplier, or employee who interacted directly or indirectly with any business (Hoberman, 2007).

Trust

Trust has been defined as 'a generalised expectancy held by an individual that the word of another can be relied on' (YAU Suk Ching Eppie 2007). Trust has been documented as a belief and expectancy ingrained in the mindset of the customer (McAllister, 1995). Trust is defined as the buyer's belief that the seller will behave benevolently, capably and ethically (Chao-Min Chiu et. Al 2008). Trust indicates a positive belief about the perceived reliability of, dependability of, and confidence in a person, object or process (Rempel et al., 1985).

Trust in Online System

Trust refers a set of beliefs held by an online consumer concerning certain characteristics of the e-supplier, as well as the possible behavior of the e-supplier in the future (Mustafa I. Eid, 2011) In Internet context, the development of trust depends upon service providers characteristics. Trust toward online companies is often regarded as a key factor of commerce growth, online success and competitiveness (Rappa, 2002). The antecedents of trust are responsiveness of the website, privacy and securities issues, user interface and information quality of the company. Customers' trust to online companies is critical for online companies' success.

Concepts and Hypotheses

Security

Online health system deals with the personal information of the cus-

tomers. Security is closely associated with trustfulness of online health providers (Zhilin Yang 2004). The perceived lack of security on in online health system is major a block (Balfour et al., 1998). "Security" encompassed low risk associated with online transactions, safeguarding personal information, and safety in completing online transactions. (Zhilin Yang 2004). The main barrier to the development of online health system is lack of security as perceived by the customers.

H1: Security has direct positive effect on customer trust

Responsiveness

Responsiveness represents the service provider's ability to respond quickly to request and suggestions, and provide assistance for customers in case of problem (Zeithaml et al, 2000). Parasuraman et al., 2005 explained effective handling of the problem through online health system is called responsiveness. Responsiveness is the most important factor in determining online trust (Chao-Min Chiu et. Al 2008). Timely and faster communication leads to trust towards the online health system (Moorman et al. 1993). A quick response to the queries and request increase confidence and trust on the OHCS (Gummerus et al., 2004). Responsiveness is a positive antecedent of interpersonal trust (Kineta Hung et al., 2011).

H2: Responsiveness has direct positive impact on customer trust.

Information quality

Information quality refers to the e-commerce content issues and covers the completeness, accuracy, format and currency aspects of information delivered by e-commerce marketplaces (Wixom et al. 2005). A widely used general definition of information quality (IQ) is the information's "fitness for use" (Wang & Strong, 1996). Information quality is a determinant for online customer trust (Mustafa I. Eid 2011).

H3: Information Quality has direct positive effect on customer trust.

User Interface

Gummerus, Liljander, Pura and Van Riel [2004] define the user interface as the channel through which Consumers are in contact with the e-service provider. Park and Kim [2003] found that the quality of the user interface affects the customer trust directly, since it provides physical evidence of the service provider's competence as well as facilitating effortless use of the service. Alam and Yasin [2009] found that website user interface design is strongly related to customer trust.

H4: User Interface has direct positive effect on customer trust.

Research Methodology

Measurement

Based on the literature review 41 measurement items taken for the pilot study. The pilot study was conducted in Coimbatore city in Tamil Nadu, taking a sample size of 50. From the pilot study results some of the measurement items were confusing the respondents. To solve this problem some of the measurement items were modified and some were removed from the questionnaire after conducting a content validity from the 10 experts. Content validity score found to be 91%. Finally 30 measurement items were taken for the final study.

Sample Size Determination

For this study the size of the population was unknown. It has been suggested to have a sample of between 200 and 1,000 respondents for populations of 10,000 or more (Aleck and Settle, 1985). After considering factors like budget, time and accessibility to respondents, this survey ultimately used 296 respondents.

Results and Discussion

Table 1: Respondent Profile

Variable	Measure	Frequency
Gender	Male	192
	Female	104
Age	Less than 25	98
	25-35	72
	36-45	66
	45-60	41
	Above 60	19
Education Level	School level	187
	Graduate	73
	Post graduate	32
Location	Doctorate	4
	Urban	124
	Rural	172

Exploratory Factor Analysis (EFA)

EFA used to extract the factors from the variable. Five factors were extracted and were named as Responsiveness, User interface, Security, Information Quality and Trust. Kaiser Meyer Olkin (KMO) measure of sampling adequacy conforms that the sample size for the study is good enough to perform the factor analysis. The value is 0.768. The KMO Measure of Sampling Adequacy high value (close to 1.0) indicates that a factor analysis may be useful.

Reliability Test

The reliability coefficient alpha for each factor is found to be greater than 0.7 which denotes high reliability level (Nunnally 1978)

Multiple Regression Analysis

Multiple regression analysis was performed to analyse Hypotheses. The coefficient of determination (R square), is the squared value of the multiple correlation coefficient. It shows that about 46.9% the variation is explained by the model. The significance value of the F statistic is less than 0.05.

The beta coefficients value for security is 0.481 which explains that security is the main factor which affects customer trust. Next to security, perceived usefulness (0.112) and responsiveness (0.192) affect trust. Information quality has very low value of 0.003 which amount to no effect on trust. Based on the results we conclude the following

Table 2: Hypothesis Testing Results

Hypothesis	Coefficient Sig.	Result
H1: Security has direct positive effect on customer trust	.000	Accepted
H2: Responsiveness has direct positive effect on customer trust.	.030	Accepted
H3: Information Quality has direct positive effect on customer trust.	.932	Rejected
H4: User Interface has direct positive effect on customer trust.	.001	Accepted

Conclusion

The objective of this study is to determine key predictor of trust. The hypothesis testing conducted through the deployment of multiple regression analysis reveals that the factors securities, responsiveness, perceived usefulness have direct impact on trust. Therefore it is very evident that the customers of the online health care system expect these components from service provider to fuel their trust.

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