

Analysis of Web Quality Provided by Pintwire Informatics in IT Industry: using WEBQUAL Instrument

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Abstract

The enhanced internet penetration and the increased usage of the facilities provided by the e-commerce websites, and thus generate the urge to find out the best amongst the options and the factors determining it. This paper tries to explore the optimally performing e-commerce websites in the Indian context based on the evaluation parameters highlighted by WebQual. The issue of website quality is tackled from the perspective of 'Voice of the Customer'. In this paper an online survey is administered through questionnaire with a sample of 60 respondents in Delhi & NCR, to examine the customers' satisfaction level involved with website quality that is influenced by a series of quality dimensions which hinder in delivering the best web quality in IT industry. To observe the questionnaire WEBQUAL instrument was used and response was taken to examine the different aspects associated with customer's satisfaction level. It is tested with the help of regression analysis.

Keywords: Assurance, Empathy and Responsiveness, IT Sector, Reliability, WEBQUAL

1. Introduction

Information technology is playing an important role in India today as it has changed the image from a slow growing economy to the place of innovative entrepreneurs.

The IT sector in India has opened up the opportunity of employment by 2.5 million. India is now one of the biggest IT capitals of the world.

1.1 Industry Segmentation

IT industry can be broadly classified into three sectors:

Software

IT Services

IT enabled Services (ITeS)- BPO

1.2 Present Industry Structure

The Indian IT industry comprises of well established firms as well as the emerging players that have just started up. The industry is fragmented yet concentrated. In terms of Small and Medium Enterprise (SMEs) and their offerings, they can be termed as fragmented. But, on the other hand, the leading players, their earnings and their offerings, the industry can be termed as concentrated.

The industry can be categorized as follows:

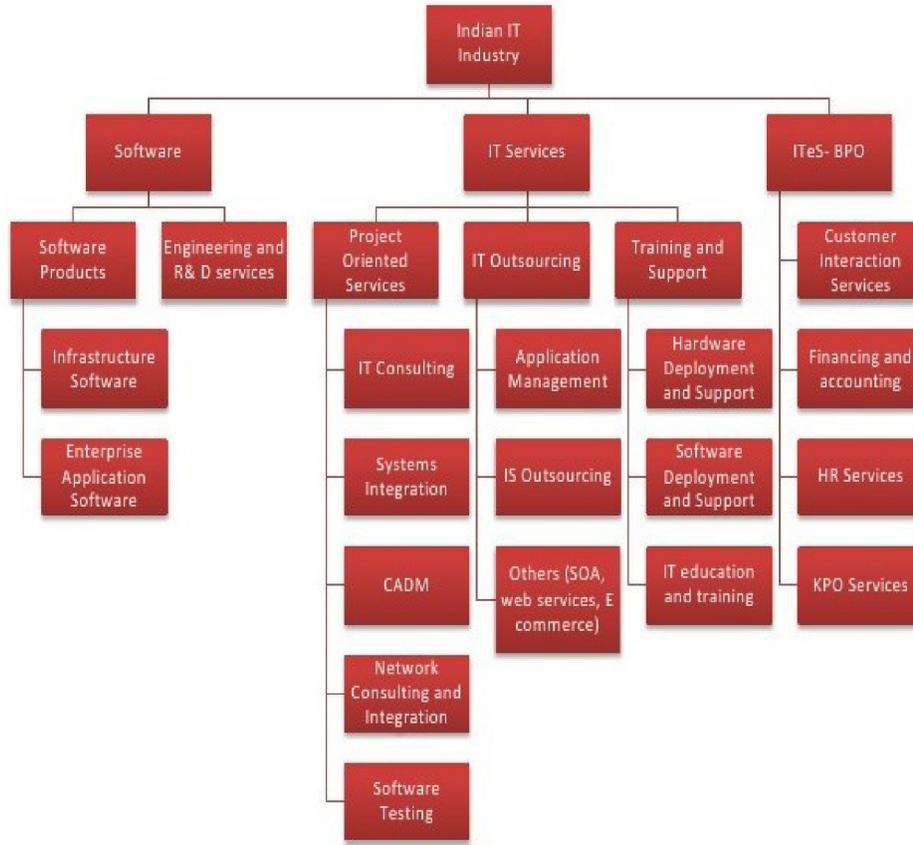
- 1.2.1 Tier I Players
- 1.2.2 Tier II Players
- 1.2.3 Offshore Global Services Provider
- 1.2.4 Pure Play BPO Providers
- 1.2.5 Captive BPO Units
- 1.2.6 Emerging Players

1.1.1 Tier I Players

The number of players in this category is very low (5-7). They account for almost 45 per cent of IT Services and 4-5 percent of BPO exports. These firms have increased their sales due to their strong management capabilities and Global Delivery Model (GDM). These factors have helped them to mark their presence globally. They have started new services like IT consulting, Research and Development (R & D), testing etc.

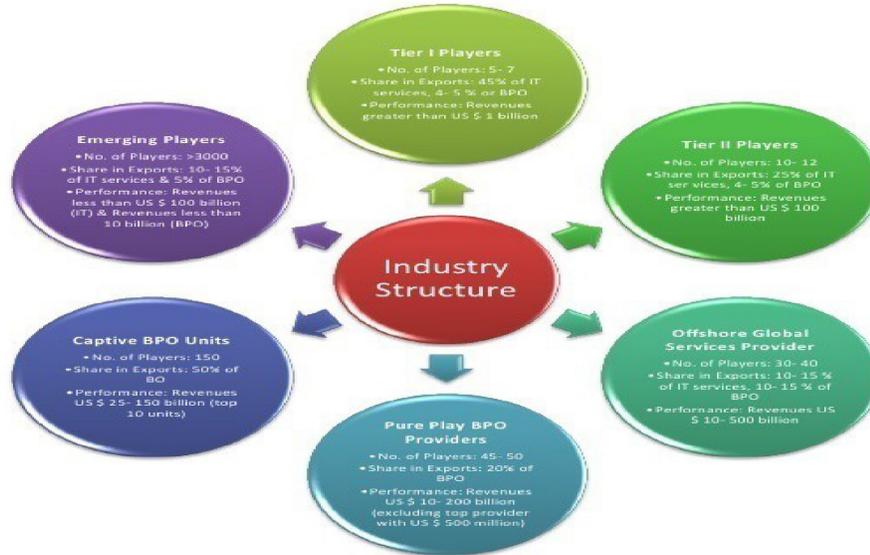
1.1.2 Tier II Players

Their revenue is greater than US \$ 100 billion. The number of player are low (10-12). They account for 25 per cent of IT services and 4-5 per cent of BPO exports. Due to limited number of



[Source: NASSCOM, D&B Industry Research Service]

Figure 1. Hierarchy of India IT Industry.



[Source: NASSCOM, D&B Industry Research Service]

Figure 2. Industry Structure.

clients and verticals, these players have registered a lower growth rate than the Tier I players.

1.1.3 Offshore Global Service Providers

This category has around 30–40 players who registered their sales revenue of US \$ 10–500 billion. These players are recording inorganic growth through acquisitions in low cost destinations including India. But, due to complex local market conditions, they are facing challenges in integrating Indian operations.

1.1.4 Pure Play BPO Providers

The number of players in Pure Play BPO providers has hanged around 40–50. They account for around 20 per cent of BPO exports. These providers are facing serious challenges in terms of increasing customer expectations in quality and delivery of service.

1.1.5 Captive BPO Units

There are about 150 players in Captive BPO Units. They account for 50 per cent of BPO exports. They are also increasing their presence in Tier II cities, firstly for cost and resource considerations.

1.1.6 Emerging Players

The number of players which are emerging in this category is over 3000. They account for about 10–15 per cent of IT services exports and 5 per cent of BPO. These players are facing problems as they have limited access to markets.

2. Advantage India

2.1 Technically Skilled Professionals

There is a huge reservoir of technically skilled manpower in India. This has been proved to be as one of the most critical success factors for IT sector. The main reason behind this growth is the demographic profile of India, where over 50 per cent of the population is below 25 years of age. The growing number of world class educational institutions along with the policy for educational loans, have geared the growth of the industry.

2.2 English Speaking Population

The medium of education in India is primarily English due to India's emigrant past and this has proved to be boon to the industry. After USA, India is the largest nation in the world in terms of English speaking population.

2.3 Robust Telecom Infrastructure

The telecom Industry in India is well established. The telecommunication network in India is the third largest network in the world and the second largest among the emerging nations in Asia. The availability of superior, robust and reliable telecom connectivity has added to the success of the whole industry in India.

2.4 Rendering Customized, End to End and Niche Services/Solutions

Indian firms have slowly graduated from giving customized solutions to the end services and also niche solutions/services, due to the increasing pervasiveness of IT and huge potential for earning foreign exchange.

2.5 Low Costs of Offshore Outsourcing

The first driver for off shoring to India was cost. But, India has proved to render quality services at affordable costs. According to off shoring to India results in saving 25–60 per cent base cost.

2.6 Favourable Government Policies

Entry barriers for foreign investors have been removed in India after the liberalization of Indian economy. Therefore, liberalized FDI policies, tax exemptions, basic infrastructure, subsidies etc. from the government has definitely provided a boost to the establishment of the IT industry in India.

2.7 Quality Orientation

Indian companies are certifying themselves with ISO 9001, Six Sigma, Just in Time, COPC certificate to attract foreign clients.

2.8 Established IT hubs in India

- (A). Bangalore
- (B). Hyderabad
- (C). NCR-Delhi
- (D). Kolkata
- (E). Mumbai
- (F). Pune
- (G). Chennai

2.9 Emerging IT Hubs in India

Slowly and steadily the Tier 2 and Tier 3 cities are also emerging to become IT hubs. The major advantages which these cities provide are:

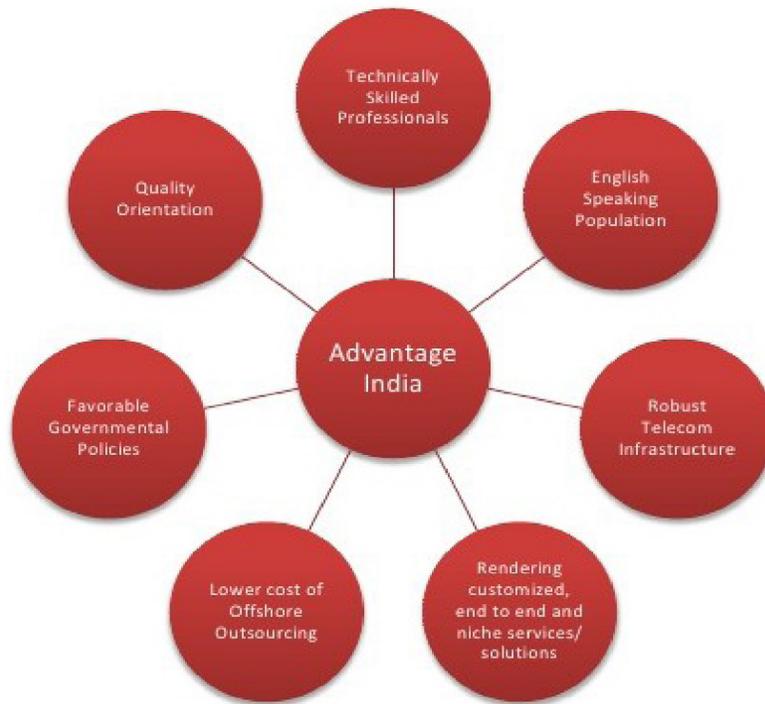


Figure 3. India's competitive advantage.

Established IT hubs in India



Figure 4. Established IT Hubs In India.



Figure 5.

1. Higher savings in administration
2. Lower infrastructural costs
3. Large pool of talents in the form of skilled professionals

3. Website Quality

“WebQual is an instrument for assessing the usability, information, and service interaction quality of Internet web-sites, particularly those offering e-commerce facilities.” To identify and check the website quality provided by the company WebQual is used with respect to the customer’s satisfaction level. The five dimensions of QUALITY are:

- 1) Tangibility: includes physical facilities, equipment, personnel and communication materials.
- 2) Reliability: is the ability to work dependably and accurately for the promised services.
- 3) Responsiveness: is willingness on the part of service providers for helping the customers and providing service.
- 4) Assurance: is employee’s knowledge, courtesy and ability to convey trust and confidence.
- 5) Empathy: is giving attention to the individual customers.

3.1 Objectives of the Study

The objective of the research done for the company was to know about the website quality provided by Pintwire Infomatics to their customers. Moreover the secondary aim was also to find out the quality of the website service provided by the company over some pre-setted parameters by getting response from the customers who are currently using Pintwire’s website service. However, if looked into the questionnaire the purpose of finding out the website quality provided by Pintwire Infomatics was a quite successful exercise.

4. Research Methodology

The questionnaire was administrated using WebQual instrument. The design used for the study is descriptive under conclusive design. It is a quantitative design where the defined hypothesis is tested on the basis of primary data which is collected with the help of a structured tool called questionnaire.

The study was done with a sample size of 60 respondents. The respondents were selected for the study from the various customers of Pintwire Infomatics. A random sampling was taken.

The research instrument or tool used for the preparation of this project is Questionnaire. A questionnaire consists of a list of questions printed in a definite order on a form to be asked from respondent.

4.1 Data Collection

The approach used for the data collection is Survey Method. There are two sources of data collection:

- 1) Primary Data: Data collected for the purpose of this project is through:
 - Observations
 - Survey through Questionnaire
- 2) Secondary Data: Secondary data collected through:
 - Websites
 - Books

4.2 Hypothesis

- Hypothesis is a supposition or proposed explanation made on the basis of limited evidence as a starting point for further investigation.
- It is a proposition made as a basis for reasoning, without any assumption of its truth.
- The hypothesis for this study is constructed below on the basis of dimensions of quality:
 - H1: Customers perceived ‘Reliability’ of website of Pintwire Infomatics leads to customer satisfaction.
 - H2: Customers perceived ‘Performance’ of website of Pintwire Infomatics leads to customer satisfaction.
 - H3: Customers perceived ‘Responsiveness’ of website of Pintwire Infomatics leads to customer satisfaction.
 - H4: Customers perceived ‘Durability’ of website of Pintwire Infomatics leads to customer satisfaction.
 - H5: customers perceived ‘Features’ of website of Pintwire Infomatics leads to customer satisfaction.

4.3 Analysis

Table 1 showing the regression analysis among customer satisfaction through responsiveness, reliability, empathy & assurance. to examine the relationship between these variables (responsiveness, reliability, empathy, assurance) multiple regression has been run.

4.3.1 Dimension – Responsiveness (Model 1)

Model – 1 shows the relationship between customer satisfaction and responsiveness. Here the value of p is less than 0.05. Hence, responsiveness is significant to the customer satisfaction. It implies that customer satisfaction is achieved through responsiveness.

4.3.2 Dimension – Reliability (Model 2)

Model – 2 shows the relationship between responsiveness and reliability through customer satisfaction which implies that when

Table 1. Regression analysis of customer satisfaction through responsiveness, reliability, empathy & assurance

| | Model 1 | Model 2 | Model 3 | Model 4 |
|----------------|---------|---------|---------|---------|
| Responsiveness | 0.812* | -0.111 | -0.056 | -0.070* |
| | 0.082 | 0.169 | 0.099 | 0.031 |
| Reliability | | 0.996* | -0.232 | 0.039 |
| | | 0.171 | 0.189 | 0.061 |
| Empathy | | | 1.265* | -0.104 |
| | | | 0.165 | 0.099 |
| Assurance | | | | 1.132* |
| | | | | 0.069 |

Note: Here * denotes the value of p is less than 0.05 which represents the significance level.

Table 2. R square

| | Model 1 | Model 2 | Model 3 | Model 4 |
|----------|---------|---------|---------|---------|
| R Square | 0.75 | 0.88 | 0.96 | 0.99 |

customer satisfaction is measured then only reliability is satisfying the customers. Here in the Table-2 the value of p in reliability is less than 0.05. Hence, it means only reliability is significant and responsiveness is insignificant to the customer satisfaction.

4.3.3 Dimension – Empathy (Model 3)

This model examines the relationship between responsiveness, reliability and empathy. It implies that when responsiveness, reliability & empathy are measured through customer satisfaction then only empathy is satisfying the customers. Here the value of p in empathy is less than 0.05. Hence, it means that only empathy is significant and responsiveness, reliability is insignificant with respect to the customer satisfaction.

4.3.4 Dimension – Assurance (Model 4)

This model examines the relationship between responsiveness, reliability, empathy and assurance. It implies that when responsiveness, reliability, empathy and assurance is measured through customer satisfaction then only two variables responsiveness & assurance are satisfying the customers. Here the value of p in responsiveness and assurance are less than 0.05. Hence, it means that only responsiveness and assurance are significant to the customer satisfaction. However responsiveness & reliability are insignificant with respect to the customer satisfaction.

From all the above analysis we conclude that responsiveness and assurance is the two main predictor of the customer satisfaction with respect to the website quality of Pintwire Infomatics Pvt. Ltd.

5. Limitations of the Study

1. The very first limitation of this study is the small sample size because it was provided by the company itself.
2. The second limitation of this study is that the sample size is confined to Delhi & NCR.
3. The results of this study cannot be generalized because the samples were heterogeneous in nature and this can be also stated as a limitation for this study.
4. The next limitation is the time constraint because the duration of training was short, due to which it was difficult to collect data.
5. Another limitation has been the cost, as it involves the collection of primary and secondary data, therefore the cost incurred was much more.
6. Sometimes customers don't used to share the true information because of ignorance and their busy schedule.

6. Conclusion

Finally, winding up this paper, we conclude that customers are the most important asset of any organization. The success of any organization ultimately depends on how efficient and effectively its customer is being satisfied. Therefore the main aim of the organization must be to satisfy its customers for longer time duration. In this study I found that Responsiveness and Assurance are fully satisfying the customers but rest of the parameters are not satisfying the customers. So the other parameters such as Reliability & Empathy need to be improved in order to satisfy the customers. Moreover it would improve reputation of the company, retain the current customers and bring new customers. Broaden their outlook, capacity and potential with the effective utilization of website quality.

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