“Re-engineering of Indian Economy-Opportunities & Challenges” On 24th October 2013

Business Process Reengineering and Customer Satisfaction in Indian Telecommunication sector

M. Rajeshwari, S. Manjula & Gangavathi P
Mathematics Department
SHIRDI SAI ENGINEERING COLLEGE

Abstract

Intention of the study was to quantitatively analyze the factors based on which telecom service providers can formulate strategy to satisfy customers to get an edge over the competitors. And we will see how Business Process Management and Re-engineering might play the role of a weapon to Indian Telco service providers. The elements of the business processes of the Telecom domain, which affect customer satisfaction level and how BPR can impact the level of customer satisfaction in the telecom sector in India was investigated in this study. Mainly three categories of research findings have been deduced from the study. The first category dealing with the customer’s perception on different areas of Indian Telecom processes exposed the need for a fast cycle capability and competitiveness of the Telco system. The second category analyzes customer’s satisfaction with the existing service facilities of Indian Telco services and shows an average figure of their present satisfaction level. The third category describes customer’s perception on Indian telecom service providers for enhancement of the level of satisfaction revealing a strong need for strategic planning and implementation of IT-enabled reengineered business process. The findings will be useful to increase customer value, customer satisfaction and retention and can guide the strategic business planners to introduce better, innovative and customized products to the consumers.

Keywords: Business process reengineering, fast cycle capability, customer satisfaction, business process improvement.

Introduction

Business Process Reengineering, Customer Satisfaction and Consumer Behaviour etc. are relatively new subjects in the field of business process research in India. In the present business environment organizational success depends on out-performing the business competitors while satisfying the consumers. The telecom ecology of a country is an essential domain not only for the economic development but also having huge social impact. Living in an age of global transition, one can’t help wondering about the transformations that took place, are taking place and will take place in social, economic and technological areas.

Technological changes have been massive and radical in India with the utilization of voice and data transmission technologies by companies for their global business framework. The revolution is still on, particularly for Telecom sector in India, as India is already having more than 110 million global systems for mobile communications (GSM) subscribers, according to global mobile suppliers association (GSA). So, the orientation to such a huge volume of customer satisfaction is quite an
obvious phenomenon. Many successful business people over the years have identified the importance of focusing on customer satisfaction. Thus, customer satisfaction has a long-reaching impact on the current and perhaps future viability of an organization.

Schlesinger and Heskitt (1991) demonstrated the inter-relation between satisfied customers and satisfied employees in their ‘cycle of good service’ showing a cyclic relation which starts from customer satisfaction leading to lower customer churn which in turn generates higher profit margin. Satisfaction is quickly becoming the key to competitive posture within an industry as customer satisfaction has proved to give an organization competitive advantage by way of improved profitability, improved customer retention and improved market share. Most of the time a re-engineered system provides process automation of a business area by optimizing the sequence of activities and the involvement of proper human or computer resources associated with different steps.

This study was aimed with the following objectives

- To study the customers’ perception on different dimensions of current business process of telecommunication in India.
- To develop an understanding about the degree of importance attached by the customers to each of these dimensions.
- To study how the applications of information technology in the business process of Telecom has affected customer satisfaction.
- To suggest a strategic framework through IT-enabled business process in Indian Telecommunication for enhancement of customer satisfaction.

This study has been carried out for available telecom service providers operating in and around Kolkata (A major metro city located in the eastern part of India).

**Business Process Re-engineering:**

Business Process Re-engineering or BPR is the analysis and redesign of workflow and processes within and between Organizations. It is the Fundamental rethinking and Radical redesign of Business Processes to achieve Dramatic improvements in critical measures of performance such as Cost, Quality, Service and Speed.

**Business Process:**

- BP is a collection of activities that takes one or more kinds of input and creates an output that is of value to customers

**Materials and methods:**

**Experimental design:**

This work was done mainly as an exploratory research to reveal the correlation between business process reengineering and customer satisfaction. It was planned to analyze the customer psyche i.e., to find out what were the customers’ needs and expectations and their telecommunication experience with the service providers. Hence, they have many questions of customer. Questionnaires were divided under several sections:

**Section A:** Products and services offered by the service providers where the customer is receiving his/her service.
“Re-engineering of Indian Economy-Opportunities & Challenges” On 24th October 2013

Section B: Telecom operation or process for delivering the service where the customer is receiving the service.

Section C: Customer’s perception of telecom services.

Section D: Customer’s idea on process reengineering for better satisfaction.

Section E: Background of the respondent.

Approximately sets of different questionnaires were used.

Scaling technique:
We have used Likert-type Scales, consisting of a number of statements to scribe either a favourable or unfavourable perspective to a given object to which the respondent is asked to provide his/her input. Each response is assigned with a numerical value, indicating its favourableness/unfavourableness and the scores are summed up to measure the respondent’s behaviour.

Sampling:
It was decided that the study would be carried out among telecom customers from different service providers in Kolkata region in West Bengal and its suburbs. This was done by the concept of convenience sampling. First, the 19 telecommunication service providers were arranged but the final selection was done with the help of the random sampling process. It was actually then trimmed down to 6 service providers.

The whole geographic area in and around Kolkata was divided into two main parts as Kolkata main city area and suburb of Kolkata. One of the prime motives behind the research study was to get direct feedback/input from the end-customers based on the above-mentioned questionnaire. The customers were taken at random by the interviewer on the basis of judgmental process because the researcher realized that they have more useful information related to the research.

Statistical analysis:
The data collected through questionnaire were analyzed using the following statistical techniques:

- Univariate statistical technique: The measures of central tendency, namely, mean were used for determining customer satisfaction on various dimensions of Indian Telecom sector.
- Bi-variate statistical techniques: The correlation matrix of the variables has been used to determine the association amongst the variables.
- Multivariate statistical techniques: Factor analysis was carried out to identify the different dimensions of Indian Telecom industry and the variables that impact the dimensions.

Results and discussion
The data collected were analyzed and tested fewer than three categories:
1. Category I: Customer perception on different parameters of Indian Telecom customer-centric process.
2. Category II: Customer satisfaction on service facilities of Telecom services and
3. Category III: Customer perception on various dimensions of the Telecom industry in India to increase customer satisfaction.
“Re-engineering of Indian Economy-Opportunities & Challenges” On 24th October 2013

The profile of the customers interviewed showed that 68.1% of the customers were related with a particular service provider.
Findings on category’s by using 3 analysis
1. Analysis and test of mean
2. Correlation analysis
3. Factor analysis

The statistical analysis clearly reflects the dimensions of the Indian Telecom services which affect their customer satisfaction level. The implications of the findings may be summarized as follows: There are broadly four dimensions namely, the time dimension, service customization dimensions, service environment dimensions and the technology dimensions. All the above dimensions except technology dimension have been revealed from the statistical analysis of the customers’ perception on different attributes of Indian Telecom Sector and their present satisfaction level. The technology dimension has been revealed from the Analysis of customers’ perception on enhancement of Telecom services. The improvement on the time dimension calls for a fast cycle capability which is one of the core objectives of BPR. This dimension was found to be highly significant in customers’ perception study. The service customization dimension was also quite significant as per customer satisfaction study. This dimension can be improved through extensive use of Information technology. Therefore the strategic planners have to base their strategies and policies so as to address the different dimensions for overall customer satisfaction.

Goals of BPR
1. Customer Friendliness
   • Meeting customer requirements closely
   • Providing convenience
2. Effectiveness
   • Outcome-based approach
   • Gaining loyalty of customers
   • Image and branding
3. Efficiency
   • Cost
   • Time
   • Effort

Conclusion
From the study, it is revealed that re-engineering of the business processes for the telecom service providers has significant impact on the level of customer satisfaction. In order to improve their competitiveness in the present market environment the strategic leader should concentrate to improve on the dimensions of customization, working environment enhancement, time compression and technology up gradation. Emerging business goal oriented technologies like Enterprise Service Bus, Service Orchestration and Business Process Management (BPM) can play a significant role in implementing NGOSS to provide a blueprint for robust and adaptable infrastructure
to deploy new offering quickly. BPM helps in the interaction between of activities of various human actors and OSS/BSS systems with the information available. BPM system can offer the required process execution framework for process flows written in an executable process-language. A process stack can be used to maintain pre-defined process flows for generic processes like provisioning, order entry, rating, billing, payment handling, and customer inquiry and problem management. An effective Process performance tier can be included on top of the existing business process tiers in overall business process architecture. It can create more opportunities developing more optimized systems for managing process. As per the observed process-performance, there is scope for minimizing the provisioning cycle-time and reducing costs. To outperform the competitors, there should be strong emphasis on customer interaction and improvement in level of satisfaction.

**Reference:**