Marketing on telecom services: A study with special reference to BSNL, Dindigul district

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Abstract
The telecommunications service user is responsible for the information content of the message. The telecommunications service provider has the responsibility for the acceptance, transmission, and delivery of the message. Bharat Sanchar Nigam Limited (abbreviated BSNL) is an Indian state owned telecommunication company headquartered in New Delhi India. BSNL is the only service provider, making focused efforts and planned initiatives to bridge the Rural-Urban Digital Divide ICT sector. BSNL serves its customers with its wide bouquet of telecom services. BSNL is numerous operator of India in all services in its license area. Bharat Sanchar Nigam Limited (BSNL) formed in October, 2000, is the World's seventh largest Telecommunications Company, providing comprehensive range of telecom services in India. For achieving the aim of providing quality and reliable fixed telecom services, the customers should be offered services to their expectation. BSNL renders services through its employees and so the efficiency and level of satisfaction of the employees make a great contribution towards the achievement of its aim. It is found that study is required in this important area and the present study is proposed in this direction. The objective is to assess the effectiveness of the training provided to the BNL employees for customer satisfaction and to know the extent to which they are being implemented. The study revealed that BSNL contributed a lot in increasing productivity of employees and developing them through effective training practices and also study the various services provided by BSNL thereby achieving the goals of the organisation.

Keywords: Telecommunication, BSNL, ICT, Effectiveness

1. Introduction
Bharat Sanchar Nigam Limited (abbreviated BSNL) is an Indian state owned Telecommunications Company headquartered in New Delhi, India. It was incorporated on 15 September 2000. It took over the business of providing of telecom services and network management from the erstwhile Central Government Departments of Telecom Services (DTS) and Telecom Operations (DTO), with effect from 1 October 2000 on going concern basis. It is the largest provider of fixed telephony and fourth largest mobile telephony provider in India, and is also a provider of broadband services. However, in recent years the company's revenue and market share plunged into heavy losses due to intense competition in the Indian telecommunications sector.

BSNL is India's oldest and largest Communication Service Provider (CSP). It had a customer base of 117 million as of Jan 2014. It has footprints throughout India except for the metropolitan cities of Mumbai and New Delhi, which are managed by Mananagar Telephone Nigam Limited (MTNL). BSNL, then known as the Department of Telecommunications, had been a near monopoly during the socialist period of the Indian economy. During this period, BSNL was the only telecom service provider in the country. MTNL was present only in Mumbai and New Delhi. During this period BSNL operated as a typical state-run organization, inefficient, slow, bureaucratic, and heavily unionised. As a result subscribers had to wait for as long as five years to get a telephone connection. The corporation tasted competition for the first time after the liberalisation of Indian economy in 1991. Faced with stiff competition from the private telecom service providers, BSNL has subsequently tried to increase efficiencies itself. BSNL has been providing connections in both urban and rural areas. Pre-activated Mobile connections are available at many places across India. BSNL has also unveiled cost-effective broadband internet access plans (Data One) targeted at homes and small businesses. At present BSNL enjoys around 60% of market share of ISP services.
Meaning of telecommunication
In telecommunication, “a telecommunication services is a service provided by a telecommunications provider, or a specified set of user-information transfer capabilities provided to a group of users by a telecommunications system.

Telecommunications, also called telecommunication, is the exchange of information over significant distances by electronic means. A complete, single telecommunications circuit consists of two stations, each equipped with a transmitter and a receiver. The transmitter and receiver at any station may be combined into a single device called a transceiver. The medium of signal transmission can be electrical wire or cable (also known as "copper"), optical fiber or electromagnetic fields. The free-space transmission and reception of data by means of electro Magnetic fields is called wireless.

Definition of Telecommunication
For purposes of regulation by the Federal Communications Commission under the U.S. Communications Act of 1934 and Telecommunications Act of 1996, the definition of telecommunications service is "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." Telecommunication in turn, is defined as "the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received."

Objectives
➢ To be a Lead Telecom Services Provider. To provide quality and reliable fixed telecom service to our customer and thereby increase customer's confidence.
➢ To provide mobile telephone service of high quality and become No. 1 GSM operator in its area of operation.
➢ To provide point of interconnection to other service provider as per their requirement promptly.
➢ To find out the relevance of training and development in achieving the goals of BSNL.

➢ To study the different aspects of training in BSNL from the point of view of each Group of employees at BSNL.

Methodology
The present study which covered the period from 2012 December to 2013 June utilized primary sources of data, which were obtained through the administration of structured questionnaire on respondents in order to assess their level of satisfaction with the services of BSNL Dindigul. In all, a total of 400 questionnaires were distributed to the respondents in the cities of Dindigul.

Result and discussion
The Demographic Characteristics of the Respondents:
The sex distribution showed that 53.8% of the respondents were male, while 46.2% of the respondents were female. The age distribution showed that 19% of the respondents belonged to the age bracket of 16-25 years, 59.5% of the respondents belonged to the age group of 26-40 years, 12.5% of the respondents belonged to the age group of 41-50 years 8% of the respondents belonged to the age group 56-65years, and 1% of the respondents belonged to the age bracket of 66 years and above. 13.5% of the respondents possessed the SSCE Certificate, 31.8% of the respondents possessed the BA/B Sc degree. 18.8% of the respondents were educated up to the master’s level, while 4% of the respondents possessed the Ph D degree. With reference of marital status, 48.2% of the respondents were single, 49.8% were married, while 2% were divorced. 77.2% of the respondents were Christians, while 22.8% were Muslims. The 5 point weighted likert scale was used to measure the satisfaction level of the respondents: (1) No opinion, (2) Extremely dissatisfied, (3) Dissatisfied, (4) Satisfied, (5) Extremely satisfied.

The student t-test was used to test the difference between means of responses, while the weighted mean was used to test the null hypothesis that subscribers were not satisfied with the services provided by the GSM operators. ANOVA was used to test the hypothesis that the level of satisfaction of GSM subscribers was the same across all networks.

Table: 1 Satisfaction levels of respondent mean, score and rank.

<table>
<thead>
<tr>
<th></th>
<th>F</th>
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<tbody>
<tr>
<td>Courtesy</td>
<td>27</td>
<td>6.8</td>
<td>7</td>
<td>1.8</td>
<td>34</td>
<td>8.5</td>
<td>198</td>
<td>49.5</td>
<td>134</td>
<td>33.5</td>
</tr>
<tr>
<td>Adequacy of Facilities</td>
<td>12</td>
<td>3.0</td>
<td>26</td>
<td>6.5</td>
<td>69</td>
<td>17.2</td>
<td>211</td>
<td>52.8</td>
<td>82</td>
<td>20.5</td>
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<td>4</td>
<td>1.0</td>
<td>26</td>
<td>6.5</td>
<td>126</td>
<td>31.5</td>
<td>162</td>
<td>40.5</td>
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<tr>
<td>Prompt Service</td>
<td>18</td>
<td>4.5</td>
<td>20</td>
<td>5.0</td>
<td>99</td>
<td>24.8</td>
<td>205</td>
<td>51.2</td>
<td>58</td>
<td>14.5</td>
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<td>12</td>
<td>3.0</td>
<td>26</td>
<td>6.5</td>
<td>88</td>
<td>22</td>
<td>220</td>
<td>51.8</td>
<td>67</td>
<td>16.8</td>
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<tr>
<td>Billing Cost</td>
<td>10</td>
<td>2.5</td>
<td>88</td>
<td>22</td>
<td>107</td>
<td>26.8</td>
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<td>36.8</td>
<td>48</td>
<td>12</td>
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<tr>
<td>Browsing Plan</td>
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<td>16</td>
<td>36</td>
<td>9</td>
<td>56</td>
<td>14</td>
<td>1182</td>
<td>45.5</td>
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<tr>
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<td>16</td>
<td>4</td>
<td>18</td>
<td>4.5</td>
<td>58</td>
<td>14.5</td>
<td>218</td>
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<td>90</td>
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<td>Coverage Area</td>
<td>10</td>
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<td>38</td>
<td>9.5</td>
<td>46</td>
<td>11.5</td>
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<td>55</td>
<td>86</td>
<td>21.5</td>
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<tr>
<td>Customer Care</td>
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<td>19</td>
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<td>16</td>
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<td>Ease of Recharge</td>
<td>10</td>
<td>2.5</td>
<td>34</td>
<td>8.5</td>
<td>22</td>
<td>5.5</td>
<td>174</td>
<td>43.5</td>
<td>160</td>
<td>40</td>
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<td>Value Added services</td>
<td>90</td>
<td>22.5</td>
<td>74</td>
<td>18.5</td>
<td>56</td>
<td>14</td>
<td>124</td>
<td>31</td>
<td>56</td>
<td>14</td>
</tr>
</tbody>
</table>

Source: Primary Data

The level of customer satisfaction was analyzed based on the following parameters: courtesy adequacy of facilities reliability, prompt service, network availability, billing cost, browsing plan, call quality, coverage area, customer care, ease of recharge, and value-added services.

It can be observed from the table 1 that 83% of the respondents were satisfied with courtesy, 73.3% were satisfied with the adequacy of facilities, 65.7% were satisfied with the prompt services, 68.6% of the respondents were satisfied with the network availability of BSNL operators, and 48.8% of the respondents were satisfied with the billing cost respectively. Furthermore, it was also revealed the 61% of the respond ends were satisfied with the browsing plan offered by the BSNL operators, 77% of the respondents were satisfied with the call quality, 76.5% were satisfied with the coverage area, 59.5% were satisfied with the customer care
services, 83.5% were satisfied with the ease of recharge, and 45% were satisfied with the value added services respectively.

Based on the weighted mean of 3.66 rated on a 1 to 5 likert scale, as displayed in the table, it can be inferred that the subscriber’s were satisfied with the service of the BSNL operators, and that they had a positive viewpoint about the ability BSNL service providers to meet their changing needs.

### Quality of service rendered by BSNL

<table>
<thead>
<tr>
<th>T</th>
<th>df</th>
<th>Sig. (2 tailed)</th>
<th>Mean differences</th>
<th>95% Confidence interval of the Difference</th>
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<td>Courtesy</td>
<td>77.232</td>
<td>399</td>
<td>0.00</td>
<td>3.9350</td>
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<td>Adequacy of Facilities</td>
<td>75.328</td>
<td>399</td>
<td>0.00</td>
<td>3.7725</td>
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<tr>
<td>Reliability</td>
<td>85.262</td>
<td>399</td>
<td>0.00</td>
<td>3.7875</td>
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<tr>
<td>Prompt Service</td>
<td>75.416</td>
<td>399</td>
<td>0.00</td>
<td>3.6150</td>
</tr>
<tr>
<td>Network Availability</td>
<td>79.532</td>
<td>399</td>
<td>0.00</td>
<td>3.69000</td>
</tr>
<tr>
<td>Billing Cost</td>
<td>72.250</td>
<td>399</td>
<td>0.00</td>
<td>3.4975</td>
</tr>
<tr>
<td>Browsing Plan</td>
<td>52.228</td>
<td>399</td>
<td>0.00</td>
<td>3.3925</td>
</tr>
<tr>
<td>Call Quality</td>
<td>80.249</td>
<td>399</td>
<td>0.00</td>
<td>3.84500</td>
</tr>
<tr>
<td>Coverage Area</td>
<td>77.764</td>
<td>399</td>
<td>0.00</td>
<td>3.7975</td>
</tr>
<tr>
<td>Customer Care</td>
<td>76.625</td>
<td>399</td>
<td>0.00</td>
<td>3.64000</td>
</tr>
<tr>
<td>Ease of Recharge</td>
<td>80.205</td>
<td>399</td>
<td>0.00</td>
<td>4.0375</td>
</tr>
<tr>
<td>Value Added services</td>
<td>48.199</td>
<td>399</td>
<td>0.00</td>
<td>3.20250</td>
</tr>
</tbody>
</table>

Source: Primary Data

To be quality of services rendered by the BSNL operators:

The results presented in the table 2 show that =3.68and>3.

Based on the results obtained and displayed in the table2, it is inferred that the subscribers were satisfied with services offered by the GSM operators. This implied that the respondents in this study had a positive impression about the ability of the GSM service providers to meet their changing needs.

### Administrative Units

BSNL is divided into a number of administrative units termed as telecom circles, metro districts, project circles and specialized units. It has 24 telecom circles, 2 metro districts, 6 project circles, 4 maintenance regions, 5 telecom factories, 3 training institutions and 4 specialized telecom units.

### Training at BSNL

- BSNL has to train its employees to impart specific skills and knowledge so that they contribute to organisational efficiency and cope with changing environment.
- Training is necessary when existing employees are promoted to higher level in the organisation or when there is some new job due to transfer.
- It is necessary to equip the senior employees with the new techniques or technology and advanced disciplines.
- It is necessary for maintaining human relation besides maintaining sound industrial relations and also to deal with human problems.

### BSNL provides almost every telecom service in India. Following are the main telecom services provided by BSNL:

- **Optical Infrastructure and DWDM**
  - BSNL owns the biggest OFC (Optical Fiber Communication) network in India. Also the DWDN (Dense Wavelenghting Division Multiplexing) network is one of the biggest in the world. The DWDN equipments purchased in open tender at BSNL are mainly of United Telecoms Limited (UTL) make, which was declared lowest cost in competitive bidding. Rest DWDN equipments are from Huawei. The SDH equipments are mainly from Tejas Networks, Huawei, ZTE, ECI, UT STAR etc.

- **Market Share**:
  - As of 30 November 2013, BSNL had 12.9% market share in India and stands as 5th Telecom Operator in India and 67% market share in ADSL Services.

- **Managed Network Services**:
  - BSNL is providing complete Telecom Services Solution to the Enterprise Customers i.e. MPLS connectivity, Point to Point Leased Lines and Internet Leased Lines.

- **Universal Telecom Services**:
  - Fixed wire line services and landline in local loop (WLL) using CDMA Technology called bfone and Tarang respectively. As of 30 June 2010, BSNL had 75% market share of fixed lines.

- **Cellular Mobile Telephone Services**:
  - BSNL is major provider of Cellular Mobile Telephone services using GSM (Global System for Mobile Communication) platform under the brand name Cell one & Excel (BSNL Mobile). As of 30 June 2010 BSNL has 13.50% share of mobile telephony in the country. It has 95.54 million customers using BSNL mobile.

- **WLL-CDMA Telephone Services**:
  - BSNL’s WLL (Wireless in Local Loop) service is a service giving both fixed line telephony & Mobile telephony.

### Challenges:

During the financial year 2008–09 (from 1 April 2008 to 31 March 2009) BSNL has added 8.1 million new customers in various telephone services taking its customer base to 75.9 million. BSNL’s nearest competitor Bharti Airtel is standing at a customer base of 62.3 million. However, despite impressive growth shown by BSNL in recent times, the Fixed-line customer base of BSNL is declining. In order to woo back its fixed-line customers BSNL has brought down long distance calling rate under One India plan, however, the merger of BSNL with Bharti Airtel will not be possible. The success of the scheme is not known and BSNL faces bleak fiscal 2009-2010 as users flee.

Presently there is an intense competition in Indian Telecom sector and various Telco’s are rolling out attractive schemes and are providing good customer services. But situation as
on 2012, BSNL will be third largest operator (Service) and No 1 access operator in the country. As per the TRAI Report 2011-12, BSNL became the most trustworthy brand due to its loyalty towards customers and its rule.

Access Deficit Charges (ADC, a levy being paid by the private operators to BSNL for providing service in non-lucrative areas, especially rural areas) has been slashed by 20% by TRAI, w.e.f. 1 April 2009. The reduction in ADC may hit the profits of BSNL.

BSNL has started 3G services in 290 cities and acquired more than 600,000 customers. It has planned to roll out 3G services in 760 cities across the country in 2010-11. according to users and big sources BSNL's 3G data speed is much higher than other operator and also it is competitively cheap.

Broadband services: The shift in demand from voice to data has revolutionized the very nature of the network. BSNL is poised to cash on this opportunity and has planned for extensive expansion of the Broadband services. The Broadband customer base of 3.56 Million customers in March'2009 is planned to be increased to 16.00 million by March 2014. On 13 June 2012, BSNL employees participated called off an earlier planned nationwide strike against discriminatory policies of BSNL management upon promise by Management to resolve the Demands of the protesting unions.

Suggestions:

- On the basis of the findings of the study the following suggestions are put forward to improve the effectiveness of training and development practices of BSNL.
- The training session should be made more interactive and participative so that the trainees and the trainer are in constant interaction whereby the trainees may be self-motivated to involve in it.
- Training should help directly in the career enhancement of employees which will contribute to meet his individual goal and in turn lead to the accomplishment of organisational goals.

References: