

Customer Perception and Expectation: A Comparative Analysis between Private & Public Cell Phone Service Providers

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Abstract

The telecommunication sector of India is now running in a dynamic challenge concerning both customer base and performance. Service quality, customer satisfaction, customer retention, customer loyalty and delight are now the major challenges in gripping this sector. Human element acts an important role in perceived service quality as well as satisfaction. Public sector cell phone service providers need to redefine the customer service parameter in order to compete with the nationalized private sector players both in profitability and brand image. This study is just a small step in understanding the gap between customer expectation and perception about the cell phone services and its implications in competitive environment.

Keywords: Expectation, Perception, Telecommunication, Service Quality, India

1. Introduction

All players in the telecommunication industry have established call centers as a proactive way to establish direct communication with their customers and differentiate their services, helping the business to build, maintain and manage relationships with existing customers and attract new ones. As the customer-to-player ratio is high, call centers (or customer service hotlines) are a fundamental service touch-point in the industry. In today's competitive market, customer service call centers have moved from the back to the front office as a customer satisfaction and retention strategy (Anton, 1997). Call centers are paramount in the telecommunication industry. Many researchers (Cronin & Taylor, 1992; Spreng & Mackoy, 1996) have stated that service quality influences customer satisfaction, and that the two are closely related. Many scholars (Oliver, 1980; Stum & Thiry, 1991) believe that a satisfied customer would be a re-purchasing consumer; a loyal customer will recommend products to other people. Hence, the benefits of good service quality are twofold: first, satisfied customers will continue to use the provider's products, and the company can maintain its market share by retaining its customer base. Second, satisfied customers will recommend products to others, influencing others purchase intentions in a way that benefits the company, it will acquire new customers and thus gain market share.

India's telecommunication network is the second largest in the world based on the total number of telephone users (both fixed and mobile phone), the first being it has one of the lowest call tariffs in the world enabled by the mega telephone networks and hyper-competition among them and also bigger turn over obtained from the users. It has the world's third-largest Internet user-base with over 137 million as of June 2012. Major sectors of the Indian telecommunication industry are telephony, internet and television broadcasting.

Telephone Industry in the country which is in an ongoing process of transforming into next generation network, is backed up by modern network elements such as digital telephone exchanges, mobile switching centers, media gateways and signaling gateways at the core, interconnected by a wide variety of transmission systems using optical fiber or Microwave radio relay networks. India possesses a diversified system of communications with different copper pair, optical fiber & wireless technologies, DTH has attained significant popularity with the access network which connects the subscriber to the network. INSAT system developed & supported the system through out the country & it became the largest reliable telecommunication system in the country and has recognition in the international scenario.

Investigation reveals that BSNL (Bharat Sanchar Nigam Limited) India is the pioneer in mobile telephony sector has a very strong customer base but, it is thinning day by day because customers have high quality alternatives (John Jessy 2011). BSNL could able to content loyal customers by dint of its network quality, customer service and VAS (Value added Service). As BSNL, a Public Service Unit, a govt. entity, the tariff is not so low as compared to the other private service providers. It is one of the reasons for losing its customer base very slowly. But, customer loyalty in the case of mobile telephony is determined by its geographical coverage area. It is the only service provider which follows the norms of social obligation as per TRAI. So, its penetration to the rural area is worth seeing. So, its customer base will not reduce further. No, doubt, Telecom Service Providers while competing with each other, are trying their best to improve their quality of services for customer satisfaction and retention and thus the buzz word should be customer loyalty which depends upon customer satisfaction at the cheapest tariff (Khattar Vivek 2006). Various objective as well as subjective methods should be used by the telecommunication service providers to periodically assess their quality of service for their survival as Darwin's law of survival – survival of the fittest – holds good in this managerial analysis also. At this backdrop, the main objective of this paper is to analyze the data collected from

the customers of both public and private service providers in the year of 2013 to understand their behavior with particular emphasis on their expectation and perceptions regarding cell phone services on different parameters for measuring their satisfaction and dissatisfaction.

2. Study Design and Methodology

The data for the study were collected through a structured questionnaire from 803 cell phone users covering all telecom districts of the state of Odisha, India during the year of 2013. While choosing a cell phone user, the method of random sampling was followed and the respondents were approached personally. Initially 1000 samples were planned covering 500 customers of both private and public sector cell phone service providers. Because of less accessibility to rural area customers, more urban concentration, unwillingness of the customers to provide data, time and budgetary constraints restricted the sample size to 803, out of which 373 from BSNL (public sector) and 430 from private sectors. A questionnaire for customer survey is designed keeping the broad parameters in mind, which was pre-tested before finalisation. The data regarding perceptions and expectations of customers are collected in interval scales (in a 4 – point scale). Apart from this, some qualitative data like demographic background, reasons for using the current service, views regarding staff, etc. are collected. The data collected through measurement instrument are entered into an Excel spread sheet and then transferred to SPSS data sheet for further processing. Cross tabulations are made to understand the underlying relationships among the variable under study keeping the broad objectives in mind.

3. Literature Review

Olson and Dover (1979) consider customer expectations to be representative of pretrial beliefs about a product or service. Expectations, according to Churchill and Surprenant (1982) reflect anticipated performance. The satisfaction literature suggests that customers may apply different types of expectations with respect to anticipated performance: ideal, expected, minimum tolerable and desirable (Miller, 1977; Churchill & Surprenant, 1982). Others, however, contend that expectations should be based on experience norms (Woodruff, Cadotte, & Jenkins, 1983; Cadotte, Woodruff, & Jenkins, 1987).

The concept of “meeting expectations” frequently surfaces in considerations of service quality (Coye, 2004). In industrial field service, for instance, setting realistic customer expectations, and then striving to meet or exceed those expectations can have a large impact on how a firm is perceived. Parasuraman et al. (1988) argue that the term “expectations” is used differently in the service quality literature than it is in the consumer satisfaction literature. Their contention is that expectations, in the consumer satisfaction literature, are viewed as predictions customers make about what is likely to happen in the course of a transaction or exchange. This is similar to Oliver’s (1981) assessment that expectations are consumer-defined probabilities of the occurrence of positive or negative outcomes relative to some undertaken behavior. In contrast, Parasuraman et al. (1988) distinguish that expectations, in the service quality literature, are viewed as desires or wants of customers, in other words, what customers feel a service provider should provide as opposed to would provide. This indicates that, would expectations infer a probabilistic likelihood, whereas should expectations, infer what the customer ultimately desires or considers as ideal.

The disconfirmation paradigm is widely accepted as a view of the process by which customers develop feelings of satisfaction or dissatisfaction (Cadotte et al., 1987). Disconfirmation, according to Oliver (1981) essentially refers to “a mental comparison of an actual state of nature with its anticipated probability”. As such disconfirmation operates as a fundamental intervening variable relative to the satisfaction construct. Churchill & Surprenant (1982) inform that “Disconfirmation arises from discrepancies between prior expectations and actual performance. It is presumably the magnitude of the disconfirmation effect that generates satisfaction and dissatisfaction”. Swan and Trawick (1981) distinguish between inferred and perceived disconfirmation. They first point out that inferred and perceived disconfirmation may appear to measure the same construct, and therefore qualify the differences. Inferred disconfirmation is ascribed as being the difference between the customer’s post-rating and pre-rating of a product or service. Perceived disconfirmation (Oliver, 1980), on the other hand, relates to the customer’s perception that performance was better or worse than expected. Woodruff et al. (1983), further expound that the effects of customers’ prior experiences can also influence the disconfirmation process.

The Relationship of Expectations with Disconfirmation The disconfirmation- expectation model assumes that a customer’s degree of satisfaction is an outcome of a four step process (Hunt, 1977; Oliver, 1980). Relative to the example of retail service, Swan & Trawick (1981) summarize the process as: The process starts with a consumer’s pre-purchase expectations, which are beliefs that a retail establishment will achieve a certain performance level on a set of salient attributes (Oliver, 1980a; LaTour & Peat, 1980). In the second step, the consumer shops the store and forms perceptions of store performance on the salient attributes. The user compares these perceptions with recalled expectations. Expectations are thus either positively disconfirmed (performance exceeds expectations), confirmed (performance equals expectations), or negatively disconfirmed

(performance is short of expectations). The result of this comparison process is some perceived level of disconfirmation. In the third step, perceived disconfirmation determines a level of satisfaction. In the fourth step, satisfaction determines the intentions to either patronize or not patronize the store in the future, where intentions are a customer's anticipation of future behavior toward a store.

Oliver (1997) defines performance level as “the perceived amount of product or service attribute outcomes received, usually reported on an objective scale bounded by good and bad levels of performance” (p.28). Performance is of primary importance in the satisfaction literature as it serves as a standard of comparison by which to assess disconfirmation (Churchill & Surprenant, 1982). Thus, as Spreng, MacKenzie, and Olshavsky (1996) observe, most models of the satisfaction formation process posit that satisfaction occurs when customers compare their perceptions of product or service performance to their expectations. Specific to the service quality, Bolton and Drew (1991b) believe that the customer's overall assessment of service quality is directly affected by perceptions of performance levels.

Through a Survey research conducted in Nigeria Telecom Industry, it has been revealed that customer service has positive impact on service quality perception and customer satisfaction (Ojo Olu, 2010). It is also clear from this survey that there exists significant relationship between customer satisfaction and service quality which ultimately helps customers' loyalty and retention. There was an intense study on Malaysian Telecommunications Industry and the empirical findings clearly indicate that there is a concrete and cohesive relationship between price, quality and customers satisfaction (Ismali Hishamudi et al. 2004). This piece of research work is a different one as the research has not conducted on basic telephony or mobile telephony. Rather, the research study is on the behavioral aspect of digital leased line service customers. It is inferred as the service quality is the most important determinant of value followed by degree of satisfaction or dis-satisfaction experienced by the esteemed customers. A study on telecommunication sector of Pakistan says that customers retention is critical for strategies in dynamic world of telecommunication sector and improved service quality creates brand loyalty and this brand loyalty retains customer (Nawaz Noor – UL – Ain et al. 2011).

4. Customer Profile Analysis

The demographic backgrounds of the sample respondents in seven parameters are presented in Table 1 to understand the customer profiles i.e., age, education, gender, occupation, monthly family income, location and type of service providers operating. It is observed from the table that young customers (between the ages 20 years of 29 years) constitute the majority of sample (32.6 %). The proportion of very young population (below 20 years) is the lowest in sample (6.6 %). This behaviour corroborates the general trend in the industry. Similarly, the graduate and post-graduate respondents dominate the sample (38.9 % and 18.2 % respectively). This observed behaviour may be due to urban biasness of the sample and increased willingness of educated people to participate in the survey. Again, the representation of the females (22.5 %) is smaller in the sample as less number of women in Odisha are working and having mobile phones. So far the financial matters are concerned in using cell phones; male members are more dominated in the trend of Odia culture. Occupation-wise analysis revealed that employed in private sectors (33.4 %) dominates the sample compared to others. In the recent years, students are more exposed to communication resources and are proactive in usage of mobile phones for various purposes. As a result, student respondents constitute the second largest group in the sample. Similarly, the income groups having income more than Rs. 10, 000 and less than Rs. 25, 000 dominate the sample (39.2 % of sample respondents) and 27.5 per cent are between Rs. 25, 000 and Rs. 50, 000; combined together they constituted about 65.7 per cent of the sample. The location distribution shows that the urban people alone contribute 51.6 % of total in the study. Private sector customers (53.5 %) are slightly more than the BSNL (46.5 %).

Table 2 describes the customer profile and the types of telecom service provider they have chosen for their usages. It is evident from Table 2 that 13.8 per cent of the mature youth respondents prefers to use public sector (BSNL) service provider, while, 32.6 per cent of the young population prefers private sector service providers. All the respondents in different age groups have shown similar behaviour, excepting below 20 years, where private sector has the domination and above 50 years age group, where the dominance of public sector telecom service provider is visible. The χ^2 value is significant at 1 per cent level of significance indicating age-groups of the respondents and their choices of the bank are dependent on each other.

It is observed from the same table that less educated customers have an inclination to choose public sector service provider (12.2 %) as compared to private sector service provider (5.90%). This trend is observed may be due to the large presence of private sector telecom service providers with wide ranges products more suitable for higher qualified groups, while public sector is offering value-added services for special group of customers with much more ease to use. The χ^2 - value is significant at 1 per cent level of significance indicating the dependence between levels of education and choice for a telecommunication service provider. More or less the behaviour of different gender is similar, and the χ^2 value for gender variation is not significant.

Taking into account the occupation of the customers, mid range salaried persons dominate the sample.

The private sector professionals, students and house-wives have shown more preference for private sector telecom service provider compared to the other groups (18.8 %, 9.8 % and 5.6 % respectively), though public sector service holders have a clear preference for public sector service providers. The χ^2 value is significant at 1 per cent level of significance, implying that customers with occupational variations have a preference for a telecommunication service provider. Similarly for different income groups, below mid range of income prefers private sector service provider and above mid range of income prefers public sector service provider. The χ^2 value is significant at 1 per cent level, indicating the influence of levels of income for choice telecommunication service provider. Customers staying in urban areas have little bit more inclination towards public sector service provider as compared to private players.

5. Results and Discussion

In availing a particular type of services, the customer searches for his past experiences; what he got for what he had searched. This gives a unique situation called customer experiences. This has been explained by two behavioral constructs; expectation and perception. Finding out what customers expect is essential to provide quality service. Research holds the key for understanding customer's expectations and perceptions of services. Not knowing what customers expect is one of the root causes of not delivering up to the customers' expectations. Provider gap is the difference between customer expectations of service and the organizations understanding of these expectations (Zeithaml & Bitner, 2003).

Why does this provider gap occur? Many reasons may be attributed for the same such as, no direct interaction with the customers, unwillingness to ask about expectations and un-preparedness in addressing them. When the people with the authority and responsibility for setting priorities do not fully understand customer's service expectations, they may trigger a chain of poor decisions and suboptimal resource allocations that result in perception of poor service quality. Inaccurate understanding of the customers ultimately ends up with heavy expenditures in undesirable areas – the end result is no gains but only pains. An inaccurate understanding of what customers expect and what really matters to them leads to service performances that falls short of customer expectations. The first step necessary in improving service quality is to acquire accurate information about customer expectations. At this backdrop, in this section, an attempt has been made to understand the customer expectations and perceptions for different types of telecommunication parameters like Network Coverage, SMS, Bulk SMS, GPRS/WAP/MMS, Conference, National Roaming, International Roaming, Free Call Limit, Tariff, Customer Care, Unified Messaging, Availability of Recharge Voucher (in all denominations), Magic Voucher, 3G, 3G Data Voucher etc. The expectations of customers of both private and public telecom service providers for different parameters mentioned above are measured in a 4-point scale ranging from 'not at all' to 'most important' and perception ranges from 'unsatisfactory' to 'excellent'. The differences between the mean values of different parameters are termed as quality gap. Positive gaps indicate satisfaction and negative gaps as dissatisfaction of the customers with that particular parameter.

The views of the sample respondents regarding the services offered by the telecom service providers under study are presented in Table 3. Referring to this table; one comparison of customer's expectations and perceived performance on different mobile phone service attributes for all types of service providers has been made and it is found that all the (P - E) gaps are negative and significant showing the level of dissatisfaction with all the parameters. It is also observed that there lies a significant and positive correlation between customer perception and expectation scores for all the attributes.

Table 4 and 5 depict the summary of customer expectations and perceptions on different parameters of services by the telecom service provider in the public sector (BSNL) and private sector respectively in separate form. It is evident from the tables that both the expectations and perceptions are higher than the mid point score 2.5, which indicates that the consumers attach more importance to their expectations and are having favorable perceived performance scores with respect to all the service parameters.

The difference scores of means for perceptions and expectations are tested for significance by applying 2-tail paired t – test. The differences in the mean values of expectation and perceptions in all parameters are statistically significant, indicating the existence of differences between perceptions and expectations of the customers. However, a little bit higher gaps are found in case of private service providers indicating more dissatisfaction level as compared to BSNL.

A comparison between opinion of respondents for customer's expectations and perceived performance on different mobile phone service attributes exhibits that all the sixteen attributes of service quality gaps are negative indicating customer dissatisfaction. The levels of dissatisfaction with private sector service providers are more in comparison to BSNL, as the gap in public sector service providers (BSNL) is comparatively lesser than private sector service providers. The mean scores for both expectations and perceived performance of telecom service providers are in the middle-range indicating not very-high levels of expectations from the telecom service providers. Figure 1, 2 and 3 present the graphical presentations of mean scores of expectations and perceived performance of respondents of total sample, public and private sector service providers

respectively.

6. Implication

After opening up heavy competition and emergence of private global players, Indian telecommunication sector faces enormous challenges of attracting and retaining customers. The study revealed that the public sector cell phone service provider BSNL are just a little ahead of the private players in satisfying customers based on customer perception and expectation gap analysis implicating better opportunity for BSNL in having a scope of growth in retaining customers. However, as the study reveals, BSNL fails to penetrate more the rural and sub urban areas having low income group as compared to private service providers. It also can not capture significantly the younger highly educated mass. It may be because of less given importance to have attractive value added services, that too in low price. Developing a product for the customers without knowing what customer expects is futile. Therefore it is really much more necessary now to take care about customer expectations properly and offer service accordingly.

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Table 1 Customer Profile

Parameters		Frequency	Percentage
Age	Below 20 years	53	6.6
	20-29 years	262	32.6
	30-39 years	234	29.1
	40-49 years	160	19.9
	50 years and above	94	11.7
Education	Upto Matriculate	145	18.1
	Intermediate	86	10.7
	Diploma	31	3.9
	Graduate	312	38.9
	Post Graduate	146	18.2
	Professional course	83	10.3
Gender	Male	622	77.5
	Female	181	22.5
Occupation	Govt. servant	122	15.2
	Service in Pvt. Sector	268	33.4
	Student	112	13.9
	Businessman / woman	101	12.6
	Housewife	83	10.3
	Farmer	10	1.2
	Other	107	13.3
Monthly Family Income	Less than Rs.10, 000	151	18.8
	Rs.10, 001 – 25, 000	315	39.2
	Rs.25, 001 –50, 000	221	27.5
	Rs.50, 001 and above	116	14.4
Location	Rural	138	17.2
	Semi-urban	251	31.3
	Urban	414	51.6
Type of Service Provider	Public (BSNL)	373	46.5
	Private	430	53.5
Total		803	100

Table 2 Customer Profile by Type of Service Providers

Parameters		Public (BSNL)		Private		Total		Chi Square
		f	%	f	%	f	%	
Age	Below 20 years	13	1.6	40	5.0	53	6.6	54.184*
	20-29 years	90	11.2	172	21.4	262	32.6	
	30-39 years	111	13.8	123	15.3	234	29.1	
	40-49 years	95	11.8	65	8.1	160	19.9	
	50 years and above	64	8.0	30	3.7	94	11.7	
Education	Upto Matriculate	47	12.2	98	5.9	145	18.1	15.567*
	Intermediate	42	5.5	44	5.2	86	10.7	
	Diploma	16	1.9	15	2.0	31	3.9	
	Graduate	148	20.4	164	18.4	312	38.9	
	Post Graduate	78	8.5	68	9.7	146	18.2	
	Professional course	42	5.2	41	5.1	83	10.3	
Gender	Male	284	35.4	338	42.1	622	77.5	0.695
	Female	89	11.1	92	11.5	181	22.5	
Occupation	Govt. servant	86	10.7	36	4.5	122	15.2	53.833*
	Service in Pvt. Sector	117	14.6	151	18.8	268	33.4	
	Student	33	4.1	79	9.8	112	13.9	
	Businessman / woman	42	5.2	59	7.3	101	12.6	
	Housewife	38	4.7	45	5.6	83	10.3	
	Farmer	0	0.0	10	1.2	10	1.2	
	Other	57	7.1	50	6.2	107	13.3	
Monthly Family Income	Less than Rs.10, 000	54	6.7	97	12.1	151	18.8	23.364*
	Rs.10, 001 – 25, 000	130	16.2	185	23.0	315	39.2	
	Rs.25, 001 –50, 000	121	15.1	100	12.5	221	27.5	
	Rs.50, 001 and above	68	8.5	48	6.0	116	14.4	
Location	Rural	62	7.7	76	9.5	138	17.2	10.847*
	Semi-urban	97	12.1	154	19.2	251	31.3	
	Urban	214	26.7	200	24.9	414	51.6	
All Samples		373	46.5	430	53.5	803	100	* 1% level of significance

Table 3 Customers' Expectations and Perceived Performance on Different Mobile Phone Service Attributes – All types of Service Providers

Service Attributes	Mean Score			Correlation Coefficient	t-value
	Performance (P)	Expectation (E)	Gap (P-E)		
NETWORK COVERAGE	3.10	3.77	-0.67	0.280*	21.950*
SMS	2.94	3.77	-0.83	0.168*	26.284*
BULK SMS	2.46	2.91	-0.45	0.582*	14.236*
PULSE RATE	2.66	3.32	-0.66	0.428*	20.430*
GPRS/WAP/MMS	2.57	3.08	-0.51	0.574*	15.445*
CONFERENCE	2.65	3.12	-0.47	0.525*	14.393*
NATIONAL ROAMING	2.58	3.18	-0.60	0.450*	17.691*
INTERNATIONAL ROAMING	2.23	2.68	-0.45	0.467*	13.004*
FREE CALL LIMIT	2.63	3.43	-0.80	0.250*	22.224*
TARIFF	2.69	3.44	-0.75	0.394*	22.691*
CUSTOMER CARE	2.67	3.62	-0.95	0.185*	26.059*
UNIFIED MESSAGING	2.13	2.59	-0.46	0.536*	14.028*
AVAILABILITY OF RECHARGE VOUCHER (IN ALL DENOMINATIONS)	3.00	3.59	-0.59	0.397*	18.452*
MAGIC VOUCHER	2.91	3.49	-0.58	0.396*	17.528*
3G	2.46	3.11	-0.65	0.499*	18.431*
3G DATA VOUCHER	2.40	3.05	-0.65	0.438*	17.295*
* 1% Level of Significance					
** 5% Level of Significance					

Table 4 Customers' Expectations and Perceived Performance on Different Mobile Phone Service Attributes – BSNL

Service Attributes	Mean Score			Correlation Coefficient	t-value
	Performance (P)	Expectation (E)	Gap (P-E)		
NETWORK COVERAGE	3.11	3.79	-0.68	0.302*	14.972*
SMS	3.02	3.79	-0.77	0.207*	16.768*
BULK SMS	2.60	2.95	-0.35	0.572*	7.541*
PULSE RATE	2.71	3.38	-0.67	0.352*	13.431*
GPRS/WAP/MMS	2.68	3.15	-0.47	0.520*	9.756*
CONFERENCE	2.82	3.15	-0.33	0.530*	6.987*
NATIONAL ROAMING	2.67	3.27	-0.60	0.441*	12.039*
INTERNATIONAL ROAMING	2.35	2.77	-0.42	0.504*	8.672*
FREE CALL LIMIT	2.64	3.47	-0.83	0.150*	14.679*
TARIFF	2.70	3.48	-0.78	0.313*	15.803*
CUSTOMER CARE	2.67	3.67	-1.00	0.224*	18.906*
UNIFIED MESSAGING	2.24	2.68	-0.44	0.526*	9.164*
AVAILABILITY OF RECHARGE VOUCHER (IN ALL DENOMINATIONS)	3.10	3.59	-0.49	0.419*	10.842*
MAGIC VOUCHER	2.99	3.50	-0.51	0.443*	10.933*
3G	2.61	3.13	-0.52	0.569*	10.778*
3G DATA VOUCHER	2.59	3.10	-0.51	0.507*	9.822*
* 1% Level of Significance					
** 5% Level of Significance					

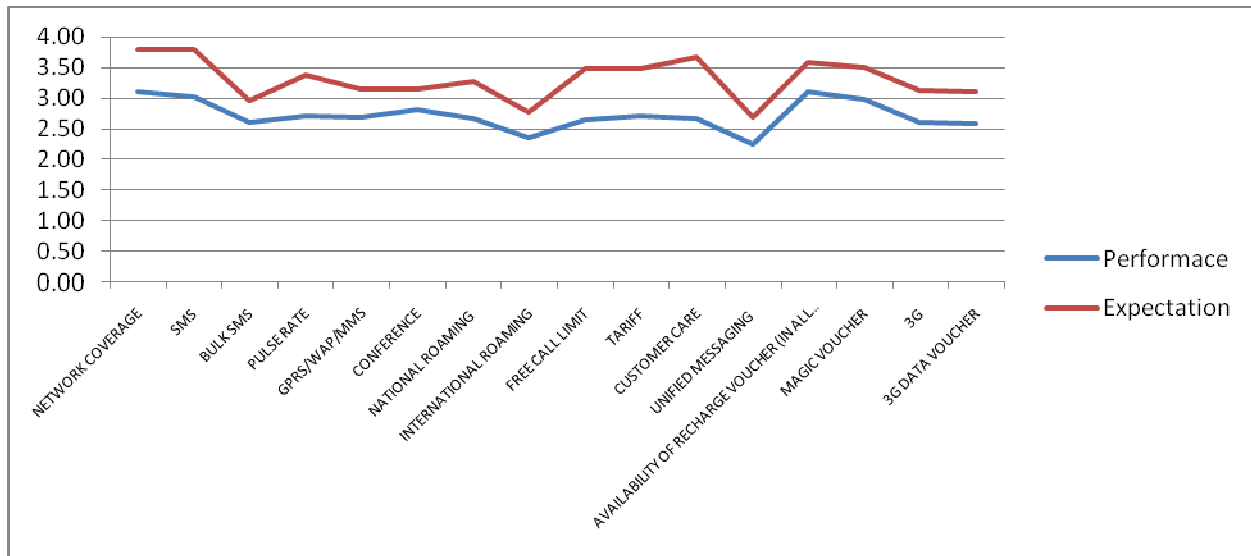


Figure 2 . Comparisons between Customers' Expectations and Perceived Performance on Different Mobile Phone Service Attributes – BSNL Service Providers

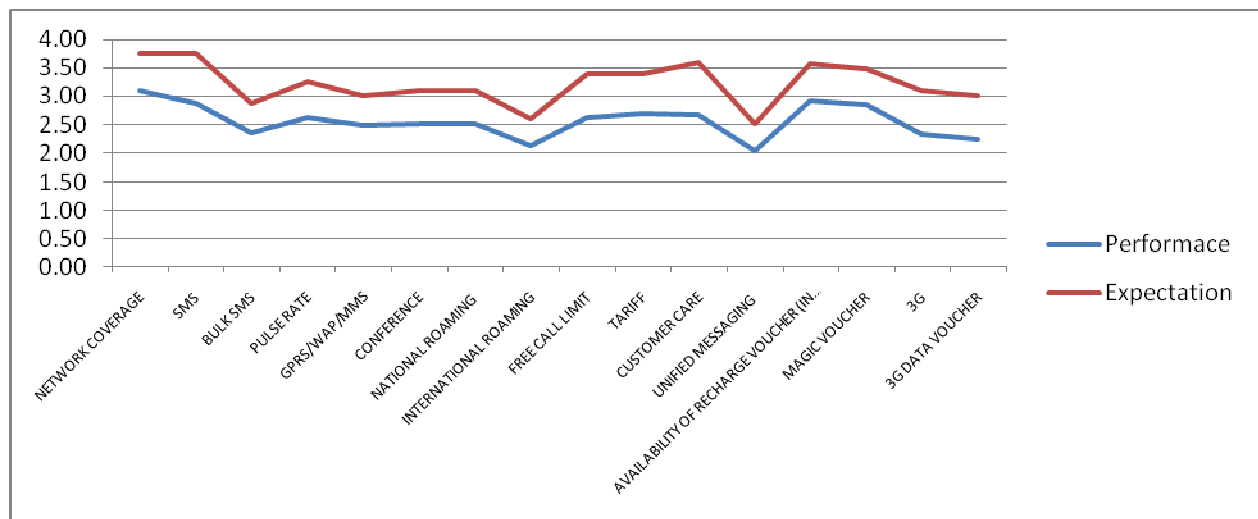


Figure 3. Comparisons between Customers' Expectations and Perceived Performance on Different Mobile Phone Service Attributes – Pvt. Service Providers

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