

## **Perception of Service Quality in the Life Insurance Sector: A Case Study on North East India**

Shyamasree Saha<sup>1</sup> and Anirban Dutta<sup>1+</sup>

<sup>1</sup> Research Scholar, NIT Agartala, Tripura, India

<sup>2</sup> Asst. Professor, NIT Agartala, Tripura, India

**Abstract.** In this research paper an attempt has been made to study the customer's perception of service quality offered by the life insurance companies operating in the eight states (Assam, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya and Sikkim) of North East India. One of the main objectives of this research study is to identify the factors affecting the service quality in the life insurance sector which plays a crucial role in creating customers' perception regarding the quality of service delivered.

**Keywords:** Service Quality, Life Insurance, North East India, etc.

### **1. Introduction**

Since the Service Industries are characterised by – Intangibility, Inventory (Perishability), Inseparability and Inconsistency (Variability), it becomes much more demanding to uphold and endure the same level of quality of service every time a service has been rendered. The Indian Life Insurance Industry is no exception to it. The Life insurance sector has entered into new businesses and is bent on enhancing its market share, which can be achieved only if the industry is able to get new customers and retain old customers. Today relationships with customers have undergone a paradigm shift and all the private players are competing with each other to provide quality service to customers as customer satisfaction, customer loyalty and customer delight have become the success mantra of cut throat competitive scenario (Vannirajan, 2008) [1]. Presently only those insurance companies can survive and sustain their growth and profitable that believes in delivering the highest delivered value to the customers (Chattoraj, 2005) [2]. As a result maintaining service quality in Indian Insurance sector is of colossal significance.

The main focus of this research paper is to explore and measure the customer's perception of service quality offered by the life insurance companies operating in the North Eastern states (Assam, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya and Sikkim) of India. One of the key objectives of this investigative study is to identify the factors affecting the service quality in the life insurance sector which plays a decisive role in creating customers' perception regarding the quality of service that has been delivered to them by the Life Insurance providing companies.

### **2. Measuring Service Quality**

Parasuraman, Zeithaml and Berry (1985) [3] opined that, regardless of the type of service, consumers basically use the same criteria to assess quality. Service quality is nothing but a general customer outlook that the patron perceives regarding its delivery, which is established by a chain of

---

<sup>+</sup> Corresponding author. Tel.: + 91 8415902777; fax: +91 381-2346360  
E-mail address: anirbandutta.som@gmail.com.

positive or disastrous experiences. Thus it can be easily inferred that by managing those gaps in service delivery a particular service provider can improve its quality. But no such model was available based on which a customer can give a general feedback on the service they have experienced. With an objective to decipher this problem, Parasuraman, Zeithaml and Berry (1985) developed a methodology commonly known as SERVQUAL where a customer can compare between several orders of expectations and perceptions of service quality regarding the service delivered. This SERVQUAL model pursues to aid managers to comprehend and recognise the sources of problems in quality of service delivered and how to improve those glitches. SERVQUAL is an instrument to measure quality of service perceived by the customer and works with the difference in scores or gaps in the form of a questionnaire. The original SERVQUAL scale uses 22 questions to measure customer's perception of the quality of service delivered based on the five dimensions of service quality: reliability, tangibility, security, empathy and responsibility. These questions are then scored on a Likert scale either from 1 to 5 or 1 to 7. The extremes are marked as strongly disagree (1) and strongly agree (7).

### **3. Research Methodology**

The research started on July 2014, which took almost four months to complete. Several methods and measures have been used to collect and analyse the data in this study which are being explained below in the following subheadings:

#### **3.1. Research Gap**

The researcher is yet to come across any such study or research that revolves around the measurement of service quality in Life Insurance Sector of India that focuses solely on the North Eastern states of India. So there lies a gap in the field of investigation of measurement of service quality in Life Insurance sector especially with special attention to the eight states that lie in the North Eastern part of the country

#### **3.2. Research Design**

Descriptive and Quantitative research has been chosen to do this study. The main objective of this research work is to study the factors effecting service quality of the Life Insurance companies in the North Eastern states of India. The data is being collected through a framed questionnaire which was totally sculpted based on the SERVQUAL Model formulated by Parasuraman, Zeithaml and Berry (1985) [4]. The questionnaire has 23 questions which were based on the RATER model (Reliability, Assurance, Tangibility, Empathy and Responsiveness Model). The study was restricted to the eight states of North East India which includes: Assam, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya and Sikkim.

#### **3.3. Data Collection and Sample Selection**

For the process of Data collection a Google spread sheet of the questionnaire was made and circulated through various social media and also through emails to collect the responses of the respondents. In a span of 3 months 373 responses received but only 336 were found to be complete and without errors. So for this study those 336 responses were being considered as Sample size for the analysis of the data. The data collected is being analysed by using the software IBM SPSS Statistics 20.

The structured questionnaire was administered through a Google spread sheet and circulated through various social media, emails and also in person to approximately 400 respondents. 373 replies were registered. But only 336 responses were found to be complete and error free. The respondents included in the study were chosen randomly from all the eight states of North East India and was a balanced mix of various demographic factors (gender, age, monthly income and occupation).

### **3.4. Method of Analysis**

The statistical software tool named IBM SPSS Statistics 20 was used to analyse the whole data collected through the questionnaires. The key statistical analysis tools used in this research study are Reliability analysis, Factor analysis for structural detection which includes KMO and Bartlett's Test, Rotated Component Matrix and Principal component analysis and many other statistical inference analyses which can be easily calculated with the help of this software tool.

## **4. Data Analysis**

### **4.1. Profile of Respondents**

The profiles of the respondents are being made according to the demographic and economic factors of the respondents. The respondents are also asked to select the respective North Eastern state they belong to among the eight states. The statements respondents who have chosen to not answer this question have been eliminated from this study.

After analysis it has been found that 46.1% of the respondents are female while rest 53.9 are male. 50.3% of the respondents belonged to the age group of 20 to 30 years, 36.9 % belong to the age group of 30 to 40 years while only a few people among the respondents belonged to other age groups which signifies that a lion's portion of the respondents of this study were between the age of 20 to 40 years. The respondents have varied monthly income though most of them lied between the three categories. 28.9 % of the respondents have a monthly income between Rs. 10,000 to 20,000; 33.3% has monthly income between Rs. 20,000 to 30,000; 27.4% has monthly income between Rs. 30,000 to 40,000 respectively while a minority of them belong to other monthly income groups. A majority of the respondents (42%) were from the service industries while the other respondents had different other occupation. It has been found that a bulk percentage (66.7%) of the respondents bought their Life Insurance policies through the Insurance Agents and only a few relied on other channels like Branch office (22.9%), Internet (8.3%) and others (2.1%) which signifies that people mostly prefers to buy insurance policies from the life insurance agents though many other convenient channels are available to them. The highest numbers of respondents are from Tripura (23.3%), Assam (22.6%) and Manipur (16.7%) while 13.1 % of the respondents are from Mizoram, 8.3% from Meghalaya, 6.3% from Arunachal Pradesh, 5.1 % from Sikkim and 4.8 % from Nagaland respectively.

### **4.2. Reliability Analysis**

A reliability of the questionnaire was one of the primary concerns to this study. A study can be considered as reliable when the tool used in that study is reliable to the extent that the scores made by the respondents remain approximately the same in repeated measurement. According to (Cronbach, 1984) [5], the evaluation of any questionnaire reliability that is internal consistency is possible by calculating Cronbach's  $\alpha$ . The reliability of the instrument means that its results are characterized by repetitiveness (Psarou M. K. & Zafiroopoulos, 2004) [6] Cronbach's  $\alpha$  is considered to be the most important reliability index and is based on the number of the variables/items of a questionnaire (SERVQUAL Model in this study), as well as on the correlations between the variables (Nunnally, 1978). The index alpha ( $\alpha$ ) is evaluated by Cronbach alpha coefficient. The Cronbach's  $\alpha$  is the key index of internal consistency and is attributed as the mean of correlations of all the variables, and it does not depend on their arrangement (Anastasiadou, 2006) [8].

The reliability scale was employed to assess the validity of the five dimensions of SERVQUAL. After analysing all the 23 questions of the structured questionnaire used in this it has been found that  $\alpha$  of the overall questionnaire is .882 (Table.1) The value of  $\alpha=.882$  certainly lies in the region indicated by (Kline, 1999) [9] as "good" (since  $0.7 \leq \alpha < 0.9$  is Good). So the result signifies that the structured questionnaire used in this study probably indicates good reliability. Apart from analysing the overall reliability of the questionnaire, Cronbach's  $\alpha$  was also employed to measure the reliability of the underlying dimensions i.e. Reliability, Assurance, Tangibles, Empathy and Responsiveness.

Table 1. Overall Reliability Statistics

Cronbach's Alpha	N of Items
.882	23

### 4.3. KMO and Bartlett's Test

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a indicator that specifies the proportion of variance in the variables of a particular study that might be affected by underlying factors. High values (i.e. close to 1.0) generally specify that a factor analysis may be suitable for the data collected and if the value observed is less than 0.50, the results of the factor analysis probably won't be of much use for the researcher. Kaiser (1974) [10] has recommended that a bare minimum of 0.5 is acceptable and Hutcheson & Sofroniou, (1999) [11] has denoted that values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are superb. For this set of data, after doing KMO analysis it has been found that the value is 0.737 (Table. 2), which falls into the range of being “good”, so it can be conveniently inferred that the sample size is adequate for factor analysis.

Bartlett's test of Sphericity assesses the hypothesis that the correlation matrix is an identity matrix; i.e. all diagonal elements are 1 and all off-diagonal elements are 0, which suggests that all of the variables are uncorrelated. If the Sig value for this test is less than the alpha level (i.e less than 0.05), it can be suggested to discard the null hypothesis that the population matrix is an identity matrix. For factor analysis to work some relationship is required between variables and if the R-matrix is an identity matrix then all correlation coefficients would be zero. Therefore, it is important for this test to be significant (i.e. have a significance value less than .05). A significant test denotes that if the R-matrix is not an identity matrix; therefore, there are some relationships between the variables that can be included in the analysis. For this data set, Bartlett's test is highly significant ( $p < .001$ ), and therefore factor analysis is appropriate. The Sig. value for this present study has come .000 (Table.2) which is way below 0.05 as a result this value analysed points towards rejecting the null hypothesis and determine that there are correlations in the data set that are apposite for factor analysis. This study expediently meets this requirement.

Table 2. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.737
Bartlett's Test of Sphericity	Approx. Chi-Square	4153.620
	df	253
	Sig.	.000

### 4.4. Principal Component Analysis:

Descriptive statistics is a statistical tool to quantitatively designate the main features of an congregation of information or sometimes the quantitative description itself. Descriptive statistics intend to condense a sample, rather than using the data to learn about the population that the sample of data is generally assumed to signify. Some repeatedly used methods of descriptive statistics to analyse a data set are: the measures of central tendency and measures of variability or dispersion. The Measures of central tendency comprises of the mean, median and mode, while measures of variability denotes the standard deviation (or variance), the minimum and maximum values of the variables, kurtosis and skewness. The standard deviation is a measure of the spread of average variability within a set of data analysed in the same units of measurement as the original data. Standard deviation is the square root of the variance. In this study two measures of descriptive statistics i.e. mean and standard

deviation has been used to analyse the data collected (Table.5). The highest and lowest range of Mean is 5.23 and 3.93 respectively. The data nearest to the mean value is considered to be good. While the highest and the lowest range of standard deviation is 1.398 and 1.025 respectively. The values having lowest standard deviation are considered to be good. So it can be referred from Table.5 that the Life Insurance companies of North East India are good at Reliability, Empathy and Responsiveness dimensions of the service quality as compared to the other two dimensions, Tangibility and Assurance.

Table.3 Descriptive Statistics

	Mean	Std. Deviation	Analysis N
Q.1 The branch office has modern looking service equipment	3.93	1.211	336
Q2. The branch office has visually appealing interiors	4.11	1.293	336
Q3.The Agents/Employees of the Insurance Company appear neat	4.73	1.242	336
Q4. The Promotional materials associated with the service such as pamphlets, brochures, etc. of the Insurance Company are visually appealing	4.86	1.143	336
Q5.The Branch office has adequate physical facilities	4.51	1.231	336
Q6.When you have a problem, the employees/agents of the Life Insurance Company shows sincere interest in solving it	4.84	1.116	336
Q7. The Life Insurance Company follows/maintains service timeline:	5.01	1.025	336
Q8. The Life Insurance Company Performs the service at the first time:	4.65	1.295	336
Q4. The Life Insurance Company keeps its service promises	4.89	1.087	336
Q12. The Life Insurance Company provides error free records	4.73	1.146	336
Q11. The Life Insurance Company keeps customer informed about when services will be performed	4.65	1.212	336
Q12. The employees/agents in the Life Insurance Company give you prompt error free service	4.69	1.070	336
Q13. The employees/agents in the Life Insurance Company are always willing to help you	5.23	1.135	336
Q14. The employees and agents in the Life Insurance Company are never too busy to respond to your request	4.69	1.332	336
Q15. The behaviour of the employees/agents in the Life Insurance Company instils confidence in you	4.51	1.358	336
Q16. You feel safe and assured in your transactions with the Life Insurance Company	5.03	1.195	336
Q17. The employees and agents in the Life Insurance Company are consistently courteous:	4.81	1.207	336
Q16. The employees/agents in the Life Insurance Company have the knowledge to answer your questions	5.03	1.374	336
Q14.The employees/agents in the Life Insurance Company give you individual attention	4.91	1.168	336

Q22. The Life Insurance Company has employees/agents who are always willing to help you	4.98	1.150	336
Q21. The Life Insurance Company understand your specific needs	4.79	1.398	336
Q22. The Life Insurance Company has your best interest in heart	4.54	1.181	336
Q23. The Life Insurance Company has operating hours that are convenient to all its customers	4.64	1.214	336

Next is the table of estimated communalities (Table.6). Communality is the extent to which an item correlates with all other items present in the questionnaire. The Communalities are the guesstimates of that part of the variability in each variable that is shared with others, and which is not due to measurement error or latent variable influence on the observed variable). The higher the communalities are, the better it is. If the communalities for a precise variable are low (i.e. between 0.0-0.4), then that variable may tussle to load considerably on any factor. The initial values can be disregarded. In the given table (Table.4) all of the extracted Communalities are acceptable (since the entire values extracted lie between the ranges of 0.556 to 0.812) and all variables are fit for the factor solution as their extraction values are large and satisfactory.

After Extraction Method in Principal Component analysis (Table.5) it has been found that the first seven components (factors) in the initial solution have an Eigenvalues over 1 and they justify for maximum observed variation in forming consumers' perception concerning the quality of service they have experienced regarding the Life Insurance policies from the Life Insurance Companies in North Eastern Region of India. As per the Kaiser Criterion, only first seven factors should be used because their ensuing eigenvalues are less than 1 and hence they would not be considered while analysing the interpretation.

Table 4. Communalities

	<b>Initial</b>	<b>Extraction</b>
Q.1 The branch office has modern looking service equipment	1.000	.738
Q2. The branch office has visually appealing interiors	1.000	.622
Q3.The Agents/Employees of the Insurance Company appear neat	1.000	.722
Q4. The Promotional materials associated with the service such as pamphlets, brochures, etc. of the Insurance Company are visually appealing	1.000	.744
Q5.The Branch office has adequate physical facilities	1.000	.763
Q6.When you have a problem, the employees/agents of the Life Insurance Company shows sincere interest in solving it:	1.000	.744
Q7. The Life Insurance Company follows/maintains service timeline:	1.000	.681
Q8. The Life Insurance Company Performs the service at the first time:	1.000	.750
Q9. The Life Insurance Company keeps its service promises	1.000	.683
Q10. The Life Insurance Company provides error free records:	1.000	.685
Q11. The Life Insurance Company keeps customer informed about when services will be performed:	1.000	.697
Q12. The employees/agents in the Life Insurance Company give you prompt error free service:	1.000	.812

Q13. The employees/agents in the Life Insurance Company are always willing to help you:	1.000	.768
Q14. The employees and agents in the Life Insurance Company are never too busy to respond to your request	1.000	.556
Q15. The behaviour of the employees/agents in the Life Insurance Company instils confidence in you	1.000	.672
Q16. You feel safe and assured in your transactions with the Life Insurance Company	1.000	.808
Q17. The employees and agents in the Life Insurance Company are consistently courteous:	1.000	.734
Q18. The employees/agents in the Life Insurance Company have the knowledge to answer your questions	1.000	.697
Q19. The employees/agents in the Life Insurance Company give you individual attention	1.000	.690
Q20. The Life Insurance Company has employees/agents who are always willing to help you	1.000	.690
Q21. The Life Insurance Company understand your specific needs	1.000	.746
Q22. The Life Insurance Company has your best interest in heart	1.000	.705
Q23. The Life Insurance Company has operating hours that are convenient to all its customers:	1.000	.750

Extraction Method: Principal Component Analysis.

Principal Component Analysis, data reduction statistical tool has been used in this present study to extract maximum variance from the data set with each component thus plummeting a large number of variables into smaller number of components. Researchers may use Principal Component Analysis as the first step to reduce the data, then follow-up with the factor analysis technique. Generally, the factor loadings are equitably analogous and it may need to perform rotation regardless of the extraction technique (Tabachnick, 2007) [11]. Factors are rotated for better interpretation since unrotated factors are ambiguous. The aim of rotation is to accomplish an optimal simple structure which endeavours to have each variable load on as few factors as possible, but maximizes the number of high loadings on each variable (Rummel, 1970) [12]. Ultimately, the simple structure attempts to have each factor define a distinct cluster of interrelated variables so that interpretation is easier (Cattell, 1973) [13]. In this study out of two common orthogonal techniques are Quartimax and Varimax rotation, Varimax rotation with Kaiser Normalization rotation method has been used which curtails the number of variables that have high loading value on each factor and works to make small loadings even more less significant.

In the present analysis Factor Loading has been used to measure correlation between variables and the factors. Loading value close to 1 signifies strong correlation between variable and the factor, while a loading value nearer to zero indicates weak correlation. After doing Principal Component Analysis (PCA) method for factor extraction in the present study only those factors were considered for the purpose of interpretation whose values are greater than 0.4. After Evaluating the Total Variance Explained (Table.5) it can be found that the 23 questions stated in the questionnaire can be grouped under 7 components i.e. factor groups of questions.

Table. 5 Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.708	29.167	29.167	6.708	29.167	29.167	3.533	15.359	15.359
2	2.891	12.571	41.738	2.891	12.571	41.738	3.362	14.617	29.976
3	1.742	7.574	49.312	1.742	7.574	49.312	2.197	9.554	39.530
4	1.563	6.797	56.109	1.563	6.797	56.109	2.178	9.468	48.998
5	1.353	5.881	61.990	1.353	5.881	61.990	2.035	8.848	57.847
6	1.167	5.076	67.066	1.167	5.076	67.066	1.670	7.261	65.108
7	1.032	4.486	71.552	1.032	4.486	71.552	1.482	6.444	71.552
8	.848	3.688	75.240						
9	.796	3.460	78.700						
10	.667	2.898	81.598						
11	.615	2.676	84.274						
12	.546	2.374	86.648						
13	.477	2.074	88.722						
14	.453	1.972	90.694						
15	.385	1.675	92.369						
16	.355	1.546	93.915						
17	.315	1.371	95.285						
18	.265	1.154	96.439						
19	.226	.983	97.422						
20	.210	.911	98.333						
21	.164	.711	99.044						
22	.122	.528	99.573						
23	.098	.427	100.000						

Extraction Method: Principal Component Analysis.

Table. 8 Component Matrix<sup>a</sup>

	Component						
	1	2	3	4	5	6	7
Q.1 The branch office has modern looking service equipment	.344	-.134	.324	.131	.573	-.330	-.205
Q2. The branch office has visually appealing interiors	.317	-.382	.361	.136	-.416	.228	-.033
Q3.The Agents/Employees of the Insurance Company appear neat	.645	-.471	.097	-.016	-.196	-.026	-.188
Q4. The Promotional materials associated with the service such as pamphlets, brochures, etc. of the Insurance Company are visually appealing	.545	.531	.059	-.188	-.203	.044	-.286

Q5.The Branch office has adequate physical facilities	.661	-.360	.274	-.318	-.110	-.089	.000
Q6.When you have a problem, the employees/agents of the Life Insurance Company shows sincere interest in solving it:	.782	-.089	-.079	-.090	-.300	-.110	-.086
Q7. The Life Insurance Company follows/maintains service timeline:	.679	.102	-.053	.202	-.374	-.104	.123
Q8. The Life Insurance Company Performs the service at the first time:	.462	.107	.101	.706	.045	.009	.121
Q9. The Life Insurance Company keeps its service promises	.512	.371	.272	.105	-.115	.362	-.233
Q10. The Life Insurance Company provides error free records:	.492	.054	.335	.535	.057	-.183	.074
Q11. The Life Insurance Company keeps customer informed about when services will be performed:	.480	.600	.036	.060	-.081	-.302	-.058
Q12. The employees/agents in the Life Insurance Company give you prompt error free service:	.349	.366	.461	-.218	.165	.428	.291
Q13. The employees/agents in the Life Insurance Company are always willing to help you:	.464	.657	-.002	-.130	.038	.088	-.310
Q14. The employees and agents in the Life Insurance Company are never too busy to respond to your request	.455	.500	-.060	.009	-.161	.134	.227
Q15. The behaviour of the employees/agents in the Life Insurance Company instils confidence in you	.674	.011	.059	-.060	.334	.054	-.310
Q16. You feel safe and assured in your transactions with the Life Insurance Company	.594	-.453	-.031	.146	.263	-.171	.360
Q17. The employees and agents in the Life Insurance Company are consistently courteous:	.564	-.132	.099	-.412	.009	-.314	.347
Q18. The employees/agents in the Life Insurance Company have the knowledge to answer your questions	.448	.310	.270	-.497	.217	.000	.181
Q19.The employees/agents in the Life Insurance Company give you individual attention	.483	-.376	-.361	.023	.097	.306	.287
Q20. The Life Insurance Company has employees/agents who are always willing to help you	.527	.447	-.382	.049	-.146	-.125	.162
Q21. The Life Insurance Company understand your specific needs	.555	.056	-.641	-.123	-.018	-.034	-.088
Q22. The Life Insurance Company has your best interest in heart	.645	.045	-.400	.008	.290	-.023	-.206
Q23. The Life Insurance Company has operating hours that are convenient to all its customers:	.462	-.287	-.247	.140	.327	.516	.027

Extraction Method: Principal Component Analysis.a. 7 components extracted.

Table 9. Rotated Component Matrix<sup>a</sup>

	Component						
	1	2	3	4	5	6	7
Q.1 The branch office has modern looking service equipment	-.107	.087	.048	-.002	.288	.774	.187

Q2. The branch office has visually appealing interiors	-.191	.663	.109	.048	.284	-.208	-.086
Q3. The Agents/Employees of the Insurance Company appear neat	.097	.777	-.050	.209	.148	.170	.107
Q4. The Promotional materials associated with the service such as pamphlets, brochures, etc. of the Insurance Company are visually appealing	.030	.811	-.056	.214	-.076	.167	.051
Q5. The Branch office has adequate physical facilities	.070	.726	.228	.087	.012	.195	.366
Q6. When you have a problem, the employees/agents of the Life Insurance Company shows sincere interest in solving it:	.618	.537	.060	.132	.129	.071	.165
Q7. The Life Insurance Company follows/maintains service timeline:	.543	.408	.068	.069	.418	-.132	.133
Q8. The Life Insurance Company Performs the service at the first time:	.204	.039	.033	.193	.809	.086	-.077
Q9. The Life Insurance Company keeps its service promises	.315	.276	.531	.025	.263	.091	-.384
Q10. The Life Insurance Company provides error free records:	.120	.174	.101	-.028	.755	.232	.077
Q11. The Life Insurance Company keeps customer informed about when services will be performed:	.674	-.009	.237	-.280	.266	.187	.047
Q12. The employees/agents in the Life Insurance Company give you prompt error free service:	.018	.002	.886	.091	.117	-.002	.065
Q13. The employees/agents in the Life Insurance Company are always willing to help you:	.636	.010	.453	-.099	-.016	.273	-.274
Q14. The employees and agents in the Life Insurance Company are never too busy to respond to your request	.554	-.016	.414	.066	.203	-.175	.032
Q15. The behaviour of the employees/agents in the Life Insurance Company instils confidence in you	.282	.319	.260	.272	.087	.583	-.037
Q16. You feel safe and assured in your transactions with the Life Insurance Company	.016	.282	-.059	.470	.371	.228	.560
Q17. The employees and agents in the Life Insurance Company are consistently courteous:	.234	.353	.228	.039	-.034	.117	.697
Q18. The employees/agents in the Life Insurance Company have the knowledge to answer your questions	.241	.078	.659	-.038	-.138	.238	.348
Q19. The employees/agents in the Life Insurance Company give you individual attention	.117	.240	-.003	.748	.063	-.088	.220
Q20. The Life Insurance Company has employees/agents who are always willing to help you	.785	-.037	.088	.121	.162	-.078	.134
Q21. The Life Insurance Company understand your specific needs	.688	.164	-.153	.426	-.157	.099	.080
Q22. The Life Insurance Company has your best interest in heart	.537	.142	-.024	.449	.023	.439	.021
Q23. The Life Insurance Company has operating hours that are convenient to all its customers:	.016	.165	.129	.813	.108	.152	-.100

**Extraction Method:** Principal Component Analysis **Rotation Method:** Varimax with Kaiser Normalization.

a. Rotation converged in 12 iterations.

Table.10 Component Transformation Matrix

Component	1	2	3	4	5	6	7
1	.543	.544	.292	.334	.307	.277	.206
2	.576	-.523	.449	-.362	.060	-.029	-.238
3	-.514	.258	.537	-.499	.326	.156	.026
4	-.048	-.177	-.344	.115	.851	-.032	-.332
5	-.231	-.489	.148	.367	-.020	.727	.147
6	-.216	.037	.483	.562	-.107	-.320	-.537
7	-.085	-.303	.225	.209	.246	-.516	.693

**Extraction Method:** Principal Component Analysis. **Rotation Method:** Varimax with Kaiser Normalization.

The Factor Analysis made so far by using IBM SPSS Statistics 20 helps to extract seven factors namely:

- I. Affinity towards dependable Receptiveness (Component.1)
- II. Physical Appearance (Component.2)
- III. Service Performance (Component.3)
- IV. Understanding Customer needs (Component.4)
- V. Constancy (Component.5)
- VI. Impressing the Customer (Component.6)
- VII. Service Commitment (Component.7)

## 5. Interpretation:

After thorough observation and analysis it has been found that seen factors are quite responsible for the formation of customers' perception of service quality regarding the Life Insurance policies from the Life Insurance Companies in North Eastern Region of India. The components are explained according to their rank in the descending order of their importance:

### 5.1. Affinity towards dependable Receptiveness:

Affinity towards dependable receptiveness was rank highest among all other components in respect of customer perception regarding the quality of service offered by the Life Insurance companies. Natural affinity with the customers will help the companies to gain their trust which will in turn strengthen their customer base. The employees and the agents of the Life Insurance Company must be constantly prepared to serve the customer. They must be well equipped to understand a customer's specific needs and try their level best to assure them that the company has their best interest in heart to serve the customer. They must attend and assist them whenever is needed. If any customer is facing a problem the employees and agents should oblige to their earnest to solve that particular problem as efficiently as they can. The Insurance Company should keep the customer well informed about when the services will be performed and should definitely try to strictly adhere to the service timeline they have promised to the customer and should not make the customer wait to get the quality of service he actually deserves. The employees and the agents should never be too busy to respond to the queries or problems of the customer and should try to report and resolve the issue at earliest convenience. If a Life Insurance Company fails to affine this reliable approachability towards their customers, it may end up having a whole batch of dissatisfied customers which is quite

detrimental to any kind of service providing organisation. The quality of service offered by these Life Insurance Companies hugely rests on this affinity towards dependable receptiveness.

## **5.2. Physical Appearance:**

Physical appearance of the branch office as well as of the employees and agents of the Life Insurance Company ranks second in signifying service quality in creating customer perception. Intangibility is one of the most significant characteristic of service industry that separates it from rest other companies as a result of this tangibility plays an important role in defining and shaping the perception of quality of service by the customer. In this study it has been found that there is a positive relationship between the tangible components of service like physical appearances of the branch office and the employees and agents and the quality of service perceived by the customers. When the promotional materials associated with the service such as pamphlets, brochure, and website etc. of a respective Life Insurance providing company are visually appealing and well informed it creates a decent image of the company regarding the quality of service they are receiving from the other end. Apart from this the visually appealing interiors of the branch office, the neat dress up of the employees and the agents, a branch office having adequate physical facilities all these factors help to create a positive appearance in the mind of the customer regarding the service quality provided by the Insurance Company.

## **5.3. Service Performance:**

Service performance of the Life Insurance providing company as well as its employees and agents ranks third in creating customer perception of Service Quality provided by the Life Insurance Companies. The Life Insurance Company must be dedicated to provide prompt error free service to the customers. Faulty receipts, late maturity of the insurance, wrongful amount of the premium etc. all these account for a bad quality of service. The employees must be well trained enough to give an error free and prompt service to a customer. Negligence of any kind should be avoided as much as it is possible because this will end up having an unsatisfied customer which is not at all appreciated in any kind of service industry. The employees and the agents of the Life Insurance Company must also be knowledgeable to answer the queries and various questions asked by the customer. Insurance being a financial service sector where customers invest their hard earned money it is very much common and usual that the customer will have different queries relating to the service provided to him by the Life Insurance Companies. So the employees and the agents reporting to his questions must be erudite enough to give him satisfactory answers or else the company may lose an important client. Another important aspect of service performance is keeping the promises made by the service provider. It is a common habit of the Insurance Companies to make many promises just to attract the customers but if in the long run the company fails to keep up to the promises it has claimed to keep, the company may lose its whole reputation.

## **5.4. Understanding Customer Needs:**

Understanding the customer needs is the fourth most important factor that defines the customer perception of service quality of the Life Insurance Company in North East India. This factor is very much important because until and unless a service provider understands the need of their customer they would not be able to serve properly to the customer and the desirable quality of service would never be achieved. The Company should have convenient operating hours to provide service to the customers so that they can avail the service they require at their feasible time. Moreover the employees and the agents of the Life insurance Company should give individual attention to the employees while resolving their probes so that they may feel important. Understanding the customer needs and providing them service accordingly will ensure a worthy service quality.

## **5.5. Service Constancy:**

Service Constancy ranks as fifth most important factor that signifies the customer perception of service quality of the Life Insurance Company in North East India. Service Constancy denotes how efficiently and unmistakably the life Insurance provider serves its customers. Service constancy balances on the whole equation of accuracy and reliability provided by the Insurance Company. Since the customers invest their toiling earnings in the life insurance policies maintaining that level of reliability and accuracy can a degree of concern for the service provider. Yet to ensure the service quality, the company must perform precise and accurate service at the first time. At the same time the Life Insurance Company must also maintain and preserve error free records which can be reminisced at the slightest convenience. Since huge amount of investments by the customers are involved in the Life Insurance Sector, the stakes are very high and a small degree of error may lead to the collapse of the goodwill of the Life Insurance Company. So the Companies should continuously confirm to Service Constancy.

### **5.6. Impressing the Customer:**

The sixth most important factor that manifests perception of service quality regarding the Life Insurance Companies of North East India is 'Impressing the Customer'. Impressing the customer is of benevolent importance. An impressed customer is a delighted customer who has a very upright perception regarding the service quality provided to him. If the branch office has modern looking up to date service equipment and gadgets he might feel that he and his investment is in right hands and is safe and secured with the Life Insurance providing company. Apart from this the behaviour, the confident and optimistic attitude of the agents and employees will inculcate a sense of confidence and reliability in the mind of the customer which will in turn create an affirmative perception of service quality. So impressing the customer has its own set of perks and advantages.

### **5.7. Service Commitment:**

The 'last but not the least' most important factor that explicitly marks the perception of service quality provided by the Life Insurance Companies of North East India is Service Commitment. The Life Insurance Company must affirm and commit to provide the best kind of service to its customers and this will ensure a constructive feedback regarding the service quality the customers are receiving. The employees and the agents must be unswervingly and unflinchingly courteous towards the customers. The company should also try to make the customers feel safe and assured while transacting with the company. This sort of commitment and discreet assertion will generate a pleasant perception regarding the service quality they have been provided by the Life Insurance Company and help the company in a long run.

## **6. Conclusion:**

One of the foremost intentions of this study is to find an approach which the managers may find helpful while identifying the significant factors that contribute in formation of customers' perception of service quality in the Life Insurance Sector of North East India. The amount of study done in this field keeping the North Eastern States of India in mind is very negligible. So the managers working in Life Insurance Sector of North East India might find this study very helpful after analysing the inference and interpretations of the study. Even though the customers of North Eastern States of India seemed quite satisfied yet there is a lot of scope to improvise in the field of Life Insurance Sector.

It has been also observed that the customers generally refer to the Insurance agents while rendering a new policy. So it is very much suggested that a great deal of focus must be made on the Life Insurance Agents. Proper care should be taken regarding the appearance and grooming of the agents which is being ignored in many cases. Another important aspect is the proper training of the employees and the agents. Since they are the persons with the customers are interacting directly, a big deal of responsibility rests on their shoulder for generating customer perception regarding the quality of service rendered.

## 7. Acknowledgements

This research paper is made possible through the help and guidance of Dr. P. K. Behera, Asst. Prof., NIT Agartala, Dr. Sonit Datta, Asst. Prof., NIT Agartala, Miss. Mili Kar, Teaching Assitant, NIT Agartala and last but not the least, Mr.Subhayan Chakraborty, Guest Faculty, Tripura University.

## 8. References

- [1] Vannirajan, Devi and Shankar, (2008), Service Quality of Life Insurance Companies at Salem, *Global Business Review*, 2(2), 23-31
- [2] Chattoraj, Abhijit (2005), Customer delivered value- A key to success, *The Insurance Times*, January, 22-30
- [3] Parasuraman, Valarie A. Zeithaml, Leonard L. Berry (1985) A Conceptual Model of Service Quality and Its Implications for Future Research, *The Journal of Marketing*, Vol. 49, No. 4 (Autumn, 1985), pp. 41-50]
- [4] Cronbach, L. J. (1984). *A Research Worker's Treasure Chest. Multivariate Behavioral Research*. 19, 223-240.]
- [5] Psarou M. K. &Zafiropoulos, C. (2004). *Scietific Research: Theory and Applications in Social Sciences*. Athens, Tipothito, Dardanos
- [6] Nunnally, J. C. (1978). *Psychometric Theory*. McGraw-Hill Book Company, pp. 86-113, 190-255
- [7] Anastasiadou, S. (2006). Factorial validity evaluation of a measurement through principal components analysis and implicative statistical analysis. In D.X.Xatzidimou, K. Mpikos, P.A.Stravakou, & K.D. Xatzidimou (eds), *5th Hellenic Conference of Pedagogy Company*,Thessaloniki, pp. 341-348
- [8] Kline, P. (1999). *The handbook of psychological testing* (2nd ed). London: Routledge
- [9] Kaiser, H.F. (1974). *An index of factorial simplicity*. *Psychometrika*, 39, 31-36.
- [10] Hutcheson, G. D., and Sofroniou, N. (1999). *The Multivariate Social Scientist: an introduction to generalized linear models*. Sage Publications.
- [11] Tabachnick, B. G., &Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Allyn& Bacon
- [12] Rummel, R.J. (1970). *Applied factor analysis*.Evanston, IL: Northwestern University Press
- [13] Cattell, R.B. 1973, *Personality and Mood by Questionnaire*. Jossey-Bass, San Francisco (1973)