CHAPTER 4

METHODOLOGY
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This chapter attempts to provide the methodology for achieving the objectives of the study. In this chapter the research plan, research design, customer delight variables, data collection procedure, questionnaire design, and data analysis techniques of this study have been discussed in detail. This study involves both exploratory and descriptive research design.

4.1 Information Needs:

For fulfillment of the objectives of this study, certain specific information needs have been identified in detail. The first objective as given in section 3.4 (in Chapter 3) deals with establishing the concept with respect to the sequence of customer delight with empirical evidence in the hospitality industry (mainly in hotels) in North East India. In order to fulfill this objective, a literature review is carried out regarding customer delight (refer to section 1.1 in Chapter 1). Similar literatures are reviewed in case of customer satisfaction as customer delight is related to it (as noticed in the literature review). Through this attempt, it is found that variables like surpassing of guests’ expectations, their pleasant surprises from any act of hotels, and resultant happiness along with their perceived excitement and perceived positive feelings (as discussed in section 1.1 in Chapter 1) may form a sequence that may lead to customer delight in hotels (Crotts, Pan and Raschid 463; Crotts and Magnini 719-722; Finn 19; Magnini, Crotts and Zehrer 535-545). Primary data on these variables need to be collected in order to empirically establish the sequence leading to customer delight.

The second objective as specified in section 3.4 (in Chapter 3) deals with determination of the role of common hospitality parameters in creating customer delight in the hospitality industry (mainly in hotels) in North East India. For fulfillment of this objective, literature related to customer delight and hospitality industry (particularly the hotel industry) is studied. This also includes study of literature relating to customer satisfaction for reasons mentioned in the earlier paragraph. This endeavour revealed 50 main common hospitality parameters constituting customer delight in the hotels falling under 5 star deluxe, 4 star, 3 star,
Heritage Grand and unclassified categories in North East India (refer to section 4.3.2.7(a) in this Chapter). Some of these important common parameters include food and beverage quality, availability of food and beverage variety, hygiene of food and beverage etc. In order to analyze the roles of these variables (discussion on which is offered in another section of this Chapter) customer (guests in this case) preferences are to be measured.

The third objective as mentioned in section 3.4 (in Chapter 3) is related with the development of strategy for management of customer delight in the hospitality industry (mainly in hotels) in North East India. This includes two sub-objectives. One of them involves studying the role of reenacted delight and transitory delight in overall delight management in hotels (refer to section 1.1 in Chapter 1). For attainment of this sub-objective, literature relating to these two forms of delight as well as overall customer delight in hotels (as established by Rust and Oliver (88)) is studied in depth. An explanation regarding reenacted and transitory delight is already discussed in section 1.1 in Chapter 1. Such delight may lead to guests’ happiness in a hotel resulting in increased repeat visits, thereby causing maintenance of delight. The required strategy for management of customer delight in hotels through reenacted and transitory delight needed to be determined with the aid of primary data collected from respondents as explained in section 4.3.2 in this Chapter. The second sub-objective of the third objective of this research work involves the study of the role of skilled and well trained employees in overall delight management in hotels as established by Torres and Kline (290-291). For achievement of this sub-objective, literature relating to constructs that constitute proper skill and training of employees in relation to customer delight in the hospitality industry (particularly hotels) are studied. The required strategy for management of customer delight in hotels involving skilled and well trained employees through reenacted and transitory delight needed to be formulated with the help of primary data.

4.2 Research Design:

As stated earlier, this study involves both exploratory and descriptive research design. Exploratory research emphasizes on the discovery of “ideas” by providing valuable insights into the problem situation confronting the research.
This research work has been carried out on customer delight in the hospitality industry in North East India. As discussed earlier, this involves extensive literature review of studies related to customer delight, customer loyalty and satisfaction, and the hospitality industry. In this way, this research involves exploratory research design. Descriptive research is a well structured study intended to describe the characteristics and facts related to any issue or problem involved in a research study (Aaker et al. 228-229, 245-246; Beri, *Marketing Research* 63; Chawla and Sondhi 53; Cooper and Schindler 151; Malhotra 183; Tull and Hawkins 57). The objectives of this study (refer to section 3.4 of Chapter 3) include deep analysis of the said concept of customer delight. This involves empirically establishing the sequence leading to customer delight. Therefore, this study also involves descriptive research design. Since, primary data in this study has been collected only once from the sample respondents through survey, it is a cross-sectional descriptive study. Survey research has been employed in this study to collect required data. Data collection procedure is discussed in section 4.3 of this Chapter.

Initially, a review of literature related to customer delight is conducted for identification of variables which can result in such delight and its overall management in the hospitality industry (mainly hotels). The same literature are also reviewed to identify data collection procedure and data analysis approaches. Additional ideas and information on this subject is gathered from existing literature on customer loyalty and satisfaction, as well as on hospitality industry (refer to section 3.3 Need of the Study in Chapter 3). As discussed earlier, this led to the identification of variables like surpassing of guests' expectations, their pleasant surprises, and consequent happiness along with their perceived excitement and perceived positive feelings that may result in customer delight in hotels. The same literature review also led to the identification of a set of 46 common hospitality variables (including an open ended variable "others") like food and beverage quality, availability of food and beverage variety, hygiene of food and beverage etc. as common hospitality parameters that might affect guests' delight in hotels. In a similar manner, 6 probable elements of pleasant surprises (including an open ended element "others") like free gifts, special discounts, special foods etc. (as common
hospitality parameters) that may lead to customer delight in hotels are selected. Primary data has been collected within a time frame of one year (from 1st June, 2010 to 31st May, 2011) in North East India. Primary data is collected with the help of a sample survey through a structured self-administered questionnaire for repeat guests in the hotels. It is to be noted that before the final survey, a pilot survey is conducted among 66 repeat guests in 12 hotels falling in 4 Star, 3 Star and unclassified categories in Guwahati city (Assam) and required modifications are incorporated into the final questionnaire. The final questionnaire consists of 41 questions covering variables relating to customer delight and its overall management in the hotels. This questionnaire has been administered to repeat guests in 5 Star Deluxe, 4 Star, 3 Star, Heritage Grand and unclassified hotels in North East India. Thereafter, the collected data is analyzed using SPSS (Statistical Package for Social Science) software. This analysis has been shown in Chapters 5, 6 and 7.

4.2.1 Research Design for the First Objective:

The first objective of this study is concerned with the establishment of the concept of customer delight with empirical evidence in the hospitality industry (particularly hotels) in North East India (refer to section 3.4 in Chapter 3). This involves empirically establishing the sequence resulting in customer delight in the hospitality industry (particularly hotels). According to the views of various scholars, surpassing of guests' expectations, their pleasant surprises and their resultant happiness along with their perceived excitement and perceived positive feelings may lead to customer delight in hotels (Crotts et al. 463; Crotts and Magnini 719-722; Finn 19; Oliver, Rust and Varki 318; Rust and Oliver 87). In fact, these scholars have noted that these may be the main antecedents of such delight. Such observations indicate the sequence involving these variables for creating customer delight in hotels. The following relations based on these views may be considered to be a part of such a sequence:

i. Relation of surpassing of expectations with pleasant surprises in hotels.
ii. Relation of pleasant surprises in hotels with resultant happiness.
iii. Relation of perceived excitement with happiness due to pleasant surprises.
iv. Relation of perceived positive feelings with happiness due to pleasant surprises.
v. Relation of surpassing of expectations with perceived positive feelings.

The above relations may be appropriately tested using One-way ANOVA at a significance level of 5% (α=0.05) and Discriminant Analysis. One-way ANOVA is used for examining the presence of significant differences among the means of the dependent variables across independent variables (Malhotra 505). The value of the means of the dependent variable with respect to different groups (levels) of the independent variable may show the nature of relationship between these two variables. Discriminant Analysis is employed to examine the existence of significant differences among groups of dependent variable in terms of the independent (predictor) variable (Hair, Black, Babin, and Anderson 245; Malhotra 576). It also helps in developing the Discriminant Function which is a linear combination of the independent (predictor) variable(s) that will appropriately discriminate between categories of the dependent variable.

In case of relation i. of the first objective of this study, the variable, respondent guests' perception on surpassing of their expectations may be treated as the independent variable while the variable, respondents' viewpoint regarding pleasant surprises may be treated as the dependent variable (refer to Question No.15(i) and 18 respectively in the questionnaire given in Appendix-I). Here, One-way ANOVA may test the presence of significant differences among the means of guests' opinion on their pleasant surprises in hotels across their perception on surpassing of their expectations. Besides, the value of the means of the guests' pleasant surprises with respect to different levels of surpassing of their expectations may indicate the nature of relationship between these two variables. Similarly, Discriminant Analysis may also test the existence of significant differences among groups of guests' opinion on such pleasant surprises with respect to their views on surpassing of their expectations. It may also aid in forming the Discriminant Function- linear combination of surpassing of guests' expectations which may best discriminate between categories of their pleasant surprises in hotels. In this manner this relation may be tested. Similarly, the other four relations may be tested using ANOVA and Discriminant Analysis. The degree of relationship between the pairs of variables associated with each of these relations may be essential in arriving at a meaningful study on customer delight. This can be tested through Pearson's Correlation (Malhotra 534-542). This effort may help in checking the above
mentioned sequence of customer delight (comprising these relations) for establishing its presence in hotels in North East India. The details are shown in Chapter 5.

Use of Discriminant Analysis in the above situation offers certain advantages. These are (Hair et al. 245; Malhotra 576-577):

i. It helps in the determination of the Discriminant function that can discriminate between the categories of the dependent (criterion) variable.

ii. It helps in finding out the presence of significant differences among groups in terms of the independent (predictor) variables.

iii. It helps in examining which independent (predictor) variables may highly contribute to most of the intergroup differences.

iv. It aids in classification of cases on the basis of the values of independent (predictor) variable.

v. Besides, it also helps in finding out the accuracy of the classification.

It is to be noted that an attempt was made to involve Structural Equation Modeling (SEM) (involving Exploratory Factor Analysis and Confirmatory Factor Analysis) for creating a path diagram indicating a model of the sequence of customer delight in the hotel industry in North East India. However, this could not be put into practice owing to the following two serious limitations of SEM with respect to this study (Kleyman and McVean 5; Valluzzi, Larson and Miller 4350; Wu 33):

i. “Missing data and outliers” have influence on the covariance and correlation matrices analyzed in SEM. This study consists of considerable missing data particularly in case of responses to branching questions for customer delight. This led to failure of model fit while using SEM in this study.

ii. In most cases, a “large sample size produces stable estimates of the covariance or correlation among variables”, but may also result in easier rejection of the model.

4.2.2 Research Design for the Second Objective:

The second objective of this study is concerned with the determination of the role of common hospitality parameters in creating customer delight in the hospitality industry (particularly hotels) in North East India (refer to section 3.4 in Chapter 3). As per the literature review, certain common hospitality parameters of hotels have
been identified (refer to section 4.3.2.7(a) in this Chapter). These include 46 common hospitality variables (45 identified variables and any other variable) and 6 probable elements of pleasant surprises (5 probable elements and any other element of pleasant surprises). Some of these 46 common hospitality variables include food and beverage quality, availability of food and beverage variety, hygiene of food and beverage etc. Few of the 6 probable elements of pleasant surprises are free gifts, special foods, special discounts etc. These common hospitality parameters may lead to customer delight in hotels. It is important to reduce the earlier mentioned 46 common hospitality variables into few manageable factors. This would lead to proper understanding regarding customer delight in hotels with respect to these variables. Thereby this can help in arriving at meaningful observations for achieving the second objective of this study. This may be suitably done through Factor Analysis. It is used for data reduction and summarization. Factor Analysis can be used for two purposes. Firstly, it reduces a large number of variables into a smaller manageable number of factors. Secondly, it also analyses the “interdependence of interrelationship among a total set of variables” (Beri, *Marketing Research* 369-380; Chawla and Sondhi 489-521; Malhotra 609-611). Factor Analysis has two basic approaches, namely, *Principal Component Analysis* and *Common Factor Analysis*. In Principal Component Analysis, the total variance of data is considered. It is normally employed when emphasis is on determining the “minimum number of factors that will account for maximum variance in the data for use in subsequent multivariate analysis” (Chawla and Sondhi 489-521; Malhotra 616-617). In Common Factor Analysis (also called Principal Axis Factoring), the common variance of data is considered. It is used when focus is on “identifying the underlying dimensions and common variance of interest” (Chawla and Sondhi 489-521; Malhotra 616-617). For the purpose of this study, Factor Analysis employing Principal Component Analysis with Varimax rotation is decided to be conducted on all these 46 common hospitality variables to best reduce them to few factors.

As already mentioned, the common hospitality parameters of hotels comprising 46 common hospitality variables and 6 probable elements of pleasant surprises may lead to customer delight in hotels. This may be tested on the basis of their relationship with surpassing of guests’ expectations in hotels, which is an important component of customer delight (Crotts et al. 463; Crotts and Magnini 719-
These relations may be duly tested using One-way ANOVA at a significance level of 5% (α=0.05) for reasons mentioned in earlier section 4.2.1. Here, the variable, respondent guests’ expectations regarding each of these 46 variables may be treated as the independent variable while the variable, surpassing expectations of the respondents may be treated as the dependent variable. In this case, an equal number of One-way ANOVA tests may be carried out to examine if the means of guests’ opinion on surpassing of their expectations differ across their expectations regarding each of these 46 variables. Thereafter, the value of the means of guests’ views on surpassing of their expectations with respect to the different levels of their expectations regarding each of these 46 variables may indicate the nature of relationship between them. This may show the nature of relationship of guests’ expectations of each of these 46 variables with respect to surpassing of their expectations. This may help in indicating which of these variables may be highly emphasized by hotels to delight guests. Again for ANOVA, the variable, respondent guests’ views on the frequency of obtaining the above mentioned 6 probable elements of pleasant surprises may be treated as the independent variable while the variable, surpassing expectations of the respondents may be treated as the dependent variable. Here, an equal number of One-Way ANOVA may be conducted to verify if the means of guests’ perception on surpassing of their expectations differ in relation to obtainment of these 6 probable elements of pleasant surprises in hotels. Subsequently, the value of the means of guests’ opinion on surpassing of their expectations across the different levels of their obtainment of each of these 6 probable elements of pleasant surprises may specify the nature of relationship between the former and the latter. This effort may help in studying the role of common hospitality parameters in creating customer delight in the hotels in North East India. The details are shown in Chapter 6.

4.2.3 Research Design for the Third Objective:

4.2.3.1 First Sub-Objective:

The first sub-objective of the third objective of this study is concerned with the development of strategy for management of customer delight in the hospitality industry (particularly hotels) in North East India involving reenacted delight and transitory delight (refer to section 3.4 in Chapter 3). It may be noted that staggered
delivery of customer delight may be a possible strategy in this regard. It is noticed through earlier research studies that staggered delivery of customer delight may be achievable through reenacted delight and transitory delight (Rust and Oliver 88). The former delight may be possible by providing similar value addition during guests’ subsequent visits to hotels (refer to section 1.1 in Chapter 1). The latter delight may be possible by offering changes in value addition during guests’ subsequent visits to hotels (refer to section 1.1 in Chapter 1).

As per the studies of Rust and Oliver (88), guests’ regular expectation of pleasant surprises in the hotels, their expectation of similar value addition in their subsequent visits, and their resultant happiness and likelihood of staying in their same preferred hotels during their next visits may form a basis for management of customer delight in hotels through reenacted delight (refer to section 1.1 in Chapter 1). Therefore, the following relations may form the basis of any such proposed strategy in North East India:

i. Relation of regular expectations of pleasant surprises in preferred hotels with expectations of similar value addition during next visit to these hotels.

ii. Relation of expectations of similar value addition during next visit in preferred hotels with resultant happiness.

iii. Relation of expectations of similar value addition during next visit in preferred hotels with resultant likelihood to stay in the same hotels.

The above relations may be suitably tested using One-way ANOVA at a significance level of 5% (a=0.05) (as discussed in section 4.2.1). In case of the above relation i., the variable, respondents’ regular expectation of pleasant surprises is treated as the dependent variable while the variable, respondents’ expectation of similar value addition in their subsequent visits to the hotels is treated as the independent variable (refer to Question No.20 and 25 respectively in the questionnaire given in Appendix-I). Here, One-way ANOVA may check if the means of guests’ regular expectation of pleasant surprises differ across their responses if they ever expect similar value addition in their subsequent visits to the hotels. Next, the value of the means of the guests’ regular expectation of pleasant surprises with respect to different levels of their expectations of similar value addition may indicate the nature of relationship between these two variables. Similarly, the other two relations may be tested using One-way ANOVA. The
degree of relationship between the variables—guests’ happiness with their preferred hotels due to similar value addition and their resultant likelihood to stay in the same hotels may also be important in this regard. This may be tested through Pearson’s Correlation (Malhotra 534-542). As mentioned earlier, this may form the basis of any future strategy for management of customer delight in hotels through reenacted delight. Besides, examination of the segments of guests who may have higher or lower perception about expectations of such similar value addition during their next visit may add important inputs to such a strategy. This may be suitably done through a series of Independent sample t-tests and One-way ANOVA. Independent sample t-test may be used to test whether significant differences exist between the means of the dependent variables (test variables) across independent variables (grouping variables) (Malhotra 479). One-way ANOVA is used for reasons mentioned in earlier section 4.2.1. In these tests, the variable, respondent guests’ expectation of similar value addition in their subsequent visits to the hotels is treated as the dependent variable while the variable, respondents’ profiles (comprising of their gender, marital status etc.) is taken as the independent variable. The value of the means of the guests’ expectation of similar value addition with respect to their profiles may indicate the segments of guests who may have higher or lower expectations about such value addition. The details are shown in section 7.2.1 of Chapter 7.

From the views of Rust and Oliver (88), it is also seen that guests’ regular expectation of pleasant surprises in the hotels, their expectation of changes in value addition in their subsequent visits, and their resultant happiness and likelihood of staying in their same preferred hotels during their next visits may be important for management of customer delight in hotels through transitory delight (refer to section 1.1 in Chapter 1). As such, the following relations may form the basis of any such projected strategy in North East India:

i. Relation of regular expectations of pleasant surprises in preferred hotels with expectations of changes in value addition during next visit to these hotels.

ii. Relation of expectations of changes in value addition during next visit in preferred hotels with resultant happiness.
iii. Relation of expectations of changes in value addition during next visit in preferred hotels with resultant likelihood to stay in the same hotels in such visits.

The above relations may be duly tested using One-way ANOVA at a significance level of 5% (a=0.05) (as discussed in section 4.2.1 and earlier paragraphs). In this regard, the degree of relationship between the variables- guests' happiness with their preferred hotels due to changes in value addition and their consequent likelihood to stay in the same hotels may also be significant. This may be checked through Pearson's Correlation (Malhotra 534-542). As stated earlier, this may form the basis of any prospective strategy for management of customer delight in hotels through transitory delight. Moreover, examination of the segments of guests who may have higher or lower perception about expectations of such changes in value addition during their next visit may provide additional contributions to such a strategy. This may be appropriately done through a series of Independent sample t-test and One-way ANOVA as mentioned in the preceding paragraphs. The details are discussed in section 7.2.2 of Chapter 7.

4.2.3.2 Second Sub-Objective:

The second sub-objective of the third objective of this study is also aimed at the development of a strategy for management of customer delight in the hospitality industry (particularly hotels) in North East India involving skilled and well trained employees (refer to section 3.4 in Chapter 3). It is seen that continuous delivery of customer delight in hotels may be a potential strategy in such case. This is feasible through skilled and well trained hotel employees involving reenacted and transitory delight (Rust and Oliver 88; Torres and Kline 290-300). In this regard, a proper Human Resource Management policy in any hotel is essential. As such, identification of common hospitality variables of customer delight that are directly possible through skilled and well trained hotel employees and are repeatedly emphasized by guests may be essential at the initial stage. It is also important to reduce these variables into few manageable factors. This may result in proper understanding regarding such continuous delivery of customer delight with respect to these variables. In this way, this can aid in arriving at significant observations for achieving the second sub-objective of the third objective of this study (refer to
section 3.4 of Chapter 3). This may be suitably done through Factor Analysis (involving Principal Component Analysis with Varimax Rotation) for reasons mentioned in section 4.2.2. It may also be essential to find out which segments of guests show higher or lower expectations regarding these factors in the hotels. For this purpose, factor scores are computed for each of these factors using weighted average of the factor loadings. Again, such segments of guests may be suitably identified through Independent sample t-tests and One-way ANOVA at a significance level of 5% (α=0.05) as stated in the earlier sections 4.2.1 and 4.2.3.1. Here, the variable, factor scores on respondent guests’ perception of each of these factors is treated as the dependent variable while the variable, respondents’ profiles (comprising of their gender, marital status etc.) is taken as the independent variable.

For continuous delivery of customer delight through reenacted delight, it is important to identify which of the above already stated repeated common hospitality variables have to be emphasized with respect to guests’ expectations of similar value addition during their next visits to their preferred hotels. This is obtained through One-way ANOVA. In this case, the variable, respondents’ expectations of similar value addition during their next visit to their preferred hotels is treated as the dependent variable while the variable, respondents’ expectations of such repeated variables is taken as the independent variable. The value of the means of the former variable across the latter variable indicates the nature of relationship between these two variables. In fact, this endeavour may show which of these repeated variables have to be focused for any future strategy for continuous delivery (management) of customer delight for the same guests in these hotels in the form of reenacted delight through skilled and well trained employees. These attempts, in addition to the already mentioned means to arrive at a future strategy for maintenance of customer delight through reenacted delight (refer to section 4.2.3.1), may also aid in formulating a future strategy for management of the same through the same delight involving skilled and well trained hotel employees in North East India. Again, for continuous delivery of customer delight through transitory delight, it may be vital to discover which of the above stated repeated variables have to be focused with respect to guests’ expectations of changes in value addition during their subsequent visit to their preferred hotels. This is possible through One-way ANOVA as mentioned above. Here, the variable, respondents’ expectations of changes in value
addition during their next visit to their preferred hotels is treated as the dependent variable while the variable, expectations of such repeated variables is taken as the independent variable. This endeavour, in addition to the already mentioned means to arrive at a proposed strategy for maintenance of customer delight through transitory delight (refer to section 4.2.3.1), may also assist in forming a future strategy for management of the same through the same delight involving skilled and well trained hotel employees in North East India. The details are shown in section 7.3 of Chapter 7.

4.3 Sources of Data:

The sources of primary and secondary data for this study are discussed in the following sections.

4.3.1 Secondary Data Sources:

Secondary data is mainly important for fulfillment of the second objective of this study, i.e., to identify the role of common hospitality parameters in creating customer delight in the hospitality industry (mainly hotels) (refer to section 3.4 of Chapter 3). In addition, secondary data is also essential in fulfillment of the first and third objective of this study. Secondary data has been obtained from the following:

i. Books
ii. Journals
iii. Magazines and periodicals
iv. Websites
v. Literature, brochures and leaflets etc.

The detail list is offered in the Bibliography.

4.3.2 Primary Data Sources:

Primary data for this study is collected from repeat guests (customers) of 65 hotels in 5 Star Deluxe, 4 Star, 3 Star, Heritage Grand and unclassified categories in North East India covered during the sample survey (refer to Appendix-III). Survey method is used to collect primary data. Survey method is employed for data collection because of its wide scope and ability to provide detailed information from a sample of large population (Aaker et al. 245-255; Beri, Marketing Research 103-131; Chawla and Sondhi 99; Cooper and Schindler 245-246; Malhotra 410-423, 426-451; Tull and Hawkins 61, 164). This is done through interview of repeat guests in
hotels falling in 5 Star Deluxe, 4 Star, 3 Star, Heritage Grand and unclassified categories in North East India covered during the sample survey. Besides, only repeat guests in these hotels are included as sampling elements in this study as customer delight is associated only with them (as established through literature survey). Only such hotels are selected for this study as they contain almost all the facilities wherein the concept of customer delight is applicable (refer to section 3.5 of Chapter 3). It is to be noted that wherever 5 Star Deluxe, 4 Star, 3 Star and Heritage Grand categories of hotels are absent, other unclassified hotels having state of art facilities for guests had to be included for this survey. It is to be noted that unclassified hotels refers to those hotels that have not applied for any type of classification to the competent Government of India authority, i.e., Hotel and Restaurant Approval and Classification Committee (HRACC).

Table 4.1 Star Category Of Hotels in North East India covered during this Study

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Star Category</th>
<th>Number</th>
<th>Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 Star Deluxe</td>
<td>1</td>
<td>Gangtok</td>
</tr>
<tr>
<td>2</td>
<td>4 Star</td>
<td>6</td>
<td>Gangtok, Guwahati, Shillong</td>
</tr>
<tr>
<td>3</td>
<td>3 Star</td>
<td>49</td>
<td>Gangtok, Guwahati, Kaziranga, Dibrugarh, Jorhat, Tezpur, Silchar, Agartala, Kohima, Dimapur, Itanagar and Shillong</td>
</tr>
<tr>
<td>4</td>
<td>Heritage Grand</td>
<td>1</td>
<td>Gangtok</td>
</tr>
<tr>
<td>5</td>
<td>No Classification</td>
<td>8</td>
<td>Gangtok, Guwahati, Agartala, Aizawl, Itanagar and Imphal</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>65</td>
<td></td>
</tr>
</tbody>
</table>

4.3.2.1 Study Population:

The population for this study includes only repeat guests in 65 hotels in the 5 Star Deluxe, 4 Star, 3 Star, Heritage Grand and some unclassified categories in North East India covered during the sample survey. It is to be noted that only repeat guests are involved for data collection as the concept of customer delight in hotels is only applicable for them (Arnold, Reynolds, Ponder and Lueg 1133-1136; Crotts and Magnini 720; Crotts et al. 462; Donovan and Samler 38-43; Fuller and Matzler 118; Mascarenhas, Kesavan and Bernacchi 486-490; Schneider and Bowen 35-45; Skogland and Siguaw 221-225; Stewart 112-113; Torres and Kline 297). This fact has been supported by other scholars (Keiningham, Goddard, Vavra and Laci 57-64; Keiningham and Vavra 25).

A detailed view of the North East India in terms of number of tourist visits to different states in this region is shown in Table 4.2. Such tourists include both domestic and foreign tourists and they belong to different age groups, genders and visit for various purposes. Domestic tourists arrive from different states of India
outside the North East region. Foreign tourists arrive from different countries located in various parts of the world. These are evident from different studies (Ministry of Tourism, Government of India 11-15, 17-19, 21-24, 29-60, 87-88). It is noticed that there is an increasing trend of the total tourist visits to North East India similar to that of India and the world in general. Thereby, any viewpoint arrived from study on such tourists in this region of India may also represent world view.

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arunachal</td>
<td>195,147</td>
<td>3,945</td>
<td>227,857</td>
<td>3,395</td>
<td>233,227</td>
<td>4,753</td>
</tr>
<tr>
<td>Assam</td>
<td>3,850,521</td>
<td>14,942</td>
<td>4,050,924</td>
<td>15,157</td>
<td>4,339,485</td>
<td>16,400</td>
</tr>
<tr>
<td>Manipur</td>
<td>124,229</td>
<td>337</td>
<td>114,062</td>
<td>389</td>
<td>134,505</td>
<td>578</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>591,398</td>
<td>4,522</td>
<td>652,756</td>
<td>4,177</td>
<td>667,504</td>
<td>4,803</td>
</tr>
<tr>
<td>Mizoram</td>
<td>56,651</td>
<td>513</td>
<td>57,292</td>
<td>731</td>
<td>62,174</td>
<td>858</td>
</tr>
<tr>
<td>Nagaland</td>
<td>20,953</td>
<td>1,423</td>
<td>21,094</td>
<td>1,132</td>
<td>25,391</td>
<td>2,080</td>
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<tr>
<td>Sikkim</td>
<td>615,628</td>
<td>17,730</td>
<td>700,011</td>
<td>20,757</td>
<td>552,453</td>
<td>23,602</td>
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<td>Tripura</td>
<td>317,541</td>
<td>4,246</td>
<td>342,273</td>
<td>5,212</td>
<td>359,515</td>
<td>6,046</td>
</tr>
<tr>
<td>North East</td>
<td>5,772,068</td>
<td>47,658</td>
<td>6,166,269</td>
<td>50,950</td>
<td>6,374,254</td>
<td>58,920</td>
</tr>
<tr>
<td>North East Total</td>
<td>5,819,726</td>
<td>62,171</td>
<td>6,433,174</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>688,800,482</td>
<td>14,372,300</td>
<td>740,214,297</td>
<td>17,852,777</td>
<td>850,866,640</td>
<td>19,494,879</td>
</tr>
<tr>
<td>India Total</td>
<td>683,172,782</td>
<td>7,568,076</td>
<td>758,067,074</td>
<td></td>
<td>870,351,519</td>
<td></td>
</tr>
<tr>
<td>World Total</td>
<td>880,000,000</td>
<td>940,000,000</td>
<td></td>
<td></td>
<td>983,000,000</td>
<td></td>
</tr>
</tbody>
</table>

*Multiple entry of tourists may be recorded by the Government of India machinery during calculations of their total visits to the states in North East India.
(Source: Ministry of Tourism, Government of India 87-88, http://databank.nedfi.com/content/tourism, and UNWTO 4)

4.3.2.1(a) Elements:

In this study, elements constitutes the repeat guests of 65 hotels falling in 5 Star Deluxe, 4 Star, 3 Star, Heritage Grand and a few unclassified categories in North East India from whom information is collected for fulfillment of the stated objectives. Only repeat guests are selected as sampling elements in this study as customer delight is associated only with them (as established through literature survey). Few unclassified hotels are included in this study as they have all the required facilities and provisions for providing customer delight for their guests (refer to point iv. section 3.6 of Chapter 3).

4.3.2.2 Sampling Units:

In this study, sampling unit consists of repeat guests of 65 hotels falling in 5 Star Deluxe, 4 Star, 3 Star, Heritage Grand and unclassified categories in North East India. As discussed earlier in section 4.3.2.1, only repeat guests are included as sampling units keeping in view the applicability of the concept of customer delight in hotels among them.
4.3.2.3 Time Period of Data Collection:

The study has been carried out within a time frame of one year (From 1st June, 2010 to 31st May, 2011) in North East India. Data collection has been done during summer, rainy and winter seasons as applicable in this region during this time frame of one year.

4.3.2.4 Extent of Data Collection:

The study covers the guests of hotels situated in the North East region of India. Hotels from the following places are selected as the basis of concentration of hotels in the selected categories (5 Star Deluxe, 4 Star, 3 Star, Heritage Grand and unclassified categories). These places are depicted in an indicative map (Fig. 4.1):

Fig. 4.1. Indicative Map of Places housing the Selected Hotels in North East India
(Places of Sampling are indicated within Black Circles in the Map)
(Source: http://cyberjournalist.org.in/images/states.gif and http://allindiiabirdingtours.com/images/map%20of%20NE%20India.JPG)
i. Itanagar (in the state of Arunachal Pradesh)  
ii. Guwahati (in the state of Assam)  
iii. Dibrugarh (in the state of Assam)  
iv. Jorhat (in the state of Assam)  
v. Silchar (in the state of Assam)  
vi. Kaziranga (in the state of Assam)  
vii. Shillong (in the state of Meghalaya)  
ix. Aizawl (in the state of Mizoram)  
x. Kohima (in the state of Nagaland)  
xi. Dimapur (in the state of Nagaland)  
 xii. Gangtok (in the state of Sikkim)  
xiii. Agartala (in the state of Tripura)  
xiv. Imphal (in the state of Manipur)

4.3.2.5 Sample Size:

The size of the sample for this study is 500 repeat guests of 65 hotels falling in 5 Star Deluxe, 4 Star, 3 Star, Heritage Grand and unclassified categories in North East India (refer to Appendix-III). This sample size is selected on account of the fact that population size for this study is unknown. This is because accurate records of this population consisting of repeat guests in star category hotels (as mentioned in section 4.3.2.1 of this Chapter) are not available. Besides, such a sample size is taken keeping in view the convenience of identifying and approaching repeat guests in these hotels for collection of required data for the study. In addition, this sample size has been selected based on other similar studies related to customer delight, satisfaction and loyalty, and tourism as shown in Table 4.3.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Researchers</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andaleeb and Conway 3-11</td>
<td>119</td>
</tr>
<tr>
<td>2</td>
<td>Atilgan, Akinci and Aksoy 412-422</td>
<td>200</td>
</tr>
<tr>
<td>3</td>
<td>Cameron and Gatwood 107-127</td>
<td>255</td>
</tr>
<tr>
<td>4</td>
<td>Chen, Chu and Wu 360-365</td>
<td>311</td>
</tr>
<tr>
<td>5</td>
<td>Faulkner and Tideswell 3-26</td>
<td>400</td>
</tr>
<tr>
<td>6</td>
<td>Finn 18-32</td>
<td>250</td>
</tr>
<tr>
<td>7</td>
<td>Ganguli 7-17</td>
<td>200</td>
</tr>
<tr>
<td>8</td>
<td>Gilbert 178-186</td>
<td>465</td>
</tr>
<tr>
<td>9</td>
<td>Hensley and Sulek 151-173</td>
<td>150</td>
</tr>
<tr>
<td>10</td>
<td>Heung, Qu and Chu 308-315</td>
<td>406</td>
</tr>
<tr>
<td>11</td>
<td>Huang, Soutar and Brown 53-59</td>
<td>276</td>
</tr>
<tr>
<td>12</td>
<td>Jamal and Naser 146-160</td>
<td>200</td>
</tr>
<tr>
<td>13</td>
<td>Jham and Khan 17-23</td>
<td>555</td>
</tr>
<tr>
<td>14</td>
<td>Julian and O'Cass 19-39</td>
<td>203</td>
</tr>
<tr>
<td>15</td>
<td>Kelsey and Bond 359-367</td>
<td>272</td>
</tr>
<tr>
<td>16</td>
<td>Miller, Craighead and Kanwan 387-400</td>
<td>448</td>
</tr>
<tr>
<td>17</td>
<td>Mittal and Lassar 177-194</td>
<td>233</td>
</tr>
<tr>
<td>18</td>
<td>Morrison, Hsieh and Wang 32-40</td>
<td>300</td>
</tr>
<tr>
<td>19</td>
<td>Oliver, Rust and Varki 311-336</td>
<td>124</td>
</tr>
<tr>
<td>20</td>
<td>Panayides 42-68</td>
<td>212</td>
</tr>
<tr>
<td>21</td>
<td>Popli 17-24</td>
<td>50</td>
</tr>
<tr>
<td>22</td>
<td>Sirakaya, Petrick and Choi 517-539</td>
<td>394</td>
</tr>
<tr>
<td>23</td>
<td>Smith and Kranich 783-802</td>
<td>160</td>
</tr>
<tr>
<td>24</td>
<td>Tosun 231-253</td>
<td>241</td>
</tr>
<tr>
<td>25</td>
<td>Vilares and Coelho 1703-1722</td>
<td>547</td>
</tr>
<tr>
<td>26</td>
<td>Wang, Su and Hui 239-252</td>
<td>431</td>
</tr>
<tr>
<td>27</td>
<td>Winsted 399-421</td>
<td>511</td>
</tr>
<tr>
<td>28</td>
<td>Wirtz 99-111</td>
<td>264</td>
</tr>
<tr>
<td>29</td>
<td>Yu and Goulden 1331-1342</td>
<td>530</td>
</tr>
<tr>
<td>30</td>
<td>Yuksel, Kilinc and Yuksel 11-24</td>
<td>420</td>
</tr>
</tbody>
</table>

In this study, the sample size of 500 respondents is larger compared to most of the above mentioned studies in Table 4.3. Since this study envisages dealing with...
Discriminant analysis and many other hypotheses concerning the study population, it is thought to be important to have a large sample size. A large sample size would presumably ensure normality of the distribution. This is discussed in detail in section 3.6 (vii) of Chapter 3 and in sections 5.3.2; 5.3.3; 5.3.4.3 and 5.3.5 of Chapter 5. A sample size of 500 is thought to be large enough.

4.3.2.6 Sampling Procedure:

Due to unavailability of any proper sampling frame for the population from which data would be collected, probabilistic sampling procedure could not be selected for this study. Therefore, non-probabilistic sampling procedure is employed to select repeat guests in 65 hotels falling in 5 Star Deluxe, 4 Star, 3 Star, Heritage Grand and unclassified categories in North East India. Besides, this sampling procedure has been selected as such repeat guests are generally difficult to be traced for required data collection in North East India. This sampling procedure did not involve the use of any mathematical tools and techniques or any other basis for selection of elements from the population in the sample.

Therefore, snowball sampling is employed during this survey for selection of elements from the population to be included in the sample. Snowball sampling initially involves selection of a group of sample respondents through judgement sampling. After interviewing them, they are requested to identify other respondents belonging to the target population. Thereafter, other respondents are selected through referrals. This process is repeated until all the 500 respondents are selected (Bajpai 267; Beri, *Marketing Research* 156; Beri, *Business Statistics* 265-299; Bhardwaj 1-226; Chawla and Sondhi 223; Cooper and Schindler 409-410; Lind, Marchal and Wathen 250-311; Malhotra 345).

4.3.2.7 Data Collection Instrument:

As mentioned in section 4.3.2 of this Chapter, survey is conducted to collect primary data in this study through structured and unstructured interview of repeat guests in hotels. This is done with the help of a well defined self administered questionnaire for repeat guests (refer to Appendix-I). Questionnaire is selected as the data collection instrument as it presents questions related to this study in a formalized
manner. This is supposed to improve the accuracy of recording and processing of
data for this study (Malhotra 299).

4.3.2.7(a) Variables Measured:

In order to select the variables that may lead to customer delight in the
hotels, an extensive literature review is carried out. Precedence from similar
customer delight and customer satisfaction studies, as well as studies on the
hospitality industry, that were conducted previously have provided immense help in
deciding about the variables to be measured in the context of this study. In addition,
the pilot survey also helped in fine tuning the variables finally taken up.

The idea behind the exercise is to measure two broad dependent variables:
i) guests' expectations in hotels, and ii) enjoyment of the guests in hotels.

i) Guests’ Expectations in Hotels: The first factor is measured with the help
of 50 common hospitality parameters. Such parameters include common
hospitality variables and pleasant surprises. These are shown alongwith the
references of works where they appeared below:

Common Hospitality Variables:
1. Food and beverage quality (Choi and Chu 116-119, 121-124; Heung 311;
Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and
Qu 320)
2. Availability of food and beverage variety (Choi and Chu 116-119, 121-
124; Heung 311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219,
222; Tsang and Qu 320)
3. Hygiene of food and beverage (Choi and Chu 116-119, 121-124; Heung
311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang
and Qu 320)
4. Food and beverage at reasonable price (Mohsin and Lockyer 161, 164,
166; Poon and Low 219, 222; Tsang and Qu 320)
5. Quality of the restaurant (Choi and Chu 116-119, 121-124; Heung 311;
Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and
Qu 320)
6. Location of the hotel (Heung 311; Poon and Low 219, 222; Tsang and Qu 320)

7. Physical appearance of the hotel (Heung 311; Poon and Low 219, 222)

8. View of the surrounding areas of the hotel (Heung 311; Mohsin and Lockyer 166)

9. Welcoming atmosphere in the hotel (Choi and Chu 116-119, 121-124; Heung 311; Lynch 1; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and Qu 320)

10. Cleanliness and tidiness of the hotel (Choi and Chu 116-119, 121-124; Heung 311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and Qu 320)

11. Room furnishings and appearance (Choi and Chu 116-119, 121-124; Heung 311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and Qu 320)

12. Comfort of beds/ mattresses/ pillows (Choi and Chu 116-119, 121-124; Heung 311; Mohsin and Lockyer 161, 164, 166; Tsang and Qu 320)

13. Quietness of the room (Poon and Low 219, 222; Tsang and Qu 320)

14. Cleanliness of the room (Choi and Chu 116-119, 121-124; Heung 311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and Qu 320)

15. Quality of in-room temperature control (Choi and Chu 116-119, 121-124; Tsang and Qu 320)

16. Room service (Choi and Chu 116-119, 121-124; Heung 311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and Qu 320)

17. In-room entertainment including television/ video/ audio (Choi and Chu 116-119, 121-124; Heung 311; Poon and Low 219, 222; Tsang and Qu 320)

18. Internet connection (Poon and Low 219, 222; and Tsang and Qu 320)

19. Reasonable price for the room (Choi and Chu 116-119, 121-124; Heung 311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and Qu 320)

20. Helpful pre transaction information (Heung 311; Mohsin and Lockyer 161, 164, 166)
21. Convenient and reliable reservation system (Heung 311; Mohsin and Lockyer 161, 164, 166; Tsang and Qu 320)
22. Friendliness and helpfulness of the hotel staff (Choi and Chu 116-119, 121-124; Heung 311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and Qu 320)
23. Availability of the hotel staff to provide prompt service (Choi and Chu 116-119, 121-124; Heung 311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and Qu 320)
24. Special attention (Heung 311; and Tsang and Qu 320)
25. Courtesy of the hotel staff (Choi and Chu 116-119, 121-124; Heung 311; Poon and Low 219, 222; Tsang and Qu 320)
26. Language proficiency of the hotel staff (Heung 311; Poon and Low 219, 222; Tsang and Qu 320)
27. Efficient check-in and check-out (Mohsin and Lockyer 161, 164, 166; Tsang and Qu 320)
28. Neat appearance of staff (Tsang and Qu 320)
29. Convenient payment method (Poon and Low 219, 222)
30. Availability of reliable wake-up call (Choi and Chu 116-119, 121-124; Poon and Low 219, 222; Tsang and Qu 320)
31. Security of belongings including valuables inside the room (Choi and Chu 116-119, 121-124; Groenenboom and Jones 14-16; Heung 311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and Qu 320)
32. Responsible security personnel (Choi and Chu 116-119, 121-124; Groenenboom and Jones 14-16; Heung 311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and Qu 320)
33. Availability of recreation facilities (Heung 311; Poon and Low 219, 222)
34. Availability of transportation arrangements (Heung 311; Poon and Low 219, 222)
35. Availability of 24 hours taxi service (Heung 311; Poon and Low 219, 222)
36. Availability of business centre (Choi and Chu 116-119, 121-124; Heung 311; Poon and Low 219, 222; Tsang and Qu 320)
37. Availability of meeting facilities (Choi and Chu 116-119, 121-124; Heung 311; Poon and Low 219, 222; Tsang and Qu 320)
38. Availability of convenient parking facilities (Heung 311; Poon and Low 219, 222)
39. Availability of efficient laundry service (Heung 311; Poon and Low 219, 222)
40. Availability of personal care amenities (like spa, facial treatment, salon etc.) (Poon and Low 219, 222; Tsang and Qu 320)
41. Availability of free newspaper (Poon and Low 219, 222; Tsang and Qu 320)
42. Availability of frequent travellers’ program (Heung 311; Tsang and Qu 320)
43. Availability of swimming facilities (Heung 311; Tsang and Qu 320)
44. Availability of gymnasium facilities (Heung 311; Tsang and Qu 320)
45. Overall comfortability (Choi and Chu 116-119, 121-124; Heung 311; Mohsin and Lockyer 161, 164, 166; Poon and Low 219, 222; Tsang and Qu 320)

It is to be noted that the study also involved other common hospitality variables other than the above mentioned variables labeled as “Any other” in Question No.16 in the Questionnaire given in Appendix-I.

**Probable Elements of Pleasant Surprises:**
1. Free gifts (Poon and Low 219, 222)
2. Special discounts (observed during pilot survey)
3. Special foods (Poon and Low 219, 222)
4. Special entertainment (Poon and Low 219, 222)
5. Free access to facilities (Poon and Low 219, 222)

It is to be noted that the study also involved other probable elements of pleasant surprises other than the above mentioned elements labeled as “Any other” in Question No.19 in the Questionnaire given in Appendix-I.

**ii) Enjoyment of the Guests in Hotels:** This is measured on the basis of the presence of happiness, positive feelings and excitement (arousal) due to surpassing of guests’ expectations and resultant pleasant surprises in the hotels.
It is to be noted that all the above mentioned variables are measured through survey of repeat guests of the stated hotels.

4.3.2.7(b) Questionnaire Design:

The questionnaire that is prepared by the incorporating the required changes after the pilot survey consists of 41 questions (including sub-questions). Of these 41 questions, 3 questions are open-ended questions and the rest are close-ended questions. Of the 38 close-ended questions, 12 are nominal scaled questions, 1 is 3 point Likert type questions and the rest are 5 point Likert type questions. This division is shown through the pie diagram in Fig. 4.2.

The natures of the questions in this questionnaire are discussed as follows:

i. The first six questions (Questions 1, 2, 3, 4, 5 and 6) are meant to determine the required demographic characteristics of the respondents for this study.

ii. The last three questions (Questions 27, 28 and 29) are also meant to determine the required demographic characteristics of the respondents for this study.

iii. Thereafter, there are four questions (Questions 7, 8 and 14 (including one sub-question)) which are meant to determine the loyalty status of the respondent guests.

iv. Two questions (Question 10 and 12) are meant to determine nature of respondent guests’ fulfillment of expectations and their reaction when such expectations are not met.

v. Again there are four questions (Questions 9, 11, 13, and 16) to determine the respondent guests’ expectations of different common hospitality variables (as common hospitality parameters) during their stay in the hotel.

vi. There is one question (Questions 19) to determine the respondent guests’ frequency of obtainment of various probable elements of pleasant surprises (as common hospitality parameters) during their stay in the hotel.
vii. Thereafter, there are nine questions (Questions 15(i), 15(ii), 17, 18 (including one sub-question), 20 (including one sub-question), 21 and 22) to establish customer delight in hotels.

viii. The remaining ten questions (Questions 23, 24, 25 (including two sub-questions 25(b1) and 25(b2)) and 26 (including two sub-questions and another two sub-questions 26(c1) and 26(c2))) are meant to determine the constancy of customer delight in the stated hotels.

As per the above discussion, the natures of the questions for achieving the objectives of this study (refer to section 3.4 in Chapter 3) are as follows:

i. For achieving the first objective of this study (refer to section 3.4 in Chapter 3), most of the questions (questions 9, 11, 13, 16, 15 (i), 18, 15 (ii) and 21) are based on 5 point scale (Likert scale). One of such question (Question 22) is based on 3 point scale (Likert scale).

ii. For fulfilling the second objective of this study (refer to section 3.4 in Chapter 3), most of the questions (questions 9, 11, 13, 16, 19 and 15 (i)) are based on 5 point Likert scale.

iii. For achieving the third objective of this study (refer to section 3.4 in Chapter 3), most of the questions (questions 9, 11, 13, 16, 20, 25 (including sub-questions 25(b1) and 25(b2)), 26 (including sub-questions 26(c1) and 26(c2))) are based on 5 point Likert scale. Two branching sub-questions included in question 26 are nominal scaled. Questions 20, 25 (including sub-questions 25(b1) and 25(b2)), and 26 (including sub-questions 26(c1) and 26(c2)) are related to the first sub-objective of the third objective. Again, questions 9, 11, 13, 16, 20, 25 (including sub-questions 25(b1) and 25(b2)), and 26 (including sub-questions 26(c1) and 26(c2)) are related to the second sub-objective of the third objective.

4.3.2.8 Pilot Survey:

Before the start of the final survey, the draft questionnaire is tested through a pilot survey. This pilot survey is conducted among 66 repeat guests in 12 hotels in Guwahati city of the state of Assam in North East India which are mentioned in Table 4.4. This is done to incorporate any changes that may appear essential before administering the final questionnaire.
The pilot survey led to some modifications in the draft questionnaire. This included incorporation of additional variables that are likely to result in customer delight in hotels. Besides, it also included inclusion of other questions for the fulfillment of the stated objectives of this study (refer to section 3.4 in Chapter 3). The pilot survey also led to incorporation of few modifications in the sequence of the research plan in terms of the sequence of customer delight and its overall management through reenacted delight, transitory delight, and skilled and well trained hotel employees.

### 4.4 Analysis Techniques Adopted:

SPSS is used in the entire analysis. In order to make the responses useable all choices in the questionnaire are converted into numeric values. In the sections below, the details of data processing is discussed.

### 4.4.1 Data Processing:

As mentioned data are processed and coded uniformly in order to make these useable in the SPSS software. A codebook is made which is reproduced in the Appendix-II.

### 4.4.2 Statistical Tools Used:

As discussed in detail in Section 4.2 this work uses the following statistical tools extensively.

1. Pearson’s Correlation
2. Independent Sample t-test
3. One-way ANOVA
4. Discriminant Analysis
5. Factor Analysis

A very brief discussion on these is offered in this section.
In order to achieve the first objective of this study (refer to section 3.4 of Chapter 3), One-way ANOVA and Discriminant Analysis has been used as discussed in Chapter 5. Again, the degree of relationship between the variables that may lead to customer delight in hotels is determined using Pearson’s Correlation.

For fulfillment of the second objective of the study (refer to section 3.4 of Chapter 3), an exploratory study with the help of the questionnaire is applied. As discussed in Chapter 6, this also involves extraction of factors from the common hospitality variables (as common hospitality parameters) that may lead to customer delight in hotels using Factor Analysis (involving Principal Component Analysis with Varimax Rotation). Reliability Analysis (using Cronbach’s Alpha) is used to calculate the reliability coefficients for each factor. Thereafter, One-way ANOVA is used to determine the relation of each these common hospitality parameters with surpassing of guests’ expectations.

For attaining the first sub-objective of the third objective of this study (refer to section 3.4 of Chapter 3), Independent sample t-tests and One-way ANOVA, and Pearson’s Correlation has been used as discussed in Chapter 7.

For achieving the second sub-objective of the third objective of this study (refer to section 3.4 of Chapter 3), the variables among the 7 common hospitality variables of customer delight that are directly possible through skilled and well trained hotel employees that have been repeatedly emphasized by respondent guests are identified (as discussed in Chapter 7). Thereafter, Factor Analysis (involving Principal Component Analysis with Varimax Rotation) is used to extract factors from these repeated variables followed by determination of reliability coefficients through Reliability Analysis (using Cronbach’s Alpha). This is followed by the use of Independent sample t-tests and One-way ANOVA, and Pearson’s Correlation for fulfillment of this sub-objective as discussed in Chapter 7.

Fig. 4.3 indicates the various statistical tools used for achieving the objectives of this study (refer to section 3.4 of Chapter 3).
For establishing the applicability and authenticity of the above mentioned data analysis for this study, a literature review is conducted to determine analysis techniques used in similar studies related to customer delight, satisfaction and loyalty, and tourism.

Factor Analysis, as a tool of data analysis, has been used in a total of 16 related studies that are reviewed for this study. These are shown in Table 4.5. In these studies, the size of the sample ranged from 124 to 5136. The number of variables which are involved in these studies ranged between 10 to 47. In most of the cases, 5 point Likert type scales and 7 point Likert type scales have been mainly used. Again, all these studies involve Factor Analysis through Principal Component Analysis with Varimax Rotation.

### Table 4.5: Studies using Factor Analysis

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Researcher and Date</th>
<th>Sample Size</th>
<th>Number of Variables</th>
<th>Variables Used</th>
<th>Factor Analysis</th>
<th>Data Format/Scale Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andaleeb and Conway 3-11</td>
<td>119</td>
<td>17</td>
<td>Activities</td>
<td>PCA with VR</td>
<td>7 point Likert type scale</td>
</tr>
<tr>
<td>2</td>
<td>Aldaigan and Buffle 349-359</td>
<td>975</td>
<td>17</td>
<td>Activities</td>
<td>PCA with VR</td>
<td>7 point Likert type scale</td>
</tr>
<tr>
<td>3</td>
<td>Cameron and Gatewood 107-127</td>
<td>255</td>
<td>15</td>
<td>Activities</td>
<td>PCA with VR</td>
<td>3 point scale</td>
</tr>
<tr>
<td>4</td>
<td>Faulkner and Tideswell 3-28</td>
<td>400</td>
<td>30</td>
<td>Activities</td>
<td>PCA with VR</td>
<td>5 point Likert type scale</td>
</tr>
<tr>
<td>5</td>
<td>Finn 18-32</td>
<td>250</td>
<td>10</td>
<td>Attributes</td>
<td>SEM involving EFA and CFA</td>
<td>5 point scale and 7 point scale</td>
</tr>
<tr>
<td>6</td>
<td>Gilbert 178-186</td>
<td>465</td>
<td>15</td>
<td>Activities</td>
<td>PCA with VR</td>
<td>7 point Likert type scale</td>
</tr>
</tbody>
</table>
A total of 10 related studies that are reviewed for this study have involved the use of Discriminant Analysis, as shown in Table 4.6. In these studies, the size of the sample ranged from 200 to 1516. The number of variables which are involved in these studies ranged between 2 to 17. In seven of these studies, 5 point Likert type scales have been used. In three of these studies, 7 point Likert type scales have been used.

As mentioned earlier, an attempt was made to use Structural Equation Modeling (SEM) for creating a path diagram showing a model of the sequence of
customer delight in the hotel industry. Similar efforts were also made using SEM to create another path diagram showing a model for management of overall customer delight in the hotel industry through reenacted and transitory delight, and skilled and well trained employees. However, this could not be put into practice owing to the two serious limitations associated SEM with respect to this study as mentioned in section 4.2.1 earlier.

4.5 Indicative Hypotheses Tested:

For fulfillment of the first objective of this study, the following hypotheses have been formed (refer to Fig. 4.4):

First Indicative Hypothesis ($H_1$): Surpassing guests’ expectations has relation with their pleasant surprises at the hotels.

Second Indicative Hypothesis ($H_2$): Pleasant surprises of guests at the hotels have relation with their resultant happiness.

Third Indicative Hypothesis ($H_3$): Perceived excitement (arousal) of guests has relation with their happiness due to pleasant surprises at the hotels.

Fourth Indicative Hypothesis ($H_4$): Perceived positive feelings of guests have relation with their happiness due to pleasant surprises at the hotels.

Fifth Indicative Hypothesis ($H_5$): Surpassing guests’ expectations has relation with their perceived positive feelings in the hotels.

The above hypotheses are tested by a series of Pearson’s Correlation, One-way ANOVA and Discriminant Analysis as discussed in Chapter 5.

The second objective of the study has been obtained through exploratory study with the help of the questionnaire. Factor Analysis (involving Principal
Component Analysis with Varimax Rotation) and One-way ANOVA has been used in this regard as discussed in Chapter 6.

The third objective of this study has been attained through the following:

i. The first sub-objective has been obtained using a series of Independent Sample t-tests and One-way ANOVA. Pearson’s Correlation has also been used in this regard (refer to Chapter 7).

ii. The second sub-objective has been attained using Factor Analysis. Besides, this attempt also involves a series of Independent Sample t-tests and One-way ANOVA. Pearson’s Correlation has also been used in this case (refer to Chapter 7).

References


"Map of NE India." Map. *Allindiabirdingtours.com*. All India Birding Tours, 3 May. 2012. Web


