METHODOLOGY
3.1 PROBLEM IDENTIFICATION FOR THE RESEARCH PURPOSE

The review of literature has endowed with the determination of diverse parameters of retail market growth and selection of specific geographical locations for the present study. In the recent past, West Bengal has made remarkable progress towards industrialization. The West Bengal economy has been undergoing a transformational phase due to rise of service sectors. The state has been able to attract a considerable amount of Foreign Direct Investment (FDI) from various national and international sources. The better economic condition of a state is the regulator of purchasing power of the people, enhanced standard of living, increase in investments of business firms etc. The retail trading generates more employment opportunity and has been strengthening the state's economy. In this backdrop West Bengal has been regarded as the potential retail destination. The theme 'retailing' has already emerged as an important concern in the field of marketing due to global pressure and changes in the consumers' taste and preferences. In India, especially in other Metros and B-grade cities it has been witnessed the remarkable development of retail format with novel ambience, variety of branded product etc. Though it is late but in Kolkata and its sub-urban latest retail formats have also enhanced in a rapid pace. The prime interest of the researcher in this study to explore the reasons of retail growth. Of late, growing consciousness and interest in the area of retailing has made the study relevant and justified.
3.2 OBJECTIVES OF THE STUDY

1. To identify the determinant items towards the growth of organized retailing in Kolkata, Durgapur and Burdwan markets.

2. To examine demography wise preference of consumers towards both organized and unorganized retailing.

3. To identify the importance of different facilities like display, space, ambience, location, customer service, decoration, refreshment facilities, civic amenities, parking facilities and their effects on customer satisfaction.

4. To study the role of promotion in motivating customers to visit retail outlets.

West Bengal is a densely populated state and has vast geographical boundaries. In this study selected places have been chosen which are unique in terms of their demographic profile, standard of living and means of livelihood is relevant in understanding the retail marketing perspective and customers' buying preferences:

Kolkata, a metro city of West Bengal which is also a historic city and famous for its advantageous location and an epitome of ethnicity, culture and art. It is a central place of the state for trade and commerce, various service sectors, industries, education, hospitality, tourism, medical facilities and entertainment. By its own virtue this metro city has gained importance in retail sector also. A basketful of national and international retailers of repute has set up their retail formats.

Durgapur is an industrial city and centre place for service and educational sector which caters huge pool of people from different parts of India and
generates employment. This place is economically sound and accessible from various districts of the state.

Burdwan is an old and historic place of West Bengal and the back bone of its economy is agriculture. It is also well connected with different parts of the state. This market is surrounded by the rural areas.

Researcher is of the opinion that in this research work Burdwan has been included as a special case to study its market potentialities as this town is almost dependent on agro-based rural economy.

3.3 METHODOLOGY

The present research work is mainly based on both qualitative and quantitative approaches. Qualitative approach enables one to understand customers' psychology and their activities. The quantitative technique is adopted to establish cause and effect relationship of different variables.

Qualitative approach depicts substantive connotation and understanding of how and why of any particular phenomenon under investigation and deals with subjective assessment of attitude, opinion and behaviour. The qualitative research provides flexibility and suitability and in depth understanding of a particular situation. The longitudinal and open ended research design is beneficial for complex and multi-dimensional decisions. [Carson, Gilmore, Perry and Gronhaug, 2001].

Qualitative research can provide support to quantitative research and vise versa. Hammersley [1996] remarked that both qualitative and
quantitative can be applied according to research problem and combined approaches are regarded as complementary research design. Moreover Combined approaches are to provide a more generalized picture of the issue under study. The problem of generality can be resolved for qualitative research by adding quantitative findings [Bryman, 1992]. It is not confined to develop insight for the purpose of study, moreover produces knowledge that is practically viable and relevant.

3.4 RESEARCH DESIGN

Research design is the conceptual framework or blueprint within which research is conducted. It is a primary structure for data collection, measurement and data analysis.

The focus of this research work is on exploratory research as it provides flexibilities, new ideas inclusive of different dimensions of the study. It is justifiable for formulating the specific problem area relating to recent retail market development. The exploratory research encompasses different types of design namely

- Case study
- Grounded theory
- Ethnography
- Discourse analysis
- Phenomenology and
- Observation
Each type has its own features and importance.

- In this research work case study and observation methods have been adopted to gain rich and detail information about the real event or setting. These techniques will help to project the idea of the recent retail market situation.

- The qualitative techniques will provide the fundamental basis for identification of important parameters. Further the parameters can be measured and tested with the help of quantitative techniques.

3.4.1. SOURCE OF DATA COLLECTION

Data can be obtained from primary and secondary sources. Primary data refers to information obtained first hand by the researcher on the variables which are relevant for the study. When a study is based on secondary data, it is essential to satisfy that data are suitable to justify the objectives.

3.4.1.1 PRIMARY SOURCE

Primary data can be collected through experiment and survey. Observation technique has been adopted as a source of primary data. This is worthwhile when real picturesque of the retail market has been accumulated.

Two sets of structured questionnaires have been prepared to collect data from customers and retailers of Kolkata, Durgapur and Burdwan retail markets.
3.4.1.2 SECONDARY SOURCE

Secondary data refer to the data which are already been accumulated and analysed. Secondary data may be published data and unpublished data. Published data are available in various books, journals, newspaper, magazines, reports and publication prepared by academicians, research scholar, universities, business houses and the corporates, banks etc. Further various publication of central and state Government and foreign government and international bodies and various records, historical documents and statistics of from authentic sources have been considered for the study. In this work various related journals, newspaper, website publications have been utilized. Case study is used in this present work as a tool for qualitative analysis. The existing information of the selected retail firms has provided the valuable insight to comprehend the strategies implemented to grab the market opportunities.

The case study and the observation techniques have facilitated to draw hypothesis for this research work.

3.4.1.2.1 CASE STUDIES

A case may be an event and process of any organization, social setting, a group of people etc. The objective of case study method is to find out the factors, events, conditions and their interrelationship.

“A case study is an intensive examination, using multiple sources of evidence (which may be qualitative, quantitative or both) of a single
entity which is bounded by time and place” [Daymon and Holloway, 2002].

This is a method of multiple sources of information and different theoretical interferences can be drawn. Single case is studied to probe in to the minute details The use of two or multiple cases allow researcher to measure generalization to a wider perspective. It also helps researcher to find out distinguished features by examining the similarities and dissimilarities exist within the cases.

Random selection of cases is not preferred . Purposive sampling can be used to select cases [Paton 1990]. Miles and Huberman [1994:30] suggest the range of number of cases to study : minimum is 2 to 4 and maximum is 10 , 12 and 15. But too many cases reduces the depth of the study . Only one case is sufficient if it represents different necessary corners of the topic selected for the study.

In this context, two cases have been studied to build some conception about the recent trends of retail boom in Kolkata , Durgapur and Burdwan region of West Bengal.

The following parameters have been decided to focus on

- retail market situation ,
- strategies of the company ,
- types of product offered and
- services available in the store type,
- whether retail marketing performance of the company is increasing or not.
This method results in some purposive hypothesis build along with data which are helpful in testing them.

3.4.1.2.2 OBSERVATION

Observation is a preferred technique to gather data in public places. This technique is suitable for specific setting, event, demographic factor [Barbour, 2007].

Observation is the systematic noting and recording of events and behaviour of informants in a specific situation. It is effective in longitudinal studies. Alder and Alder [1994] suggested that observation is the fundamental element of all types of research work.

Once observation is carrying out, researcher requires to make notes about every aspect. It should be recorded in such a way that information can be retrieved. Observation is continued until a point of saturation is achieved. This indicates generic feature of new findings replicate earlier one. [Barbour, 2007].

Gold [1958] proposed four main roles for the researcher:

- Complete Participant
- Participant as observer
- Observer as participant
- Complete observer
The observation technique has been adopted for a long period of time in various places in Kolkata, Durgapur and Burdwan retail market. In this context researcher visited different shopping malls, speciality stores and traditional retail markets of three cities.

Complete observation allows researcher to take the help of video, photography, audio aids to store and interpret collected data. Here photographs of different settings, and facilities in various types of retail formats both at traditional and organized markets have been taken for consideration under research work.

3.4.2 THE MEASURABLE VARIABLES

To develop an instrument for this study, Previous literature, observation methods and case studies were examined to identify relevant parameters to conduct the study.
<table>
<thead>
<tr>
<th>SOURCES USED</th>
<th>PARAMETERS USED</th>
</tr>
</thead>
</table>
| Vasal [2008], A.T Kearney [2006], TSMG analysis [2006], Ernst & Young [2006], The Economic times[2007] | Product Category:  
  ♦ Grocery  
  ♦ Garments  
  ♦ Food and Beverages  
  ♦ Fashionable accessories  
  ♦ Electronic items  
  ♦ Home Decoration  
  ♦ Jewellery  
  ♦ Fruits and vegetables  
  ♦ Entertainment |
  ♦ Unstructured  
  ♦ Departmental store  
  ♦ Speciality stores  
  ♦ Hypermarket  
  ♦ Mall |
  ♦ Overall ambience,  
  ♦ civic amenities,  
  ♦ parking facilities,  
  ♦ availability of branded items  
  ♦ exterior and interior design,  
  ♦ refreshment facilities,  
  ♦ customer service,  
  ♦ symbol of status,  
  ♦ space  
  ♦ display |
| Klassen, Clayson and Jaspel [1996], Lavy and Kumar [2000] and Abu [2004]                        | Quality of sales people  
  ♦ Responsiveness  
  ♦ Helping Attitude  
  ♦ Product knowledge  
  ♦ Well mannered |
| Mermeilstein and Shalbaczid [2005], Burton, Lichtensteina and Netemeyer [1999]                  | Promotional tools used  
  ♦ Friend  
  ♦ Family  
  ♦ Neighbour  
  ♦ Newspaper  
  ♦ Magazine  
  ♦ Celebrity endorsement  
  ♦ Hoarding  
  ♦ Electronic media |
3.4.3 HYPOTHESIS FORMULATION

To understand the parameters responsible for the retail boom in Kolkata, Durgapur and Burdwan. The research has been carried out on the basis of following hypothesis.

- **Hypothesis**: Customers preference are different across three cities toward various formats of retailing.

- **Hypothesis**: In respect of purchasing of different items in the organized retail market, age and income of the customer, have significant bearing.

- **Hypothesis**: Frequency of visit to modern market vary across different age and income levels.

- **Hypothesis**: Frequency of visit to traditional market vary across different age and income levels.

- **Hypothesis**: Income level of customers has significant influence on monthly spending on different items.

- **Hypothesis**: Traditional market and modern market are differently perceived by the customers in respect of their preference vector containing relative importance attached to different attributes [overall ambience, civic amenities, parking facilities, availability of branded items, exterior and interior design, refreshment facilities, customer service, symbol of status, space and display].

- **Hypothesis**: There is a significant difference across traditional markets and modern markets in respect of the attributes such as overall ambience, civic amenities, parking facilities, availability of branded items, exterior
and interior design, refreshment facilities, customer service, symbol of status, space and display.

♦ Hypothesis: The satisfaction level of customers is significantly different across modern market and traditional market in respect of behaviour of sales people.

♦ Hypothesis: There is significant difference in the perception of customers in respect of various parameters on marketing environment that exits in modern and traditional markets.

♦ Hypothesis: There is a relative importance of different promotional tools in motivating customers to visit traditional and modern retail outlets.

♦ Hypothesis: organized market is growing rapidly compared to unorganized retail market across three cities.

♦ Hypothesis: The retailers of traditional and modern markets have different attitude towards modification of various attributes in their respective retail outlets.

♦ Hypothesis: Traditional market and modern market are differently perceived by the retailers in respect of their preference vector containing relative importance attached to different attributes [overall ambience, civic amenities, parking facilities, availability of branded items, exterior and interior design, refreshment facilities, customer service, symbol of status, space, display].

♦ Hypothesis: Retailers assign relative importance of different promotional tools in motivating customers to visit traditional and modern retail markets.
3.4.4 ANALYSIS OF QUESTIONNAIRE

The study has been conducted on the basis of two sets of questionnaire. One is employed for customers another for retailers. There are some similar questions that have included in the retailer's part also. The first part of questionnaire for customers has been constructed to receive the information regarding the demography of customers including Age, Income level, place of living etc. The second part of the questionnaire aims to know the buying preference of customers relating to various product category and frequency of visit to modern and traditional markets. It consists on mainly different product category and various forms of retail outlets.

The third part of questionnaire has been prepared on the basis of the importance of attributes and its influence on customers prefers towards traditional and modern markets. The rating scale has been used to collect data regarding customers' satisfaction towards different attributes of traditional and modern markets. The attributes are overall ambience, civic amenities, parking facilities, availability of branded items, exterior and interior design, refreshment facilities, customer service, symbol of status, space, display. A question is formulated in the form of rank order scaling to know the relative importance of the different attributes.

The part four consists of Likert scale to perceive customers' perception towards modern and traditional retailing and rank order scale has been used to know the relative importance of the promotion in motivating the customers to visit different retail outlets.

The retailers' questionnaire is consisted of two parts. The first portion
begins with identification of general information such as name of the store, duration of operation, place of operation, the type of products offered. The second part is mainly constructed on rank order scaling techniques to understand the relative importance of attributes to retailers and the media preferred by the traditional and modern retailers.

3.4.5 IDENTIFICATION OF THE POPULATION AND SAMPLE PLANNING

It has been experienced that customers and retailers are reluctant to respond in the retail market setting because retailers are being busy in their operation and customers are not being interested to waste their time during shopping.

Sampling is the process of selecting a sufficient number of elements from the population. The study of sample and understanding its properties make it possible to characterise the population. The study of sample is effective because it reduces the time, cost, human resources, fatigue and errors. [Sekaran, 2009] In this context, population of customers and retailers are enormous in numbers. For effective study convenient sampling has been employed to select specific retail destinations in traditional and modern retail markets of Kolkata, Durgapur and Burdwan. The customers who were involved in buying process in the selected retail outlets have been randomly selected for the study. Further the retail outlets of different products in modern and traditional markets have chosen on the basis of simple random sampling. Simple random sampling is suitable as it offers least bias and generalizability.
The following table indicates the retail destinations selected in three cities for the study.

**Table 4.2 : Retail Markets of the Three Cities**

<table>
<thead>
<tr>
<th>Area of Study</th>
<th>Traditional Retail market</th>
<th>Modern Retail market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolkata Market</td>
<td>Different shops of New market, Gariahat, Shyam Bazar market</td>
<td>Forum [Elgin road], City Center [Salt Lake], South City Mall [Prince Anwar Shah Road], Gariahat Mall [Gariahat], Mani Square [E.M Bypass] and Metropolis [E.M Bypass] and few branded outlets</td>
</tr>
<tr>
<td>Durgapur Market</td>
<td>Various stores of Durgapur Station market, Benachity market, traditional stores of City Centre</td>
<td>Dreamplex Mall and Suhatta Mall along with few branded retail outlets</td>
</tr>
<tr>
<td>Burdwan Market</td>
<td>Different stores of Station Bazaar, Raniganj Bazaar and Tentultala Bazaar</td>
<td>Big bazaar, City Tower and few branded retail outlets</td>
</tr>
</tbody>
</table>

**3.4.6 TECHNIQUES OF DATA COLLECTION**

Data have been collected through structured questionnaire. Two set of questionnaires have been prepared for customers and retailers separately. To collect data effectively, separates set of questionnaire for retailers and customers have been circulated randomly in selected retail setting. With the help of literature review, specific items have been chosen. The questionnaire is being distributed to those retailers who sell the products, identified for the study. To collect customers’ responses, questionnaire has been distributed to both the people who are visiting the market place.
and engaged in the buying process. At the time of data collection from both traditional and modern markets, the people who are present in the respective markets have been surveyed. Their responses have been taken into account for the analytical part of the research. In the process of data collection 500 questionnaires for customers have been distributed randomly among the customers in the market place. The questionnaire for retailers is randomly distributed among 275 retailers. After collection of information, an extensive scrutiny has helped me to identify the irrelevance and missing of required data in the questionnaire. After the screening of questionnaire, the following sample size has been accepted for customers and retailers for further proceedings.

### 3.4.7 SAMPLE SIZE

<table>
<thead>
<tr>
<th>Respondents [In numbers]</th>
<th>Kolkata</th>
<th>Durgapur</th>
<th>Burdwan</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers</td>
<td>201</td>
<td>100</td>
<td>100</td>
<td>402</td>
</tr>
<tr>
<td>Retailers</td>
<td>71</td>
<td>36</td>
<td>43</td>
<td>150</td>
</tr>
</tbody>
</table>

The self administered questionnaire that lasted for April 2009 to June 2009. The survey was conducted on and around 12 weeks in three cities. Respondents younger than 15 years were automatically excluded.

### 3.4.8 VALIDITY OF THE STUDY

A number of experts, academic scholars in the field of marketing management and retailing were asked to confirm the validity of the questionnaire. Therefore, in this study, and extensive literature review has helped the researcher in strengthening ‘Content Validity’.
3.4.9 STATISTICAL TOOLS USED IN THIS RESEARCH

In this research, the researcher has used a number of statistical tools to interpret collected data and for testing of hypothesis.

3.4.9.1 DESCRIPTIVE STATISTICS

Descriptive statistics has been employed to analyse the data with the help of frequency distribution, standard deviation and maximum and minimum means for several questions. For this purpose excel [2007] version has been used.

3.4.9.2 THURSTONE SCALING

It is a method of equal appearing interval scale. It is a technique for attitude measurement. In this study it is used to understand the favourable, unfavourable and neutral attitude of customers and retailers towards different attributes and promotional tools in traditional and modern markets. Visual Basic [6.0] version has been employed to prepare the analysis.

3.4.9.3. INFERENTIAL STATISTICS

A number of tests have been used to infer from data through analysis with a view to establish relationship between two variables and differences in these variables among different groups and sub groups.

a. Chi-square Test

This test has been utilized to identify the association between variables.
Here it is used to identify the association of age and income group with the frequency of visit to the mall and traditional markets.

b. Two way ANOVA

This technique is used when data are classified on the basis of two factors and is employed to find out the relation between spending pattern for different items in different income groups.

Chi-square test and Two way ANOVA have been prepared with the help of Minitab 15 version software.

c. Rank Correlation

Charles Spearman's coefficient of correlation is the technique of determining the degree of correlation between two variables. The main objective is to determine the extent to which the two sets of ranking are similar or dissimilar. Here the views of customers and retailers towards different markets have been analysed. For this purpose SPSS[ 17.0] coach has been used. The formula used for rank correlation is:

\[
R = 1 - \frac{6\sum D^2}{N^3 - N}
\]

3.4.9.4 TIME SERIES ANALYSIS

It is a sequence of data points at successive time spaced at uniform time interval. It is a collection of observations of data items obtained through repeated measurement over time. Trend analysis refers to the concept of collecting information to spot a pattern or trend. This study has been adopted this technique to identify the trend of retail market over the years
across three cities. The formula used for time series is:

\[ y = a + bt \]

Minitab 15.0 version has been used for calculations.

3.4.9.5 MAHALANOBIS DISTANCE SQUARE

In statistic it is a distance measure introduced by P.C Mohalnobis in 1936. It is based on correlation between variables by which different patterns can be identified and analysed. It is used for classification techniques. The Mahalanobis distance of a multivariate vector \( x = (x_1, x_2, x_3, \ldots, x_N) \) from a group of values with mean \( \mu = (\mu_1, \mu_2, \mu_3, \ldots, \mu_N) \) and covariance matrix \( S \) is defined as dissimilarity measure between two vectors of the same distribution with the covariance matrix. The Formula used for Mahalanobis distance square is:

\[
D_{M}(x) = \sqrt{(x-\mu)^T S^{-1} (x-\mu)}.
\] .......................... (i)

\[
D^2 = (\bar{x} - \mu)^T S^{-1} (\bar{x} - \mu)
\] .......................... (ii)

In this research work this has been used to classify the attributes available in traditional and modern markets. Ordinal scale is approximated as ratio scale and distance between two population has been identified. The distance has been measured with the help of this techniques in respect to behaviour of sales people in traditional and modern markets. To measure this distance R software has been used to find out the results.
3.4.9.6 Euclidean Distance

The Euclidean Distance between points \( p \) and \( q \) is the length of the line segment \( pq \). In Cartesian coordinates, if \( p = (p_1, p_2, \ldots, p_n) \) and \( q = (q_1, q_2, \ldots, q_n) \) are two points in Euclidean \( n \)-space, then the distance from \( p \) to \( q \) is given by:

\[
d(p, q) = \sqrt{(p_1 - q_1)^2 + (p_2 - q_2)^2 + \cdots + (p_n - q_n)^2} = \sqrt{\sum_{i=1}^{n} (p_i - q_i)^2}.
\]

Here in this research work the researcher has tried to measure the distance based on above mentioned Euclidean distance formula on customers’ perception relating to convenience of shopping, promotional offers, ambience and price regarding traditional and modern markets in Kolkata, Durgapur and Burdwan.