CHAPTER NO. 4

RESEARCH METHODOLOGY

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Studying Consumer Behaviour in shopping mall is possible through consumer survey.

4.1. Importance of study:

Retail shops / outlets in India are spread across Mumbai city in high and busy street, neighborhood strips, shopping centers and shopping malls. The present study will help to understand the consumer behavior in shopping mall with a special reference to Mumbai region. It will also try to gauge the marketability of malls. The purpose of this research is to focus on the retail shops development and community interaction aspects of Mumbai city shopping malls. The Present research on shopping mall development and redevelopment can more comprehensively address the importance of malls to the communities in which they are located. Broadly, neglected areas of research are the community and economic contributions of shopping malls. These are critical issues, given the age of shopping malls worldwide, the need for adjacent area redevelopment and requirement of large public subsidies for infrastructure construction. The present study will also give suggestions to enhance the effectiveness of retail shops through shopping malls.

The study attempts to provide recommendations and suggestions which can be used for effective management of shopping malls and induct revolution and continuously appreciate the dynamics change so as to have competitive edge in the survival and growth of shopping malls in Mumbai. Shopping mall is the fastest route for business expansion which offers an excellent business model particularly, for service organizations waiting to extend their networks and reach the consumers. The present study will be helpful in assessing the past performance of shopping mall in various retail businesses. Indian consumers are transforming into global customers, now they demand better facilities, International standards of services and top brands and quality.

Thus, shopping malls have a bright future in India, an attempt has been made to study the future potential of shopping malls in various retail businesses.
4.2. Objectives of study:

1. To study the consumer behavior at shopping malls with reference to gender, age, occupation and income.
2. To analyse different attributes of layout, accessibility, ambience, offered services, sales personnel and promotional tools in Mall.
3. To study consumer’s buying tactic, shopping priority during shopping at malls in region of Mumbai.
4. To find the expectation and perceptions of consumer’s desirable and wishful factors in future they want in a mall.

4.3. Hypotheses of Study:

To develop a good theoretical frame work for the investigation, a review of literature on consumer behaviour has been done. The hypotheses for the purpose of studying consumer’s behaviour are drawn partly on the basis of study and partly on the basis of self interest. The research is done under the outline of following hypotheses:

H₀ : There is no significant relationship between gender, age, occupation and income of respondents and perception towards shopping malls.
H₁ : There is significant relationship between gender, age, occupation and income of respondents and perception towards shopping malls.
H₀ : There is no significant relationship between accessibility, availability of related services and other factors of shopping malls.
H₂ : There is significant relationship between accessibility, availability of related services and other factors of shopping malls.
H₀ : There is no significant difference among consumers buying tactics and shopping priority towards shopping malls.
H₃ : There is significant difference among consumer’s buying tactics and shopping priority towards shopping malls.
H₀ : There is no impact of income on shopping from Normal shops and Shopping Malls.
H₄ : There is impact of income on shopping from Normal Shops and Shopping Malls.
4.4. Universe of the Study:

The universe of the study consists of the consumers visiting shopping malls resident of Mumbai city. The populations under study are different in their gender, age, marital status, educational qualification, occupation and average monthly family income. Mumbai being urban city and with high income and education, resident are expected to be ideal respondents for a study of the type proposed to be undertaken. Due to limitation of time and other resources, concentration of study is on a single city. Drawing any conclusion through macro level studies are not very meaningful, hence specific area based studies are expected to give more meaningful and significant information.

4.5. The Sample and Sampling Design

It was considered to have a sample of 1000 consumers with different gender including other gender also because on 15th April, 2014 to give equal rights and protection to transgender persons, the honorable supreme court has affirmed the constitutional right in the judgment as “third or other gender. Hence the day old gender male and female, data from other gender as consumer who are different in their buying behaviour are also studied.

Consumer between age group of teen ager i.e less than or equal to twenty years to senior citizen i.e. sixty six years and above, married and unmarried, Education from less than or equal to tenth to post-graduate, student, salaried, professional and businessmen with average monthly family income of less than or equal to Rs. Twenty thousand to income above Rs. Eighty thousand are covered as respondent who visit shopping malls.

In the present study the consumers has been considered as unit of research. It was assumed that the size of the consumers would have different demographic status of the people living in Mumbai. Shopping Malls are chosen for the purpose of research study.

The selection of shopping mall for this study has been based on shopping malls located in greater Mumbai region only. In all there are forty three shopping mall in Mumbai including Thane and Navi-Mumbai. There are twenty seven shopping malls are located in greater Mumbai area. Out of these twenty shopping malls are selected for the purposes of research study having walking crowd are as under:
<table>
<thead>
<tr>
<th>No.</th>
<th>Name and Address of Shopping Mall</th>
<th>No. of respondents are selected</th>
</tr>
</thead>
</table>
| 1   | *Sobo Central Mall*  
Haji Ali, Tardeo Raod,  
Mumbai – 400 034.  | 50 |
| 2   | *Pheonix Market City*  
RP Housing Bldg, Dr. E. Mosses Road,  
Laxmi Mill Estate, Mahalxmi, Mumbai – 400 011.  | 50 |
| 3   | *Palladium Mall*  
High street phoenix, 462, Senapati Bapat Marg,  
Lower Parel, Mumbai – 400 013.  | 50 |
| 4   | *Atria – The Millennium Mall*  
2/A-1, Roayal Garden, Dr. Annie Besant Road,  
Worli, Mumbai – 400 018.  | 50 |
| 5   | *Pantaloon Retail*  
Old Tata Press Bldg., Prabhadevi,  
Mumbai – 400 025.  | 50 |
| 6   | *Heer Panna Shopping Mall*  
Haji Ali, B.D. Road,  
Mumbai – 400 026.  | 50 |
| 7   | *Shoppers’ Stop*  
Linking Road, Bandra (West),  
Mumbai – 400 050.  | 50 |
| 8   | *Croma*  
Linking Road, Bandra, (West),  
Mumbai – 400 050.  | 50 |
| 9   | *Infiniti Mall*  
New Link Road, Oshiwara, Andheri (West),  
Mumbai – 400 053.  | 50 |
| 10  | *Megha City Mall*  
Oshiwara, Andheri (West),  
Mumbai – 400 053.  | 50 |
<table>
<thead>
<tr>
<th></th>
<th>Mall Name</th>
<th>Address</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td><strong>Oberoi Mall</strong></td>
<td>International Bus Park, Oberoi Garden, Western Express Highway, Goregaon (East), Mumbai – 400 063.</td>
<td>50</td>
</tr>
<tr>
<td>12</td>
<td><strong>Inorbit Mall</strong></td>
<td>Link Road, Malad (West), Mumbai – 400 064</td>
<td>50</td>
</tr>
<tr>
<td>13</td>
<td><strong>Infiniti Mall 2</strong></td>
<td>New Link Road, Mindspace, Malad (West), Mumbai – 400 064.</td>
<td>50</td>
</tr>
<tr>
<td>14</td>
<td><strong>Raghuleela Mega Mall</strong></td>
<td>Off S.V. Road, Kandivali (West), Mumbai – 400 067.</td>
<td>50</td>
</tr>
<tr>
<td>15</td>
<td><strong>Kohinoor City Mall</strong></td>
<td>Kural (West), Mumbai – 400 070.</td>
<td>50</td>
</tr>
<tr>
<td>16</td>
<td><strong>Phoenix Market City Mall</strong></td>
<td>LBS Marg, Kurla, Mumbai – 400 070.</td>
<td>50</td>
</tr>
<tr>
<td>17</td>
<td><strong>K- Star</strong></td>
<td>3-B, V. N. Purav Marg, Chembur (East), Mumbai – 400 071.</td>
<td>50</td>
</tr>
<tr>
<td>18</td>
<td><strong>R-City Mall</strong></td>
<td>LBS Marg, Ghatkopar (West), Mumbai – 400 086.</td>
<td>50</td>
</tr>
<tr>
<td>19</td>
<td><strong>Neptune Magnet Mall</strong></td>
<td>B.S. Road, Bhandup (West), Mumbai – 400 078.</td>
<td>50</td>
</tr>
<tr>
<td>20</td>
<td><strong>Dream The Mall</strong></td>
<td>B. S. Road, Bhandup (West), Mumbai - 400 078.</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1000</strong></td>
</tr>
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</table>
4.6. Data Collection:

The data for study were collected through interviewing selected respondents based on their demographic factors such as gender, age, occupation and average monthly family income of those visitors who resides in Mumbai with the help of questionnaire. It was structured questionnaire. To prepare a structured questionnaire, I reviewed literature on consumer behaviour and consulted the experts in the area of my study. The final questionnaire is given in appendix.

The questionnaire includes questions relating to the demographic factors of consumer and consumer’s perception about shopping mall. The questions were close ended with multiple choices. Some of the questions need to answer “yes” or “No”. To study different aspects of consumer behaviour, direct questioning technique has been more relied.

4.7. Data Analysis and hypotheses testing:

To give scientific outlook to the study and to reach specific conclusions, the researcher has used various statistical tools like Chi-square analysis and Multinomial Logit Model. For simple comparisons and presentation various tabulation, charts, graphs are also used.

To interpret and establish interdependence of collected and analysed data various factors relating to consumer’s behaviour with shopping malls and normal shops I used following statistical tools and methodologies.

- **CHI-SQUARE ANALYSIS**

- **MULTINOMIAL LOGIT MODEL.**

**CHI-SQUARE ANALYSIS \( \chi^2 \)**

A chi-square test is a statistical test commonly used for testing independence and goodness of fit. Testing independence determines whether two or more observations across two populations are dependent on each other (that is, whether one variable helps to estimate the other). Testing for goodness of fit determines if an observed frequency distribution matches a theoretical frequency distribution.
To test the hypotheses I have used chi-square test for independence at 1% level of significance.

**MULTINOMIAL LOGIT MODEL**

In statistics, multinomial logistic regression is a classification method that generalizes logistic regression to multiclass problems, i.e. with more than two possible discrete outcomes. That is, it is a model that is used to predict the probabilities of the different possible outcomes of a categorically distributed dependent variable, given a set of independent variables (which may be real-valued, binary-valued, categorical-valued, etc.)

To test the hypothesis the impact of income on buying preference Multinomial Logit Model is used, it uses the Z test at significance level of 5% for testing the significance of the coefficients.

The data were processed on SPSS programme.

### 4.8. Limitation of study:

Like every research, this research also contains certain limitations. These limitations should be taken into account when the results of this research are interpreted. The study has been conducted in Mumbai city of Maharashtra, India. The results of the same, if conducted in other part of the country may vary because a country like India has geographically, economically, socially and culturally vary in different area. The samples consist of 1,000 active mall shoppers. The sample size is also error-prone. The study is based on a consumer survey through a questionnaire, which may suffer from the basic limitation of the difference between what opinion is given and what is truth. Consumer may not be disclosing the true answers. To eliminate the error of communication, interviews were conducted personally by spending good hours of time on establishment of report with the respondents. Then too, there is no full proof way of obtaining the possibility of an error. Shopping behavior in this study captures the general predisposition of respondents towards the act of shopping. It is likely that individual's give different shopping behavior on varying occasions. Due to subjectivity and beliefs of Indian consumers, some answer of the questionnaire may differ from the real.
4.9. Scope for future study:

This study identified several shopping behavior of Mumbai’s consumers, the topic discussed in this study is still developing and it may have missed others. These behaviors need to be measured in detail in future research. A future research may be undertaken to make a comparison between the malls shopping behaviors in different cities with different factors. Sample size can also be change. Further study can also be done on different culture and consumer’s behaviour in shopping malls. Study can restrict to particular shopping mall, employment opportunities available in retail sector, Shopping mall management and development of allied sectors.