CHAPTER – III
METHODOLOGICAL DESIGN AND FRAMEWORK

3.1. Introduction:

This chapter explains the methodology which was used for carrying out this study. Table No. 3.1 has been presented to explain the methodology in a nut shell. The nature of data, sampling technique, instruments used, nature of respondents, number of potential respondents, place/the area in which were used in the data collection were presented in the table. The later part of the chapter also explains the period for which the data had been collected was also explained, and the statistical tools and software tools used for analysing the data was also mentioned.

Table No. 3.1. The gist of Research Methodology which was followed for Study

<table>
<thead>
<tr>
<th>Nature of the Data</th>
<th>Primary Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling Technique</td>
<td>Convenient Sampling</td>
</tr>
<tr>
<td>Area of the Study</td>
<td>Pondicherry City</td>
</tr>
<tr>
<td>Population of the Study</td>
<td>International Tourists 83291</td>
</tr>
<tr>
<td>Sample Size</td>
<td>403</td>
</tr>
<tr>
<td>Data Collection Method</td>
<td>Structured Questionnaire</td>
</tr>
<tr>
<td>Period of the Study</td>
<td>May 2014 to December 2014</td>
</tr>
<tr>
<td>Statistical Tools</td>
<td>Correlation, Multiple Regression Analysis &amp; Structure Equation Modelling</td>
</tr>
<tr>
<td>Software’s Used</td>
<td>SPSS 20 and AMOS</td>
</tr>
</tbody>
</table>

As the Methodology is the heart for the study and it plays key role in taking the study in a proper scientific method, the represented subheadings in the table are explained in detailed in later part of the chapter.
3.2. Nature of the Data:
Data collected from primary sources have been used for this study. The primary data had been collected from the international tourists who have visited Pondicherry City during the period of May 2014 to December 2014. A structured questionnaire was used as the instrument to collect the data.

3.3. Population of the Study:
The Ministry of Tourism has revealed that a number of 83,291 foreign tourists have visited Pondicherry during the year 2014. So this gives the base in proceeding for the study by considering this as the Population for the study.

3.4. Sampling Technique:
The international tourists who visit Pondicherry would stay only for very limited period, and their willingness to participate in the survey is also considered. So, the Convenient Sampling has been adapted for the study.

3.5. Sample Size:
Sample Size has been decided with the help of the Krejcie Formula

\[ n = \frac{\chi^2 \times N \times P \times (1-P)}{ME^2 \times (N-1) + [\chi^2 \times P \times (1-P)]} \]

Where,
- \( n = \) Sample Size
- \( P = \) Population Proportion (0.50)
- \( \chi^2 = \) Chi-square for specified confidence level at 1 degree of freedom
- \( N = \) Population size
- \( ME = \) Margin of Error

\[ n = \frac{1.96^2 \times (0.5) \times (0.5) \times 83291}{(0.05)^2 \times (83291 - 1) + (1.96)^2 \times (0.50) \times (1-1)} \]

\[ n = \frac{1.96^2 \times (0.5) \times (0.5) \times 83291}{(0.05)^2 \times (83291 - 1) + (1.96)^2 \times (0.50) \times (1-1)} \]

\[ n = 382 \]

37 Ministry of Tourism, Govt. of India. (ON579) & Press Information Bureau (PIB)
3.6. Variables and Description:

Relevant variables were identified from the review of literature. A brief description about each variable is given in the following table no. 3.2

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Awareness Level</td>
<td>Awareness is the knowledge about a particular topic and the ability to perceive and be conscious about something.</td>
</tr>
<tr>
<td>2</td>
<td>Behavioural Intentions</td>
<td>Behavioural intention (BI) is defined as “a person's perceived likelihood” or &quot;subjective probability that he or she will engage in a given behaviour&quot;.</td>
</tr>
<tr>
<td>3</td>
<td>Brand Loyalty</td>
<td>Seiler (2005): 2 types of Loyalty (i) Behavioural Loyalty related to “frequency amount and value of customer purchases”, (ii) Attitudinal Loyalty which refers to “the extent to which customers develop emotional attachments to particular company and prefer its products/ services over all others”.</td>
</tr>
<tr>
<td>4</td>
<td>Brand Strength</td>
<td>“Brand strength is the strength of consumer demand for a brand, relative to its competitors.”</td>
</tr>
<tr>
<td>5</td>
<td>Brand Image</td>
<td>“The impression in the consumers' mind of a brand's total personality”. “Brand image is developed over time through advertising campaigns with a consistent theme, and is authenticated through the consumers' direct experience”.</td>
</tr>
</tbody>
</table>

3.7. Pilot Study:

As the scale were adapted and developed based on the review of literature, a pilot study was conducted with a sample size of 50 the researcher was keen on its normality and reliability in the selected area. So,. The results were given below.

Results of Reliability Test:

Reliability refers to “the extent to which a scale produces consistent results if repeated measurements are made”. Since the desired Cronbach’s Alpha is supposed to more than 0.70, (as a thumb rule before using the data collection instrument). Each factor was checked for reliability and the results of the test are shown to be below in the table number 3.3.
Table No.: 3.3. Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.727</td>
<td>43</td>
</tr>
</tbody>
</table>

Table No.: 3.3. Showing the Cronbach’s Alpha Value of key variables

<table>
<thead>
<tr>
<th>Factor</th>
<th>Cronbach’s Alpha Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Awareness level</td>
<td>0.722</td>
</tr>
<tr>
<td>2 Auditory Components</td>
<td>0.759</td>
</tr>
<tr>
<td>3 Visual Components</td>
<td>0.879</td>
</tr>
<tr>
<td>4 Olfactory Components</td>
<td>0.791</td>
</tr>
<tr>
<td>5 Gustative Components</td>
<td>0.738</td>
</tr>
<tr>
<td>6 Tactile Components</td>
<td>0.758</td>
</tr>
<tr>
<td>7 Customer Behavioural Intentions</td>
<td>0.716</td>
</tr>
<tr>
<td>8 Brand Loyalty</td>
<td>0.886</td>
</tr>
<tr>
<td>9 Brand Strength</td>
<td>0.890</td>
</tr>
</tbody>
</table>

Since the Cronbach’s Alpha values of all the variables are more than desired value, the study have been taken forwarded for data collection.

3.8. Description of variables:

3.8.1. Level of Awareness:

Studying the awareness level about the services of a business organisation is very important. One of the basic functions of modern marketing is to teach the customers what they really need and what they have to demand from the businesses and marketers and also how to delight with the products or the services that they have been using or experiencing.

In this context, the awareness about a product or service plays a very important role in a business success or failure. Studying the level of awareness about a product or service is needed for a business organisation to move forward for a different strategy to provide a better kind of service than the competitors. It also helps the business organisation to know how far their customers are aware of their services and take action in such a way that the customers will know the services in a better way and thereby it will impact the purchasing decisions of the customers. In the study of Sensory Branding, the level of awareness has importance where the literature proves that the customer behavioural intentions will differ from customer highly aware to the person who is not aware of the sensory branding much.
So, to measure the level of awareness, 5 point Likert Scale was used for this study based on Vagias, Wade M (2006)\textsuperscript{39}. 1- Not at all Aware, 2- Slightly Aware, 3- Somewhat aware, 4- Moderately aware, 5- Extremely Aware.

Most of the customers are aware that the business organisations do practice the sensory marketing techniques for customer delight. But if we check in them in particular, many of the customers are not at all aware of the term “Sensory Branding”. The interesting thing is that, the some of the same customers, who are aware that the businesses provide good ambiance, use colours and lighting in an attractive way. They are also aware that the service environments especially medium and luxury hotels play a good music for the customers in order to engage them and make them relaxed.

It is a known fact that the customers visit different hotels in order to eat different kinds of dishes. It is because, most of the hotels will be special for their unique dishes. The hotels have special concentration on it. The customers are also aware that the service environments especially the hotels, do maintain unique odours and scents and sprays in order to bring out a fresh look and also to involve the customers in the service environment. The customers know that the special furniture and other touch points are provided in order to show the luxury even with the tables and seats.

As it was discussed earlier, even though the many customers are not familiar with the term ‘sensory branding’, they know that the business organisations especially hotels do provide all the sensory related facilities in the service environments in order to attract customers. Pahome et.al\textsuperscript{40} found that, Sensory Branding can result in increasing the brand loyalty.


\textsuperscript{40} Pahome, T., \\& Amornratkul, N. (2010). How sensory marketing applies to the hotel and restaurant industry in order to influence customer’s behaviour in Thailand.
3.8.2. Behavioural Intentions:

Behavioural intention “(BI) is defined as a person's perceived likelihood” or "subjective probability that he or she will engage in a given behaviour" (Mai, 2015) (Ahmet, 2013). The customer behaviour is very interesting and one of the most studied and researched areas at diverse levels in the marketing field. Studying customer behavioural intentions has always high relevance because it can help the marketer to proceed in offering the services accordingly. It results in customers getting attached to the business organisation by visiting regularly.

Turhan Gulden et.al had examined 3 different facets of behavioural intention: a) purchase intention of consumers’, willingness to pay the premium prices, and recommending the brand to others (Turhan Gülden, 2013).

Mehrabian & Russel had analysed the behavioural intentions of a customer in the context of hotel service environment as approach-avoidance (Mehrabian & Russell, 1974). If the customer is looking with all positive behavioural intentions- affected by the environment either indirectly or directly, the customer will ‘approach’ the brand for quenching his/her needs. If the customer is affected negatively and he/she doesn’t feel comfortable, then he/she will ‘avoid’ the brand because of the bad experience. The behavioural intentions of the customers based on the sensory environment are explained below.

a) The pleasurable environmental components like refreshing music, renewing scent, attracting lights, and other decorative items have the capacity to evoke the pleasure in the customer’s heart and arouse the feelings which will take them towards different patronage intentions (Kang, 2011).

b) Philip Kotler explained that pleasant environment affects ‘consumers’ willingness to buy (Kotler, 1973-74).

c) Pleasant music can affect the customer by making him/her spend a longer time in the hotel than usual (Bellizzi, 1992). Literature proves that tempo of music which is played in a restaurant can affect the behavioural intentions. If the music

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is slow, the consumption speed of the customer would be faster but the slower
the tempo, consumption would be slow (Milliman, 1986) (VALENTI, 2008).

d) The environment can influence the Customer spend more money by leading
him/her towards unplanned purchases (Kang, 2011)
e) Customer preferences are positively affected towards hotel brand (VALENTI,
2008)
f) The customer revisiting intentions will grow (Spies, 1997) (Kang, 2011)
g) The customers suggest the hotel brand to their friends and relatives (Spies,
1997) (Sherman, 1997)
h) With regard to consumer behaviour, studies indicate that mood can interact with
involvement and shopping experiences (Swinyard, 1993). The customers would
automatically interact with the hotel and its environment (Kang, 2011) if it is in
such a way that it is pleasing.

3.8.3. Brand Strength:
The definition of brand strength 42 is “the strength of consumer demand for a brand,
relative to its competitors”. Consumers demand the products or the brands which they
feel that it is better than the other products in the market. This brand strength can be
improved by giving the best things to the customers in terms of the quality, experience,
design and durability of the product etc.

In the context of the sensory branding, the researchers say that the brand strength can
be improved in an effective way where, it gives the sensory delight and experience to
the consumers. All this result in consumer connecting to the brand and prefer it. Brand
strength gets improved only by the Sensory Branding:

a) Sensory Branding creates a holistic brand experience (Gibson, 2009)
   (Wikipedia, n.d.)
b) Sensory Branding can help in identifying the brand with special variable
   (Lindstrom, 2005)
c) Sensory Branding can be the critical in the success of the firm (Cobos, 2012)
d) Sensory Branding strengthens brand identity and its image by invoking to the
   senses (Wikipedia, n.d.)

42 http://brandirectory.com/glossary/definition/brand_strength
3.8.4. Brand Loyalty:
It is always riskier to attract the new customers than retaining the existing customers. So, ‘brand loyalty’ is very meaningful to marketing and marketer. According to Investopedia\textsuperscript{43}, Brand Loyalty is defined as “a result of consumer behaviour and is affected by a person’s preferences and choices towards a particular brand”. Loyal customers are the people who purchase the products time after time from their choice of brands, irrespective of convenience or price.

Seiler (2005) viewed Loyalty in 2 types:

(i) \textit{Attitudinal Loyalty}:
“It refers to the extent to which customers develop emotional attachments towards a particular company and prefer its products/services over all others”.

(ii) \textit{Behavioural Loyalty}:
It is related to “the frequency amount and value of customer purchases” or “intentions being translated into actions”.

\textbf{Attitudinal Loyalty}:
Brand loyalty is made known in “increasing the scale and scope of a relationship”, or “the act of recommending a product or service”, “continuing to purchase services from the same supplier”, (Yi, 1989).

Attitudinal loyalty is overall impression which reflects intentions being translated into actions. The attitudinal customer loyalty comprehends in long-term commitment with emotion and trust towards the business organisation, the services and products that it offers and also the premium prices. Attitudinal type of loyalty has importance because it symbolises the consumers’ possibility of faithful commitment towards the business firm and the proclivity to suggest and recommend the ‘brand’ to family members, relatives, friends, colleagues or neighbours (Reichheld, 2003).

\textsuperscript{43}\url{http://www.investopedia.com/terms/b/brand-loyalty.asp}
According to Eagly and Chaiken (1993), ‘Attitudinal’ refers to “the psychological affinity that is expressed by evaluating a particular entity with some favour or disfavour”. In the context of hotel industry, increased visiting frequency and customers’ recommendation to others through word of mouth (De Ruyter et al., 1998) are the most relevant.

**Behavioural Loyalty:**

Behavioural loyalty reflects the extent to which the attitudinal feelings are translated into actions and loyalty behaviour (Daniel Onwonga Auka, 2013). The customers, who are positively inspired by the experience in the hotel environment, will tend to behave positively and visit again or keep this particular brand in his/her preferences whenever they are in need.

**The acts of showing brand loyalty:**

Sensory branding practices are highly useful to maintain the customer relationships, developing and also deepening the relations with them (AnnicaIsacsson, 2009). These practices can give the information to new customers and remind the old customers about the services of the hotel (Annicalacsson, 2009). It is mostly because of the involvement of ‘human senses’ in this process. The more senses involve in marketing, the more effective the message will be. Kotler (1973) and Julie Baker (2002) had emphasized that the Consumers’ willingness to buy will grow positively because of the Sensory Branding (Kotler, 1973-74) (Julie Baker, 2002).

**3.8.5. Brand Image:**

Brand image is understood as “the impression in the consumers' mind of a brand's total personality”. Brand image is built over a period of time with the help of promotional activities like advertisement campaigns having a consistent theme which is attested by the customer’s direct experience.

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Grafström, et al.\textsuperscript{45} explained that “image research focuses on the way in which certain groups perceive a product, a brand, a politician, a company or a country”. Here ‘image’ denotes the way these groups decode all the indicators derived from the products, services and communication covered by the brand”. (Kapferer, 2012).

Ms. Elisabeth Ouillie noted that, "The more a brand is present on all possible points of contact with a consumer, the stronger the brand is and the more the consumer retains a brand image." (Brand Sense - Build Powerful Brands through Touch, Taste, Smell, Sight and Sound, 2005).

Kapferer (2012) understood brand image as, “the collective representation which is shaped over time by the accumulated experiences of oneself, of close relations, by word of mouth and advertising” (Kapferer, 2012). Brand image is very important instigator of customer delight and brand loyalty (Turhan Gülden, 2013).

Sayeed and Rashid\textsuperscript{46} have derived from their study that, if the consumers favour the image of a business, they would surely be loyal to it; which can also be understood as an effect of brand image on brand loyalty.

3.9. Sampling Technique and Population Size
The population consists of foreign tourists who visited Pondicherry City. Thousands of tourists (domestic as well as foreign) visit Pondicherry every month either on vacation or pleasure or on other special purposes from different countries. So, convenient sampling technique is opted for the selection of the sample size. Since the population is known, it is tentatively decided 382 respondents as the final sample size of study/survey based on Krejcie’s formula (Krejcie, 1970). The data was collected from 403 respondents.


3.10. Method of data Collection:
A structured questionnaire was prepared on the basis of review of literature and the data was collected from International Tourists during period of May 2014 to December 2014.

3.11. Data Analysis Tools:
SPSS 20 & AMOS 20 softwares were used for analysing the collected data for the relevant, accurate and reliable results.

3.12. Statistical Tools Used:
ANOVA, t-Test, Mean Scores Analysis, Test of Correlation, Multiple Regression and Structural Equation Modelling were performed to analyse.

3.13. Scale used in the Study:
Based on Vagias, Wade M47, 5 point Likert-Scale has been used for this study even in the case of knowing the awareness level.

3.14. Research Design:
This is a descriptive study aimed at studying the impact of sensory branding practices in building the hotels’ as brands.
The study was done in the following way:

d) Carried out as a statistical study using the survey method to know the awareness level regarding the sensory branding practices with respect to international tourists who visited Pondicherry
e) Studying how far the sensory branding practices, with each individual sense separately and all the senses as a whole, are able to influence the behavioural intentions of the customers responding to the hotel atmosphere.
f) Statistical study using the survey method to find out whether the changing behavioural intentions of the customers have any impact on the hotel’s brand image in terms of brand strength and brand loyalty.

3.15. Hypotheses Framed:
The following hypotheses were framed which are derived from the research objectives. They were also tested with the help of appropriate research tools.
It is known that, as the human is more educated and gets exposed to many things around him/her, the grasping and perceiving quality will get developed in them. And there was an attempt to know whether customers differ with their gender.

3.15.1 Objective 1: Level of awareness about sensory branding

\[ H1_a: \] There is a significant difference between the levels of awareness among the foreign tourists with respect to their academic qualification

\[ H1_b: \] There is a significant relationship between the levels of awareness among the foreign tourists when they know the concept of Sensory Branding’

\[ H1_c: \] Levels of awareness differ among the respondents with respect to their academic qualification when they do not know the term ‘sensory branding’

\[ H1_d: \] Male and female significantly differ with respect to their level of awareness

\[ H1_e: \] Male and female differ with their level of awareness of the term sensory branding

\[ H1_f: \] There is a significant difference between male and female when they are not aware of the term “sensory branding”

3.15.2. Objective 2: Identifying the strength and potentials of sensory branding in Pondicherry hotels

Impact of individual sensory components on behavioural intentions with respect to the academic qualification.

\[ H2_a: \] Customers’ behavioural intentions significantly differ with respect to Auditory Practices in the hotel based on the academic qualifications with (Music)

\[ H2_b: \] Customer behavioural intentions significantly differ with the academic qualifications with respect to Visual Marketing (Vision)

\[ H2_c: \] Customer behavioural intentions significantly differ with the academic qualifications with respect to Olfactory Marketing (Scent)

\[ H2_d: \] Customer behavioural intentions significantly differ with the academic qualifications with respect to Gustative Marketing (Taste)
**H2c:** Customers’ behavioural intentions significantly differ with their academic qualification in respect to Tactile Marketing (Touch)

**H2f:** Customers’ behavioural intentions significantly differ with their academic qualification

**H2g:** Customer behavioural intentions significantly differ from male to female with respect to Music in the hotel

**H2h:** Customer behavioural intentions differ from male to female with respect to Visual components in the hotel

**H2i:** Customer behavioural intentions significantly differ from male to female with respect to Odours in the hotel

**H2j:** Customer behavioural intentions differ from male to female with respect to Taste in the hotel

**H2k:** Customer behavioural intentions differ from male to female in respect of tactile components in the hotel

**H2l:** Customer behavioural intentions differ from male to female with respect to sensory environment in the hotel

3.15.3. **Impact of sensory branding strategy on hotel in building as brands:**

Hypotheses under this subheading were framed to check the relationship between all the dependent and independent variables.

**H3a:** Customers’ awareness level has is a positive relationship with behavioural intentions

**H3b:** There is a positive relationship between awareness and brand loyalty

**H3c:** There is a positive relationship between awareness level and brand image

**H3d:** Customer behavioural intentions has a positive relationship with brand loyalty

**H3e:** Customer behavioural intentions has a positive relationship with brand image

**H3f:** There is a positive relationship between brand loyalty and brand image
In order to know the impact of all the individual sensory components on hotel’s brand image, the following hypotheses were framed

**H3_a**: Auditory branding practices has significant influence on hotel’s Brand Image  
**H3_b**: Visual branding practices has significant influence on hotel’s Brand Image  
**H3_c**: Olfactory branding practices has significant influence on Hotel’s Brand Image  
**H3_d**: Gustative branding practices has significant influence on hotel’s Brand Image  
**H3_e**: Tactile branding practices has significant influence on Hotel’s Brand Image  
**H3_f**: Level of Awareness has a significant influence on Brand Image of the Hotel