The research design is the specification of method and procedure used for acquiring the information needed for the study. The credibility of findings and conclusions extensively depend on the quality of the research design, data collection, data management, and data analysis. This chapter deals with the description of the methods and procedures done in order to obtain the data, their analysis and interpretation. Survey method and Experimentation method was adopted for the study in order to fulfil the objectives. The detailed classifications of methodology involved in this investigation were presented under the following heading:

3.1 Conceptual framework of the study

3.2 Research design

Phase I- Documentation of Brocade craft and Chowkpurana floor art

3.3.1 Documentation of Brocade craft

3.3.1.i Collection of relevant literature for brocade craft

3.3.1.ii Selection of locale for brocade craft

3.3.1.iii Criteria for selecting the sample

3.3.1.iv Methods for data collection

3.3.1.v Tools and techniques for data collection

3.3.1.vi Pre-testing and validation of the tool

3.3.2 Documentation of Chowkpurana floor art

3.3.2.a Selection of locale for Chowkpurana floor art

3.3.2.b Criteria for selecting the sample

3.3.2.c Methods for data collection

3.3.2.d Tools and techniques for data collection
Phase II- Incorporation of *Chowkpurana* floor art motifs into brocade handloom

3.4.1 Market survey

3.4.2 Pilot study

3.4.3 Selection of categories for designing

3.4.4 Selection of *Chowkpurana* motifs for designing the brocade saris

3.4.5 Selection of the placement of *Chowkpurana* motifs for brocade saris

3.4.6 Selection of the designed saris for weaving

3.4.7 Selection of colour and sourcing of raw materials

3.4.7 (A) Selection of variety and yarn for *Chowkpurana* brocade saris

3.4.7 (B) Preparation of graph, punch card, loom and suitable brocade technique for weaving

3.4.7 (C) Selection of area for weaving of *Chowkpurana* brocade saris

Phase III- Market acceptability and development of promotional material

3.5 Pre-testing of questionnaire

3.6 Selection of locale and sample for exhibition of *Chowkpurana* brocade saris

3.7 Variables included for consumer acceptance

3.8 Development of promotional material

3.9 Cost of manufacturing *Chowkpurana* brocade saris

3.10 Statistical methods used for data analysis
Base line of the study

Uttar Pradesh is recognized for its cultural heritage such as brocade crafts, chikankari, metal work and Chowkpurana floor art. These crafts and art are famous for their infinite techniques and design/motifs all over the world except Chowkpurana floor art as it remained untouched owing to modernization. The researcher basically belonged to same state and has been observing Chowkpurana floor art since her childhood. Chowkpurana was the religious drawing done on the floors and walls of mud houses of villages for decoration. People have switched over to the modern houses, thus the mode of decoration has also changed and the chowk was almost on the verge of extinction. The mere fact that the houses were not made of mud anymore is the main reason. Investigator analyzed that the Chowkpurana motifs was based on narrated stories and had distinctive features. For instance: human figure in geometrical form, flora and fauna motifs etc. The researcher was keenly interested in preserving the Chowkpurana motifs, therefore a visit was made to villages for documentation of floor art motifs. Varanasi is historically known for its magnificent craftsmanship, though there is a necessity and stipulate of innovative designs for handloom brocade saris. An effort was made in this study to design saris by incorporating Chowkpurana motifs through brocade techniques as both art and craft needed assistance for sustainability. Hence, research will provide impetus to both floor art and brocade craft of Uttar Pradesh by fusing them as Chowkpurana motifs introduced into textile which has numerous opportunities simultaneously brocade craft adopted innovative designs.
Methodology

- Development of promotional material

Socio-economic aspect of craft and art artisans
- Demographic detail
- Education
- Family composition, Custom
- Economy

Renaissance of Brocade (craft) and Chowkpurana (floor art) of Uttar Pradesh

Manufacturing details of craft and art
- Raw materials
- Tools and Technique
- Process
- Motifs/Design
- Colour

Documentation of craft and art

Development of the promotional material

Sustainability Approach

Blending of craft and art

Design development

Brocade weaving

Production of fabric

Marketing

Figure 3.1 Conceptual framework of the study
3.2 Research design

The research design was prepared considering parameters like time, resources and the objectives. Study was descriptive in nature as it describes certain present condition. It is also widely accepted that the descriptive method of research is a fact-finding and involves adequate and accurate interpretation of findings. The study was carried out in three phases. Each phase facilitated the understanding of facet of both art (Chowkpurana) and craft (Brocade) and enabled the planning of the subsequent line of action as per the research thrusts. The first part needed the investigator to conduct a literature survey and interact with senior inhabitants of Chowkpurana and brocade regarding their history, traditional raw materials, techniques, designs. Investigator interviewed weavers, designers, master weavers and officials of the concerned organization as well as Floor artist (women) of villages. Case study method was also adopted to know in detail about the floor artists and weavers work schedule. In the second phase of study, sourcing of raw materials, placement of Chowkpurana motif over the saris layout, designing and weaving of saris was accomplished in two categories: 1. Ritual ceremony 2. Social functions. Researcher also learnt mechanism of brocade weaving from master weavers/nakshabandhas for in-depth analysis of result and discussion. Thirdly, assessment of market acceptability of Chowkpurana brocade saris was done through self structured questionnaire which contained few questions like: suitability of techniques, placement of Chowkpurana floor art motifs, colour combination of designed saris and overall aesthetic appeal. Market acceptability was evaluated from three segment- customers, textile experts and floor artists. Opinion was also taken from male member of the family as they do not wear saris however always give their suggestion to mother/wife/daughter while purchasing. Promotional tools such as brand, logo, and website were developed to create awareness regarding elegant designed Chowkpurana brocade saris for making their existence among established brands (Fig 3.2).
Methodology

Research design

Phase I - Documentation of craft and art

Chowkpurana floor art → Selection of locale and sample

Brocade craft

Four districts

Agra → Firozabad → Etah → Mathura

240 respondents → Data collection → 20 Weavers

- Origin and history
- Socio economic condition of floor and craft artists
- Raw materials
- Tools and techniques
- Process
- Design/motifs

Phase II - (Incorporation of Chowkpurana motif into brocade weaving),

Experimental procedure

Analysis of Chowkpurana floor art

Market survey

Selection of categories

Selection of product (Saris)

Selection of raw materials

Preparation of loom set up

Weaving of Chowkpurana brocade saris

Production of saris

Evaluation of woven saris

Phase III (Market assessment)

Exhibitions

Launching of website

Development of promotion tool

Figure 3.2 Research Design
Phase I- Documentation of Brocade craft and Chowkpurana floor art

3.3.1.i Collection of relevant literature for brocade craft

The data pertaining to the origin and history, raw materials, tools and techniques, designs, colours, motifs and their symbolism of Chowkpurana floor art and brocade craft respectively, was gathered from various published and unpublished works from the libraries.

- National Institute of Fashion Technology (New Delhi and Gandhinagar)
- Lady Irwin College (New Delhi),
- Institute of Home Economic (New Delhi),
- National Institute of Design (Ahmedabad),
- Hansa Mehta Library (Baroda),
- Weavers Service Centre (Varanasi),

The data collected from literature review was further corroborated by visiting several museum viz: National Museum (New Delhi), Crafts Museums, Calico Museum (Ahmedabad), Bharat Kala Bhawan (Varanasi).

3.3.1.ii Selection of the locale for the brocade craft

Varanasi brocade craft is known all over the world, thus secondary information was available in books and in various publications. Researcher also visited Varanasi to know the locale for better understanding before selecting the handloom weaving areas. Weavers Service Centre of Varanasi has a list of all weavers and location where handloom weaving is being done. Ten localions were visited (1) Alaipura (2) Madanpura (3) Rewari Talab (4) Bajardiha (5) Lallapura (6) Pilikotih (7) Lohta (8) Nati Imali (9) Chittanpura (10) Ramnagar. Weavers were purposively selected from various places Alaipura, Madanpura, Lohta, Rewari Talab and Pili Kothi to know the existing status of handloom industry of Varanasi (Figure: 6).
3.3.1.iii Criteria for selecting the sample

The researcher visited Varanasi handloom offices, weavers service centre and procured a list of handloom weaving places. Review on Varanasi brocade craft was available in various museum, historians and books however to know the current status of brocade craft the researcher dwelled in the environment of weaving and visited working places of weavers to study their methods, techniques and process. 20 handloom weavers were purposively selected for procuring the first hand data(Figure: 3.3).

3.3.1.iv Methods for data collection

The data collected for the present study was obtained from both primary and secondary sources. Primary information included mainly photographs, article preserved in the museums, government documents, private collectors and the records of the field investigations. The secondary sources integrated were craft survey report, relevant research, review articles, newsletter of the craft agencies/magazines, monographs, encyclopaedia and history books.

a. Observation: Observations could be of the setting or physical environment, social interactions, physical activities and non-verbal communication. In quality research this method gives an insight into the research problem and supplements the information collected from the other methods of data collection (Best and Khan, 1998). Observation of the weavers was necessary to study their methods, techniques and process. During interview researcher observed simultaneously the working pattern of master weavers and designers as it enables a better understanding related to the brocade textiles.

b. Focus Group Discussion: This method facilitated the researcher to get an interaction with Master weavers, weavers, designers and graph making person. Chowkpurana motifs were critically analyzed and techniques for weaving were selected during the discussion.

c. Case study: approach has been adopted for acquiring the detail information from five master weavers. Craft artisans were agreed to give information as they have been witness to its growth/decline and the winds of change in products, process, materials and designs over the years.
3.3.1. Tools and Techniques for data collection

Pre-testing and Validation of tool

Interview schedule was given to five experts from the various disciplines for content validity. Modification in the statements and questions were made on the suggestions of the experts. Test-retest method was adopted for checking the reliability of tool. 30 respondents were interviewed in July 2010 and again after a month in August, 2010 the same respondents were interviewed. Pre and post answers of the respondents were critically analyzed. Few complex questions were modified and the unwanted ones were discarded.

Keeping the objectives in the mind two interview schedules (annexure I and II) and a self structured questionnaire (Annexure III) was constructed. The schedule contained closed ended with one or two open-ended questions. Interview schedule II for brocade craftsman, was focused on existing status of handloom brocade, demographic status of the weaver, craft details related to technique, tools, process of weaving, designs/motifs and colours as well as marketing practices of the brocade. Investigator stayed in Varanasi for two years during the data collection and frequently visited weavers and master weavers places to observe and understand their work pattern and local language. The interview was carried out in Hindi which was afterwards translated in English while being analysed. Informal interview was conducted with designers to know their source of inspiration, process of graphs manufacturing, selection of colour, its suitability, products and problems faced by them.
PHASE I

Figure 3.3 Locale for data collection (Varanasi Brocade)
3.3.2.a Selection of locale for Chowkpura floor art

Chowkpurna floor art was not documented anywhere else so researcher personally visited various internal villages of western Uttar Pradesh to recognize the places where floor art was being done. While roaming around, few questions were generally asked from floor artisans. It was found that several villages had left Chowkpurna however few villages were yet practising. Multistage sampling method was followed for the selection of locale and villages were selected on the basis of frequently drawn floor art. 1st stage: Four districts Agra, Mathura, Eta and Firozabad were purposively selected, 2nd stage: One tallukas from each district (four talluka) Etmadpur, Mahavan, Awagarh and Tundla. 3rd stage: Two villages from each talluka (Eight villages) Chawli and Gharijassa, Jasdishpura and Kashipur, Naglagada and Naglagharana, Madawali and Basai, were selected respectively (Plate 3.3).

![Uttar Pradesh Map](image)

3.3.2.b Criteria for sample selection

Chowkpurna floor art was female dominated therefore women floor artists were selected through snow ball technique. Artists were selected on the basis of those who were ready to share information and frequently practised floor art as well as had an experience of customs and traditions of their family. Five per cent of respondents of total population of each villages i.e total 240 respondents were interviewed during several visits (Figure 3.4).
PHASE I

Figure 3.4 Locale for data collection (Chowkpurana Floor Art)
3.3.2.c Method of data collection

Social constructivist methods such as field trip, observation and structured interviews schedule have been employed for procuring first hand data. Catherine C. Fitzgerald, (June 2005) relatively, the method was appropriate to this study as it aimed to describe the present condition of Chowkpurana floor art and brocade craft. The primary data were also derived from the answers of respondents provided in the structured interview schedule prepared by the researcher.

Observation: The researcher adopted participation observation method to understand the Chowkpurana floor art. She was present at the time of celebrations of rituals and social functions and also participated in the drawing of Chowkpurana.

Field trip: The researcher adopted panel technique for citation of Chowkpurana floor art, as respondents celebrated festivals whole year thus interview was conducted a number of times with the same respondents on different occasion. Therefore visits to interior villages were made frequently to capture minute details of floor art.

Case study: The method was adopted to get in-depth information of Chowkpurana floor art hence, five floor artisans were selected.

3.3.2.d Tools and Techniques for data collection

Interview schedule I was constructed for Chowkpurana’s respondents which consisted of origin of floor art, demographic data of the respondents, education and monthly income of the family, raw materials and equipments used while drawing. Casual visits were made to the houses of floor artist which proved very useful in the understanding of their work. Simultaneously, informal discussion facilitated the artisans to express them fully without being disrupted by new questions.

Annexure III was preference schedule in the form of self structured questionnaire, constructed for assessment of opinion of public towards the Chowkpurana brocade saris. The preference schedule was prepared with regards to the following parameters: need of innovative design for brocade, overall aesthetic appeal, placement of motifs and colour combinations of saris.
The study employed both qualitative and quantitative approaches. The quantitative approach focused on obtaining numerical findings which acquired from self structured questionnaire constructed to collect opinion of the respondents on *Chowkpurana* brocade saris. The interview on the other hand, made up the qualitative approach of the study as this was focused on observations, description and individual insights of the respondents. The study employed the combined approach to overcome the limitations of each other.

3.3.2.e **Photography:** The research included digital records of motifs and patterns. The purpose of this recording was not only for analysis but also for digital preservation in the form of database devoted to this *Chowkpurana* floor art and brocade craft. A digital canon camera of 10 mega pixel resolution was used for the documentation of art and craft.

3.4 **Phase II- Incorporation of Chowkpurana floor art motifs into handloom brocade**

3.4.1 **Market survey**

Survey was one of the tools adopted to collect the relevant information from the shop owners. The direct-data type of survey was a reliable source of first-hand information as the researcher directly interacted with the respondents. The researcher conducted a market survey in different regions in Vadodara (Nawa Bazar, Alkapuri), Delhi (Art and craft fair at Pragati Maidan, Karol Bagh) and Varanasi (Nai Sadak, Chowk, Lohta, Madanpura, Alaipura) cities to assess the demand, design and variety of brocade in market. The Places visited were handicraft exhibitions, brocade specialist shops; simultaneously a random informal interview with manufacturer and retailer was carried out. Market survey helped the investigator to know the existing demand of the handloom brocade. Information was gathered and critically analyzed. Collected information was fruitful and kept in mind while designing the *Chowkpurana* brocade saris.
3.4.2 Pilot study

Motifs were collected with the help of photographs and analysed critically whether the designs could be adapted for handloom. Investigator obtained the information about handloom weaving places in Varanasi through exhaustive literature and discussed with master weavers, nakshabandhan and weavers for transferring the Chowkpurana floor art motifs into textile pattern. One motif was selected for weaving on their running loom however preparatory process (manufacturing of graph and punch card) was done. The result of pilot study showed that Chowpurana design was feasible and adaptable in to weaving through brocade techniques.

3.4.3 Selection of occasion and categories for designing

The researcher observed that Chowkpurana floor art, was being done on various occasion (Ahoi Astmi, Bhaiya dauj, Devthan, Devthan, Holi, Nagpanchmi, Sakat, Karva chaudth, Baby shower, Birthdays, Marriage, Rakshabandhan) and their design/motifs changed according to the festivals. In this context Kamladevi Chattopadhyay has also said that usually the total design has two aspects: the ceremonial and the decorative (Figure 3.5 and 3.6). The former would be a recognised geometrical pattern to symbolise the deity; the latter depicts the usual motifs and any new innovation the painter’s imagination may prompt. Three festivals of each category (Ritual ceremony I and Social function II) selected are as follows:

<table>
<thead>
<tr>
<th>Category: I Ritual ceremony</th>
<th>Category: II Social functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahoi Astmi</td>
<td>Rakshabandhan</td>
</tr>
<tr>
<td>Diwali</td>
<td>Baby shower</td>
</tr>
<tr>
<td>Devthan</td>
<td>Marriage</td>
</tr>
</tbody>
</table>
Category I - Ritual ceremony:

(A) Ahoi Astmi

(B) Devthan

(C) Diwali

Figure 3.5: Various motifs of ritual occasions
Category II - Social functions:

(A) Rakshabandha

(B) Baby shower

(C) Marriage

Figure 3.6: Various motifs of social functions
3.4.4 Selection of *Chowkpurana* motifs for designing the brocade saris

Varanasi is known for handloom brocade saris in various varieties all over India with typical floral, animal, bird and geometrical motifs. Hence, researcher selected brocade saris for transferring floor art motifs. The investigator collected various types of *Chowkpurana* floor art motifs of various occasion from selected eight villages. Each villages have their own way of drawing on particular occasion therefore motifs were different from each other. Motifs were collected with the help of photographs and videos. Moreover researcher also requested to the floor artisans to draw design on paper with the help of pencil whenever ingredients of *Chowkpurana* for drawing were not prepared. Collected motifs were shown to textile experts, master weavers and nakshabandhas to know their opinion regarding which motifs would be feasible for handloom. One design from each festival (Category: I, *Ahoi Astmi, Diwali, Devthan*, Category: II, *Rakshabandhan, Baby shower, Marriage*) of both categories were selected. Total six *Chowkpurana* designs were selected on the basis of expert advice.

3.4.5 Selection of placement of *Chowkpurana* floor art motifs for brocade saris

Motifs were collected in the form of photograph as well as drawings on paper through pencil by the respondents. They were transferred from photograph to paper in to their original shape as motifs were resized according to the saris layout. Corel Draw graphics suites X5, 2012 software was adopted for placement of *Chowkpurana* motifs over the saris layout keeping in mind the technical features of Jacquard, loom and their techniques. Three placements of Chowkpurana motifs over saris were selected as follows:

(A) Motifs with border and pallav
(B) Motif with ornamented field, pallav and border
(C) Motifs with border, pallav and pleats

A Total of 18 saris (Table 3.2) with various placements of *Chowkpurana* motifs of two categories were designed as shown in the table below:
### Table 3.2 Various placements of Chowkpurana motifs for brocade saris

<table>
<thead>
<tr>
<th>CATEGORY: 1</th>
<th>Ritual ceremony</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Set 1.A: Ahoi Astmi</strong></td>
<td><strong>1.A.1 Motifs with border and pallav</strong></td>
</tr>
<tr>
<td>(Figure 3.7)</td>
<td><strong>1.A.2 Motif with ornamented field, pallav and border</strong></td>
</tr>
<tr>
<td></td>
<td><strong>1.A.3 Motifs with border, pallav and pleats</strong></td>
</tr>
<tr>
<td><strong>Set 1.B: Diwali</strong></td>
<td><strong>1.B.1 Motifs with border and pallav</strong></td>
</tr>
<tr>
<td>(Figure 3.8)</td>
<td><strong>1.B.2 Motif with ornamented field, pallav and border</strong></td>
</tr>
<tr>
<td></td>
<td><strong>1.B.3 Motifs with border, pallav and pleats</strong></td>
</tr>
<tr>
<td><strong>Set 1.C: Devthan</strong></td>
<td><strong>1.C.1 Motifs with border and pallav</strong></td>
</tr>
<tr>
<td>(Figure 3.9)</td>
<td><strong>1.C.2 Motif with ornamented field, pallav and border</strong></td>
</tr>
<tr>
<td></td>
<td><strong>1.C.3 Motifs with border, pallav and pleats</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATEGORY: 2</th>
<th>Social function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Set 2.A: Rakshabandhan</strong></td>
<td><strong>2.A.1 Motifs with border and pallav</strong></td>
</tr>
<tr>
<td>(Figure 3.10)</td>
<td><strong>2.A.2 Motif with ornamented field, pallav and border</strong></td>
</tr>
<tr>
<td></td>
<td><strong>2.A.3 Motifs with border, pallav and pleats</strong></td>
</tr>
<tr>
<td><strong>Set 2.B: Baby shower</strong></td>
<td><strong>2.B.1 Motifs with border and pallav</strong></td>
</tr>
<tr>
<td>(Figure 3.11)</td>
<td><strong>2.B.2 Motif with ornamented field, pallav and border</strong></td>
</tr>
<tr>
<td></td>
<td><strong>2.B.3 Motifs with border, pallav and pleats</strong></td>
</tr>
<tr>
<td><strong>Set 2.C: Marriage</strong></td>
<td><strong>2.C.1 Motifs with border and pallav</strong></td>
</tr>
<tr>
<td>(Figure 3.12)</td>
<td><strong>2.C.2 Motif with ornamented field, pallav and border</strong></td>
</tr>
<tr>
<td></td>
<td><strong>2.C.3 Motifs with border, pallav and pleats</strong></td>
</tr>
</tbody>
</table>
Figure 3.7 Ahoi Astmi
Figure 3.8 Diwali
Figure 3.9 Devthan
Figure 3.10 Rakshabandhan
Figure 3.11 Baby shower
Figure 3.12 Marriage
3.3.6 Selection of designed saris for weaving

The investigator showed all 18 designed saris on paper to textile experts of different areas related to manufacturer, designer, master weavers, and consumers. Request was made to give their contribution towards the selection of placement of Chowkpurana motifs. Each designed sari was given a code to identify the precedence of saris to be woven. Textile experts were asked to give their responses in terms of rank 1, 2, 3.

**Rank 3**- Highly appealing

**Rank 2**- Appealing

**Rank 1**- Not appealing

Responses were collected and suggestions were also received. One sari of each occasion was selected for the weaving on the basis of their highest score. Thus total of six saris were selected for weaving. All six designs and placement of Chowkpurana brocade saris were reconsidered before weaving.

3.3.7 Selection of colour and sourcing of raw materials for Chowkpurana brocade saris

Investigator observed the floor artists during the data collection of Chowkpurana floor art. Rice solution (white in colour) and geru paste (red in colour) were used as a base on which further drawings were done. White colour was considered as pure as well as women wore this colour on ritual ceremony, therefore the researcher kept cream base for selected five saris, however one Chowkpurana motifs was selected from marriage function and white colour in marriage was forbidden thus one of the saris was manufactured in brownish red colour.

A market survey was done to know the different types of silk yarn and zari available in the city of Varanasi. The investigator collected yarn swatches from Chowk, Badi bazar places according to the suitability of techniques to be executed. All the materials needed for producing saris were procured from local places of Varanasi.
3.3.7 (A) Selection of variety and yarn for *Chowkpurana* brocade saris

The researcher considered the opinion of master weavers about the selection of the variety, as it played a significant role in revealing the findings of market survey. Three varieties Organza, Tissue and Sateen were selected for manufacturing of brocade saris. Yarns were procured from the local market on the basis of variety for instance: *Organza* variety: undegummed silk for warp and weft, *Tissue*: silk in warp and zari in weft, *Sateen*: katan in warp and weft.

3.3.7 (B) Preparation of graph, punch card, loom and technique

Placement of motifs was drawn on paper over a saris layout however it has to be transferred on a graph paper for cutting the punch card. The length and width of *Chowkpurana* motifs were resized according to variety and jacquard capacity of pit loom while producing graphs. A person who does imitation of paper design on graph paper is known as *Nakshabandhan* in Varanasi as he has the knowledge of hand loom weaving and jacquard mechanism. Punch cards, hardboard material in which the whole thing was created manually with the help of graph design and was laced in serial order to form a repeat pattern. Each loom of different areas of Varanasi have their own specifications for manufacturing brocade depending on the variety and design, and it is manually changed from time to time according to the brocade type. All six saris have different motifs from each other therefore every time the loom was set up according to the variety and designs to be woven. Traditionally three techniques (*Gathua*, *Karua* and *Phekwa*) were used for manufacturing the brocade however today only two techniques were practised. *Phekwa* technique was principally used everywhere in Varanasi as it took less time in weaving as compared to *Karua* technique. Both the above techniques (*Phekwa* and *Karua*) are adopted for weaving of *Chowkpurana* brocade saris. The length and width of selected saris was 5.30 meters 45 inch respectively, moreover the length of both side border of saris and pallav varied according to their design/motifs.

3.3.7 (C) Selection of areas for weaving

The researcher acquired information through field visit that in Varanasi few places are known for their traditional weaving for instance Alaipura, Madanpura Pilikothi and Rewari Talab. These areas were selected for manufacturing of *Chowkpurana* brocade saris. A *Chowkpurana* brocade fabric of 5 meter was also produced in organza variety through *Phekwa* technique.
Phase III- Assessment of market acceptability of *Chowkpurana* brocade saris and development of promotional material

Third phase of the study includes the evaluation of market acceptability of *Chowkpurana* brocade saris. For the execution of the above aim, a tool (self structured questionnaire) was developed keeping in the mind all the variables. The tool consisted of open and close ended statements and also some statements that elicited multiple responses. Likert scale was developed as it consisted of a number of statements which expressed attribute of a given object on a three/five point range depending upon the questions nature to which the respondents were asked to respond. Questionnaire contained questions regarding suitability of technique, placement of motifs, overall aesthetic appeal, and cost effectiveness. Three and five point scale was developed as given below:

**Table 3.3 Three point scales**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Highly appealing/ Strongly agree/Excellent/Highly suitable</th>
<th>Appealing/ Agree/ Good/ Suitable</th>
<th>Not appealing/ Disagree/ Fair/ Not suitable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**Table 3.4 Five point scales**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

To know the most preferable *Chowkpurana* brocade sari, rank was given in as first rank with the highest value and last rank with the lowest value.

**Table 3.5 Rank given for Chowkpurana brocade saris**

<table>
<thead>
<tr>
<th>Rank</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**3.5.1 Pre-testing of questionnaire**

Self structured questionnaire was given to five experts of the different discipline for content validity. Test-retest method was adopted for testing of questionnaire. 30 respondents were randomly selected as a sample from various age group, educational level, occupation and income level. The researcher showed
Methodology

*Chowkpurana* brocade saris to 20 respondents at their own place near Fatehgunj, Vadodara. Those respondents who not able to come were personally visited by the respondents their at homes and exhibited saris over there. Questionnaire tool was distributed to respondents simultaneously. Researcher explained the mechanism involved in manufacturing the fusion of *Chowkpurana* brocade saris and assisted them wherever they found complexity in answering. Collected responses were thoroughly analyzed and few changes were made.

3.6 Selection of locale and sample for exhibition the *Chowkpurana* brocade saris

Fusion of *Chowkpurana* brocade (art and craft) saree was a product of Uttar Pradesh, therefore Agra and Varanasi were selected for display and assessment. One more city, Ghaziabad, was selected for exhibition of *Chowkpurana* brocade saris as it is situated at the border of Delhi the capital of India. A two day exhibition on “Floor to Fashion: *Chowkpurana* Brocade Saree” was also organised on 14 January, 2014 at Parsi Agyari in Vadodara. Opinion was also taken from male persons as they played significant role at the time of purchasing of women’s wear as revealed in the market survey. *Chowkpurana* brocade fabric was also displayed along with saris to know the opinion of the respondents. A self structured questionnaire was administered to assess the opinion by three different segments of respondents’ for instance customers, textile experts and floor artisans.

3.6.i Acceptance by consumers

General consumers included in this study those who were not much aware of the handloom technologies however they knew about the handloom products. The review also revealed the behaviour of consumer while purchasing of fabric and how their focus was on texture/quality, price and colour of fabric rather than the technology used.

3.6.ii Acceptance by textile experts

The handloom work is very tedious, time consuming as cost increases with the intricacy of design/motifs therefore, textile experts who were involved in manufacturing of handloom saris were selected.
3.6.iii Acceptance by floor artisans

Chowkpurana brocade saris were displayed to floor artisan who was involved in practising of floor art. The aim was to capture their reaction on Chowkpurana motifs over the brocade saris which they drew on the floor.

A Total of 500 respondents were randomly selected including both genders (male and female) from various places (Agra, Ghaziabad, Varanasi and Vadodara) of different segments (consumers, textile experts and floor artisans) for gathering the opinion on designed saris.

3.7 Variables included for consumer acceptance

Variables are the characteristics that are manipulated or controlled by the researcher. The variable of study was as follows:

**Independent variable:** were those variables that antecedent to the dependent variables and cannot be changed.

1. Gender: Male and Female
2. Brocade techniques
3. Categories: I Ritualistic occasion and II Social function

**Dependent variable:** Dependent variable is a variable where the changes occur due to independent variables and depends on the outcome of the independent variable. The dependent variables included for the study were as given below:

1. Placement, colour combination and varieties of Chowkpurana brocade saris
2. Cost of Chowkpurana brocade saris
3. Occasions: Diwali, Ahoi Aathe, Devthan, Baby shower, Rakshabandhan and marriage

3.8 Development of promotional material

Advertisement, a necessary tool for any product which is going to be launched, creates awareness and base in market for consumers. One of the aims of research was to create promotional material for awareness of Chowkpurana brocade saris. A strategy was planned to bring this fusion of art and craft closer to masses and make them aware of the existence of its textures in brocade saris to the customers. It is the 4 P’s (Product, Price, Place and Promotion) of marketing that plays a very important role in improving the performance of the product. A website, brand, logo and
information labels were developed to achieve this aim. Exhibitions were planned and executed in four cities so invitation was prepared and given to several segments of population. Posters on Chowkpurana floor art and brocade craft were made in English for clear understanding of consumers about the fusion of (art and craft) Chowkpurana brocade saris. Information label/tags were designed to provide information to the consumers regarding care and maintenance of the brocade saris.

3.3.8.i Preparation of booklet
Chowkpurana has an incredibly distinctive vocabulary of design and motifs. Originals designs and their stories related to different festivals were collected in the form of photographs, recorded respectively from various interior villages. The conventional motifs of Chowkpurana floor art comprised of animal, geometrical human figure and other ritualistic symbol like Swastika, OM etc. It was observed that several motifs were found to be of the same occasion however few motifs were selected for weaving of saris therefore rest of them were documented in a booklet form. It was not feasible to write the whole stories behind each Chowkpurana motif in the thesis thus a separate booklet was prepared for preservation.

3.3.8.ii Fashion show
A Fashion shows creates good opportunity for designers to show case their innovation among fashion innovators. The motive behind showcasing Chowkpurana brocade saris was to generate awareness among youth towards their traditional heritage. Newly designed Chowkpurana brocade saris were planned to display in Creation 2015: A Fashion Show, organised by Department of Clothing & Textiles, Faculty of Family & Community Sciences, The Maharaja Sayajirao University of Baroda, Vadodara Gujarat India.

3.9 Cost of manufacturing of Chowkpurana brocade saris
The cost of any product in handloom depends on raw materials, techniques, colour and intricacy of motifs/design used. These factors were also kept in mind while manufacturing of Chowkpurana brocade saris. The price of each Chowkpurana brocade saris was estimated on the basis of prototype manufacturing which included time period, raw materials, graph produced, punch card cutting, warping and setting up of loom, weaving charges and other wages. The production cost of saris was also
calculated by straight line method on the basis of raw material, annually production of saris from the loom moreover number of time graph and punch card could be used.

### 3.10 Statistical methods used for data analysis

The data was analysed by using the following statistical methods: Weighted Average Ranking and Chi-square. All statistical methods applied in this study were computed with the help of Excel 2007 and SPSS (Statistical Package for the Social Sciences).

#### 3.10.i Weighted Average Ranking (WAR)

WAR was applied to assess the extent of acceptance for newly designed Chowkpurana brocade saris and to know the separate rank given to designed saris by both gender. WAR was calculated by using the following formula.

\[
\text{Weighted Average Ranking} = \frac{\sum R_i f_i}{\sum f_i}
\]

Where, \( R_i \) – ranks given by the respondents
\( f_i \) – the frequency

#### 3.10.ii Chi-square test

of significance was applied to assess statement like: the need of innovative design for handloom brocade and their acceptance by the customers, cost of higher price for conventional craft, symbolism of Chowkpurana motifs for saris. The formula used to calculate chi-square test with the significance tested at \((r - 1) (c - 1)\) degree of freedom was:

\[
X^2 = \frac{\sum (O_{ij} - E_{ij})^2}{\sum E_{ij}}
\]

Where, \( O_{ij} \) – observed frequency
\( E_{ij} \) – expected frequency (row total x column total / grand total)

\( r \) – Number of rows
\( c \) – Number of columns