

# **ROLE OF MARKETING INTELLIGENCE IN BRAND POSITIONING OF SELECT CONSUMER DURABLES**

A

Thesis

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the Requirements for the Award of the Degree of

**DOCTOR OF PHILOSOPHY**



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## DECLARATION

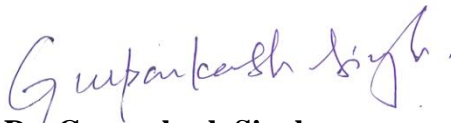
I hereby declare that the work presented in the thesis entitled “**Role of Marketing Intelligence in Brand Positioning of Select Consumer Durables**” for the award of degree of **DOCTOR OF PHILOSOPHY** submitted to Lalit Mohan Thapar School of Management, Thapar Institute of Engineering & Technology, Patiala, is an authentic record of my own carried out under the supervision of **Dr. Gurparkash Singh**, Assistant Professor, L. M. Thapar School of Management, Thapar Institute of Engineering and Technology, Patiala and **Dr. Harsh Vardhan Samalia**, Associate Professor, Rajiv Gandhi Indian Institute of Management, Shillong. Any material previously published or written by another author or person in the text is well acknowledged and referenced in the thesis.

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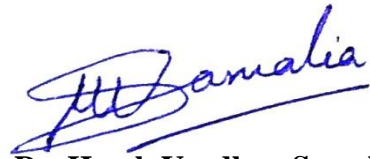
## CERTIFICATE

This is to certify that the thesis entitled “**Role of Marketing Intelligence in Brand Positioning of Select Consumer Durables**” which is being submitted by Ms. Supreet Kanwal (Reg. No. 951013012), in fulfilment of the requirements for the award of the degree of **DOCTOR OF PHILOSOPHY in MANAGEMENT** at Lalit Mohan Thapar School of Management, Thapar Institute of Engineering and Technology, Patiala, Punjab, is a bona fide record of candidate’s original research work carried out by her under our supervision and guidance. To the best of our knowledge, the matter presented in this thesis has not been submitted to any other University or Institute for the award of any degree or diploma.



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*Supreet Kanwal*  
(Supreet Kanwal)

## **Abstract**

In India, the market for consumer durables is huge and is operating in a highly competitive, complex and rapidly changing business environment. The importance of this research in consumer durable industry is significant as consumers get vast variety of products in this sector and decision making is required to choose at the consumer end. The objectives of this research are 1) To identify the key factors of brand positioning of select consumer durables. 2) To identify the factor(s) of brand positioning those are most significantly influenced by marketing intelligence and 3) To propose a conceptual framework depicting the impact of marketing intelligence (MI) on factors of brand positioning (BP). Extensive literature review helped in identification of the constructs of BP and MI and on the role of MI in BP.

The research instruments were prepared based on the valuable feedback from the industry and academia. This process helped to ensure comprehensiveness, clarity, face validity and readability of the scales of the survey instruments. Reliability analysis confirmed that the scale is reliable as all the constructs Cronbach alpha values were above 0.7 and is acceptable as per literature (Cronbach, 1951; Nunnally, 1978). Purposive sampling for IT and Marketing Professionals of consumer durable companies and convenience sampling methodology was used to collect data from consumers of consumer durable organizations on a 5 point Likert Scale (Strongly Disagree- Strongly Agree). The products selected in consumer durable sector in this research, namely; Air Conditioners, Washing Machines, Refrigerators in White Goods; LCDs/ LEDs, Laptops, Mobile Phones, Consumer Electronics and Microwave/Ovens, Mixers/ Grinders/ Food-Processors and Electric Fans in Brown Goods. 72 consumer durable companies have been selected for the data collection.

After the reliability check, exploratory factor analysis (EFA) was done to explore the factors and the factor loadings have been grouped into six important factors of brand positioning from consumers point of view in rotated component matrix. The factors were; Credibility, Brand Personality, Product Attributes, Customer Perceptions, Organizational attributes, and Price. Thus, the researcher has constructed a scale for brand positioning, the first objective of this research. This helps in the formulation of the hypothesized relationships as well as a research framework depicting the role of MI in six factors of BP.

Confirmatory factor analysis (CFA) was applied to validate the factors of Brand Positioning. The factors of Brand Positioning validated from CFA were Credibility, Brand Personality, Product Attributes, Price, Organizational Attributes, and Customer Perceptions.

At last, Structured Equation Modelling was applied to check the effect of factors of MI on each factor of brand positioning which is the second objective of this research. The most significant affected factors came out to be Credibility, Brand Personality, Customer Perceptions and Product Attributes. The model fit values came out to be in range which state that five factors of brand positioning namely; Credibility, Brand Personality, Customer Perceptions, Product attributes and Organizational attributes are statistically dependent on the factors of MI. Only one factor namely, Price is not statistically affected by Organizational culture (factor of MI). Similar results can be seen in previous study in which the price setting is affected by Organizations procedures, policies and planning process (Gwin & Gwin, 2003). Price is known to be dependent on Planning Focus and Process Structure (factors of MI) and not by organizational culture.

The identified factors of BP can be used as inputs by marketing professionals to design and reformulate their branding strategies. The results imply that consistency in value and message to be delivered to the customer leads to better positioning in the mind of the customer. Product attributes are of significant interest to marketing researchers and practitioners, as these are the prominent criteria by which consumers evaluate products prior to making purchase decisions and it is on the basis of attributes that marketers design their products and set it apart from competition. Innovations in features and user-friendly interfaces can give consumers an opportunity to engage with the product and the brand. Top management concern to make the brand sophisticated, sincere, competitive, exciting is important to become better than the competitors' brand. Team work and supportive culture in organization can enhance the success of promotions. To make a sincere, rugged, sophisticated, competitive and technologically excited product, managers must rely on the MkIS analyzed information. Word of mouth can influence perceptions of consumers during the information search phase of the buying process.

The better the MI of an organization, the better it can position its brand as MI facilitates managers' mission to take decisions at all levels of operations based upon the information flow. Organizations must endeavour to create better BP with the help of MI through MkIS that assists in information generation, dissemination and responsiveness.

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## List of Abbreviations used

<b>Sr. No.</b>	<b>Abbreviation</b>	<b>Description</b>
1.	AMOS	Analysis of Moment Structures
2.	BP	Brand Positioning
3.	BI	Business Intelligence
4.	CA	Competitors' Attributes
5.	CAGR	Compound Annual Growth Rate
6.	CFA	Confirmatory Factor Analysis
7.	CFI	Comparative Fit Index
8.	CI	Competitive Intelligence
9.	df	Degrees of Freedom
10.	DSS	Decision Support Systems
11.	FY	Financial year
12.	EFA	Exploratory Factor Analysis
13.	GDP	Gross Domestic Product
14.	GFI	Goodness of Fit Index
15.	GSPN	Global Service partner network
16.	IBEF	Indian Brand Equity Foundation
17.	IFB	Indian Fine Blanks
18.	IFI	Incremental Fit Index
19.	INR	Indian Rupee
20.	IPMS	Integrated Partner Management System
21.	LCD	Light Crystal Diode
22.	LED	Light Emitting Diode
23.	MI	Marketing Intelligence
24.	MkIS	Marketing Information System
25.	NFI	Normalised Fit Index
26.	OA	Organizational Attributes
27.	PA	Product Attributes
28.	RMSEA	Root Mean Square Error of Approximation
29.	SAP	Systems, Applications, Products
30.	SE	Standard Error

31.	SEM	Structural Equation Modelling
32.	SPSS	Statistical Package for Social Sciences
34.	SRMR	Standardized Root Mean Square Residual
35.	TLI	Tucker Lewis Index
36.	USD	United States Dollar

**CHAPTER I**  
**INTRODUCTION**

# Chapter I

## Introduction

---

*"The last thing that we find in making a book is to know what we must put first."*

*Blaise Pascal*

The notion of globalization and technological innovation is responsible for the birth of new brands and new players in the consumer durables sector. Brand Positioning (BP) has appeared as the first concern for management in the past 20 years. Brands are one of the most critical abstract resources within a firm (Keller & Lehmann, 2006). The concept of a brand can be traced back to product marketing, where the role of BP has been primarily to create differentiation and preference for a product in the mind of the customer (Knox & Bickerton, 2003). The development of product branding over the past three decades is characterized by layers of added value built around the core functionality of the product to create and maintain the distinction in a particular market (Knox & Bickerton, 2003). In simple words, brands are used as the communication between a product and its existing and prospective customers. In the highly competitive and dynamic markets, BP will only be useful if the brand itself stays close to its roots of uniqueness and core values, focuses on specific market segments and captures a competitive positioning within a particular market. Positioning communicates a particular aspect of identity at a given time in a given specific market segment within a field of competition. Hence, BP derives from brand identity and may change over time and differ per product (Kapferer, 2008).

BP is the sum of all activities that position the brand in the mind of the customer relative to its competition. Positioning is not creating something new or different, but to manipulate the mindset and to retire existing connections (Ries & Trout, 2001). The objective of BP is to locate the brand into the minds of stakeholders and customers. A recognizable and trusted customer-focused value proposition can be the result of a successful positioning without doing something to the product itself. It is the rational and persuasive reason to buy the brand in highly competitive target markets (Kotler & Keller, 2009). Therefore, it is essential to understand and to know the position a brand owns in the mind of a customer. To position a brand within its market efficiently, it is critical to evaluate the brand objectivity and assess how the brand is viewed by customers and potential prospective customers (Ries & Trout, 2001).

With the invention of information systems (IS), the human has entered in such an era where they have converted the industrial to informational age quickly. New technology in today's era has helped human to create the phenomenon of information explosion to accelerate the rate of production of new knowledge from day to day and hour to hour (Elahi, 1996). With increasing pace of competition, marketing professionals are relying more on online sources of marketing intelligence (MI) (Hill & Scott, 2004) along with the conventional way of offline sources to meet all the needs of marketers. Marketing Information System (MkIS) is used to describe a more broad-ranging information function. It is a tool that assists in generating MI. In India, there are companies which are doing market research to get the information about customers' needs, competitors' activities, exclusives of markets and suppliers' attitude (Hakhu, Kiran, & Goyal, 2012). The ultimate aim of the organizations is to get accurate inside and outside information of the firm, competitors, and market through both offline and online sources to enhance the overall performance of the firm. According to Trim & Lee (2008), MI is the means to fully comprehend, examine, and evaluate the inside and outside environment related to organization's customers, competitors, markets, and industry to enhance the tactical and long-term decision-making process.

MI is one of the latest developments of Business Intelligence (BI) and Decision Support Systems (DSS) (Slimani & Labo, 2013) that assists in all the marketing related activities like product management, budget tracking, sales and BP (Marshall & LaMotte, 1992). It offers potential tools for analyzing and presenting data to managers so they can make correct decisions of branding and marketing. Technological advances in computer-based information systems have dramatically changed approaches to marketing management (Wright & Ashill, 1998). The microcomputer revolution brought computer capabilities to virtualize all marketing organizations and continuing technology advances are moving marketing managers into the corporate spotlight by providing new tools with which to respond to market opportunities (Wright & Ashill, 1998). According to Tan & Ahmed (1999), "MI is defined as a continuing and interacting structure of people, equipment, and procedures to gather, sort, analyze and distribute pertinent, timely and accurate information for use by marketing decision makers to improve their marketing planning, implementation, and control." It is important to note that MI is a broader term and MkIS is a tool that assists in generating intelligence for BP, product management, budget tracking, and sales. In this regard, MI has a significant role in strategic BP (Marshall & LaMotte, 1992).

Organizations are shifting to online branding, usage of search engines and the Internet as a tool in the era of competition to get the whole gamut of information about the market. These companies are using MkIS to assist them in their decision-making regarding BP (Tripathi, 2017). For efficient decision making, a continuous flow of information is the lifeblood of a good MI system. As organizations grow, expand product lines, markets, and distribution channels; the need for formal analytical support tools and rapid data access increases to take decisions regarding brand identity development and BP. Organizations use MI to increase the ability to produce and give more and newer products and services. Managers are equipped with MkIS for analyzing the internal information about the company and the external information about the market, customers, and competitors. MI helps the managers of the companies to assist in their BP decision making by fully understand the organization, market, competitors' information, analyze and assess with the help of formal infrastructure, innovative culture, policies, procedures, organizational awareness, and a MkIS tool.

From the consumer's perspective, decision making is crucial regarding consumer durable products as these are high involvement goods. High involvement goods are high capital value goods that are purchased only after long and careful consideration (Chand, 2000). From a company's perspective, MI assists the marketing managers of a company in decision making regarding BP of high involvement consumer durable products. Contemporary organizations utilize MI for varied purposes. These include decision making regarding product development, brand evolution (Marshall & LaMotte, 1992), sales (Trim & Lee, 2008), budget tracking, pricing (Folsom, 1991), performance enhancement (Talvinen, 1994; Ismail, 2011) but is limited to find the role of MI in BP in the context of consumer durable companies. However, questions remain regarding the contribution of MkIS to marketing professionals' decision-making and how its usage impacts organizational performance; specifically in consumer durables sector where consumers get varied number of choices of products, and they need to decide while purchasing such products.

### **1.1 Marketing Intelligence**

Marketing is becoming more of a battle based on information that based on sales power (Kotler, 2000). The idea of using MI with the help of MkIS in enhancing BP has been identified as the foundation stone of the concept of IT-enabled branding (Marshall & LaMotte, 1992). Contemporary marketing academia propounds MI as a paradigm shift from market research to MI approach to enhance the performance of the organization (Wright &

Ashill, 1998) with the system assisted decision making. MI has evolved and identified as a strategic approach directing all marketing tasks towards determining, advancing and sustaining successful BP in the mind of the customers.

BP is not a novel concept; neither for academic nor for the corporate world. It is feasible to drive back the utility of brand all the way to the Stone Age when hunters used weapons of specific brands to succeed in the hunt (Almquist & Roberts, 2000). Since the 18<sup>th</sup> century, there has been the enormous progress of the knowledge, procedures, and theories within branding (Paola, 1985). BP is at the heart of marketing strategy (Dibb & Simkin, 1991). It is a place that a product, brand or company occupies in the consumers' mind relative to competing offerings which is intimately connected to the concept of the target market. Positioning involves finding a proper location in the minds of a group of customers or market segment so that they think about the product in the right way (Trout & Ries, 1969). Marketing begins with the customer and ends with the customer. All the business-related decisions will have to be in consonance with customer demands. Brands allow marketers to add meanings to products and services, but it is consumers who ultimately determine what a brand means. However, the process of positioning is long and complex. Positioning possibilities are almost limitless for any given brand and can be defined in many different ways. Accurate positioning of a brand is fundamental to its competitive-edge while an inaccurate or inexact positioning can ruin a brand to collapse (Prasnikar, Rajkovic, & Vehovec, 2008). Thus, to reach at ideal positioning for a given brand, the hunt for it, begins in the consciousness of the consumer at the brand image level (consumers' perceptions about the brand). At the brand identity level (company or marketing managers point of view), the role of MI with the use of MkIS becomes extremely important in enhancing the BP of the product. It is emphasized that researchers need to focus on the various ways in which MkIS can assist marketing professionals in identifying customers at brand identity level to make refined, appropriate and confident decisions regarding customer needs and preferences (Talvinen & Saarinen, 1995). MkIS is a total system that incorporates human processes for interpreting and processing information into intelligence (Wood, 2001). MI focuses particularly on competitors, customers, consumer spending, suppliers and market trends. It tends to offer a broader view of markets including business and sector data such as market sizing, segmentation, and share data.

MkIS helps in analyzing product attributes with customer data, assessing channels and pricing options, designing and examining advertisement proposals, gaining immediate assessment on concepts and plans and moving marketing plans quickly into performance (Harmon, 2003). Queiroz & Oliveira (2014) highlighted the benefits of the marketing information system (MkIS) in companies that operate in the retail business. The results indicate that information and its systematization possess great importance for the development of competitiveness, contributing to the development of the operations and the promotion of new business opportunities.

The focus of this research is high involvement consumer durable products where BP and decision making plays a significant role (IBEF, 2018; Kulshreshtha *et al.*, 2017). However, questions remain regarding the contribution of MkIS to marketing professionals' decision-making for the formulation of BP strategies and ultimately its usage impacts BP and organization's performance specifically in consumer durables sector where consumers get a varied number of choices of products.

In the domain of consumer durables, there is a rising interest in understanding the phenomenon of BP through the use of IS. Kumar (2017) said that consumers from an emerging market like India have a higher brand choice from global and domestic companies than ever before. India's liberalizing policies and changing business environment along with regulatory changes have enhanced the macroeconomic growth of India, thereby increasing offerings to Indian consumers. Thus, building and properly managed BP has become essential for any business organization and consumer durable organizations are no exception. The development of new customer solutions manifests BP, incorporation of innovative abstract and concrete product attributes, consistent information from marketing managers, building trust by providing excellent service, brand personality features, price, consumer perceptions, solving the dissonance in the mind of the customers. BP refers to making an image in the mind of the customers (Trout & Ries, 1969). It can be created as an effort by managers of the organizations by creating value in the product offering, expertise in the product, affordable price, product attribute, how consumer relate his personality to the brand. Scholars within the marketing literature have given intensive attention to explain BP and how a company can position its brand in the mind of its targeted customers.

## 1.2 Consumer Durable Sector in India

The area of interest of this research is high involvement consumer durables products are defined as products that do not have to be purchased frequently because they are made to last for an extended period (typically more than three years) (IBEF, 2018; Kulshreshtha *et al.*, 2017). This sector is considered because it is very complex and competitive. A lot of brands with varied choices of products are introducing in this sector. Thus, decision making at the consumers' end is required on the basis of some attributes or preferences. Positioning a brand is very important for the marketing managers for the success of their organization.

The consumer durables sector can be divided into three categories: White goods, Brown goods, and consumer electronics (IBEF, 2018; Kulshreshtha *et al.*, 2017). This research is focusing on the BP where MI provides a competitive advantage to the company. For this research, the selected consumer durables are as follows:

- White Goods - Air Conditioners, Refrigerators, Washing Machines
- Brown Goods - Microwave Ovens, Mixers & Grinders, Food processors and Electric Fans
- Consumer Electronics - LCDs or LEDs, Mobile Phones and Laptops

White Goods are the heavy household appliances that were originally manufactured with a white enamel finish such as refrigerators, freezers, washers, and dryers. Today the term applies to all such goods, even though they are available in a variety of decorated colors and finishes. (Source: (The Dictionary of Marketing Terms, 2000)).

Goods that have a white porcelain enamel exterior are called white goods. Large household electrical appliances for domestic use, such as refrigerators, freezers, and dishwashers which are used to be painted only in the white enamel finish. Despite their availability in varied colors now, they are still called white goods. (Source: (The Dictionary of Marketing Terms, 2000)).

Brown goods usually require high technical knowledge and skills (which get more complex with time, such as going from a soldering iron to a hot-air soldering station). Brown goods were traditionally finished with or looked like wood or Bakelite. Old-fashioned brown appearance has been upgraded today with contemporary stainless steel coatings and fashionable colors. Kitchen appliances are also called brown goods. These consist of

chimneys, microwave ovens, grinders, mixers. (*Source: (Barron's Marketing Dictionary, 2008)*).

Consumer electronics are electronic devices which are used for daily purposes such as office work, communications, radio broadcasting and entertainment at the start of the 20<sup>th</sup> century. After this, many products came in the market such as personal computers, telephones, MP3 players, audio equipment, televisions, calculators, GPS automotive electronics, digital cameras and players and recorders using video media such as DVDs, VCRs or camcorders. (*Source: (KPMG, 2017)*).

There are five groups of the population of India which are based on yearly household income according to recent indices (KPMG, 2017). These groups are lower income, three subgroups of middle income and higher income. Household income in India is projected to grow at 10 percent yearly over the next eight years, which is likely to increase consumer spending on durables. With the advancement of easy loans, zero equated monthly installments (EMI); it has become comfortable for Indian consumers to afford more expensive consumer goods. Consumer durables market is expected to grow at CAGR of 13 percent from FY05 to FY20 (KPMG, 2017).

Eswari & Subramanian (2017) said that the consumer durable goods industry is operating in a highly competitive, complex and rapidly changing business environment. Business leaders of consumer durables white goods organizations know their importance of having ready to access timely, accurate, consistent information and data to establish, nurture and manage customer relationships across divisions. The consumer buying preferences are rapidly changing and moving towards high-end technology products with acculturation. Products which were once considered luxury items have become a necessity because of the changing lifestyle and rising income levels. With the growth in disposable incomes, the demand for high-end products such as LED, washing machine, refrigerator, and the air conditioner has increased considerably. It is also facilitated by the easy availability of finance and the prevalence of nuclear families. The consumer is brand conscious but not necessarily brand loyal, and might even pick up a reliable private label if it offers good price and quality values.

An increase in competition and improvement in technology had led to a situation where the majority of the consumer durable products are commoditized. This shift has created a scenario where recognizing an exclusive differentiator for the goods is imperative and thus, is the need to promote it actively. It is mandatory for marketers to lay particular emphasis on

concerns that can be drivers of demand and marketing campaigns that can address concerns or apprehensions of potential consumers. Consumption patterns and changing lifestyles of consumers have created a considerable demand in the market. The market of consumer durables has evolved from a market with limited products and a few features. Now, this market is inundated with numerous products, all giving distinct features, novel choices, improved quality and latest technology (Corporate Catalyst India Pvt. Ltd., 2015).

The rapid economic growth is enhancing employment and business opportunities which in turn increasing disposable incomes. The middle class, defined as households with disposable incomes from Rs 200,000 to 1,000,000 a year comprises about 50 million people, roughly 5% of the population at present (Lobo & Shah, 2015). By 2025, the size of the middle class will increase to approximately 583 million people or 41 % of the population. Extreme rural poverty has declined from 94% in 1985 to 61% in 2005 and is projected to drop to 26% by 2025. The affluent class is defined as earnings above Rs 1,000,000 a year will increase from 0.2% of the population at present to 2% of the population by 2025. Affluent class's share of national private consumption will increase from 7% at present to 20% in 2025 (Dharmaraj, 2017). Kulshreshtha, Bajpai, & Tripathi (2017) examined the Indian consumers' decision making regarding consumer durable goods that is split air conditioner on the basis of several factors like brand equity, price, advertisement, and promotion. The relative importance of these attributes is being determined. According to this study, the second highest population of consumers with different wants and preferences, India is a place where MNCs have ample opportunities to cater to a variety of products.

### **1.3 The rationale of the research**

Due to intense competition in the market and growing needs of the consumers, today consumers want psychological satisfaction by using a particular brand. Thus, every marketer is concerned about the BP of the concerned company. In India, consumer durables industry has significantly fewer penetration levels as compared to other countries in the world. New brands are introducing in this sector with their unique and innovative products in the market. This intense competition among players leading to higher ad spends and less pricing power, thereby lowering the margins in the consumer durables industry. The availability of consumer durables to masses is difficult as 68 percent of India's population still lives in rural areas (IBEF, 2017). As a result, India has enormous unrealized potential. There are short product life cycles due to changes in technology. The purchasers for consumer durables are mostly

from the middle class and affluent class of Indian society. The rapid economic growth is increasing, thereby enhancing employment and business opportunities and in turn growing disposable incomes (Dharmaraj, 2017). Thus, this is a challenge for the companies to position their brands in the mind of the customer. This positioning can be enhanced with the assistance of MI.

With the rise of consumers and the introduction of new technologies, the consumer durables market has become more competitive. Consequently, brand managers are required to understand the factors affecting BP (Harris & Chernatony, 2001). The existing literature on Indian consumer durables sector has primarily focused on product quality in organizations (Mugge, Dahl, & Schoormans, 2018). A limited number of studies have researched the choices, perceptions, purchase intentions, buying and post-purchase behavior of consumers of durable goods.

There are number of studies that examine the role of MI in brand management for various sectors such as airline (Ismail, 2011); Indian SMEs (Hakhu, Kiran, & Goyal, 2012); MI contributes to brand performance of Australian organizations (O'Cass & Ngo, 2007); MI in successful and unsuccessful new product development (Haverila & Ashill, 2011); MI is used to aid brand management (Wright & Calof, 2006); Role of Business Intelligence in enhancing the quality of decision-making in 11 knowledge based and high-tech start-ups based in Northern Ireland (Hill & Scott, 2004); MI focuses on marketing and sales initiatives and forecasts product demand and sales (Lackman, Saban, & Lanasa, 2000); Marketing Information System (MkIS) combine with modern concept of DSS aids to meet marketing information needs (Ashill & Wright, 2011); Model of measuring maturity of BI systems (Popovic, Turk, & Jaklic, 2010); Benefits of the Marketing Information System (MkIS) in the clothing retail business (Queiroz & Oliveira, 2014).

The inclination of these studies is on the model of the intelligence process (Wright & Calof, 2006), role of e-business in marketing decision making, evolution of MI, innovative culture for building a successful brand, internet as a tool of MI, the extent of usage of MkIS in fortune 500 organizations and not on the precise role of MI on each factor of BP. This narrow and limited understanding, prevailed in existing studies, provides a scope to understand the factors of BP and MI and the role of MI in BP. However, each of these studies conceptualizes the concept of usage of MkIS in marketing applications differently, that subsequently does not provide much insight in the positioning of a brand through MI and MkIS. It further

provides a scope to implement IS across all the functional departments, the use of MI in a planned and structured way is limited.

The present research aims to investigate the factors of BP from consumers' and marketing professionals' perspective regarding consumer durable products in the Indian context. Along with this, it studies the effect of MI on BP factors. The research problem is worth researching as few studies emphasize the MkIS assisted brand positioning. Queiroz & Oliveira (2014) conducted field research in a major clothing retailer, through a case-study that consisted of interviews with two employees of the company, one from top management and one from the marketing area. The close-knit relationship between MI, BI, and IT show the need for adaptation of the reality and the culture of the company to the use of information. The apparent limitation is in regards to performing a single case-study; it is believed that the possible comparison with other case studies could further clarify the treatment of the flow and distribution of information, which, in this research, was limited to the access based on the creation of user profiles. The exploration of other variables is recommended, such as the necessary information for decision-making processes and environmental analysis. Aswani, Kumar, Ilavarasan, & Dwivedi (2018) highlighted how digital marketing is often detrimental, and search engine marketing often not only fails to provide benefits but also destructs value if not done properly. Transaction costs like agency problems, coordination costs, loss of non-contractible value are identified with potential fallouts which affect the long-term benefits.

The past research has not analyzed the role of MI in BP specifically in consumer durables sector by considering culture and process-structure along with data collection, dissemination, and decision-making. To better understand the importance of MI in BP, this research has been conducted. Given the proliferation of MI tools in marketing, the relationship between MI – BP needs investigation. This investigation involves identifying factors affecting BP and their relationship with MI. Such studies have been done in Canada, UK, and Europe. For example, Calof, Arcos, & Sewdass (2018) compared the results to a similar study done in Europe by Wright & Calof (2006), it revealed that the breadth of applications of CI has grown well beyond competitors to include customer related intelligence, technology, and market from 2006 to 2018. To analyze how BP is influenced by MI considering organizational culture, awareness, attitude of the sales force team, process- structure and planning process on BP, this research has been done. The present research explores the phenomenon that how MI (Offline and Online) is used to extract more intelligence to make better BP strategies. This research particularly focuses on the relationship between MI and

BP. This research will contribute to both the academic literature and to the marketing practices. Academic research will benefit from an extension of the conceptualization of BP and MI. This research will be helpful to the managers of consumer durables companies as it provides insights regarding the key factors of BP that are influenced by MI. This will help the managers to assimilate better information on the marketing efforts done by them for creating a better BP of their respective products.

#### **1.4 Organization of Dissertation**

The dissertation is organized into the following chapters. A summary of each chapter is given below:

*Chapter One* presents the introduction of the research. The overview of the research is also briefly discussed along with objectives of research, the scope of research, framework & hypotheses to be tested and the analytical tools. The last section of this chapter describes how the subsequent chapters of this dissertation are organized.

*Chapter Two* describes the literature review related to BP, MI, and MkIS. The review comprises of the conceptual development of the variables that subsequently led the researcher to find out research gaps and to identify various constructs, selected further for the research. The literature review helped the researcher to define the objectives of the research and proceed towards the achievement of the objective by pursuing a systematic and scientific investigation.

*Chapter Three* discusses the research methodology of the present research. It includes research questions, objectives, scope, framework, hypotheses and in the end, it describes the flowchart to carry out the research systematically and scientifically. The conceptual research framework of showing the impact of MI on factors of BP was developed on the basis of literature review. The identified and selected variables were further used to draft the questionnaire. The analytical tools used in the present research are elaborated while highlighting their advantages and rationale.

*Chapter Four* presents statistical data analysis and the results of the research. Parametric test assumptions and multivariate analysis were discussed. The research hypotheses were tested using structural equation modelling (SEM). The developed research framework was tested empirically, and the ensuing results were given.

*Chapter Five* describes findings and discussions regarding hypotheses, drawn with the help of statistical analysis. It also explains various observations made by the researcher. It explains the theoretical contribution and managerial implications.

*Chapter Six* presents the conclusion of the research. It further concludes with recommendations, limitations and future implications of the research.

## **1.5 Conclusion**

This chapter presents the brief concept of BP and MI and the rationale of the research with reference to consumer durables sector. It further presents an overview of consumer durables scenario in India and why this sector is considered. Chapter scheme describing the organization of the thesis has also been shown. The next chapter further concentrates on the conceptual development of identified variables and by creating a relationship between MI and factors of BP to lay down the foundation for the theoretical framework.

**CHAPTER II**  
**REVIEW OF**  
**LITERATURE**

## **Chapter II**

### **Review of Literature**

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*“Literature adds to reality. It does not simply describe it” - C.S.Lewis.*

#### **2.1 Introduction**

Review of literature is an essential part of any research project. It helps to plan and execute the research process by familiarizing with the work that has been done in that area. It also assists in identifying research gaps and defining the research problem. This chapter presents the review of literature related to various aspects which are important and relevant in the context of current research. It has been divided into seven sections. Section 2.3 presents studies related to BP. Studies related to MI have been outlined in section 2.4. Section 2.5 demonstrates studies related to the role of MI in BP.

An extensive review of the existing literature on BP and MI is carried out. The focus of the literature review is on both, the theoretical advancement in the area as well as empirical researches. It is done not only to gain insight on the existing body of knowledge but also to examine the role of MI in BP so that theoretical framework for the research can be laid down proposing a framework depicting the role of MI on BP.

#### **2.2 Objectives of Literature Review**

An extensive literature review was carried out with the following objectives:

1. To understand the theoretical advancement of the concept of BP, MI, and studies showing the role of MI in BP.
2. To identify factors of BP and MI derived from the identified framework.
3. To explore the role of MI in BP.
4. To identify the research gaps that form the basis for further research.

The review guides the researcher to gain an understanding of various topics and further to know the extent of the effect of MI on each factor of BP. It further lays the foundation for developing a conceptual framework and subsequently for testing it empirically with the hypotheses formulated.

## 2.3 Brand Positioning

In the present era of intense competition and demanding customers, BP has grabbed the attention of scholars and practitioners. It has a major impact on marketing as a discipline, triggering a paradigm shift from product-based to customer based marketing strategies. Marketing needs research tools that are capable of identifying the criteria that consumers use when choosing a brand in a given category (Genglar & Mulvey, 2017). The concept of positioning has evolved from being just a communication tool to being a very important marketing concept in the era of hyper-competition. Trout & Ries (1969) coined the term "Positioning" in the 1970's. Trout & Ries (1969) states that "Positioning is not what one does to a product, positioning is what one does to the mind of the prospect". It is an aggregate perception the market has of a particular company, product or service in relation to their perceptions of the competitors in the same category. According to Trout & Ries (1969), it is believed that positioning is a promising concept and has unlimited use within the marketing and advertising community. Certainly, the basic concepts of positioning were not new in 1972. Nowadays, positioning is considered as a synonym of marketing strategy, rather it is thought to be considered as an element of strategy.

Thus, positioning involves finding the proper location in the minds of a group of customers or market segment so that they think about the product in the right way. For example, Rolex clearly positions its brand attracting the top economic section of the society; and as a consequence finds advertising avenues and promotional events where its target customer participates such as Golf tournament. Targeting the different demographic segments of society is another way of positioning the brand (Keller, 2008). For instance, Pepsi used to position itself as the favored drink of the younger generation through its "Generation Next" campaign. BP leads to business legitimacy in the eyes of the media, the public, and the government.

Great positioning creates a belief and a desire that is fundamental to commercial success. BP is crucial for the development of the brand image in the mind of the consumers. A method used for brand introduction is defined as positioning activity. The decoding of a brand image in the target market depends on positioning strategies, carried out by an organization and the way a message is created and delivered to customers. The majority of marketing specialists claim that positioning depends to a greater extent on efficient marketing communications such as advertising and sales promotion. Positioning is affected by pricing, distribution and

the nature of the product (Dibb & Simkin, 1991). Positioning has emerged as a vital tool to understand how brands are positioned in the mind of the customer in relation to relevant attributes. It is based on functional attributes or the emotional associations with the brand which is the pursuit of differential advantage (Senugupta, 2005).

Positioning is the basis of everything done in business. No brand can be built effectively and no consistent image can be conveyed until a strong BP is developed. Positioning is the foundation of R&D, Product development, Branding, Pricing, Packaging, Advertising, Promotion, Merchandising, Publicity and Distribution channels (Diwan & Jain, 2009). Positioning a brand through a clear and consistent image-building campaign has been a cornerstone of brand marketing practice. Marketers spend millions of dollars each year to create and support brand images (Bhat & Reddy, 1998). Brands mean different things to different consumers. While brand management may strive to communicate a specific and consistent image to the market, consumers may develop different perceptions depending on their relationship-intensity with the brand (Lim, Arokiasamy, & Moorthy, 2010). The term brand refers to a name, term, symbol, sign or design used by a firm to differentiate its offerings from those of its competitors (Czinkota & Ronkainen, 2013). A brand is the sum of its equity, identity, positioning, personality, essence, character, soul, culture and finally the brand image (Upshaw, 1995). The concept of the brand can be traced back to product marketing where the role of branding and brand management has been primarily to create differentiation and preference for a product or a service in the mind of the customer (Upshaw, 1995). The development of branding over the past 30 years is characterized by layers of added value built around the core functionality of the product or service to create and maintain the distinction in a particular market.

Dumitriu (2012) said that brand management consists of defining the essential values of a brand and then of converting them into visible aspects of the brand like name, logo, and color.

According to Kotler (2005), Positioning is the act of designing the organization's offering and image to occupy a meaningful and distinctive competitive position in the target customer's minds. In order to develop positioning alternatives, it is helpful to determine the image and brand personality of the major competitors. Weaknesses of competitors on relevant attributes or personality traits can represent an opportunity to differentiate and develop advantage; strengths of competitors on important dimensions may represent challenges to exceed them (Aaker, 1998). As Aaker (1996) states, a brand position is the part

of the brand identity and value proposition that is to be actively communicated to the target audience and that demonstrates an advantage over competing brands. All products and all organizations have a position. An increasing number of organizations are trying to manage the positions occupied by their brands and are using positioning strategies to move to new positions in buyers minds and so generate an advantage over their competitors (Fill, 2002). BP is the development of a brand's position in the market by heightening customer perception of the brand's superiority over other brands of a similar nature. BP relies on the identification of a real strength or value that has a clear advantage over the nearest competitor and is easily communicated to the consumer (QFINANCE - The Ultimate Resource, 2009). Brand Positioning has to ensure the brand a distinct niche in the market. Positioning refers to how customers think about proposed and/ or present brands in a market (Perreault & McCarthy, 1999). According to Ries & Trout (2003), positioning products in a complex market can be one of a company's most difficult decisions. Urban & Hauser (1993) said that BP is critical for a new product. Not only must a new product deliver the benefits the customer needs, but it must be better than competitors. In developing a positioning, the marketer must consider four things:

- 1 The target market;
- 2 How the product is different or better than competitors;
- 3 The value of this difference to the target market; and
- 4 The ability to demonstrate or communicate this difference to the target market.

Ever since the brand literature commenced in the 1940s (Guest, 1942), there has been consistent recognition that branding offers organizations a means for differentiation in markets crowded with similar offerings (Aaker, 1991; Keller, 1993; Kotler, *et al.*, 2007). The pursuit of differentiation is explicit in brand definitions, which have most commonly been varying as stated by ((Aaker, 1991), p.7):

“A brand is a distinguishing name and/ or symbol (such as logo, trademark, or package design) intended to identify the goods or services of either one seller or a group of sellers and to differentiate those goods from those of competitors”.

A brand is different from a product. According to Kotler (2000), a product is anything which can be presented to a market for purchase, use or consumption that is possible of satisfying need or want. A product is made up of goods that have physical appearance, service, events, experiences, places, persons, organization, properties, information and ideas. A brand is,

therefore, more than a product, because it can have dimensions that differentiate it in some way from other products designed to satisfy the same need. These differences may be rational and tangible – related to product performance of the brand or more symbolic, emotional and intangible – related to what the brand represents. According to De Chernatony & McDonald (2003), a brand goes beyond physical constituents and what it stands for, it has some additional attributes which although may be intangible but are still important to consumers consideration. A brand has added value which differentiates it from a product (Doyle, 2002; De Chernatony & McDonald, 2003; Jones & Slater, 2003).

Jones & Slater (2003) sum up these added values as those that develop from experiences of the brand; those that arise as a result of usage of the brand, those that arise as a result of consumers associated with the brand, and those that arise from the appearance of the brand. According to Doyle (2002), these added values play a vital role in many consumers buying decisions, as brands are purchased from emotional motivation as well as functional motivation. One of the functions of a brand is that it serves as an identifier of product and services so that it can be differentiated from other products and services of the same class.

The brand is the most important success factor which should be matching with a firm's functional and emotional values as well as with the performance and psychological needs of consumers. The concept of Brand is a multidimensional construct (Chernatony & Riley, 1998). The authors extended a step towards developing a theory towards brand construct. There are 12 main themes which can be an accurate categorization of the broad range of definitions of the brand.

1. Legal Instrument;
2. Logo;
3. Company;
4. Shorthand;
5. Risk Reducer;
6. Identity System;
7. Image in consumers' minds;
8. Value System;
9. Personality;

10. Relationship;
11. Adding Value; and
12. Evolving Entity.

A brand-oriented company generates value and meaning via its brands. The ability to transform products into brands has internal significance for the organization itself and for the target group constitutes the fundamental process in companies. A product can be objectively described, explained, and analyzed while a brand with emotional and symbolic values is experienced and interpreted. A product can be compared and placed on a par with other corresponding products, while a brand with a personality and identity of its own provides a basis for a unique relationship. A product fulfills a function, while a brand symbolizes values and a meaning in a social context. So far as the company's performance is concerned, BP is considered as a core value. BP is effective only to the extent that it aligns with prospects' needs and interests and is viewed as worth spending their money on (Genglar & Mulvey, 2017). This section presents various definitions, important success factors, and background of BP.

### **2.3.1 Brand Positioning: Models and Processes**

Several theories have described the models and processes of brand positioning. A brief description of the models is included in the context of BP.

Chernatony & Riley (2010) presented a four-step process for building corporate brands. This process includes Stage 1, intelligence gathering - accumulating knowledge about the corporate brand. Stage 2, the strategy phase - focuses on defining the brand essence. This leads to Stage 3, communications - expressing the brand for internal and external audiences. Finally, Stage 4, the management phase - focuses on organizational commitment, time, skills and infrastructure to support the brand. The brand asset management model is one of the few models that could be useful in gaining external and internal intelligence.

Balakrishnan (2009) discussed the performance ingredient branding model which is based on functional and symbolic attributes. This model represents the tangible and intangible benefits. Janonis & Virvilaite (2007) focused on strengthening and developing the brand image which helps to retain a position in the market for an organization under the conditions of intensive competition. To make a positive brand image, authors have articulated an approach for the company which is focused on the refinement of marketing activity that is connected to form strategies of BP and retains a positive brand. An approach called consumers approach which

is based on a consumer's attitude towards the interpretation of the brand image and brand equity. The significance of brand in the market is influenced by company's ability to assess the fact how consumers interpret brand image and company's strength to manage the strategy of BP, adequately revealing brand's equity to a consumer. This study has identified factors of brand image. These include price, consumer image, brand personality, and experience. The study has adopted Keller's model (Kotler & Keller, 2012) of brand image which identifies the different phases of the process namely; identification of competitors, evaluation of the importance of decision making attributes, identification of competitors' position according to the most important attributes, identification of consumer needs, preparation of a positioning map, selection of the desired position and selection of positioning strategy. This study has analyzed that with a clear and consistent brand image, BP becomes the background of marketing activity.

Aaker & Joachimisthaler (2000) marked the process of brand image development in which brand identity includes brand essence (most important quality or feature), principle and extended identity which can be seen as the brand as a company, personality, a symbol and a good. The author analyzed that brand identity affects the BP which leads to brand image formation.

Bhattacharya (1997) has articulated that brand loyalty plays a vital role in marketing. The study examined how marketing mix elements such as prices and promotions relate to excess loyalty. This study has adopted the Dirichlet model (Goodhardt, Ehrenberg, & Chatfield, 1984) which offers a robust, parsimonious way of predicting repeat purchase behavior. The share of category requirements (SCR model) measures each brand's market share among the group of households that bought the brand at least once during the time period under consideration. This study investigated the deviations in SCR estimates regularly monitored by managers. As brand loyalty is inferred from repeat purchase so this model is adopted to study the trend of the penetration level of a brand which lends itself to a particular purchase frequency level. The study also administered positioning strategies based on two parameters; penetration and purchase frequency. The two brand positioning strategies involve niche and change of pace brands. Niche brands are those that fulfil the primary needs of a consumer segment who buy the brand with greater frequency and change of pace brands are those that appeal only on specific purchase occasions. Thus, by fulfilling the specific need for a segment, niche brands may enjoy higher loyalty levels than average brands, while the change of pace brands are those that appeal on specific purchase occasions. The change of pace

brands is primarily used to fulfil variety seeking needs. They would thus have a lower loyalty level than of niche brands. The study has also revealed the relationship between market share and brand loyalty which suggests that a brand's marketing inputs (price, promotion, and advertising) will affect its loyalty level only to the extent that its market share is affected. The study analyzed the trend of brand loyalty with the Dirichlet model (Goodhardt, Ehrenberg, & Chatfield, 1984) where consumers who normally purchase low priced brands will switch to high priced brands but not vice versa. As a result, the penetration levels of high priced brands will be higher than that of low priced brands.

Howard & Sheth (1969) suggested three levels of decision making in the organization for BP. The first level describes the extensive problem-solving stage. At this level, the consumer does not have any basic information or knowledge about the brand and does not have any preferences for any product. The second level has limited problem-solving. This situation exists for consumers who have little knowledge about the market and what they want to purchase. In order to arrive at a brand preference, some comparative brand information is sought. The third level is a habitual response behavior. In this level, the consumer knows very well about the different brands and can differentiate between the different characteristics of each product. This model explained the type of problem-solving behavior that consumers undergo while making a brand choice decision. This model explains the brand choice behavior over time and focuses on repeat buying behavior. Input Variables considered in this were symbolic (quality, price, distinctiveness, service, availability) and social (family, reference groups, social class).

The section covers the different models and processes of BP which are adopted in the organizations for BP activities.

### **2.3.2 Brand Positioning Factors**

Various authors have contributed to identifying the factors of BP. Some important studies that show the factors affecting BP are included in this section.

Kapferer (1992) suggests that globally positioned brands are likely to have special *credibility* and prestige. The notion of brand credibility was inspired by Erdem & Swait (1998). The authors examined consumer-based brand equity by drawing on signalling theory. Brand credibility has the ability to feel certain of the product position information embedded in a brand, depending on consumers' perceptions of whether the brand has the ability and willingness to continuously deliver what has been promised (Erdem & Swait, 2004). The

study revealed that brand credibility consists of two main components; trustworthiness and expertise. Trustworthiness refers to the willingness of firms to deliver what they have promised. Expertise refers to the ability of firms to actually deliver what they have promised. Since the trustworthiness and expertise of a brand are based on the cumulative impacts of marketing strategies and actions taken by a brand, it is not surprising that brand credibility reflects the consistency of marketing mix strategies through brand investments such as advertising. Brands may be seen as the source of advertisement and the positioning of a brand can thus enhance the attractiveness and credibility or vice versa (Heinberg, Ozkaya, & Taube, 2017).

Baek, Kim, & Yu (2010) explored that brand credibility and brand prestige affect the brand purchase intention. Under different product categories, the high and low self-expressive nature can be examined with the help of factors such as perceived quality; information costs saved, and perceived risk. Brand Credibility is the perceived notion of a brand that has the ability and willingness to continuously deliver what has been promised. The brand provides unbeatable benefits to both consumers and companies. For consumers, purchasing a credible brand assures a quality that they can count on. For companies, a credible brand means that marketing efforts will be more cost effective because of the heightened likelihood of message acceptance.

Janeszewska & Inch (2012) said that the positioning should be credible, significant to the audience, differentiating from the competitors and allowing for organization's growth. Brand credibility is based on the brand's consistency in keeping the promises it makes. When a brand's actual potential and capabilities are not supported, the audience is inevitably disappointed and the brand loses its credibility. Lack of credibility is also reflected in the audience's involvement in the brand which may be of key importance to place brands. It is extremely difficult to regain lost credibility, the process is very consuming and expensive.

According to Bhat & Reddy (1998), the symbolic values may relate to a consumer's personality or self-concept that includes fashion-ability, prestige, and exclusivity. This study mentioned the signalling theory to support the brand credibility factor. Signalling theory also suggests that credibility is a key determinant of a brand signal for conveying information effectively. Brands as market signals improve customer perceptions about brand attribute levels and increase confidence in brands' claims (Erdem & Swait, 1998). This implies that brands can serve as credible signals because they may include the cumulative efforts of prior marketing communication strategies. The symbolic meaning embedded in brands can often

be used to represent the prestigious value of BP, referred to as brand prestige (Steenkamp, Jan-Benedict, Alden, & Batra, 2003).

Vazquez, Rio, & Iglesias (2002) indicated that there are four basic dimensions of brand utilities. These include product functional utility (comfort, safety, duration), product symbolic utility (Aesthetics), brand name functional utility (Guarantee), brand name symbolic utility (Social identification, Status, and Personal Identification). The study stated that consumer-based brand utility is the overall utility that the consumer associates to the use and consume the brand including associations expressing both functional and symbolic utilities.

According to Jamal & Al-Marri (2007), brands have personal image attributes (a brand can have a youthful and friendly image) which are different from functional or utilitarian brand attributes (these describe the tangible costs and benefits such as performance, price and product quality). The personal images reflect stereotype of generalized users of that brand and are determined by a host of factors such as advertisement, price and other marketing and psychological associations.

Gray *et al.*, (1998) stated that *brand personality* is certainly a key facet of brand identity. Aaker (1997) has developed a process of building a scale for measurement purposes which defines brand personality not as a part but as a whole the set of human characteristics associated to a brand. Further, this process has been adopted by various researchers (Gray *et al.*, 1998) to show that brand identity relates to the traits of human personality. However, inner values, physical traits, and pictures of the typical user are also 'human characteristics' that can be associated with a brand.

A brand personality can be defined as the face of the brand, and the human characteristics associated with the brand (Aaker, 1996; Upshaw, 1995). According to Aaker (1997), the brand personality tends to serve a symbolic or self-expressive function or as the set of human characteristics associated with the typical user of a brand. A brand with a personality tends to be more memorable and interesting than a brand which is nothing more than a set of attributes (Aaker, 1998).

Ahmad & Thyagaraj (2017) examined the structure of brand personality dimensions in India. The authors developed a brand personality scale in India and compared it with Aaker's Brand Personality scale. The results revealed that brand personality in India can be described in six dimensions. These include sophistication, excitement, popularity, competence, trendiness, and integrity.

The concept of brand personality must never be lost (Azoulay & Kapferer, 2003). It is the unique set of human personality traits. Aaker (1997) has stated that brand personality identifies 5 dimensions (excitement, sincerity, competence, sophistication, and ruggedness). Various studies examining brand personality follow Aaker (1997) and focus on the factor associated with a brand. The study has created a generalizable measurement scale to measure the five brand personality dimensions. These are sincerity, competency, ruggedness, sophistication, and excitement. According to this study, brand personality is considered as an active participant in the consumer brand interaction. The Aaker's (Aaker, 1997) approach is the most acceptable measurement of brand personality and support for the tighter interpersonal (connected with relationships) view of brand personality (Azoulay & Kapferer, 2003).

Conejo, Wooliscroft, & Inch (2017) applied Rasch Modelling to the brand personality construct and redefined as the set of human mental traits consistently associated with brands across situations and time. It is the first step towards actual brand personality measures, these scales lay the foundations for refinement. Niros, Pollalis, & Niros (2017) said that brand personality should be a continuous, persistent and hard effort by using integrated marketing communications.

Ekinci, Calderon, & Siala (2016) examined the product price and product types moderate the relationship between personality traits and intentions to complain in the retail industry. The research model is tested by logistic regression analysis on two groups of consumers who report passive and active complaining intentions. The study reveals that conscientious consumers who are open to new experiences tend to have higher intentions to complain. Whilst, price levels (low/ high) and product types (grocery, clothing, and electronics) improve the predictive ability of the complaining behavior.

Erdem & Swait (2016) discussed that the *consumers' perceptions* are pre-trial beliefs about a product. BP cannot be measured by attribute measurements alone. It must include measurements of consumer perceptions of the value and benefits attained from using the brand. Similar viewpoints are also expressed by Sondoh *et al.*, (2007). They suggest that it is very important to understand consumer perceptions, expectations, needs and goals.

According to Genglar & Mulvey (2017), BP is effective only to the extent that it aligns with consumers' needs and interests and is viewed as worth spending their money on. The study detects three distinct segments of potential high-end adopters of a next-generation cellphone

with innovative design features. The results offered insights to guide go to market branding strategy, and related product line, pricing, and positioning decisions.

Niros, Pollalis, & Niros (2017) said that consumers are characterized by a great deal of brand attachment find it very difficult to switch the brand because they have developed trust towards the brand and feel emotionally involved. Consumers being attached to the brand are the best and the cheapest salespersons, since they provide to other potential buyers with valuable, costless and trusted positive information necessary to entice trial and brand adoption.

After purchasing, sometimes consumer is still doubtful about the purchase decision of buying the product. This is known as Dissonance situation. O' Neill & Palmer (2004) examined the possible relationship between post consumption dissonance and consumers' time elapsed perceptions of service quality. The authors suggested that the degree of post-consumption dissonance experienced would be inversely related to both initial ratings of service quality and subsequent time elapsed ratings.

Dissonance theory suggests that where there were dissonant elements arising from the original decision to purchase (the negative aspects of the service consumed, and the positive elements of the alternatives not consumed), there would be post-purchase tension in the consumer's mind regarding the negative aspects of the product or service consumed (Festinger, 1957; Mercer, 1998; Oliver, 1997). This may influence the future perceptual rating about the product.

According to Diwan & Jain (2009), for the marketer, it is necessary to know the consumer perceptions regarding the products that they perceive as the substitutes. Perceptual mapping technique helps the marketer to know about the consumer perceptions and preferences about the organization's own products in relation to competitor's products.

Kumar (2017) said that companies are interested not only in the product but also the perception and behavior of the consumers because it gives them the right orientations for brand positioning. In this liberalized and competitive market, both foreign and Indian companies must understand consumer's motivation towards their brand choice and consumer perception is essential. Clark, Li, & Shepherd (2018) contributed to the emergent literature on the critical role of cognition in decision making about markets.

Gwin & Gwin (2003) explained *the price of the product* with the help of Lancaster model (Lancaster, 1966) that the consumer derives utility based on the levels of product attributes existing in the brand that the consumer chooses in a budget constraint situation. The choice is subjected to the consumer's budget constraint which must be greater than or equal to the price in combination with the quality of brand purchased.

Lancaster's model (1966) of consumer behavior describes different contributions like:

- An explanation for the role of price in determining the demand for differentiated products.
- A framework for estimating the sensitivity of demand to change in the relative price of a brand.

Carpenter, Glazer, & Nakamoto (1984) revealed that Product differentiation is done through *product attributes* that are meaningful, relevant and valuable. Many brands successfully differentiate themselves from competitors by focusing on the attributes that appear to be valuable but on closer examination irrelevant attributes might be useful when a competitor already focuses on the determinant attribute. Then, the irrelevant attribute would be perceived as an additional benefit to the consumer only if the consumer perceives that the attributes are both meaningful and unique.

Aaker (1992) explained that an important attribute is one that is considered as a benefit towards the satisfaction of consumer needs. Attributes can be classified as being concrete or abstract. Mowen (1993), p.771 defined product attributes as "The characteristics or features that an object may or may not have". With the rising popularity of technological attributes, increasingly more customers are enjoying personalized, autonomous, and optimized services provided by smart and connected objects.

According to Dumitriu (2012), the brands are seeking to provide both tangible and intangible benefits to the customers, so that they adhere to the brand's ideals. The functional attributes are related to meeting the basic functions of the product, for as long as possible. Therefore, the product must be capable of providing the utility for which it was designed, projected and produced. The additional services represent the additional functions that the product is offering, in order to make the product more desirable: the warranty, free delivery, information and consultancy services and payments in installments. The brand is represented by those product features (of fame, pride, and affiliation) that are passed on to the client, at the moment of purchase or of consumption. The execution of the marketing activities is taken

place only at the level of additional services and of the brand. The functional attributes are well known by the consumers and they cannot help the product differentiation, except for new or high- tech products.

Janeszewska & Inch (2012) said that BP should be identified in such a way that on the functional and emotional level alike, it refers to arguments and benefits of importance to the target group. Significance on the emotional level is more difficult to define yet key in building up a robust brand position in the target group awareness.

Mugge, Dahl, & Schoormans (2018) said that consumers often purchase consumer durables without using these products beforehand. Product appearance is then one of the factors that consumers use to form inferences about the experience and credence attributes of consumer durables. For companies, it is important to successfully manage these inference processes of consumers to create a competitive advantage. However, a comprehensive understanding of the relationships between product appearance and the inferences about products' appearance and credence attributes is lacking.

Aaker *et al.*, (2001) discussed the brand as an *organization* and its variables; technological innovation and concern to consumers. Urde (2003) stated that corporate brands must reflect organizational values.

Senugupta (2005) said that the brand served to identify a product and to distinguish it from competition contributes to *competitors' attributes*. The challenge today is to create a strong and distinctive image. Positioning is the pursuit of differential advantage in terms of price and quality. Prasnikar *et al.*, (2008) explained the case of Gorenje, a European manufacturer of household appliances which is based on the coordinated development of the key core capabilities that explain that competitive advantage and first mover advantage. Firms without well integrated technological and marketing capabilities may not be able to reap their first mover advantage.

According to Janeszewska & Inch (2012), brand differentiation may refer to the competition or the product category. It is worth remembering that differentiation in a strategy when a brand leaves a category or a brand new category is created is accompanied by a high risk of failure. This is why competition is more frequently used as a point of reference in identifying positioning. Positioning should differentiate the brand from other alternative brands in the market. In this context, brand positioning may be perceived as a process aimed at creating differences between brands.

Choudhury (2018) said that customers prefer the brand if they can differentiate the product from the competitors and if they believe that the product uniquely meets their needs will select that brand.

Mahmoud (2018) investigated the influence of applying green marketing mix elements (product, pricing, distribution, and promotion) in Sudan on purchase intention. Green marketing includes a broad range of activities such as product modification, change in the production process, modification in advertising and change in packaging. Statistical analysis revealed that there is a significant relationship between green marketing mix elements and consumers' purchase intention.

Diwan & Jain (2009) demonstrated Product Superiority by comparing it directly with its competitors. Some companies adopt aggressive positioning strategy to justify that how their brand is superior by comparative advertisements. In comparative advertisements, a product is compared with the competitor's product which is not named but can be recognized by people. Then after comparison of attributes, the superiority of 'our' product is justified.

According to Bivainiene (2007), brand image depends on four major factors. They are loyalty, recognition, value, and expansion. Brand image is related to contiguity (touching) functional and emotional elements, which help an organization in communication with consumers. The study is associated with BP and consumers' loyalty. It is required to control the organization's marketing communication process when advertising, public relations, sponsorship, and personal selling point towards long-term brand image leading intention.

Jamal & Al-Marri (2007) articulated that self-image congruence can influence brand preference, brand satisfaction, and purchase intentions. The study presented the factors of customer perception as self-concept that interacts with product user image. Different segments of customers are supposed to exhibit different levels of self-image congruence. Customer perception includes the customers understanding of and knowledge about the product attributes and performance in a product category. Customers may focus their attention more towards the functional qualities and performance outcomes. Consumers strongly rely on their memories and experience during their decision-making process (Herz & Brunk, 2017). Self-image congruence was a strong predictor of an important post-purchase phenomenon of brand satisfaction. Brand satisfaction is described as the full meaning of one's expectations and is widely recognized as a key influence in the formation of customers future purchase intentions of that brand. Greater the self-image congruence with a brand, greater

will be the satisfaction with the brand. Brand satisfaction is the feeling a customer has towards a brand after it has been used.

Eisingerich & Rubera (2010) revealed brand commitment is affected by brand innovativeness, customer orientation, self-relevance, and social responsibility. According to their study, intensive competition exists within the market having wide variety and choice for customers in each product market. Due to the highly competitive nature of the market, many marketing managers realize that having a strong corporate brand could be an essential part of a competitive advantage for a firm. Nowadays, firms are increasingly employing global brand management strategies for the effective coordination of their global activities. The authors have examined that there is an influence of the culture that could be seen on the impact of four key brand management elements (brand innovativeness, brand customer orientation, brand self-relevance, and social responsibility) on customer's commitment to a brand. The global brand managers aspire to optimize BP and strengthen customers' brand commitment across cultures. It is examined that the brand building process is based on in-depth interviews with leading-edge brand consultants. To position a new product in the market, we need to build a model of the positioning of a brand from scratch. For this, there is a consideration of the impact of the organization's internal and external orientation. Organizations utilize cross-functional teams, a strong customer orientation and a brand supporting culture to maximize the success of their brand. Responsibility for brand development is less likely to reside with one person and more likely to be a team representing the main functional areas. A new brand should consider what the competitors are doing, then, how to differentiate and deliver something which is going to give us a meaningful competitive advantage. A strong brand is the one that consumers know and perceive as distinguished from competing brands (Lee, O'Cass, & Sok, 2017).

How a brand is recognized in the market-place is based largely on its personality, but what it means in someone's life is derived from its positioning. Perceptual mapping is a commonly used tool for determining the position of a brand in the marketplace (Ekhlassi, Reshadi, & Anfeng, 2016). It is a visual representation of consumer perceptions of the brand and its competitors using attributes that are vital to consumers. The author also identifies four important steps in developing a perceptual map. The steps include findings set of competing brands, identifying important product attributes that consumers use when choosing between brands, conduct market research and finally plot the brands on a two-dimensional map.

The review of literature summarizes important definitions of BP, factors of BP and models and processes of BP. Table 1 summarizes the various factors identified from the review of literature of BP along with references. As shown in Table 1, column 2 states the factors, column 3 describes the definition of each factor. Column 4 presents the variables identified and column 5 presents the author(s) name(s).

**Table 1: Brand Positioning Factors (Source: Author)**

S.No.	Factors	Description	Variables	Author(s)
1	Product Attributes	The characteristics or features that an object may or may not have.	Concrete – Tangible	(Alden, D., Nariswari, A., 2017; Mowen, 1993; Bivainiene, 2007; Aaker & Keller, 1998)
			Abstract – Intangible	(Aaker, 1992; Aufreiter, Elzinga, & Gordon, 2003; Lee & Liao, 2009; Wilke, Johnson, & Chin, 2018; Lee & Nguyen, 2017; Karamaki, Lahtinen, & Tuominen, 2017)
2.	Competitors' attributes	Activities that create superior value above its rivals. Characteristics of competitors – Competitive Advantage, First Mover Advantage, Competitive intensity, market turbulence, technological turbulence	First mover advantage	(Diwan & Jain, 2009; Wright & Calof, 2006; Kuuru & Tuominen, 2016)
			Competitive advantage	(Mahmoud, 2011; Urde, 1999; Prasnika, Rajkovic, & Vehovec, 2008; Boatswain & Kalafatis, 2017)
3.	Organizational attributes	Attributes that constitutes Innovation, concern for consumers and top management support	Innovative technology	(Aaker <i>et al.</i> , 2001; Aaker & Joachimsthaler, 2000; Aaker, 2004a; Urde, 2003; Hasgall & Ahituv, 2018; Vera, 2018; Brexendorf, Bayus, & Keller, 2015)
			Consumer concern	(Aaker <i>et al.</i> , 2001; Alden & Nariswari, 2017)
			Top management support for Promotions	(Urde, 2003; Meena, 2017; Iyer, Davari, & Paswan, 2018)
4.	Credibility	The level of being believed or trusted	Expertise	(Erdem & Swait, 1998; Kapferer, 1992; Newell & Goldsmith, 2001; Erdem & Swait, 2016)
			Trustworthiness	(Malshe, 2009; Erdem & Swait, 1998; Eisingerich & Rubera, 2010; Erdem & Swait, 2016; Napoli, Dickinson, Beverland, & Farrelly, 2014)
			Consistency	(Bhat & Reddy, 1998; Erdem & Swait, 2016)
5.	Brand	Brand personality is a	Sincerity	(Aaker, 1997; Azoulay

	Personality	phrase used for the humanistic features or emotions that differentiate a brand.		&Kapferer, 2003; Chang & Kim, 2018)
			Competence	(Aaker, 1997; Diwan & Jain, 2009; Ahmad & Thyagaraj, 2017)
			Sophistication	(Aaker, 1997; Plummer, 1985; Ahmad & Thyagaraj, 2017)
			Excitement	(Aaker, 1997; Kotler, 1991; Lee, Hansen, & Lee, 2018)
			Ruggedness	(Aaker, 1997; Rutter, Chalvatzis, Roper, & Lettice, 2017)
6.	Price of the product	A benefit that will buy a definite quantity, weight, or another measure of a good or service.	Monitoring competitors pricing	(Prasnikar, Rajkovic, & Vehovec, 2008; Parguel, Delecolle, & Florence, 2016)
			Fast price response	(Gwin & Gwin, 2003; Krishnan & Hari, 2011; Gengler & Mulvey, 2017)
7.	Customer Perceptions	Consciousness about brands. Perceived-value customers seek from the purchase of a good or service.	Brand Recalling	(Diwan & Jain, 2009; Lim, Arokiasamy, & Moorthy, 2010;Heinberg <i>et al.</i> , 2017)
			Social and esteem value perceptions	(Jamal & Al-Marri, 2007; Baek, Kim, & Yu, 2010; Gengler & Mulvey, 2017)
			Quality perceptions	(Erdem & Swait, 2004; Lee & Liao, 2009; Singh, Kalafatis, & Ledden, 2014; Abbey, Kleber, Souza, & Voigt, 2017; Casidy, Nyadzayo, Mohan, & Brown, 2018; Thanasuta & Metharom, 2015; Chien, Yu, Wang, & Kuo, 2014)
			Associations	(Diwan & Jain, 2009; Lee, O' Cass, & Sok, 2017)
			Consumer perceived risks	(Jamal & Al-Marri, 2007; Mitchell & Boustani, 2015)
			Cognitive Dissonance	(Festinger, 1957; Oliver, 1997; O' Neill & Palmer, 2004; Liang Y. J., 2016; Wu, Wei and Tseng, 2018; Davvetas & Diamantopoulos, 2018)

## 2.4 Marketing Intelligence

This section describes various definitions, models, sources of MI. It establishes the role of MI in BP and the significance of this research. As there is no widely adopted definition of MI, various authors have contributed their views on MI. Some of the definitions of authors are presented here.

MI is defined as “the process of acquiring and analyzing information in order to understand the market (both existing and potential customers); determining the current and future needs, attitudes and behaviour of the market; and assessing changes in the business environment that may affect the size and nature of the market in future” (Aaker, Kumar, & Day, 2007).

Kotler & Keller (2012) defined the MkIS as "an interacting structure of people, equipment and procedures to gather, sort, analyze, evaluate and distribute timely and accurate information for use by marketing decision makers to improve their marketing planning, implementation, and control".

Ali & Rao (2016) said that MkIS is widely used for decision making that saves time and prevents rework as it provides information to all marketing activities regarding planning, promotion, sales of goods and services for both customer satisfaction and organizational goals.

In addition, MI provides the decision maker- the ability to comprehend understand, analyze and assess the inside and outside environment thoroughly related to an organization's customers, competitors, markets and industry to enhance the decision-making process. This would require the integration of competitive intelligence (CI), market research, market analysis, business and financial analysis information (Aaker, Kumar, & Day, 2007). According to Talvinen (1994), MI is defined as “information obtained from external sources that can be used for the proper identification of problems, changes, and opportunities in the external marketing environment”. Terms like CI, MI is commonly used interchangeably (Calof & Wright, 2008).

MI is the collection, analysis, and interpretation of relevant internal and external marketing information. It is the process that makes it possible for a firm to learn about, understand and deal with new challenges. MI is, therefore, a future-oriented activity, that helps an organization to cope up in the market for BP. It includes all ways an organization acquires and uses information. It is comprised of all kinds of market and marketing research, collection and analysis of internal data, competitive analysis, analysis and reverse engineering of competitor's products, understanding how and where to add value to customers and the process of synthesizing large amounts of gathering information about the industry and business environment informally. This environment can be divided into a number of areas of study. These include economic, political, social, technological,

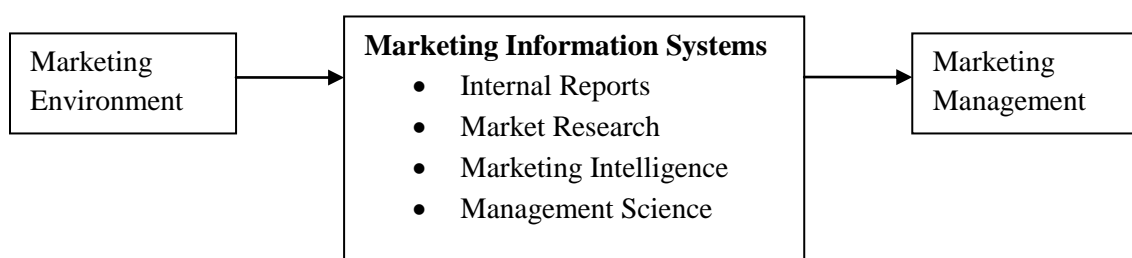
infrastructural, ecological, legal and demographic. MI can be comprehensive or as narrow as a company may want it to be (Jenster & Soilen, 2009).

“A MkIS is a computerized system that is designed to provide an organized flow of information to enable and support the marketing activities of an organization” (Harmon, 2005, p.146).

Pride & Ferrell (1987) defined MkIS as “the framework for the day to day managing and structuring of information gathered regularly from sources both inside and outside an organization” (p.327).

MI support the marketing function and plays a crucial role on the corporate level and in establishing CI since it presents a good platform to base an organization’s overall strategic and tactical intelligence capabilities (Wright & Calof, 2006). The academic literature has developed the concept of the MkIS as a guide to meet these marketing information needs and extract MI for BP. Research into and modelling of the MkIS is intended to allow relevant information gathering techniques to be instituted and managed by the marketing practitioner.

According to Kotler & Keller (2012), “MkIS is defined as a continuing and interacting structure of people, equipment and procedures to gather, sort, analyze, evaluate and distribute timely and accurate information for use by marketing decision makers to improve their marketing planning, execution, and control” (p.65). Figure 1 presents the MkIS that extracts the data from the market and convert it into information for BP decisions.



**Figure 1: Marketing Information System (MkIS) (Adapted from Kotler & Keller, 2012).**

The firms have functional information systems (IS) that consist of Marketing IS (MkIS), Manufacturing IS, Finance IS, Human Resource IS and Information resource IS. The firms have to study the manager’s needs and design MkIS that really meets their needs (Kotler & Keller, 2012). Kotler & Armstrong (2010) pointed out that there is no one MkIS that will serve all organizations because of the unique information requirements of different

organizations which are composed of sub-systems and are built over a long period of time. From the marketing management point of view, MkIS is a tool for managing marketing information, marketing research, modelling marketing transactions, decision making in marketing, planning marketing strategy and tactics, budgeting, analyzing different courses of action and last but not least reporting and control (Li, 1997; Higby & Farah, 1991).

Without good marketing information, managers have to use intuition or guesses and in today's fast-changing and competitive markets, this invites failure (McCarthy & Perreault, 1993). There are some firms which lack information sophistication and do not have a marketing research department. Moreover, there are some managers who complain about the lack of information, getting the needed information late and getting too much information that they can't use. All the firms around the globe must organize the information and disseminate in a timely manner.

The general system elements for any MkIS include data acquisition system, database management system, graphical and statistical analysis tools, model base, directories (specific data elements or information classification schemes) and retrieval systems (Amaravadi, Samaddar, & Dutta, 1995).

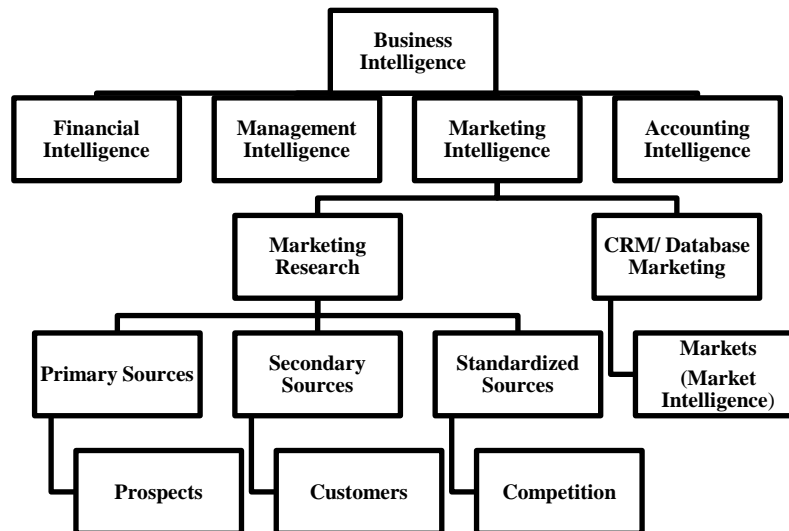
All of these descriptions envisioned the MkIS as an information processor, gathering data and information from the marketing environment, processing that data and information and providing the results to marketing managers in the forms of management information. The managers would act on the information and make decisions that affect the environment as well as the firm's operations (Li E. , 1995).

According to Kotler & Keller (2012), the input to MkIS is marketing environment and output is the management of marketing. Market Research was the starting point of the MkIS literature. Brien & Stafford (1968) established that market research was unable to meet all marketing informational needs and that a more wide-ranging approach to marketing information was required, namely the MkIS.

In the early days of literature, the term MI or sometimes marketing information described either the entire MkIS or all the external information inputs (Kelley, 1965; Kotler, 1966). It was usually associated with the design of a department to manage the information gathering, analyze and disseminate. To implement the overall MkIS model, internal reporting is emphasized and sub-systems are analyzed. Recently, marketing intelligence has been

conceived as the process of gathering tactical competitive information (Junnarkar & Verma, 2017; Trim & Lee, 2008) and analyzing the marketing environment (Slimani & Labo, 2013) with the help of MkIS. According to Perreault & McCarthy (2003), A MkIS is an organized way of continually gathering and analyzing data to provide marketing managers with the information they need to make decisions. Perreault & McCarthy (2003) added, that in some of the companies, a MkIS is set up by the marketing managers, whereas in other companies the system is set up by a group that provides information to every department inside the firm. Wee (2001) in his study stated that conventional marketing research is increasingly viewed as being too narrowly focused on tactical and operational issues. It is characterized by an overriding concern with data rather than analyzing information and the research is often conducted in response to an apparent market threat or opportunity rather than ongoing business. According to this study, the source of MI; Internet demonstrates the market intelligence process, techniques, and procedures. There are offline and online sources of information. The intelligent use of the internet is beneficial for both market research and intelligence. MI is much more strategic, result-driven and is primarily qualitative in nature, exploits secondary and primary sources and taps a wider variety of networks for information such as customers, competitors, suppliers, former employees, electronic databases and the mass media.

According to Aaker, Kumar, Day, & Leone (2009), MI is a component of business intelligence (BI) which is comprised of several other components including financial and accounting intelligence. Several related terms to MI include CI, market intelligence, competitor intelligence, customer intelligence, strategic intelligence and technical intelligence (Pirttimaki & Lonqvist, 2006). Figure 2 shows that the MI is component of BI which further comprises of marketing research and CRM/ Database marketing.



**Figure 2: Diagram showing Marketing Intelligence is the Component of Business Intelligence (Adapted from(Hosta, 2011)).**

MI is used to aid in marketing related decisions. As per Huster (2005), p.456, MI is "the ability to fully understand, analyze, and assess the internal and external environment associated with customers, competitors, markets, industry and use the acquired knowledge for long and short-term strategic planning".

Ashill & Wright (2011) established that market research was unable to meet all marketing information needs and that a more wide-ranging approach to marketing information was required namely, the MkIS. Ashill & Wright (2011) differentiated between MkIS and MIS by stating that the focus of marketing and MkIS is on the customer and the business environment, while the Management Information System (MIS) tends to focus on management control information using computer technology.

Popovic & Yeoh (2016) suggested that implementing a BI system is a costly, resource-intensive and complex undertaking. A cross-case analysis suggests that organizational factors play the most crucial role in determining the success of a BI system implementation.

Park, (2018) said that the organizations retain their strengths in integrated manufacturing IT. Organizations use globally standardized IT to keep up with global ISs in order to remain competitive. Borba & Akemi (2018) highlighted the importance of Information for brand crisis management.

Keller (2009) explained the customer based brand equity model that emphasized the importance of understanding consumer brand knowledge. Specifically, the brand resonance

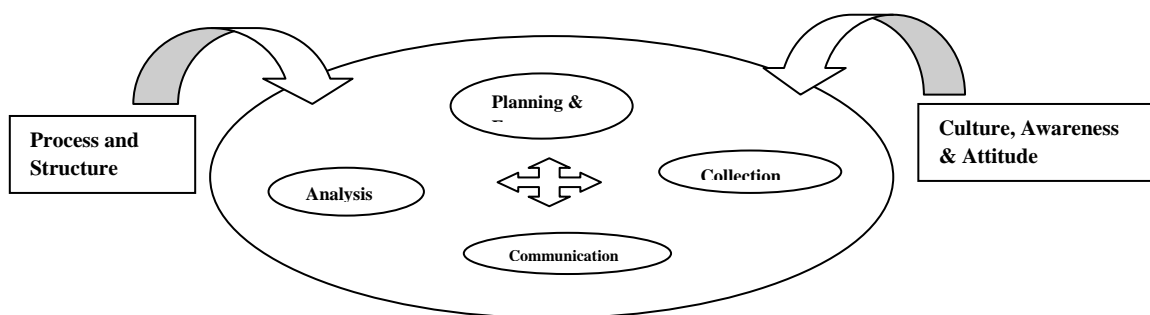
pyramid is reviewed as a means to track how marketing communications can create intense, active loyalty relationships and affect brand equity. According to this model, integrating marketing communications involves mixing and matching different communication options to establish the desired awareness and image in the minds of consumers. The versatility of online, interactive marketing communications to marketers in brand building is also addressed.

### 2.4.1 Critical Elements of Effective Marketing Intelligence Operation

The three elements of MI operation have been identified which are very important in any organization. These three elements help in deciding the effective MI operation. The degree of their effectiveness varies from company to company.

Wright & Calof (2006) have identified four processes within intelligence (planning/ focus, collection, analysis, and communication) where important influencers for success are culture/ awareness/ attitude and process- structure. The authors proposed that researchers need to understand each of these parts individually and how it works in practice. Figure 3 presents the critical elements of MI operation.

In planning focus, MkIS tool is used to gather the information, disseminate to all the employees for better decision making regarding BP.



**Figure 3: Critical Elements of an Effective Marketing Intelligence Operation (Adapted from (Wright & Calof, 2006)).**

In Figure 3, it is examined that organization culture and process-structure affects the intelligence planning focus. This implies intelligence dissemination will differ from company to company.

Calof, Arcos, & Sewdass (2018) identified European CI practices and compared the results of the current study to the 2006 year study to see if there had been changes in CI practice and compared the results to foresight practice. The respondents were provided with a list of five different types of structures for intelligence (including having no formal structure) and

different titles of the unit. The two most dominant CI structures were centralized units in the organization followed by a mixed approach where there was a centralized unit and also additional intelligence activities conducted throughout the organization. It appeared that over the ten years there had been an increase in formal CI activities.

Sarma (2018) said that culture is significant in developing consumer behavior. Companies that have succeeded in understanding the dynamics of culture have been able to withstand the test of time in developing as successful companies. Culture shapes the way we lead our lives. Therefore, Culture determines the consumption pattern of consumers.

In technology-intensive companies, managers conceptualize and perceive "intelligence" variables in successful and unsuccessful new product development (Haverila & Ashill, 2011). There is a strong role of intelligence variables which play in differentiating between successful and unsuccessful new product development outcomes. Managers in technology-intensive companies rely on two broad types of intelligence; technical production and market information during the new product development stage. The importance of a market-orientated business culture is crucial to business performance because it focuses the organization on continuously collecting external information about customers' needs and competitors' capabilities, and how to use this information internally and inter-departmentally to create superior customer value over time. Particularly in industrial and manufacturing companies, MI has a very important role in the brand positioning of their upcoming product.

Ramayah *et al.*, (2011) revealed that MI can be extracted out if there is a good market orientation which has a significant effect on organizational performance and service quality. This study presented that service quality has a significant effect on organizational performance. The service quality partially mediates the relationship between market orientation and organizational performance. The authors stated that MI focuses particularly on competitors, customers, consumer spending, market trends, and suppliers. It tends to offer a broader view of markets including business and sector data such as market sizing, segmentation, and data sharing.

Wee & Leow (1994) found that CI is a crucial function of today's economy. To analyze competitors business performance ethically, CI came into the picture. CI is found to have an impact on corporate performance by making a strategic triangle of the company, customers, and competitors. From this strategic triangle, MI is extracted out from the end of customers as well as the competitor(s). There is also an effect of CI on product lifecycle stages. The

purpose of gathering CI is to provide benchmarks, defensive intelligence to avoid surprises and offensive oriented intelligence to identify opportunities.

Junnarkar & Verma (2017) deals with various aspects of SAP as an ERP tool and how it helps to achieve overall operational improvements. It is capable of integrating multiple business modules, with each module representing a specific business function. Various modules in SAP application update and process transactions in real time mode. It has the ability to be configured to meet the varied needs of the business.

Cvijanovic, Mihailovic, & Nikolic (2014) given the four main components of MkIS- 1) interface with consumers 2) software 3) Database and 4) System support. The MkIS provides an organized and timely flow of information, necessary in work of decision- maker in marketing. When it finds, it does not imply just the equipment, software, databases, but also to procedures, methodologies, and people, as inevitable elements for the system success in fulfilling their organizational goals. The MIS encircles a wider set of activities from simple transactions processing to a complex strategic decision making in the field of marketing.

#### **2.4.2 Sources of Marketing Intelligence**

This section provides various informational sources of MI given by few studies as described below. The sources of MI are important for intelligence generation and accurate information dissemination.

Marshall & LaMotte (1992) provided the MkIS informational resources as:-

- External Data which comprises of competitive data (demographics, sales, resources, market share, financials), Economic data (bond prices, government policy, government statistics), Industry Data (growth, forecasts, entry barriers, foreign threats).
- Internal Data which comprises of Customer Data (Buying History, Size, Location, Personal Information) and Company Data (Sales, Inventory, Resources, Market Share, Financials).

Lackman *et al.*, (2000) and Bernhardt (1994) identified sources of MI such as internal and external. Internal sources include customers, manufacturers, research and development, sales force, physical evidence, sales quotes, trade shows, and new hires. External Sources include client meetings, dealers, distributors, customers, business associates, market research projects, suppliers, online services, periodicals, and government publications. The authors have presented the value of MI in focusing marketing and sales initiatives, determining

market potential, forecasting product demand, aiding sales forecasting, improving local MI, inputting to research and development initiatives, defining buyer behavior variables, guiding product and distributing adjustments and improving sales conversion rate.

Fleisher (2008) seeks to show how increasingly popular use of data and information acquired from open sources impacts competitive and MI. It describes the current state of the art in analysis efforts of open source intelligence in business/commercial enterprises, examines the planning & execution challenges organizations are experiencing associated with effectively using and fusing open source intelligence in MI/ CI decision making processes and provides guidelines associated with the successful use of open source intelligence.

Kursan & Mihic (2010) analyzed that the Internet has a great role in marketing research and its implications on business decision making processes. Although companies conduct a variety of research methods in an offline environment, the study aims to stress the importance of web opportunities in conducting web segmentation and collecting customer data. Due to the existence of different perceptions concerning the role of the Internet, this study tries to emphasize its effort of an interactive channel that serves the function of not only an informational nature but as a powerful research tool also. The authors discussed the role of the Web in marketing research and everyday business decision-making. It stressed the existence of various data types, different data sources as well as a number of methods and techniques of data collection that can be useful when conducting web research. The study has put special emphasis on the importance of web segmentation that enables the identification of homogeneous segments and delivery of needed information to certain target groups. From this perspective, several practical applications of different BI tools and technologies in the marketing context have emerged. For instance, a website in everyday business operations serves as a communication and sales channel. In the case of market segmentation on the basis of buying habits, managers must pay attention to the corporate Web content, structure and navigation if they want to present the company in the best possible manner. It is important to conduct marketing research on the Web and to implement Web analytics or other methods frequently, as to collect the real-time data. It is analyzed that it is important to encourage companies to use the Web as an interactive medium for establishing a connection with their customers.

Dou *et al.*, (2010) discussed that MI can be done on the basis of various search engine result pages to differentiate brands from competitors in cyberspace which remain a critical, puzzling issue in e-commerce research. Al-allak (2010) said that Internet has not yet been

recognized as an important source of MI despite having the benefits of providing much of the necessary data for good decision making quickly and at a lower cost compared with many other sources. The author has put emphasis on the informal MkIS which concentrate on immediate operating data at the expense of external data. The findings of the study show that the design of MkIS is important since the quality of MkIS affects the effectiveness of decision making for buying products and ultimately impacting BP.

Jun & Park (2017) described that online web searches had played crucial roles in influencing consumers' purchase decisions. Web search traffic information enables researchers & practitioners to better understand consumers regarding their preferences & interests, among other things.

Tripathi (2017) highlighted the importance of internet advertising that it is increasing in various media day by day. Internet advertising includes all the benefits of print media and visual media. It was because of the better interactive features. Internet and other traditional media offer more for marketing strategy.

Chiang & Yang (2018) revealed that retailers have long collected data to learn about customer purchasing habits; however, many currently do not use data mining analytics to increase marketing effectiveness by predicting future buying patterns and potential customer lifetime value, particularly to important segments such as loyal and potential repeat customers.

Mandal (2018) said that companies require information about their customers to attract them, influence them and build relationships. Companies apply a number of direct marketing channels raise concerns about the different unfair practices followed by direct marketers. Direct marketing channels allow companies to collect information and intelligence about customers and to influence them. However, companies need to protect their customers to build long-term relationships.

### **2.4.3 Usage of Marketing Information System (MkIS)**

Amstutz (1969) attempted to understand the current state of market-oriented management information systems in Fortune 500 companies in the USA. While this research was somewhat limited by a low response rate (83 responses or 17%), results suggest that 39 companies had some sort of formalized MkIS, while a further 24 claimed to have a system

under development. However, only 15 companies had the model building and simulation capabilities for brand performance.

A later study of Boone & Kurtz (1971) obtained 193 respondents and identified 75 firms with an operational MkIS and 74 firms who were currently developing a MkIS. Boone & Kurtz (1971) found only 14 companies with model building or simulation capabilities. This means that only 14 companies are utilizing MkIS for their BP strategies and rest are using offline sources of MI.

Jobber & Rainbow (1977) conducted a similar survey of the Times Top 500 in the UK. An effective response rate of 153 (35%) was obtained. 76 companies were identified as having established MkIS, while 14 were in the process of system development. Again, very few (23) firms had systems capable of sophisticated model-building or simulation. Jobber (1977) compared the results of 3 studies and concluded that USA had a higher proportion of MkIS installations while firms in the UK have more highly developed model-building and simulation capabilities.

Day & Glazer (1994) mentioned that the developments in information systems have also enhanced the ability of organizations to learn about their markets. The feasible organization changes that can overcome impediments and ensure competitive advantage can be realized from the investment in an information system. The development considerations include top management support, staff knowledge and skills, outsourcing and end-user computing.

Companies must design effective MkISs that give managers the right information, in the right form, at the right time to help them make good marketing decisions (Kotler & Armstrong, 2006). There is no one MkIS that is suitable for all companies and that is the reason why the companies design their system based on their needs.

Popovic, Turk, & Jaklic (2010) highlighted the concept of BI. The authors have proposed a model of measuring the maturity of BI systems. The study examined that there is an increasing interest for the introduction of BI systems into organizations which helps in MI by gathering the company's internal data and matching it with outer data. The study revealed that with the advances in the BI area, there is an increasing interest in utilizing these systems for the success of organizations. Although the opinion about BI and its creation of business value is generally accepted, economic justification of investments into BI systems is not always clear (TDWI, 2005). This study measured the business value of business intelligence in practice is often not carried out due to the lack of measurement methods and resources. Even

though the perceived benefits from BI systems, in terms of better information quality are far from being neglected. These are merely the indirect business benefits or the business value of such systems. The true business value of BI systems hides in improved business processes and thus in improved business performance and BP by giving accurate and consistent information to the customers. Buying preferences of customers are captured by MI and this in turn used by marketing managers for BP strategies.

Due to competitiveness, many companies have sought resources and management tools which enable them to quickly and flexibly respond to market demands. This is how information technology tools have gained a prominent role within competitive companies, as they aim to promote reliability and fast information, contributing to the mitigation of risks in decision-making processes (Kubiak & Kowalik, 2010).

The maturity model of BI given by TDWI is being used in some companies which can be categorized into six stages; Parental, Infant, Child, Teenager, Adult, and Sage. At the parental stage, managers use reporting; at an infant stage, managers use spreadsheets; at child stage, managers use data marts; at teenager stage, managers use data warehousing; at the adult stage, managers use enterprise data warehouse; at the sage stage, managers use analytical services. The more sophisticated systems are developed, a greater amount of analytical work takes place (Ashill & Wright, 2011). Ashill & Wright (2011) revealed that how the MkIS (more accurately the internal reports and analytical systems) can combine with the modern concept of DSSs to meet marketing information needs.

Hakhu, Kiran, & Goyal (2012) identified the keenness to utilize a marketing information system (MkIS) and analyzed the success of a MkIS model for SMEs in India. This study investigated the success factors of MkIS model. The study used a stepwise regression technique to find the important predictors of MkIS model. These are MkIS sophistication, design characteristics of MkIS, capabilities of MkIS, primary characteristics of MkIS and hindrance factors. The authors suggested that MkIS has been seen as a system to support marketing management in its decision-making for BP. In addition to the managerial perspective, MkIS is an essential tool for the entire marketing team in an organization.

Queiroz & Oliveira (2014) emphasized the benefits of MkIS in companies that operate in retail business. A field research was done in a major clothing retailer, by means of a case study that consisted of interviews with two employees of the company, one from top management and one from marketing area based on a semi-structured script. The results

indicate that information and its systematization possess great importance for the development of competitiveness, contributing to the development of the operations and to the promotion of new business opportunities.

Eisend, Evanschitzky, & Calantone (2016) said that marketing and technological capabilities are major drivers of new product performance. Prior research has suggested that marketing capabilities outperform technological capabilities. This study shows the relative advantage of marketing over technological capabilities for new product performance.

Ade, Akanbi, & Tubosun (2017) investigated the influence of MI on the business competitive advantage. The findings of this study revealed that the MI sub-constructs such as internal records, competitor's sales data, marketplace opportunity, competitors' threats & competitors' risks have a significant and positive influence on the business competitive advantage. Thus, it can be concluded that the MI as sensitive information has enabled the bank to successfully acquire more profit.

Li, Guo, Cao, & Li (2018) proposed a process model framework in which digital technologies promote employees to become Brand Champions. This study bridges the gap between branding and IS literature by adding critical inputs for understanding the inter-relationship between technology practices and their practitioners in the internal branding context. Digitalization has generated new challenges and opportunities for brand communication and relationship marketing. The findings of this study revealed that depending on the degree to which digitalization can be viewed as an add-on service or an ingrained element in the value chains aligned with strategic goals, digital technologies can be associated with different enablement mechanisms relating to operational optimality, better sensing, and responding capability.

This section summarizes the concepts of MI, MkIS, critical elements of an effective MI, sources of MI, usage of MI and the role of MI in BP. As shown in Figure 2, MI is part of BI and MkIS is used as a tool to assist managers in decision-making which enables them to take effective steps for BP. The identified factors of MI from the literature review are presented in Table 2.

**Table 2: List of Factors of Marketing Intelligence (Source: Author)**

S.No.	Factors	Author(s)
1	Planning Focus – (Information Generation, Information dissemination and responsiveness)	Jaworski & Kohli (1990), Wright & Calof (2006)
2	Process Structure – Procedures, policies and formal (MkIS) or informal infrastructure	Wright & Calof (2006)
3	Organizational Culture – supportive or teamwork culture, innovative culture, awareness of an organization	Wright & Calof (2006)

The brief description of the studies on MI is represented in Table 3.

**Table 3: Summary of Marketing Intelligence Studies (Source: Author)**

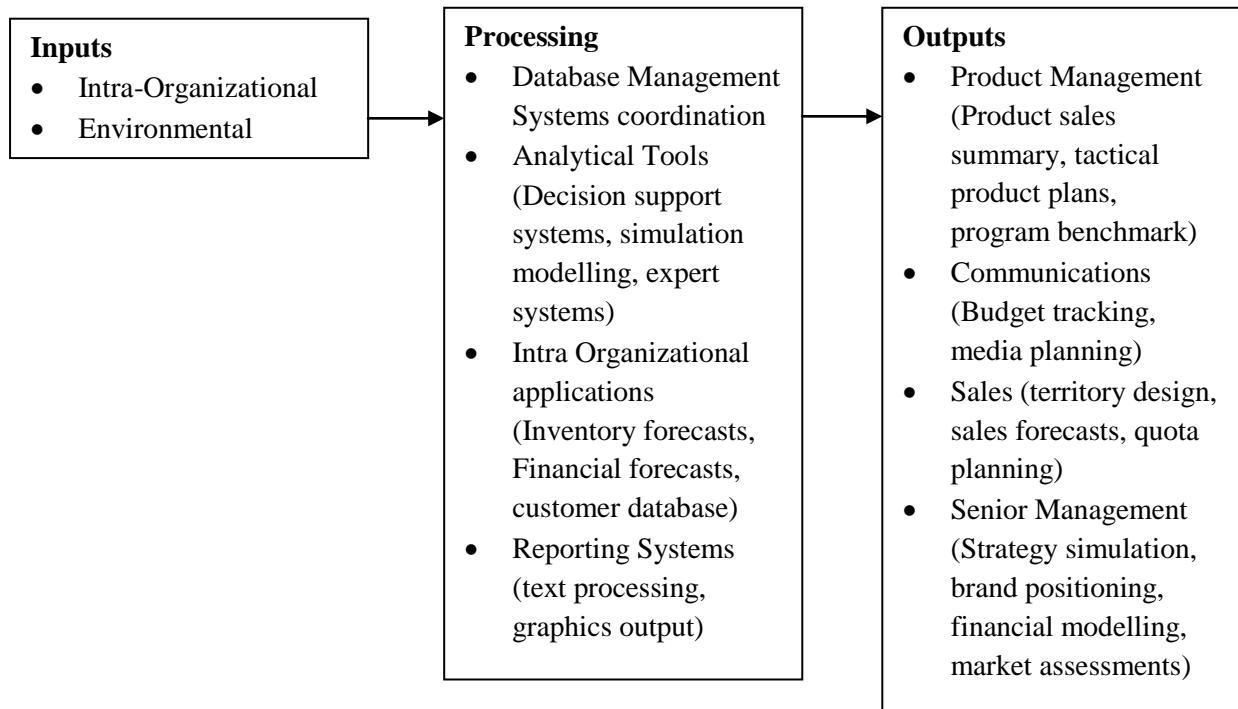
S.No.	Author	Brief Description
1	Wee & Leow (1994)	At each stage of product life cycle, Competitor's Intelligence is analyzed on Product life cycle which helps in the positioning of a company's brand image and provides a competitive advantage.
2	Attaway (1998)	Used Competitor's Intelligence for decision making which is a part of MI.
3	Tan & Ahmed (1999)	Compared various analysis like Ad hoc analysis, Project based analysis, continuous focused analysis, continuous comprehensive analysis.
4	Wee (2001)	Compared old and modern scenario which comprises of: Tactical (Operational) – Conventional source Internet, e- databases – Modern
5	Wood (2001)	MI System is used to get an internal view of the transaction system, existing customer information, financial data and external data variables (industry contact networks).
6	Myburg (2004)	(Adopted a model for competitor and market analysis) – FAROUT criteria (Future orientation, accuracy, resource efficiency, objectivity, usefulness, timeliness).
7	Trim & Lee (2008)	MI helps in counterintelligence against competitors facilitated by computerization to have a competitive edge.
8	Bunic (2007)	Proposed a process of MI and its application.
9	Stefan, Gericke, & Bucher (2009)	MI is extracted with the help of BI tools
10	Baumgartner, Gottlob, & Herzog (2009)	Relate online MI with CI for web data extraction. Implemented Web ETL implemented in the company – Lixto based in France and model of online MI and is used in pricing management.
11	Kursan & Mihic (2010)	MI is used for web segmentation that facilitates the process of positioning.

12	Popovic, Turk, & Jaklic (2010)	Used BI maturity model to compare different levels of companies.
13	Kursan & Mihic (2010)	The Internet is the main source of MI but it is not enough to use regular data or simple reports to fully understand the online customers and adapt to marketing mix effectively. Corporate sites represent the marketing mix and brand equity.
14	Haverila & Ashill (2011)	Technology-intensive companies rely on two broad types of intelligence. The two broad types are technical production and market information during new product development stage.
15	Queiroz & Oliveira (2014)	Information and its systematization possess great importance for the development of competitiveness, contributing to the development of the operations and to the promotion of new business opportunities.
16	Junnarkar & Verma (2017)	Deals with various aspects of SAP as an ERP tool and how it helps to achieve overall operational improvements. It is capable of integrating multiple business modules, with each module representing a specific business function.
17	Calof, Arcos, & Sewdass (2018)	Identified European CI practices and compared the results of the current study to the 2006 year study to see if there had been changes in CI practice and compared the results to foresight practice. CI practices have become more formalized and structured in 2018.

## 2.5 Role of Marketing Intelligence in Brand Positioning

The role of MI in BP is briefly discussed in chapter 1. This section further reviews and establishes the need to examine MI-BP factors and how components of MkIS are used to produce output as product management, communications, sales, and senior management activities. Marshall & LaMotte (1992) discussed the importance of MkIS in BP activities. This study describes the intra-organizational and environmental factors as inputs to the MkIS, processing of data is done by MkIS along with various analytical tools to produce valuable outputs such as product sales summary, tactical product plans, program benchmarking, budget tracking, media planning, territory designing, sales forecasting and quota planning, strategy simulation, financial modelling, BP and all the marketing related activities as shown in Figure 4.

Marshall & LaMotte (1992) discussed the MkIS components as follows:



**Figure 4: Marketing Information System (MkIS) Components (Adapted from (Marshall & LaMotte, 1992))**

Ismail (2011) stated that MkIS has a significant role and usage of decision making that helps in strategic BP. It clarifies the need for quick and efficient decision to save time and prevent duplication of work. The author has identified four elements of MkIS such as internal records, MI, marketing research, analyzing marketing information for BP. In their study, the author has mentioned the MkIS functions for effective analysis of internal and external data of the organization (like sensitivity analysis, goal setting, simulation models, scorecards and dashboards, Pareto analysis etc). The author has studied the role of MI on right decision making and this study shows that there is a significant role of MI in effective decision making in marketing strategies like BP. It has been observed and analyzed that MkIS is efficient tool providing past, present and projected information related to internal operations and external intelligence. It supports MkIS intelligence operations such as the planning, control, and operational function in an organization by furnishing uniform information in the proper time frame to assist the decision maker for various BP activities (Refer Figure 4). The findings of this study confirmed positive relationships between the level of utilization and adoption of MI and the success of an organizational decision-making to provide the organization with a competitive advantage as it allows the organization to solve problems in real time.

Mahmoud (2011) revealed that firms need to be more customer-focused, monitor competitive trends and respond appropriately to MI in order to survive. According to Wood (2001), the focus of MkIS is on the external information. MI comprises MkIS. The sources of data collection are internal data variables (internal transaction system, existing customer information, financial data, personal experience/ knowledge) and external data variables (share MkIS, websites, industry contact network (informal), other sources (printed media, trade association). Wood (2001) studied the impact of internal and external factors on MkIS for making marketing strategy like positioning and targeting markets. Key elements of MkIS are Information, Information Management Processes, Intelligence development processes, Computer Systems, and an organizational focus. The typical application of MI system is in strategic analysis and scenario planning, market planning, sales, and marketing.

Trim & Lee (2008) said that for a good brand image, a strong CI is required to be one step ahead of the competitor. So the growth in CI activities has been fuelled by the growth in computerization. There is an extreme contribution of CI to the strategic intelligence process and help in establishing an intelligence culture that incorporates counter-intelligence. The authors have adopted a broader understanding of what strategic marketing represents by which marketing managers can devise new approaches to keep track of customer preferences and can develop global brand positioning strategies that when implemented to counter the actions of legitimate competitors and new entrants, and disrupt the actions of counterfeiters and fraudsters.

Bunic (2007) explored the relationship between market orientation and business performance and analyzed the effect of environmental factors on both. The author has adopted Jaworski and Kohli's (Jaworski & Kohli, 1990) structural model to increase business performance. In market orientation, the author studied two perspectives such as behavioral perspective and market intelligence perspective. MI perspective of marketing officers refers to specific behaviors that lead to improvements in performance. The author has mentioned that dissemination of the intelligence across departments, and organization-wide responsiveness to it is very important for market orientation and better business performance. The components of market orientation are distinguished into three parts; namely, information generation, information dissemination and responsiveness to MI. The author describes the MI in his study as the collection and assessment of both customers' current and future needs, plus the impact of government regulation, competition, technology, and other environmental forces. The responsiveness involves the selection of target markets, the design, and selection

of products and services, the production, distribution, and promotion of the product. The variables used in this study were Intelligence Generation, Intelligence Dissemination and Responsiveness. In this study, author has studied the external (five competitive forces) and internal (top management, interdepartmental, organizational systems) antecedents of a company which effects market orientation and finally studied the impact of environmental factors (market turbulence, technological turbulence, five competitive forces intensity) on market orientation and business performance relationship. It is analyzed in this study that the linkage between a market orientation and performance appears to be robust across contexts characterized by varying levels of market turbulence, technological turbulence, and five competitive forces intensity.

Stefan, Gericke, & Bucher (2009) researched that data analysis is a fundamental request for taking decisions in order to obtain better performance in the business market. It can be analyzed that gross information which in many cases presumes a large volume of data which is not very useful because of the impossibility to make a detailed and efficient analysis. And in every organization, to make decisions, organizations must access at the right moment and complete information from various domains of activity. Their study highlighted the essential role of BI in order to increase the quality of decisions. The authors described that the main source of information which is to be analyzed by the help of BI tools is stored in data warehouses which are subject-oriented, integrated, non-volatile and time oriented. It is concluded in this study that more and more organizations use BI solutions and are aware of the utility of information, knowledge, and models that can be obtained from data warehouses and used in the decision-making process to increase the business performance by providing customized products for BP. In future, these BI solutions will represent a vital resource for business continuity and for processing information.

According to Kotler & Armstrong (2010), the functions of MkIS are:

- i. Identify information needs
- ii. Gathering information from different sources
- iii. Data processing and preparing the information for use for BP
- iv. Disseminating information to the decision makers
- v. Saving and recording the information

One of the very first benefits that a company derives from the use of IT-based MkIS is improvements in the reporting system. Information processing becomes faster and the

company's management is able to relate pertinent information from different sources within the organization (Riel & Bruggen, 2001). Such information would be almost impossible to bring together in a meaningful and integrated fashion without the necessary IT infrastructure. The purpose of MkIS applications is to integrate inputs from various organizational functions into a holistic and meaningful map of the company's activities, depicting its interactions with suppliers and customers. As a result of doing this in a timely fashion, decision making is enhanced by relying more on facts as compared to gut-feeling and intuition (Bruggen, Smidts, & Wierenga, 1998; Talvinen & Saarinen, 1995). This is a major pre-requisite for developing realistic and successful marketing plans (McDonald & Payne, 2005), which in turn affects both the company's marketing planning process and the outcome of this process (Amaravadi, Samaddar, & Dutta, 1995; O' Brien, Schoenbachler & Gorden, 1995). Such improvements in the marketing planning effort among many other consequences have a positive direct effect on marketing operations (Baker, 2001). As companies assimilate the IT-based MkIS, they eventually become capable of transforming MI into concrete benefits for their customers (Brady, Cronin, & Brand, 2002) which in turn allows them to improve their marketing operations.

According to Harmon (2003), the primary benefits of MkIS can be useful in the areas of functional integration, market monitoring, strategy development, and strategy implementation.

- *Functional integration:* The MkIS enables the coordination of activities within the marketing department and between marketing and other organizational functions.
- *Market Monitoring:* Through the use of market research and MI activities, the MkIS can enable the identification of emerging market segments, and the monitoring of the market environment for changes in consumer behavior, competitor activities, emerging technologies, economic conditions and governmental policies.
- *Strategy Development:* The MkIS provides the information necessary to develop a marketing strategy. It supports strategy development for new products, product positioning, pricing, personal selling, distribution, customer service, and partnerships and alliances.
- *Strategy implementation:* The MkIS provides support for product launches, enables the coordination of marketing strategies, and is an integral part of sales force

automation, BP and customer service systems implementation. The MkIS enables decision-makers to more effectively manage the sales force as well as BP.

There are three roles for the MkIS according to Assael (1993), which are data collection, analysis, and dissemination. The MkIS must be able to collect relevant data from different sources such as customers, regulatory environment, competition, and Government. At the same time, the MkIS must be able to analyze the data and disseminate the data to the management and the departments in the firm (Assael, 1993).

Setting up a MkIS requires a significant investment of time and money. Trained personnel are needed to maintain and analyze the data collected in the system. Vast amounts of data can be readily obtained with computerized systems; therefore, businesses sometimes have to prioritize the kind of information that is most useful to them (Li E. , 1995).

Kotler & Keller (2012) model of a MkIS has four parts. These are internal records, MI, marketing research and marketing decision support system (MDSS). Internal records are the most used information in all the companies around the world such as reports of orders, sales, prices, costs, inventory levels, receivables, and payables. When analyzing these data the managers can spot the opportunities and threats facing the firm (Kotler & Armstrong, 2008). MI system is a set of procedures and sources used by managers to obtain their everyday information about pertinent developments in the marketing environment (Kotler & Armstrong, 2010). MI is viewed in its totality as a continuing and interacting structure of people, equipment and procedures to gather, sort, analyze and distribute pertinent, timely and accurate information for use by marketing decision makers to improve their marketing planning, implementation, and control.

The MkIS can be classified into two groups depending on the users and the type of use. The first group is the system for managers and the second is the system for operational sales and marketing activities. The users of marketing information systems are mainly senior executives, strategic business units, marketing managers and analysts (Talvinen, 1994). The cross-functional design of a MkIS and the interconnection of different subsystem imply that the overall efficiency of the system will be dependent on both subsystem's efficiency but also and perhaps even more, the optimization of the cross-functional integration. Talvinen (1994) emphasized the importance of maintaining a view of the MkIS as a system to sustain the development of the marketing process additionally to that of disseminates information across functional boundaries. The systems should reflect the three levels of the strategy of

marketing: Corporate, business and functional. Therefore, a MkIS is made to sustain the marketing management in external analysis and perceptual positioning of the company through the structured presentation and analysis of collected tacit and explicit marketing information correlated with objective market research, internal operational data and treated with specific models. It should differentiate and selectively identify the most influential environmental factors for scanning. MkIS converts tacit vision and knowledge into explicit criteria to guide information scanning and sustain strategic marketing.

Li, Guo, Cao, & Li (2018) proposed a process model framework in which digital technologies promote employees to become Brand Champions. The findings of this study revealed that depending on the degree to which digitalization can be viewed as an add-on service or an ingrained element in the value chains aligned with strategic goals, digital technologies can be associated with different enablement mechanisms relating to operational optimality, better sensing, and responding capability. This study bridges the gap between branding and IS literature by adding critical inputs for understanding the inter-relationship between technology practices and practitioners in internal branding context.

Eisend, Evanschitzky, & Calantone (2016) said that marketing and technological capabilities are major drivers of new product performance. This research has suggested that marketing capabilities outperform technological capabilities. This study examined that the relative advantage of marketing over technological capabilities for new product performance depends on the institutional context in a country. Although in general, marketing capabilities have a stronger influence than technological capabilities on new product performance, this effect is moderated by institutional context factors.

Fan, Lau, & Zhao (2015) said that the big data analytics have been embraced as a disruptive technology that will reshape business intelligence, which is a domain that relies on data analytics to gain business insights for better decision making. The study identified the data sources, methods and applications related to five important marketing perspectives, namely, people, product, place, price, and promotion, that lay the foundation for marketing intelligence. A recent technological revolution such as social media enables us to generate data much faster than ever before. The notion of big data and its application in Business Intelligence have attracted enormous attention in recent years because of its great potential in generating business impacts. In marketing intelligence, which emphasizes the marketing related aspects of business intelligence, data relevant to a company's markets are collected

and processed into insights that support decision making. The marketing mix framework is a well-known framework that identifies the principal components of marketing decisions, and it has dominated marketing thought, research, and practice.

The brief description of showing the role of MI in BP studies is presented in Table 4. The review shows significant studies which state that some companies are using ad-hoc level MI and some advanced level MI for BP. Marketing managers incorporate important factors of BP in their branding strategies by having the intelligence about the market and organization as a whole.

**Table 4: Summary of Marketing Intelligence and Brand Positioning Studies (Source: Author)**

S.No.	Author(s)	Summary
1	Morairty & Swartz (1989)	Operational use and sales activities into the concept of MkIS and have proposed four tasks typical for sales productivity systems
2	Ashill & Wright (1995)	Encouraged the adoption of MkIS due to increasing operational complexity and business size which is useful for sales and financial analysis and planning
3	Talvinen & Saarinen (1995)	Marketing intelligence focuses particularly on competitors, customers, market trends and suppliers.
4	Wood (2001)	MI is not just about market information, but the whole gamut of external environment information needed to support key strategic decisions such as brand positioning.
5	Chernatony & Riley (2010)	Proposed Brand Asset Management Model to get external and internal company intelligence which is a four-step process for brand building
6	Dou, Lim, & Su (2010)	Revealed that MI usage has contributed to elements of the brand building.
7	Jandaghi, Seresht, Mikhles, & Kharazi (2011)	Discussed the MI process which is a systematic process of gathering free data which is useful for powering commerce.
8	Slimani & Labo, (2013)	MI is one of the latest developments of Business Intelligence (BI) and Decision Support Systems (DSS) that assists in all the marketing related activities like product management and budget tracking.
9	Queiroz & Oliveira (2014)	Conducted a field research in a major clothing retailer, through a case-study. The close-knit relationship between MI, BI, and IT show the need for adaptation of the reality and the culture of the company to the use of information.
10	Eisend, Evanschitzky, & Calantone (2016)	Marketing and technological capabilities are major drivers of new product performance.

11	Ali & Rao (2016)	Marketing Information System (MkIS) is widely used for decision making, saves time and prevents rework, as it provides information to all marketing activities regarding planning, promotion, sales of goods & services for both customer satisfaction and organizational goals.
12	Tripathi (2017)	Highlighted the importance of internet advertising that it is increasing in various media day by day. It is because of the better interactive features. Internet and other traditional media offer more for marketing strategy.
13	Li, Guo, Cao, & Li (2018)	Proposed a process model framework in which digital technologies promote employees to become Brand Champions. Digitalization can be viewed as an add-on service or an ingrained element in the value chains aligned with strategic goals.

## 2.6 Research Gap

Despite the fact that the MI effectiveness has become the object of many empirical researchers; it still remains one of the most important concerns in the literature (Ashill & Wright, 2011; Jenster & Soilen, 2009; Marshall & LaMotte, 1992; Talvinen & Saarinen, 1995; Kuuru & Tuominen, 2016). The unknown issues are how MI helps in BP specifically in the consumer durables sector. A possible explanation for this may be the lack of an empirically derived, reliable and integrated measure for assessing the effectiveness of MkIS in the consumer durables sector. In fact, while most of the studies focus on assessing the effectiveness of the company's MkIS while no particular attention has been drawn on the role of MI in positioning a brand of consumer durable companies.

Ample research has been done on market research, BI, CI, and MI. However, studies depicting the role of MI with the assistance of MkIS on BP in India are few. The Indian consumer durable sector is highly competitive and complex as emerging products are introducing every year. The purchase decision becomes extremely difficult for consumers to choose from a wide variety of products. MI is a potential source of insightful information. Thus, MI still remains an under-researched and under-developed topic in the Indian context.

Salvador & Ikeda (2014) discussed that digital research and monitoring tools enable studies on consumer behavior to be used in behavioral segmentation. Ali & Rao (2016) said that Marketing Information System (MkIS) is widely used for decision making, saves time and prevents rework, as it provides information to all marketing activities regarding planning, promotion, sales of goods & services for both customer satisfaction and organizational goals. Queiroz & Oliveira, (2014) indicated that information and its systematization possess great

importance for the development of competitiveness, contributing to the development of the operations and the promotion of new business opportunities. Li, Guo, Cao, & Li (2018) revealed that depending on the degree to which digitalization can be viewed as an add-on service or an ingrained element in the value chains aligned with strategic goals, digital technologies can be associated with different enablement mechanisms related to operational optimality, better sensing, and responding capability.

Past studies have pointed to a high percentage of European firms operating intelligence units (Wright, Badr, Weiss, & Pickton, 2004; Badr, 2003). Mandal (2018) said that the collection of information sometimes becomes a challenge because customers hesitate to share personal information with companies. Decision making regarding consumer durable goods is on the basis of several factors like price, advertisement type (Kulshreshtha, Bajpai, & Tripathi, 2017), product attributes (Mugge, Dahl, & Schoormans, 2018). Consumers use these factors to form inferences about the experience and credence attributes of durable goods. For companies, it is important to successfully manage and track these inference processes of consumers to create competitive advantage.

Wright & Calof (2006) reported that the most frequently mentioned department responsible for CI was marketing. This study again provides evidence that since 2006 there has been an increase in the development of CI in Europe as a separate function. The 2006 study examined the extent to which CI had been formalized within responding organizations. CI is more formalized now in European firms than in 2006. Innovation is driving much intelligence activity, in particular research and development (R&D) and new product development decisions. Jandaghi, Seresht, Mokhles, & Kharazi, (2011) said that MI is regarded as peripheral duty of sales force, because of their boundary position, they can offer their company direct access to important information about competitors and customers.

Traditionally, market orientation and marketing research was used to know what the competitors are doing and for strategic planning, but in contemporary times, it has been changed to intelligence whether it is BI, CI or MI with the assistance of MkIS. In today's time, MI has evolved with the assistance of MkIS as a competitive tool to overcome competitors' strategies. This research will be helpful to the managers of consumer durables companies as it provides insights regarding the key factors of BP that are influenced by MI. This will help the managers to assimilate better information of the marketing efforts done by them for creating a better BP of their respective products. There are certain limitations of reviewed studies. Firstly, the impact of using MkIS and the perceived usefulness from

marketing professionals' perspective needs further investigation. Secondly, a need is identified in terms of examining which brand positioning factors are impacted through the use of MkIS by marketing professionals. In today's time, Information systems in organizations are advanced, intelligent and seriously essential but one cannot set aside the need for face to face interaction. Ettorre (1995) aligned the concept of MI to strategic planning by saying "MI was about staying one step ahead of the competition by gathering information which could be converted to actionable intelligence and which can then be applied to both short and long-term strategic planning activities like brand positioning." Advances in MI and BP have allowed organizations to use MI in marketing strategy. This relationship is only beneficial if sales professionals are highly efficient. In previous research, MI is used to gather data, disseminate and used the extracted information for decision-making but it is not only confined to data collection but other factors like culture and process-structure need to be aligned in an organization. Thus, the current research is considering all these factors in MI and checking its role in devising BP specifically in consumer durables sector.

The purpose of this research is to suggest marketing professionals of consumer durable companies that in which factor of BP, MI is playing an important role. In India, the market for consumer durables is huge. The importance of this research in the consumer durable industry is significant as consumers get a vast variety of products in this sector. There is a need to explore how MI can help in managing BP of the large variety of durables in varied choices of consumers.

## **2.7 Research Questions**

This research seeks to address the following questions:

1. What are the important factors of Brand Positioning of select consumer durables?
2. What are the key factors of Brand Positioning that are affected by Marketing Intelligence?
3. How Marketing Intelligence impacts Brand Positioning?

## **2.8 Research Objectives**

The central problem of the research is to examine the relationship between MI and BP. It further lends a hand in identifying the objectives of the research. These objectives are the statements converted from the above-mentioned research questions, derived through literature review. Following are the research objectives which will guide the research:

1. To identify the key factors for Brand Positioning of select consumer durables.
2. To identify the factors(s) of Brand Positioning those are most significantly influenced by MI in select consumer durables.
3. To propose a conceptual framework depicting the impact of Marketing Intelligence on factors of Brand Positioning.

To address research questions and objectives, section 2.9 establishes the relationship among the literature, the theory and the proposed method.

## **2.9. Establishing the relationship among the literature, the theory and the intended method**

*Q1. What are the important factors of Brand Positioning of select consumer durables?*

The factors of BP are identified from the literature, and adopted according to the requirements of this research. The important factors adopted from the literature (Refer Chapter 2, Section 2.3.2) are as follows:-

1. Product Attributes (Alden, Nariswari, 2017; Mowen, 1993).
2. Competitors Attributes (Diwan & Jain, 2009; Kuuru & Tuominen, 2016; Mahmoud, 2011; Urde, 1999).
3. Organizational Attributes (Aaker et al., 2001; Aaker & Joachimisthaler, 2000; Urde, 2003; Aaker, 2004a).
4. Credibility (Erdem & Swait, 1998; Kapferer, 1992; Erdem & Swait, 2016; Bhat & Reddy, 1998).
5. Brand Personality (Aaker, 1997; Azoulay & Kapferer, 2003; Ahmad & Thyagaraj, 2017).
6. Price of the product (Prasnikar, Rajkovic & Vehovec, 2008; Parguel, Delecolle & Florence, 2016).
7. Customer Perceptions (Jamal & Al-Marri, 2007; Festinger, 1957; O'Neil & Palmer, 2004; Liang, 2016).

The proposed method to answer the first research question is Exploratory Factor Analysis that will be conducted on two sets of data i.e. Consumers (Refer Table 25 of Section 4.12.6) and Marketing Professionals (Refer Table 20 of Section 4.7.7). The validity and the reliability of the BP construct will be presented in Table 5 (Consumers' Perspective) and in Table 6 (Marketing Professionals' Perspective). The development and empirical testing of the questionnaires will be discussed in section 4.2 of Chapter 4. The factors of BP will be validated and confirmed by conducting Confirmatory Factor Analysis (Refer Table 27 of section 4.13.2 and 4.13.3).

*Q2. What are the key factors of Brand Positioning that are affected by Marketing Intelligence?*

The key factors of BP that are most significantly affected by MI will be discussed after applying Structural Equation Modelling on the dimensions MI and BP factors. The factors of MI have been identified from the literature review (Refer Chapter 2, section 2.4.1). The intended method to answer the second research question will be Structural Equation Modelling by (Refer section 4.14.4 of Chapter 4). The results of the Structural equation modelling will depict the key factors of BP that are affected by MI (Refer Figure 33 and 36, Table 30).

*Q3. How Marketing Intelligence impacts Brand Positioning?*

The framework depicting the impact of MI on BP will be shown from the structural relationship between MI and BP. The most significant and least significant factors will be discussed in section 4.14.4 of Chapter 4. The proposed method to be used to answer the third research question is Structural equation modelling (Refer Figure 33 of section 4.14.4).

## **2.10 Significance of the research**

BP has become fairly important in today's society as many industries are characterized by fierce competition. In order to achieve financial success, brands need to fulfil customer needs, positively differentiate from the competition, and be salient in the marketplace. BP allows brands to fulfil these criteria. Most large firms operating in consumer markets own and market more than one brand; they have a brand portfolio (Morgan & Rego, 2009). The present research aims to find out the factors of BP and then to find the role of MI in BP of consumer durable goods. The research is expected to be useful for marketing managers,

brand managers, company owners of consumer durable organizations. It may help them in segmenting, targeting and positioning consumer durable products on the basis of consumers' needs and demands. It may assist them in policy reformulations and overall brand positioning. The present research seeks to provide a knowledge base to marketers of consumer durable organizations regarding brand positioning factors and how MI help in increasing the BP of their specific brand.

It endeavors to understand the purchase behavior of consumers that may help consumer durable organizations in formulating their expansion and diversification plans. It also aims to address the unexplored gaps in literature related to marketing, consumer preferences, consumer durable industry, and branding strategy. Further, it tries to provide some inputs in the form of identified factors of BP and the role of MI in factors of BP.

## **2.11 Conclusion**

This chapter firstly reviewed the literature review on BP and MI and the role of MI in BP. A detailed literature review has been conducted to identify the factors of BP and MI. Section 2.1 presents the introduction of a review of the literature, Section 2.2 presents the Objectives of the literature review. Section 2.3 reviews the definition, models, and factors of BP, 2.4 reviews definitions and concepts of MI, Sources of MI and Usage of MkIS, 2.5 reviews the role of MI in BP, 2.6 present the research gap, 2.7 presents the research questions, 2.8 depicts the research objectives. Table 1 shows the factors of BP identified from the literature review. Table 3 represents the MI studies in different sectors. Table 4 depicts the MI and BP studies. Based on the review, the research underlines the existing gaps and presents a theoretical framework in subsequent chapter 3 for undertaking research in this area as shown in Figure 6.

**CHAPTER III**  
**RESEARCH**  
**METHODOLOGY**

## Chapter III

### Research Methodology

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*“Great Design sprouts when good research grows” – M. Cobanli*

#### 3.1 Introduction

As discussed in Chapter 2, this research has been conducted with a prime objective of the role of MI in BP of consumer durables and suggests various brand positioning strategies to marketing professionals to enhance the sale, satisfy the needs of the consumers and to have a better image of their brand in the minds of consumers. This chapter essentially deals with the methodology used to carry out research as a systematic and scientific investigation. It introduces the overall research design which includes the methodology adopted for carrying out the research and various phases of this research. Although, a number of techniques are available for collecting primary information from IT professionals, Marketing Professionals and consumers, well-structured questionnaires have been designed and used as prime survey instruments for data collection as the questionnaire addresses the issue of reliability of information by reducing and eliminating differences in the way the questions are asked, and how they are presented. The research flow diagram is presented in Figure 5.

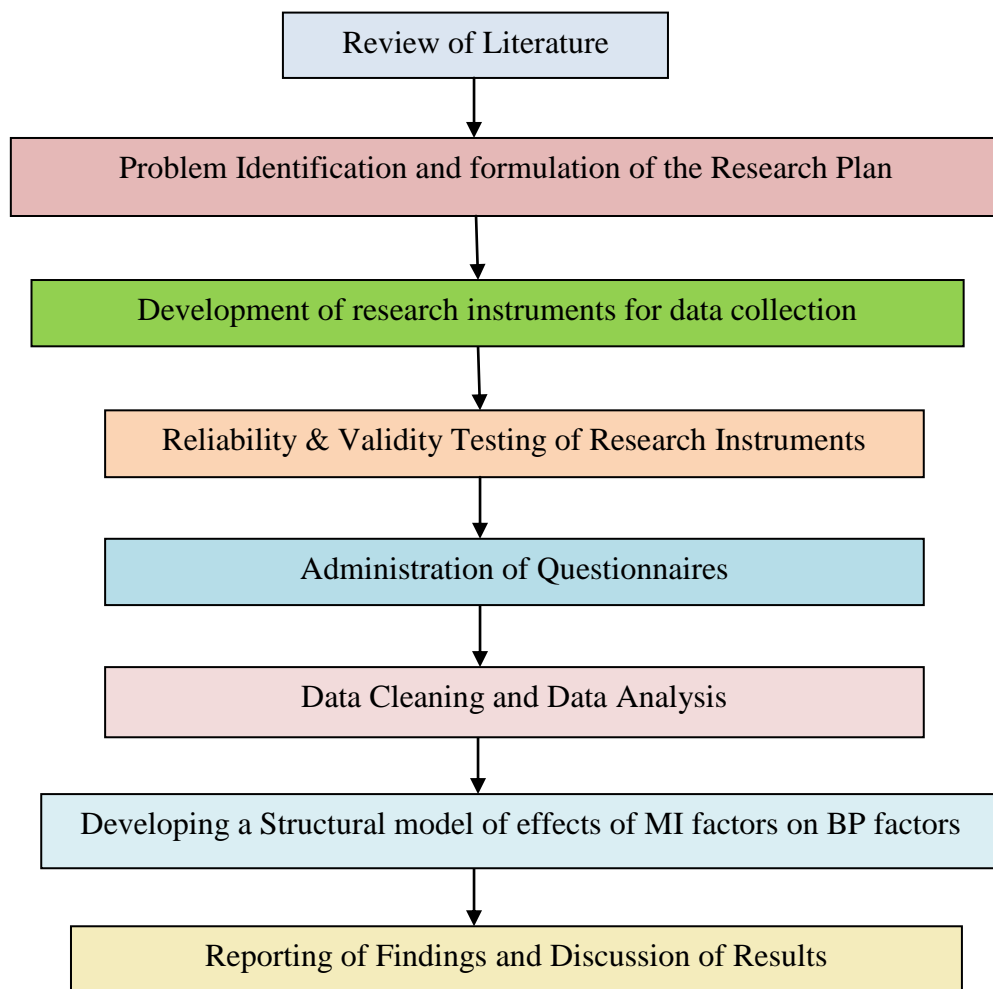
The objective of the research methodology is to pursue a research problem scientifically and achieve a valid and reliable result (Malhotra, 2006). The research comprises a collection of three types of responses (IT professionals, Marketing Professionals, and Consumers) from 72 consumer durable companies to be analyzed. The techniques applied for analysis of the research are mostly quantitative in nature and the research methodology is presented here. A number of techniques are available for collecting primary information from respondents. A well-structured questionnaire based on a five-point Likert type scale has been used as a prime survey instrument for data collection in this research. To attain the research objectives of the research, Exploratory Factor analysis (EFA), Confirmatory Factor analysis (CFA) and SEM have been applied in a holistic manner.

Based upon the results, a strategic framework on showing the impact of marketing intelligence on brand positioning factors from consumer durable sector in Northern India has been developed. Consumers' choices and preferences with respect to brands of consumer

durable goods have been studied. Decisions for the repurchase of a particular brand from consumers' end, the building of brand identity at the marketers' end and assistance of their branding strategies with MkIS developed by IT Professionals' end have been identified. Based upon the results, a framework of MI and BP in consumer durable sector has also been developed.

### 3.2 Research Flow Diagram

The flow diagram of the research is presented in Figure 5. It shows the steps how research is carried out initially started with the review of the literature to reporting of findings and discussion of the results.



**Figure 5: Research Flow Diagram**

### 3.3 Hypotheses Formulated

Marketing Managers utilize the sources of MI either website, online or offline mode to collect the feedback, views of the consumers regarding abstract and concrete variables regarding symbolic and functional benefit received from the product (Mowen, 1993; Aaker *et al.*, 1992).

*H1: There is a positive relationship between Marketing Intelligence and Product Attributes for Brand Positioning.*

The consistent information about the brand and the organization is communicated by the sales force team makes the brand credible in the mind of the consumer (Erdem & Swait, 2004).

*H2: There is a positive relationship between Marketing Intelligence and Credibility for Brand Positioning.*

Information and feedback extracted from typical brand users about which aspect of their personality induces them to buy a specific brand. Brand Personality traits of the people associated with the brand are transferred directly to the brand (Aaker, 1997). It is based on the notion that human and brand personality traits share similar conceptualization (Azoulay & Kapferer 2003).

*H3: There is a positive relationship between Marketing Intelligence and Brand Personality for Brand Positioning.*

MkIS helps in tracking the budget, setting the pricing in comparison to competitors. The consumer derives utility based on the levels of these attributes existing in the brand in a budget constraint (Gwin & Gwin, 2003).

*H4: There is a positive relationship between Marketing Intelligence and Price of the Product for Brand Positioning.*

A different mode of MI to provide information to the customers like the sales force, advertising campaigns, company's websites, offline sources, and feature priming makes the customer perceptions and their buying history information helps in defining buyer's behavior trends (Lancaster, 1966; Kumar, 2017).

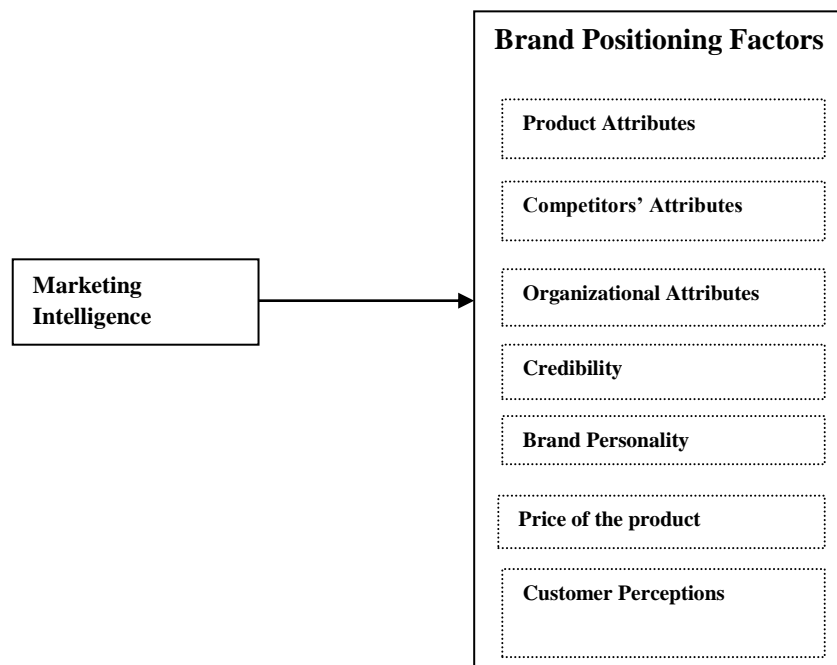
*H5: There is a positive relationship between Marketing Intelligence and Consumer Perceptions for Brand Positioning.*

Organizational structure and organizational Culture reflect the brand values and ultimately in delivering superior value to the customer over time (Aaker, 2004a; Urde, 2003).

*H6: There is a positive relationship between Marketing Intelligence and Organizational attributes for Brand Positioning.*

### 3.4 Conceptual Framework

Based on the hypotheses of the research, the conceptual framework of the research is shown in Figure 6.



**Figure 6: Conceptual Framework depicting the Role of Marketing Intelligence in Brand Positioning Factors**

Figure 6 shows the conceptual framework depicting the role of MI in factors of BP explored from the literature review.

### 3.5 Unit of Analysis

The unit of analysis is 72 consumer durable organizations.

### **3.6 Population and Respondents**

The consumer durables industry is growing at a phenomenal rate of 13 percent from FY05 to FY20 and is expected to grow to \$20.6 billion by 2020 (IBEF, 2017). Various companies like Blue Star, Diakin, Godrej, Hitachi, LG, Videocon, Samsung, Voltas, Sony, Philips, and Whirlpool have flooded the market with numerous product categories like televisions, air conditioners, washing machines, microwave ovens, laptops, refrigerators, LED/ LCDs, food processors, and electric fans.

In the present research, the scope of consumer durables market has been confined to nine product categories namely, air-conditioners, refrigerators, washing machines, microwave/ovens, Mixers/ Grinders/ Food Processors, Mobile phones, LCDs/ LEDs, electric fans and laptops whose buyers have been selected as respondents. 72 consumer durable companies have been selected for these product categories. It has been observed and found that the people in the IT department are responsible for designing the MkIS, people in the marketing department of a particular consumer durable organization are required to manage BP strategies (respond on usage of MI for BP) and consumers of particular brands prove the positioning by the frequency of purchase of that brand. Thus, the target population is identified and it comprises of executives from IT and marketing departments of different consumer durable organizations and consumers of consumer durable organizations.

### **3.7 Sampling and Data Collection**

The population of this research is very large and enumeration of all members is nearly impossible. On the basis of availability of consumer durable companies in different cities of various states and union territories in North India, a Purposive sampling for IT and marketing professionals and convenience sampling technique has been adopted for consumers of durable companies as it is selected based on the characteristics of a population (Patton, 1990). Convenience sampling technique is often used for confirmatory research work in social sciences where the population is very large (Babbie, 1990; Zikmund, 1997). Due care has been taken to include respondents of both the genders belonging to all age-groups, income-groups, educational levels and occupation categories (Refer to Table 12, 23 and 33 for demographic details of respondents). A structured and non-disguised questionnaire, based on a five-point Likert type scale, has been administered to the respondents to collect primary data. A total of 1640 questionnaires have been administered between March 2014 to September 2016, to the marketing professionals and IT professionals of durable companies

located in Northern India. Personal visits and associations through the alumni network helped to meet the professionals of these companies. Many professionals refused to fill the questionnaire. There were only a few IT professionals in these companies. Repeated visits to the organizations made the data collection possible. Out of 1640 questionnaires, 880 were received and from those 880 questionnaires, 780 were valid and 100 (45 consumers data, 30 marketing professionals and 25 IT professionals) were invalid, incomplete and had missing data. Thus, they were not considered in the research. The considered responses were 780 (310- consumers, 270- Marketing Professionals, 200- IT Professionals) completely-filled questionnaire, comprise the sample of the research. Kent (1993) has also affirmed that a sample of more than 600 respondents is adequate to conduct market research. MI implementation, usage and brand positioning were done by IT professionals, marketing professionals and consumers of select consumer durable organizations respectively. In order to test a model, the minimum sample size should be  $50 + 8k$ , where  $k$  is no. of predictors (Field, 2005). Thus the required sample size for IT professionals is 122 ( $50 + 8 \cdot 9$ ), for marketing professionals is 242 ( $50 + 8 \cdot 24$ ) and for consumers is 250 ( $50 + 8 \cdot 25$ ), however sample size of 200 is considered for IT professionals, 270 for marketing professionals and for consumers, 310 respondents is kept for consideration to perform CFA. To check the role of MI on Brand Positioning, 72 respondents (one from each company) were considered in the research to know the impact of MI on BP.

### **3.8 Sample Size**

India has a population of 1.3 billion people residing in 29 states and seven union territories, out of which 31% are situated in northern part of the country consisting of seven states, namely, Haryana, Punjab, Uttar Pradesh, Rajasthan, Uttarakhand, Himachal Pradesh, Jammu & Kashmir, and two union territories namely Delhi and Chandigarh. The research selected a total of 780 valid respondents comprises of 310 consumers, 270 Marketing Professionals, 200 IT Professionals from 72 consumer durable companies for collecting data from the major cities of Punjab and National Capital Region. The purpose of selecting Punjab as a sample is based on the fact that Punjab characterizes a rich state with the modern cities being equipped with all kinds of emerging consumer durable companies. Moreover, Punjab is a state where people are fond of spending. Punjab affords the best quality of life to its residents. The major cities have been included in the Malwa region. The cities covered were Ludhiana, Patiala, Mohali, and Chandigarh from the Malwa region. National Capital Region is also considered to have the big organizations and affords the best quality of life to its residents. The cities

covered from National Capital Region were New Delhi, Noida, Gurgaon, Ghaziabad, and Faridabad.

The north region of India has been chosen based on practical considerations since the researcher and the University are located in the Malwa region of Punjab, district Patiala. The region includes rich states with modern cities which are populated with consumer durable companies. The survey method with the use of questionnaire formation has been carried out while keeping the following objectives in mind.

- a) To attain the required input by measuring the variables quantitatively so as to test the hypotheses.
- b) To collect data by using a questionnaire as an instrument.

### **3.9 Design and Development of Research Instruments**

After the identification of factors of BP and MI, a sequence of questions has been decided to collect the information considering the objectives of the present research. The three questionnaires have been divided into three different sections such as demographic profile, product category, and questions related to each factor of BP and MI. Information collected from respondents has been compiled in an excel format according to standardized manuals of statistical tests.

1. The IT Professionals' questionnaire was divided into two sections covering all the important aspects of MI. Section A covers the demographic profile of IT Professionals; section B contains the MI questions.
2. In the same way, Marketing Professionals' questionnaire was divided into two sections i.e., section A covers demographic profile of marketing professionals; section B covers the statements showing the usage of MI for building brand positioning. The statements are made by linking MI and BP factors.
3. In a similar manner, Consumers' questionnaire was divided into two sections i.e., section A covers the demographic details of the consumers and section B covers their purchase preferences factors to buy a particular brand. The three questionnaires have been shown as an Appendix 1, 2 and 3.

The questionnaire design process was adapted by Radhakrishna (2007). The factors of MI and BP were identified from the literature and considered their measurement items on the basis of literature and items were formulated with the consultation of academic and industry

experts. A structured questionnaire, based on a five-point Likert scale, has been used to collect primary data. In most of the similar studies, this scale has been used to measure respondents' attitudes towards BP (Talvinen & Saarinen, 1995).

The whole foundation of questionnaire development is to record the response of the sample to obtain the information sought by the researchers for achieving research objectives. The foundation of all questionnaires is the questions statements for which the researcher intends to seek answer or opinion. Thus, questionnaires were made in the light of research purpose, information was sought and analysis plan was drafted. The questionnaire was developed keeping in mind the independent (MI) and dependent variables (BP factors) of the research framework and their subsequent relationships. The research framework presented in Figure 6 is the basis of questionnaire formation.

Questionnaire development for the survey is conducted in multiple stages signifying the different phases of it. The first step was the review of relevant literature which is carried out to identify the existing scale for the constructs identified. The second step was to review previously tested and validated scale. But in this research, the statements were made by linking brand positioning factors with MI factors and not taken the validated scales as they were previously considered. New scales were developed through a review of the literature and theoretical definitions of each construct, where no validated measure was available. The following section deals with the scale formation in the present research.

### **3.10 Scale Formation**

Scaling is the generation of a continuum on which measured objects are located by assigning the numbers to the characteristic of objects in pre-specified rules (Malhotra, 2006). The items used in the survey are measured using a five-point Likert scale. In developing these scales, an effort was made to ensure that scale references are kept to a minimum to avoid respondents' confusion. Likert scale is used to formulate the questions in statement forms with five intervals of measurement starting from strongly agree to strongly disagree. Some multiple item questions were also used to obtain the firm's details. A deliberate effort was made to avoid generalized, biased and misleading questions in order to ensure the purpose of research. Open-ended questions were not used due to the difficulty in analyzing such responses. Formatting of the questionnaire is done in a way so that it can be appealing and inducing to the respondents for giving responses. Simple and precise statements were designed keeping in mind the responses being sought by the researcher. Special care was

taken in order to commensurate the language and wording of statements with respondent's possible thought processing and also to create and sustain the interest of the respondents during the process of data collection. The decisions were taken regarding question relevance and language sequence, question response choice, and layout. The readability test was applied named as Flesch – Kincaid Readability Test (Standard Score: 7-8 to ensure understandable test- class 4<sup>th</sup> grade students able to understand) given by Radhakrishna (2007) as discussed by academic experts. Pre-testing of the questionnaires was done by an expert panel and was treated as the respondents of the survey and they identified the problems with the questionnaire. Protocol analysis and debriefing procedures were applied while pre-testing of the questionnaire. Double-barrelled questions were identified, reconstructed and question sequence was changed in the pre-testing stage. MI statements were reconstructed to make the respondents comfortable with the questionnaire as these were having an implicit assumption. Cognitive Dissonance variable was added in consumer perceptions factor of BP based on the suggestion of one of the academic expert. A careful specification of the constructs, review of scaling procedures was done by academic experts and respondents of the population.

### **3.11 Assessment of Three Types of Respondents' Perspective**

#### ***i. IT Professionals***

It involved designing a well-structured questionnaire to assess the perceptions of IT professionals of consumer durable firms towards MI and designing MkIS for the organization. The questionnaire for IT Professionals to measure MI lays emphasis on:

- secure and error-free information to consumers;
- the ability of MkIS to provide necessary information related to the organization and market effectively to all the employees;
- the ability of MkIS to assist in providing updated information on the market to all the departments concurrently;
- MkIS is comparable to standards;
- MkIS enables employees to accomplish tasks more quickly and effectively; and
- support from top management to deploy updated technology for the effective collection of information.

The IT Professionals were asked about how information is generated from MkIS, how information is disseminated to various departments concurrently and how the responsiveness from employees can be increased through MkIS.

*ii. Marketing Professionals*

It involved designing a well-structured questionnaire to assess the marketing professionals' viewpoint on the use of MkIS designed by IT professionals to utilize in BP strategies. It emphasizes on the usage of MI in building brand positioning factors like the credibility of the brand, price setting, innovation in the product, brand personality, customer expectations and perceptions, product attributes and knowledge about competitors to achieve competitive advantage over them.

*iii. Consumers*

It involves designing a well-structured questionnaire to assess consumers' preferences towards a particular brand of their choice as follows:

- the factors they consider while buying their favorite brand;
- after how long they do repeat purchase of the same brand;
- the abstract (intangible) and concrete (tangible) attributes they consider in a branded product of their choice;
- price aspects;
- perceived risk, how do they associate themselves with the brand while purchasing a branded product of their choice;
- how do they recall brand; and
- how they perceive their own personality by using that specific brand

**3.12 Reliability and Validity of the Research Instruments**

A sample of 100 respondents was used to test the reliability and validity of the instruments. Data were collected by administering the questionnaires to the IT Professionals, Marketing Professionals, and Consumers of 72 durable companies. The respondents have been approached personally in various districts. The purpose of the questionnaire was explained to them and help has been extended to them, wherever required, for filling the questionnaire. The consumers were assured anonymity and that the requirement of information is for

academic purposes only. After collecting the data, values of Cronbach's alpha and factor loadings for each statement have also been recorded.

The validity of the instrument can be verified from the values of factor loadings for each statement. It is usually accepted that factor loadings  $\geq .40$  for each statement is good for the validity of the questionnaire (Hair *et al.*, 2006). The validity is a criterion that essentially means the degree to be observed (Rosenthal & Rosnow, 1984). A pre-test or pilot testing with respondents of (IT professionals, Marketing Professionals, and Consumers) of consumer durable organizations was conducted. During this pre-test, managers were asked a variety of questions targeted to assess the face validity of the scale items and also to identify the potential issues pertaining to general quality of survey, clarity of instruction and meaningfulness of the items included in the questionnaire. Managers were also asked to find out any item of questionnaire carrying ambiguity or posing confusion to them. The same population which is subject to final research was deliberately chosen for pilot testing. The face validity test of the research instruments has been analyzed by experts. Along with industrial personnel, three academic experts have assessed the face validity of the scale items. Factor loading for each statement has also shown that statements are valid as all the values are more than 0.40.

Reliability of the questionnaire can be verified from Cronbach's alpha presented for various items in the questionnaire, which suggests a higher degree of inter-correlation among the test items (Cronbach, 1951). In the present research, reliability analysis has been carried out by using Cronbach's coefficient alpha which indicates the internal consistency of the scale used in the research for data collection purpose. Alpha is typically used when there are several Likert type items that are summed to take a composite score or summated scale. It is based on average correlation of each item in the scale with every other item. The high value of Cronbach's alpha, simply suggests that the scale possesses high internal consistency or high reliability of different items designed to measure multiple constructs and variables. Generally, as a rule of thumb, Cronbach's alpha  $\geq 0.70$  is considered an acceptable reliability coefficient (Nunnally, 1978). The questionnaire has been pre-tested on a sample of 100 respondents. All the statements have been found to be reliable since the value of Cronbach's alpha for each construct is greater than 0.70.

A pilot testing was done to achieve the following objectives i.e. accurate miniaturization of the planned research; explore the understanding of questions by respondents, ease of administration, glimpse of nature of the information that would be obtained, the production

rate of interviews and any particular problem encountered. The pilot testing got rid of weakness embedded in the questionnaire and necessary changes were incorporated in the form of reformulation, change of words, language, space, and appearance. After making the revised questionnaire, it is again presented to the pool of experts to get their final nod for data collection. The final questionnaires are attached as Appendix 1, 2 and 3.

### **3.13 Data Analysis Techniques**

Data were analyzed with the help SPSS v 21 (Statistical Package for Social Sciences) and AMOS version 21.0. Structural Equation Modelling (SEM) was applied to the data to test the hypotheses.

#### **a) Structural Equation Modelling**

SEM is a powerful, yet complex, analytical technique (Shook *et. al.*, 2004). It is a family of statistical models that seek to explain the relationships between multiple variables and examines the structure of interrelationships expressed in a series of equations (Hair *et al.*, 2006). It is a unique combination of both interdependence and dependence techniques. The series of statistical methods allow complex relationships between one or more independent variables and one or more dependent variables. It can be conceptually used to answer any research question involving direct or indirect observation of one or more independent variables or one or more dependent variables. It is particularly useful when one dependent variable becomes an independent variable in a subsequent dependence relationship and it makes the structural model interdependent. However, the primary goal of SEM is to determine and validate a proposed conceptual model. In this analysis, two types of variables are used, namely, exogenous variables and endogenous variables (Hair *et al.*, 2006). Variables that are not influenced by other variables in a model are called exogenous variables. Variables that are influenced by other variables in a model are called endogenous variables.

SEM is used in this research to test the relation between MI and BP. In this research, a structural model of the direct effects of factors of MI on BP has been developed. SEM helped to achieve Objective 2 and 3 by showing the proposed model along with the R-Square values that depict the % effect of MI on each factor of BP.

### **3.14 Conclusion**

Choice of an appropriate research design and methodology is one of the most important aspects that pave the way for targeted outcomes in the research process. This chapter described the detail of step by step approach adopted for the present research. It describes the research flow diagram, unit of analysis, sampling and research instruments development. It outlines the overview of the rationale of the statistical technique SEM used in the research. The next chapter presents the analysis and the results.

**CHAPTER IV**  
**DATA ANALYSIS AND**  
**RESULTS**

## Chapter IV

### Analysis and Results

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*“Analysis is the critical starting point of strategic thinking” - Kenichi Ohmae.*

#### 4.1 Introduction

This chapter covers the statistical analysis of data and reports the findings. Data were analyzed with the help of SPSS®21.0. It includes the statistical analysis of data representing the IT Professionals’ perspective on MI, Marketing Professionals’ Perspective on Usage of MI for BP and Consumers’ perspective for their purchase preference factors while purchasing any branded consumer durable product in the Northern region of India. Analysis based on IT Professionals’ perspective has been segregated in two sections: First, the demographic profile of IT Professionals and Second, the analysis on MkIS, information generation, information dissemination and responsiveness in consumer durable organizations in Northern India. Analysis based on marketing professionals’ perspective has been segregated in two sections: demographic profile of marketing professionals; and the analysis on usage of MI in each factor of BP from marketing professional’s point of view. It is done to understand the branding strategies adopted by them and to suggest the important branding strategies to marketing professionals for better management. Analysis based on consumers’ perspective has been segregated in two sections: demographic profile of consumers; and the analysis on preferences and factors considered while purchasing any branded product.

Based upon the results and discussion of IT, Marketing and consumers’ perspective, a framework was developed on these three perspectives for format wise choice.

This chapter presents the statistical analysis of data for the research and reports the findings. Data analysis was done with SPSS (21.0). In this process, firstly data coding is checked and if required, data purging is done. Prior to the analysis of data, SPSS data editor was arranged and data exploration was carried out. Once data were arranged, cleaned and ready to be analyzed statistically, all the necessary assumptions were tested and subsequently, it is concluded which of the statistical techniques is required to be carried out viz. uni-variate, bi-variate or multivariate analysis. It was done with the help of descriptive as well as inferential statistics. In this research, various constructs were used and their reliability and validity were tested. Sample profile was also generated. Statistical Analysis Techniques particularly EFA,

CFA, and SEM were conducted with the help of SPSS (21.0) to validate the research framework.

#### 4.2 Data Validity and Reliability of the Research Instruments

In the present research, reliability analysis has been carried out by using Cronbach’s coefficient alpha which indicates the internal consistency of the scale used in this research for the purpose of data collection. Cronbach’s alpha is typically used when there are several Likert type items that are summed to take a composite score or a summated scale. It is based on an average correlation of each item in the scale with every other item. The high value of Cronbach’s coefficient alpha suggests that the scale possesses high internal consistency or high reliability of different items designed to measure multiple constructs and variables. Generally, as a rule of thumb, Cronbach’s alpha  $\geq 0.70$  is considered an acceptable reliability coefficient (Nunnally, 1978). In the present research, the questionnaire has been pre-tested on a sample of 100 respondents. The validity of the instrument was also verified from the values of factor loadings for each statement. It accepted that factor loading  $\geq .40$  for each statement is good for the validity of the statements and for the questionnaire (Hair *et al.*, 2006).

A construct of ‘BP factors’ has been proposed in the research. It consists of twenty-five statements representing seven sub-constructs, namely, Product Attributes (2), Credibility (3), Brand Personality (6), Price (2), Customer perceptions (7), Organizational attributes (3), Competitors’ attributes (2), taken together.

Table 5 shows the Validity and Reliability of Brand Positioning.

**Table 5: Validity and Reliability of the construct Brand Positioning (Consumers’ Perspective)**

Name of the construct (Value of Cronbach’s coefficient alpha)	Constructs	Items	Statements	Factor loadings
Brand Positioning factors (0.821)	Credibility (.844)	Trustworthiness	CR1 <i>I perceive that the selected brand has ability to fulfil expected quality.</i>	.889
		Expertise	CR2. <i>I perceive that the selected brand provides consistent quality.</i>	.861
		Consistency	CR3. <i>I get the consistent information of the selected brand from marketing personnel.</i>	.841

	<b>Brand Personality (.887)</b>	Brand Personality	BP1. <i>I stick to the selected brand because it appeals to me.</i>	.814
		Sincerity	BP2. <i>I purchase the selected brand because it gives me the reflection of honesty and fulfilment in terms of value.</i>	.848
		Ruggedness	BP3. <i>I purchase the selected brand because the products of this brand are non delicate or hard enough to sustain with the extreme handling.</i>	.827
		Competence	BP4. <i>I purchase the selected brand because of its reliability.</i>	.735
		Sophistication	BP5. <i>I purchase the selected brand because it gives me a feeling of sophistication (hi-class).</i>	.826
		Excitement	BP6. <i>I purchase the selected brand because it is trendy and innovative (exciting).</i>	.792
	<b>Organizational Attributes (.827)</b>	Consumer Concern	OA1. <i>The organization of the selected brand supports me in resolving any type of brand related query or problem.</i>	.810
		Innovation	OA2. <i>I found majority of people aware about the brand's unique features through advertisements and promotions.</i>	.863
		Consumer Concern	OA3. <i>The organization of the selected brand provides regular satisfactory post sales services.</i>	.852
	<b>Product Attributes (.705)</b>	Concrete	PA1. <i>I prefer this brand because I give more importance to physical features of the product like color, design and spaciousness.</i>	.869
		Abstract	PA2. <i>I prefer this brand because of its various secondary benefits like warranty schemes, eco-friendliness, earlier purchase experience and discount schemes.</i>	.872
	<b>Price of the Product (.745)</b>	Fast price response	PR1. <i>I am ready to pay the high price for the selected brand as it adds to my status.</i>	.824
		Fast price response	PR2. <i>The selected brand provides me value for money.</i>	.793
		Monitoring competitor's pricing	PR3. <i>With respect to competitors, I found the brands prices as fair enough.</i>	.705

<b>Customer Perceptions (.882)</b>	Brand recalling	CP1. <i>I recall the selected brand because of promotions and advertisements.</i>	.530
	Social and esteem value perceptions	CP2. <i>When I use this brand, I feel socially acknowledged.</i>	.694
	Quality Perceptions	CP3. <i>I purchase this brand as it provides me qualities and features that I am looking for.</i>	.600
	Associations	CP4. <i>I can associate this brand with my personality.</i>	.835
	Social and esteem value perceptions	CP5. <i>I consider this brand as it reflects my status.</i>	.800
	Perceived risks	CP6. <i>I perceive risk while purchasing the selected brand for the first time.</i>	.702
	Cognitive dissonance	CP7. <i>Due to poor post sales services, I feel my purchase decision was wrong.</i>	.736
	Cognitive dissonance	CP8. <i>Due to poor quality of the product of the selected brand, I feel my purchase decision was wrong.</i>	.790

All the constructs, namely, credibility, product attributes, brand personality, price, organizational attributes, customer perceptions are valid because the factor loadings of each of the twenty-five statements are greater than 0.40. The values of Cronbach's alpha of all constructs are greater than 0.7, indicating they are reliable. The validity of the instrument was also verified from the values of factor loadings for each statement. It accepted that factor loading  $\geq .40$  for each statement is good for the validity of the statements and for the questionnaire (Hair *et al.*, 2006). Table 6 presents the validity and reliability of the construct of Brand Positioning from the perspective of marketing professionals.

**Table 6: Validity and Reliability of the construct of Brand Positioning (Marketing Professionals' Perspective)**

Name of the construct (Value of Cronbach's coefficient alpha)	Constructs	Items	Statements	Factor loadings
	<b>Credibility (0.836)</b>	Expertise 1	CE1. <i>MI assists you to put in extra efforts to maintain expected quality in the brand.</i>	0.905
		Expertise 2	CE2. <i>MI of the company facilitates managers to deliver expected quality brand.</i>	0.878

<b>Brand Positioning (0.824)</b>	Trustworthiness 1	CT1. <i>MI of the company is able to deliver expected quality brand.</i>	0.860	
	Trustworthiness 2	CT2. <i>My company's available resources (top management support, MkIS, team spirit) are sufficient/ adequate for maintaining the credibility.</i>	0.873	
	Consistency	CC1. <i>MI assists in providing the consistent information about the brand to its customers.</i>	0.830	
	<b>Brand Personality (0.805)</b>	Sincerity	BPSi. <i>MI of the company assists in making a brand which appears honest to the customers.</i>	0.646
		Ruggedness	BPR. <i>MI of the company assists in making a tough brand which can withstand tough situations.</i>	0.614
		Competency	BPC. <i>MI of the company facilitates in making a competent brand in terms of reliability and success.</i>	0.863
		Sophistication	BPSo. <i>MI of the company helps in making a sophisticated brand.</i>	0.766
		Excitement	BPE. <i>MI of the company helps in making an imaginative and up-to-date brand.</i>	0.668
	<b>Price of the product (0.777)</b>	Price setting of the products	PS1. <i>MI facilitates in appropriate price setting of products.</i>	0.793
		Monitoring competitors pricing	PS2. <i>MI provides better ways to monitor the competitor's pricing strategies.</i>	0.883
		Fast Price response	PS3. <i>MI helps in getting faster price response to market price fluctuations.</i>	0.708
	<b>Organizational Attributes (0.819)</b>	Consumer Concern	OA1. <i>MI assists in handling the queries and problems of the customers.</i>	0.920
		Innovation	OA2. <i>MI helps in showcasing the uniqueness of the product to the customers.</i>	0.672
		Promotional Support	OA3. <i>MI helps in</i>	0.881

			<i>developing better promotional mix strategies.</i>	
	<b>Competitors' Attributes (0.889)</b>	Competitive Advantage	<i>CA1. MI facilitates in assessing the market turbulence.</i>	0.807
		First Mover Advantage	<i>CA2. MI helps marketing managers in knowing the extent of competition.</i>	0.771
	<b>Consumer Perceptions (0.842)</b>	Consumer perceived risks	<i>CP1. MI helps in identifying and reducing consumer's perceived risks.</i>	0.802
		Brand recalling	<i>CP2. MI fulfils all the needs and expectations of the consumers by continuously providing the updated information about business environment.</i>	0.906
		Associations	<i>CP3. MI helps in scanning the market for better segmentation.</i>	0.814
		Social and Esteem value perceptions	<i>CP4. MI helps in targeting the customers based on their perceptions and expectations.</i>	0.744
	<b>Product Attributes (0.837)</b>	Concrete	<i>PAC. I use the incorporation of unique attributes to differentiate my brand with the competitors brand (tangible) like color, design, spaciousness.</i>	0.922
		Abstract	<i>PAA. I stress on the benefits the customer is getting, for effective purchase process (intangible) like warranty schemes, discount schemes, comfort.</i>	0.916

In Table 6, the values of *Cronbach's coefficient alpha* for the select variables were found significant. In fact, all the values of alpha are more than the cut off value of 0.60 (Nunnally, 1978). All the scales for select variables were found significant. Values around or more than 0.75 are considered highly significant. It can thus be concluded that the scales for different variables, used for data collection are found internally consistent therefore reliable. The compound value for this scale is 0.824 which is reliable (Nunnally & Bernstein, 1994). The

factor loadings of each of the statements are greater than 0.40, which indicates that constructs are valid as shown in Table 6.

The construct of MI has also been studied. It consists of nine statements representing three sub-constructs, namely planning focus (3), organizational culture (3) and process structure (3), taken together as shown in Table 7.

**Table 7: Validity and Reliability of the construct Marketing Intelligence (IT Professionals’ Perspective)**

<b>Name of the construct (Value of Cronbach’s coefficient alpha)</b>	<b>Constructs</b>	<b>Statements</b>	<b>Factor loadings</b>
<b>Marketing Intelligence (0.744)</b>	<b>Planning Focus (0.745)</b>	Information Dissemination - The company provides secure and error-free information to the consumers.	0.913
		Information Generation- The MkIS of the Company is able to provide necessary information related to the organization and market effectively to all the employees.	0.874
		Responsiveness- MkIS assists in providing updated information on the market to all the departments concurrently at the same time.	0.864
	<b>Process structure (0.708)</b>	The organization’s formal procedures are followed with the help of information system.	0.936
		Organizational processes are adhered to appropriate policies.	0.863
		Information system improves individual’s job performance with respect to marketing domain.	0.750
	<b>Organizational Culture (0.761)</b>	The culture of the company is cooperative and believes in high team spirit among the employees.	0.892
		Top Management always encourages managers/ employees to use MkIS and utilize innovative methods.	0.845
		Employees usually use MkIS to accomplish tasks more quickly and effectively to get more awareness about the organization.	0.627

In Table 7, the factor loadings of each of the statements is greater than 0.4, which indicates that constructs “Planning focus”, “Process Structure” and “Organizational Culture” are valid. The value of Cronbach’s alpha of all these constructs are greater than 0.7, indicating that all the constructs are reliable.

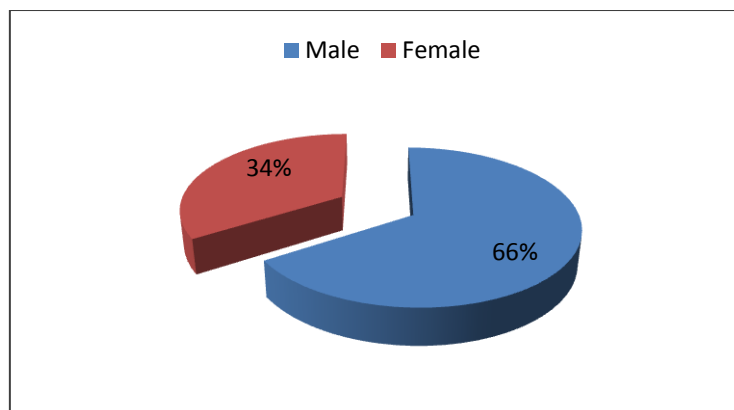
### 4.3 Demographic Profile of IT Professionals

The demographic profile of IT Professionals is shown in Table 8.

**Table 8: Demographic Profile of IT Professionals**

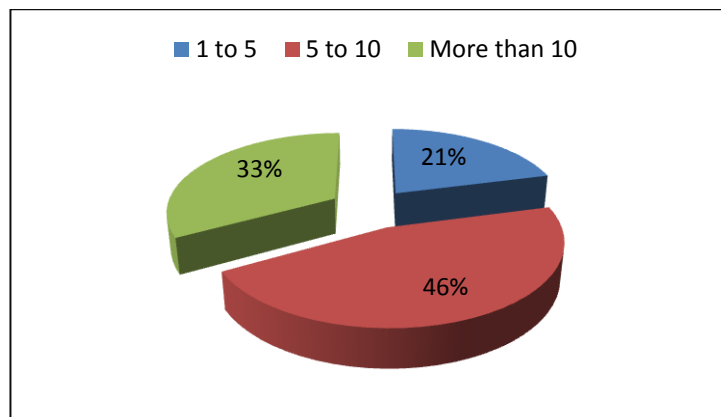
Demographic Profile	Code	Response
<b>Gender</b>		
Male	1	132
Female	2	68
<b>Years of service</b>		
1 to 5	1	42
5 to 10	2	92
More than 10	3	66

Table 8 represents that there are 132 male IT professionals and 68 female IT professionals, the IT professionals have different years of experience as 42 professionals are having 1 to 5 years of experience, 92 professionals are having 5 to 10 years of experience and 66 professionals are having more than 10 years of experience.



**Figure 7: Gender Distribution of IT Professionals**

Figure 7 represents the gender distribution of IT professionals as 34% male IT professionals and 66 % female IT professionals.



**Figure 8: Years of Service Distribution of IT professionals**

Figure 8 shows the years of service distribution of IT professionals as 33% professionals have 1 to 5 year experience, 46% of IT professionals have 5 to 10 years of experience and 21 % have more than 10 years of experience.

#### **4.4 Exploratory Factor Analysis of Marketing Intelligence (IT Professionals' Perspective)**

The factors of MI were identified with the help of EFA. IT Professionals were asked to give responses to various statements affecting MI on a five-point Likert type importance scale. Table 7 presents the statements, factor loadings and values of Cronbach's alpha for all factors.

##### **4.4.1 Descriptive Statistics of the Factors of Marketing Intelligence**

The descriptive statistics of the factors of MI is shown in Table 1 of Appendix 5.

It presents the descriptive statistics for all the variables of MI under investigation. The mean, standard deviation and number of respondents (N) who participated in the survey are given in this table. The results show that Organizational culture 1 is the most important variable that influences MI. It has the highest mean is 4.30.

##### **4.4.2 Correlation Matrix**

A correlation matrix presents the correlation between the variables of MI considered in this research. The Pearson Correlation along with the significance of each variable is given in Table 9. It can be seen from Table 9 that all the variables are significant and can be considered for further analysis. It is a rectangular array of numbers which gives the correlation coefficients between a single variable and every other variable in the investigation. The correlation coefficient between a variable and itself is always 1, hence the principal diagonal of the correlation matrix contains 1s. The correlation coefficients above and below the principal diagonal are the same.

**Table 9: Correlation Matrix of the Variables of Marketing Intelligence**

		Correlations								
		PF1	PF2	PS1	OC1	PF3	OC2	PS2	OC3	PS3
PF1	Pearson Correlation	1	.716**	.564**	.560**	.468**	.247*	.103*	.442**	.329**
	Sig. (2-tailed)		.000	.000	.000	.000	.039	.037	.000	.005
PF2	Pearson Correlation	.716**	1	.836**	.723**	.667**	.469**	.322**	.514**	.481**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.006	.000	.000
PS1	Pearson Correlation	.564**	.836**	1	.755**	.711**	.498**	.506**	.563**	.532**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000
OC1	Pearson Correlation	.560**	.723**	.755**	1	.735**	.541**	.523**	.509**	.529**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000
PF3	Pearson Correlation	.468**	.667**	.711**	.735**	1	.581**	.454**	.387**	.394**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.001	.001
OC2	Pearson Correlation	.247*	.469**	.498**	.541**	.581**	1	.434**	.319**	.322**
	Sig. (2-tailed)	.039	.000	.000	.000	.000		.000	.007	.007
PS2	Pearson Correlation	.103*	.322**	.506**	.523**	.454**	.434**	1	.405**	.399**
	Sig. (2-tailed)	.037	.006	.000	.000	.000	.000		.001	.001
OC3	Pearson Correlation	.442**	.514**	.563**	.509**	.387**	.319**	.405**	1	.864**
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.007	.001		.000
PS3	Pearson Correlation	.329**	.481**	.532**	.529**	.394**	.322**	.399**	.864**	1
	Sig. (2-tailed)	.005	.000	.000	.000	.001	.007	.001	.000	
**. Correlation is significant at the 0.01 level (2-tailed).										
*. Correlation is significant at the 0.05 level (2-tailed).										

#### 4.4.3 KMO and Bartlett's Test of Sphericity for Marketing Intelligence

The KMO measures the sampling adequacy (which determines if the responses given with the sample are adequate or not) which should be close than 0.5 for a satisfactory factor analysis to proceed. Kaiser (1974) recommended 0.5 (value for KMO) as minimum (barely accepted), values between 0.7-0.8 acceptable, and values above 0.9 are superb. The value obtained in Table 10 was 0.834 which is in the acceptable range. Hair *et al.*, (2006) recommended that in general over 300 respondents for sampling analysis is adequate. There is universal agreement that factor analysis is inappropriate when sample size is below 50.

Table 10 presents the values of Kaiser-Meyer-Olkin and Bartlett's Test of Sphericity for MI.

**Table 10: Kaiser-Meyer-Olkin and Bartlett's Test of Sphericity for Marketing Intelligence**

<b>Kaiser-Meyer-Olkin</b>		.834
Bartlett's Test of Sphericity	Approximate Chi-Square	440.967
	Degrees of Freedom	36
	Significance	.000

Bartlett's test is another indication of the strength of the relationship among the variables. This tests the null hypothesis that the correlation matrix is an identity matrix. In Table 10, the Bartlett's test of sphericity is significant (.000) as it is less than .05. It is small enough to reject the null hypothesis. This means that correlation matrix is not an identity matrix.

#### 4.4.4 Total Variance Explained by Factors of Marketing Intelligence

Principal Component Analysis with varimax rotation method was used for extracting the factors. Statements with factor loadings greater than 0.40 were considered. Factors with eigenvalue of one or more have been extracted. Three factors cumulatively explaining 74.104% of total variance have been extracted. Table 11 presents the names, eigenvalues, total variance explained and relative importance of each identified factor.

**Table 11: Names, eigenvalues, variance explained and relative importance of the Factors of Marketing Intelligence**

Names of factors	Eigen values	Variance explained	Relative importance
Planning Focus	3.076	34.177	1
Process Structure	1.950	21.662	2
Organizational Culture	1.644	18.265	3

### **Factor 1: Planning Focus**

The first factor affecting MI with the highest explained variance of 34.177% was named as 'Planning Focus'. The eigenvalue of this factor is 3.076. Three statements which significantly load on this factor are information generation, information dissemination, and responsiveness. The findings of other studies have also shown that information generation, information dissemination, and responsiveness are considerable determinants of Planning Focus (Kohli & Jaworski, 1990). Kohli & Jaworski (1990) defined MI as composed of three set of activities. These are first, organization-wide generation of market intelligence pertaining to current and future customer needs. Second, the dissemination of the intelligence across departments, and Third, organization-wide responsiveness to it.

### **Factor 2: Process-Structure**

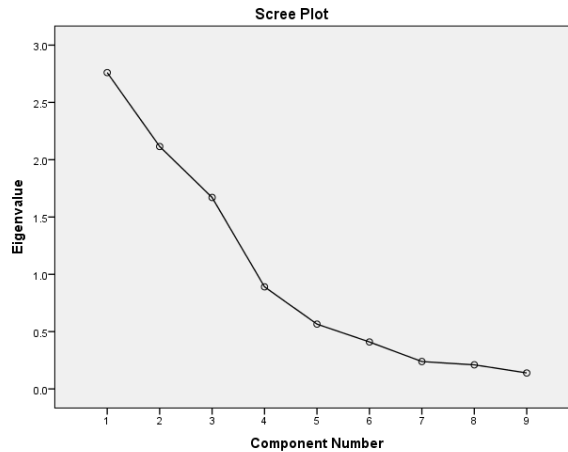
Process-Structure is the name that was given to the second factor. It had explained the variance of 21.662%. The eigenvalue of this factor is 1.950. Three statements which significantly load on this factor are procedures, appropriate policies, and formal or informal infrastructure are three statements which load on this factor. The results of previous studies have also presented similar results (Wright & Calof, 2006).

### **Factor 3: Organizational Culture**

The third factor was mentioned as 'Organizational Culture'. It explained the variance of 18.265% and eigenvalue of this factor is 1.644. Three statements which significantly load on this factor are Supportive & Teamwork culture, innovative culture, and Organizational awareness through MkIS. Other studies have also described these as important determinants of Organizational Culture (Wright & Calof, 2006).

#### **4.4.5 Scree Plot of Marketing Intelligence Factors**

The scree plot shown in Figure 9 is a graph of eigenvalues against all the factors. The graph is useful for determining how many factors to retain. The point of interest is where the curve starts to flatten. It can be seen that the curve begins to flatten between 3 and 4. Factors 4 onwards have an eigenvalue of less than 1, so only three factors have been retained. The items are grouped into 3 variables.



**Figure 9: Scree plot of Factors of Marketing Intelligence**

#### 4.4.6 Rotated Component Matrix for the Factors of Marketing Intelligence

The idea of rotation is to reduce the number of factors on which the variables under investigation have high loadings. Rotation does not actually change anything but makes the interpretation of the analysis easier. All the factors have been given approximate names according to the statements that have been loaded on these factors. Rotated factor matrix has been used for this purpose as shown in Table 12.

In Table 12, Planning Focus 1, 2 and 3 are substantially loaded on factor component 1 while process structure 1, 2, 3 are substantially loaded on Factor 2. All the remaining variables are substantially loaded on Factor 3. These factors can be used as variables for further analysis.

**Table 12: Rotated Component Matrix**

	Component		
	1	2	3
Planning Focus 1	.929		
Planning Focus 3	.906		
Planning Focus 2	.852		
process structure 1		.935	
process structure 3		.836	
process structure 2		.792	
organizational culture 3			.891
organizational culture 2			.817
organizational culture 1			.602

The factors obtained from exploratory factor analysis were confirmed by applying CFA. The subsequent discussion is based on analysis of data related to the objectives of the research.

#### 4.5 Confirmatory Factor Analysis of Marketing Intelligence Factors

CFA incorporates the uni-dimensionality and evaluates a data set by confirming the underlying structure on basis of theoretical background. This simply suggests simplification, modification and any required refinement in the measurement for theory testing and examining the level of fit. The construct of MI consists of 9 statements representing 3 sub-constructs, namely, ‘Planning Focus’, ‘Process Structure’ and ‘Organizational Culture’. These three sub-constructs have been subjected to CFA. The fit indices have suggested a moderate fit with regards to adequacy of fit elevated,  $\chi^2$ , GFI, NFI, RMSEA and PCLOSE as displayed in Table 13. By using valid and reliable constructs by EFA, the default model has been tested and assessed. The measurement model has been evaluated using CFA. They have been accepted on the basis of measures of fit, the statistical significance and signs of the coefficients.

**Table 13: Model Fit Summary of Marketing Intelligence Factors**

<b>Model Fit Summary</b>			
<b>S.No.</b>	<b>Parameters</b>	<b>Results</b>	<b>Acceptable Range</b>
1	CMIN/ DF	1.417	<5 permissible
2	CMIN	35.431	
3	P	.081	
4	GFI	0.908	>.90
5	AGFI	0.835	>.80
6	RMR	0.089	<.09
7	TLI	0.909	>0.9
8	IFI	0.941	>0.9
9	CFI	0.937	>.90
10	PCLOSE	.219	>0.05
11	RMSEA	.055	<0.05
Degrees of freedom = 25, Sample Size = 200			
The model is recursive, Minimum was achieved.			

**Table 14: Composite Reliability and Variance Extracted by Factors of Marketing Intelligence**

	<b>CR</b>	<b>AVE</b>	<b>MSV</b>	<b>Max R(H)</b>	<b>PS</b>	<b>PF</b>	<b>OC</b>
<b>PS</b>	0.764	0.535	0.020	0.914	<b>0.732</b>		
<b>PF</b>	0.801	0.573	0.065	0.937	0.108	<b>0.757</b>	
<b>OC</b>	0.734	0.582	0.065	0.948	-0.142	-0.254	<b>0.695</b>
SIC- Squared inter-construct correlation, AVE- Average variance extracted, CR- Composite Reliability							

All variances extracted (AVE) estimates in Table 14 were larger than the squared inter construct correlation estimates (SIC). Therefore, it was confirmed that the indicators have more in common with the construct they were associated with than they do with other

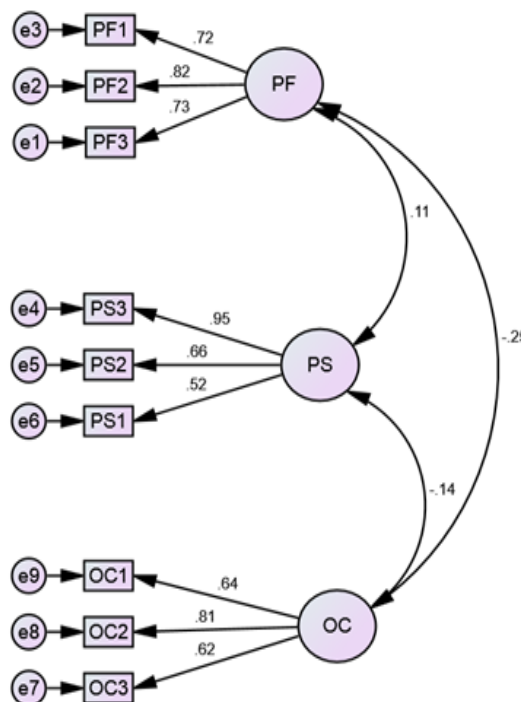
constructs. Also, Reliability = CR > 0.7, Convergent Validity = AVE >0.5. For discriminant validity, MSV < AVE (Square-root of AVE is greater than inter-construct correlations). Thus, the model has no issues of convergent or discriminant validity.

Nomological validity was tested by examining whether the covariances between the constructs in the measurement model make sense. The construct covariances are used to assess this. All the covariances are positive and significant as seen in Table 15 confirming nomological validity.

**Table 15: Regression Weights**

			Estimate	S.E.	C.R.	P
PF3	<---	PF	1.000			
PF2	<---	PF	1.030	.196	5.249	***
PF1	<---	PF	.890	.173	5.145	***
PS3	<---	PS	1.000			
PS2	<---	PS	.841	.223	3.774	***
PS1	<---	PS	.511	.152	3.361	***
OC3	<---	OC	.551	.114	4.835	***
OC2	<---	OC	1.000			
OC1	<---	OC	.573	.114	5.013	***

From the observations given in Table 15, it was confirmed that the scale developed measures MI. The measurement model representing loadings is shown in Figure 10.



**Figure 10: Measurement Model for Marketing Intelligence Construct.**

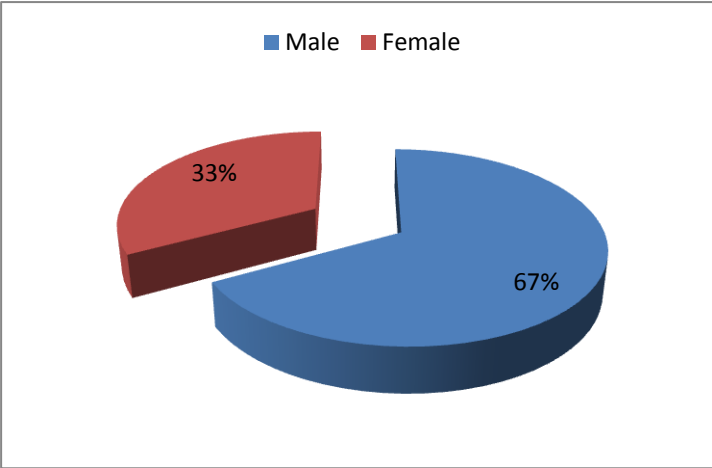
#### 4.6 Demographic Profile of Marketing Professionals

The demographic profile of marketing professionals is shown in Table 16.

**Table 16: Demographic Profile of Marketing Professionals**

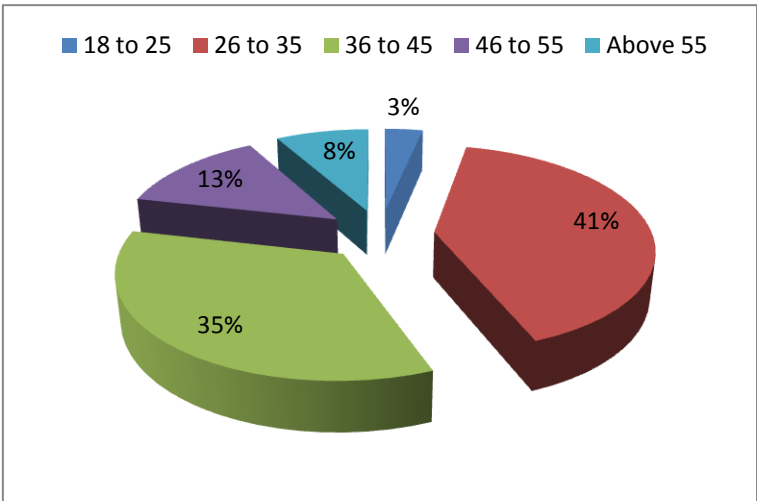
Demographic Profile	Code	Responses
<b>Gender</b>		
Male	1	181
Female	2	89
<b>Age</b>		
18 to 25	1	9
26 to 35	2	110
36 to 45	3	93
46 to 55	4	36
Above 55	5	22
<b>Years of Service</b>		
Less than 1	1	10
1 to 5	2	58
5 to 10	3	113
more than 10	4	89
<b>Highest Level of Education</b>		
Bachelors Degree	1	136
Post Graduate Degree	2	134
<b>Computer Knowledge</b>		
Proficient	1	208
Not Proficient	2	62
<b>How often do you use computer for your job purpose?</b>		
• Totally computer based job	1	14
• Have to refer computer daily for one or other reason	2	114
• Have to refer computer occasionally for work	3	82
• I rarely use computer	4	60

Table 16 implies the demographic details of marketing professionals like 181 professionals are males and 89 are females. The age group constitutes that 9 marketing professionals lie in the age group of 18 to 25, 110 falls in the age group of 26 to 35 years, 93 lie in the age group of 36 to 45 years, 36 lie in 46 to 55 years and in case of above 55 years group, the count is 22. In years of service, 113 marketing professionals have maximum experience i.e., 5 to 10 years, 89 lies in more than 10 years, 58 lies in 1 to 5 years and 10 lies in less than 1 year. In the highest level of education, 136 have done bachelors and 134 have done a post-graduate degree. 208 professionals are proficient in using the computer and different software while 62 are not proficient. 114 professionals use a computer for one or the other reason related to marketing, 74 professionals have rarely used, 68 professionals have to refer computer occasionally for work while 14 professionals have totally a computer-based job.



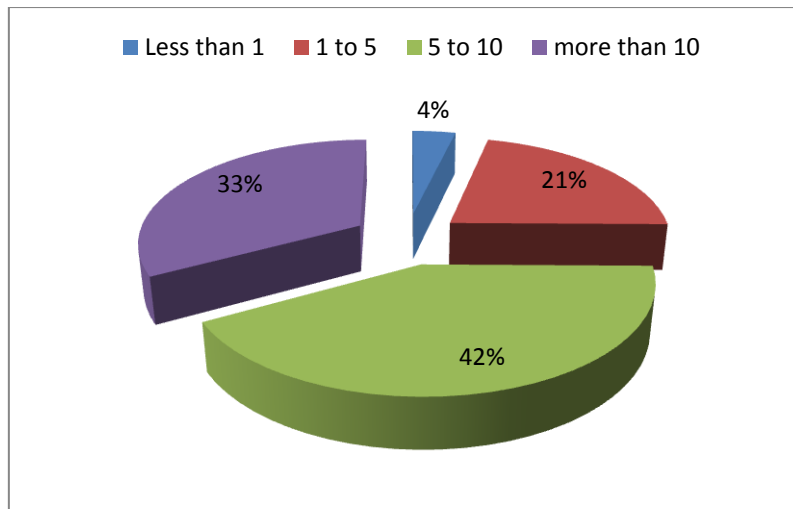
**Figure 11: Gender Distribution of Marketing Professionals**

Figure 11 shows the gender wise distribution of marketing professionals – 33 % as female marketing professionals and 67 % as male marketing professionals.



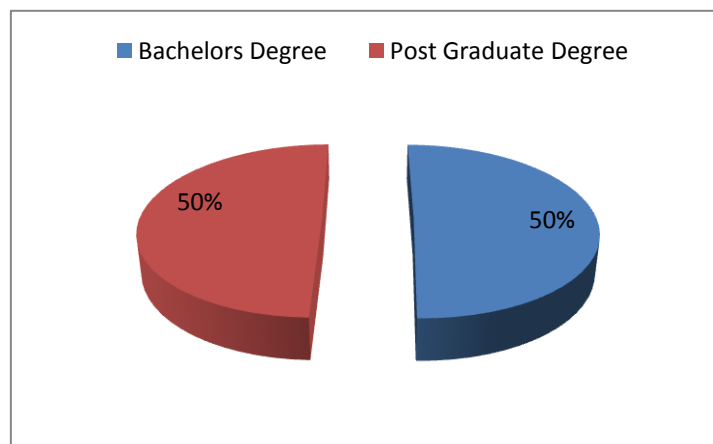
**Figure 12: Age Distribution of Marketing Professionals**

Figure 12 represents the age distribution of marketing professionals that is 3 % are 18 to 25 years of old, 41 % lie in 26 to 35 years old, 35 % are 36 to 45 years old, 13% are 46 to 55 years old and 8 % are 55 years old.



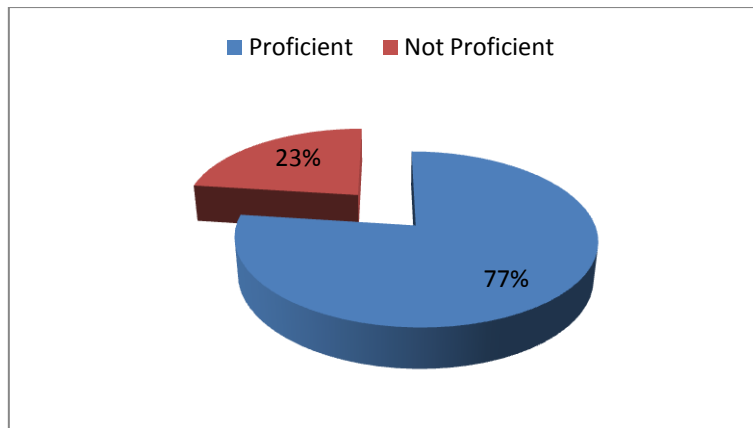
**Figure 13: Years of Service Distribution of Marketing Professionals**

Figure 13 depicts that 4% marketing professionals have less than 1 year experience, 21% marketing professionals were having 1 to 5 years' experience, 42% have 5 to 10 years' experience while 33% have more than 10 years' of experience.



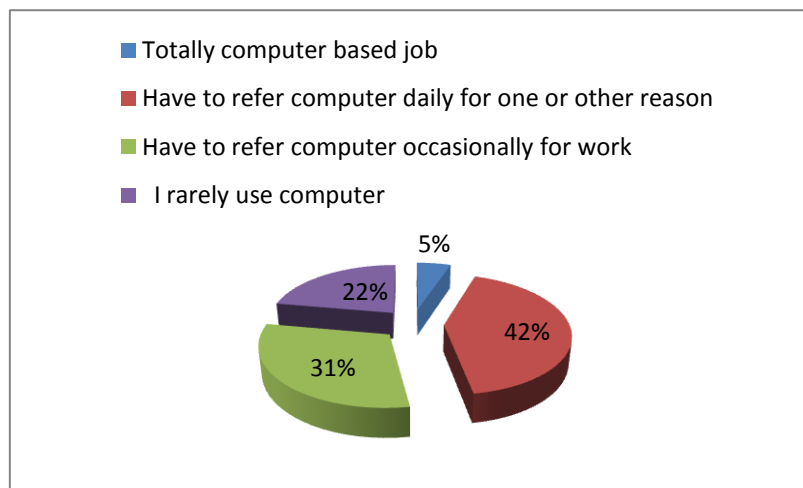
**Figure 14: Distribution of Highest Level of Education of Marketing Professionals**

Figure 14 presents the highest level of education distribution - 50% marketing professionals were graduates and 50 % were post-graduates.



**Figure 15: Computer Knowledge Proficiency Distribution of Marketing Professionals**

Figure 15 shows that 23 % marketing professionals were not proficient in computers while 77% were proficient in computers.



**Figure 16: Computer Usage Distribution of Marketing Professionals**

Figure 16 presents the computer usage distribution- 5 % professionals were into totally computer based job, 42% have to refer computer daily for one or other reason, 31% marketing professionals have to refer computer occasionally for work while 22% rarely use computer.

#### **4.7 Exploratory Factor Analysis of Brand Positioning (Marketing Professionals Perspective)**

EFA was conducted to establish the validity of the scales to select variables in the proposed research framework. Convergent validity was established by observing the factor loading. It was done by carrying out factor analysis on all the select variables, one by one. High factor

loadings indicate that the items are highly correlated with each other, thus form a group also. The factor loadings of different items of all the select variables are presented in Table 6. The factors loadings of the items on the same construct shown, as the rotated component matrix is more than 0.5 (Hair *et al.*,2006). In most of the cases, it clearly depicts that instrument possesses construct validity through convergent validity.

#### **4.7.1 Sample Profile of Marketing Professionals**

Data were collected by administering questionnaires among the marketing professionals that deal with white goods, brown goods, and electronics on a personal basis by the researcher. The sample comprises of consumer durable firms in three classifications - White Goods, Brown Goods, and Electronics. These are household appliances. It ranges from small and medium-sized manufacturers to multinationals, employing a workforce between 400 and 5000. Out of total 300, 270 questionnaires were found valid and appropriate and sufficient from the information's point of view while 30 were invalid and had missing data. This sample size is sufficient to conduct EFA according to Tabachnick & Fidell (2007). Data collection process was ceased up to this level for EFA. It was tabulated with the help of SPSS version 21.0.

The time taken to complete this exercise was 10 months. Personal approach was followed to get the questionnaire completed by the senior executives – marketing managers. Prior to the interview, appointment through telephone and e-mail was taken. In the first round of visit, questionnaires were given and then on subsequent visits filled up questionnaires were collected. Simultaneously, during the administration of the questionnaire, doubts and questions were clarified. The executives of the units were assured anonymity by the researchers and were convinced that the information obtained through the survey would be used for academic purpose only.

#### **4.7.2 Descriptive Statistics of Brand Positioning (Marketing Professionals Perspective)**

The descriptive statistics of BP factors under investigation are given in Table 2 of Appendix 5. It presents the mean, standard deviation and number of respondents (N) who participated in the survey are given in Table 2 of Appendix 5, the highest mean is of Product Attributes factor that means it is the most important variable that marketing professionals consider in their brand positioning strategies to influence the customer. It has the highest mean of 4.08.

The assumption of normality is checked in this table for descriptive statistics of variables in the research framework. The value of the mean, median and mode shall be more or less same and the value of skewness must lie between -1 to +1 in order to consider normality in the data (Hair et al., 2006). It is found applicable in the data set thus the available data can be treated as approximately normal in Table 2 of Appendix 5.

#### 4.7.3 Correlation Matrix of the Variables of Brand Positioning

The correlation between the factors of BP (Marketing Professionals' perspective) is shown in Table 17. The significant correlations along with the level of significance are mentioned in Table 17. It presents that all the variables of BP considered in this research are significant and can be taken for further analysis.

**Table 17: Correlation Matrix of the Factors of Brand Positioning (computed)**

		Correlations						
		Credibility	Brand Personality	Price	Organizational Attributes	Competitors Attributes	Cust Percep	Product Attributes
Credibility	Pearson Correlation	1	.273**	.265**	.159**	.499**	0.213*	0.074*
	Sig. (2-tailed)		.000	.000	.009	.000	.043	.023
Brand Personality	Pearson Correlation	.273**	1	.273**	.337**	.467**	.157*	.129*
	Sig. (2-tailed)	.000		.000	.000	.000	.010	.034
Price	Pearson Correlation	.265**	.273**	1	.322**	.184**	.111*	.091*
	Sig. (2-tailed)	.000	.000		.000	.002	.035	.037
Organizational Attributes	Pearson Correlation	.159**	.337**	.322**	1	.265**	0.105*	0.083*
	Sig. (2-tailed)	.009	.000	.000		.000	.022	.017
Competitors Attributes	Pearson Correlation	.499**	.467**	.184**	.265**	1	.256**	0.116*
	Sig. (2-tailed)	.000	.000	.002	.000		.000	.046
Cust Percep	Pearson Correlation	0.213*	.157*	.111*	0.105*	.256**	1	0.149*
	Sig. (2-tailed)	.043	.010	.035	.022	.000		.021
Product Attributes	Pearson Correlation	0.074*	.129*	.091*	0.083*	0.116*	0.149*	1
	Sig. (2-tailed)	.023	.034	.037	.017	.046	.021	
**.		Correlation is significant at the 0.01 level (2-tailed).						
*.		Correlation is significant at the 0.05 level (2-tailed).						

#### 4.7.4 KMO and Bartlett's Test for Brand Positioning Factors (Marketing Professionals' Perspective)

Bartlett's test of sphericity is significant which supports the factorability of the data set and implies the presence of non-zero correlation among the items and a high level of homogeneity among variables (Field, 2006). Kaiser Meyer Olkin (KMO) and Bartlett's Test (measures the strength of relationship among the variables) is shown in Table 18.

**Table 18: KMO and Bartlett's Test for Brand Positioning Factors**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.780
Approx. Chi-Square		4077.905
Bartlett's Test of Sphericity	df	276
	Sig.	.000

The KMO measures the sampling adequacy (which determines if the responses given with the sample are adequate or not) which should be almost 0.5 for a satisfactory factor analysis to proceed. Kaiser (1974) recommend 0.5 (value for KMO) as a minimum (barely accepted), values between 0.7 – 0.8 acceptable, and values above 0.9 are superb. In Table 18, the KMO measure is 0.780 which is between 0.7 – 0.8 which is acceptable. Field (2005) says that in general over 100 respondents for sampling analysis is probably adequate. There is universal agreement that factor analysis is inappropriate when the sample size is below 50.

Bartlett's test is another indication of the strength of the relationship among variables. This tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is a matrix in which all of the diagonal elements are 1 and all off diagonal elements are close to 0. Bartlett's test of sphericity is .000 that is less than 0.05. It rejects the null hypothesis. This means that the correlation matrix is not an identity matrix.

The assumptions concerning missing data and outliers were met. Fourth, the results of data linearity, multicollinearity, and normality were satisfactory. Overall, these data satisfy the fundamental requirements for factor analysis.

#### 4.7.5 Total Variance Explained by Factors of Brand Positioning

The current research employed Principal Component Analysis for factor extraction (Hair *et al.*, 2006; Tabachnick & Fidell, 2007). The eigenvalue actually reflects the number of extracted factors whose sum should be equal to the number of items which are subjected to factor analysis. The eigenvalue table has been divided into three sub-sections such as Initial Eigen Values, Extracted Sums of Squared Loadings and Rotation of Sums of Squared Loadings. For analysis and interpretation purpose, a concern is only with Extracted Sums of

Squared Loadings. In Table 19, the first factor accounts for 26.250% of the variance, the second 12.017%, third 11.521%, fourth 8.129%, fifth 6.925%, sixth 6.486% and the seventh 4.765%. All the factors constitute 76.093% variance (Table 19).

**Table 19: Total Variance Explained by Factors of Brand Positioning (Computed)**

S.No.		Extraction Sums of Squared Loadings			Relative importance
		Total	% of Variance	Cumulative %	
1	Credibility	6.300	26.250	26.250	1
2	Brand Personality	2.884	12.017	38.268	2
3	Price	2.765	11.521	49.789	3
4	Organizational Attributes	1.951	8.129	57.917	4
5	Competitors' attributes	1.662	6.925	64.843	5
6	Customer Perceptions	1.557	6.486	71.328	6
7	Product Attributes	1.144	4.765	76.093	7

**Factor 1: Credibility**

The first-factor affecting brand positioning with the highest explained variance of 26.250% has been named as ‘Credibility’. The eigenvalue of this factor is 6.300. Five statements which significantly load on this factor are maintenance of expected quality, manages to deliver expected quality, ability to deliver expected quality, available resources to fulfil expected quality, and consistency in information. The findings of other studies have also shown that these items are considerable determinants of Credibility (Erdem & Swait, 1998; Eisingerich & Rubera, 2010; Erdem & Swait, 2016).

**Factor 2: Brand Personality**

Brand Personality is the name that has been given to the second factor. It has explained the variance of 12.017%. The eigenvalue of this factor is 2.884. The five statements which significantly load on this factor are sincerity, competence, sophistication, excitement, ruggedness. The findings of other studies have also shown that these five items are the considerable determinants of brand personality (Aaker, 1997; Azoulay & Kapferer, 2003).

**Factor 3: Customer Perceptions**

‘Customer Perceptions’ is named as the third factor. It has explained the variance of 6.486%. The eigenvalue of this factor is 1.557. Customer perceived risks, Needs of the customers, market segmentation, and targeting customers based on perceptions and needs are the four

statements which significantly load on this factor. Other studies have also observed similar findings (Diwan & Jain, 2009, Jamal & Al-Marri, 2007; O'Neil & Palmer, 2004).

#### **Factor 4: Organizational Attributes**

'Organizational attributes' has been reported as the fourth factor. It has explained the variance of 8.129%. The eigenvalue of this factor is 1.951. Three statements which significantly load on this factor are handling queries and problems (Consumer concern), showcasing the uniqueness of the product (Innovative culture), developing better promotional mix strategies (Top management support). Various studies have also demonstrated similar findings (Urde, 2003; Aaker *et al.*, 2001; Aaker, 2004a).

#### **Factor 5: Price**

The fifth factor has been mentioned as 'Price'. It has explained the variance of 11.521%. The eigenvalue of this factor is 2.765. Three statements which significantly load on this factor are the facilitation of appropriate price setting, ways to monitor competitor's pricing strategy, and faster price response to market fluctuations. Similar findings of other studies have also shown that three items are the determinants of Price (Prasnikar, Rajkovic & Vehovec, 2008; Gwin & Gwin, 2003).

#### **Factor 6: Product Attributes**

'Product attributes' has been documented as the sixth factor affecting BP with the lowest explained variance of 4.765%. The eigenvalue of this factor is 1.144. Abstract and Concrete features are the two statements which significantly load on this factor. Findings of various studies have also depicted these features as determinants of product attributes (Mowen, 1993; Aaker, 1992; Alden & Nariswari, 2017).

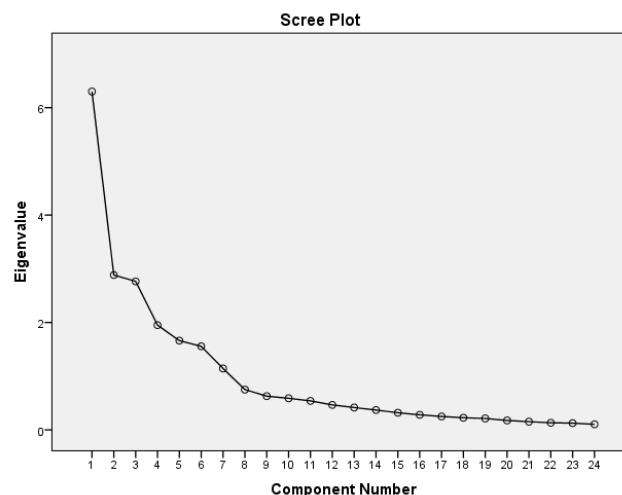
#### **Factor 7: Competitors' Attributes**

The seventh factor has been named as 'Competitors' attributes'. It has explained the variance of 6.925%. The eigenvalue of this factor is 1.662. Two statements which significantly load on this factor are to assessing the market turbulence (First mover advantage), knowing the extent of competition (Competitive advantage). Previous studies have also highlighted these items as relevant determinants of competitors' attributes (Diwan & Jain, 2009; Wright & Calof, 2006, Mahmoud, 2011).

#### 4.7.6 Scree Plot of Factors of Brand Positioning (Marketing Professionals' Perspective)

A scree plot as shown in Figure 17 is a graph of the eigenvalues against all the factors. The graph is useful for determining how many factors to retain. The point of interest is where the curve starts to flatten. It can be seen that the curve begins to flatten between factors 7 and 8.

The graphical results of the scree test are better than the rule of eigenvalues greater than 1 (Ford, MacCallum, & Trait, 1986). Subsequent research also supports the concept that when the goal is to categorize common factors, it is more rational to examine the scree plots of the eigenvalues (Fabrigar *et al.*, 1999) by using Cattell's scree test (Cattell, 1966). As shown in Figure 17, a scree plot is a graphical representation which involves the visual exploration of a graphical representation of the eigenvalues. In the scree test, the eigenvalues are presented in descending order and linked by a line. A point is determined where a drop or break has taken place (Ledesma & Valero-Mora, 2007). The scree plot is shown in Figure 17.



**Figure 17: Scree Plot of Factors of Brand Positioning (Marketing Professionals' Perspective)**

On analysis of the scree plot, as shown in Figure 17, a clear break is revealed in the trend for eigenvalues after the seventh component. As depicted in Figure 17, the graphical line in the scree test drops down until there is a break or bump in the curve, and where it begins to straighten out is considered to be an indication of the maximum number of factors where the cut off for eigenvalues is greater than 1.0 (Hair *et al.*, 2010; Malhotra, Peterson, & Kleiser, 1999).

#### 4.7.7 Factor Rotation

A rotated solution is required for meaningful factor names and reproducibility of factors (Abdi, 2003). The factors are therefore rotated to improve item loadings on the factors and to provide a better interpretation which reveals the presence of a simple structure with all components showing a number of strong loadings and all variables loading substantially on only one component (Hair, Anderson, Tatham, & Black, 1995).

The choice of the factor rotation is the most important decision in EFA (Sass & Schmitt, 2010). Varimax Orthogonal Rotation was employed to get the best and the clearest solutions. Orthogonal rotation assumes the uncorrelated underlying constructs are used for easier solutions interpretation and reporting in the social sciences (Abdi, 2003; Tabachnick & Fidell, 2007).

**Table 20: Rotated Component Matrix<sup>a</sup>**

	Component						
	1	2	3	4	5	6	7
expertise 1	.905						
expertise 2	.878						
trustworthiness 2	.873						
trustworthiness 1	.860						
consistency	.830						
competency		.863					
sophistication		.766					
excitement		.668					
sincerity		.646					
ruggedness		.614					
customer perceptions 2			.906				
customer perceptions 3			.814				
customer perceptions 1			.802				
customer perceptions 4			.744				
org attributes 1				.920			
org attributes 3				.881			
org attributes 2				.672			
price setting 2					.883		
price setting 1					.793		
price setting 3					.708		
Abstract						.922	
Concrete						.916	
competitors attributes 1							.807
competitors attributes 2							.771

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 7 iterations.

The idea of rotation is to reduce the number of factors on which the variables under investigation have high loadings. Rotation does not actually change anything but makes the interpretation of the analysis easier. In Table 20, the expertise 1, expertise 2, trustworthiness 2, trustworthiness 1, consistency are substantially loaded on Factor (Component) 1 while competency, sophistication, excitement, sincerity, ruggedness are substantially loaded on Factor (Component) 2. All the remaining variables are substantially loaded on next consequent factors. These factors can be used as variables for further analysis (Table 20).

Naming was done on the basis of the groups evolved from this rotated component matrix. Factor Number 1 named as Credibility (expertise 1, expertise 2, trustworthiness 1, trustworthiness 2 and consistency). Factor Number 2 named as brand personality (sincerity, ruggedness, competence, sophistication, and excitement). Factor Number 3 named as customer perceptions (CP1, CP2, CP3, and CP4). Factor Number 4 named as Organizational attributes (OA1, OA2, and OA3). Factor Number 5 is named as Price of the product (Price setting 1, Price setting 2, and Price setting 3). Factor Number 6 is named as Product Attributes (Abstract and Concrete). Factor Number 7 is named as Competitors' attributes (CA1 and CA2). Factor loadings are greater than 0.4.

#### **4.8 Exploring Issues Pertaining to Brand Positioning Practices**

The present research also explores how BP is practiced by consumer durable firms. In this regard, various questions were asked from the marketing professionals and responses were sought. These discussions give an overall view of the various aspects of our research objectives. However, these factors were validated by applying CFA. The subsequent discussion was based on an analysis of data related to the objectives of this research. The subsequent section will present the EFA and CFA of the third set of data – Consumers.

#### **4.9 Demographic Profile of Consumers**

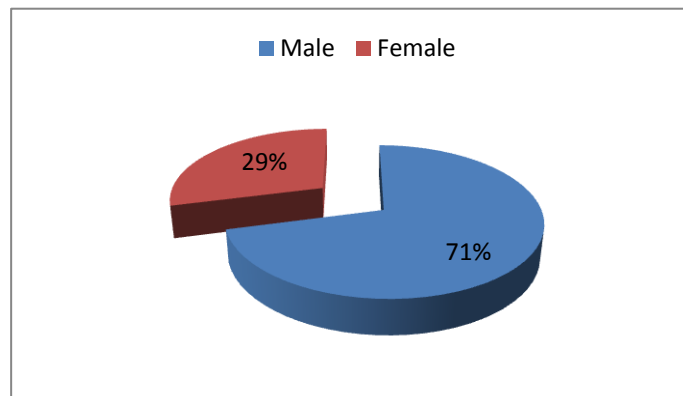
Table 21 represents that there are 220 male consumers and 90 female consumers, the maximum consumers (129) were of 26-35 years old and only 34 consumers were above 55 years old. The maximum respondents (124) were having a family size of 3. Only 20 consumers were having more than four members in their family. 165 consumers were found to be post-graduate. Only 19 were diploma holders and graduates were 106 consumers. 190 consumers were salaried while self-employed were 50, 29 consumers were students, 15 were retired and 26 were non-working. In the category of monthly income, 88 consumers were in

the range of 20,000 to 40,000. There were 73 consumers who were earning above 60,000. 115 consumers lie in 1 to 5 years of experience. 156 consumers were found to purchase online occasionally while only 48 consumers purchase online weekly. The demographic profile of the consumers is shown in Table 21.

**Table 21: Demographic Profile of Consumers**

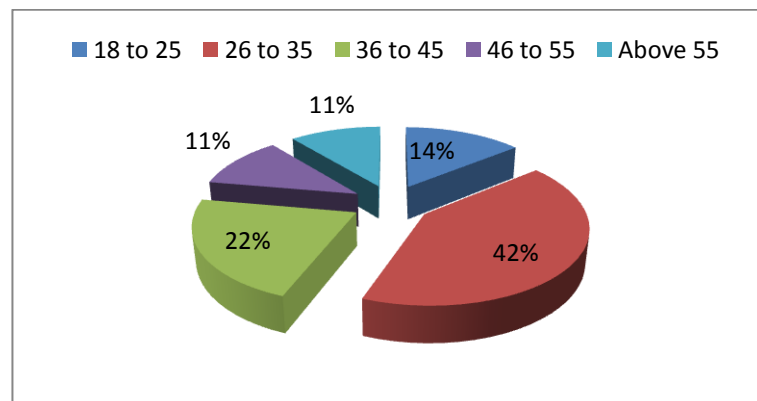
<b>Demographic Profile</b>	<b>Code</b>	<b>Response</b>
<b>Gender</b>		
Male	1	220
Female	2	90
<b>Age</b>		
18 to 25	1	44
26 to 35	2	129
36 to 45	3	68
46 to 55	4	35
Above 55	5	34
<b>Family Size</b>		
Two	1	46
Three	2	124
Four	3	120
More	4	20
<b>Highest level of Education</b>		
Secondary	1	20
Diploma	2	19
Graduate	3	106
Post Graduate	4	165
<b>Occupation</b>		
Salaried	1	190
Self Employed	2	50
Not working	3	26
Retiree	4	15
Student	5	29
<b>Monthly Income</b>		
Below 20,000	1	68
20,000 to 40,000	2	88
40,000 to 60,000	3	81
Above 60,000	4	73
<b>Years of Service</b>		
less than 1	1	44
1 to 5	2	115
5 to 10	3	83
more than 10	4	68
<b>How often do you purchase through websites?</b>		
Weekly	1	48
Monthly	2	106
Occasionally	3	156

The pie charts of the demographic details of the consumers are shown in respective figures.



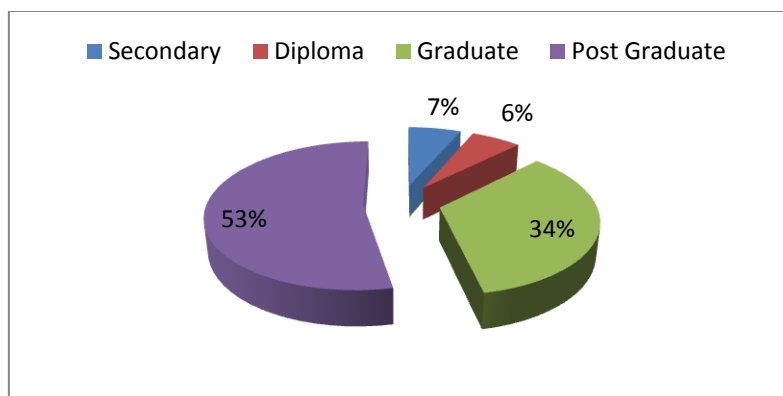
**Figure 18: Gender Distribution of Consumers**

Figure 18 presents the distribution of gender of consumers as 29% of respondents were females and 71% were males.



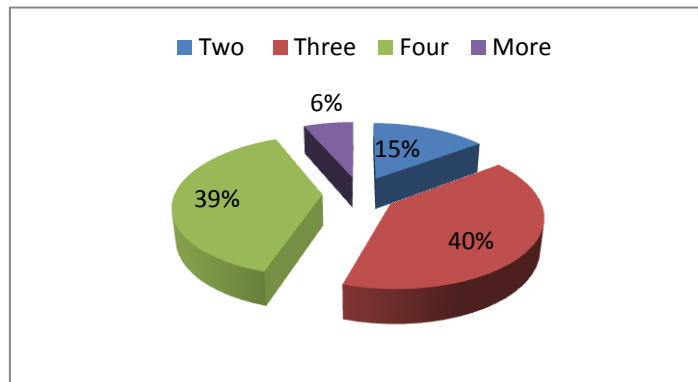
**Figure 19: Age Distribution of Consumers**

Figure 19 shows that the age distribution of consumers constitutes 14 % -18-25 years old, 42% -26-35 years old, 22% - 36-45 years old, 11% - 46-55 years old and 11 % consumers as above 55 years old.



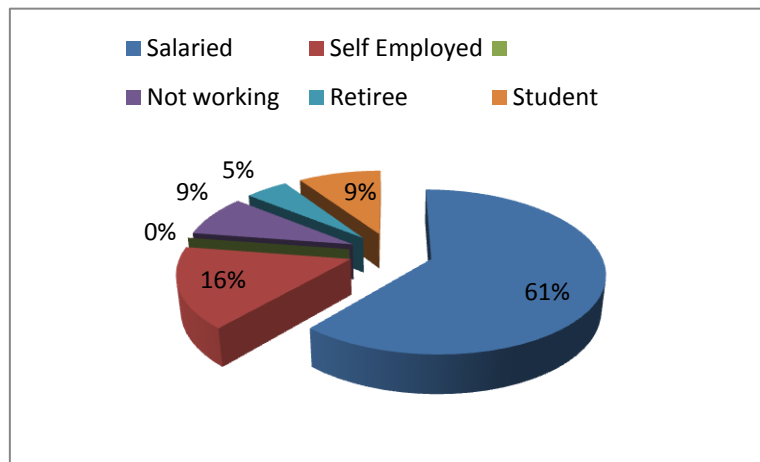
**Figure 20: Highest Level of Education Distribution of Consumers**

Figure 20 presents the highest level of education distribution of consumers as 7% have done secondary, 6% were diploma holders, 34% were graduates and 53% were post graduates.



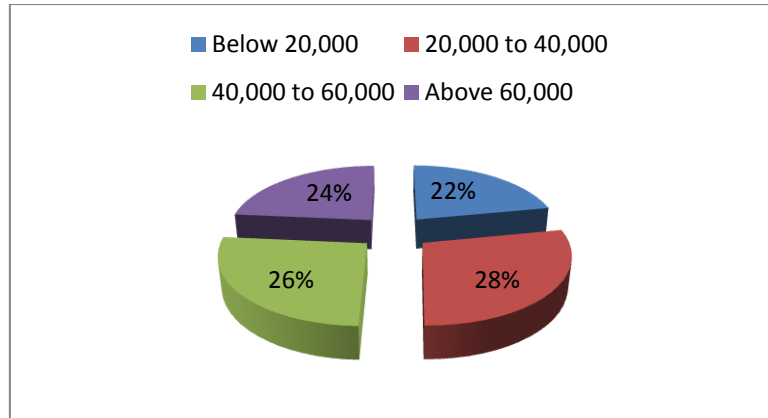
**Figure 21: Family Size Distribution of Consumers**

Figure 21 shows the family size distribution of consumers – 15% were having 2 members in the family, 40% were having three members, 39% were having four members and 6% were having more than 4 members in the family.



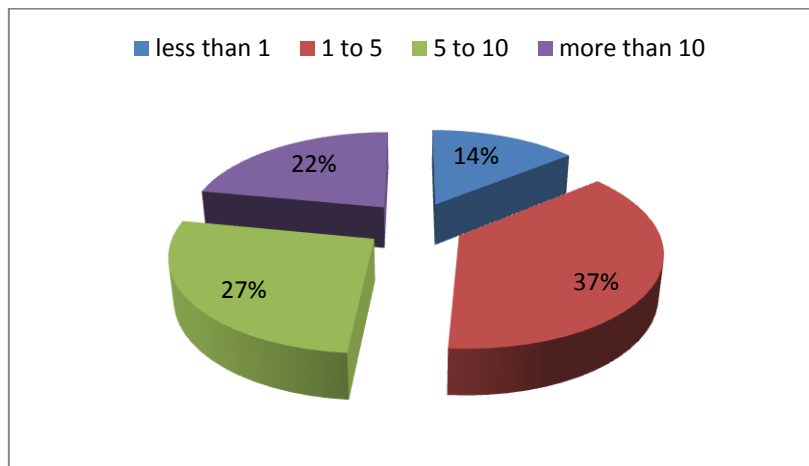
**Figure 22: Occupation Distribution of Consumers**

Figure 22 presents the occupation distribution of consumers:- 61% were salaried, 16% were self-employed, 9% were not working, 5% were retired and 9% were students.



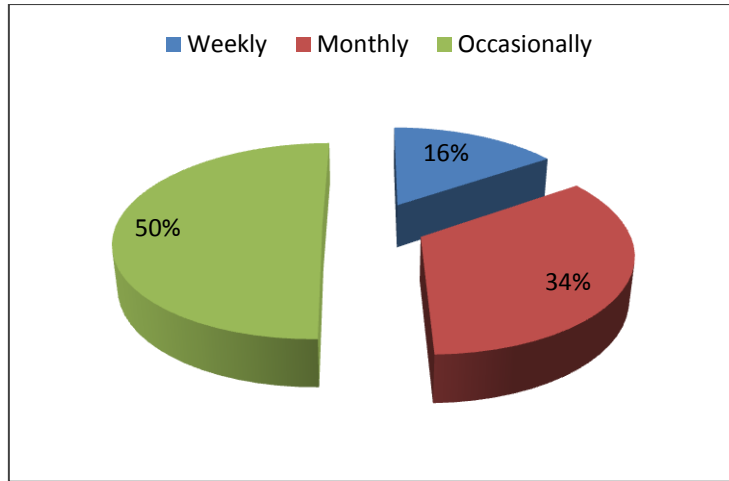
**Figure 23: Monthly Income Distribution of Consumers (Rs)**

Figure 23 shows the monthly income distribution of consumers – 22 % lie in below 20,000, 28% lie in 20,000 to 40,000, 26% consumers were getting 40,000 to 60,000 and 24% were getting above 60,000 income.



**Figure 24: Years of Service Distribution of Consumers**

Figure 24 depicts the experience distribution of consumers- 14% were having less than 1 year experience, 37% were having 1 to 5 years of experience, 27% lie in 5 to 10 years and 22% had more than 10 years of service.

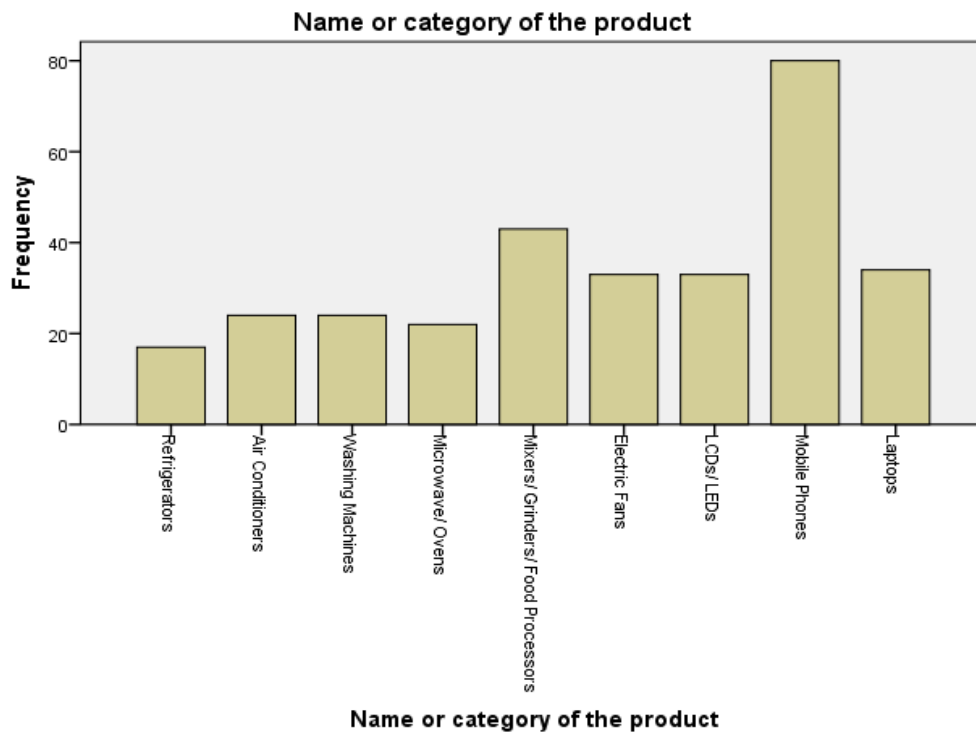


**Figure 25: Frequency Distribution of Purchase through Websites by Consumers**

Figure 25 shows that 16% consumers do weekly purchase through websites, 34% purchase monthly and 50% consumers do occasionally online purchase.

#### 4.10 Descriptive Statistics of Products Considered in the Research

The descriptive statistics of the nine products considered in the research is as shown in the Table 7 of Appendix 5. Figure 26 shows the demand of different products considered in the research.



**Figure 26: Product Classification Showing Demand Sequence**



durable companies. The overall reliability of the scale came out to be 0.821 (No. of items 26) which shows that it is reliable scale.

#### **4.12.1. Descriptive Statistics of the Factors of Brand Positioning (Consumers' Perspective)**

The descriptive statistics of the factors of BP and the items of the factors of BP considered in the research are shown in Table 8 and 9 of Appendix 5. The mean, standard deviation and number of respondents (N) who participated in the survey are given in Table 8 (Appendix 5). It shows that the highest mean is of product attributes (3.9019) and lowest mean is of Price (3.1792). The highest mean value of PA1 that is the concrete attribute of product attributes i.e., 3.9585 (Table 9 of Appendix 5). Thus, this item is very important for consumers while purchasing any product of a specific brand of their choice. Second most important factor for consumers while purchasing any product of their desired brand is brand personality and the third most important factor is organizational attributes.

The assumption of normality is checked from the above tables for descriptive statistics of variables in the research framework. The value of the mean, median and mode shall be more or less same and the value of skewness must lie between -1 to +1 in order to consider normality in the data (Hair *et al.*, 2006). It is found applicable in our data set thus the available data can be treated as approximately normal.

#### **4.12.2 Correlation Matrix**

In Table 22, the correlation between the factors of BP is presented. The Pearson Correlation coefficients along with their significant value of each factor comparison are given in Table 22. It is a rectangular array of numbers which gives the correlation coefficients between a single variable and every other variable in the investigation.

**Table 22: Correlation Matrix of the Factors of Brand Positioning (Consumers' Perspective)**

		Correlations					
		CP	CR	BP	OA	PA	PR
CP	Pearson Correlation	1	.168**	0.116*	.219**	0.103*	.246**
	Sig. (2-tailed)		.003	.032	.000	.044	.000
CR	Pearson Correlation	.168**	1	0.150*	0.199*	0.142*	0.166*
	Sig. (2-tailed)	.003		.038	.043	.034	.041
BP	Pearson Correlation	0.116*	0.150*	1	.219**	0.117*	0.138*
	Sig. (2-tailed)	.032	.038		.000	.051	.049
OA	Pearson Correlation	.219**	0.199*	.219**	1	0.108*	0.157*
	Sig. (2-tailed)	.000	.043	.000		.038	.031
PA	Pearson Correlation	.103*	0.142*	0.117*	0.108*	1	0.159*
	Sig. (2-tailed)	.044	.034	.051	.038		.029
PR	Pearson Correlation	.246**	0.166*	0.138*	0.157*	0.159*	1
	Sig. (2-tailed)	.000	.041	.049	.031	.029	
** . Correlation is significant at the 0.01 level (2-tailed).							
* . Correlation is significant at the 0.05 level (2-tailed).							

The correlations between the factors of BP are highlighted in Table 22. The significant correlations are flagged for identification in Table 22. The coefficients above and below the principal diagonal are the same. The off-diagonal elements are very small (close to zero) as shown in Table 22. This represents that it is a good model.

#### 4.12.3 KMO and Bartlett's Test for Factors of Brand Positioning

Kaiser Meyer Olkin (KMO) and Bartlett's Test measures the strength of relationship among the variables. Table 23 presents the KMO and Bartlett's Test for factors of BP.

**Table 23: KMO and Bartlett's Test for Factors of Brand Positioning (Consumers' Perspective)**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.842
Bartlett's Test of Sphericity	Approx. Chi-Square	5448.379
	df	325
	Sig.	.000

The KMO measures the sampling adequacy that determines the responses given with the sample are adequate as the KMO value came out to be 0.842. Kaiser (1974) recommended 0.5 (value for KMO) as a minimum (barely accepted), values between 0.7 – 0.8 acceptable, and values above 0.9 are superb. In Table 23, the KMO measure is 0.842 which is good and acceptable.

Bartlett's test is another indication of the strength of the relationship among variables. This tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is a matrix in which all of the diagonal elements are 1 and all off-diagonal elements are close to

0. Bartlett’s test of sphericity is .000 that is less than 0.05. It rejects the null hypothesis. This means that the correlation matrix is not an identity matrix.

#### 4.12.4 Total Variance Explained by Factors of Brand Positioning (Consumers’ Perspective)

The Eigenvalue table was divided into three sub-sections such as Initial Eigen Values, Extracted Sums of Squared Loadings and Rotation of Sums of Squared Loadings. For analysis and interpretation purpose, concern was only with Extracted Sums of Squared Loadings. In Table 24, the first factor accounts for 19.746% of the variance, the second 14.699%, the third 8.718%, fourth 8.116%, fifth 7.387% and the sixth 5.949%. All the remaining factors are not significant (Table 24). All factors of BP constitute 64.615% variation as shown in Table 24.

**Table 24: Total Variance Explained by the Factors of Brand Positioning**

Names of factors	Extraction Sums of Squared loadings			Relative Importance
	Total	% of Variance	Cumulative %	
Customer Perceptions	5.134	19.746	19.746	1
Brand Personality	3.822	14.699	34.445	2
Credibility	2.267	8.718	43.163	3
Price	2.110	8.116	51.278	4
Organizational Attributes	1.921	7.387	58.666	5
Product Attributes	1.547	5.949	64.615	6

#### Factor 1: Customer Perceptions

This first-factor affecting brand positioning from consumer durable sector with highest explained variance of 19.746% has been named as ‘Customer Perceptions’. The eigenvalue of this factor is 5.134. Eight statements which significantly load on this factor are brand recalling, using the brand customers feel socially acknowledged, brand provides qualities and features that customers are looking for, brand associations, brand reflect the status, perceived risk while purchasing the brand for the first time, cognitive dissonance- due to poor post sales services- feeling of wrong purchase decision by customers, due to poor quality- customers feel that their purchase decision was wrong. Other studies have also presented similar findings (Oliver, 1997; Jamal & Al-Marri, 2007; Diwan & Jain, 2009; Erdem & Swait, 2004; Heinberg *et al.*, 2017).

### **Factor 2: Brand Personality**

‘Brand Personality’ is the name that has been given to the second factor. It has explained 14.699% of variance. The eigenvalue of this factor is 3.822. Brand appealing, a brand provides the reflection of honesty and fulfilment in terms of value, the product of this brand is hard enough to sustain with extreme handling, a brand is reliable, a brand gives a feeling of sophistication, and a brand is trendy and innovative are six statements which significantly load on this factor. Various studies have also shown that these items are considerable determinants of brand personality (Aaker, 1997; Azoulay & Kapferer, 2003).

### **Factor 3: Credibility**

The third factor has been reported as ‘Credibility’. It has explained the variance of 8.718%. The eigenvalue of this factor is 2.267. Three statements which significantly load on this factor are selected brand has ability to fulfil expected quality, selected brand provides consistent quality, get the consistent information of a selected brand from marketing personnel. The findings of other studies have also described that ability to fulfil expected quality, consistent quality and consistent information from marketing personnel are important determinants of Credibility (Erdem & Swait, 1998; Malshe, 2009; Bhat & Reddy, 1998).

### **Factor 4: Price**

‘Price’ has been reported as the fourth factor. It has explained the variance of 8.116%. The eigenvalue of this factor is 2.110. Three statements which significantly load on this factor are ready to pay the high price for the selected brand as it adds to my status, the selected brand provides me value for money, and prices are fair enough with respect to competitors. Various studies have also presented similar findings (Prasnikar *et al.*, 2008; Krishnan & Hari, 2011; Gengler & Mulvey, 2017).

### **Factor 5: Organizational Attributes**

The fifth factor has been described as ‘Organizational attributes’. It has explained the variance of 7.387%. The eigenvalue of this factor is 1.921. Three statements which significantly load on this factor are organization of the selected brand supports in resolving any type of brand related query or problem, the majority of people are aware of the brand’s unique features through advertisements and promotions, and an organization of selected brand provides regular satisfactory post sales services. Previous studies have also highlighted

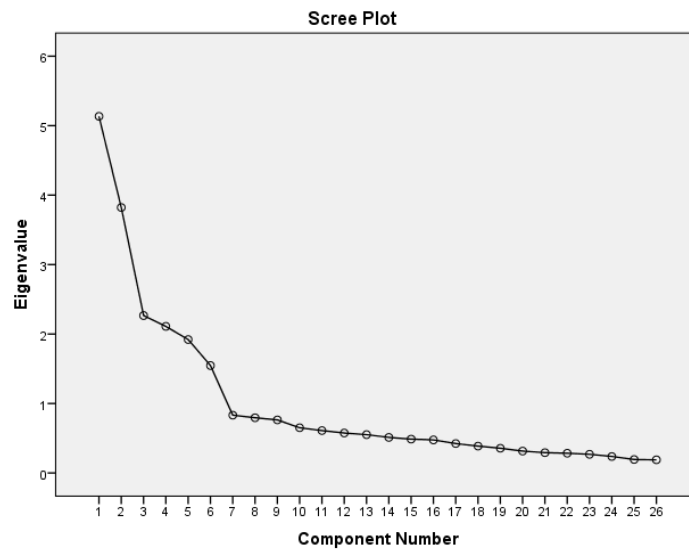
these statements as relevant determinants of organizational attributes (Aaker, 2004; Aaker 2004a; Urde, 2003).

**Factor 6: Product Attributes**

‘Product attributes’ is the name that has been given to the sixth factor. It has explained the variance of 5.949%. The eigenvalue of this factor is 1.547. Physical features of the product like color, design, and spaciousness, and secondary benefits like warranty schemes, eco-friendliness, earlier purchase experience and discount schemes are the two statements which significantly load on this factor. Other studies have also observed similar findings (Mowen 1993; Aaker, 1992; Alden & Nariswari, 2017).

**4.12.5 Scree Plot for the Factors of Brand Positioning (Consumers’ Perspective)**

The scree plot as shown in Figure 28 is a graph of the eigenvalues against all the factors. The graph is useful for determining how many factors to retain. The point of interest is where the curve starts to flatten. It can be seen in Figure 28 that the curve begins to flatten between factors 6 and 7. The items were grouped into 6 factors.



**Figure 28: Scree plot of Factors of Brand Positioning (Consumers’ Perspective)**

**4.12.6 Rotated Component Matrix**

Varimax rotation method was applied to reduce the number of factors on which the variables under investigation. Rotation does not actually change anything but makes the interpretation of the analysis easier. In Table 25, the CP4, CP5, CP8, CP7, CP6, CP2, CP3, CP1 are substantially loaded on Factor (Component) 1 while BP2, BP3, BP5, BP1, BP6 are substantially loaded on Factor (Component) 2. All the remaining variables are substantially

loaded on next consequent factors. These factors can be used as variables for further analysis (Table 25).

**Table 25: Rotated Component Matrix<sup>a</sup>**

	Component					
	1	2	3	4	5	6
CP4	.835					
CP5	.800					
CP8	.790					
CP7	.736					
CP6	.702					
CP2	.694					
CP3	.600					
CP1	.530					
BP2		.848				
BP3		.827				
BP5		.826				
BP1		.814				
BP6		.792				
BP4		.735				
CR1			.889			
CR2			.861			
CR3			.841			
PR1				.824		
PR2				.793		
PR3				.705		
PR4				.635		
OA2					.863	
OA3					.852	
OA1					.810	
PA2						.872
PA1						.869

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 6 iterations.

Naming was done on the basis of the groups evolved from this rotated component matrix. Factor Number 1 named as Customer Perceptions (CP4, CP5, CP8, CP7, CP6, CP2, CP3). Factor Number 2 named as brand personality (BP2, BP3, BP5, BP1, BP6, BP4). Factor Number 3 named as Credibility (CR1, CR2, CR3). Factor Number 4 is named as Price of the product (Price1, Price2, Price 3 and Price 4). Factor Number 5 named as Organizational attributes (OA2, OA3 and OA1). Factor Number 6 is named as Product Attributes (PA1 Concrete and PA2 Abstract). Thus, the factors came out to be six. The validity of the factors was checked by applying CFA.

### **4.13 Confirmatory Factor Analysis of Brand Positioning (Consumers' Perspective)**

CFA is the next step of EFA to determine the factor structure of the data set. In EFA, factors and its structure were explored (how the variables relate and group based on inter-variable correlations), in the CFA, extracted factor structure is confirmed. CFA (often performed through SEM) is a much more sophisticated technique usually used in the advanced stages of the research process to test a theory about latent processes (De Chernatony & McDonald, 2003; Tabachnick & Fidell, 2007). CFA can be used to test the factor loadings of each observed variable on the latent variable (Byrne, 2010). This permits the assessment of constructs in terms of convergent validity and discriminant validity (Hair *et al.*, 2006).

As discussed earlier, MI implementation was done by IT professionals, usage was done by marketing professionals and BP is confirmed by consumers of select consumer durable organizations. In order to test a model, the minimum sample size should be  $50 + 8k$ , where  $k$  is no. of predictors (Field, 2005). Thus the required sample size for consumers is 250 ( $50 + 8 * 25$ ), however, sample size of is considered for consumers 310 respondents is kept for consideration for confirmatory factor analysis. Convenience sampling was used. CFA was applied to consumers' data to confirm the factors of brand positioning on AMOS 21.0.

Model fit refers to how well the proposed model accounts for the correlations between variables in the dataset. If there are major correlations inherent in the dataset (with regards to the variables in the model) then there is a good fit. If not, then there is a significant discrepancy between the correlations proposed and the correlations observed, and thus the model fit represents a poor model or proposed model does not fit the observed or estimated model (correlations in the data set).

#### **4.13.1 Metrics**

There are specific measures that can be calculated to determine the goodness of fit. The metrics that ought to be reported are listed below along with their acceptable thresholds. The goodness of fit is inversely related to sample size and the number of variables in the model. The thresholds listed in Table 26 are from Hu & Bentler (1999).

#### ***Measurement Model***

The measurement model that serves to create a structural model representing the hypothesized relationship among the constructs examined first, followed by the structural model evaluation (Anderson & Gerbing, 1988). CFA was employed to validate the

measurement model, which composed of 6 constructs with 24 measurement items. Except Price 4, Customer Perceptions 1, Brand Personality 6; the factor loadings are ranging from 0.72 to 0.96, were all significant at a p-value of 0.000. Further, the average variance extracted (AVE) was greater than the threshold of 0.50 for all the constructs, confirming convergent validity (Anderson & Gerbing, 1988; Bagozzi & Yu, 1988). The squared correlation between pairs of constructs was less than the AVE of respective constructs. Lastly, the composite reliability of construct exceeded the threshold of 0.70 (showing the results from 0.741 to 0.910 as shown in Table 27) (Hair, William, Barry, & Rolph, 2010).

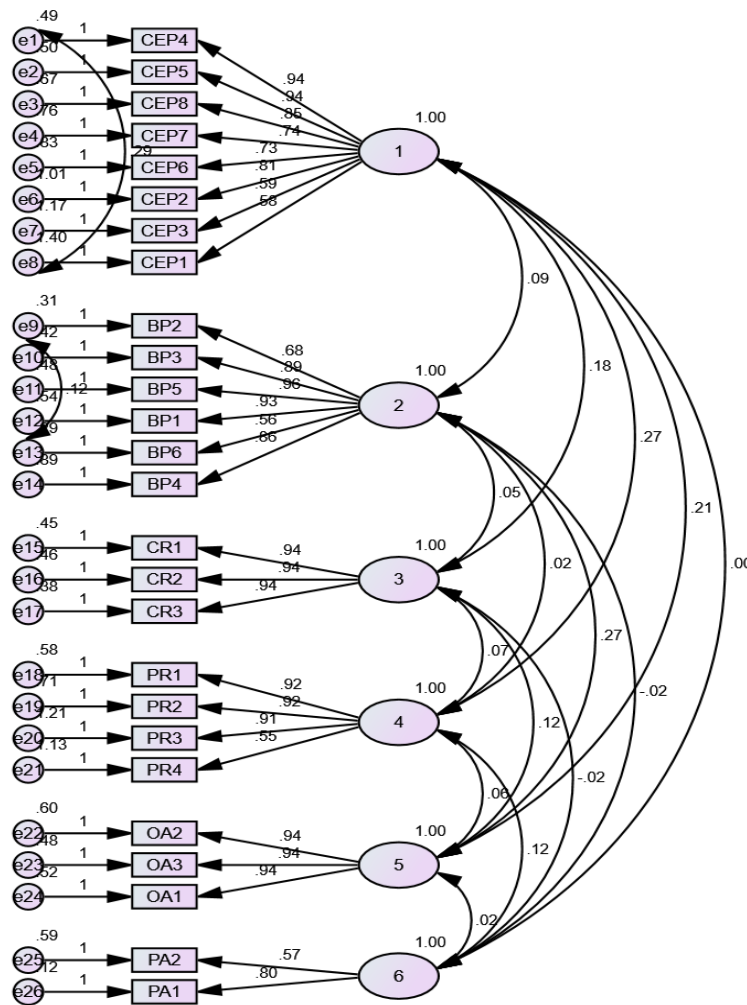
**Table 26: Model Fit Summary of Brand Positioning Factors**

Measures of goodness of fit	Acceptable level	Value
CMIN		444.427
df		287
Chi-square/ df (cmin/df)	<3 good, <5 sometimes permissible	1.549
p-value for the model	>.05, >.95 great, >.90 traditional, > .80 sometimes permissible	.000
CFI	>.95	.953
GFI	>.95	.902
AGFI	>.80	.880
SRMR	<.09	.078
RMSEA	<.05 good, .05-.10 moderate, >.10 bad	.044
PCLOSE	>.05	.892
Source: Hu & Bentler (1999)		

Based upon the threshold limits which has been recommended by Hu & Bentler (1999) majority of the estimates were found to be meeting the acceptable norms.

### 4.13.2 Measurement Model for Factors of Brand Positioning

The measurement model of factors of BP is as shown in Figure 29.



**Figure 29: CFA Model for Factors of Brand Positioning (Consumers' Perspective)**

1 – Customer Perceptions, 2- Brand Personality, 3- Credibility, 4- Price, 5- Organizational Attributes, 6 – Product Attributes.

### 4.13.3 Validity and Reliability of the Factors of Brand Positioning

Convergent validity is concerned with measuring the degree of a positive relationship among scale items developed to measure the same construct (Nachmias & Nachmias, 2007). In other words, convergent validity confirms that measures that should be theoretically related are in reality related. Convergent validity was checked between the items of the same construct that is greater than 0.7. Discriminant validity was checked between different constructs that came less than 0.8 of each construct.

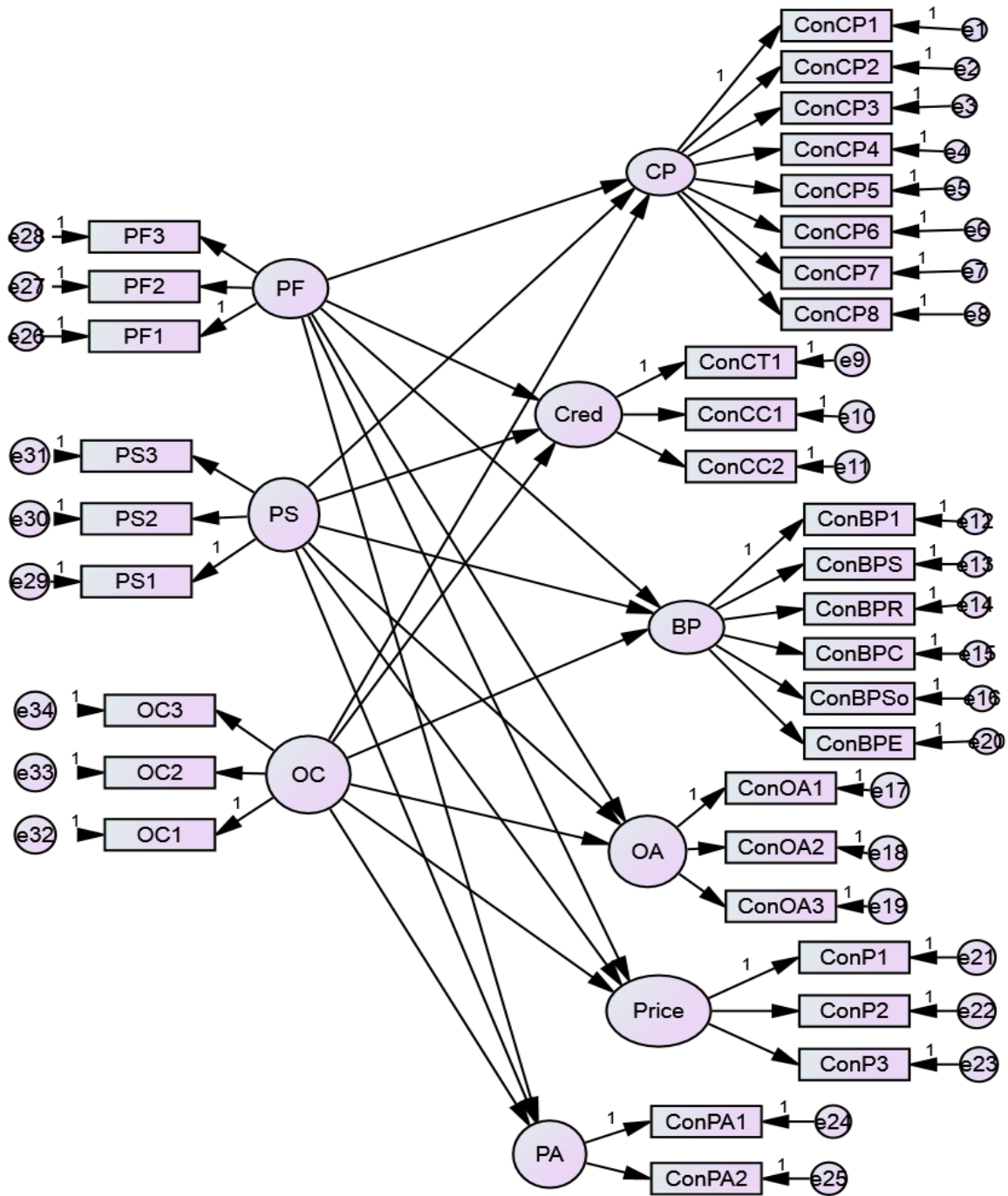
**Table 27: Composite Reliability and Discriminant Validity of the Factors of Brand Positioning (Consumers' Perspective)**

	CR	AVE	MSV	MaxR(H)	PR	CEP	BP	CR	OA	PA
<b>PR</b>	0.741	0.510	0.164	0.745	<b>0.699</b>					
<b>CEP</b>	0.869	0.532	0.164	0.927	0.405	<b>0.719</b>				
<b>BP</b>	0.910	0.628	0.046	0.960	0.011	-0.027	<b>0.782</b>			
<b>CR</b>	0.857	0.668	0.104	0.968	0.198	0.322	0.090	<b>0.802</b>		
<b>OA</b>	0.832	0.624	0.052	0.973	0.199	0.110	0.215	0.016	<b>0.772</b>	
<b>PA</b>	0.891	0.891	0.052	0.978	0.033	0.095	-0.011	0.218	0.229	<b>0.932</b>

Table 27 shows that there are no validity concerns. The model has convergent validity as all values of AVE (Average Variance extracted) are above 0.5. This model is reliable as all the CR (Composite Reliability) values are above 0.7. This model has the discriminant validity based on the square roots of inter factor correlation. All the MSV values are less than AVE values that means model has the discriminant validity. The square roots of AVE are greater than inter-construct correlations. Reliability = CR > 0.7, Convergent Validity = AVE > 0.5. It means the scale is reliable and valid.

#### **4.14 Structural Equation Modelling on Both of the Constructs Brand Positioning and Marketing Intelligence**

Structural equation modelling is a methodology which is used to establish a structural model to explain causality between multiple constructs in a multivariate analysis (Hair, William, Barry, & Rolph, 2010). Although there are not hard and fast rules, there are a few heuristics which can be used to identify minimal sample size for such researches. Hair et al., 2010 suggested that a 10:1 ratio of sample size to estimate parameters is acceptable. Literature suggests a number < 200 as unacceptable (Barrett, 2007). But there have been studies in literature which have used sample sizes below 200 (Menachof, Gibson, Hanna, & Whiteing, 2009). SEM was applied on both of the constructs of MI and BP. The proposed structural model of effects of MI factors on BP factors is shown in Figure 30.



**Figure 30: Proposed Structural Model of Effects of Marketing Intelligence Factors on Brand Positioning Factors**

The measurement model showing both the constructs with their factor loadings is shown in Figure 31.

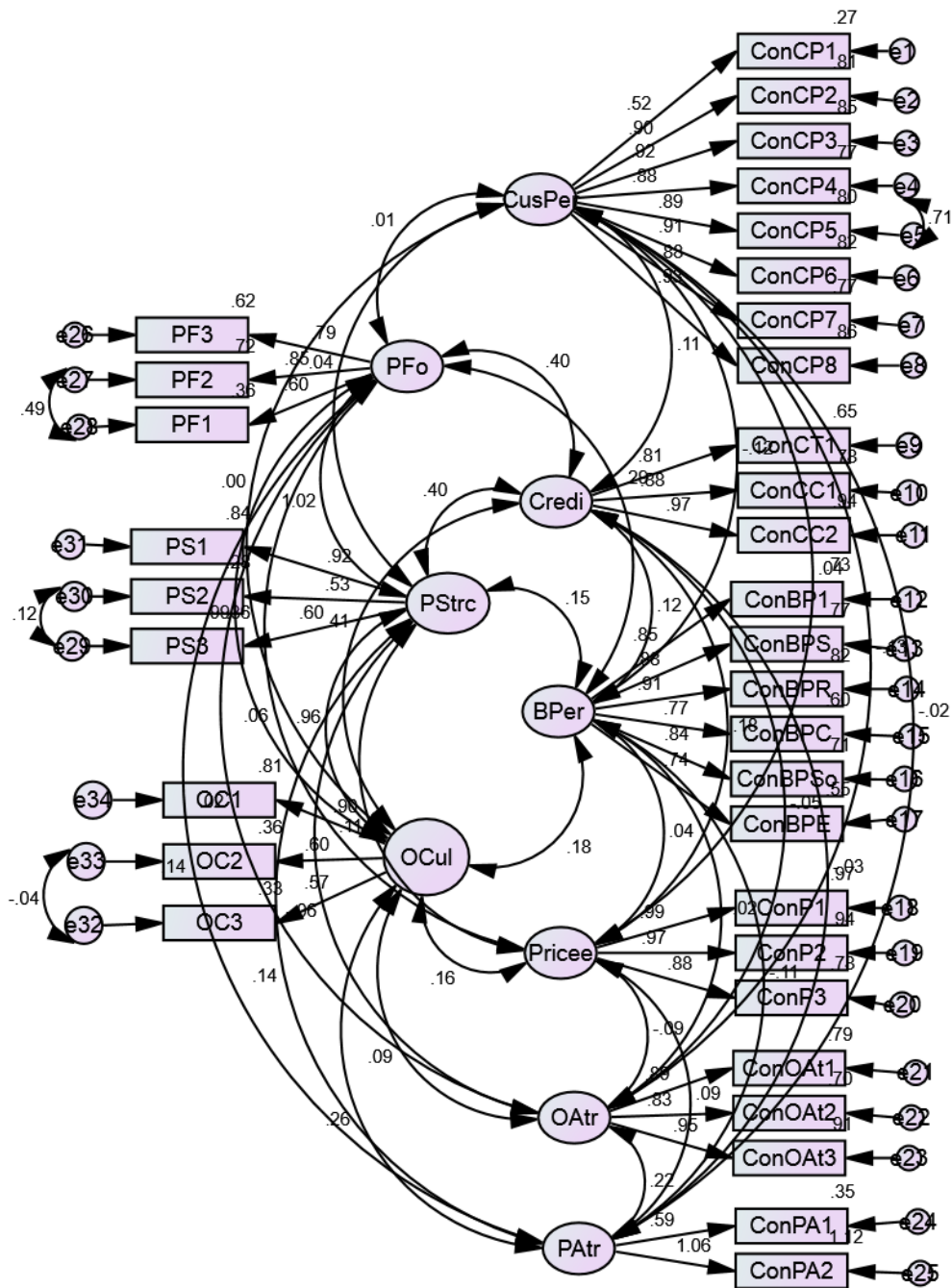


Figure 31: Measurement Model

#### **4.14.1 Initial Measurement Model Fit and Modification**

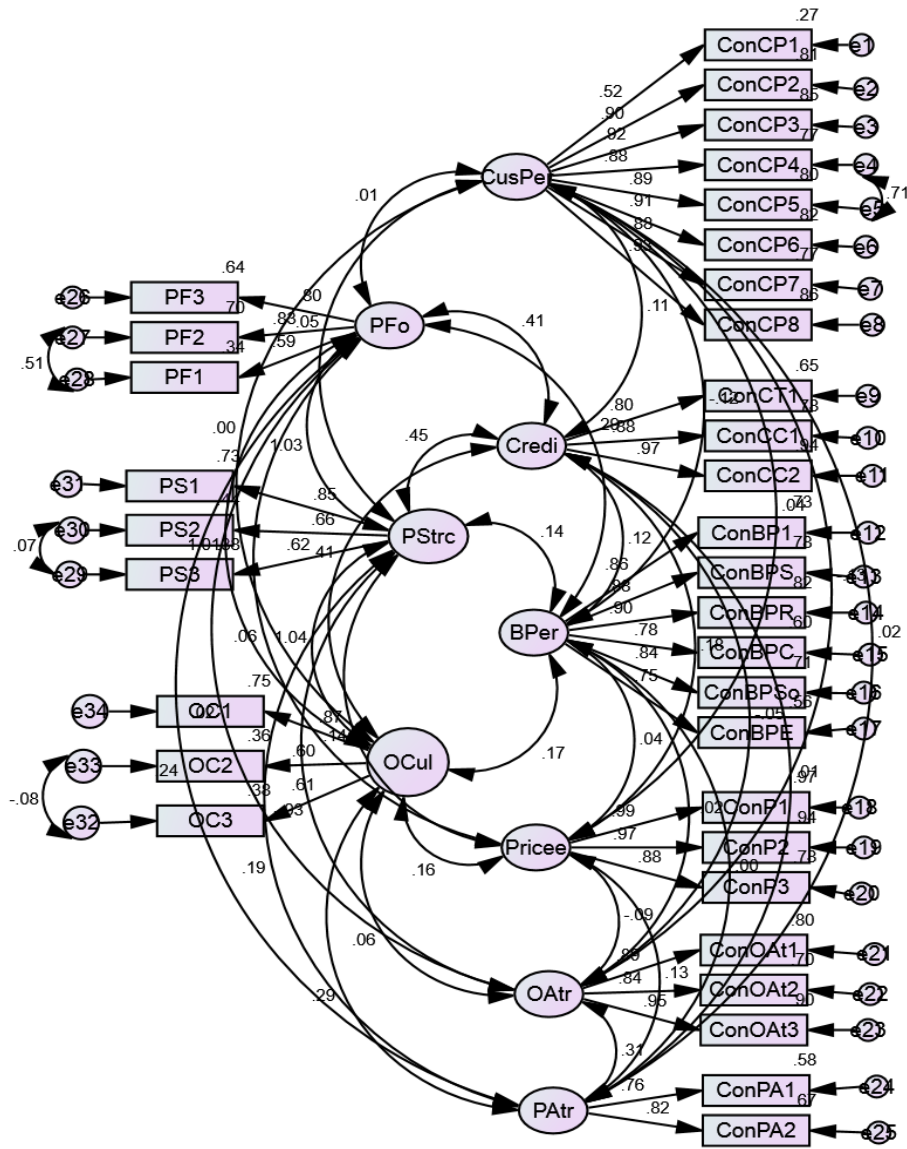
SEM has been used to estimate parameters of the structural model and to test the research hypothesis. Prior to analysis, all assumptions for a successful application of the method have been checked and analyzed. The focus has been on all key findings in relation to initial measurement model fit along with CFA. CFA incorporates the uni-dimensionality and evaluates a data set by confirming the underlying structure on basis of theoretical background. This simply suggests simplification, modification and any required refinement in the measurement for theory testing and examining the level of fit.

Although model identification is the requirement of CFA, modification and standardized loadings (standardized regression weights) in AMOS output were the options to verify the dimensionality of the measurement or to verify the model fit. Modification Indices (MI) are comprised of variances, covariance and regression weights. These indices have been examined during the evaluation of model fit. Anderson & Gerbing (1988) have suggested that under unacceptable, but converged and proper solutions, relating or deleting the indicator from the model are the preferred basic ways to re-specify the model. This means deleting an item and adding new path indicators are the best ways to get a better fitting model.

- a) The construct of 'MI factors' consisting of 9 statements – self designed questionnaire representing 3 sub-constructs, namely, Planning Focus, Process Structure, and Organizational Attributes. These three sub-constructs were subjected to CFA. The fit indices have suggested a good fit with regards to adequacy of fit elevated  $\chi^2$ , GFI, NFI, TLI, and RMSEA, as displayed in Table13.
- b) BP was measured by a self-designed questionnaire which consisted of 25 statements subjected to CFA. The results have indicated a positive evaluation of the scale (Table 26).

#### **4.14.2 Testing the Default Model and Fit Indices**

Following the evaluation and analysis of the measurement tools, an analysis of the structural model was carried out. By using valid and reliable constructs, the default model was tested and assessed. To achieve the parsimonious fit between data and default model, all possible exogenous variables were allowed to co-vary in the proposed structural model.



**Figure 32: Measurement Model with Loadings**

Thus, the complete SEM model including all its indicators has been tested. The fit indices of the initial SEM test have been presented in Table 28.

**Table 28: Model Fit Indices of Measurement Model of both the constructs Marketing Intelligence and Brand Positioning**

Level of Model Fit	Model Fit Indices of Measurement Model						
Fit Measures *	$\chi^2/df$	RMSEA	GFI	NFI	TLI	IFI	CFI
	Model	1.623	.081	.845	.851	.872	.923

RMSEA: Root Mean Square Error of Approximation; GFI: Goodness of Fit Index; NFI: Normalised Fit Index; TLI: Tucker Lewis Index; IFI: Incremental Fit Index

It has been observed that the default model is not a very good fit of the data ( $\chi^2/df = 1.623$ , GFI = .845, CFI=.90, NFI=.851, RMSEA=.081). Thus, this has been improved. Since RMSEA has not been found to be significant, Standardized regression weights of each item have been analyzed. Items below 0.6 have not been included for further analysis. Thus, CP1 was removed.

However, to further improve the fit, co-variance between error structures indicated in modification indices have been added. The co-variance has been added between  $\epsilon_4 \leftrightarrow \epsilon_5$ ,  $\epsilon_{27} \leftrightarrow \epsilon_{28}$ ,  $\epsilon_{29} \leftrightarrow \epsilon_{30}$ ,  $\epsilon_{32} \leftrightarrow \epsilon_{33}$ .

After adding the co-variances and assigning constants (aaa) to ConPA1 and ConPA2, the values have been improved. ConCP1 was less than 0.60. Thus, this item was removed from the model to make it a good model fit. PF1 has 0.59 which is equivalent to 0.6. Thus, it was not deleted.

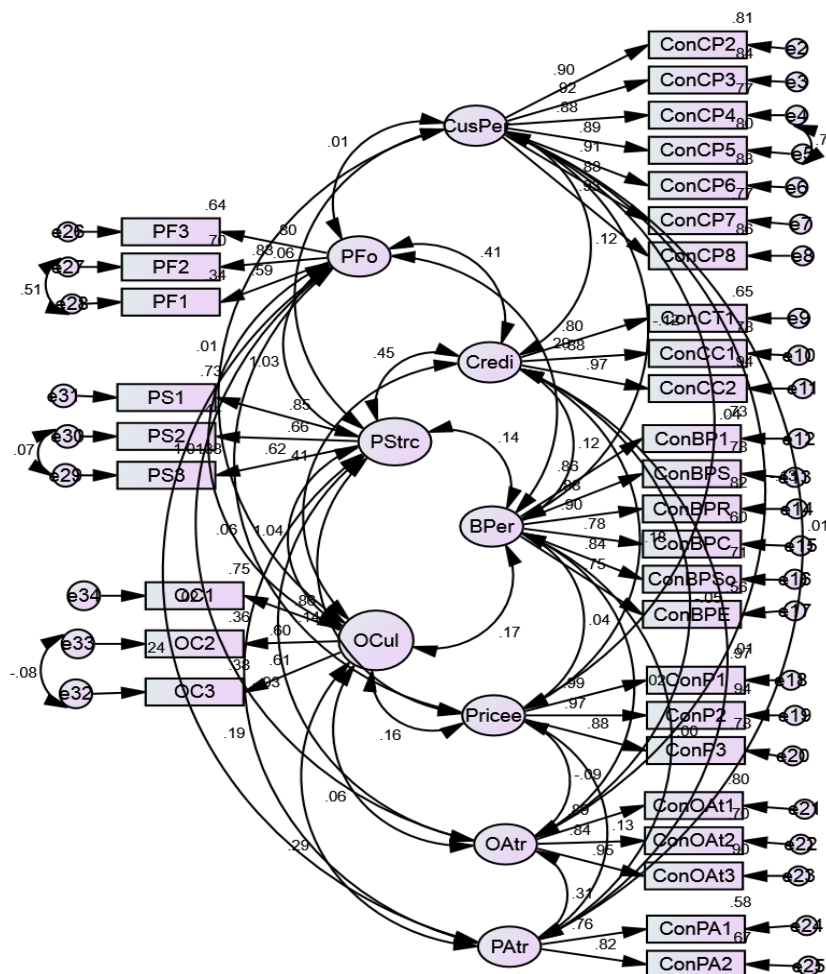


Figure 33: Measurement Model after adding Covariances and deleting one item CP1

After adding co-variances among error structures, the model has been found to be a good fit ( $\chi^2/df = 1.554$ , GFI = 0.965, CFI= 0.973, NFI = 0.929, RMSEA = .048, TLI = 0.958).

#### 4.14.3 Composite Reliability and Discriminant Validity of the Model

Table 29 shows that there are no validity concerns. The model has convergent validity as all values of AVE (Average Variance extracted) are above 0.5. This model is reliable as all the CR (Composite Reliability) values are above 0.7. This model has the discriminant validity based on the square roots of inter-factor correlation. All the MSV values are less than AVE values that means model has discriminant validity. The square roots of AVE are greater than inter-construct correlations. Reliability = CR > 0.7, Convergent Validity = AVE > 0.5. It means the model is reliable and valid.

**Table 29: Composite Reliability and Discriminant Validity of the Structural Model**

	CR	AVE	MSV	MaxR(H)	PS	CustPer	Cred	BP	Price	OA	PA	PF	OC
PS	0.762	0.525	0.045	0.836	<b>0.713</b>								
CustPer	0.93	0.692	0.053	0.968	-0.073	<b>0.825</b>							
Cred	0.926	0.808	0.036	0.979	0.027	-0.002	<b>0.882</b>						
BP	0.93	0.688	0.04	0.984	-0.136	0.199	0.191	<b>0.813</b>					
Price	0.943	0.849	0.053	0.981	-0.182	0.231	0.01	0.067	<b>0.913</b>				
OA	0.85	0.658	0.076	0.983	0.201	-0.028	-0.03	0.053	-0.165	<b>0.795</b>			
PA	0.792	0.663	0.076	0.986	0.211	0.184	0.084	0.124	0.117	0.276	<b>0.805</b>		
PF	0.8	0.573	0.089	0.987	0.113	-0.058	-0.175	-0.103	-0.036	0.121	0.065	<b>0.742</b>	
OC	0.71	0.527	0.089	0.987	-0.16	-0.049	0.117	-0.08	-0.014	-0.069	0.111	-0.298	<b>0.675</b>

#### 4.14.4 Path Analysis

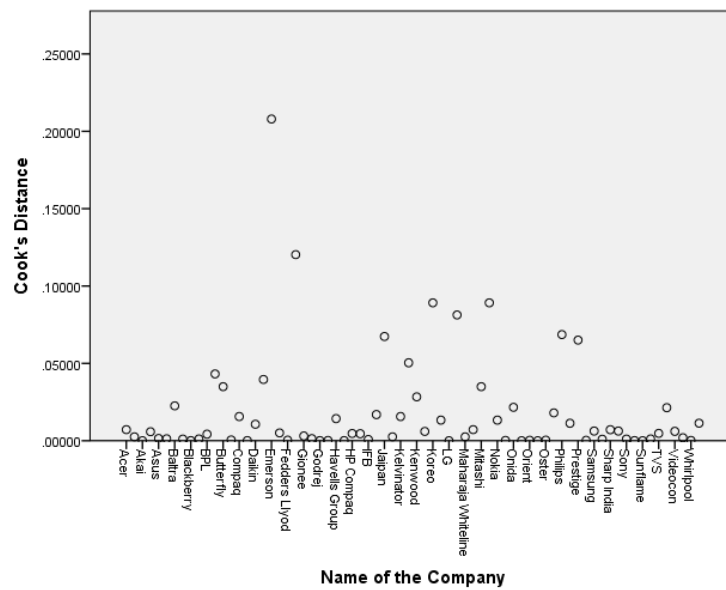
The path of MI factors influencing BP factors has been analyzed. The path analysis has been conducted using AMOS (21.0) software for SEM, to find the path coefficients for the variables. It provides various methods for estimating structural equation models such as Maximum likelihood estimates, Unweighted least squares, Generalized least squares, and Bayesian estimation. It also provides various model fit indices such as the goodness of fit, comparative fit indices and evaluates how well the model fits the data. Measurement scales for the constructs have satisfied minimum requirements of Cronbach's alpha coefficient. The measurement models of SEM constructs have been evaluated using confirmatory factor analysis (CFA). They have been accepted on the basis of measures of fit, the statistical significance and signs of the coefficients.

**Table 30: Standardized Regression Weights****Standardized Regression Weights**

	Estimate
ConCP2 <--- CusPer	.898
ConCP3 <--- CusPer	.918
ConCP4 <--- CusPer	.878
ConCP5 <--- CusPer	.894
ConCP6 <--- CusPer	.908
ConCP7 <--- CusPer	.880
ConCP8 <--- CusPer	.928
ConCT1 <--- Credi	.804
ConCC1 <--- Credi	.881
ConCC2 <--- Credi	.969
ConBP1 <--- BPer	.857
ConBPS <--- BPer	.881
ConBPR <--- BPer	.904
ConBPC <--- BPer	.776
ConBPSo <--- BPer	.840
ConBPE <--- BPer	.746
ConP1 <--- Price	.987
ConP2 <--- Price	.968
ConP3 <--- Price	.885
ConOAt1 <--- OAtr	.892
ConOAt2 <--- OAtr	.837
ConOAt3 <--- OAtr	.947
ConPA1 <--- PAtr	.765
ConPA2 <--- PAtr	.817
PF3 <--- PFo	.799
PF2 <--- PFo	.835
PF1 <--- PFo	.587
PS3 <--- PStrc	.619
PS2 <--- PStrc	.665
PS1 <--- PStrc	.852
OC3 <--- OCul	.613
OC2 <--- OCul	.601
OC1 <--- OCul	.865

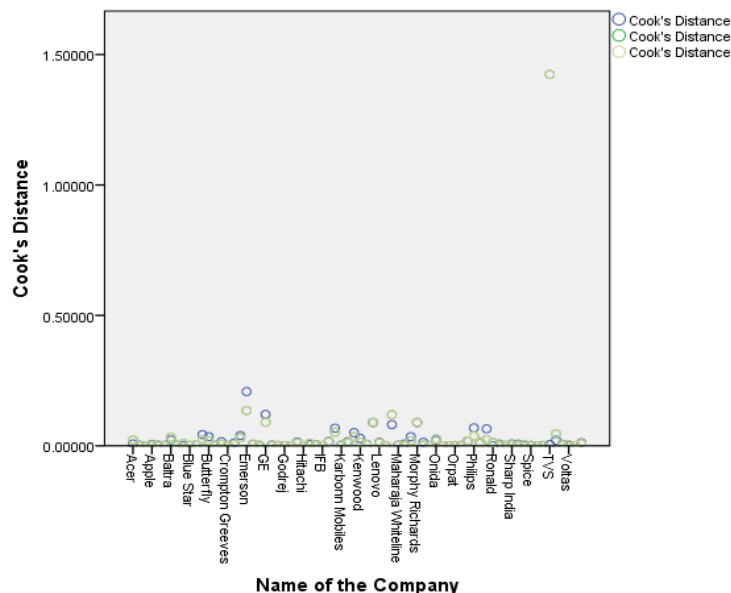
After adding co-variances among error structures, the model has been found to be a good fit (Figure 36). The values for model fit have been displayed in Table 31. Data has been confirmed that the model is a good fit ( $\chi^2/df = 1.254$ , GFI = 0.925, CFI = 0.958, NFI = 0.931, RMSEA = .048, TLI = 0.949). An overall acceptability of the analyzed structural model has

also been indicated since  $RMSEA < 10\%$  and  $GFI$  and  $NFI > 90\%$  (Hu & Bentler, 1999). Along with this, cooks distance was also checked to get the most influential records.



**Figure 34: Cooks Distance Diagram Showing the Influential Records**

From the Figure 34, Emerson has the highest influence (0.21) on the variables Credibility and Planning Focus. Rest other companies have less influence. But the value is not  $> 1$ . Thus, we will not remove this record's response in the data sheet.



**Figure 35: Cooks Distance Diagram showing the Influential Record**

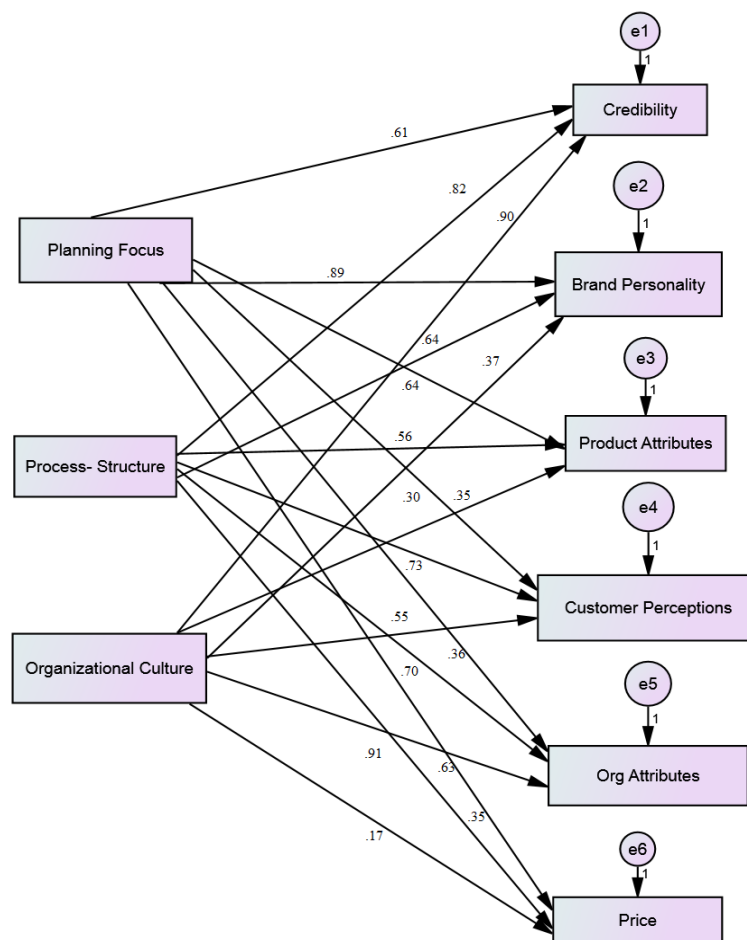
In the Figure 35, Emerson has 0.2 influence on the variables Credibility and MI factors. GE has around 0.17 influence. These are small values not the alarming. Rest other companies have less influence on the variables Credibility and factors of MI. The two respondents – GE and Emerson have not been deleted as these are not pulling the regression line away from the optimum line (Value is not greater than 1).

#### 4.14.5 Multicollinearity Test

**Table 31: Multicollinearity Test**

S.No.	Tolerance	VIF
Planning Focus	0.452	1.214
Process Structure	0.295	1.130
Organizational Culture	0.251	1.981

In Table 31, VIF values are < 3 and Tolerance values are > 0.1 which means that there is no problem of collinearity among the variables. There is no need to drop any one of them from the model.



**Figure 36: Structural Model showing the Path Values for Factors of Marketing Intelligence and Brand Positioning Factors**

Figure 36 has shown the effect of factors of MI on factors of BP. Data has established it to be a good fit model ( $\chi^2/df = 1.254$ , GFI = 0.925, CFI = 0.958, NFI = 0.931, RMSEA = .048, TLI = 0.949) as shown in Table 34.

#### 4.14.6 Structural Model Estimates

The model fit summary is shown in Table 32.

**Table 32: Structural Model Estimates**

Structure Model Estimates	
<b>Fit Measures</b>	$\chi^2/df = 1.254$ , GFI = 0.925, CFI = 0.958, NFI = 0.931, RMSEA = .048, TLI = 0.949
RMSEA: Root Mean Square Error of Approximation; GFI: Goodness of Fit Index; NFI: Normalised Fit Index; TLI: Tucker Lewis Index; CFI: Comparative Fit Index	

Credibility is influenced by Planning Focus ( $\beta=0.61$ ,  $p<.001$ ), Process Structure ( $\beta=0.82$ ,  $p<.01$ ) and Organizational Culture ( $\beta= .90$ ,  $p<.001$ ).

Brand Personality is affected by Planning Focus ( $\beta=0.89$ ,  $p<.001$ ), Process Structure ( $\beta=0.64$ ,  $p<.01$ ) and Organizational Culture ( $\beta=0.37$ ,  $p<.001$ ).

Product Attributes is affected by Planning Focus ( $\beta=0.64$ ,  $p<.001$ ), Process Structure ( $\beta= .56$ ,  $p <.001$ ), and Organizational Culture ( $\beta=0.35$ ,  $p<.001$ )

Customer Perceptions is affected by Planning Focus ( $\beta=0.30$ ,  $p<.001$ ), Process Structure ( $\beta=0.73$ ,  $p<.001$ ) and Organizational Culture ( $\beta=0.55$ ,  $p<.001$ ).

Organizational Attributes is affected by Planning Focus ( $\beta = .36$ ,  $p <.01$ ), Process Structure ( $\beta=0.70$ ,  $p<.001$ ) and Organizational Culture ( $\beta=0.63$ ,  $p<.001$ ).

Price is affected by Planning Focus ( $\beta=0.35$ ,  $p<.001$ ) and Process structure ( $\beta=0.91$ ,  $p<.001$ ) and not affected by Organizational culture ( $\beta = .17$ ,  $p =.590$ ) as  $p>.05$ .

#### 4.14.7 Regression Weights

Table 33 shows the estimates and standard errors of parameters.

**Table 33: Regression Weights**

<b>Regression Weights</b>				
	<b>Estimate</b>	<b>S.E.</b>	<b>C.R.</b>	<b>P</b>
Credibility <--- Process Structure	.827	.382	2.167	.002
Product Attributes<---Process Structure	.564	.137	4.109	***
Customer Perceptions <--- Process Structure	.731	.098	7.441	***
Organizational Attributes <--- Process Structure	.705	.126	5.607	.030
Price <--- Process Structure	.906	.128	7.058	***
Credibility <--- Organizational Culture	.912	.148	6.147	***
Brand Personality <--- Organizational Culture	.370	.112	3.297	***
Customer Perceptions <--- Organizational Culture	.554	.127	4.341	***
Organizational Attributes <--- Organizational Culture	.633	.143	4.434	.005
Price <--- Organizational Culture	.175	.325	.5384	.590
Credibility <--- Planning Focus	.610	.111	5.511	***
Brand Personality <--- Planning Focus	.895	.200	4.477	***
Product Attributes <--- Planning Focus	.640	.150	4.268	***
Price <--- Planning Focus	.357	.090	3.987	***
Product Attributes <--- Organizational Culture	.350	.092	3.786	***
Brand Personality <--- Process Structure	.604	.105	5.742	***
Customer Perceptions <--- Planning Focus	.308	.109	2.812	***
Organizational Attributes <--- Planning Focus	.367	.059	6.197	.003

S.E: Standard Error, C.R: Critical Ratio

Hence, it can be concluded that all six alternate hypotheses have been accepted. The results have confirmed the proposed model of analysis, pointing that the most significant affected factors by MI are Credibility, Brand Personality and Product Attributes. There is no significant effect of Organizational Culture on Price. The remaining factors have significant effect by MI. This implies that the BP of consumer durable organizations is extremely affected by the influence of MI factors.

#### 4.15 Evidence to Support Hypotheses of the research

**Table 34: Hypotheses Support**

Hypothesis	Evidence	Conclusion
H1: There is a positive relationship between Marketing Intelligence and Credibility for Brand Positioning	$\beta = .61, p = .020$ $\beta = .82, p = .000$ $\beta = .91, p = .000$	Supported
H2: There is a positive relationship between Marketing Intelligence and Brand Personality for Brand Positioning	$\beta = .89, p = .000$ $\beta = .60, p = .000$ $\beta = .37, p = .000$	Supported
H3: There is a positive relationship between Marketing Intelligence and Product Attributes for Brand Positioning	$\beta = .64, p = .000$ $\beta = .56, p = .000$ $\beta = .35, p = .036$	Supported
H4: There is a positive relationship between Marketing Intelligence and Customer Perceptions for Brand Positioning	$\beta = .30, p = .005$ $\beta = .73, p = .000$ $\beta = .55, p = .000$	Supported
H5: There is a positive relationship between Marketing Intelligence and Organizational attributes for Brand Positioning	$\beta = .36, p = .003$ $\beta = .70, p = .000$ $\beta = .63, p = .000$	Supported
H6: There is a positive relationship between Marketing Intelligence and Price of the Product for Brand Positioning	$\beta = .35, p = .000$ $\beta = .91, p = .005$ $\beta = .17, p = .590$	Supported

To ensure global and local tests, betas and p values are ensured in the range to get the hypotheses supported.

#### 4.16 Conclusion

This chapter discussed the results, based on the responses collected with the help of the questionnaire administration. First of all, the data set was prepared with the help of SPSS (21.0). Data exploration is done to check data error and to understand data. It was also done to find out whether or not the assumption of normal distribution stands true in the data set. The data was found normally distributed. Various statistical techniques were applied to the data set. The internal consistency of various instruments used in the present research was checked by calculating *Cronbach's alpha* and it is found that the instruments are internally consistent thus reliable. The validity is also established with the help of EFA and it is found valid. Multi-variate tools were used for hypotheses testing particularly CFA and SEM were performed. It was done to test the proposed framework empirically while testing the six hypotheses; all alternate hypotheses are accepted on the basis of beta and p values. These results help the researcher to gain insight into MI role in BP from the customer point of view. The subsequent chapter five presents findings and discussions of the research.

**CHAPTER V**  
**FINDINGS AND**  
**DISCUSSIONS**

## Chapter V

### Findings and Discussions

---

*"The findings fit in well with previous research and provide definite answers where previously there was uncertainty" – Sarah Darby*

#### 5.1 Introduction

This chapter presents a summary of the present research. The research has been conducted to examine the role of MI in BP in consumer durable sector of Punjab and NCR. The effect of factors of MI on factors of BP has been analyzed. It is based on a survey of consumers, marketing professionals and IT professionals of consumer durable product categories, namely, air-conditioners, refrigerators, washing machines, LCDs/ LEDs, mobile phones, Laptops, Mixers/ Grinders/ Food Processors, Microwave/ Ovens, and Electric Fans. Primary data collected with the help of three structured questionnaires from 310 consumers, 270 marketing professionals and 200 IT professionals have been analyzed using SPSS version 21.0 and AMOS version 21.0. Statistical tools like EFA, CFA and SEM have been employed to test the hypotheses.

#### 5.2 Findings and Discussions

A review of literature followed by findings of the present research has yielded insights into a number of important factors of BP and the effect of factors of MI on BP factors. The present research attempts to present a comprehensive view from the consumers' perspective, marketing professionals' perspective, and IT professionals' perspective. It analyses the effect of MI on BP factors.

A discussion of research objectives is crucial in understanding whether the same has been achieved. This research has three major research objectives and questions.

**5.2.1 The first research objective** was to identify the factors of BP of select consumer durables. The research question was what are the important factors of BP of select consumer durables. The first research objective and question was achieved on the basis of an extensive review of the literature and exploratory factor analysis on data collected from the consumers of durable goods considered in the research. The nomenclature of factors of BP after the EFA has been done on the basis of first and second important statements from the review of the

literature and based on the surrogate variables. The scales for BP and MI were constructed. The rotated component matrix in EFA (Refer to Table 25) shows the groupings of the emerged factors from EFA which were further validated by CFA on three sets of data. CFA then confirmed the identified factors. The identified factors of brand positioning from EFA and CFA are Credibility, Brand Personality, Price, Organizational Attributes, Customer Perceptions, and Product Attributes. These factors constitute 64.615% variability for brand positioning. This implies that marketing managers of Indian consumer durable organizations must focus on these six factors for their BP strategies. To devise the strategy for BP, marketing managers have to think on making the credibility, brand personality, price, organizational attributes, product attributes and perceptions of customers to place an image of their brand in their minds.

**5.2.2 The second research objective** was to identify the factors(s) of BP those are most significantly influenced by MI in select consumer durables. The second research question was what are the key factors of BP that are affected by MI? The second research objective and question was achieved by SEM. The results of SEM show that the factors of BP which are most significantly affected by MI are Credibility, Brand Personality, Organizational attributes, Customer Perceptions, and Product attributes. SEM results demonstrate that Credibility, Brand Personality, Organizational Attributes, and Customer Perceptions are the most significantly affected factors by MI. This means that managers of Indian consumer durable organizations can consider these most significant affected factors of BP while framing their BP strategies. Credible information given by marketing manager to the customers, the personality of the brand and the product which the managers are going to present to the customers, organizational attributes like innovation in the product, promotions, top management support and most importantly what the customer perceives about a brand, are the most significantly affected by MI. Thus, the better and correct the information collection, dissemination, and evaluation, the managers would be able to provide credible information to the customers, they can innovate in the right direction, they can work on promotions in a better way, and lastly they can track customer perceptions and their wants about a particular brand.

**5.2.3 The third objective** is to propose a framework depicting the effect of MI on factors of BP. The third research question was how MI impacts BP? This has been achieved by SEM on both the constructs MI and BP (Refer to Figure 36). This model has thus, established a

relationship between factors of MI and BP. The structural model depicts the role of MI on factors of BP. This implies that marketing managers of Indian consumer durable organizations can enhance their BP if they focus on the factors of BP which are most significantly affected by MI and utilize MI to take decisions regarding BP. The structural model shows the usefulness of MI in BP of Indian consumer durable organizations. The framework presents which factor of BP is mostly impacted by MI, and which factor is not. The key factors that are most influenced by MI are credibility, organizational attributes, product attributes, brand personality, and customer perceptions. This implies that an organization can devise their BP strategies by working on MI. The managers and enhance their BP if they utilize MkIS for fast and accurate information collection from the market.

### **5.3 Scale Formation for Brand Positioning and Marketing Intelligence**

#### ***Exploratory Factor Analysis***

As discussed in chapter 3, constructs of MI and BP have been designed by preparing the research instruments which consists of nine statements consisting of three sub-constructs, namely, 'Planning Focus', 'Process-Structure' and 'Organizational Culture' for MI and 26 statements consisting of 7 sub-constructs, namely, Credibility, Product Attributes, Brand Personality, Customer Perceptions, Price, Organizational Attributes and Competitor Attributes for BP. The scales were constructed for MI and BP. A survey method was used to collect the responses of marketing professionals and IT professionals working in 72 consumer durable organizations and consumers of these companies. The principles of reliability, validity, and sensitivity in the design of the scales have been applied to enhance the rigor of the scale. Reliability of the questionnaires has been tested which is coming out to be reliable, and the values are greater than 0.7. EFA was applied to check the factor loadings and check if any factor reduction is needed. Out of 7 factors, six factors came out for BP namely, Brand Personality, Credibility, Price, Organizational attributes, Customer Perceptions, and Product attributes. After the hypotheses formation, CFA was applied to validate the factors of BP.

#### ***Confirmatory Factor Analysis***

CFA was applied after conducted the EFA on three sets of data on AMOS 21. Six factors of BP were validated namely, Credibility, Brand Personality, Product Attributes, Customer Perceptions, Organizational Attributes, and Price. Three factors of MI were confirmed namely, Planning Focus, Process Structure, and Organizational Culture. The model fit of

three data sets was refined to get the good fit model by adding the covariances and by deleting the items.

### ***Structural Equation Modelling***

To study the effect of MI on BP, a structural model was proposed (Refer to Figure 36 in Chapter 4). Results of the data established it to be a good fit model ( $\chi^2/df = 1.254$ , GFI = 0.925, CFI = 0.958, NFI = 0.931, RMSEA = .048, TLI = 0.949). The structural model has been found to be acceptable since RMSEA < 10% and GFI and NFI > 90%.

It has been validated that factors of MI have an effect on BP factors. It has been found that Planning Focus, Process structure and organizational culture have direct effect on Credibility ( $\beta = .61$ ,  $p = .020$ ), ( $\beta = .82$ ,  $p = .000$ ), ( $\beta = .91$ ,  $p = .000$ ). It is the most significantly affected factor by MI. The daily information related to an organization's market is generated, collected and examined especially to arrive on precise and assured decisions has the largest effect on Credibility. It means the more the information is generated, collected and responded, the more the credibility of the brand can be achieved. The previous studies have also highlighted the importance of consistency (Erdem & Swait, 2004).

It has been found that Planning Focus, Process-Structure and Organizational Culture have a direct effect on Brand Personality ( $\beta = .89$ ,  $p = .000$ ), ( $\beta = .60$ ,  $p = .000$ ), ( $\beta = .37$ ,  $p = .000$ ). It is the second most significantly affected factor by MI. Brand personality reflects the values, words, and actions of all employees of the organization (Keller & Richey, 2006). Brand personality effort has to be aligned with organizational processes that help deliver the promises to customers through all departments of the organization (Batra, Lehmann, & Singh, 1993). To make a brand sincere, sophisticated, competitive, excited and rugged; managers are required to work on Planning focus, process-structure, and organizational culture.

It has been found that Planning Focus, Process-Structure and Organizational Culture have significant effect on Organizational attributes ( $\beta = .36$ ,  $p = .003$ ), ( $\beta = .70$ ,  $p = .000$ ) and ( $\beta = .63$ ,  $p = .028$ ) as  $p < 0.5$ . It is the third most statistically significantly affected factor by MI. This implies that promotions, advertising can be successful only if there is a supportive, innovative culture in the organization. Formal and informal procedures, appropriate policies are required to fulfil organizational attributes for the BP. Top management concern for consumers in terms of delivering quality products can only be possible if there are good

organizational processes, policies, formal infrastructure. Innovative products can be produced if there is an innovative and supportive culture in the organization (Aaker, 2004). Without information dissemination and responsiveness in the organization, managers cannot deliver value to the customers.

It has been found that Planning Focus, Process-Structure and Organizational Culture have direct effect on customer perceptions ( $\beta = .30$ ,  $p = .005$ ), ( $\beta = .73$ ,  $p = .000$ ), and ( $\beta = .55$ ,  $p = .000$ ). It is the fourth most statistically significant affected factor by MI. It implies that the more the organization has awareness about the customer needs, the better advertisements and brand recalls can be designed which build customer perceptions and influence them to buy the product. The consistent information by all the employees given to customers can decrease their cognitive dissonance. Teamwork and supportive culture help in promotional activities that ultimately affect customer perceptions (Guenzi & Troilo, 2006; Jones, Busch, & Dacin, 2003). Customers associations can be rebuilt by supportive work culture and planning focus.

It has been validated that factors of MI have an effect on Product attributes. The results show that Planning Focus, Process-structure and Organizational culture have a direct impact on Product attributes ( $\beta = .64$ ,  $p = .000$ ), ( $\beta = .56$ ,  $p = .000$ ) and ( $\beta = .35$ ,  $p = .036$ ). It is the fifth most significantly affected factor by MI. This implies that information generation, collection, and responsiveness is important to decide the product attributes for BP. The decisions taken with the help of MI (through MkIS) can introduce innovative attributes in a product in terms of abstract and concrete. Step by step process and product understanding facilitates the development of better innovative products (Norman, *et al.*, 2017). Organizations encourage the development of advanced manufacturing technologies for competitive products (Matzlera & Hinterhuberb, 1998).

It has been found that Organizational culture has no statistical significant effect on price ( $\beta = .17$ ,  $p = .590$ ) as  $p$  is  $>.05$  while Planning Focus and Process Structure have significant effect on Price ( $\beta = .35$ ,  $p = .000$ ) and ( $\beta = .91$ ,  $p = .000$ ). It implies that the better the intelligence about the organization and the market, the better monitoring of competitors' pricing is possible. Organizations' procedures, processes, and formal infrastructure influence price setting. Innovative and supportive culture has no impact on pricing (Gwin & Gwin, 2003). The previous study has shown similar results that Price setting is not affecting by Organizational Culture (Prasnikar *et al.*, 2008).

## 5.4 Managerial Implications

This section summarizes important managerial implications from the findings of the research as follows:-

1. Consistent and reliable information helps in reducing the cognitive dissonance arose in the mind of customer due to less and inappropriate information perceived by the customer.
2. The symbolic and functional attributes are important for BP to incorporate into the branding strategies of Indian consumer durable organizations.
3. To make a sincere, rugged, sophisticated, competitive and technologically exciting product, managers must rely on the MkIS analyzed information. Brand managers must be aware of the market and inside the company and must follow the policies of the organization.
4. Marketing managers have more concern to incorporate new product attributes to distinguish their product from its competitors.
5. Managers of multinational companies consider the MkIS as for guaranteed to be present and without it, they cannot assume their work to function. Only the start-ups are using customized or offline mode of MI to stay ahead of competitors.
6. Consistent and reliable information provided to the customers reduces their cognitive dissonance and their negative perceptions of the brand.
7. Mostly all companies are using MkIS except few that are using some other types of information systems like DSS, CRM, ERP, and customized information system for the smooth functioning of their routine to strategic decisions regarding brand positioning.
8. Many multi-national companies in India carry out ad-hoc marketing research, the prominent one being Motorola. In India, an integrated set of actions are required aimed at increasing long-term wellbeing and strength of an enterprise relative to its competitors.

The insight helps not only the existing organizations but are those intending to enter the consumer durables market arena. Organizations must endeavor to create better brand positioning with the help of MI through MkIS that assists in information generation, dissemination and responsiveness. The better the MI of an organization, the better it can position its brand as it facilitates managers' mission to decide all levels of operations based upon the information flow. An implication is that advertisements should prominently showcase the brand and explain the value explicitly. It helps in generating interest in

consumers and making the advertisements more noticeable and memorable. Teamwork and supportive culture an organization can enhance the success of promotions. Steps can also be taken to get the information about existing customers, as they will flow the information to others.

It has been further observed that Consistency in value and message to be delivered to the customer leads to better positioning in the mind of the customer. Word of mouth can influence perceptions of consumers during the information search phase of the buying process. A positive and consistent word of mouth and favorable recommendation by loyal consumers can spread fast and do wonders in attracting new consumers in a cost-effective manner.

Organizations must know about the price of competitors' brand. Top management concern to make the brand sophisticated, sincere, competitive, exciting is important to become better than the competitors' brand. Thus, MI about the market and competitor organizations is essential to devise a proactive approach for brand positioning.

Innovations in features and user-friendly interfaces can give consumers an opportunity to engage with the product and the brand. Ease and convenience of consumers concerning location, the point of purchase, payment modes should be emphasized.

Product attributes are of significant interest to marketing researchers and practitioners, as these are the prominent criteria by which consumers evaluate products before making purchase decisions, and it is on the basis of attributes important to consumers that marketers design their products and set it apart from the competition.

Academicians and practitioners can collaborate to establish how an intelligence culture can be created within an organization to position a particular brand in the minds of the customers. Many organizations are recognizing the need for integrated marketing communications across offline and online channels.

The product attributes allow the firm to see how its brand is perceived compared to the competitors. The firm can assess whether it operates from a position of strength or if it is vulnerable to the competition. If it is vulnerable, it can determine the appropriate action to take a new product, changes in the existing product, changes in price or a new promotional strategy.

Organizations can improve consumers' experience by improving the quality of products such as product attributes, brand personality, credible information about the brand, affordable

price, technologically innovative than competitors. The marketing professionals can utilize these factors as opportunities to provide brand attributes to surpass customers' perceptions. Factors affecting brand positioning from marketing professionals' and consumers' point of view are required to be incorporated in branding strategies in consumer durable companies. Consumer durable organizations can strive to achieve high-quality standards while creating and delivering the products to consumers. Practitioners and marketing professionals can also use the results related to repurchase and recommendation intentions of consumers of durable goods. The categories of decision-makers can be seen as a base for devising expansion and diversification plans for consumer durable organizations.

Consumers' experiences with the product can be collected and analyzed as a tool for continuous monitoring and improvement of product quality. Consumer durable organizations must periodically conduct MI to understand dynamic market situations.

## **5.5 Research Contribution**

The present research highlights the role of MI in BP in the consumer durables sector. The research shows the importance of MI in BP strategies of consumer durable organizations. The effects of factors of MI on factors of BP have been studied. The research attempts to provide meaningful inputs to the management of organizations in the sector of consumer durables with respect to BP and utilization of MkIS for BP. The significant contribution of this research is the identification of BP factors and the key factors of BP that are most influenced by MI, thereby constructing a scale that evaluates the role of MI in BP. It might also be useful in understanding consumer preferences for consumer durable goods. Academicians and researchers may gain from this research while undertaking similar studies in the future.

In order to achieve the first and second research objective, the author has developed scales that 1) validate the important factors of BP; 2) to evaluate the role of MI in BP. The factors of BP were derived through an extensive review of the literature and explored by EFA (Refer Table 20 & 25). Further, these scales were validated by CFA (Refer Table 26 & 27). As a result, the first theoretical contribution is the identification of factors of BP that were derived through an extensive review of the literature and explored by EFA (Refer to Table 20 & 25).

The second contribution is the MI-BP model (Refer to Figure 36) that depicts the role of MI in BP which is the output of the structural relationship between MI and BP that has been established by SEM. The scale of MI-BP was developed and empirically tested (Refer to

Table 6). As a result, the specific factors, i.e., Credibility, Brand Personality, Organizational attributes, Customer Perceptions, and Product attributes came out to be most influenced by MI. Thus, the author has developed a scale to achieve research objective 2. For MI-BP model, all stakeholders "IT professionals, Marketing Professionals, and Consumers" instruments were empirically tested and validated (Refer Table 5, 6 and 7). The outcome is the MI-BP model (Refer to Figure 36).

From the industry point of view, the results from the SEM model shows the key factors that are most influenced by MI are Credibility, Brand Personality, Organizational Attributes, Customer Perceptions, and Product Attributes (Refer Table 33). The implication for this is managers should focus on these factors while constructing their BP strategies.

## **5.6 Conclusion**

It is concluded from the research that there is a significant impact of MI on BP as five factors of BP are being influenced by all the factors of MI except Price. Only Organizational Culture has no significant effect on Price as Price setting is affected mainly by Process-Structure and Planning Focus. The success of BP can be enhanced with the help of MI. This chapter comprises the findings and discussions, theoretical and managerial implications and research contribution. The conclusions, limitations, and recommendations for future research are presented in the next chapter.

**CHAPTER VI**  
**CONCLUSION & FUTURE  
SCOPE**

## Chapter VI

### Conclusion & Future Scope

---

*"Problems worthy of attack prove their worth by hitting back." -- Piet Hein*

This chapter presents the conclusion and limitations of the present research. The future research directions have also been highlighted.

#### 6.1 Conclusion

The results contribute to the body of knowledge of BP literature about the important factors that affect BP of consumer durable organizations. The important factors of BP emerged from EFA and literature review are Credibility, Brand Personality, Organizational attributes, Customer Perceptions, Product attributes, Price and Competitors' attributes. These seven factors are used by marketing managers of Indian consumer durable organizations. From consumers' point of view, six factors are important while choosing a product from varied options of brands. These are Credibility, Brand Personality, Organizational attributes, customer perceptions, product attributes, and price. The research has constructed a scale for BP from consumers as well as marketing professionals' point of view. The SEM results demonstrate the most significant factors of BP affected by MI. The factors are Credibility, Brand Personality, Customer Perceptions, and Product Attributes. It implies that to enhance the BP of an organization; managers must utilize MI to fulfill these important factors on BP.

The results imply that consistency in value and message to be delivered to the customer leads to better positioning in the mind of the customer. Product attributes are of significant interest to marketing researchers and practitioners, as these are the prominent criteria by which consumers evaluate products before making purchase decisions, and it is on the basis of attributes that marketers design their products and set it apart from the competition. Innovations in features and user-friendly interfaces can give consumers an opportunity to engage with the product and the brand. Top management concern to make the brand sophisticated, sincere, competitive, exciting is important to become better than the competitors' brand. Teamwork and supportive culture in an organization can enhance the success of promotions. To make a sincere, rugged, sophisticated, competitive and technologically exciting product, managers must rely on the MkIS analyzed information.

Word of mouth can influence perceptions of consumers during the information search phase of the buying process. It is concluded that BP can be increased if there is effective MI generation, dissemination, and responsiveness in the consumer durable organizations.

## **6.2 Limitations of the research**

Although this research is based on sound literature and methodological foundations, specific limitations are acknowledged. These limitations are highlighted in the following section.

The first limitation of this research is related to the dimensions used in the research model. Although the proposed MI-BP model (Refer to Figure 36) has addressed the dimensions that are central to the research questions, several other possible dimensions could also influence the relationships proposed in the conceptual model. In future, the rigor of the MI-BP model can be improved by investigating the mediating and moderating factors such as corporate social responsibility (Johson, Lee, & Ashoori, 2018), globalization (Canli, Abi, & Hayran, 2018), Green IT, Green Marketing (Growning, Sarkis, & Zhu, 2018) anthropomorphism (Puzakova & Aggarwal, 2018), organizational culture and process structure.

The second limitation is the scope of the research in terms of data collection. For this research, data collection is restricted to NCR and Malwa region of Punjab. It can be extended to other parts of India. Only 780 out of 1640 were duly filled and fit to be considered from 72 consumer durable companies. Sample size can be increased to include other durable companies or respondents from other parts of India. Further, from method perspectives, we can do case studies for cross-country comparisons.

## **6.3 Future Scope**

Though the present research has made an attempt to cover many important aspects of marketing intelligence and brand positioning in the consumer durables industry, still there is a vast scope for further research. The future research can focus on two aspects.

Firstly, the sample size can be increased by collecting data from across India. The data collected for this research is from North India only. The future research can be extended to other regions of the country on the basis of the proposed and validated framework and consumer durables in terms of product categories. The constructed scale for BP can be used in other sectors (like healthcare or automobiles) to validate the scale further.

Secondly, to make the MI-BP model more rigorous, mediating and moderating factors such as Corporate Social Responsibility (Ali, 2014), Green IT, Green Branding (Wang, 2017), Globalization (Alden, Steenkamp, & Rajeev, 1999), Process, Structure and Organizational Culture can be evaluated. This will enable theoretically enriching the descriptive and analytical capacity of the MI-BP model. Further, a product-wise analysis can also be carried out to gain more insight into this area of research. This may involve cross country comparison, single case studies to have a thorough view of a single company considering a single product.

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# **APPENDICES**

## Appendix 1 – Research Questionnaire

### Questionnaire for IT Professionals

Dear Respondent

I am working on a research project named “**Role of marketing intelligence in brand positioning of select consumer durables**”.

This is the survey of opinion for academic research only. The identity of the respondents would be kept anonymous and concealed and would not be disclosed at any circumstances. The objective of this survey is to apply for academic research and not for any other purpose. Your cooperation would be a great help.

#### Part A: General Information

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**Role/ Type of work/ work:** \_\_\_\_\_

**Company Name:** \_\_\_\_\_

**Place of Posting:** \_\_\_\_\_

**Gender:** M  F

#### Years of Service

Less than 1  1 to 5

5 to 10  More than 10

#### Computer Knowledge

Proficient  Not Proficient

**Email:** \_\_\_\_\_

**Tel No:** \_\_\_\_\_

**Mobile:** \_\_\_\_\_

**Part B: Opinion of the Respondents**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Not sure</b>	<b>Agree</b>	<b>Strongly Agree</b>

**Please give the responses of following questions on the 5 point scale**

MI- Marketing Intelligence, MkIS- Marketing Information System

<b>S.No.</b>	<b>Questions</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	The company provides secure and error-free information to the consumers.					
2	The MkIS of the Company is able to provide necessary information related to the organization and market effectively to all the employees.					
3	MkIS assists in providing updated information on the market to all the departments concurrently at the same time.					
4	The organization's formal procedures are followed with the help of information system.					
5	Organizational processes are adhered to appropriate policies.					
6	Information system improves individual's job performance with respect to marketing domain.					
7	The culture of the company is cooperative and believes in high team spirit among the employees.					
8	Top Management always encourages managers/ employees to use MkIS and utilize innovative methods.					
9	Employees usually use MkIS to accomplish tasks more quickly and effectively to get more awareness about the organization.					

## Appendix 2 – Research Questionnaire

### Questionnaire for Marketing Professionals

Dear Respondent

I am working on a research project named “**Role of marketing intelligence in brand positioning of select consumer durables**”.

This is the survey of opinion for academic research only. The identity of the respondents would be kept anonymous and concealed and would not be disclosed at any circumstances. The objective of this survey is to apply for academic research and not for any other purpose. Your cooperation would be a great help.

#### Part A: General Information

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Company Name: \_\_\_\_\_

Role/ Type of Work: \_\_\_\_\_

#### Products Handled:

Air Conditioners	<input type="checkbox"/>	Refrigerators	<input type="checkbox"/>
Washing Machines	<input type="checkbox"/>	Microwaves/ Ovens	<input type="checkbox"/>
Mixers/ Grinders/ Food Processors	<input type="checkbox"/>	Electric Fans	<input type="checkbox"/>
LCDs/ LEDs	<input type="checkbox"/>	Mobile Phones	<input type="checkbox"/>
Laptops	<input type="checkbox"/>		

Place of Posting: \_\_\_\_\_

#### Age:

18 to 25	<input type="checkbox"/>	26 to 35	<input type="checkbox"/>
36 to 45	<input type="checkbox"/>	46 to 55	<input type="checkbox"/>
Above 55	<input type="checkbox"/>		

#### Highest level of Education:

Diploma

Bachelors Degree  Post Graduate Degree

**Years of Service**

Less than 1  1 to 5

5 to 10  More than 10

**Computer Knowledge**

Proficient  Not Proficient

**Email:** \_\_\_\_\_

**Tel No:** \_\_\_\_\_

**Q. How often do you use computer for your job purpose?**

- a) Mine is totally computer based job
- b) Have to refer computer daily for one or other reason
- c) Have to refer computer occasionally for work
- d) I rarely use computer
- e) Never used computer

**Part B: Opinion of the Respondents**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Not Sure</b>	<b>Agree</b>	<b>Strongly Agree</b>

**Please give responses of following questions in the 5 point scale:**

S.No.	Questions	1	2	3	4	5
1	MI assists you to put in extra efforts to maintain expected quality in the brand.					
2	MI of the company facilitates managers to deliver expected quality brand.					
3	MI of the company is able to deliver expected quality brand.					
4	My company's available resources (top management support, MkIS, team spirit) are sufficient/ adequate for maintaining the					

	credibility.					
5	MI assists in providing the consistent information about the brand to its customers.					
6	MI of the company assists in making a brand which appears honest to the customers.					
7	MI of the company assists in making a tough brand which can withstand tough situations.					
8	MI of the company facilitates in making a competent brand in terms of reliability and success.					
9	MI of the company helps in making a sophisticated brand.					
10	MI of the company helps in making an imaginative and up-to-date brand.					
11	MI facilitates in appropriate price setting of products.					
12	MI provides better ways to monitor the competitor's pricing strategies.					
13	MI helps in getting faster price response to market price fluctuations.					
14	MI assists in handling the queries and problems of the customers.					
15	MI helps in showcasing the uniqueness of the product to the customers.					
16	MI helps in developing better promotional mix strategies.					
17	MI facilitates in assessing the market turbulence.					
18	MI helps marketing managers in knowing the extent of competition.					
19	MI helps in identifying and reducing consumer's perceived risks.					
20	MI fulfils all the needs and expectations of the consumers by continuously providing the updated information about business environment.					
21	MI helps in scanning the market for better segmentation.					
22	MI helps in targeting the customers based on their perceptions and expectations.					
23	I use the incorporation of unique attributes to differentiate my brand with the competitors brand (tangible) like color, design,					

	spaciousness.					
24	I stress on the benefits the customer is getting, for effective purchase process (intangible) like warranty schemes, discount schemes, comfort.					

Q. As Marketing Intelligence constitutes organization structure, culture and planning process, which of the following contributes the most in your organization for the above questions you have responded.

- a. Organization Process/ structure
- b. Culture prevalent in the organization
- c. Planning process specifically for implementing MI used in company (MkIS)
- d. Other

**Thank You for giving your precious time for filling this questionnaire**

## Appendix 3 – Research Questionnaire

### Questionnaire for Consumers

Dear Respondent

I am working on a research project named “**Role of marketing intelligence in brand positioning of select consumer durables**”.

This is the survey of opinion for academic research only. The identity of the respondents would be kept anonymous and concealed and would not be disclosed at any circumstances. The objective of this survey is to apply for academic research and not for any other purpose. Your cooperation would be a great help.

#### Part A: General Information

**Name:** \_\_\_\_\_

**Place:** \_\_\_\_\_

**Gender:** M  F

**Age:** 18 to 25  26 to 35  36 to 45   
46 to 55  Above 55

**Marital Status:** Single  Married

**Family Size:** Two  Three  Four  More

**Highest Level of Education:**

Secondary  Diploma

Graduate  Post Graduate

**Occupation:**

Salaried  Self Employed

Not working  Student

Retiree

**Monthly Income:**

Below 20,000  20,000 to 40,000

40,000 to 60,000  Above 60,000

**Years of Service:**

less than 1	<input type="text"/>	1 to 5	<input type="text"/>
5 to 10	<input type="text"/>	more than 10	<input type="text"/>

**Internet Knowledge:**

Proficient	<input type="text"/>	Not Proficient	<input type="text"/>
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**How often do you use computer for surfing through websites?**

Daily	<input type="text"/>	Weekly	<input type="text"/>
Monthly	<input type="text"/>	Occasionally	<input type="text"/>

**How often do you use computer for purchasing through websites?**

Daily	<input type="text"/>	Weekly	<input type="text"/>
Monthly	<input type="text"/>	Occasionally	<input type="text"/>

**Email:** \_\_\_\_\_

**Tel No:** \_\_\_\_\_

**Mobile No:** \_\_\_\_\_

**Please select one product out of the following:**

*This selection will be used for filling up the rest of the form*

Refrigerators	<input type="text"/>	Air Conditioners	<input type="text"/>
Washing Machines	<input type="text"/>	Microwaves/ Ovens	<input type="text"/>
Mixers/ Grinders/ Food Processors	<input type="text"/>	Electric Fans	<input type="text"/>
LCD/LEDs	<input type="text"/>	Mobile Phones	<input type="text"/>
Laptops	<input type="text"/>		

**Refrigerators**

Which brand of Refrigerator you have used and perceived as best out of the following brands?

Whirlpool	<input type="text"/>	Bluestar	<input type="text"/>	Hitachi	<input type="text"/>
Videocon	<input type="text"/>	Kelvinator	<input type="text"/>	Sharp	<input type="text"/>
Panasonic	<input type="text"/>	LG	<input type="text"/>	Godrej	<input type="text"/>
Samsung	<input type="text"/>	Haier	<input type="text"/>		

### Air Conditioners

Which brand of Air Conditioners you have used and perceived as best out of the following brands?

Videocon	<input type="text"/>	Fedders Lloyd	<input type="text"/>	Sharp	<input type="text"/>
OGeneral	<input type="text"/>	Daikin	<input type="text"/>	Bluestar	<input type="text"/>
Career	<input type="text"/>	Koreo	<input type="text"/>	Samsung	<input type="text"/>
Haier	<input type="text"/>	Voltas	<input type="text"/>	LG	<input type="text"/>
Whirlpool	<input type="text"/>				

### Washing Machines

Which brand of Washing Machines you have used and perceived as best out of the following brands?

Videocon	<input type="text"/>	Fedders Llyod	<input type="text"/>	Sharp	<input type="text"/>
IFB	<input type="text"/>	Siemens	<input type="text"/>	GE	<input type="text"/>
Electrolux	<input type="text"/>	Godrej	<input type="text"/>	Kelvinator	<input type="text"/>
Akai	<input type="text"/>	Onida	<input type="text"/>	Haier	<input type="text"/>
Panasonic	<input type="text"/>	TVS	<input type="text"/>	Voltas	<input type="text"/>
Samsung	<input type="text"/>	LG	<input type="text"/>	Whirlpool	<input type="text"/>

### Microwaves/Ovens

Which brand of Microwaves/ Ovens you have used and perceived as best out of the following brands?

Sharp	<input type="text"/>	Bajaj	<input type="text"/>	Glen	<input type="text"/>
Sunflame	<input type="text"/>	Whirlpool	<input type="text"/>	Onida	<input type="text"/>
Godrej	<input type="text"/>	Morphy Richards	<input type="text"/>	IFB	<input type="text"/>
Samsung	<input type="text"/>	LG	<input type="text"/>	Inalsa	<input type="text"/>
Akai	<input type="text"/>				

### Mixers/ Grinders/ Food Processors

Which brand of Mixers/ Grinders/ Foods Processors you have used and perceived as best out of the following brands?

Bajaj	<input type="text"/>	Lumix	<input type="text"/>	Ronald	<input type="text"/>
Usha	<input type="text"/>	Crompton Greeves	<input type="text"/>	Oster	<input type="text"/>
Braun	<input type="text"/>	Singer	<input type="text"/>	Inalsa	<input type="text"/>
Panasonic	<input type="text"/>	Morphy Richards	<input type="text"/>	Black and Decker	<input type="text"/>
Prestige	<input type="text"/>	Orpat Kitchen	<input type="text"/>	Jaipan	<input type="text"/>
Preethi	<input type="text"/>	Sunflame	<input type="text"/>	Philips	<input type="text"/>
Maharaja Whiteline	<input type="text"/>	Kenwood	<input type="text"/>		

### Electric Fans

Which brand of Electric Fans you have used and perceived as best out of the following brands?

Bajaj	<input type="text"/>	Emerson	<input type="text"/>	Orpat	<input type="text"/>
Crompton Greeves	<input type="text"/>	Orient	<input type="text"/>	Khaitan	<input type="text"/>

### LCD/LEDs

Which brand of LCDs/LEDs you have used and perceived as best out of the following brands?

Sony	<input type="text"/>	Fedders Lloyd	<input type="text"/>	Sansui	<input type="text"/>
Hitachi	<input type="text"/>	Philips	<input type="text"/>	Mitashi	<input type="text"/>
Panasonic	<input type="text"/>	Toshiba	<input type="text"/>	Aiwa	<input type="text"/>
Akai	<input type="text"/>	Sharp	<input type="text"/>	Samsung	<input type="text"/>
Haier	<input type="text"/>	Koreo	<input type="text"/>	Onida	<input type="text"/>

### Mobile Phones

Which brand of Mobile Phones you have used and perceived as best out of the following brands?

Sony	<input type="text"/>	Zen	<input type="text"/>	Sansui	<input type="text"/>
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Philips	<input type="text"/>	Karbons	<input type="text"/>	Ericsson	<input type="text"/>
Motorola	<input type="text"/>	Blackberry	<input type="text"/>	Spice	<input type="text"/>
Nokia	<input type="text"/>	Idea	<input type="text"/>	Akai	<input type="text"/>
Micromax	<input type="text"/>	Samsung	<input type="text"/>		

**Laptops**

Which brand of Laptops you have used and perceived as best out of the following brands?

Sony	<input type="text"/>	Acer	<input type="text"/>	IBM Think Pad	<input type="text"/>
Apple	<input type="text"/>	Philips	<input type="text"/>	Samsung	<input type="text"/>
Asus	<input type="text"/>	Lenovo	<input type="text"/>	Toshiba	<input type="text"/>
Compaq	<input type="text"/>	Dell	<input type="text"/>	HP	<input type="text"/>

**Part B: Opinion of the Respondents**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Not Sure</b>	<b>Agree</b>	<b>Strongly Agree</b>

**Based on your best brand, answer the following questions**

S.No.	Questions	1	2	3	4	5
1	I recall the selected brand because of promotions and advertisements.					
2	I perceive that the selected brand has ability to fulfil expected quality.					
3	I perceive that the selected brand provides consistent quality.					
4	I get the consistent information of the selected brand from marketing personnel.					
5	I stick to the selected brand because it appeals to me.					
6	I purchase the selected brand because it gives me the reflection of honesty and fulfilment in terms of value.					
7	I purchase the selected brand because the products of this brand are non delicate or hard enough to sustain with the extreme handling.					
8	I purchase the selected brand because of its reliability.					
9	I purchase the selected brand because it gives me a feeling of					

	sophistication (hi-class).						
10	I purchase the selected brand because it is trendy and innovative (exciting).						
11	I am ready to pay the high price for the selected brand as it adds to my status.						
12	The selected brand provides me value for money.						
13	With respect to competitors, I found the brands prices as fair enough.						
14	The organization of the selected brand supports me in resolving any type of brand related query or problem.						
15	I found majority of people aware about the brand's unique features through advertisements and promotions.						
16	The organization of the selected brand provides regular satisfactory post sales services.						
17	When I use this brand, I feel socially acknowledged.						
18	I purchase this brand as it provides me qualities and features that I am looking for.						
19	I can associate this brand with my personality.						
20	I consider this brand as it reflects my status.						
21	I perceive risk while purchasing the selected brand for the first time.						
22	Due to poor post sales services, I feel my purchase decision was wrong.						
23	Due to poor quality of the product of the selected brand, I feel my purchase decision was wrong.						
24	I prefer this brand because I give more importance to physical features of the product like color, design and spaciousness.						
25	I prefer this brand because of its various secondary benefits like warranty schemes, eco-friendliness, earlier purchase experience and discount schemes.						

**Thank-you for your time and cooperation**

#### **Appendix 4- Profile of List of Consumer Durable Companies Considered in the research**

1. **Acer:** Acer's subsidiary in India is Acer India (Pvt) Limited, and was incorporated as a wholly owned subsidiary of Acer Computer International, Ltd. in 1999. It is a notable vendor in key segments such as education, desktop computers and low profile notebooks for education. The headquarters are in Bangalore, India. Its Products include Desktops, **Laptops, Netbooks, Servers, Smartphones, Tablet Computers**, storage, handhelds, Monitors, Televisions, **LED, LCD & Plasma**, Video Projectors. Its branches are in **New Delhi**, West Bengal and Gujarat.
2. **Activa:** It is established in 1993 at Delhi. It is India's number 1 Kitchen appliances company and manufacturer. Its head office is in **New Delhi**. Its products include **Fans, Mixers, and Grinders**.
3. **Akai:** It is a consumer electronics brand now headquartered in Singapore. Akai was founded by Masukichi Akai and his son, a Japanese manufacturer in 1929. The leading Japanese Technology since 1929. Products are **AC, Refrigerators and Washing Machines**. In Kitchen, Food Processors, Mixer Grinders. Ritu Shukla is the marketing Head in Gurgaon. Its **corporate Office is in New Delhi and Marketing Office is in Gurgaon**. It has customer care centres, e stores, service centres and distributors in India in various cities.
4. **Almonard:** It was established by a team of young technocrats engineers way back in 1968 under strong and able leadership of Mr. Vinod Patel. Its branch office is in New Delhi. Its products include domestic ceiling fans and industrial fans.
5. **AOC:** It is an international brand of TPV Technology Limited, a US \$ 12 billion Business Conglomerate that was formed in USA and is now based out of Taiwan. TPV group designs and manufactures a wide range of **LED and LCD** displays for global distribution across Europe, North and South America, Australia, China, India and many other Asian countries. AOC is a complete one stop solution for all display needs. AOC has earned a reputation for selling user-friendly, technologically advanced displays, with every aspect of AOC's business focusing on the development of products that fit seamlessly into consumers' digital lifestyles. Its head office is in **Gurgaon**.
6. **Bajaj Electricals:** Its registered office, company Showroom, Head Office and corporate office – all are in **Mumbai**, Maharashtra. Its products include fans, Kitchen appliances

(**food processors, cooking appliances, Oven, Microwaves**) and lighting. Its branch Offices are in other states and cities like **Delhi and Chandigarh**.

7. **Baltra:** BALTRA Home Products started its journey from a small home appliance maker to a brand name in the market by achieving several goals of success. BALTRA, set up in 1994, the company over the years has become a foremost name in **Glassware, Kitchenware and Electrical Appliances**, conforming to various National & International Standards. Our innate forethought to study & identify consumer needs by offering well-designed & engineered products, has made us one of the country's leading brand in the field of Appliances. BALTRA Home Products are suitable for Domestic as well as Industrial applications with varied usages for kitchen convenience. Its Registered Office and **Corporate Office is in New Delhi**. Other work units are in Baddi (HP) India.
8. **Black and Decker:** Stanley Black and Decker India Private Ltd. is US based company and its branch offices are in Bangalore, Karnataka, Mumbai, **Gurgaon**, Ghaziabad, Baddi and Chandigarh. Its products include mixers, grinders, ovens, food processors and other kitchen appliances. It is an American Manufacturer of home improvement products and technology headquartered in Maryland. It got merged with Stanley to become stanley black and decker.
9. **Bluestar:** Blue Star is India's leading **air conditioning and commercial refrigeration company**, with an annual revenue of over ₹ 3,500 crores (over US\$ 510 million), a network of 35 offices, 5 modern manufacturing facilities, 2,700 employees, 2,200 dealers and 600 retailers. Blue Star's integrated business model of a manufacturer, contractor and after-sales service provider enables it to offer an end-to-end solution to its customers, which has proved to be a significant differentiator in the market place. In fact, every third commercial building in India has a Blue Star product installed. Its branches are at **Gurgaon, Ghaziabad, Chandigarh, New Delhi** and Ludhiana in Northern region of India.
10. **Bosch:** Bosch home appliances is part of BSH Home Appliance Group, based in Munich, Germany. The Bosch name has always stood for both quality and reliability, and we remain committed to ensuring uncompromising performance and great design is built into every single appliance we produce. The Bosch range of home appliances, including refrigerators, washing machines, dishwashers and dryers are designed and manufactured keeping Bosch's unwavering commitment to the highest standards in technology and

quality. It has a sales office in Chandigarh, Delhi, Ghaziabad. Its regional office is in New Delhi.

11. **BPL Limited: British Physical Laboratories:** is an Indian electronics company. It makes health care equipment. It was founded in 1963 in Palakkad, Kerala, and is headquartered at Bangalore, Karnataka. Its office is in **Delhi**. Its products include **LEDs, LCDs, washing machines and refrigerators.**
12. **Butterfly:** ‘Gandhimathi Appliances Limited’, the flagship company of the Butterfly group, was originally incorporated as Private Limited Company on 24th February 1986 and was converted into a Public Limited Company on 25th April 1990. Subsequent to merger of its associate, Gangadharam Appliances Limited, the name of the Company was rechristened to ‘Butterfly Gandhimathi Appliances Limited’ (BGMAL), with effect from 25th October 2011. BGMAL is listed with Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). Its products include Mixer grinders, Table Top Wet **Grinders**, Pressure Cooker, Stainless Steel Cookware and Non-Stick Cookware. Other products comprise Juicers, Hand Blenders, Electric Irons, Power Hobs, Electric Rice Cookers, Water Heaters (Geysers), Air Coolers, Electric Water Kettle, Electric Sandwich Maker, Electric Bread Toaster, Fans (all types) and Washing Machine. Its Corporate Office is in Tamil Nadu and its branch offices are in **New Delhi**, Mumbai, and Hyderabad.
13. **Carrier:** is a brand of United Technologies Corporation Building & Industrial Systems based in Farmington, Connecticut. Carrier was founded in 1915 as an independent, American company, manufacturing and distributing heating, ventilating and **air conditioning systems** as well as commercial refrigeration and food service equipment. Carrier was acquired by United Technologies in 1979. It has a corporate office in **Gurgaon, India.**
14. **Cata Appliances Ltd. India:** brings kitchen appliances of European standard. Its corporate office is in New Delhi. Its products include microwaves, ovens.
15. **Crompton Greaves:** Crompton Greaves is an Indian Multinational company engaged in design, manufacturing and marketing of products related to power generation, transmission and distribution based in Mumbai. It is part of Avantha Group. Its offices are in **New Delhi**, Jaipur, Jalandhar, Lucknow and Gwalior in northern region of India. Its products considered in the research include **Fans and Appliances.**
16. **Daikin:** Daikin is a Japanese multinational **air conditioner** manufacturing company headquartered in Osaka. It has operations in Japan, China, Australia, India, Philippines,

Southeast Asia, Europe, North America and South America. Daikin is the inventor of variable refrigerant volume systems and an innovator in the split system air conditioning market. Dian Air-conditioning India Pvt. Ltd. is a 100 percent subsidiary of Daikin Industries Ltd. Japan, a global leader in the manufacturing of commercial use and residential air conditioning systems. It has 11 branch offices in India which include sales and services. It has 15 sales offices in India (**New Delhi, Gurgaon**). Its corporate Office is in **Gurgaon**.

17. **Dektron:** It is established in 1989. It is engaged in offering wide range of consumer electronics and energy solutions. Its products include **LED** television. Its head Office is in Haryana. Its corporate office is in **New Delhi**.
18. **Dell:** is an American privately owned multinational computer technology company based in Texas, United States. Dell Technologies made its name as a supplier of built to order personal computers. In India, its offices are in Bangalore and in Pune. It has a office in **Mohali, SAS Nagar**. Its products include **Laptops**.
19. **Electrolux Kelvinator:** **Kelvinator** was a home appliance manufacturer that is now a brand name owned by Electrolux. It takes its name from William Thomson, 1st Baron Kelvin, who developed the concept of absolute zero and for whom the Kelvin temperature scale is named. The name was thought appropriate for a company that manufactured ice-boxes and domestic refrigerators. Kelvinator was founded in 1914, in Detroit, Michigan, United States, by engineer Nathaniel B. Wales who introduced his idea for a practical electric **refrigeration** unit for the home to Edmund Copeland and Arnold Goss. Its legal address is in New Delhi. Its corporate office is in Mumbai. Its office is in **Gurgaon**.
20. **Fedders Llyod:** Fedders Lloyd was incorporated in the year 1957. The company was promoted by the Punj Family. Fedders Lloyd is one of the leading companies in overall product range and number one in the customized AC units. It is headquartered in Noida (UP), with modern manufacturing facilities at **Noida**, Kala-AMB and Guwahati. Its products include **Air Conditioners, LCD TVs**.
21. **GE:** General Electric in India (GE) is a company located in New Delhi, **Delhi** (NCT), India. Beginning in the early 1900s and lasting to the present, GE has manufactured home appliances, including stoves, the “Hotpoint” iron, **washing machines, air conditioners**, radios, and televisions.

22. **Gionee:** Gionee Communication Equipment Co. Ltd was founded on September 2002 and is now the world's top 10 **mobile** manufacturer. It is a high tech enterprise that focuses on the R&D, production and sales of cellular mobile devices. Our management team advocates for a scientific and standardized enterprise management mode, with a strong sense of innovation. R&D Centers are set up in Shenzhen, Beijing and **New Delhi** since 2006, the first phase of the project had a total INVESTMENT of more than 1Billion RMB and covers an area of 500 acres of the Gionee Industrial Park. Production reached a capacity of 80 million units per year. Once the entire industrial park is completed and put into production, production capacity will reach 80 million units per year, making Gionee China's largest mobile phone production site. Arvind R Vohra heads Gionee's business in India. As the Director of Syntech Technology Pvt. Ltd., he is the India Partner to Gionee's overseas arm Syntech Technology (HK) Ltd. In his role as a Partner, Vohra's prime focus is to build the business.
23. **Glen:** Glen Appliances Private Limited is headquartered in India. Glen is an inspiration from the needs of the discerning buyers of modern home appliances. Acknowledging the fact that quality services are the only two parameters for acceptance of a brand in the market, Glen is the answer to market dynamics. Its headquarters are in **Faridabad, Haryana**. It's famous in **kitchen appliances**.
24. **Godrej:** The Godrej Group is an Indian conglomerate headquartered in Mumbai, Maharashtra, India, managed and largely owned by the Godrej family. It was founded by Ardeshir Godrej and Pirojsha Burjorji Godrej in 1897, and operates in sectors as diverse as real estate, consumer products, industrial engineering, appliances, furniture, security and agricultural products. Subsidiaries and affiliated companies include Godrej Industries and its subsidiaries Godrej Consumer Products, Godrej Agrovet, and Godrej Properties, as well as the private holding company Godrej & Boyce. Godrej Appliances is one of the largest players in the **Home Appliances** space in India and has always delighted the consumer with relevant technology across a wide range of products. In 1958, Godrej was the First Indian Company to manufacture **Refrigerators** and has now become synonymous with the category. Its branch offices are in **NCR, Chandigarh and Delhi**.
25. **Haier Appliances:** Haier India is a 100 percent subsidiary of Haier Group, which is one of the fastest growing consumer durables companies in the world. The Haier group was set up in 1984 in Qingdao, China. In just over two decades as per Euro-monitor Statistics

of 2003, Haier was ranked as the 2nd largest Home Appliances brand in the world. Its corporate office is in **New Delhi**. Haier a fast growing consumer durables in the world produces innovative **Refrigerators, AC, TV, LED, Washing Machines**, Water Heaters, Wine Cellar, Deep Freezers, and **Microwave Ovens**.

26. **Havells Group:** Havells India Limited is the country's leading Fast Moving Electrical Goods (FMEG) manufacturer, producing a wide range of world class industrial and consumer electrical products. Its offices are in **Chandigarh, Noida, Delhi** and various other places in India. Its products include **kitchen appliances**.
27. **Hitachi:** Hitachi started its business in India in the 1930's. With over 25 business bases and over 10,000 employees in India presently, Hitachi Group in India is expanding through using its expertise in 'Social Innovation Business'. Hitachi India Pvt. Ltd. (HIL) markets and sells a wide range of products/services ranging from Information & Telecommunications Systems, Digital Solutions & Services, Infrastructure Systems, Industrial Systems like Water, Oil & Gas supply and management to Transportation and Urban Development Systems. Its branches are in **New Delhi**, Mumbai and Bangalore. Its products include **air-conditioners**.
28. **HP Compaq:** Hewlett-Packard was an American multinational information technology company headquartered in Palo Alto, California. Hewlett-Packard company events included the spin-off of its electronic and bio-analytical measurement instruments part of its business as Agilent Technologies in 1999, its merger with Compaq in 2002. Its offices are in **Gurgaon, New Delhi**. Its products include **Laptops**.
29. **Huawei Telecommunications India Co. Pvt. Ltd.: Huawei Technologies Co. Ltd.:** is a Chinese multinational networking and telecommunications equipment and services company headquartered in Shenzhen, Guangdong. It is the largest telecommunications equipment manufacturer in the world, having overtaken Ericsson in 2012. Its office is in Gurgaon. Its products include smart phones, Tablet devices, and mobiles. It has a circle office in Chandigarh.
30. **iBall:** iBall is a privately held consumer electronics company headquartered in MIDC Andheri Mumbai, Maharashtra, India. Its products include mobile phones, tablets and laptops. It imports computer peripherals, smart-phones and tablets from original equipment manufacturers (OEMs). iBall started operations in September 2001, initially selling computer mice. As of 2011, the company sold consumer electronics products in 27 different product categories. Its branch offices are in New Delhi and Gurgaon.

31. **IFB:** IFB Industries Limited originally known as Indian Fine Blanks Limited started their operations in India during 1974 in collaboration with Hienrich Schmid AG of Switzerland. The product range includes Fine Blanked components, tools and related machine tools like Straighteners, Decoilers, Strip loaders and others. The Engineering divisions are located at Kolkata & Bangalore. The Bangalore unit, apart from Fine Blanked components, manufactures motors for White goods as well as Automotive applications. It has manufacturing office in **New Delhi**. Its products include **washing machines, microwave, air-conditioners**.
32. **Inalsa:** For almost 50 years, Inalsa has been a pioneer in household appliances in India, both in terms of latest designs as well as technology. Founded in 1967, INALSA has always been the first choice of Indian consumers for small **home kitchen appliances**, it is one of the fastest growing appliance companies, INALSA is a subsidiary of Taurus Group, headquartered in Spain, which is one of the most popular brands in Europe with its innovative product range of appliances since 1962. Its Corporate office is in **Noida**.
33. **Intex Mobiles: Intex Technologies**, founded in 1996, is an Indian smart-phone, consumer durables and IT Accessories manufacturer. Intex is headquartered in New Delhi, India. Its products are mobile phones. It manufactures super quality smart-phones, IT accessories.
34. **Karbons Mobiles:** Karbons Mobiles Pvt. Ltd is a telecommunications company in India that was founded in March 2009. It is a joint venture mobile manufacturing company between the Bangalore (United Telelinks Limited) and Noida (Jaina Marketing & Associates). Karbons Mobiles has a strategic tie-up with Sistema Shyam TeleServices Limited. Karbons has a presence in countries such as Bangladesh, Nepal, Sri Lanka and in the Middle East and Europe as well. Its office is in **New Delhi**. Its products are **mobile phones**.
35. **Kenstar:** **Kenstar** is a brand of home appliances by company **Kitchen Appliances India Limited** which was launched during October 1996. It makes kitchen appliances, TVs, Air conditioners, air coolers and health appliances. Its corporate address is at **Gurgaon**. Kenstar is famous for Kitchen appliances like food processors, mixers grinders, microwave ovens, Air conditioners.
36. **Kenwood: Kenwood Corporation** is a Japanese company that designs, develops and markets a range of car audio, hi-fi home and personal audio, professional two-way radio communications solutions and amateur radio ("ham") equipment. Its marketing office is

in **Gurgaon**. It is established in 1946 as the Kasuga Radio Co. Ltd. in Komagane City, Nagano Prefecture, Japan, in 1960 the company was renamed Trio Corporation. In 1963 the first overseas office was founded in Los Angeles County, California. Its products include **kitchen appliances, food processors**.

37. **Khaitan: Khaitan & Co** is one of India's oldest and full service law firms comprising over 480 fee earners and consultants including 104 partners and directors . Founded in 1911 by Debi Prasad Khaitan, a member of the Constituent Assembly of India and one of the 7 members of the Drafting Committee which framed the Constitution of India. Khaitan & Co has offices in 4 cities: Kolkata (founded in 1911), **New Delhi** (started operations in 1970), Bengaluru (1994) and Mumbai (2001). Its products include **fans**.
38. **Lava: Lava International Ltd.** is an Indian mobile handset company with headquarters located in **Noida** .
39. **Lenovo: Lenovo Group Ltd** is a Chinese multinational technology company with headquarters in Beijing, China, and Morrisville, North Carolina, United States. It designs, develops, manufactures and sells personal computers, tablet computers, smartphones, workstations, servers, electronic storage devices, IT management software, and smart televisions. Its sales and marketing office is in **Delhi and in Gurgaon**.
40. **LG: LG Electronics Inc.** is a South Korean multinational electronics company headquartered in Yeouido-dong, Seoul, South Korea, and is part of the LG Group, employing 82,000 people working in 119 local subsidiaries worldwide. With 2014 global sales of USD 55.91 billion (KRW 59.04 trillion), LG comprises four business units: Home Entertainment, Mobile Communications, **Home Appliance & Air Solution**, and Vehicle Components, with Starion India as its main production vendor for refrigeration and **washing machines** in the Indian sub-continent. The CEO of LG Electronics is Bon-joon Koo, who assumed the role of vice chairman of LG Electronics on 1 October 2010. In 2011, LG Electronics was the world's second-largest television manufacturer. It has regional sales office in **Noida**.
41. **Luminous:** "Luminous Power Technologies is the leading home electrical specialist in India having a vast portfolio comprising of Power back up solutions such as Home UPS, Inverter Batteries and Solar Applications to Electrical offerings such as **Fans**, Wires & Switches. With 7 manufacturing units, more than 28 sales offices in India and presence in over 36 countries. Its corporate office is in **Gurgaon** and registered office is in New Delhi.

42. **Maharaja Whiteline:** It is founded in 1976. **Maharaja Whiteline has been a leader in innovation** ever since its inception. Brand introduced the very first "**Maharaja Mixie**", a unique solution for a full meal preparation with 3 jars - liquidizing, dry and wet **grinding** and chutney and it is constantly innovating ever since. Its corporate address is in **New Delhi**. Its products include kitchen appliances like **mixers, grinders, food processors**.
43. **Micromax:** Micromax Informatics Limited is one of the leading consumer electronics company in India, and the 10th **largest mobile phone** player in the world. Over the past decade, Micromax has pioneered the democratisation of technology in India - by offering affordable innovations through their product offerings and removing barriers for large scale adoption of advanced technologies. Micromax is currently the 2nd largest Smartphone Company in India. Micromax is a brand which is close to the heart of the youth, and celebrates the vibrancies of life and empowerment. Its head office is in **Gurgaon** and Factory is in Nalagarh, Solan.
44. **Morphy Richards:** For over 80 years, Morphy Richards has been a pioneer in household appliances in Europe, both in terms of latest designs as well as technology. Morphy Richards is being marketed and serviced in India by Bajaj Electricals Limited., India's leading appliances company. Thereby offering the Indian customer a two-fold benefit of international quality products and trusted service. Its products include mixers/ grinders, food processors, microwave ovens. Its corporate office is in Mumbai. Its customer care and service centres are in New Delhi.
45. **Motorola:** It has a corporate office in Gurgaon. It was an American multinational telecommunications company founded on September 25, 1928 based in Illinois. Its products include mobile phones.
46. **Nokia: Nokia Corporation** is a Finnish multinational communications and information technology company, founded in 1865. Nokia is headquartered in Espoo, Uusimaa, in the greater Helsinki metropolitan area. Its offices are in Gurgaon, Bangalore, Mumbai and Chennai. Its corporate office is in **Gurgaon**. Its products include mobiles.
47. **O General:** Fujitsu O'General is one of the most popular air conditioners manufacturers worldwide. O' **General Air-conditioners** is a brand of **air conditioners** in India manufactured by ETA General. It is joint venture between Fujitsu General and ETA-Ascon group based in Dubai. The company is headquartered in Chennai, while its manufacturing facility is located in Pondicherry. It has another manufacturing unit

in Thailand. In 2014, the company announced plans to invest ₹ 250 crore to build a new manufacturing unit in India. Its corporate offices are in **Gurgaon, Noida and New Delhi**.

- 48. Onida:** Onida is an electronics brand of Mirc Electronics, based in India. Onida was well known in India for its colour CRT televisions. Onida was ranked 51st among India's most trusted brands by the Brand Trust Report 2013 India study, a research conducted by Trust Research Advisory and subsequently, in the Brand Trust Report 2014, Onida was ranked 27th among India's most trusted brands. Onida was started by G.L. Mirchandani and Vijay Mansukhani in 1981 in Mumbai. G.L. Mirchandani is the chairman and managing director of M/s Mirc Electronics Ltd. Onida has a network of 33 branch offices, 208 Customer Relation Centers and 41 depots spread across India. As on 31 March 2005, Onida had a market capitalization of 301.46 crore. Its one of the branch office is in **New Delhi and Zirakpur**. Its products include air-conditioners, washing machines, mobile phones, microwave ovens and televisions.
- 49. Oppo: OPPO Electronics Corporation** is a Chinese electronics manufacturer based in Dongguan, Guangdong. Its major product lines include **smart-phones**, Blue-ray players and other electronic devices. Globally registered in 2004 and founded in 2001, the company has registered the OPPO brand name in many parts of the world. Its corporate office is in **Gurgaon**.
- 50. Orient: Orient Electric** is an Indian consumer electrical equipments manufacturing company based in New Delhi. It is a part of the Orient Paper & Industries (BSE: 502420), and which itself is a subsidiary of the \$1.6 billion CK Birla Group. Formerly it was known as **Orient Electricals**, and in April 2014 it changed its name to **Orient Electric**. It manufactures and export **fans**, lighting products and consumer appliances. Its headquarters is in **New Delhi**. Its products include Fans. Its manufacturing facilities are based in **Faridabad** and Kolkatta.
- 51. Orpat:** ORPAT is a group of companies based in the state of Gujarat, India with its wide national and international presence. The company is involved in manufacturing a wide range of well diversified products. ORPAT, with its continuous endeavors to strive for high precision premium class products has developed a state of art manufacturing plant with its strong R&D team, continuously involved in achieving innovations for its products and process. ORPAT has added one more vertical to ORPAT Group dealing in designing and producing **world class Fans**. This vertical is engaged in presenting world class Fans with a touch of variety and creativity. The vertical has a big range of products

to offer including Wall Fans, Ventilation Fans, Table Fans, Pedestal Fans and Ceiling Fans. The company has diversified in to this segment of consumer durables and home appliances with a big basket of home appliances ranging from Hand Blender, Irons, Mixer Grinders, Toasters, Ovens, Heaters, and Fans etc. Orpat Fans' head office is in **New Delhi**. Its service centres are also in New Delhi.

52. **Oster:** The history of the Oster® Brand began in 1924 when Mr. John Oster saw an opportunity to market a hand-operated hair clipper. The new product was designed to cut and style women's hair. Four years later, a new motor-driven clipper was introduced, and soon, The John Oster Manufacturing Company became a manufacturer of choice for professionals in the grooming industry. Its head office is in Ludhiana. Its products include kitchen appliances like mixers grinders, Ovens.
53. **Panasonic:** Panasonic has recently been designated India as regional hub to drive growth and build deeper inroads into the fast emerging Asiatic, Middle Eastern and Western economies. Its head office is in **Gurgaon**. Panasonic makes available in India its wide range of consumer electronics, home appliances like LCD & Plasma TVs, DVD players, Home Theatre Systems, Smart-phones, Cameras, Camcorders, Car Audio Systems, **Air Conditioners, Washing Machines, Refrigerators, Microwave Ovens**, Automatic Cookers, Vacuum Cleaners and a wide range of system products including communication ones like Mobile Phones, High Definition Videoconferencing, Professional Audio Video products like Broadcast Cameras, Projectors and Displays, Business Solutions including Printers, Whiteboards and Security Solutions.
54. **Philips:** Philips India Limited is a subsidiary of Royal Philips of the Netherlands, a leading health technology company focused on improving people's health and enabling better outcomes across the health continuum from healthy living and prevention, to diagnosis, treatment and home care. Philips leverages advanced technology and deep clinical and consumer insights to deliver integrated solutions. The company is a leader in diagnostic imaging, image-guided therapy, patient monitoring and health informatics, as well as in consumer health and home care. Its offices are in **Gurgaon, Noida** and in **Chandigarh**. Its products include **LEDs, mixers, grinders, food processors**.
55. **Prestige: TTK Prestige limited** is one of the oldest business of India, founded by T T Krishnamachari in the year 1928. *TTK Prestige Limited* was incorporated as a private limited company on 22 October 1955, at Chennai as *TT Private Limited* and it became a public limited company on 15 June 1988. The company started its manufacturing unit

after independence. It started manufacturing in the year 1949 by setting up manufacturing unit near Bangalore. Its corporate office is in Bangalore, Karnataka. Its north zone branch offices are in **Ghaziabad**, Ambala Cantt and Ludhiana. Its products include kitchen appliances.

56. **Samsung: Samsung Group** is a South Korean multinational conglomerate headquartered in Samsung Town, Seoul. It comprises numerous affiliated businesses, most of them united under the *Samsung* brand, and is the largest South Korean *chaebol*. Samsung Electronics has assembly plants and sales networks in 80 countries and employs around 370,000 people. It is the world's largest manufacturer of mobile phones and smart-phones fuelled by the popularity of its Samsung Galaxy line of devices. Samsung has been the world's largest television manufacturer since 2006, and the world's largest manufacturer of **mobile phones** since 2011. Samsung Electronics is a major part of the South Korean economy; in 2012 it was responsible for 20% of GDP. Its head office is in **Gurgaon**. Service Locations are in NCR region. It has a research institute in New Delhi. Its R& D operations are at **Noida**. Its products include washing machines, air conditioners, LEDs, LCDs, Refrigerators, mobile phones.

57. **Sansui India:** With the inception of Sansui in 1947 in Tokyo Japan, a new day in the field of entertainment was born. The company found faith at an enviable pace thus enjoying its presence in more than 100 countries. Five decades later, Sansui started its operation in India in 1997. From a small company in the entertainment industry, owing to its ground breaking technologies, today Sansui prides itself in being No.1 in customer satisfaction in India. Sansui is one of the most loved brands in the country, with a reputation for new age technology and excellent after sales service. In India, Sansui has marked its presence across all major towns and cities in the country. Its products include LEDs, Air conditioners, Mobile Phones. Its corporate office is in Gurgaon.

58. **Sharp India:** Sharp Corporation is a Japanese multinational corporation that designs and manufactures electronic products, headquartered in Sakai. Since 2016 it has been an integral part of Taiwan-based Foxconn Group. Sharp employs more than 50,000 people worldwide. The company was founded in September 1912 in Tokyo and takes its name from one of its founder's first inventions, the Ever-Sharp mechanical pencil, which was invented by Tokuji Hayakawa in 1915. Its products include **Televisions, Home appliances, LCD panels**. Its head Office is in Osaka, Japan. In India, it has head office is in **Noida**. Zonal Office is situated in New Delhi. It has branch offices in Chandigarh and

Gurgaon in northern regions of India. It has national service and training centre at New Delhi. As of 2013, Sharp Corporation is the tenth-largest, by market share, television manufacturer in the world. In Japan it has been a long-time leader. Sharp has at times also been the most popular mobile phone brand in the Japanese market, but is currently third biggest.

59. **Singer:** In the year 1851, Sir Isaac Merritt Singer established “Singer Sewing Machine Company” in USA to manufacture and sell sewing machines. The “SINGER” Trademark is one of the most widely recognized and established brands in the World. Since 1871 the name SINGER has been synonymous with sewing in India. The Company celebrated many firsts, including the world’s first Zig-Zag machine, the Fashion Maker. The Company later changed its name to “Singer India Limited” and established Headquarter at **Delhi**. Singer India Limited (SIL) is one of the operating subsidiaries of Singer Asia Limited, with other operating subsidiaries in Bangladesh and Sri Lanka engaged in the retail of a wide variety of household consumer durables (HCDs) with consumer credit and other financial services available to eligible customers. SIL is one of the leading marketers of sewing machines & small home appliances. SIL has two business segments, sewing products and home appliances like **Food processor, Mixer Grinder, Dry Iron, Steam Iron, Sandwich maker Toaster, Hand Blender, etc.** Recently the Company added range of Room Cooler and Water Heater in its product portfolio.

SIL is an ISO 9001:2008 certified Company.

60. **Sony:** Sony India Pvt. Ltd., based in **New Delhi**, is the Indian subsidiary of Japan's Sony Corporation, headquartered in Tokyo.

Sony's principal Indian businesses include Marketing, Sales and After-Sales Service of electronic products & software exports Products: LCD Televisions, Video and Digital Still Cameras, **Notebooks** and Business Projectors, Personal Audio, Audio Video Accessories, Hi-fi Audios and Home Theatre systems, Car Audio and Visual Systems, Game Consoles, **Mobile Phones**, Recording Media and Energy Devices, Broadcast and Professional products. In India, Sony has its footprint across all major towns and cities in the country through a distribution network of over 10,400 dealers and distributors, 270 exclusive Sony outlets and 23 direct branch locations. Moreover, Sony's 19 sales branches cover a total of 450 cities. It has also developed a network of 270 Sony Centre and established 30 warehouses across the country to manage its supply chain effectively.

61. **Spice:** Spice Digital Limited, previously known as Cellebrum Technologies Limited, is a developer of Mobile Value Added Services (MVAS), Mobile applications and Internet products and services with headquarters at **Noida** in NCR, India. Spice Digital is a subsidiary of listed entity S Mobility, which has diversified interests in telecom space. The Company offers services for Telecom Operators, Enterprises and Government, using different mobile connectivity medium of Voice, IVR, SMS, USSD, WAP, 3G, Mobile Applications & **Mobiles**.
62. **Sunflame:** It was established in 1981. Sunflame with its presence in the Indian Kitchens for more than three decades has constantly endeavoured to give homemakers the latest in technology and making cooking a luxurious and pleasurable experience. Our continuous pursuit of the true understanding of customer's needs and necessities, have made us constantly innovative. Always exploring the possibility of new designs, technologies, features and innovations with great stress on R&D, Sunflame has established its leadership in creating better products for its consumers. Its corporate office is in **Faridabad**. Its products include **kitchen appliances, Ovens, Mixer Grinders and Food Processors**.
63. **Surya Roshni Ltd.:** It is known as one of the largest Indian Multinationals of all time, Surya has indeed come a long way since its incorporation back in 1973. Its head office is in **New Delhi**. Its products include **ceiling fans, home appliances like mixers grinders, juicers**.
64. **Toshiba:** Toshiba Corporation known as Toshiba is a Japanese multinational conglomerate headquartered in Tokyo, Japan. Its diversified products and services include information technology and communications equipment and systems, electronic components and materials, power systems, industrial and social infrastructure systems, consumer electronics, household appliances, medical equipment, office equipment, as well as lighting and logistics. Toshiba was founded in 1938 as Tokyo Shibaura Electric K.K. through the merger of Shibaura Seisaku-sho (founded in 1875) and Tokyo Denki (founded in 1890). The company name was officially changed to Toshiba Corporation in 1978. Its offices in India are at **Gurgaon**, Bangalore, Chennai, Hyderabad, **Noida** and Mumbai. Its products include laptops.
65. **Usha:** The Siddharth Shriram group was founded by the legendary Lala Shriram in 1889. The group's businesses extended to textiles, chemicals, sugar, automobiles, engines, nylon tyre cord, automotive components, edible oil, heavy chemicals (fertilizers),

engineering foundries, sewing machines, **fans and home appliances**. In 1989, the group underwent a major transformation, following the segregation of business interests across the new generation - the descendants of Lala Shriram. The group's proud heritage and achievement over the years have earned it the trust and respect of its consumers both in India and abroad. Usha International Ltd (the Company), a constituent of the Siddharth Shriram group, was formed in 1934 and started doing business under the brand name, USHA. Over the decades, this brand name has become a household name in India while the Company has diversified into the business of new age home appliances, sewing machines, fans, power products, water cooler, water dispensers, modern farm equipments and auto components. It has registered office is in **New Delhi**. Its head office is in **Gurgaon**.

66. **Videocon:** It was established in 1979. **Videocon Industries Limited** is a large diversified Indian company headquartered in Mumbai. The group has 17 manufacturing sites in India and plants in Mainland China, Poland, Italy and Mexico. It is the third largest picture tube manufacturer in the world. The group is a US\$5 billion global conglomerate. The Videocon group's core areas of business are consumer **electronics and home appliances**. They have recently diversified into areas such as DTH, power, oil exploration and telecommunication. It has corporate office dealing in marketing, service and support in **Gurgaon**. Main Corporate office is in Mumbai. Factory is in Aurangabad.
67. **Vivo:** **Vivo** is a Chinese multinational technology company that designs, develops, and manufactures **smart-phones**, smart-phone accessories, software, and online services. It was founded in 2009 in Dongguan, Guangdong. The brand utilises Hi-Fi chips in its smart-phones. Software developed by the company includes the Vivo App Store, iManager, and a proprietary Android-based operating system called Funtouch OS. Vivo is a leading global **smart-phone** brand focusing on introducing products with professional-grade audio, extraordinary appearance, and fast and smooth user experience. Vivo was founded in 2009 as a sub-brand of BBK Electronics. The brand entered the telecommunication and consumer electronics industry with landline phones and wireless phones. In 2011, Vivo started manufacturing and marketing its own range of smart-phones. Vivo entered the Indian market in 2014. Its head office in India is in **Gurgaon** and factory address is in **Greater Noida**.

68. **Voltas:** Voltas is India's largest air conditioning company, and one of the world's premier engineering solutions providers and project specialists. Founded in India in 1954 and being one of the principal companies in the TATA group, Voltas Limited offers engineering solutions for a wide spectrum of industries in areas such as heating, ventilation and **air conditioning, refrigeration**, electro-mechanical projects, textile machinery, mining and construction equipment, water management & treatment, cold chain solutions, building management systems, and indoor air quality. Voltas has provided air conditioning in the world's tallest building i.e. the Burj Khalifa in Dubai and also in the once biggest ocean liner RMS Queen Mary 2. Its corporate headquarters is in Mumbai. Its territorial area offices are in **Chandigarh and Ghaziabad**.
69. **Whirlpool:** The **Whirlpool** Corporation is an American multinational manufacturer and marketer of home appliances, headquartered in Benton Charter Township, Michigan, United States, near Benton Harbor, Michigan. Whirlpool entered India in the late 1980s as part of its global expansion strategy. It forayed into the market under a joint venture with TVS group and established the first Whirlpool manufacturing facility in Pondicherry for washing machine category. In 1995 Whirlpool acquired Kelvinator India Limited and marked an entry into the refrigerator market as well. The same year the company also saw acquisition of major shares in TVS joint venture and later in 1996, Kelvinator and TVS acquisitions were merged to create, Whirlpool of India Limited. This expanded the company's portfolio in the Indian subcontinent to **washing machines, refrigerator, microwave ovens and air conditioners**. Whirlpool of India Limited headquartered in Gurugram, is now one of the leading manufacturers and marketers of major home appliances in the country. The company owns three state-of-the-art manufacturing facilities at **Faridabad**, Pondicherry and Pune. Each of the manufacturing set-up features an infrastructure that is witness of Whirlpool's commitment to providing its consumer with forward looking solutions.
70. **Xolo:** **XOLO** is a **mobile** device brand based out of **Noida**, India. Company manufactures smart-phone devices. In April 2012, XOLO launched India's first smart-phone with an Intel processor, the XOLO X900. XOLO was also the first Indian manufacturer to partner with AMD to launch the XOLO Win tablet. This was followed by the first 4G-enabled smart-phone in India, the LT900, in December 2013.
71. **Zen:** Founded in the year 2009, Zen **Mobile** are the pioneers in bringing the affordable mobile handsets to the Indian shores equipped with the advanced technology. Zen **Mobile**

is a brand of Telecare Group which has expertise in managing and distributing the best mobile brands in India for over 15 years now. In a short span of 3 years, we have attained and build a distinct identity among the consumers and we are the only brand in the handset industry to have shown a rapid growth of 100 percent year on year. Its head office is in **Noida**.

72. **ZTE Telecom India Pvt Ltd: ZTE Telecom India** is a Private Sector Organisation that offers services in Telecommunication/ **Mobile** with Annual Total Turnover of 2500-5000 Crs and with Employee Strength of 1001-2500. Its office is in **Gurgaon**.

The following Table A shows the organizations name, their location and products catered.

**Table A: List of Companies along with their location and products (Source: (IBEF, 2017))**

<b>Sr. No.</b>	<b>Company Name</b>	<b>Location</b>	<b>Products</b>
1	Acer	New Delhi (Branch Office)	LCDs, LEDs, Laptops, Smartphones
2	Activa	New Delhi (Head Office)	Mixers, Grinders, Ceiling Fans
3	Akai	New Delhi (Corporate Office), Gurgaon (Marketing Office)	ACs, Refrigerators, Washing Machines, Food Processors, Mixers, Grinders.
4	Almonard	New Delhi (Branch Office)	Ceiling Fans
5	AOC	Gurgaon (Head Office)	LEDs, LCDs
6	Bajaj Electricals	Delhi, Chandigarh (Branch Offices)	Food Processors, Microwaves, Ovens)
7	Baltra	New Delhi (Corporate Office)	Mixers, Grinders
8	Black and Decker	Gurgaon (Branch Office)	Mixers, Grinders, Food Processors
9	Bluestar	New Delhi, Ghaziabad, Gurgaon, Chandigarh (branches)	Air-conditioners, Refrigerators
10	Bosch	New Delhi (Regional Office), Chandigarh, Delhi, Ghaziabad (Sales offices)	LCDs, LEDs, Washing Machines, Refrigerators
11	BPL	Delhi	LEDs, LCDs, Washing machines, refrigerators
12	Butterfly	New Delhi (Branch Office)	Mixers, Grinders, Ceiling Fans, Washing Machines
13	Carrier	Gurgaon (Corporate Office)	Air Conditioner, Refrigerator
14	Cata Appliances Ltd. India	New Delhi (Corporate Office)	Microwaves, Ovens

15	Crompton Greeves	New Delhi (Branch Office)	Ceiling Fans, Mixers, Grinders, Food Processors
16	Daikin	Gurgaon (Corporate Office), New Delhi (Sales Office)	Air Conditioner
17	Dektron	New Delhi (Corporate Office)	LEDs, LCDs
18	Dell	Mohali (Branch Office)	Laptops
19	Electrolux Kelvinator	Gurgaon (Branch Office), New Delhi (Legal Office)	Refrigerators
20	Fedders Llyod	Noida (HQ), Manufacturing Unit	Air Conditioners, LEDs, LCDs
21	GE	New Delhi, Gurugram (Corporate Office)	Washing Machines, Air Conditioners, Microwaves, Refrigerators, Ovens
22	Gionee	New Delhi (R&D Centre)	Mobile Phones
23	Glen	Faridabad (HQ)	Mixers, Grinders, Food Processors, Ovens, Microwaves
24	Godrej	Chandigarh, Delhi (Branch Offices)	Refrigerators, Washing machines, LEDs, LCDs, Air Conditioners, Microwaves, Ovens
25	Haier Appliances	New Delhi (Corporate Office)	Refrigerators, AC, TV, LED, Washing Machines, Microwaves, Ovens
26	Havells Group	Chandigarh, Noida, Delhi (Branch Offices)	Mixers, Grinders, Food Processors, Ceiling Fans
27	Hitachi	New Delhi (Branch Office)	Air Conditioners, Refrigerators, LCDs, LEDs, Washing Machines
28	HP Compaq	Gurgaon, New Delhi (Branch Offices)	Laptops
29	Huawei Telecommunications India Co Pvt. Ltd.	Gurgaon (Office), Chandigarh (Circle Office)	Smart-Phones, Tablets
30	iBall	New Delhi, Gurgaon (Branch Offices)	Smart-Phones, Tablets, Laptops
31	IFB	New Delhi (Manufacturing Office)	Washing Machines, Microwaves, Air-conditioners
32	Inalsa	Noida (Corporate Office)	Mixers, Grinders, Food Processors, Microwaves, Ovens
33	Intex Mobiles	New Delhi (HQ)	Smart-Phones, IT accessories
34	Karbons Mobiles	New Delhi (Branch Office)	Mobile Phones
35	Kenstar	Gurgaon (Corporate Office)	Food Processors, Mixers, Grinders, Microwaves, Ovens, Air-conditioners

36	Kenwood	Gurgaon (Marketing Office)	Food Processors, Mixers, Grinders, Microwaves, Ovens
37	Khaitan	New Delhi (Operations Office)	Ceiling Fans
38	Lava	Noida (HQ)	Mobile Phones
39	Lenovo	Delhi, Gurgaon (Sales and Marketing Offices)	Smart-phones, Laptops, Tablets
40	LG	Noida (Regional Sales Office)	Washing Machines, LEDs, LCDs, Refrigerators, Air Conditioners, Microwaves, Ovens, Mobile Phones
41	Luminous	Gurgaon (Corporate Office), New Delhi (Registered Office)	Ceiling Fans
42	Maharaja Whiteline	New Delhi (Corporate Office)	Mixers, Grinders, Food Processors
43	Micromax	Gurgaon (Head Office)	Mobile Phones
44	Morphy Richards	New Delhi (Service Centre and Customer Care)	Mixers, Grinders, Food Processors, Microwaves, Ovens
45	Motorola	Gurgaon (Corporate Office)	Mobile Phones
46	Nokia	Gurgaon (Corporate Office)	Mobile Phones
47	O General	Gurgaon, New Delhi, Noida (Corporate Offices)	Air Conditioners
48	Onida	Zirakpur, New Delhi (Branch Offices)	Air Conditioners, Washing Machines, Mobile Phones, Microwave Ovens, LEDs, LCDs
49	Oppo	Gurgaon (Corporate Office)	Smart-Phones
50	Orient	New Delhi (HQ), Faridabad (Manufacturing Unit)	Ceiling Fans
51	Orpat	New Delhi (Head Office and service centre)	Ceiling Fans, Mixers, Grinders,
52	Oster	Ludhiana (Head Office)	Mixers, Grinders, Ovens
53	Panasonic	Gurgaon (Head Office)	Air Conditioners, Washing Machines, Refrigerators, Microwave Ovens
54	Philips	Gurgaon, Noida, Chandigarh (Branch Offices)	LEDs, mixers, grinders, food processors
55	Prestige	Ghaziabad, Ambala Cantt, Ludhiana (Branch Offices)	Mixers, Grinders, Food Processors, Microwaves, Ovens
56	Samsung	Noida (R&D), Gurgaon (Head Office)	Mobile Phones, Air Conditioners, Refrigerators, Washing Machines, Microwaves, Ovens
57	Sansui India	Gurgaon (Corporate Office)	LEDs, Air Conditioners, Mobile Phones

58	Sharp India	Noida (Head Office)	LCDs, LEDs
59	Singer	Delhi (HQ)	Food Processors, Mixers, Grinders
60	Sony	New Delhi (Head Office)	Mobile Phones, Notebooks, Laptops, LCDs, LEDs
61	Spice	Noida (HQ)	Mobile Phones
62	Sunflame	Faridabad (Corporate Office)	Microwaves, Ovens, Mixers, Grinders, Food Processors
63	Surya Roshni Ltd	New Delhi (Head Office)	Ceiling fans, home appliances like mixers grinders.
64	Toshiba	Gurgaon, Noida (Branch Offices)	Laptops
65	Usha	New Delhi (Registered Office), Gurgaon (Head Office)	Ceiling Fans, Food Processors, Mixers, Grinders, Ovens
66	Videocon	Gurgaon (Marketing & Service Support Office)	Washing Machines, Refrigerators, Air Conditioners
67	Vivo	Gurgaon (Head Office), Greater Noida (Factory Address)	Smartphones
68	Voltas	Chandigarh, Ghaziabad (Territorial Offices)	Air Conditioners, Refrigerators
69	Whirlpool	Faridabad (Manufacturing Office)	washing machines, refrigerator, microwave ovens and air conditioners
70	Xolo	Noida (Head Office)	Mobile Phones
71	Zen	Noida (Head Office)	Mobile Phones
72	ZTE Telecom India Pvt. Ltd	Gurgaon (Office)	Mobile Phones

## Appendix 5 Tables

**Table 1: Descriptive Statistics of Factors of Marketing Intelligence**

	Mean	Std. Deviation	Analysis N
Planning Focus 1	3.55	1.318	200
Planning Focus 2	3.41	1.212	200
process structure 1	3.76	1.131	200
organizational culture 1	4.30	.558	200
Planning Focus 3	3.59	1.265	200
organizational culture 2	3.82	.906	200
process structure 2	3.57	1.193	200
organizational culture 3	4.06	.774	200
process structure 3	3.38	1.184	200

**Table 2: Communalities of Items of Marketing Intelligence**

	Initial	Extraction
Planning Focus 1	1.000	.892
Planning Focus 2	1.000	.773
Process Structure 1	1.000	.888
Organizational Culture 1	1.000	.513
Planning Focus 3	1.000	.823
Organizational Culture 2	1.000	.721
Process Structure 2	1.000	.631
Organizational Culture 3	1.000	.807
Process Structure 3	1.000	.721
Extraction method: Principal Component Analysis		

**Table 3: Descriptive Statistics of Factors of Brand Positioning (Marketing Professionals' Perspective)**

Statistics	Credibility	Brand Personality	Price	Organizational Attributes	Competitors Attributes	Customer Perceptions	Product Attributes
N	270	270	270	270	270	270	270
Mean	3.34	3.89	3.13	3.96	3.75	3.60	4.08
Median	3.83	4.07	3.17	4.12	4.08	3.83	4.17
Mode	4.20	4.20	3.00	4.00	4.50	4.25	4.00
Std. Deviation	1.17	.78	.89	.88	1.12	.97	.79
Variance	1.38	.62	.80	.77	1.27	.94	.63
Skewness	-.52	-.60	-.17	-.15	-.66	-.51	-.78

**Table 4: Communalities of Items of Brand Positioning**

	<b>Initial</b>	<b>Extraction</b>
expertise 1	1.000	.838
expertise 2	1.000	.805
trustworthiness 1	1.000	.812
trustworthiness 2	1.000	.799
consistency	1.000	.770
sincerity	1.000	.623
ruggedness	1.000	.604
competency	1.000	.842
sophistication	1.000	.621
excitement	1.000	.595
price setting 1	1.000	.688
price setting 2	1.000	.810
price setting 3	1.000	.646
org attributes 1	1.000	.905
org attributes 2	1.000	.768
org attributes 3	1.000	.819
competitors attributes 1	1.000	.893
competitors attributes 2	1.000	.841
customer perceptions 1	1.000	.686
customer perceptions 2	1.000	.857
customer perceptions 3	1.000	.698
customer perceptions 4	1.000	.727
Concrete	1.000	.862
Abstract	1.000	.853
Extraction method: Principal Component Analysis		

**Table 5: Communalities by computing (Factors of Brand Positioning)**

	<b>Initial</b>	<b>Extraction</b>
Credibility	1.000	.447
Brand Personality	1.000	.528
Price	1.000	.585
Organizational Attributes	1.000	.520
Competitors Attributes	1.000	.674
Customer Perceptions	1.000	.514
Product Attributes	1.000	.480

**Table 6: Component Matrix of Factors of Brand Positioning (Marketing Professionals' Perspective)**

**Table 6: Component Matrix<sup>a</sup>**

	Component						
	1	2	3	4	5	6	7
consistency	.747		.365				
trustworthiness 1	.733		.479				
competitors attributes 1	.713						.566
trustworthiness 2	.712		.490				
expertise 2	.709		.469				
competitors attributes 2	.704						.526
expertise 1	.697		.535				
sincerity	.603						
competency	.576	.433					
ruggedness	.538		-.441				
price setting 3	.514			-.456			
sophistication	.433						
excitement	.420				-.397		
customer perceptions 1		.633	.428				
customer perceptions 2		.614	.553				
org attributes 2	.353	.564					
customer perceptions 3		.542	.514				
customer perceptions 4		.510	.416				.426
price setting 1		.483		-.405		.423	
Concrete				.632	.446	.456	
Abstract				.554	.461	.548	
org attributes 3	.432				.565	-.390	
org attributes 1	.462	.430			.518	-.360	
price setting 2	.361			-.534		.539	

Extraction Method: Principal Component Analysis.

a. 7 components extracted.

**Table 7: Descriptive Statistics of Products Considered in the research**

	Frequency	Percent	Valid Percent	Cumulative Percent
<b>Refrigerators</b>	17	5.5	5.5	5.5
<b>Air Conditioners</b>	24	7.7	7.7	13.2
<b>Washing Machines</b>	24	7.7	7.7	21.0
<b>Microwave/ Ovens</b>	22	7.1	7.1	28.1
<b>Mixers/ Grinders/ Food Processors</b>	43	13.9	13.9	41.9
<b>Electric Fans</b>	33	10.6	10.6	52.6
<b>LCDs/ LEDs</b>	33	10.6	10.6	63.2
<b>Mobile Phones</b>	80	25.8	25.8	89.0
<b>Laptops</b>	34	11.0	11.0	100.0
<b>Total</b>	310	100.0	100.0	

**Table 8: Descriptive Statistics of Computed Variables of Brand Positioning (Consumers' Perspective)**

		Price	CP	BP	Cred	PA	OA
N	Valid	310	310	310	310	310	310
Mean		3.1792	3.5976	3.8447	3.6365	3.9019	3.6264
Median		3.5000	4.0000	4.1667	4.0000	4.5000	4.0000
Mode		3.75	4.00	4.50	4.33	4.50	4.33
Std. Deviation		1.15979	1.02731	.89769	.97179	.95733	1.00966
Variance		1.345	1.055	.806	.944	.916	1.019
Skewness		-.089	-.618	-.793	-.401	-.244	-.708

**Table 9: Descriptive Statistics of the items of the Factors of Brand Positioning (Consumers' Perspective)**

	Mean	Std. Deviation	Analysis N
CP1	3.5472	1.34229	310
CR2	3.6038	1.12040	310
CR3	3.7245	1.02042	310
CR1	3.5811	1.11210	310
BP4	3.8491	1.16118	310
BP3	3.8302	1.09641	310
BP1	3.7019	1.17977	310
BP6	4.2340	.77238	310
BP5	3.7321	1.18382	310
BP2	3.7208	.88621	310
PR1	3.1962	1.13784	310
PR2	3.3245	1.18080	310
PR3	3.1321	1.43334	310
OA1	3.5736	1.09892	310
OA2	3.6151	1.22589	310
OA3	3.6906	1.10889	310
CP2	3.5623	1.31889	310
CP3	3.6528	1.19351	310
CP4	3.5660	1.23567	310
CP5	3.6604	1.16032	310
CP6	3.6075	1.22038	310
CP7	3.6151	1.18504	310
CP8	3.5698	1.25975	310
PA1	3.9585	1.03818	310
PA2	3.8453	1.12925	310
PR4	3.0642	1.49736	310

**Table 10: Communalities of Variables of Brand Positioning (Consumers' Perspective)**

	<b>Initial</b>	<b>Extraction</b>
CP1	1.000	.462
CR2	1.000	.788
CR3	1.000	.759
CR1	1.000	.868
BP4	1.000	.735
BP3	1.000	.750
BP1	1.000	.842
BP6	1.000	.693
BP5	1.000	.693
BP2	1.000	.755
PR1	1.000	.738
PR2	1.000	.730
PR3	1.000	.851
OA1	1.000	.724
OA2	1.000	.805
OA3	1.000	.858
CP2	1.000	.757
CP3	1.000	.844
CP4	1.000	.823
CP5	1.000	.816
CP6	1.000	.764
CP7	1.000	.865
CP8	1.000	.488
PA1	1.000	.754
PA2	1.000	.777
PR4	1.000	.810

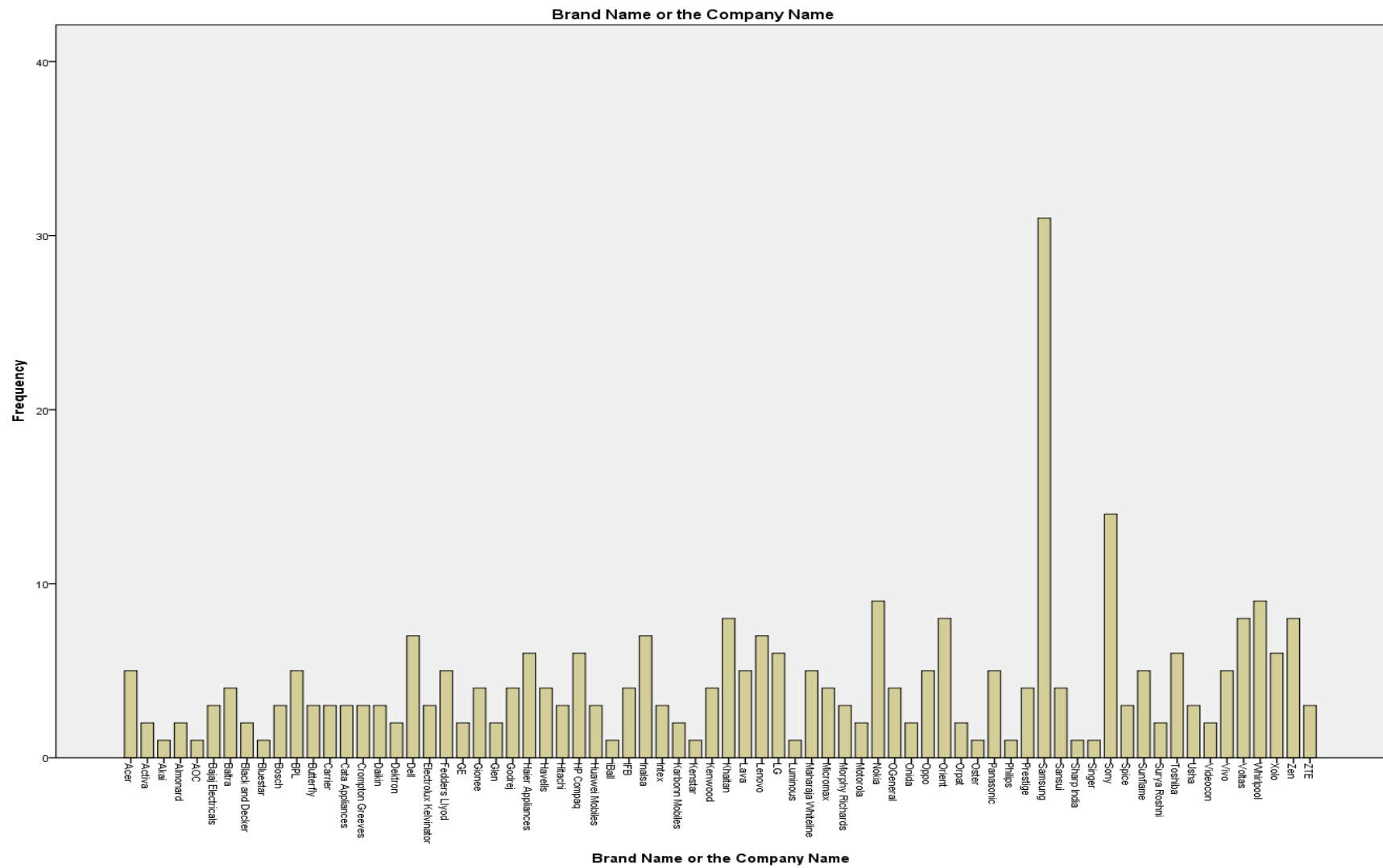
**Table 11: Component Matrix of Factors of Brand Positioning (Consumers' Perspective)**

**Table 11: Component matrix<sup>a</sup>**

	Component					
	1	2	3	4	5	6
CP4	.730	-.419				
CP5	.677					
CP8	.643					
CP2	.603					
CP7	.573					
CP1	.569					
CP6	.546					
CP3	.475					
BP2	.409	.716				
BP1		.707				
BP5	.446	.689				
BP3	.505	.666				
BP6	.474	.643				
BP4	.419	.562				
CR1			.786			
CR2			.786			
CR3			.728			
PR1				.695		
PR2				.657		
PR3				.576		
PR4				.484		
OA3	.404				.703	
OA2					.703	
OA1	.432				.673	
PA2						.824
PA1						.814

Extraction Method: Principal Component Analysis.

a. 6 components extracted.



**Figure 1: Frequency of Demand of Brands by Consumers**

## Appendix 6 – List of Publications

### I. Papers in ABDC journals

1. Kanwal, S., Samalia, H. V., & Singh, G. (2017). The Role of Marketing Intelligence in Brand Positioning: Perspective of Marketing Professionals. *Journal of Cases on Information Technology*, 19(1), 60-78. (ABDC - 'C').
2. Kanwal, S., Singh, G., & Samalia, H. V. (2017). The Role of Organizational Culture and Process- Structure in Marketing Intelligence: Perspective of IT Professionals. *Journal of Cases on Information Technology*, 19(1), 24-41. (ABDC- 'C').

### II. Papers Communicated

1. "Customer Perceptions: a major driver for Brand Positioning" in the Journal of Consumer Marketing. Manuscript ID is JCM-12-2018-2974 submitted on 7 Dec 2018.
2. "Marketing Intelligence for Brand Positioning of Consumer Durables" in the Asia Pacific Journal of Marketing and Logistics. Manuscript ID is APJML-12-2018-0509 submitted on 9 Dec 2018.

### III. Papers in Conference Proceedings

1. Kanwal, S. (2016). Marketing Information Systems: A Union of Systems Analysis and Marketing Management. *International Conference on Innovations in Technology: A Roadmap for Achieving Global Competitiveness (ICIT-2K16)* held at G. L. Bajaj Institute of Management & Research, Greater Noida (10 September, 2016).
2. Kanwal, S. (2016). Brand Positioning for Sustainable Competitive Advantage. *3<sup>rd</sup> International Conference on Sustainable Development through Green Initiatives* held at Sri Guru Granth Sahib World University, Fatehgarh Sahib (1-2 March, 2016).
3. Kanwal, S. & Samalia, H. V. (2015). Marketing Intelligence in Customer Relationship Management. *2<sup>nd</sup> International Business Conference -2015 on Value Creation for Sustainable Development*: Organized by Sri Guru Granth Sahib World University, Fatehgarh Sahib, Punjab (17-18 March, 2015).
4. Kanwal, S. & Samalia, H. V. (2014). Review of Literature on Marketing Intelligence. *11th PCMA International Business Conference*: Organized by PCMA and Multani Mal Modi College, Patiala (7-8 November, 2014).
5. Kanwal, S.& Samalia, H. V. (2012). Theories that influence consumer behavior while purchase of counterfeit luxury goods – A Review. *PCMA International Conference -2012* held at Sri Guru Granth Sahib World University and PCMA (21-22<sup>nd</sup> December, 2012).

6. Kanwal, S. & Samalia, H. V. & Khatkar, A (2012). Significance of Business Intelligence in Customer Relationship Management. National Conference on changing perspectives and paradigms in business and behavioral sciences, April 27-28, 2012 at Thapar Institute of Engineering & Technology, Patiala.