Market Research

Project on

Impact of Product Packaging on Consumer's Buying Behaviour

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Foreword

Packaging has become itself a sales promotion tool for the organizations. The consumer's buying behaviour also stimulated by the packaging quality, colour, wrapper, and other characteristics of packaging. Packaging is a whole package that becomes an ultimate selling proposition, which stimulates impulse buying behaviour.

Packaging is a technology of enclosing or protecting products for distribution, storage, selling. Packaging also refers to the process of designing, evaluating, and producing packages. Packaging can be described as a coordinated system of preparing goods for transport, warehousing, logistics, sale, and end use. Packaging contains, protects, preserves, transports, informs, and sells.

There has been more attention given to packaging design in recent years, as companies are realizing that attractive packaging equals increased sales. Think about it: when you are picking out a bottle of wine, aren't you drawn to the bottles with interesting labels? Your product's packaging can be a consumer's first point of contact with your product, and a spiffy package may make someone try a new brand.

Your package design is one of the most important elements for a successful product launch. But there are so many things to think about when designing a package –design that has to function. It has to protect what's inside. It has to allow for easy storage and distribution. It needs to display information about what's in it and should draw attention of consumer.

Packaging can work as a differentiator some time and good product with poor packaging may suffer disastrously.

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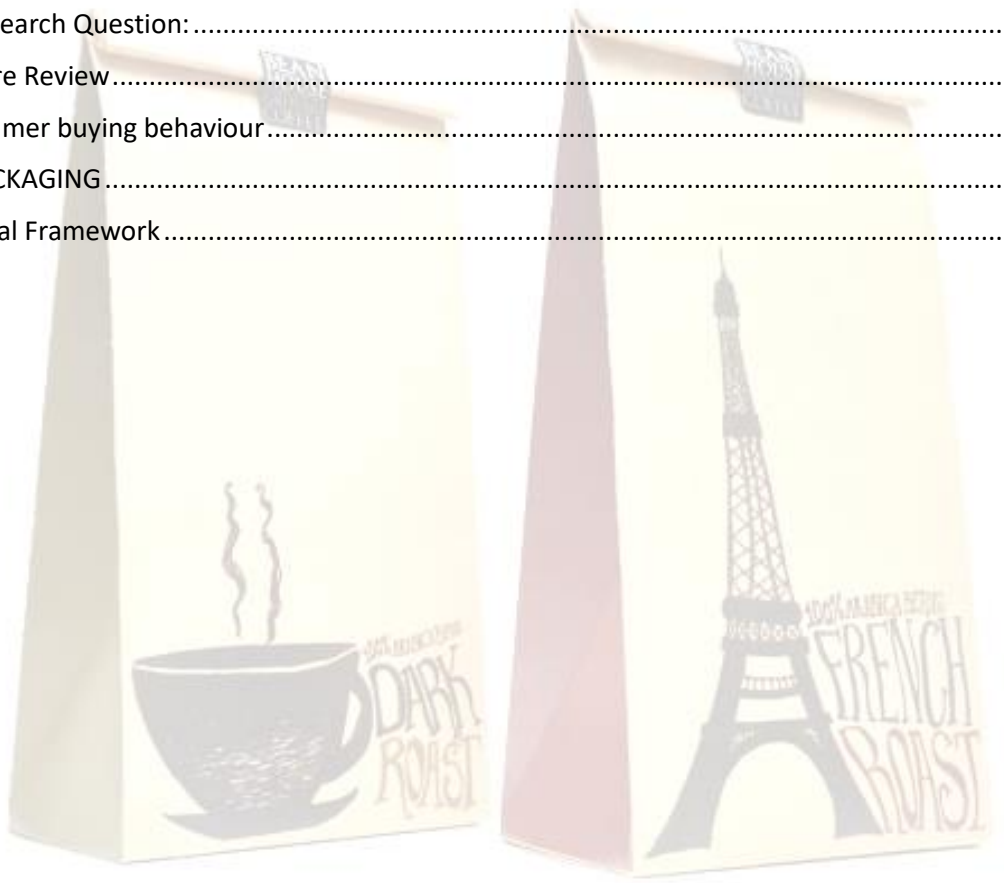
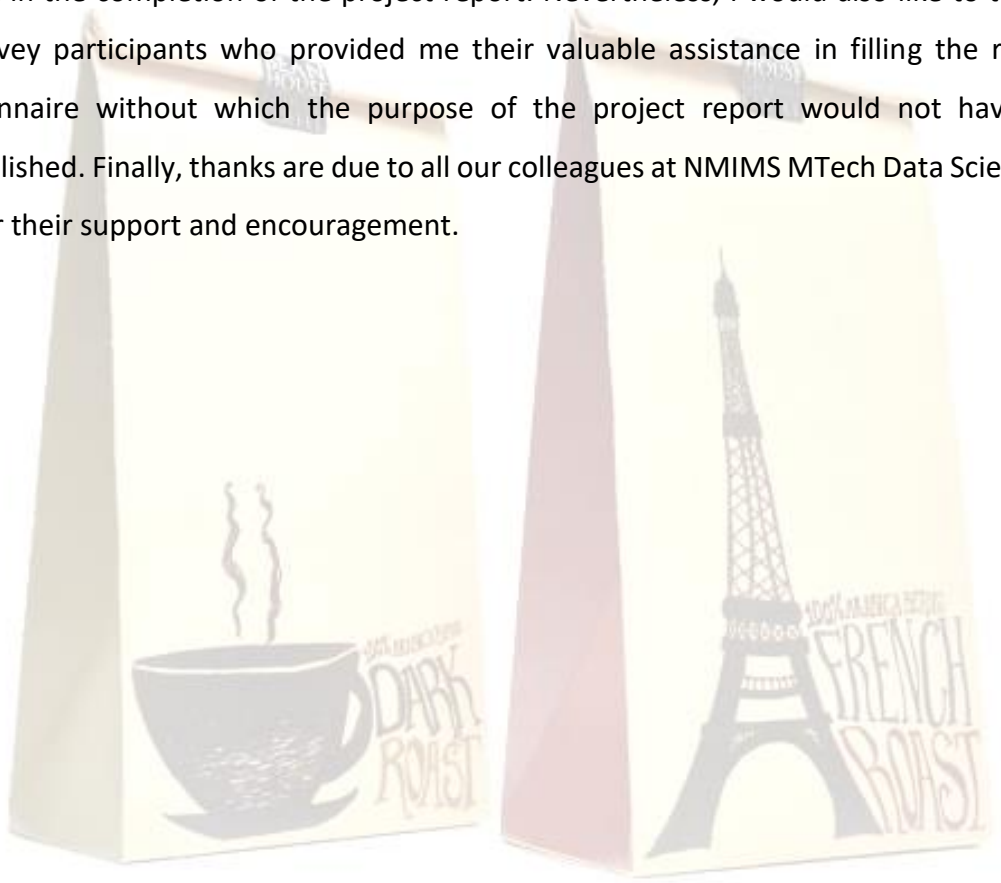


Acknowledgements

We would like to express my sincere thanks & gratitude to Prof. Cajetan Dsouza for his guidance through the course of the study and valuable comments. I would also like to acknowledge the guidance of various other faculties, who have provided me an auxiliary support in the completion of the project report. Nevertheless, I would also like to thank all the survey participants who provided me their valuable assistance in filling the required questionnaire without which the purpose of the project report would not have been accomplished. Finally, thanks are due to all our colleagues at NMIMS MTech Data Science and SBM for their support and encouragement.



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Executive Summary

Packaging is an absolute necessity in the modern world. Our contemporary society places many demands upon packaging relative to issues such as safety, convenience, efficiency, identification, and marketing. However, packaging is also a burden to producers, consumers, and the environment. As more and more people become “modern consumers,” we need to change packaging materials and methods, as well as our thought processes, in order to minimize the impact on society and the planet.

The objective of this study is to determine role of packaging on consumer’s buying behaviour. The purpose of this research is to examine the essential factors, which are driving the success of a brand. This research also identified the relationship between the dependent and independent variables. This is the primary research and data has been collected through questionnaire and for analysis purpose SPSS software has been used.

In this study samples of 263 respondents have been collected and tested the reliability of the model.

The sample of respondents are from all age groups with varied salary and backgrounds.

The key findings of the research are the following: -

- Packaging is one of the most important factor influencing consumer’s purchase decision.
- Packaging elements like its Colour, Innovation, Brand Image, Quality are more important factors when consumer is making any buying decision.
- Consumers have better awareness to understand the importance of nutrition.
- The research overall has given us an insight into consumer’s buying behaviour when it comes to giving what amount of importance to packaging.

INTRODUCTION

Consumer behaviour can be broadly classified as the decisions and actions that influence the purchasing behaviour of a consumer. What drives consumers to choose a particular product with respect to others is a question which is often analysed and studied by marketers. Most of the selection process involved in purchasing is based on emotions and reasoning.

The study of consumer behaviour not only helps to understand the past but even predict the future. The below underlined factors pertaining to the tendencies, attitude and priorities of people must be given due importance to have a fairly good understanding of the purchasing patterns of consumers.

In nowadays competitive environment the role of package has changed due to increasing self-service and changing consumers' lifestyle. Firms' interest in package as a tool of sales promotion is growing increasingly. Package becomes an ultimate selling proposition stimulating impulsive buying behaviour, increasing market share and reducing promotional costs. According to Rundh (2005) package attracts consumer's attention to particular brand, enhances its image, and influences consumer's perceptions about product. Also, package imparts unique value to products (Underwood, Klein & Burke, 2001; Silayoi & Speece, 2004), works as a tool for differentiation, i.e. helps consumers to choose the product from wide range of similar products, stimulates customers buying behaviour (Wells, Farley & Armstrong, 2007).

Thus, a package performs an important role in marketing communications and could be treated as one of the most important factors influencing consumer's purchase decision. In this context, seeking to maximize the effectiveness of package in a buying place, the researches of package, its elements and their impact on consumer's buying behaviour became a relevant issue.

Literature analysis on question under investigation has shown that there is no agreement on classification of package elements as well as on research methods of package impact on

consumer's purchase decision. Some of researchers try to investigate all possible elements of package and their impact on consumer's purchase decision (Silayoi & Speece, 2004; Silayoi & Speece, 2007; Butkeviciene, Stravinskiene & Rutelione, 2008), while others concentrate on separate elements of package and their impact on consumer buying behaviour (e.g., Vila & Ampuero, 2007; Madden, Hewett & Roth, 2000; Underwood et al., 2001; Bloch, 1995). Moreover, some researchers investigate impact of package and its elements on consumer's overall purchase decision (e.g., Underwood et al., 2001), while others – on every stage of consumer's decision-making process (e.g., Role of Packaging on Consumer Buying Behaviour Page | 14 Butkeviciene et al., 2008). Furthermore, the abundance of scientific literature on this issue do not provide unanimous answer concerning impact of package elements on consumer's buying behaviour: diversity of the results in this area depends not only on research models constructed and methods employed, but on the context of the research too. All above mentioned confirms the necessity to investigate this issue in more detail. In the light of these problematic aspects, research problem could be formulated as following question: what elements of a package have an ultimate effect on consumer purchase decision?

Objective

• To find out the effect of packaging on the buying behaviour.

• Theoretical analysis of package elements and their impact on consumer ‘s purchase decision empirically reveals the elements having the ultimate effect on consumer choice in a case of different products.

• To check the effect of packaging elements on the buying behaviour.

• To measure the relative impact of each packaging element on the consumer.

• To understand each packaging element and their level of importance on the buying behaviour of the consumer.

Key terms Defined

Definition of Packaging

Packaging is anything used to contain, protect, handle, deliver or present raw materials and processed goods.

Types of Packaging: -

- Boxes
- Pallets
- Crates
- Labels
- Containers
- Tubes and cores
- Bags and sacks
- Tape and other materials

Usage:

- To attract attention.
- Assist in promotion of the product.
- Provide machine identification through barcodes.
- Impart essential or additional information such as the nutritious details of the biscuits on its cover.
- And help in preservation and utilization.

Definition of Consumer Buying Behaviour

Consumer buying behaviour is the sum total of a consumer's attitudes, preferences, intentions, and decisions regarding the consumer's behaviour in the marketplace when purchasing a product or service. The study of consumer behaviour draws upon social science disciplines of anthropology, psychology, sociology, and economics.

Research Question:

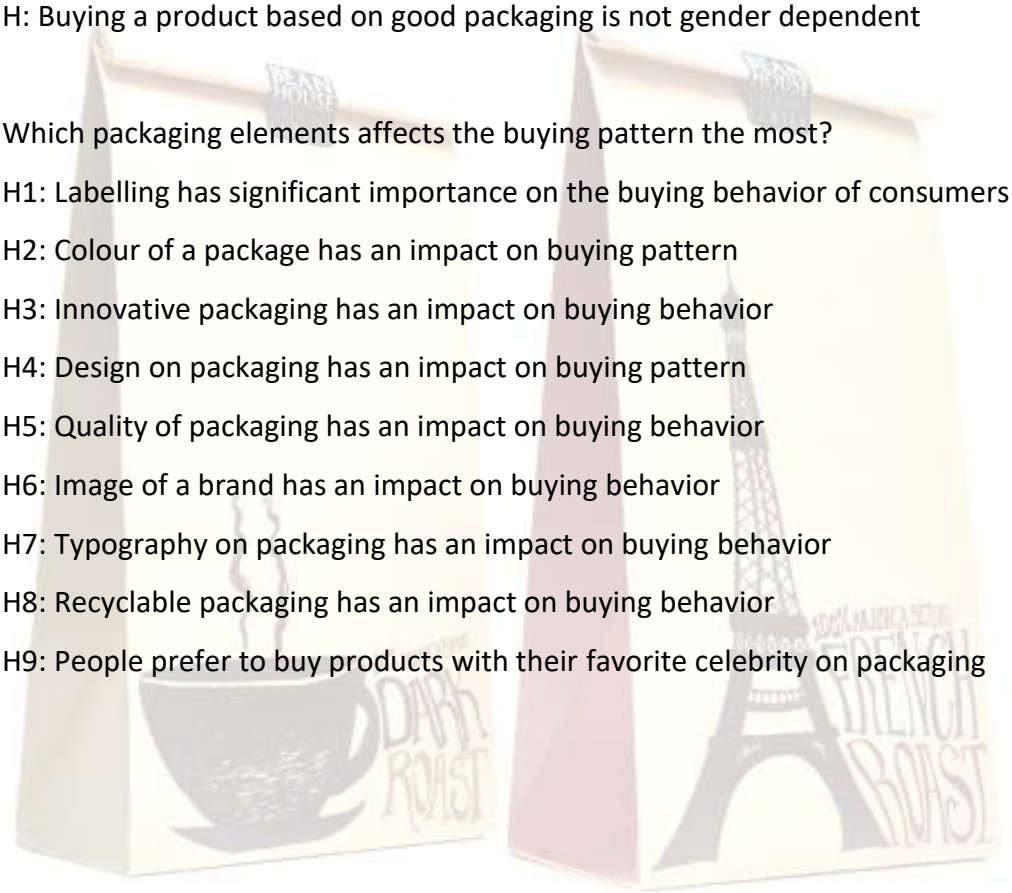
Main Question -

What is the importance of packaging on consumer's buying behaviour?

Research questions:

1. Does gender influence the buying pattern of a product based on good packaging?
   H: Buying a product based on good packaging is not gender dependent

2. Which packaging elements affects the buying pattern the most?
   H1: Labelling has significant importance on the buying behavior of consumers
   H2: Colour of a package has an impact on buying pattern
   H3: Innovative packaging has an impact on buying behavior
   H4: Design on packaging has an impact on buying pattern
   H5: Quality of packaging has an impact on buying behavior
   H6: Image of a brand has an impact on buying behavior
   H7: Typography on packaging has an impact on buying behavior
   H8: Recyclable packaging has an impact on buying behavior
   H9: People prefer to buy products with their favorite celebrity on packaging



	Male			Female		
	<25	25-50	>50	<25	25-50	>50
Colour						
Innovative						
Shape						
Recyclable						
Design						
Higher price						
Typography						
Quality						
Brand image						

Questionnaire:

Personal information: *

- Female
- Male

Age group *

- Below 25
- 25-50
- Above 50

Salary Range (Annual) *

- Below 1 lacs
- 1-5 lacs
- 5-10 lacs
- Above 10 lacs

Do you prefer buying online or In-stores? *

- Online
- In-store
- Both

Color of packaging persuades me to purchase a product *

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Innovative packaging makes me buy the product *

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Shape of packaging attracts me to buy a product *

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Prefer product packaging that is eco-friendly/recyclable *

- Strongly Disagree
- Disagree
- Neutral

- Agree
- Strongly Agree

Product's packaging should be as important as the product itself *

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

End up buying products with nice packaging even if that product is not needed *

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Don’t mind paying a higher price for a product if the packaging is good *

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Packaging with good typography encourages me to buy the product *

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Good quality packaging is essential when I buy a product *

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Brand image on packaging attracts me to buy a product *

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

I do look at the nutrition facts on packaging before purchasing the product *

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

What attributes (Ex - Color, Material of the package, Design etc.) do you prefer in packaging of a product.

Literature Review

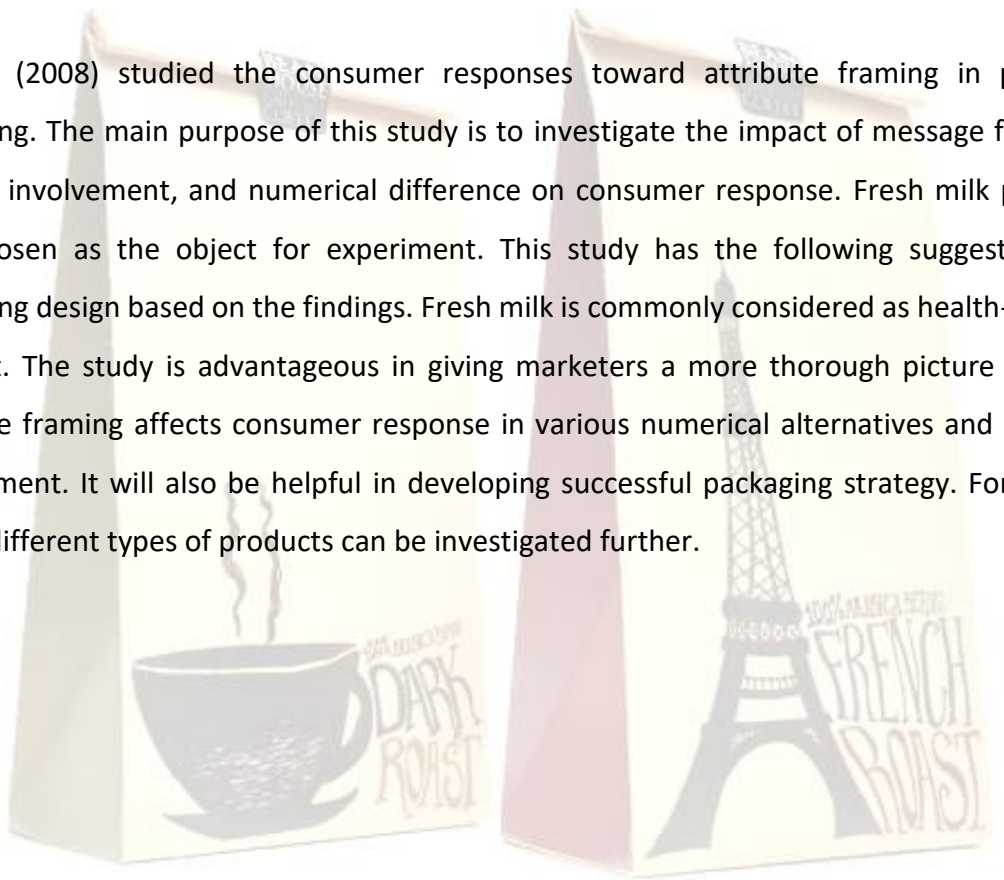
Rita Kuvykaite (2009) has descriptive research. According to Rita package attracts consumer's attention to particular brand, enhances its image, and influences consumer's perceptions about product. Also, package imparts unique value to products (Underwood, Klein & Burke, 2001; Silayoi & Speece, 2004), works as a tool for differentiation, i.e. helps consumers to choose the product from wide range of similar products, stimulates customers buying behaviour (Wells, Farley & Armstrong, 2007).

Thus, package performs an important role in marketing communications and could be treated as one of the most important factors influencing consumer's purchase of package, its elements and their impact on consumer's buying behaviour became a relevant issue. He basing on theoretical analysis of package elements and their impact on consumer 's purchase decision empirically reveals the elements having the ultimate effect on consumer choice. Research methods that Rita used is systematic and comparative analysis of scientific literature; empirical research There are six variables that must be taken into Consideration by producer and designers when creating efficient package: form, size, colour, graphics, Material and flavour. Similarly, Kotler (2003) distinguishes six elements that according to him must be evaluated when employing packaging decisions: size, form, material, colour, text and brand. The research result of Rita shows the impact of package elements on consumers purchase decisions can be stronger. He concluded that package could be treated as one of most valuable tool in today's marketing communications, necessitating more detail analysis of its elements and an impact of those elements on consumers buying behaviour. The impact of package and its elements on consumer's purchase decision can be revealed by analysing an importance of its separate elements for consumer's choice.

Packages are found to attract attention (Underwood et al., 2001; Garber et al., 2000; Goldberg et al., 1999; Schoormans & Robben, 1997). In fact, Goldberg et al. (1999) found that by dismissing such non-verbal signs as colours, the attention to verbal signs can be increased. Pictures on packages are emphasized to attract attention, particularly when consumers are not very familiar with the brands (Underwood et al., 2001).

P.H.K.Prathiraja and A.Ariyawardana (2003) has a great study in the impact of nutritional labelling on Consumer Buying Behaviour. This study shows that consumers use nutritional labelling when making a purchasing decision and that it is especially because of health consciousness. A majority of the respondents revealed that they are willing to pay something additional for the nutritional information provided on food items. Of those who are willing to pay something additional, a greater proportion was in the age category 36 to 50 years, have had tertiary education and the households had less than 4 members.

K Sony (2008) studied the consumer responses toward attribute framing in product packaging. The main purpose of this study is to investigate the impact of message framing, level of involvement, and numerical difference on consumer response. Fresh milk product was chosen as the object for experiment. This study has the following suggestion for packaging design based on the findings. Fresh milk is commonly considered as health-related product. The study is advantageous in giving marketers a more thorough picture of how message framing affects consumer response in various numerical alternatives and level of involvement. It will also be helpful in developing successful packaging strategy. For future study, different types of products can be investigated further.



Consumer buying behaviour

Consumer buying behaviour is the sum total of a consumer's attitudes, preferences, intentions, and decisions regarding the consumer's behaviour in the marketplace when purchasing a product or service. The study of consumer behaviour draws upon social science disciplines of anthropology, psychology, sociology, and economics.

Purchase decision making pattern that is a complex amalgam of needs and desires, and is influenced by factors such as the consumer's

(1) Societal role (parent, spouse, worker, etc.)

(2) Social and cultural environment and norms

(3) Aspirations and inhibitions

Buying Behaviour is the decision processes and acts of people involved in buying and using products.

Stages of the Consumer Buying Process

Six Stages to the Consumer Buying Decision Process (For complex decisions). Actual purchasing is only one stage of the process. Not all decision processes lead to a purchase. All consumer decisions do not always include all 6 stages, determined by the degree of complexity.

Following are the 6 stages of Consumer Buying process:

Problem Recognition

(Awareness of need) --difference between the desired state and the actual condition. Deficit in assortment of products. Hunger--Food. Hunger stimulates your need to eat.

Let's use the example of a consumer who has just been informed by her mechanic that fixing her car will cost more than it's worth. Our consumer realizes that she now has a transportation problem and wants to fulfil that need with the purchase of a car.

Information Search

The next step is to gather information relevant to what you need to solve the problem. Example, consumer may engage in research on the Internet to determine the types of vehicles available and their respective features.

Evaluation

After information is gathered, it is evaluated against a consumer's needs, wants, preferences, and financial resources available for purchase. In our example, our consumer has decided to narrow her choices down to three cars based upon price, comfort, and fuel efficiency.

Purchase

At this stage, the consumer will make a purchasing decision. The ultimate decision may be based on factors such as price or availability. For example, our consumer has decided to purchase a particular model of car because its price was the best she could negotiate and the car was available immediately.

Post Purchase Evaluation

At this stage, the consumer will decide whether the purchase actually satisfies her needs and wants. Is our car purchaser happy with her purchase? If she isn't satisfied, why isn't she?

Types of Consumer Buying Behaviour

Types of consumer buying behaviour are determined by:

Level of Involvement in purchase decision. Importance and intensity of interest in a product in a particular situation.

Buyers level of involvement determines why he/she is motivated to seek information about a certain products and brands but virtually ignores others.

High involvement purchases--Honda Motorbike, high priced goods, products visible to others, and the higher the risk the higher the involvement.

Types of risk:

Personal risk

Social risk

Economic risk

The four types of consumer buying behaviour are

Routine Response/Programmed Behaviour

Buying low involvement frequently purchased low cost items; need very little search and decision effort; purchased almost automatically. Examples include soft drinks, snack foods, milk etc.

Limited Decision Making

Buying product occasionally. When you need to obtain information about unfamiliar brand in a familiar product category, perhaps. Requires a moderate amount of time for information gathering. Examples include Clothes--know product class but not the brand.

Extensive Decision Making

Complex high involvement, unfamiliar, expensive and/or infrequently bought products. High degree of economic/performance/psychological risk. Examples include cars, homes, computers, education. Spend a lot of time seeking information and deciding. Information from the companies MM; friends and relatives, store personnel etc. Go through all six stages of the buying process.

Impulse buying, no conscious planning.

The purchase of the same product does not always elicit the same Buying Behavior. Product can shift from one category to the next.

For Example:

Going out for dinner for one person may be extensive decision making (for someone that does not go out often at all), but limited decision making for someone else. The reason for the dinner, whether it is an anniversary celebration, or a meal with a couple of friends will also determine the extent of the decision making.

Categories that Affect the Consumer Buying Decision Process

A consumer, making a purchase decision will be affected by the following three factors:

- **Personal**
- **Psychological**
- **Social**

The marketer must be aware of these factors in order to develop an appropriate MM for its target market.

Personal

Unique to a particular person. Demographic Factors. Sex, Race, Age etc. Who in the family is responsible for the decision making? Young people purchase things for different reasons than older people.

Psychological factors

Psychological factors include:

1. **Motives**

A motive is an internal energizing force that orients a person's activities toward satisfying a need or achieving a goal. Actions are effected by a set of motives, not just one. If marketers can identify motives then they can better develop a marketing mix.

- ***Physiological***
- ***Safety***
- ***Love and Belonging***
- ***Esteem***
- ***Self-Actualization***

So here marketers need to determine what level of the hierarchy the consumers are able to determine what motivates their purchases.

2. **Perception**

What do you see?? Perception is the process of selecting, organizing and interpreting information inputs to produce meaning. IE we chose what info we pay attention to, organize it and interpret it.

Information inputs are the sensations received through sight, taste, hearing, smell and touch.

3. **Ability and Knowledge**

Need to understand individual's capacity to learn. Learning, changes in a person's behaviour caused by information and experience.

Therefore, to change consumers' behaviour about your product, need to give them new information re: product...free sample etc.

4. **Attitudes**

Knowledge and positive and negative feelings about an object or activity-maybe tangible or intangible, living or non- living, drive perceptions. Individual learns attitudes through experience and interaction with other people.

Consumer attitudes toward a firm and its products greatly influence the success or failure of the firm's marketing strategy.

Attitudes and attitude change are influenced by consumer's personality and lifestyle.

5. **Personality**

All the internal traits and behaviours that make a person unique, uniqueness arrives from a person's heredity and personal experience.

6. **Competitiveness**

Traits affect the way people behave. Marketers try to match the store image to the perceived image of their customers. There is a weak association between personality and buying behaviour; this may be due to unreliable measures.

7. Lifestyles

Recent US trends in lifestyles are a shift towards personal independence and individualism and a preference for a healthy, natural lifestyle.

Lifestyles are the consistent patterns people follow in their lives.

Ex: - Healthy foods for a healthy lifestyle.

Social factors

Consumer wants, learning, motives etc. are influenced by opinion leaders, person's family, reference groups, social class and culture.

1. Opinion leaders

Marketers try to attract opinion leaders.

They actually use spokespeople to market their products.

Ex: Cristiano Ronaldo, Michael Jordan, Virat Kohli. All of these leaders have been used to form an opinion about a product.

2. Roles and Family Influences

Things you should do based on the expectations of you from your position within a group. People have many roles.

3. Reference Groups

Individual identifies with the group to the extent that he takes on many of the values, attitudes or behaviours of the group members.

4. Social Class

An open group of individuals who have similar social rank.

US is not a classless society.

US criteria; occupation, education, income, wealth, race, ethnic groups and possessions.

5. Geographic Regions.

Human characteristics such as age and ethnic background.

West Coast, teenage and Asian American.

Culture effects what people buy, how they buy and when they buy.

PACKAGING

The definitions of 'packaging' vary and range from being simple and functionally focused to more extensive, holistic interpretations.

Packaging can be defined quite simply as an extrinsic element of the product (Olson and Jacoby (1972)) - an attribute that is related to the product but does not form part of the physical product itself. "Packaging is the container for a product – encompassing the physical appearance of the container and including the design, color, shape, labelling and materials used" (Arens,1996).

Objectives of packaging

Packaging and package labelling have several objectives:

• **Physical Protection** – Protection of the objects enclosed in the package from shock, vibration, compression, temperature, etc.

• **Barrier Protection** - A barrier from oxygen, water vapor, dust, etc.

• **Containment or Agglomeration** - Small objects are typically grouped together in one package for transport and handling efficiency. Alternatively, bulk Commodities (such as salt) can be divided into packages that are a more suitable Size for individual households.

• **Information transmission** - Information on how to use, transport, recycle, or Dispose of the package or product is often contained on the package or label.

• **Reducing theft** - Packaging that cannot be re-closed or gets physically damaged (Shows signs of opening) is helpful in the prevention of theft. Packages also Provide opportunities to include anti-theft devices.

• **Convenience** - features which add convenience in distribution, handling, display, Sale, opening, re-closing, use, and re-use.

• **Marketing** - The packaging and labels can be used by marketers to encourage Potential buyers to purchase the product.

Theatrical Framework

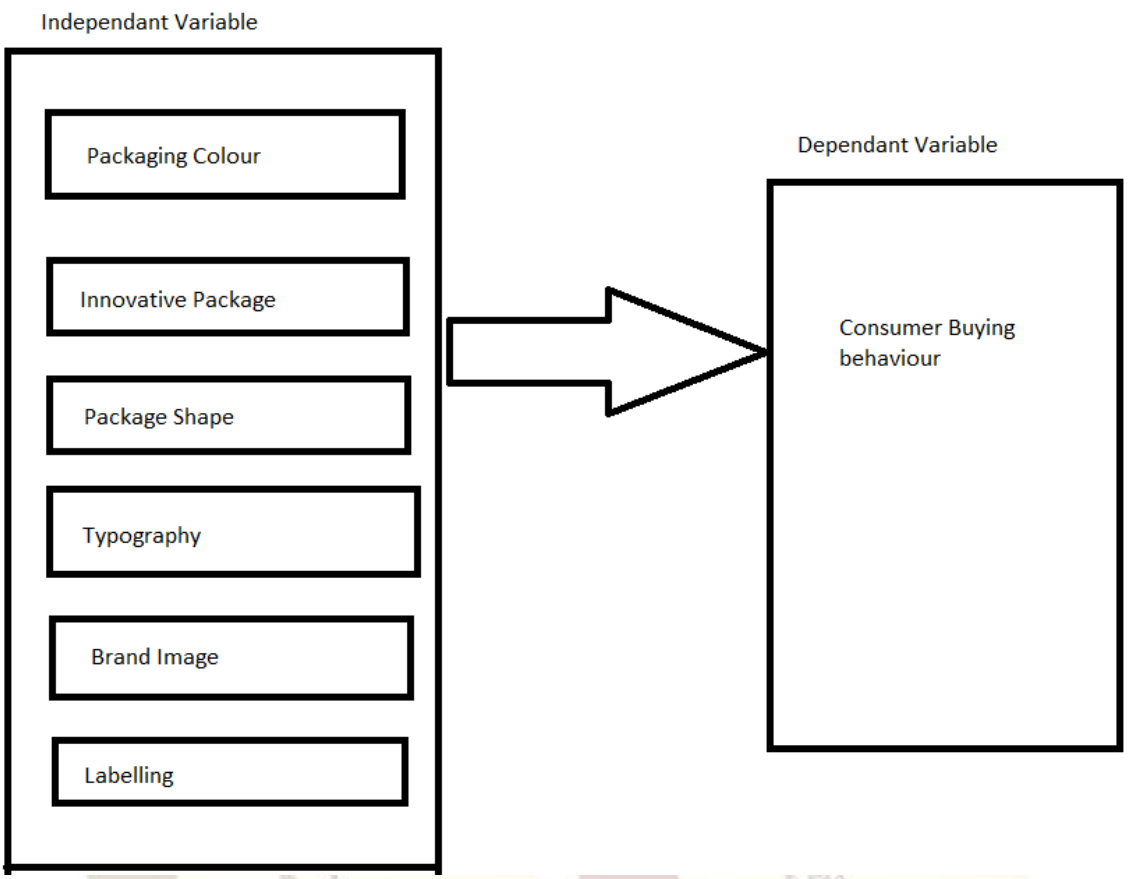


Figure 1

Independent Variable –

- **Packaging colour**
- **Innovative Package**
- **Package Shape**
- **Typography**
- **Brand Image**
- **Labelling**
- **Packaging Material**

Dependant Variable –

- **Consumer Buying behaviour**

Packaging colour

Colour plays an important role in a potential customer's decision-making process, certain colours set different moods and can help to draw attention. One good example of successful use of colour psychology is in the Apple iPod advertisements; they use simple tri tone colour schemes of black, white and a bright background colour. The bright background colour is to give the advertisement a fun feel and the contrasting white on black is to focus attention.

Packaging Material

Any material used specially to protect something- packing, wadding. Consumer can change its decision regarding packaging material. High quality packaging attracts consumer then low-quality packaging.

Innovation

Innovative packaging may actually add value to the product if it meets a consumer need such as portion control, recyclability, tamper-proofing, child-proofing, easy-open, easy store, easy-carry, and non-breakability. Manufacturers today strive to have packaging that maintains the key equities of the brand, has stand out appeal on the retailer's shelf, and is sustainable but

with lower production costs. The customer can adopt product on the basis of its innovative packaging, which shows the relation between buying behaviour and innovation of packaging.

Labelling

Container or wrapper for a consumer product that serves a number of purposes including protection and description of the contents, theft deterrence, and product promotion. The labels on packages are important components of the overall marketing mix and can support advertising claims, establish brand identity, enhance name recognition, and optimize shelf space allocations.

The consumer can change his decision on the basis of information printed on the packaging. Mostly in Merchandises and daily FMCG the consumer can perform evaluation on the basis of printed information.

Typography

The typography of package grab customer attraction. The up gradation of IT technology has support this feature. The successful companies have best practices of the font styles. They hire specialist in composing which create mind blowing and attractive font styles. The attractive package has innovative font style. So, we can say that there is relation between typography and buying behaviour.

Packaging Material

The overall design also plays a vital role in attracting the consumer. Mostly the children of 10-18 years are so sensitive to the design of wrapper. The companies try their best to create attractive design of packaging buying behaviour.

Packaging material and design is so vital for many people for having that look and feel in the products they buy.

Data Analysis

Data analysis is a process of collecting data and organizing it in a manner where one can draw a conclusion. Methods of data collection include surveys, interviews, measurements or records, and observations.

Methodology

Data analysis has two prominent methods: qualitative research and quantitative research. Each method has its own techniques. Interviews and observations are forms of qualitative research, while experiments and surveys are quantitative research.

Data analysis methods

We used Statistical Package for the Social Sciences (SPSS) version 24 for data analysis. Descriptive and inferential analysis was carried out on the data to measure the results. We used many techniques for our analysis.

a. Descriptive Statistics

- Descriptive statistics are used to describe the basic features of the data in a study.
- They provide simple summaries about the sample and the measures.
- Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data.
- Used for basic demographic analysis on our data.

b. Hypothesis testing

- Test the results of a survey or experiment to see if you have meaningful results.
- Infer the result of a hypothesis performed on sample data from a larger population.
- We have used hypothesis testing on our data to determine the various factors that affect brand switching.

c. Factor Analysis

Factor analysis is an interdependence technique in that an entire set of interdependent relationships is examined without making the distinction between dependent and independent variables. It is used in the following circumstances:

- To identify underlying dimensions, or factors, that explains the correlations among a set of variables.
- To identify a new, smaller, set of uncorrelated variables to replace the original set of correlated variables in subsequent multivariate analysis (regression or discriminant analysis).
- To identify a smaller set of salient variables from a larger set for use in subsequent multivariate analysis.

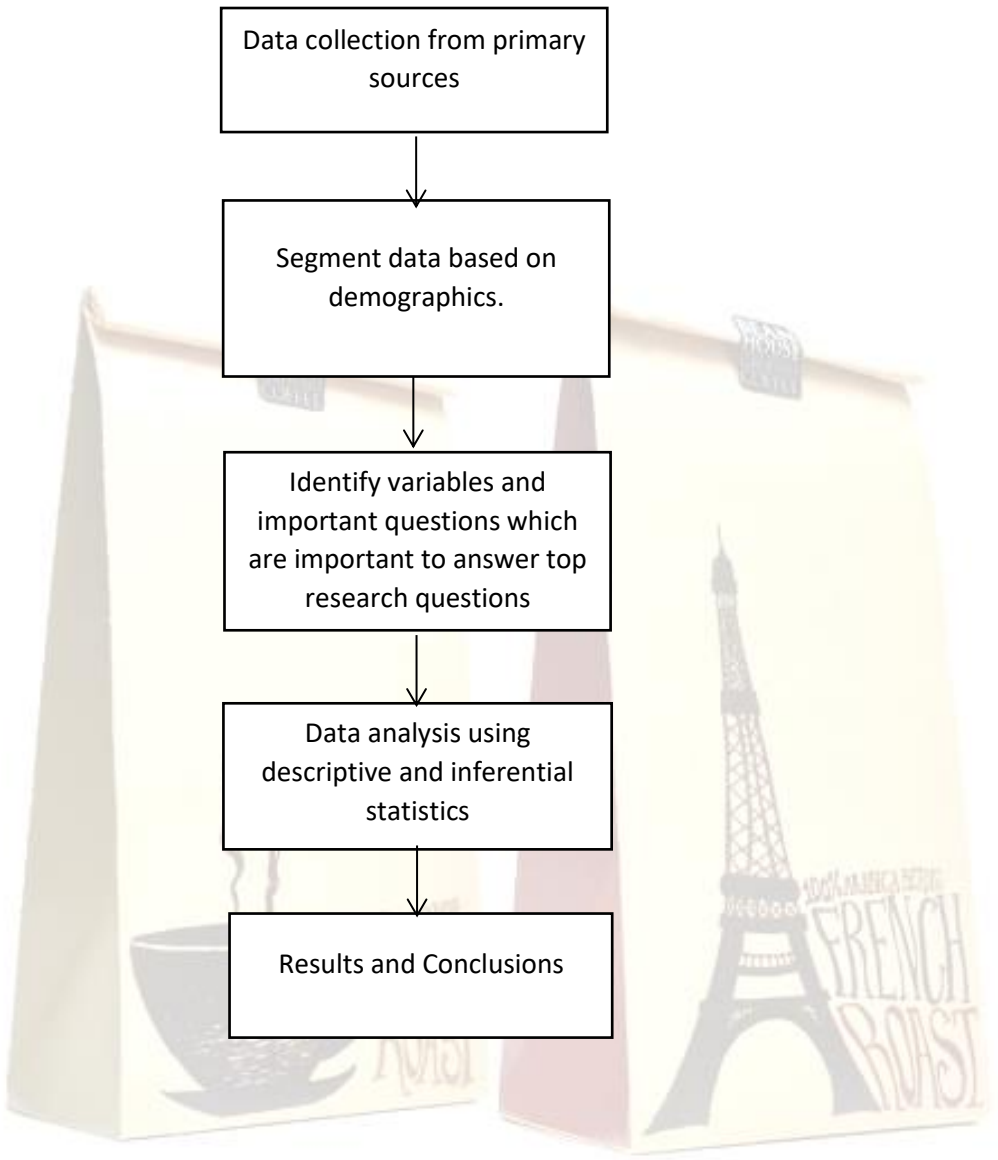
d. KMO and Bartlett's Test

- KMO is an index used to examine the appropriateness of factor analysis. High values between 0.5 and 1.0 indicate factor analysis is appropriate. Values below 0.5 imply that factor analysis may not be appropriate.
- Bartlett's test of sphericity can be used to test the null hypothesis that the variables are uncorrelated in the population
- Both have been used along with factor analysis.

Plan of data analysis

A data analysis plan is a roadmap for how you're going to organize and analyze your survey data and it should help you achieve three objectives that relate to the goal you set before you started your survey:

- Answer your top research questions.
- Use more specific survey questions to understand those answers.
- Segment survey respondents to compare the opinions of different demographic groups.


Data collection from primary sources
Segment data based on demographics.
Identify variables and important questions which are important to answer top research questions
Data analysis using descriptive and inferential statistics
Results and Conclusions

Results

Descriptive Statistics:

Descriptive Statistics			
		Frequency	Percentage
Gender	Male	193	73%
	Female	70	27%
Age Group	Below 25	138	52%
	25-50	113	43%
	Above 50	12	5%
Shopping options	Both	175	67%
	In-store	42	16%
	Online	46	17%
Salary	Below 1 lacs	55	21%
	1-5 lacs	115	44%
	5-10 lacs	55	21%
	Above 10 lacs	38	14%

Figure 7.1

Pie chart Analysis :

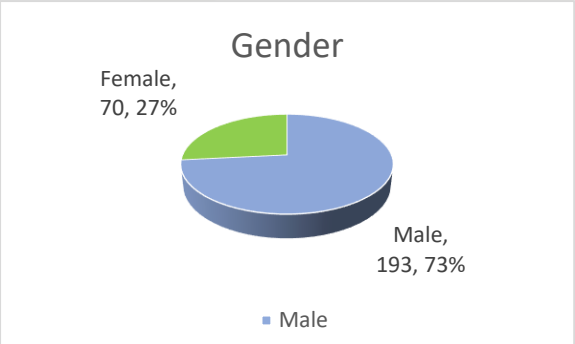


Figure 10.1

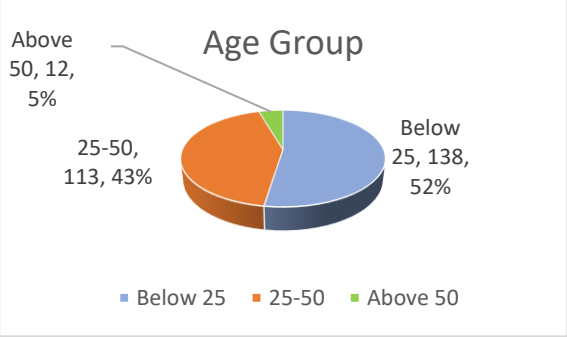


Figure 10.2

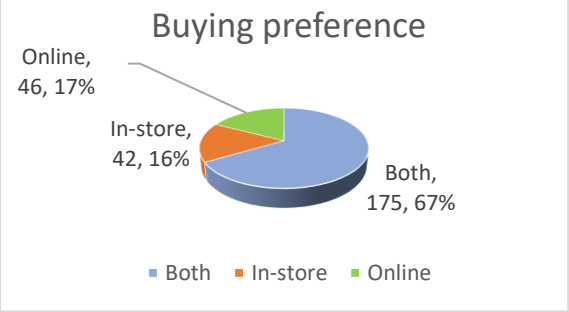


Figure 10.3

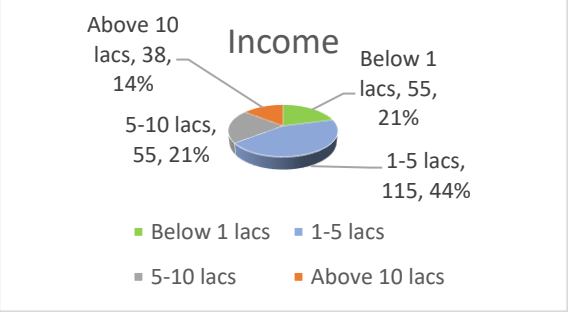


Figure 10.4

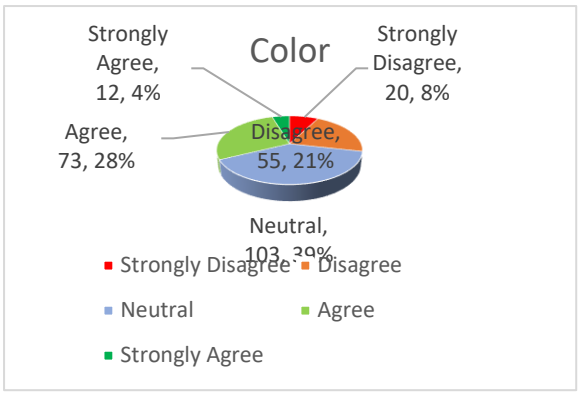


Figure 10.5

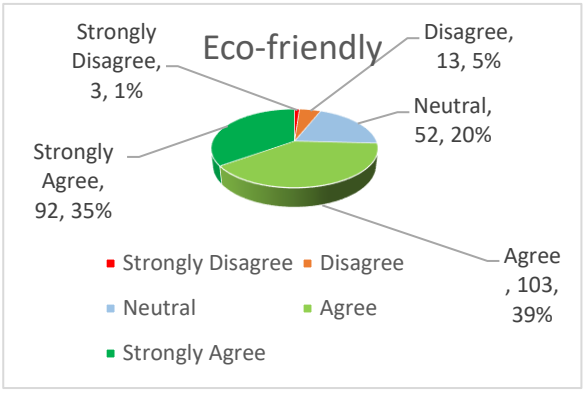


Figure 10.6

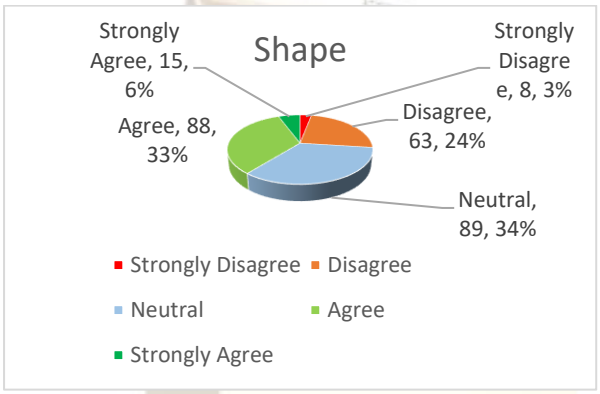


Figure 10.7

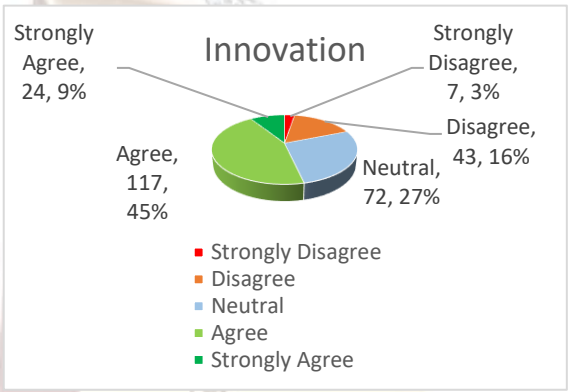
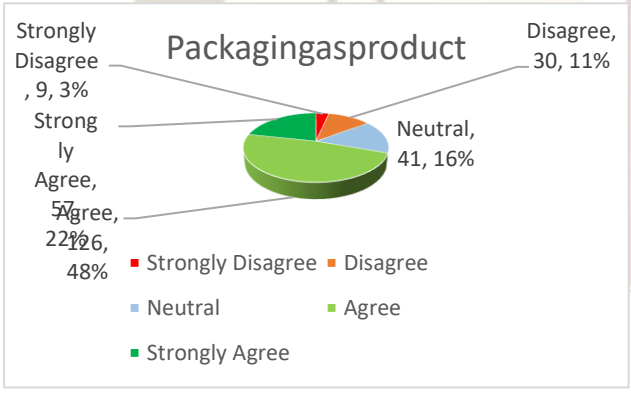


Figure 10.8



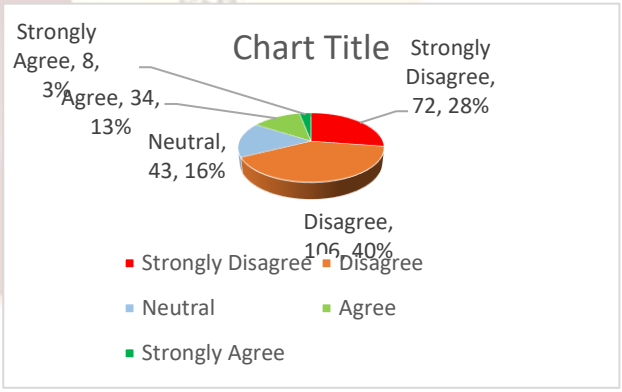


Figure 10.9

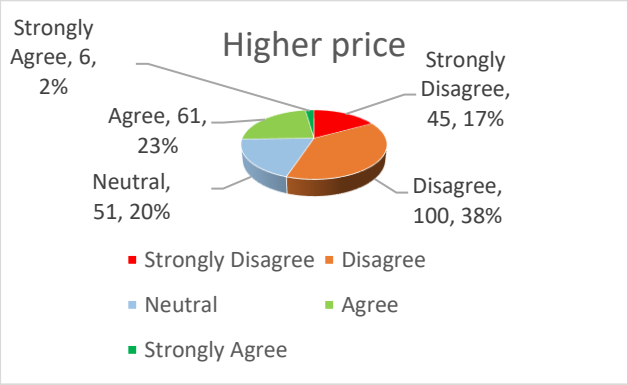


Figure 10.10

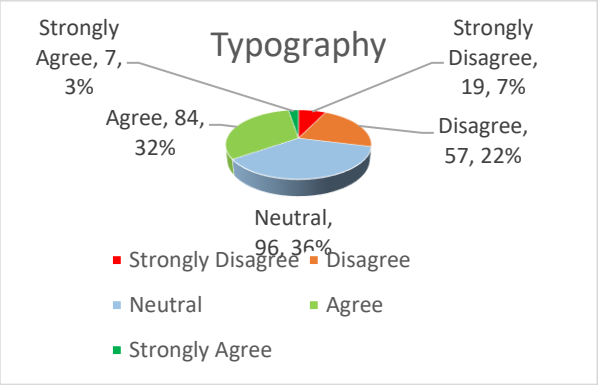


Figure 10.11

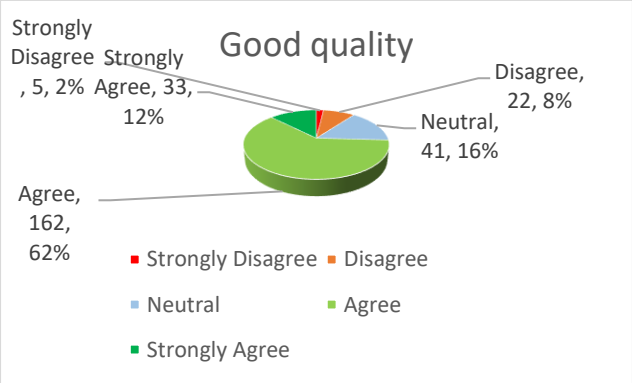


Figure 10.12

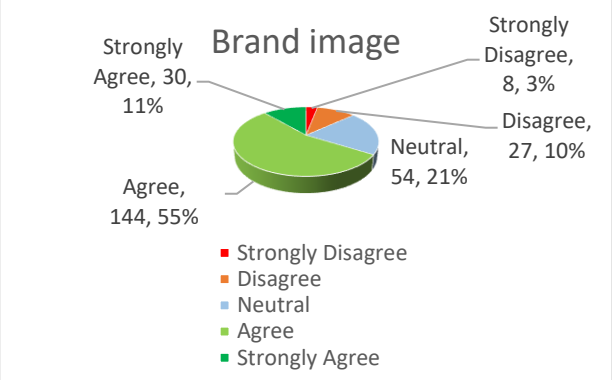


Figure 10.13

Figure 10.14

Descriptive

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Color	263	3.0076	0.98845	0.06095
Innovation	263	3.4106	0.95640	0.05897
Shape	263	3.1483	0.95153	0.05867
Ecofriendly	263	4.0190	0.92238	0.05688
PckgingasProd	263	3.7300	1.03347	0.06373
Unneccessarybuying	263	2.2395	1.08408	0.06685
Higherprice	263	2.5551	1.09292	0.06739
Typography	263	3.0114	0.96695	0.05962
Goodquality	263	3.7452	0.85143	0.05250
Brandimage	263	3.6122	0.92555	0.05707
Nutritionfacts	263	3.5703	1.04562	0.06448

Figure 10.15

One-Sample Test							
	Test Value = 3						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference		
					Lower	Upper	
Color	0.125	262	0.901	0.00760	-0.1124	0.1276	Not significant
Innovation	6.963	262	0.000	0.41065	0.2945	0.5268	Significant
Shape	2.527	262	0.012	0.14829	0.0328	0.2638	Significant
Ecofriendly	17.916	262	0.000	1.01901	0.9070	1.1310	Significant
PckgingasProd	11.456	262	0.000	0.73004	0.6046	0.8555	Significant
Unneccessarybuying	-11.376	262	0.000	-0.76046	-0.8921	-0.6288	Significant
Higherprice	-6.601	262	0.000	-0.44487	-0.5776	-0.3122	Significant
Typography	0.191	262	0.848	0.01141	-0.1060	0.1288	Not significant
Goodquality	14.195	262	0.000	0.74525	0.6419	0.8486	Significant
Brandimage	10.726	262	0.000	0.61217	0.4998	0.7245	Significant
Nutritionfacts	8.846	262	0.000	0.57034	0.4434	0.6973	Significant

Figure 10.16

INFERENCE:- Typography and colour are non significant other elements of packaging have significant influence on buying behaviour.

Correlation Matrix[a]

		Color	Innovation	Shape	Ecofriendly	PckgingasProd	Unneccessarybuying	Higherprice	Typography	Goodquality	Brandimage	Nutritionfacts
Correlation	Color	1.000	0.558	0.551	0.167	0.125	0.248	0.215	0.427	0.157	0.291	0.073
	Innovation	0.558	1.000	0.604	0.193	0.155	0.240	0.256	0.465	0.316	0.344	0.059
	Shape	0.551	0.604	1.000	0.245	0.188	0.365	0.313	0.479	0.249	0.334	0.103
	Ecofriendly	0.167	0.193	0.245	1.000	0.146	0.057	0.186	0.218	0.201	0.174	0.283
	PckgingasProd	0.125	0.155	0.188	0.146	1.000	0.221	0.204	0.213	0.399	0.273	0.139
	Unneccessarybuying	0.248	0.240	0.365	0.057	0.221	1.000	0.432	0.351	0.133	0.218	0.044
	Higherprice	0.215	0.256	0.313	0.186	0.204	0.432	1.000	0.474	0.321	0.376	0.116
	Typography	0.427	0.465	0.479	0.218	0.213	0.351	0.474	1.000	0.254	0.440	0.182
	Goodquality	0.157	0.316	0.249	0.201	0.399	0.133	0.321	0.254	1.000	0.315	0.121
	Brandimage	0.291	0.344	0.334	0.174	0.273	0.218	0.376	0.440	0.315	1.000	0.155
	Nutritionfacts	0.073	0.059	0.103	0.283	0.139	0.044	0.116	0.182	0.121	0.155	1.000
Sig. (1-tailed)	Color		0.000	0.000	0.003	0.021	0.000	0.000	0.000	0.006	0.000	0.118
	Innovation	0.000		0.000	0.001	0.006	0.000	0.000	0.000	0.000	0.000	0.171
	Shape	0.000	0.000		0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.048
	Ecofriendly	0.003	0.001	0.000		0.009	0.181	0.001	0.000	0.001	0.002	0.000
	PckgingasProd	0.021	0.006	0.001	0.009		0.000	0.000	0.000	0.000	0.000	0.012
	Unneccessarybuying	0.000	0.000	0.000	0.181	0.000		0.000	0.000	0.016	0.000	0.239
	Higherprice	0.000	0.000	0.000	0.001	0.000	0.000		0.000	0.000	0.000	0.030
	Typography	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.002
	Goodquality	0.006	0.000	0.000	0.001	0.000	0.016	0.000	0.000		0.000	0.025
	Brandimage	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000		0.006
	Nutritionfacts	0.118	0.171	0.048	0.000	0.012	0.239	0.030	0.002	0.025	0.006	

a. Determinant = .060

Figure 10.17

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.785	34.411	34.411	3.785	34.411	34.411	2.681	24.369	24.369
2	1.307	11.881	46.292	1.307	11.881	46.292	2.204	20.040	44.409
3	1.125	10.226	56.518	1.125	10.226	56.518	1.332	12.109	56.518
4	0.966	8.778	65.296						
5	0.761	6.919	72.215						
6	0.728	6.615	78.830						
7	0.612	5.562	84.392						
8	0.503	4.576	88.969						
9	0.443	4.084	93.053						
10	0.401	3.642	96.694						
11	0.364	3.306	100.000						

Extraction Method: Principal Component Analysis.

The 1st 3 components explain 56% of the total variance and they have eigen value more than 1.
Component 1 explains about 34% of the variance

Figure 10.18

Rotated Component Matrix[a]

	Component		
	1	2	3
Color	0.817		
Innovation	0.797		
Shape	0.796		
Typography	0.604	0.435	
PckgingasProd		0.690	
Higherprice		0.680	
Goodquality		0.639	
Unneccessarybuying	0.345	0.539	
Brandimage	0.350	0.532	
Nutritionfacts			0.750
Ecofriendly			0.728

1 explains most of the variance.

Figure 10.19

It is evident from the plot that component

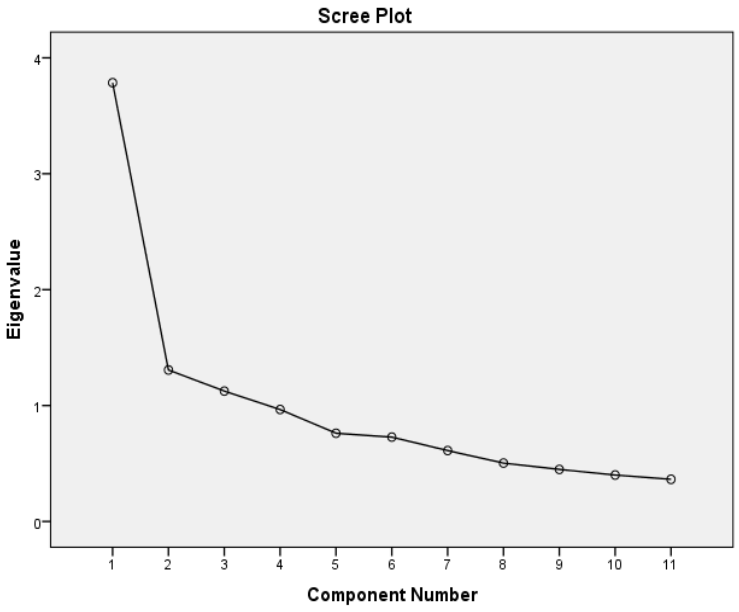


Figure 10.20

Factor 1 can be called as something new in product aspect.

Factor 2 can be called as affluent buyer.

Factor 3 can be called as healthy aspect

CHISQUARE

Dependency test between gender and attributes

Color * Gender

Crosstab

Count

		Gender		
		Male	Female	Total
Color	SD	16	4	20
	D	46	9	55
	N	72	31	103
	A	50	23	73
	SA	9	3	12
Total		193	70	263

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.957[a]	4	0.292
Likelihood Ratio	5.252	4	0.262
Linear-by-Linear Association	2.620	1	0.106
N of Valid Cases	263		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 3.19.

Gender and color are independent

Figure 10.21

Innovation * Gender

Crosstab

Count

		Gender		
		Male	Female	Total
Innovation	SD	5	2	7
	D	35	8	43
	N	54	18	72
	A	80	37	117
	SA	19	5	24
Total		193	70	263

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.436[a]	4	0.488
Likelihood Ratio	3.515	4	0.476
Linear-by-Linear Association	0.833	1	0.362
N of Valid Cases	263		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 1.86.

Gender and Innovative packaging are independe

Shape * Gender

Crosstab

Count

		Gender		
		Male	Female	Total
Shape	SD	6	2	8
	D	53	10	63
	N	62	27	89
	A	60	28	88
	SA	12	3	15
Total		193	70	263

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.320[a]	4	0.205
Likelihood Ratio	6.300	4	0.178
Linear-by-Linear Association	1.330	1	0.158
N of Valid Cases	263		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 2.13.

Gender and Shape are independent

Figure 10.22

Unneccessarybuying * Gender

Crosstab

Count

		Gender		
		Male	Female	Total
Unneccessarybuying	SD	59	13	72
	D	75	31	106
	N	26	17	43
	A	27	7	34
	SA	6	2	8
Total		193	70	263

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.394[a]	4	0.116
Likelihood Ratio	7.360	4	0.118
Linear-by-Linear Association	0.866	1	0.352
N of Valid Cases	263		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 2.13.

Gender and unneccessary buying are independent

Higherprice * Gender

Crosstab

Count

		Gender		
		Male	Female	Total
Higherprice	SD	33	12	45
	D	77	23	100
	N	36	15	51
	A	41	20	61
	SA	6	0	6
Total		193	70	263

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.233[a]	4	0.375
Likelihood Ratio	5.742	4	0.219
Linear-by-Linear Association	0.279	1	0.597
N of Valid Cases	263		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.60.

Gender and Higherprice for packaging are independent

Figure 10.23

Ecofriendly * Gender

Crosstab

			Gender		
			Male	Female	Total
Ecofriendly	SD	Count	2	1	3
		% within Gender	1.0%	1.4%	1.1%
	D	Count	13	0	13
		% within Gender	6.7%	0.0%	4.9%
	N	Count	43	9	52
		% within Gender	22.3%	12.9%	19.8%
	A	Count	74	29	103
		% within Gender	38.3%	41.4%	39.2%
	SA	Count	61	31	92
		% within Gender	31.6%	44.3%	35.0%
Total		Count	193	70	263
		% within Gender	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.577[a]	4	0.048
Likelihood Ratio	13.005	4	0.011
Linear-by-Linear Association	7.144	1	0.008
N of Valid Cases	263		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is .80.

Gender and Ecofriendly packaging are dependent

PckgingasProd * Gender

Crosstab

Count

		Gender		
		Male	Female	Total
PckgingasProd	SD	5	4	9
	D	21	9	30
	N	26	15	41
	A	96	30	126
	SA	45	12	57
Total		193	70	263

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.138[a]	4	0.273
Likelihood Ratio	4.911	4	0.297
Linear-by-Linear Association	3.625	1	0.057
N of Valid Cases	263		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 2.40.

Gender and Product as good as packaging are independent

Figure 10.24

Typography * Gender

Crosstab

Count

		Gender		
		Male	Female	Total
Typography	SD	17	2	19
	D	43	14	57
	N	69	27	96
	A	59	25	84
	SA	5	2	7
Total		193	70	263

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.193[a]	4	0.526
Likelihood Ratio	3.695	4	0.449
Linear-by-Linear Association	2.167	1	0.141
N of Valid Cases	263		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 1.86.

Gender and Typography are independent

Goodquality * Gender

Crosstab

Count

		Gender		
		Male	Female	Total
Goodquality	SD	2	3	5
	D	18	4	22
	N	29	12	41
	A	119	43	162
	SA	25	8	33
Total		193	70	263

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.838[a]	4	0.420
Likelihood Ratio	3.560	4	0.469
Linear-by-Linear Association	0.263	1	0.604
N of Valid Cases	263		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.33.

Gender and good quality packaging are independent

Figure 10.25

Brandimage * Gender

Crosstab

Count

		Gender		
		Male	Female	Total
Brandimage	SD	5	3	8
	D	23	4	27
	N	38	16	54
	A	102	42	144
	SA	25	5	30
Total		193	70	263

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.662[a]	4	0.324
Likelihood Ratio	5.016	4	0.286
Linear-by-Linear Association	0.016	1	0.898
N of Valid Cases	263		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 2.13.

Gender and Brand image are indeoendent

Nutritionfacts * Gender

Crosstab

Count

		Gender		
		Male	Female	Total
Nutritionfacts	SD	9	3	12
	D	23	7	30
	N	48	14	62
	A	79	35	114
	SA	34	11	45
Total		193	70	263

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.781[a]	4	0.776
Likelihood Ratio	1.778	4	0.777
Linear-by-Linear Association	0.296	1	0.587
N of Valid Cases	263		

a. 1 cells (10.0%) have expected count less than 5. The minimum expected count is 3.19.

Gender and reading nutrition facts are independent

Figure 10.26

AgeGroup * Color * Gender

Crosstab

Gender:

Count

		Color					
		SD	D	N	A	SA	Total
AgeGroup	Below 25	3	26	61	35	7	138
	25-50	10	25	40	34	4	113
	Above 50	1	4	2	4	1	12
Total		20	55	103	73	12	263

For Males different age groups and color are independent
For Females different age groups and colour are dependent

Chi-Square Tests

Gender		Value	df	Asymptotic Significance (2-sided)
Male	Pearson Chi-Square	8.994[a]	8	0.343
	Likelihood Ratio	9.383	8	0.311
	Linear-by-Linear Association	2.034	1	0.154
	N of Valid Cases	193		
Female	Pearson Chi-Square	17.889[a]	8	0.022
	Likelihood Ratio	19.620	8	0.012
	Linear-by-Linear Association	9.655	1	0.002
	N of Valid Cases	70		
Total	Pearson Chi-Square	5.306[a]	8	0.658
	Likelihood Ratio	6.125	8	0.633
	Linear-by-Linear Association	0.187	1	0.666
	N of Valid Cases	263		

a. 5 cells (33.3%) have expected count less than 5. The minimum expected count is .55.
b. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .37.
c. 10 cells (66.7%) have expected count less than 5. The minimum expected count is .17.

Figure 10.27

AgeGroup * Innovation * Gender

Crosstab

Gender:

Count

		Innovation					
		SD	D	N	A	SA	Total
AgeGroup	Below 25	3	23	34	62	16	138
	25-50	2	18	37	49	7	113
	Above 50	2	2	1	6	1	12
Total		7	43	72	117	24	263

For Males different age groups and Innovative packaging are independent
For Females different age groups and Innovative packaging are dependent

Chi-Square Tests

Gender		Value	df	Asymptotic Significance (2-sided)
Male	Pearson Chi-Square	7.816[a]	8	0.452
	Likelihood Ratio	6.758	8	0.563
	Linear-by-Linear Association	0.020	1	0.889
	N of Valid Cases	193		
Female	Pearson Chi-Square	19.853[a]	8	0.011
	Likelihood Ratio	18.186	8	0.020
	Linear-by-Linear Association	4.440	1	0.035
	N of Valid Cases	70		
Total	Pearson Chi-Square	14.536[a]	8	0.067
	Likelihood Ratio	10.388	8	0.239
	Linear-by-Linear Association	1.546	1	0.214
	N of Valid Cases	263		

a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .32.
b. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .21.
c. 11 cells (73.3%) have expected count less than 5. The minimum expected count is .11.

Figure 10.28

AgeGroup * Shape * Gender

Crosstab

Gender:
Count

		Shape					
		SD	D	N	A	SA	Total
AgeGroup	Below 25	3	37	40	51	7	138
	25-50	4	24	44	34	7	113
	Above 50	1	2	5	3	1	12
Total		8	63	89	88	15	263

For Males different age groups and Shape of packaging are independent
For Females different age groups and Shape of packaging are dependent

Chi-Square Tests

Gender		Value	df	Asymptotic Significance (2-sided)
Male	Pearson Chi-Square	2.114[a]	8	0.977
	Likelihood Ratio	2.260	8	0.972
	Linear-by-Linear Association	0.509	1	0.476
	N of Valid Cases	193		
Female	Pearson Chi-Square	15.595[b]	8	0.049
	Likelihood Ratio	13.295	8	0.102
	Linear-by-Linear Association	2.455	1	0.117
	N of Valid Cases	70		
Total	Pearson Chi-Square	6.103[c]	8	0.636
	Likelihood Ratio	5.806	8	0.669
	Linear-by-Linear Association	0.056	1	0.797
	N of Valid Cases	263		

a. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .37.
b. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .25.
c. 10 cells (66.7%) have expected count less than 5. The minimum expected count is .11.

Figure 10.29

AgeGroup*Ecofriendly*Gender

Crosstab

Gender:
Count

		Ecofriendly					
		SD	D	N	A	SA	Total
AgeGroup	Below 25	1	8	26	57	46	138
	25-50	1	5	22	42	43	113
	Above 50	1	0	4	4	3	12
Total		3	13	52	103	92	263

For Males different age groups and Ecofriendly packaging are independent
For Females different age groups and Ecofriendly packaging are dependent

Chi-Square Tests

Gender		Value	df	Asymptotic Significance (2-sided)
Male	Pearson Chi-Square	2.673[a]	8	0.953
	Likelihood Ratio	3.286	8	0.915
	Linear-by-Linear Association	1.314	1	0.252
	N of Valid Cases	193		
Female	Pearson Chi-Square	23.323[b]	6	0.001
	Likelihood Ratio	12.570	6	0.050
	Linear-by-Linear Association	5.519	1	0.019
	N of Valid Cases	70		
Total	Pearson Chi-Square	8.891[c]	8	0.352
	Likelihood Ratio	6.166	8	0.629
	Linear-by-Linear Association	0.089	1	0.766
	N of Valid Cases	263		

a. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .14.
b. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .08.
c. 7 cells (58.3%) have expected count less than 5. The minimum expected count is .06.

Figure 10.30

AgeGroup * PckgingasProd * Gender

Crosstab

Gender:
Count

		PckgingasProd					
		SD	D	N	A	SA	Total
AgeGroup	Below 25	3	22	20	65	28	138
	25-50	5	8	20	53	27	113
	Above 50	1	0	1	8	2	12
Total		9	30	41	126	57	263

For Males different age groups and Product good as packaging are independent
For Females different age groups and Product good as packaging are independent

Chi-Square Tests

Gender		Value	df	Asymptotic Significance (2-sided)
Male	Pearson Chi-Square	8.473[a]	8	0.389
	Likelihood Ratio	9.553	8	0.298
	Linear-by-Linear Association	0.539	1	0.463
	N of Valid Cases	193		
Female	Pearson Chi-Square	6.970[b]	8	0.540
	Likelihood Ratio	7.655	8	0.468
	Linear-by-Linear Association	0.085	1	0.770
	N of Valid Cases	70		
Total	Pearson Chi-Square	9.794[c]	8	0.280
	Likelihood Ratio	10.983	8	0.203
	Linear-by-Linear Association	0.843	1	0.358
	N of Valid Cases	263		

a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .41.
b. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .21.
c. 10 cells (66.7%) have expected count less than 5. The minimum expected count is .23.

Figure 10.31

AgeGroup * Unneccessarybuying * Gender

Crosstab

Gender:
Count

		Unneccessarybuying					
		SD	D	N	A	SA	Total
AgeGroup	Below 25	35	59	20	16	6	136
	25-50	30	44	22	15	2	113
	Above 50	7	3	1	1	0	12
Total		72	106	43	34	8	263

For Males different age groups and unncessary buying due to packaging are independent
For Females different age groups and unncessary buying due to packaging are independent

Chi-Square Tests

Gender		Value	df	Asymptotic Significance (2-sided)
Male	Pearson Chi-Square	3.372[a]	8	0.909
	Likelihood Ratio	4.515	8	0.808
	Linear-by-Linear Association	0.370	1	0.543
	N of Valid Cases	193		
Female	Pearson Chi-Square	13.163[b]	8	0.106
	Likelihood Ratio	12.383	8	0.112
	Linear-by-Linear Association	1.770	1	0.183
	N of Valid Cases	70		
Total	Pearson Chi-Square	8.771[c]	8	0.362
	Likelihood Ratio	8.330	8	0.402
	Linear-by-Linear Association	1.560	1	0.212
	N of Valid Cases	263		

a. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .37.
b. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .25.
c. 10 cells (66.7%) have expected count less than 5. The minimum expected count is .11.

Figure 10.32

AgeGroup * Higherprice * Gender

Crosstab

Gender:
Count

		Higherprice					
		SD	D	N	A	SA	Total
AgeGroup	Below 25	21	61	22	23	5	136
	25-50	22	37	26	28	0	113
	Above 50	2	2	3	4	1	12
Total		45	100	51	61	6	263

For Males different age groups and higher price due to packaging are independent
For Females different age groups and higher price due to packaging are independent

Chi-Square Tests

Gender		Value	df	Asymptotic Significance (2-sided)
Male	Pearson Chi-Square	13.623[a]	8	0.092
	Likelihood Ratio	15.469	8	0.051
	Linear-by-Linear Association	0.536	1	0.464
	N of Valid Cases	193		
Female	Pearson Chi-Square	4.107[b]	6	0.662
	Likelihood Ratio	4.301	6	0.637
	Linear-by-Linear Association	0.130	1	0.719
	N of Valid Cases	70		
Total	Pearson Chi-Square	12.646[c]	8	0.125
	Likelihood Ratio	14.561	8	0.068
	Linear-by-Linear Association	0.590	1	0.442
	N of Valid Cases	263		

a. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .27.
b. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .25.
c. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .69.

Figure 10.33

AgeGroup * Typography * Gender

Crosstab

Gender:
Count

		Typography					
		SD	D	N	A	SA	Total
AgeGroup	Below 25	7	28	57	40	6	138
	25-50	11	27	36	38	1	113
	Above 50	1	2	3	6	0	12
Total		19	57	96	84	7	263

For Males different age groups and typography are independent
For Females different age groups and typographypackaging are independent

Chi-Square Tests

Gender		Value	df	Asymptotic Significance (2-sided)
Male	Pearson Chi-Square	9.414[a]	8	0.309
	Likelihood Ratio	10.275	8	0.246
	Linear-by-Linear Association	0.031	1	0.861
	N of Valid Cases	193		
Female	Pearson Chi-Square	12.152[a]	8	0.145
	Likelihood Ratio	10.568	8	0.227
	Linear-by-Linear Association	2.420	1	0.120
	N of Valid Cases	70		
Total	Pearson Chi-Square	9.220[a]	8	0.324
	Likelihood Ratio	9.662	8	0.290
	Linear-by-Linear Association	0.514	1	0.473
	N of Valid Cases	263		

a. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .32.
b. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .21.
c. 10 cells (66.7%) have expected count less than 5. The minimum expected count is .11.

Figure 10.34

AgeGroup * Goodquality * Gender

Crosstab

Gender:
Count

		Goodquality					
		SD	D	N	A	SA	Total
AgeGroup	Below 25	1	14	22	84	17	138
	25-50	3	7	18	70	15	113
	Above 50	1	1	1	8	1	12
Total		5	22	41	162	33	263

For Males different age groups and good quality are independent
For Females different age groups and good quality are independent

Chi-Square Tests

Gender		Value	df	Asymptotic Significance (2-sided)
Male	Pearson Chi-Square	3.006[a]	8	0.934
	Likelihood Ratio	3.770	8	0.877
	Linear-by-Linear Association	0.012	1	0.912
	N of Valid Cases	193		
Female	Pearson Chi-Square	9.456[a]	8	0.305
	Likelihood Ratio	9.813	8	0.278
	Linear-by-Linear Association	0.024	1	0.878
	N of Valid Cases	70		
Total	Pearson Chi-Square	5.825[a]	8	0.667
	Likelihood Ratio	5.035	8	0.754
	Linear-by-Linear Association	0.019	1	0.892
	N of Valid Cases	263		

a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .23.
b. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .08.
c. 12 cells (80.0%) have expected count less than 5. The minimum expected count is .17.

Figure 10.35

AgeGroup * Brandimage * Gender

Crosstab

Gender:
Count

		Brandimage					
		SD	D	N	A	SA	Total
AgeGroup	Below 25	3	16	25	78	16	138
	25-50	4	10	26	60	13	113
	Above 50	1	1	3	6	1	12
Total		8	27	54	144	30	263

For Males different age groups and brand image are independent
For Females different age groups and brand image are independent

Chi-Square Tests

Gender		Value	df	Asymptotic Significance (2-sided)
Male	Pearson Chi-Square	3.682[a]	8	0.885
	Likelihood Ratio	3.674	8	0.885
	Linear-by-Linear Association	0.047	1	0.828
	N of Valid Cases	193		
Female	Pearson Chi-Square	9.471[a]	8	0.304
	Likelihood Ratio	8.666	8	0.371
	Linear-by-Linear Association	2.987	1	0.084
	N of Valid Cases	70		
Total	Pearson Chi-Square	3.176[a]	8	0.923
	Likelihood Ratio	2.863	8	0.943
	Linear-by-Linear Association	0.448	1	0.503
	N of Valid Cases	263		

a. 6 cells (40.0%) have expected count less than 5. The minimum expected count is .37.
b. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .21.
c. 11 cells (73.3%) have expected count less than 5. The minimum expected count is .17.

Figure 10.36

AgeGroup * Nutritionfacts * Gender

Crosstab

Gender:
Count

		Nutritionfacts					
		SD	D	N	A	SA	Total
AgeGroup	Below 25	5	20	34	57	22	138
	25-50	6	9	27	43	22	113
	Above 50	1	1	1	8	1	12
Total		12	30	62	114	45	263

For Males different age groups and nutrition facts are independent
For Females different age groups and nutrition facts are independent

Chi-Square Tests

Gender		Value	df	Asymptotic Significance (2-sided)
Male	Pearson Chi-Square	3.543[a]	8	0.895
	Likelihood Ratio	3.315	8	0.865
	Linear-by-Linear Association	1.622	1	0.203
	N of Valid Cases	193		
Female	Pearson Chi-Square	13.766[b]	8	0.088
	Likelihood Ratio	16.383	8	0.030
	Linear-by-Linear Association	0.240	1	0.624
	N of Valid Cases	70		
Total	Pearson Chi-Square	7.114[c]	8	0.524
	Likelihood Ratio	7.408	8	0.493
	Linear-by-Linear Association	0.631	1	0.427
	N of Valid Cases	263		

a. 4 cells (26.7%) have expected count less than 5. The minimum expected count is .55.
b. 7 cells (46.7%) have expected count less than 5. The minimum expected count is .37.
c. 11 cells (73.3%) have expected count less than 5. The minimum expected count is .17.

Figure 10.37

Conclusion

Results of our research study regarding the impact of product packaging on consumer's buying behaviour has following conclusions:

- Packaging of a product could be treated as one of the most valuable tool for a marketer and in today's marketing world it can be used greatly to impact/affect consumer's buying pattern.
- For the consumers following elements of packaging affected positively in their buying behaviour: -

  Good quality of packaging

  Brand image and value on the package

  Innovative packaging

  Eco-friendly packaging

  Shape of the packaging.
- For the consumers following elements of packaging affected negatively in their buying behaviour: -

  Higher price

  Unnecessary buying
- Typography and colour are non significant element of packaging and it hardly affects the consumer's buying behaviour.
- Since Brand value on the product package is highly significant element of packaging which are affecting consumer's buying behaviour, we understand clearly that building brand value ,trust and quality of the product is so important in reaching out to consumers.
- Since nutritional labelling is also being read a lot on the package we can clearly get an idea that people are becoming more and more aware about the macro and micro nutrients which are important in keeping them fit.

- This Research has found that different packaging cues impact and` how a product is perceived. Often the packaging is perceived to be part of the product and it can be difficult for consumers to separate the two.

- As a matter of fact, people are becoming more and more demanding; packaging has been gradually shown its important role in a way to serve consumers by providing information and delivering functions. With its different functionality to ease and to communicate with consumers, there is no doubt about increasingly important role of packaging as a strategic tool to attract consumers' attention and their perception on the product quality.

Recommendations

- We highly recommend to the marketing units to invest highly on packaging as it is really effective in reaching out to consumers and getting the product to reach their hearts.
- Also we recommend to build brand value and keep transparency in nutritional labelling of the actual product.
- The marketing units are highly recommended to use good quality of materials for packaging.
- It is finally recommended that the marketers of the industry should not consider the packaging is the solely factor for the success of any product, therefore, they should also take up other important factors of the marketing while they are launching new products or revitalize old products.
- It is also recommended to other researchers when they take up packaging then they should also consider other factors and dimensions of marketing as well ,if they think we could have left out certain factors out and that could have affected the results.