

Influence of Packaging of FMCG products on the Consumer's Purchase Decision - A Study

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ABSTRACT

Due to increasing self-service, changing consumer lifestyles, tastes and preferences, and the proliferation of the internet, the role of packaging as a tool of sales promotion and stimulator of impulsive buying behaviour is growing increasingly. Thus, packaging performs an important role in marketing, at the point of sale or at the time when a consumer is choosing from among different brands of similar products type.

For companies to create the right packaging for their products, they need to understand the consumer buying process and understand the role and the impact of packaging, as a variable, that can influence the purchase decision process. Thus, understanding the factors influence the buying behaviour and identifying which packaging elements are the most important tasks for the companies to be able to make the right decisions about packaging of their products.

This present study, in this context, was conducted keeping in view the importance of product packaging, and the impact it has on the overall purchase decision of consumers. The main objective was to determine which elements of product packaging are the most significant in influencing the consumer's buying behaviour; and to examine the factors of packaging driving the success of a brand.

This study intends to explore the relationship between consumer buying process and the dependent variables. The findings of this study might be a useful tool for all FMCG companies conscious about their brand image and focused on survival in this hypercompetitive environment.

Keywords: Purchase Decision Process, Packaging Elements, Consumer Buying Behaviour, FMCG.

INTRODUCTION:

Research Statement:

The aim of the study is to find out the effect of product packaging of FMCG products on consumer buying decision and the relative importance of the elements of packaging in the sale of FMCG products.

Primary Objectives:

1. To gather information about the perceptions a consumer towards a well-packaged product.
2. To measure the relative impact of the elements of packaging on consumers purchasing behaviour.
3. To identify the elements of packaging of FMCG products essential to attract consumers.
4. To analyse the price perception for a well-packaged FMCG and to examine the relationship, if any.

Importance of the Study:

Marketers have become increasingly conscious of the notion that product packaging has a major role to play in using differentiation strategies, especially where largely uniform perishable goods are concerned. Bulk of such advertising has invariably been executed through different media channels, but reduced budgets have known to force many managers to shift the marketing focus to point of sale communication and sales promotions.

Almost three-quarters of purchase decisions relating to FMCG products are made at the point of sale, therefore, making differentiation imperative in a market where consumers enjoy abundant choice. Furthermore, the shift towards self-service stores has meant closer contact between the consumer and the product. This increases the importance of advertising at the position that is the last and maybe the most important opportunity to influence the consumer's choice.

The importance of packaging design and the role of packaging in consumer communication and branding are growing. To achieve communication goals effectively, knowledge about consumer psychology is important so that manufacturers can understand their consumer's responses to their product's packages. Hence, this study may help companies devise the best package to grab their consumer's attention and bolster their brand's image.

LITERATURE REVIEW:

In literature, many studies have been conducted in the area of packaging. However, little is known about the impact of the consumer's perception of the package on the purchase decision regarding the same. The previous researches were not done with the aim of incorporating the direct impact of the various elements of packaging on the consumer's thought process while deciding between products that are practically un-differentiable.

Amongst the studies conducted, there seems to be no agreement on what constitutes as a element of a package. There is also a lack in clarity on the way to proceed to gauge the impact of the same, that is, research methods are not analogous.

While some researchers investigate all possible elements of package and their impact on consumer's purchase decision (Silayoi & Speece, 2004; Silayoi & Speece, 2007; Butkeviciene, Stravinskiene & Rutelione, 2008), others focus their attention on separate elements of package and their impact on consumer buying behaviour (Vila & Ampuero, 2007; Bloch, 1995).

Furthermore, some researchers investigate the impact of packaging and its elements on the consumer's overall purchase decision (Underwood et al., 2001), others – on every stage of consumer's decision making process (e.g., Butkeviciene et al., 2008).

The plethora of literature on this issue does not provide an unanimous answer concerning the impact of packaging elements on the consumer's buying behaviour: an array 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 the above mentioned, confirms the necessity to investigate this issue in detail. The aim of this paper, based on theoretical analysis of package elements and their impact on consumer's purchase decision empirically reveals the elements having an effect on consumer choice in a case of FMCG products.

RESEARCH METHODOLOGY:

Population of the study:

Our target population involves the users, deciders and buyers of FMCG products. These include people of various age groups residing across different parts of the country (and the world). However, it should be noted that a large part of the sample population belongs to Kolkata.

The deciders and the buyers include everyone. It is not unrealistic to make the assumption that everyone has, at some point, taken a decision to purchase a FMCG. Thus, all responses are relevant for the study. There has been no restriction in terms who can fill up the questionnaire, that is, no demographic has been specifically been targeted. Nor has any data been rejected for evaluation purposes.

Questionnaire Design and Data Collection:

In total, the questionnaire circulated contained 16 questions divided into two sections. The first section of the questionnaire focused on the importance and necessity of a package in a FMCG product to the respondent. The second section of the questionnaire focused on the collecting data to test the hypothesis set at the start of the study. Lastly, to assess which element of packaging had the greatest impact in the consumer's purchase decision, a multiple choice question was placed. This question had all the elements of packaging as its options, only one of which could be selected.

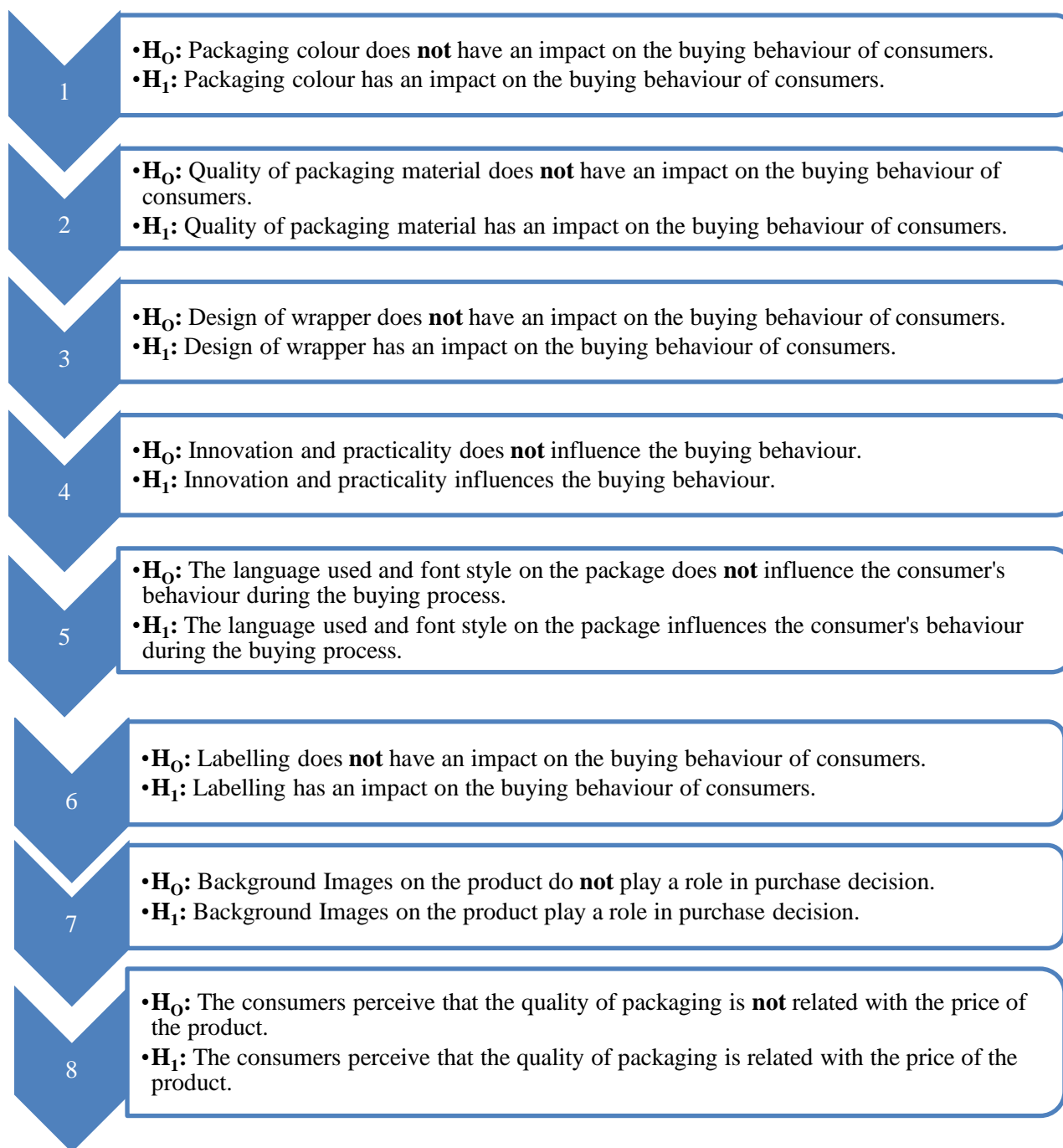
Measurement and Scaling Process:

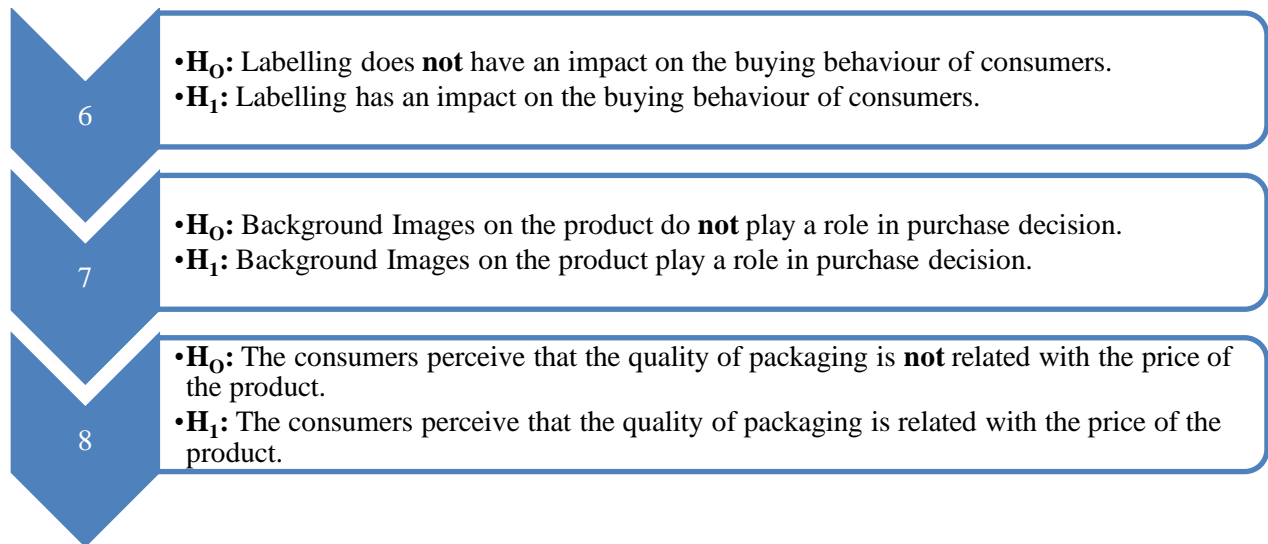
For this study, the questionnaire incorporated a Likert scale for both the sections. More specifically, an agreement scale was used where the respondents were provided with a series of statements, for which they could select – Strongly Agree, Agree, Neither Agree Nor Disagree (or Neutral), Disagree or Strongly Disagree. The options are linked to a points scale for evaluation purposes – with Strongly Disagree being rated as 1, Disagree as 2, Neutral as 3, Agree as 4, and finally Strongly Agree as 5.

Sampling Methodology:

The data was circulated on social media through the authors' accounts to reach as many people as possible, convenience sampling under non-probability sampling is applied. The reason of choosing this technique is that every individual uses FMCGs in their day-to-day activities and they know what factors trigger their purchase decision. In total, 59 responses were collected.

HYPOTHESES OF THE STUDY





Validity:

The research data collected, with respect to secondary data, has been properly referenced (given in the end) and verified before inclusion to the study. The primary data source, specifically the questionnaire, contains the required statements to effectively answer the research questions and apply suitable statistical techniques for testing. While reliability refers to the degree of trustworthiness of the measurement. Objectively, if the research is conducted by another person, the results should be similar. Since the entire study was overlooked with utmost care, there should not such defaults.

Reliability Test – Cronbach’s Alpha:

The value of Cronbach's Alpha for the independent variables is bigger than 0.7 and also positive, which shows the reliability of independent variables or predictors (Section – II).

Cronbach’s Alpha	No. of variables
0.975	8

DATA ANALYSIS & INTERPRETATION:

Descriptive Statistics:

For the given data, a tabular representation of the mode, mean, standard deviation, and the co-efficient of variation are given. Additionally, a preliminary rank table of the elements of packaging from the most important to the least important is also prepared.

Table 1: Descriptive Statistics of responses in Section – I

Statements	Mode	Mean	Standard Deviation	Coefficient of variation
1) Packaging is a necessary part of the product.	5	4.44	0.65	14.62%
2) Packaging helps in identifying the product.	5	4.52	0.70	15.52%
3) I buy a product because I like the package of any product/brand.	3	2.63	1.01	38.48%
4) Packaging sometimes misleads buyer.	4	3.90	0.79	20.39%
5) A strong brand should have a well packed product.	5	4.10	1.00	24.39%
6) Modification of packaging is necessary from time to time.	4	3.69	1.03	27.96%
7) I would change the product I purchase if I dislike the change in packaging.	4	2.16	1.00	46.26%

Inference: The coefficient of variation values is quite low that suggests a low degree of variation, that is, there is good level of agreement among the sample population.

Table 2: Descriptive Statistics of responses in Section – II

Statements	Mode	Mean	Standard Deviation	Coefficient of variation
8) Colour of packaging matters while deciding to purchase a product.	4	4.09	1.10	27.03%
9) Quality of the packaging material is important in a product.	4	4.12	1.09	26.49%
10) I prefer product packaging that has an attractive shape or design.	5	4.10	1.08	26.43%
11) I like innovative package designs which provide new ways to use the product.	5	4.31	0.87	20.12%
12) The writing style and font facilitate my purchase decision.	5	3.80	1.07	28.01%
13) The printing information (labelling) is important to me while deciding between alternatives.	4	4.13	1.04	25.22%
14) I perceive products with attractive images as better than its competitors.	5	4.07	0.94	23.08%
15) A well packaged product costs more than usual.	4	4.02	0.66	16.36%

Inference: The coefficient of variation values is quite low that suggests a low degree of variation, that is, there is good level of agreement among the sample population.

Table 3: Preliminary result showing the important of elements (Based on the last question of the questionnaire)

Element of Packaging	Frequency Recorded (%)	Mean Score (Table 2)	Importance (Ranked)
Packaging Colour	5.36%	4.09	5
Packaging Material	19.39%	4.12	3
Package (Wrapper) Design	15.05%	4.10	4
Innovations and Practicality	29.85%	4.31	1
Font Style on the Package	1.02%	3.80	7
Printed Information/ Labels	25.77%	4.13	2
Background Image	3.57%	4.07	6

Inference: The obtained results from the table above show that innovations and practicality is given the most importance in the purchase decision process, closely followed by the printed information or labels. The font style is given the least importance.

Testing of Hypotheses:

A single-sample t-test was used to analyse the impact on consumer buying behaviour as the population sample deviation is unknown.

The data presented in Table 2 (sample mean and sample standard deviation) is used to carry out testing. The population mean is set at 3 which indicates that the elements do not affect the purchase decision. The confidence level is set at 95 %, thus given us the significance level (or p-value) as 0.05. A one tailed test was selected as it was appropriate.

Table 4: Single-sample t-test results

Hypotheses	Mean Difference	t-statistic	p-value
H1: Packaging Colour	1.11	7.568	0.00001
H2: Packaging Material	1.09	7.896	0.00001
H3: Package (Wrapper) Design	1.08	7.782	0.00001
H4: Innovations & Practicality	0.87	11.63	0.00001

Hypotheses	Mean Difference	t-statistic	p-value
H5: Font Style on the Package	1.07	5.793	0.00001
H6: Printed Information/ Labels	1.04	8.332	0.00001
H7: Background Image on the Package	0.94	8.729	0.00001
H8: Well packaged perceived as expensive	0.66	11.896	0.00001

Inference: We reject the null hypotheses as the p-values are lower than the level set. The obtained results from the table above show that all the packaging elements have an impact on the buying behaviour of consumers.

Pearson’s Correlation Coefficient:

The t-statistic is taken from Table 4 to calculate the value of correlation coefficient "r".

Table 5: Pearson’s correlation coefficient results

	t	Pearson Correlation (r)	Relative rank of coefficient
Packaging Colour	7.568	0.7080	6
Packaging Material	7.896	0.7228	4
Package (Wrapper) Design	7.782	0.7178	5
Innovations & Practicality	11.63	0.8388	1
Font Style on the Package	5.793	0.6088	7
Printed Information/ Labels	8.332	0.7410	3
Background Image	8.729	0.7563	2
Well packaged perceived as expensive	11.896	0.8443	-*

*It is not considered in the rankings as it is not an element of packaging.

Inference: Almost all the values are above 0.70, which indicates that there is a strong correlation among the variables. The obtained results from the table above conclude that the packaging elements have an impact on the buying behaviour of consumers.

Spearman's Rank Correlation Coefficient:

Data is collected from Tables 3 & 5, where all the elements of packaging are ranked accordingly. The formula is applied to test the correlation between the rankings.

Table 6: Spearman's rank correlation coefficient

Element of Packaging	Rank (Table 3)	Rank (Table 5)	Diff. in Ranks (d _i)	d _i ²
Packaging Colour	5	6	- 1	1
Packaging Material	3	4	- 1	1
Package (Wrapper) Design	4	5	- 1	1
Innovations & Practicality	1	1	0	0
Font Style on the Package	7	7	0	0
Printed Information/ Labels	2	3	1	1
Background Image	6	2	4	16
Total				20

Spearman's rank correlation coefficient (r_s) = 1 - [(6*20) / 7(49 - 1)] = 0.6429

Inference: The data collected which aimed to measure the importance of elements in a package (on a scale) is consistent with the data collected which aimed the relative importance of the elements (ranked). They are positively correlated to a high degree.

FINDINGS:

Investigating peoples' perceptions about the role of packaging on consumer buying behaviour this study showed that there are various factors that influence the buying behaviour of consumers. The packaging elements represent a good means of marketing communications towards consumers, because consumers value the elements that are embodied on the package.

The research results and findings of the study are as follows:

1. Packaging is an integral marketing strategy to glamorize a product in order to attract the consumer's attention. Packaging is literally the product identity. Consumers perceive packaging as an important tool in the marketing of any product. They consider it to be a necessary part of the product. Thus, package designs are vital when it comes to brand image. Companies are now interested in packaging as a tool to increase their sales and to reduce promotional costs.
2. Packaging has been called the "silent salesman", as it informs us of the qualities and benefits that we are going to obtain if we consume a certain product. Unlike advertising exposure which can be relatively brief, packaging continues to build brand values during the extending usage of product and can drive brand equity and loyalty.
3. Peculiarity of packaging as a marketing element lies in the fact that it often accompanies the use or consumption of products and, therefore, the possibility of transmitting brand values and product characteristics increases.
4. In a standard supermarket, the typical shopper passes about 300 brands per minute. This translates into less than one-tenth of a second for a single product to get attention of the customer and spark purchase. Brand purchases are being made or broken in the "final five seconds".
5. Product identification was a strong factor that came into the purchase decision. With maximum of number of units in the sample agreeing to its strong role in breaking through the "clutter". Almost three-quarters of purchase decisions relating to such products are made at point of sale. It has become the ultimate selling proposition stimulating impulsive buying behaviour.
6. Colour is a key element of design due to the fact that it is usually vivid and memorable. The package colour can have a significant effect on consumer's ability to recognize the product. Colour perceptions vary across cultures and most of the religions are believed to have their sacred colours.
7. Pictures on the package in form of attractive situations (mountains, beaches, luxury houses and cars) can assist in triggering lifestyle aspirations. Eye-catching graphics make the product stand out on the shelf and attract the consumers.
8. High quality material will attract customers more than a low quality material. Many of the people of today want more style and uniqueness, so they seek out products with good packaging material.
9. 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. Nowadays, there are consumers that pay more attention to label information since they are more concerned with health and nutrition issues.
10. Innovative packaging may actually add value to the product in the consumer's mind if it meets a need. But its practicality is also very important for creating the added value. According to the research, it was found out that innovations & practicality in a product's packaging is the most important element. Followed, closely, by the printed information or the labelling on a package.
11. Font style on the package had an impact on the decision, though it was the least important factor as per the analysis.
12. The packaging elements have an impact on the buying behaviour of consumers; and are positively correlated with the buying behaviour. Packaging, though an important part, is not the sole consideration of the consumer's purchase decision.
13. For strong brands, the consumers expect a well-done product with the package checking in all the boxes. Modifications in packaging are not sternly demanded. But, attractive changes would surely be welcomed by the consumer; to break the monotony of looking at the same packaging at every point of purchase. Additionally, consumers tend to be brand loyal and won't instantly change their purchase decision if they dislike the change in packaging.
14. Not surprisingly, it was found out that the marketer's attempts to mislead the consumers don't go unnoticed.
15. Consumers perceived a well-packaged product to cost more than usual. This could be seen as an added value that the consumer considers while purchasing the product.

RECOMMENDATIONS:

To FMCG companies:

1. As per the findings of the research, it is highly recommended to all the FMCG companies to focus on making a useful and attractive packaging before introducing any new product in the market.
2. It is recommended that marketers do not think that packaging is the least important factor in the success of any product. They should keep in mind that the packaging is the foremost tool for attracting the consumer's and to build a perception in their minds, so it should be deeply focused on.
3. Brand is important and its strategy is considered in the units produced. Thus, it is necessary to set packaging standards and to implement them, accordingly, for better protection and promotion of a product. The brand name, logo and tagline (or motto) should be clearly visible to the consumer to make the consumer identify and differentiate it among other brands.
4. The marketers should highlight the new "innovative and practical" ways the product can be used with the packaging.
5. The information given in the label and its value have to be highlighted while promoting the product in the market. It must also be more useful technically. Basically it should describe how was it made, where it was made, when it was made, what it contains (ingredients - focus on the health aspect), how to use it etc.
6. Other elements of packaging should not be overlooked as each element has an impact on the consumer's decision process. However, priorities can be set according to the constraints under which the company is operating.
7. The product packaging should grab the attention and break through the clutter in a supermarket shelf; it should also communicate the message in an accurate, concise and crisp manner.

To other researchers:

8. It is recommended to other researchers that when they are taking packaging as a research topic they should also focus on the other marketing factors and dimensions as well.
9. Moreover, the impact of package elements on consumers purchase decisions should be evaluated depending on the consumer's involvement level, time pressure or individual characteristics of consumers.

LIMITATIONS OF THE STUDY:

1. The primary data collected has responses mainly from students living in Kolkata.
2. The scope of data collection has been limited. Access to company databases and analysis tools, would have helped bring out more elaborate answers and insightful recommendations.
3. The study could not carry out physical experimentation on test subjects to further check the recommendations finally made.

The conclusions are made without classifying the sample population and without drawing inferences on that. Additionally, secondary data has been used for refining the findings and recommendations.

CONCLUSION:

Packing and Packaging is part and parcel of human life. Modern packaging, the technology used to contain, protect, and preserve products throughout their distribution, storage and handling, and at the same time to identify them, provided instructions for their use, and promote them.

Research into packaging has found that different packaging cues affects how a product is perceived. Often the packaging is perceived to be part of the product; it can be difficult for consumer to separate the two aspects that is the element of packaging and the purchase decision.

When it comes to choosing products, we greatly rely on the visual because we are visual creatures, and that is in our nature. Almost everything in the market is coming in colourful, hygienic and suitable packaging, which not only attracted the eyes of the customer but also made its (product) shelf-life longer, safe and secure.

Marketers focus a lot of their efforts on making a useful and innovative product package. The users, deciders or purchasers (consumers), in general, are well aware of the importance of packaging. It is seen that they want it to be attractive, easy to handle, differentiable from competitive products. It is known that, people are becoming more and more demanding; they would like the packets that could have alternative new ways to be used. Innovations in packaging technologies and design are transforming brands, and enabling new consumer benefits, and enriching lives. Packaging is no longer a simple technology. It has now, developed as a very complicated art with a meaning and purpose.

REFERENCES:

- Kotler, P. and Keller, K.. (2011). *Marketing Management* (14th edition). London: Pearson Education.
- Mowen, J. C. & M. Minor (2001). *Consumer Behavior: A Framework*, USA: Prentice Hall.
- Underwood, R. L., (2003). The Communicative Power of Product Packaging: Creating Brand Identity via Lived and Mediated Experience. *Journal of Marketing Theory and Practice*, winter, 62-76.
- Underwood, R. L., Klein, N. M., & Burke, R. R. (2001). Packaging communication: Intentional Effects of Product Imagery. *Journal of Product & Brand Management*, 10(7), 403 - 422.
- P. Silayoi & M. Speece (2007). The Importance of Packaging Attributes: A Conjoint Analysis Approach, *European Journal of Marketing*, 41(11-12), 1495-1517.
- P. Silayoi & M. Speece (2004). Packaging and purchase decisions: an exploratory study on the impact of involvement level and time pressure, *British Food Journal*, 106(8), 607 - 628.
- Bloch, P.H. (1995). Seeking the Ideal Form: Product Design and Consumer Response. *Journal of Marketing*, 59 (July), 16-29.
- Aaker, D.A. (1996). Measuring brand equity across products and markets, *California Management Review* 38(3), 102–121.
- Rundh, B. (2005). The multi-faceted dimension of packaging. *British Food Journal*, 107 (9), 670-684.
- V. Butkeviciene, J. Stravinskiene and A. Rutelione (2008). Impact of consumer package communication on consumer decision making process. *Inzinerine Ekonomika-Engineering Economics* (1), 57-65.
- Hill, T. (2005). Packaging of children, breakfast cereal: manufacturers and children. *British Food Journal* , 104, 766-777.
- N. Vila & O. Ampuero (2007). The role of packaging in positioning an orange juice. *Journal of Food Products Marketing*, 23(2), 100 - 112.
