A STUDY ON IMPACT OF PRODUCT PACKAGING ON CONSUMER

BUYING BEHAVIOUR WITH REFERENCE TO COIMBATORE CITY

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ABSTRACT

As E-commerce is year-by-year growing its proportions in the total sales in retail, the importance of packaging is also increasing. Packaging has been defined as "an activity which is concerned with protection, economy, convenience and promotional considerations". Packaging is the technology of enclosing or protecting products for distribution, storage, sale, and use. Packaging is a key part of the marketing plan for any business that makes or sells products. It also influences the consumer buying habit. Packaging advancements in the early 20th century increased processing efficiency and thus leads to organizations improved performance and functionality. Package design and development are often thought of as an integral part of the new product development process. This study portrays the impact of product packaging on consumer buying behavior with reference to Coimbatore city, for which the sample size has been chosen is 100.

KEYWORDS: Protection, Economy, Convenience and Promotional Considerations

Original Article

INTRODUCTION TO THE STUDY

Consumer behavior is a blend of Economic, Technological, Political, Cultural, Demographic and natural factors as well as his own characteristics which are reflected by his attitude, motivation, perception, personality, knowledge and lifestyle. Marketers can rationalize their existence only when they are able to understand consumer behavior. Consumers often make snap judgments when making purchase. How a product is packaged may be the deciding factor of whether they make the purchase or not. **According to Business Insider, First impressions generally talk about making subsequent judgments based on quick information**. A brand is represented by the product packaging, the same as one's office, employees, and websites and so on. Packaging represents brands promise to deliver a quality experience.. A product's package can be the selling point for many consumers by delivering a sense of quality while also reflecting the product's brand image. It is critical in retail sales, where the right packaging design can attract the consumer's eye and make the product stand out next to a rack of the competitor's product. Effective packaging design can draw consumer attention, resulting more time looking at attractive packaging when making purchase decisions. Research suggests that at least a third of product decision making is based on packaging, along with personal preferences.

OBJECTIVES OF THE STUDY

- To know the tastes and preferences of consumer towards the packaging style of various products.

- To find out the expectations of consumer regarding the package of food products.

- To identify the impact of packaging style in decision- making / buying behavior of consumer and to offer suitable suggestions regarding packaging methods to the company products.

REVIEW OF LITERATURE

Ulrich et.al., (2010), studied package design is an integral part of projecting a brand image, which is sometimes designed to convey images of high quality, while at other times signaling affordable prices.

Rita Kuvykaite (2009), studied 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 works as a tool for differentiation, i.e. helps consumers to choose the product from wide range of similar products, and stimulates customers buying behavior. 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 behavior became a relevant issue.

Liang (2008) studied that packaging as a good tool for the product. According to the University of Halsted School, Packaging is useful for practical purposes as well as for communication of those information which is on the product. That not serves a functional purpose but it will also use as a mean of the communication of the information the products and brand character. Packaging must be functional, it must be protect the products in storage, transferring and also in used. Another function is to given the customers the ease access and used on the purpose of convenience.

RESEARCH METHODOLOGY

Area chosen for the present study is Coimbatore City as it has a high residential density. It is an industrial town and second largest city in the state of Tamil Nadu. Sample size indicates the number of respondents involved in the study. For the current study the sample size chosen is 100. Proportionate sampling has been chosen for this study. Primary Data is the data observed or collected directly from first-hand experience and it is the data originally obtained through the direct efforts of the researcher through surveys, interviews and direct observation. The Primary data for the study is collected through interview schedule. Interview schedule is assisted by the questionnaire which is a list of a research or survey questions asked to respondents and designed to extract specific information. Apart from primary data this research is based on books like periodical journals, documentations and other sources like internet, car manufacturers' websites, etc.

STATISTICAL TOOLS USED

The x^2 test (pronounced as chi-square test) is one of the simplest and most widely used non-parametric tests in statistical work. It is used to make rigid assumption about the distribution of the population from which samples are being drawn and **Analysis of variance** (**ANOVA**) is a collection of statistical models used in order to analyze the differences among group means and their associated procedures (such as "variation" among and between groups), developed by R. A. Fisher.

ANALYSIS AND INTERPRETATION

Table 1: Personal Profile of the Respondents

S. No	Particulars		No of Respondents	Percentage
1	Gender	Male	44	44
		Female	56	56
		Total	**100**	**100**
2	Age	Below 30 years	54	54
		30-40 years	22	22
		41-50 years	10	10
		Above 50 years	14	14
		Total	**100**	**100**
3	Educational Qualification	School Education	14	14
		Collegiate education	84	84
		Illiterate	2	2
		Total	**100**	**100**
4	Occupational Status	Business/Profession	12	12
		Government employee	8	8
		Private employee	34	34
		Agriculturist	16	16
		Others	30	30
		Total	**100**	**100**

Source: Primary data

While analyzing the personal profile of the respondents, from the above table it is evident that from the sample size 100, 44% of the respondents are male and 56% of the respondents are female and 54% of respondents are in the age group of below 30 years, 22% of the respondents are in the age group of 30-40 years, 10% of the respondents are in the age group of 41-50 years and 14% of the respondents are in the age group of above 50 years and, 14% of the respondents have school education,84% of the respondents have collegiate education, and 2% of the respondents are illiterate, 12% of the respondents are professionals or doing their own business, 34% are private employees, 8% are government employee, 16% are agriculturist 30% are students and house wives and others.

It can be inferred that majority (56%) of the respondents are female, majority (54%) of the respondents are in the age group of below 30 years, and majority (84%) of the respondents are having Collegiate Education and most (34%) of the respondents are private employees.

Table 2: Place of Buying Products

Buying Provisions	No of Respondents	Percentage (%)
Departmental store	24	24
Supermarkets	16	16
Retail markets	36	36
Malls	24	24
Total	**100**	**100**

Source: Primary Data

Table 2 shows the place of product buying of the respondents. 24% of the respondents buy the products in departmental stores, 16% in supermarkets, 36% in retail markets, and 24% of in malls. It is the inferred that majority (36%) of the respondents buy the products in retail markets.

Table 3: Perception of the Respondents about Need of Packaged Products

Particulars	No of Respondents	Percentage (%)
For all products	40	40
For some type of products	38	38
Not preferred at all	2	2
For medical products	20	20
Total	**100**	**100**

Source: Primary Data

The above table shows that 40% of respondents suggest that packaging is safe and it is needed for all products, 38% suggest only for some type of products, 2% not preferred at all and 20% of respondents suggest for medical products. It is inferred the majority (40%) of the respondents choose for all products in packaging preference.

Table 4: Reason to Buy Packaged Products

Reasons	No of Respondents	Percentage (%)
Hygiene	18	18
Quality	14	14
Better	12	12
Reliability	16	16
Safety	40	40
Total	**100**	**100**

Source: Primary Data

From the above table it is clear that 18% of the respondents buy packaged products because of hygiene factor, 14% of the respondents go for quality and12% of the respondents go for betterment of the products, 16% of the respondents say for reliability and 40% of the respondents buy packaged products for the safety of the products. It is inferred that the majority (40%) of the respondents buy packaged products for product safety.

Table 5: Rank Given by the Respondents for Elements of Packaging

Factors	I Rank	WS	II Rank	WS	III Rank	WS	IV Rank	WS	V Rank	WS	VI Rank	WS	VII Rank	WS	VIII Rank	WS	IX Rank	WS	X Rank	WS	TWS	Rank
Expiry Date	14	140	42	378	26	208	8	56	4	24	2	10	2	8	3	6	0	0	0	0	830	I
MRP	16	160	12	108	30	240	22	154	4	24	8	40	4	16	2	6	0	0	2	2	750	IV
Directions to Use	0	0	0	0	0	0	0	0	6	36	4	20	14	56	20	60	24	48	32	32	252	X
Warning	26	260	18	162	16	128	10	70	14	84	6	30	2	8	4	12	4	8	0	0	762	III
Ingredients of the Contents	2	20	0	0	2	16	6	42	16	96	12	60	16	64	16	48	18	36	12	12	394	VII
Weight	30	300	14	126	12	96	30	210	8	48	2	10	4	16	0	0	0	0	0	0	806	II
Consumer Line Address	0	0	0	0	0	0	0	0	12	72	6	30	10	40	14	42	26	52	32	32	268	IX
Nutritional Labeling	0	0	0	0	0	0	4	28	14	84	12	60	20	80	24	72	16	32	10	10	366	VIII
Manufacturer Logo	0	0	6	54	4	32	12	84	8	48	38	190	14	56	6	18	8	16	4	4	502	VI
Seal	12	120	8	72	10	80	8	56	14	84	10	50	14	56	12	36	4	8	8	8	570	V

Source: Primary Data

INTERPRETATION

Note

- First rank given a score of 10, II rank score of 9, III rank score of 8, IV rank score of 7, V rank score of 6, VI rank score of 5, VII rank score of 4, VIII rank score of 3, IX rank score of 2, X rank score of 1.

- WS denotes weighted scores.

- Ranking was done on the basis of Total Weighted Scores (TWS).

In order to find out the basis of selection of package among respondents ten factors have been considered such as Manufactured date/ Expiry date, MRP, Directions to use, Warning, Ingredients of the content, Weight/Quality, Consumer line address, Nutritional labeling, Manufacturing logo and Seal. Respondents were asked to rank all the above mentioned factors. The data collected have been presented in the table 5. It is clear from the table that the large number of respondents has given first rank to Manufactured date/ Expiry date, second rank to Weight/ Quality, third rank to Warning, fourth rank to MRP, fifth rank to Seal, sixth rank to Manufacturer logo, seventh rank to Ingredients of the content, eighth rank to Nutritional labeling, ninth rank to Consumer line address, tenth rank to Directions to use.

Table 6: Respondents' Preference in Packing Style

Particulars	No of Respondents	Percentage (%)
Color	14	14
Material	20	20
Wrapper design	24	24
Printed Information	14	14
Quality	28	28
Total	**100**	**100**

Source: Primary Data

From table 6 it is clear that 14% of the respondents prefer color in packaging style, 20% of respondents prefer material, 24% of respondents prefer wrapper design, 14% of respondents prefer printed information and 28% of respondents prefer quality in packaging style. It is inferred that the majority (28%) of the respondents prefer quality in packaging style.

Table 7: Opinion about Significant Role of Packaged Product

Particulars	No of Respondents	Percentage (%)
Yes	72	72
No	28	28
Total	**100**	**100**

Source: Primary Data

The respondents were asked whether product packaging plays a significant role in their buying decision. Table 7 shows that 28% of the respondents said No and 72% of the respondents responded yes. It is inferred the majority (72%) of the respondents feel that packaging plays a significant role in their buying decision.

STATISTICAL ANALYSIS

Analysis of Variance – One Way Classification Model

Analysis of variance is used to test the effect of independent factors on response variable of interest. Let us take the hypothesis that there is no significant difference between respondent's gender and factors preferred in packaged product.

Table 8: Respondents Gender and their Preference on Packaging Style

Gender	Color	Material	Wrapper Design	Printed Information	Quality	Total
Male	4	6	16	4	14	44
Female	10	14	10	10	12	56
Total	**14**	**20**	**26**	**14**	**26**	**100**

Applying analysis of variance technique, we get

Table 9: Anova One Way Classification Table

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	Ratio of f
Between samples	72	4	18	1.022
Within samples	88	5	17.06	

The table value for degrees of freedom are 4 and 5, at 5% level of significance is 2.87. The calculated value of **f** is less than the table value. Hence the Hypothesis is accepted and it can be found that the difference between the respondent's gender and factors preferred in packaged product is not significant.

Chi-Square Test

Chi-Square tool is applied on assuming the null hypothesis that education qualification of the respondents affects their opinion about relevancy of packaging style of the product and their buying behavior.

The hypothesis is tested by Chi-Square as given below:

Table 10: Educational Qualification and Opinion about Significant Role of Packaged Product

Role of Packaging	School Education	Collegiate	Illiterate	Total
Yes	8	64	Nil	72
No	6	20	2	28
Total	**14**	**84**	**2**	**100**

Source: Primary data

Applying Chi-Square Test

Table 11: Educational Qualification and Opinion about Significant Role of Packaged Product

χ^2 value	Degrees of Freedom	Table Value	Significance
64.69	4	5.99	NS

Level of significance: 5%

Since the calculated value of Chi-Square (64.69) is higher than the table value (5.99) the null hypothesis is rejected and it can be concluded that education qualification of the respondents and the opinion of the respondents about packaging style of the products has no relation.

SUGGESTIONS AND CONCLUSIONS

From the above findings a significant amount of suggestions can be drawn that the consumer prefers packed products. From the overall study it is clear that packaging style of a product affect the buying behavior, irrespective of the range of the education qualification. Eco-Friendly packs are not available in all places so it is necessary to improve the availability of eco-friendly packaged products. The finding of our research packaging role and its influence on consumer buying behavior shows the following results. From the research it is find out that packaging are the important elements which highly influence the consumer buying behavior. Packaging describe information about product like where it was made, when it was made, what it contains, and how it to use etc. The package elements are the most important factor to influence the consumer's purchase decision.

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