An Impact Study of Food Product Packaging on Consumer Buying Behaviour: A Study Premise to Himachal Pradesh-India

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Abstract

Packaging is the prime force to provide information to the consumer and should satisfy legal requirements for product identification, nutritional value, ingredient declaration, net weight, and manufacturer information. A package is the face of a product and often is the only product exposure consumers experience prior to purchase. Consequently, distinctive or innovative packaging can boost sales in a competitive environment. The concerned study has analyzed the consumer buying behaviour of food packaging product and has examined the customer preference to buy different food products. It has also analyzed the reasons of customer preferences over the commonly preferred food product brands in the market. The present investigation was carried out with 100 respondents from Mandi District of Himachal Pradesh. Convenience sampling technique was used for the present study for collection of data. The study was conducted by using both Primary and Secondary data. A structured questionnaire was prepared for the present study. The primary data for the present study was collected with the help of questionnaire. The secondary data for the present study was collected from journals, magazines, research articles, newspapers, and website. Findings revealed that the impact of packaging and its elements on consumer's purchase decision is quite significant in respect to the consumer's varied choice. For this purpose, the Package's elements were identified on the basis of its graphics quality, color, size, form, and material of packaging being used on the product.

1. Introduction

Consumer behaviour is the study of individuals, groups, or organizations and the processes they use to select, secure, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society. It blends elements from psychology, sociology understand the buyer's decision making process, both individually and in groups. It studies characteristics of individual consumers such as demographics and behavioural variables in an attempt to understand people's wants. It also tries to assess influences on the consumer from groups such as family, friends, reference groups, society in general. Customer behaviour study is based on consumer buying behaviour, with the customer playing the three distinct roles of user, payer and buyer (Vijayalakshmi and Mahalakshmi, 2013). Research has shown that consumer behaviour is difficult to predict, even for experts in the field. Relationship marketing is an influential asset for customer behaviour analysis as it has a keen interest in the re-discovery of the true meaning of marketing through the re-affirmation of the importance of the customer or buyer. A greater importance is also placed on consumer retention, customer relationship management, personalisation,

customisation and one-to-one marketing. Social functions can be categorized into social choice and welfare functions (Chitra, 2014). The goal of food packaging is to contain food in a cost-effective way that satisfies industry requirements and consumer desires, maintains food safety, and minimizes environmental impact (Marsh and Bugusu, 2007). Packages and labels communicate how to use, transport, recycle, or dispose-off the package or product. Some types of information are required by governments. Packaging also provides information to the consumer. For example, package labelling satisfies legal requirements for product identification, nutritional value, ingredient declaration, net weight, and manufacturer information. Additionally, the package conveys important information about the product such as cooking instructions, brand identification. The packaging and labels can be used by marketers to encourage potential buyers to purchase the product(Renaud, 2007). Package design has been an important and constantly evolving phenomenon for several decades. Marketing communications and graphic design are applied to the surface of the package and the point of sale display (Arora, 2009). Colour plays an important role in a potential customer's decision making process, certain

colours set different moods and can help to draw attention. Commodity packaging is an important factor to influence consumer psychology, particularly in the food industry. The visual stimulation of food packaging leads consumer to produce taste reaction. So good or bad packaging directly influences the product sales (Ramasamy et al., 2005). The font style of packaging grabs customer attraction. The up gradations of IT technology have supported this feature well 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 an innovative font style combination (Rettie and Brewer, 2000). 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 (Sony, 2008). 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 behavior and innovation of packaging (Sharma, 2008). Keeping in view the investigation was carried out on "An impact study of food product packaging on consumer buying behaviour : A study premise to Himachal Pradesh–India.

2. Materials and Methods

The descriptive research design was adopted for the concerned research study. A sample size of 100 respondents were taken from Mandi District of Himachal Pradesh, including respondents of different demographic status were selected for the present study. Convenience sampling technique was used for the present study for collection of data. The study was conducted by using both Primary and Secondary data. The primary data for the present study was collected with the help of questionnaire. The secondary data for the present study was collected from journals, magazines, research articles, newspapers, and website. Simple mathematical and statistical tools, Percentage Method and Total Weightage Score method was used to analyze the collected data. Total Weightage Score Method is a method in which we have to provide different weights according to their importance and multiply the values of the items (X) by the weights (W) as provided. Then add all the values to obtain the total weights of all the items and the one which get highest score will get the first rank and the one which get the lowest score will get the lowest rank. The concerned research paper was initiated with the key objectives, to analyze the factors influencing buying behaviour of Food Products on account of its packaging, to determine the impact of packaging on customer buying behaviour and to investigate the reasons for brand preference with respect to packaging.

3. Results and Discussion

3.1. Age status of the respondents

It was observed from the Table 1 that largely the respondents constituted in the age category of 20-30 years (37%), followed by 25% in 30-40 years, 22% in the category below 20 years. However, only16% respondents were in the age category of above 40 years. Therefore it concluded that respondents are of 20-30 age groups interesting to purchased packaged food products.

Table 1: Age status of the respondents

Age (years)	No. of Respondents
Below 20	22
20-30	37
30-40	25
Above 40	16
Total	100

3.2. Gender status of the respondents

From the Table 2 in reference to gender status of the respondents 55% were male and 45% were female. Hence it concluded that the majority of respondents are male gender.

Table 2 : Gender status of the respondents

Gender	No. of respondents
Male	55
Female	45
Total	100

3.3. Occupational status of the respondents

It is revealed from Table 3 that among the total respondents, 60% are student, followed by 18% were businessmen, whereas 11% respondents were self-employed and 11% were housewife. Hence respondents are literate and have a prior knowledge of packaged products and also aware about the packaging factor.

Table 3: Occupational status of the respondents

Occupation	No. of respondents
Student	60
Household/unemployed	11
Businessmen	18
Self-employed	11
Total	100

3.4. Income status of the respondents

It was observed from the Table 4 that 52% respondents were in 16000–24000 income category, followed by 34% in above 24000 income category, 10% respondents in 8000–16000 income category. However, 4% respondents were in below

8000 income category.

3.5. Respondents' preference for packaged food products

Table 4: Income Status of the respondents

Family income (₹ month^{-1})	No. of respondents
Below 8000	4
8000–16000	10
16000–24000	52
Above 24000	34
Total	100

It was observed from the Table 5 that 100% respondents were prefers packaged food products for daily needs and other purpose.

3.6. Preferred reasons packaged food products

Table 5: Respondents' preference for packaged food products

Preference	No. of respondents
Yes	100
No	0
Total	100

The data presented in Table 6 reveals that 36% respondents preferred food Product for ethical reason, followed by 30% respondents preferred for Taste, 36% respondents Preferred for quality whereas 14% respondents preferred Food product for Peace of mind. This finding was found to be similar with the study of Ramasamy et al., 2005. Therefore, it was concluded that quality is most important factor for prefer packaged products as compared to taste.

Table 6: Preferred reasons packaged food products

Reason	No. of respondents
Ethical reason	4
Taste	10
Quality of product	52
Peace of mind	34
Total	100

3.7. Important Factors for choosing packaged Food Products

Table 7 shows that 37% respondents were choose Food Products by checking Nutritional Information, followed by 27% respondents were choosing on the basis of Brand Image. 22% respondents were choosing Food Products for Flavour whereas 14% respondents were prefer products by instruction for using product. This finding also matched with the study of Prathiraja and Ariyawardana, 2003. Therefore, it concludes that most of respondents purchase packaged products on the

basis of nutritional information as compared to brand image of products.

Table 7: Important factors for choosing packaged food products

Factor	No. of respondents
Nutritional information	37
Brand image	27
Flavour	22
Instruction for use	14
Total	100

3.8. Significance level of factors associated with packaging of food products

From the Table 8 it is clearly indicated from the below stated results analyzed by using Total weightage score method, reveals that price is the most important factor pertained to packaging for food products, followed by material of packaging. However, the shape, colour, type and even size of packaging have not been resulted as significant factors for packaging. Similar results were found by Rex and Antonio, 2003. Thus, it may have been stated that companies must focus on the kind of material used in the packaging for food products and the brand name and pricing should also be clearly revealed on the packaging as well.

Table 8: Significance Level of factors associated with Packaging of food products

Packaging factor	Significance level (Response and weight)					
	VS	S_1	DM	I_2	TWS	R
Price	80	20	0	0	180*	I
Brand	70	23	7	0	156	III
Material of packaging	65	35	0	0	165	II
Colour of packaging	18	55	22	5	59	VI
Shape of packaging	30	32	28	10	44	VII
Size of packaging	52	15	23	10	76	IV
Type of opening	46	23	16	15	69	V

VS: Very significant (2); S_1: Significant (1); DM: Doesn't matter (-1); I_2: Insignificant (-2); TWS: Total weightage score; R: Rank; *80*2+20*1+0*-1+0*-2=180

3.9. Preferential reason for using distinctive kind of Packaging

It is clearly observed from the Table 9 that consumers largely preferred tin can as the most preferred choice for food products, followed by plastic packaging. However, aluminium packaging is almost negatively preferred by large number of respondents, followed by foil packaging as well. This finding also matched with the study of Sharma, 2008. Thus, it may have been suggested that food product companies must prefer

over tin can packaging to provide an influential promotion and look to their products.

Table 9: Preferential reason for using distinctive kind of Packaging

Packaging kind	Preferential criteria (Response and weight)					
	LVM	L_1	D_1	MVM	TWS	R
Plastic Packaging	35	25	20	20	35*	II
Tin Can	25	40	25	10	45	I
Aluminium Can	15	10	45	30	-65	IV
Foil Packaging	25	25	10	40	-15	III

LVM: Like very much (2); L_1: Like (1); D_1: Dislike (-1); DVM: Dislike very much (-2); TWS: Total weightage score; R: Rank; *35*2+25*1+20*-1+20*-2=35

3.10. Rank analysis for the distinctive reason for brand preference

The data presented in Table 10 showed that total weightage score method consumers largely preferred Quality as most preferred choice for Brand Preferences, followed by Social Value and Brand Loyalty. Self appearance and reliability and believability is less preferred by large number of respondents. Similar results were found by Nandagopal and Chinnaiyan, 2003; Aaker, 2000. Thus, it may have been stated that companies must focus on product self appearance.

Table 10: RANK analysis for the distinctive reason for brand preference

Reason for Brand preference	Rank (Response and weight)						
	I(5)	II(4)	III(3)	IV(2)	V(1)	TWS	R
Quality	47	21	22	10	0	405*	I
Social value)	31	41	20	5	3	396	II
Brand loyalty	19	29	33	11	8	340	III
Self appearance	29	18	23	20	10	336	IV
Reliability and believability	21	30	19	10	20	322	V

TW:Total weightage scor; R:Rank; *47*5+21*4+22*3+10*2+0*5=405

3.11. Level of Buying Behaviour in reference to the Packaging Information

From the Table 11 it is clearly observed that consumers largely preferred Basic information products, followed by Kind of packaging, Quality and Nutrition Value. Whereas Social value of packaging for information are largely preferred by customers as compared to Brand logo appearance. This finding matched with the study of John, 2000 and Moskowitz, 2009. Thus, it may have been suggest that companies must improve

Brand logo for more promotion of product.

Table 11: Level of buying behaviour in reference to the packaging information

Packaging kind	Level of buying behaviour (Response and weight)			Total weightage score	Rank
	High (3)	Moderate (2)	Low (1)		
Basic information	87 (261)	13 (26)	0 (0)	287*	I
Kind of packaging and quality	79 (237)	15 (30)	6 (6)	273	II
Nutrition value	52 (156)	42 (84)	6 (6)	246	III
Brand logo appearance	31 (93)	46 (92)	23 (23)	208	V
Social value of packaging	28 (84)	53 (106)	19 (19)	209	IV

87*3+13*2+0*0=287

3.12. Influencing level of elementary Packaging factors on the Buying Behaviour

It is clearly observed from the Table 12 that consumers largely preferred Quality based products, followed by Brand appearance and Information based products. Whereas colors, graphics, attractiveness and brand ambassadors appearance have been not resulted as influencing level or packaging factor. This finding was found to be similar with the study of Liang, 2008. Thus, it may have been advice that companies must focus on Brand Ambassadors Appearance and Attractiveness of the products.

Table 12: Influencing level of elementary packaging factors on the buying behaviour

Packaging kind	ILBB			Total weightage score	Rank
	HI	AI	LI		
Information	79	12	9	270*	II
Attractiveness	24	58	18	206	V
Quality material used	78	22	0	278	I
Brand appearance	64	24	12	252	III
Brand ambassadors appearance	29	37	34	195	VI
Colours and graphics	48	36	16	232	IV

ILBB: Influencing Level on Buying Behaviour (Response and weight); HI: Highly Influencive (3); AI: Averagely Influencive (2); LI: Least Influencive (1); 87*3+13*2+0*0=287

4. Conclusion

The brand is considered as the most important element of packaging. Study also indicated that packaging factor play a significant role associated with food products. Mostly respondent preferred tin can as the most preferred choice for food products. In reference to buying behaviour of respondents for Food Product packaging, consumers largely preferred Quality and Nutritive Value based products, basic information products, followed by Brand appearance and Kind of packaging.

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