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An Empirical Study On The Impact Of Innovative Packaging On Consumer Behaviour In The Instant Food Industry

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ABSTRACT

The evolution in the eating habits in the mankind has revolutionised the food industry. Thus giving rise to various inventions in the food and its packing styles. This constant changes have posed as a major challenge for the instant food marketers and forced them to bring out new methods of packaging like zip-lock covers, reusable containers and bio based smart packaging. The main focus of the marketers has been to provide quality food products and increased consumability of their products. This review highlights impact of these recent innovations in food packaging, that is the shift from conventional packing materials to bio-based and smart alternative packaging systems on the consumer behaviour. This study identifies challenges, such as regulatory barriers and technological limitations in the instant food packaging sector which is consistently aiming for more efficient, safer, and environmentally sustainable packaging solutions which has been regarded as the major influencing factor in the consumer behaviour in the instant food industry. The most dramatic change is the change in consumer demand preferences. Hence, an attempt has been made to analyse the influence of modern or smart packaging on consumer purchasing of the instant food products.

Key Words: Environmentally sustainable products, Consumer behavior, Smart packaging, Instant food products.

INTRODUCTION

Packaging is fundamentally a process integrated with manufacturing with an objective of protecting food, ensuring that products retain their sensory and nutritional qualities until it reaches the end-user consumers. This underscores the importance of developing new packaging solutions that focuses on the market demands while coping with the growing environmental challenges.

Food is the basic need of mankind. Food promotes health and is the first basic need for all living creatures. Only when need of the food gets satisfied man moves in search of other needs. The discovery of fire marked a turning point in the process of civilization and man has learned to cook food. During the course of time, the man changed his food habits according to his taste, experience and availability of food materials and changing sessions of the year.

Instant food can be termed as “foods that have undergone major processing by the manufacturer, such that they require little or no secondary processing and cooking before consumption”. Food packaging may serve various functions, from physical product protection against mechanical impacts and microbiological contamination to ensuring an extended shelf life through barriers against oxygen, light, and moisture. Additionally, packaging is an essential means of communication with consumers, providing information about the product, such as ingredients, usage instructions, and expiration dates, and serving as a platform for marketing strategies. The increasing money spent on advertisement make the consumer to be aware of the latest brands in the market. The easy availability is to be ensured by proper distribution in

almost all retail outlets, departmental stores and super markets. People can purchase their preferred brands from such shops. Thus, the Instant food marketers should ensure the proper marketing mix of the product, price, promotion and place to be offered with several benefits to the Indian consumers. The choice of the proper and suitable packaging ensures the above objective of the modern marketer. Smart Packaging makes a marketer smart and trendy in the market.

STATEMENT OF THE PROBLEM

Historically, cardboard, paper, glass and plastic have been predominantly used as food packaging materials. While cardboard and paper are recyclable, they face limitations regarding moisture and gas barriers, which are important for preserving many types of food. On the other hand, plastic offers versatile properties such as lightness, strength, and flexibility, making it the standard material of choice for various packaging applications. However, the high stability of these materials also makes them resistant to natural degradation, leading to their accumulation and causing environmental problems.

Given this dynamic scenario, the present study aims to analyze recent advancements and emerging trends in food packaging, focusing on impact of packaging on the consumer behaviour towards purchase of instant packed food products. This study evaluates the functional properties, environmental impacts, economic implications, and the role of intelligent technologies in packaging innovations. It also identifies key challenges and opportunities for large-scale adoption in the food industry. Understanding these trends can guide future research and technological innovations and assist policymakers and industries in making informed decisions which are fundamental for developing and implementing new packaging solutions that meet the demands of a global market in the food industry.

OBJECTIVES OF THE STUDY

- To study the consumer opinions and preferences towards purchase of instant packed food products.
- To ascertain the level of impact of packaging in purchase of the instant packed food products.

METHODOLOGY OF THE STUDY

The study is based on primary data; the source of data lies with the respondents of the study. A sample size consists of 300 respondents, purchasing the instant packed food products. The sample size is selected by adapting convenient random sampling technique.

TOOLS FOR COLLECTION OF DATA

Interview schedule is the major tool used for collecting the primary data from the respondents. The statistical package for social sciences (SPSS version 10.0) tools are used for the purpose of analysis of this study such as:

- a. Chi square Test
- b. Anova Test

Innovative Packaging

The modern packaging of the food products is the utilization of the bio-based materials. bio-based packaging creates lightweight, durable, and flexible solutions that minimize waste, protect products during transit, and are easier to recycle or compost. These materials are valuable for food packaging in the food industry, as they offer significant potentiality to reduce the environmental impact associated with plastic waste. Their biodegradability and sustainability may help minimize pollution and carbon effluences, making them an attractive choice for brands committed to sustainability. These materials are also applied in food product packaging, where moisture protection and consumability of the product demand for eco-friendlier materials. The smart packaging reflects the adoption of bio-based alternatives in food products enabling durability and efficiency in protecting them. These composites are formed by combining bio-based polymers with natural fibres, such as coconut, bamboo, and sisal fibres. The evolution of active packaging has led to the development of innovative solutions to extend the shelf life of perishable food products while maintaining their microbiological and sensory quality.

Analysis of the Impact of Innovative Packaging on Consumer Behaviour in the Instant Food industry

Hypothesis1:

The personal factors of the respondents have no significant influence over their preferences of instant packed food products.

Table1: The relationship of the personal factors of the respondents over their preferences towards the purchase of the instant food products

S- Significant at 5 % level, NS- Not Significant

Inference: It is understood from the above table that the hypothesis is rejected in all the cases except one case viz., the gender of the respondents with their preferences of instant packed food products. It is concluded that there is significant relationship between the other personal factors like age, educational level, Occupation, monthly income, size of the family and their preferences of instant packed food products. Gender alone has no significant influence over the preferences of instant packed food products. Therefore it could be concluded that the personal factors have a significant impact on the consumer preferences

S. No.	Personal factors	Chi-square value	Table value	Inference
1	Gender of the respondents	1.46	7.81	NS
2	Age of the respondents	30.76	21.00	S
3	Educational level	8.97	19.90	NS
4	Occupational status	26.53	25.00	S
5	Monthly Income	25.09	12.60	S
6	Size of the family	17.27	16.90	S

Hypothesis 2: The personal factors of the respondents have no impact in purchase of the instant packed food about instant products.

Table 2 : The relationship of the personal factors of the respondents over their preferences towards the purchase of the instant food products

S- Significant at 5 % level, NS- Not Significant

Inference: It is understood from the above table that the hypothesis is accepted in the cases of gender and educational level and other cases the hypothesis is rejected. It is concluded that the gender, educational level has no significant influence over the purchase of the instant food products.

Hypothesis 3: There is no significance relationship between Packaging of the products and amount spent for purchase by respondents.

Table 3: The relationship between the Packaging of the products and amount spent for purchase by respondents.

S. No.	Personal factors	Chi-square value	Table value	Inference
1	Gender of the respondents	2.52	9.49	NS
2	Age of the respondents	111.93	26.30	S
3	Educational level	44.26	21.00	S
4	Occupational status	107.19	36.40	S
5	Monthly Income	79.55	26.30	S
6	Size of the family	55.57	21.00	S
Source of variation		Sum of Square	Degree of freedom	Mean Square
Between groups		52.48	3	17.49
Within groups		1385.24	296	4.68
Total		1437.72	299	

Variance ratio of F = 3.738

Inference: The table value of is 2.6049. The calculated value of F is more than the table value. Hence, we reject the hypothesis i.e., the Packaging of the products has a significant influence on the amount spent for purchase by respondents.

LIMITATION OF THE STUDY: The study is limited to area of Coimbatore City only, due to time constrained only 300 respondents have been covered and as the method convenient sampling is used the findings cannot be generalized.

SUGGESTIONS

On the basis of results of the study, the following recommendations are made.

- Unlike other products, hygienic aspect is more important for food products. The packed food is liable for spoilage and decay soon. Hence adequate care is to be taken to ensure the hygienic aspect. This is a prominent factor in the preference and purchase of packed food products by the consumers. Therefore, it is essential that a suitable material is used for packaging the food products.
- It is found from the study that consumers give preference more to quality of the packaging while buying packed food. For this purpose, better ingredients should be checked so that the required quality will be maintained.
- Food labelling Standards give front-of-package health labelling which require more prominent labelling on food packaging. Require additional information on food labelling, such as recommended daily limit on added sugar consumption or caffeine consumption. Agriculture Support agricultural policies that focus on increased planting and buying of fresh fruits and vegetables
- It is also important that extra care is required before the food items are packed. The packaging should be good in the sense that the food packed is conducive for preservation and safety so that it is kept for long time without any problem.
- On the basis of suggestions given by the respondents, it is recommended to the manufactures of packed food introduce more and more new varieties of packaging which enhances the usability of the food products. This will not only retain the business but also attract a greater number of new consumers for their products.
- It is also found from the study that the advertisements, given for packed food are not adequate. For any product, advertisement today is an essential activity to communicate and attract more consumers. Hence, it is suggested to the manufacturers and retailers of packed food to go for wide advertisements in the right media to enlarge the market for their products.
- It is also found from the study that the products need lot of change and thus innovation is becoming necessary. The use of content, content measure and material mixing need to be changed for eg., it is suggested by the consumers that oil and other liquid items require more usage friendly packaging in order to considerably reduce wastages.

CONCLUSION

For any product, it is necessary to know why customers buy and why they do not buy. This type of information will be more useful to the manufacturer and that they can get such information from effective marketing research. Further it is always important to find out various factors that influence the purchasing attitude of the consumers so that they may go for producing required varieties with improvement in the quality, taste, packaging etc., Further, it becomes obligatory on the part of manufactures to explain to consumers as to why they should use the products and as to what benefit they will get in turn etc., as to will help manufactures to keep the existing customers more satisfied and to attract the new customers.

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