

# [Packaging - literature review](https://assignbuster.com/packaging-literature-review/)

### Literature Review:

### Introduction:

This chapter presents the results of a comprehensive literature search in several aspects to this work. The prime objective of this literature survey is to identify those variables, which are involved in this research study about perception of food packaging, that how consumer perceive about food packaging in industry and how they are influence the purchase of consumer decision in choosing any FMCG food products.

Packaging Definition:

Packaging can be defined as, “ All the activities of designing and producing the container or wrapper of a product”. The container is called package.

Packaging is a structure designed to contain a commercial food product, i. e. to make it easier and safer to transport, to protect the product against contamination or loss, degradation or damage and to produce a convenient way to dispense the product. . (1)

Packaging also pertains as a 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. Innovative and attractive 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.

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. When designing a packaging, the cost to manufacture, ship, and display the package must be looked at. Packaging must be small enough to accommodate available shelf space and large enough to deter theft. It must also contain an adequate amount of product to keep the unit price competitive. Packaging should be designed to highlight product benefits and can be an integral part of the product itself, like facial tissue boxes.

Packaging Evolution:

In early times, Prior to World War II, Packaging was used primarily to surround and protect products during storage, transportation, and distribution. Some packages were designed with aesthetic appeal and even for ease-of-use by the end consumer, but package design was typically left to technicians. After World War II, however, companies became more interested in marketing and promotion as a means of enticing customers to purchase their products. As a result, more manufacturers began to view packaging as an integral element of overall business marketing strategies to lure buyers.

This increased attention to packaging coincided with socioeconomic changes taking place around the world. As consumers become better educated and more flush, their expectations of product, and their reliance on them increased as well. Consequently consumer began to rely much more heavily on manufactured goods and processed food items. New technologies related to production, distribution, and preservatives led to a massive increment in the number and type of products and brands available in industrialized nations. Thus, packaging became a vital means of differentiating items and informing inundated consumers.

Packaging today, is regarded, as an essential part of a successful business practice. Package design became a marketing science, and as a new corporate cost-consciousness developed in response to increased competition, companies began to alter packaging techniques as a way to cut production, storage, and distribution expenses. Furthermore, marketers began to view packaging as a tool to exploit existing product lines by adding new items and to pump new life into maturing product. (2)

Packaging Attributes:

Food products brands use a range of packaging attributes, which comprises of packaging colors, packaging designs, shapes, messages, and symbols (Pinya Silayoi & Mark Speece, Oct, 2004). These attributes attracts and sustains the attention of consumers and help them to identify with the images presented. The importance of packaging design and the use of packaging as a vehicle for communication and branding are growing in packaged food competitive markets.

Consumer’s intentions to purchase packaged products depend on the degree of extent to which consumers expect that the product will satisfy their need when they will consume it. But there are certain situations when they haven’t even heard about the products so much while entering into the stores, (especially in the case of new products) so the intentions to purchase that very particular product is basically determined by what is communicated at the point of sale. So, at the time of sale when the product is not familiar to the consumer, the only factor that attracts consumers to purchase is Packaging. It became a critical factor when the consumer decision making process is in progress, and how they perceive it depends upon the communication elements, which become the key factor to success for marketing strategies.

Now to achieve that communication goal effectively and to optimize the potential of packaging, the marketers and the package designers must have to consider consumer perception point, their past experiences, their needs & wants, and understand how packaging design layouts get consumers to notice the package and notice messages on the package and evaluate packaging design and labeling for their effectiveness in the communication effort because it is also important to notice that not all consumers evaluate the packaging in the same way.

Packaging Functions and Elements:

Pinya Silayoi and Mark Speece (2004), defines the basic functions of packaging logistically and marketing by their role. The logistical function of packaging is mainly to protect the product from incidence of damage, spoilage or loss through theft or misplace goods during movement through the distribution channel. While in the context of marketing function, the packaging should be attractive enough and well design, so that it conveys the message of product attributes clearly.

Now whatever the logical considerations of packaging, the marketing function of packaging attributes plays a vital role as a communicator and it is only the package that sells the product by attracting and communicating the consumers, and allows the product to be comprised, divvy up, unitized and protected.

Quality judgments are largely influenced by product charactertics reflected by packaging, because package’s overall features can underline the uniqueness and originality of the product. If the packaging attributes communicates high quality consumers assume that the product is of high quality. If the package symbolizes low quality, consumers transfer this low quality perception to the product itself. The package communicates favorable or unfavorable implied meaning about the product. Mark Speece (2004) suggests that consumers are more likely to spontaneously imagine aspects of how a product looks tastes, feels, smells, or sounds while they are viewing a product picture on the package.

A review of the above literature indicates that there are mainly four packaging elements potentially affecting consumer purchase decisions. They can be separated into two categories; visual and informational elements. The visual elements consist of graphics, images size and shape of packaging. Informational elements relate to product information and information about the technologies used in the package. However the product information can further be categorized into food labeling, ingredients information, nutrition information, manufactures and expiry information etc.

Variables of Packaging:

1. Visual Elements:
   1. Graphics and Color:
   2. The implication of graphics is explained by the images created on the product. Graphics designs are visual presentations which include layout, color combinations, typography, and product photography all of which create a positive and distinctive image. For consumers, the package is the product, and different consumers respond to different packages in different ways depending on their involvement level (Silayoi & Speece, 2004). For low involvement products, such as FMCG, where initial impressions formed during initial contact can have lasting impact and where evaluation of attributes is less important in decision making, here then a highly noticeable factor such as graphics and colors becomes more important (Grossman and Wisenblit, 1999) (3). On the other hand, the behavior of consumers towards high involvement products is mostly influenced by image issues. For low involvement, there is a strong impact on consumer decision making from the development of the market through marketing communications, including image building (Kupiec and Revell, 2001). (4)
   3. Placement of Visual Impact Elements Matters:
   4. In packaging layouts, the placement of visual elements also plays an important role for consumer psyche, because a psychic research of Rettie and Brewer, (2000) (5) indicates that brain laterality results in an asymmetry in the perception of elements in packaging designs. The recall of package elements/attributes is likely to be influenced by their lateral pass position on the package, as well as by other usually recognized factors, such as font color, font size and font style. Research shows that for verbal stimuli recall is better when the copy is on the right-hand side of the package, and better for non-verbal stimuli when it is on the left-hand side. This may imply that, in order to maximize consumers’ recall, pictorial elements, such as product photography, typography, it should be positioned on the left-hand side of the package.

Grossman and Wisenblit (1999) (6), says in their research that consumers also learn color associations, which lead them to prefer certain colors for certain product categories. For a unique particular brand, using color as a clue on packaging can nurture a potentially strong association. However people in different cultures are exposed to different colors and according their own culture they develop different color preferences. So as a marketer, color consideration should be the part of their marketing strategies and by keeping in mind the color consideration according to people perception in different culture, colors of a particular logo, package or product design should be done after a thorough understanding of color association according to culture.

* 1. Packaging Size and Shape:
  2. Silayoi and Speece, (2004) states that in packaging, the other visual elements such as size and shape are also important in consideration. Package size, shape and elongation also affect consumer judgments and considerations. Consumers use these things as simplifying visual heuristics to make volume judgments. They generally perceive more elongated packages to be larger.

1. In case of sizes, especially for generic products, different sizes of packages may appeal to consumer with different involvement level. Usually generic products are packaged in larger sizes, which communicate to consumers who are specifically looking for good deals. So, this implies that when the product quality is hard to determine, as with generics, the packaging size effect is important. Thus elongating the shape, within acceptable bound, should result in consumer thinking of the package as better value for money also conceivably affect perceived volume.
2. Informational Elements
   1. Product Information
   2. Product information includes information elements, such as food labeling, nutrition information, health information, ingredients information, manufactures date, expiry date.

In high involvement level, the behavior of consumers toward product characterized is less influenced by image issues, graphical and visual response, in such cases consumer seeks product information which is one of the important packaging functions to communicate. (Kupiec and Revell, 2001; Silayoi and Speece, 2004). (7) Written information on the package can assists consumers in making their decisions carefully as they consider product characteristics.

Package layout is important for information presentation. Food labeling is considered as significant information on packaging and a recent study shows that 90 percent of the consumer’s trends towards healthier eating have highlighted the importance of labeling, which also allows consumers the opportunity to cautiously consider alternatives and make informed food choices. However, packaging information can create confusion by conveying either too much misleads the inaccurate information. Manufacturers and package designers often use very small fonts and very dense writing styles to pack extensive information on the label, which lead to poor readability and sometimes confusion.

As confusion can affect consumer decision quality, So Mitchell and Papavassiloiu (1999) (8), suggests that consumer confusion of information overload can be reduced by narrowing down their choice sets, because by reducing their choice alternatives and evaluation attributes decreases the probability that they will be confused by excessive choice and information overload. This strategy could also be applied to more experience consumers, because loyal consumers potentially look fewer brand alternatives. So, it is the experience which makes consumer more selectively perspective and restrict the scope of their choices.

Hughes (1998) (9), in one of his journals grabs the attention towards involvement level, that sometimes involvement level reflects the extent of personal relevance of the individual’s personal goals, basic values and self concept. If the product does not stimuli much interest, consumers do not give much attention to it. High involvement level shows more personal relevance. In general, consumer acquisition of low involvement products is often done without carefully examining brand and product information. This lack of commitment suggests that information on the package would carry relatively less value in such cases. On the other hand, more highly involved consumers evaluate message information more carefully, relying on the message to form their attitudes and purchase intentions (Silayoi and Speece, 2004).

* 1. Packaging Technology
  2. Packaging for the FMCG food products in market plays a vital role in promoting the product to the customer, as well as carrying informative and legislative detail. Combining these roles requires commercial awareness, detailed knowledge of the relevant technologies, creative image care and consideration of the effect of colors, typography, photography that must support the product or brand. Design and technology of packaging decoration for the users market guides you through the technical and commercial factors to consider when planning the decoration, or label, of a package (10). Technology is basically somewhat related to the informational elements, because packaging technology conveys informational messages such as nutrition, health, ingredients which is linked to the consumer life style, so the technology of packaging development that constrained in the message communicated through technology must fulfill consumers need criteria.

Consumers are even often prepared to pay slightly more for enhance value product, indicating desire for more quality. As technology embodied in the package plays a vital role, so technology innovation must respond and develop new and more efficient packages of longer life shelves, environmental friendly, nutritionally responsive and meet maximum food safety requirements. So the role of packaging technologist is to ensure that the creative design is translated into functional representation and the challenge to have both the design and execution working in harmony (Silayoi and Speece, 2004).

Packaging Design

Packaging is one of the most common examples of graphic design. Apart from displaying the important information, the packaging has become an important sales tool. With the use of illustration, color, typography and even various packaging materials, a beautiful and attractive packaging can boost the selling and stands out from the rack of competitors. Here we present some cool packaging designs to inspire you. (11)

As packaging is the biggest medium of communication mainly because of its extensive reach to all kind of category purchasers, secondly its presence at the crucial moment when the purchase decision is made and finally the high involvement of level seekers who actively scan packaging for information.

So, this involvement level of consumers makes the packaging an important element to be considered not only for recall of brand recognition but in purchase decision too. So the design of packaging itself may be an incentive to buy. The manufacturer’s and the package designers should keep packaging design, color, typography, photography, food labeling, labeling fonts of packaging in mind to make it attractive enough to gain consumer intentions.

The research “ Consumers’ perceptions of food packaging and its related impact on product choice” was conducted in Trinidad West Indies its findings are as:

The packaging feature that influenced most of the respondents’ choice of products was information on the label (41. 5%); it was followed by quality and type of packaging (24. 4%), brand name/popularity (22. 0%) and visual impact (12. 2%). When asked if they would purchase a product that was most attractively packaged, 85. 4% responded in the affirmative. Most respondents (92. 7%) believed that packaging material could adversely affect the quality of performance of a food product. Also, 92. 7% of respondents agreed that nutrition information should be shown on all food products, although 36. 6% admitted that they do not read the label because of its complexity. The different variables been analyzed in this research are discussed below.

Product Features:

Price/value for money was given the highest rating (58. 5%) as a factor that most influenced respondents in the purchase of a product or new product compared with the other factors. Price is often the driving force when a choice has to be made.

In a Grocery Manufacturers of America (GMA) survey in 2002, 82. 0% of American consumers ‘ frequently’ considered the price of a product before making a final selection.

In a research conducted by the United Kingdom Consumer’s Association in 1995 about factors influencing food purchases, 34. 0% indicated ‘ price/value for money’, 21. 0% ‘ quality’, 16. 0% ‘ nutrition/how healthy’, 12. 0% ‘ family’s/personal preference’, 5. 0% ‘ how quick/easy to prepare’, 4. 0% ‘ how fattening it is’, 3% ‘ brand name/label’, 3. 0% ‘ special diets for remedial reason’ and 1. 0% ‘ ethical/religion’.

In this study, when choosing a new product, the respondents were affected by ‘ advertisement’ (39. 0%), then by ‘ visual impact/product appeal’ (22. 0%), ‘ brand or label information’ (22. 0%) and lastly by ‘ preparation time’ (17. 0%).

Packaging Features:

When respondents were asked about the importance of specific packaging features, 41. 5% reported the importance of ‘ information on label’, 24. 4% the ‘ quality of package/type of package’, 22% the ‘ brand name’ and 12. 2% the ‘ visual impact’. Although ‘ visual impact’ in the choice of a product in the same product category was of least importance to respondents, in another question 85. 4% reported that they were influenced (36. 6% ‘ sometimes’ and 48. 8% ‘ always ‘) by the ‘ attractiveness’ of a package in the choice of products of the same product category. These results indicate that brand names and type of packaging act as cues when consumers try new products.

* Packaging Material:
* When respondents were asked whether they favored transparent packaging material so that the product content could be viewed, 40. 0% responded in the ‘ affirmative’;

40. 0% indicated it ‘ depended’ on the type of product, while 20. 0% answered ‘ no’. Plastic was the best choice of packaging material (39%) compared with glass (19. 5%), box (12. 2%), paper (4. 9%) foil (2. 4%) and metal/tin (2. 5%). The properties of plastic that make it ideally suited for packaging foods include low density, resistance to breaking, sharp edge elimination, flexibility, impermeability to oxygen and water control, control of package atmosphere, odors protection, environmental durability, light control, package appearance, inertness to flavor components, metal coating, receptivity, tear and puncture resistance and low temperature.

Most respondents (92. 7%) believed that the type of packaging material could adversely affect the quality or performance of food products. In this regard, all the respondents reported that metal/tin has the most negative impact on the quality of a food product.

* Food Labelling:
* Labels on food products are intended for consumer information and help to identify, promote, inform and offer advice on the use of the products concerned, and where for instance a label is applied over a closure, providing security as a tamper evident feature.

Food labelling might refer to naming a product or the listing of ingredients. The key objective of a food label is to provide information for the consumer, help sell the product and assist the consumer in making comparable food choices.

Of all the options given, most (41. 5%) indicated that ‘ food labelling’ was the most important factor influencing food choice. However, 22. 0% of respondents chose food label as an influencing factor when trying a new product.

Bruhn reported that consumers want to make an informed decision regarding food quality and health and also want to make choices that support their lifestyle and food production philosophy. When respondents were asked whether they read the label of food products, 48. 8% indicated ‘ never’, while 12. 2% indicated ‘ sometimes’.

The American Dietetic Association reported that fewer consumers were paying ‘ very close attention’ in 1997 than in 1995 (27. 0%vs. 33. 0% respectively).

Also, gender differences are disappearing, with 52. 0% of women reading labels compared with 48. 0% of male shoppers.

The reasons why some respondents do not read food labels are for some respondents, the food label was found too confusing or too time-consuming to read (36. 6%), and for some the display of nutrition information was difficult to follow (29. 3%). Most consumers (61. 2%) admitted that they only read food labels when purchasing a new product for the first time. Only 14. 6% reported that they checked the nutrition claims on the packages. Most respondents (48. 8%) spent only 30 seconds on reading the food label. These results are substantiated by Insall, who mentioned that relatively few consumers actually read the nutrition information provided and even fewer understood it. The manufacturer’s date and expiry date (56. 1%) was the most significant feature that consumers looked for, followed by the supplemental facts panel (29. 3%), name and place of the business or the manufacturer/package distributor (9. 8%), and health message and nutrition claim information (4. 8%). Consumers were not interested in the net contents of a product or the number of servings per container. The shelf life, designated by the manufacturer’s date and expiry date, is the period during which a product will remain safe, retain its desired sensory, chemical, physical, microbiological characteristics, and comply with any label declaration of nutrition data when stored under recommended conditions. Consumers will often actively seek the food product on the shelf with the longest remaining shelflife, as this is considered to be indicative of freshness.

* Nutrition Information:
* Most respondents (58. 5%) read the nutrition facts panel and realized the importance thereof. Nutrition labeling provides information as mandated by the Nutrition labeling and Education Act 1990. In a survey conducted in the United Kingdom in 1995 by the Consumer Association, most respondents were aware of nutrition labeling, with 62% mentioning nutrients and 45% indicating only ingredients on food labels. Although 7. 3% of the respondents in the present study knew what the nutrition fact panel was about, they still did not read the information before purchasing the product. Some Respondents (24. 4%) read the information but did not understand it. According to Sloan, ‘ if one is to believe the message of many consumer surveys, the majority want detailed label information but few consumers actually read the nutrition information and even fewer understood it’. Also, in a number of studies conducted in the United States, people are paying less attention to labels. Consumers of food items need to be more aware of and better educated about nutrition information on food labels, as this will enable them to select nutritious food. Despite the fact that most respondents in this study did not use or fully understand the nutrition information, 92. 7% agreed that it was important to Show nutrient information on all food products. Also, while consumers still do not understand all of the information on a label, it often affects their food purchase decisions, particularly among upscale shoppers and those on medically restricted diets.

New products

The ‘ advertisement’ (39. 0%) was the most important factor that influenced the respondent’s choice when purchasing a new product. This was followed by ‘ visual impact/product appeal’ (22. 0%) and ‘ brand or label information’ (22. 0%). In a study on the purchasing behavior of American consumers, price and brand name remain the leading drivers, but it seems as though the less important factors such as health claims, type of preservatives, additives and organic claims have increased in importance.

In a GMA survey, nearly half of the respondents (49. 0%) indicated that a familiar brand name was the first or second most important element when making a purchase in the According to the Ministry of Consumer Affairs in Trinidad and Tobago, there has always been an increase in the number of consumer complaints of new products after the peak season occasions such as Christmas, Easter and Carnival (E. Lara, personal communication). In these periods, consumers are prompted to purchase new food products as a result of the wide variety of advertisements and promotional sales.

Although the marketing division of a company has the freedom to promote the particular benefits of a food item, the consumer has to make an informed choice based on the comparable information. In the present study, only 7. 3% of the consumers were concerned about the fat content of a product. This follows a worldwide tendency to reject reduced-fat products, suggesting a need to explore and innovate ‘ natural’ fat substitutes and to improve the sensory quality of reduced-fat products. When respondents were asked to rate the factors that sustained their purchasing behavior, ‘ convenience in preparation and use’ had the lowest response (17. 1%), while’ performance/satisfaction’ received the highest response (39. 0%). Unlike American consumers who prefer ready-to-eat and on-the-go foods, it seems that Trinidadian respondents are not strongly influenced by convenience foods. In this study, 85% of the respondents cited that ‘ poor quality and performance’ of a product may influence them never to buy a new product again.

* 1. Grossman, R. P. and Wisenblit, J. Z. (1999), “ What we know about consumers’ color choices”, Journal of Marketing Practice: Applied Marketing Science, Vol. 5 No. 3, pp. 78-88. Article URL: http://www. emeraldinsight. com/10. 1108/EUM0000000004565
  2. Kupiec, B. and Revell, B. (2001), “ Measuring consumer quality judgments”, British Food Journal, Vol. 103 No. 1, pp. 7-22.

Article URL: http://www. emeraldinsight. com/10. 1108/00070700110382911

* 1. Rettie, R. and Brewer, C. (2000), “ The verbal and visual components of package design”, Journal of Product & Brand Management, Vol. 9 No. 1, pp. 56 – 70, available at:

http://www. emeraldinsight. com/10. 1108/10610420010316339

* 1. Grossman, R. P. and Wisenblit, J. Z. (1999), “ What we know about consumers’ color choices”, Journal of Marketing Practice: Applied Marketing Science, Vol. 5 No. 3, pp. 78-88
  2. Kupiec, B. and Revell, B. (2001), “ Measuring consumer quality judgements”, British Food Journal, Vol. 103 No. 1, pp. 7-22.

ArticleURL: www. emeraldinsight. com/10. 1108/00070700110382911

* 1. Mitchell, V. W. and Papavassiliou, V. (1999), “ Marketing causes and implications of consumer confusion”, Journal of Product & Brand Management, Vol. 8 No. 4, pp. 319-39. Article URL: http://www. emeraldinsight. com/10. 1108/10610429910284300
  2. Hughes, D., Hutchins, R. and Karathanassi, V. (1998), “ Purchase involvement methodology and product profiles: the case of cheese products in Greece”, British Food Journal, Vol. 100 No. 7, pp. 343-50.

Article URL: www. emeraldinsight. com/10. 1108/10610429910284300

* 1. Book: Design And Technology Of Packaging Decoration For The Consumer Market (Sheffield Packaging Technology, V. 1)

Available at: http://www. flipkart. com/design-technology-packaging-decoration-consumer/0849305063-j8w3f73ptf

* 1. http://dzineblog. com/2008/04/packaging-design-inspiration. html