Food Product Packaging: As an Influential Element on Consumer Buying Behavior

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Abstract
Food product packaging can be used as an aggressive promotional strategy in modern marketing era that can eventually change the consumer’s mind set at purchasing point. Study conducted to explore and investigate food product packaging as an influencing factor over consumer buying behavior in Pakistani perspective. This research aimed to measured positive/negative impact of food product packaging attributes on consumers purchasing pattern. Products packaging attributes; package design, color, labeling, shape & size can make a strong impact if used properly with food items. A sample of 203 respondents taken from total population was selected on convenience sampling and surveyed using online questionnaire and on social media poll. The questionnaire implied to the structured and based on 5 points likert scale questions & discuss each food category in accordance with the packaging attributes. The study used frequencies and descriptive statistics, correlation approach and ANOVA table for the analysis. Findings revealed that highest percentage of customers are females; according to Pakistani family structure. She might be buyer, influencer, decision maker and recommender at store. Result shows strong positive correlation (0.371**) between product packaging & consumer buying behavior. Overall, calculation shows strong positive combination as fisher’s value (32.122) is too high to defend it. This study clearly identifies the food items package a mean for producing purchasing interest.

Keywords: aggressive promotional strategy, packaging attributes, consumer purchasing attributes

1. Background
Packaging ‘the critical element’ was thought to be just a part of product factor and was treated as to protect and store products for a long time. To package appropriately is necessary for the primary reason of storage and protection, but at dynamic market place, customer demands variability in choices of multiple brands based on packaging. Choices mostly based upon that how brands reflect their image by using an attractive packaging strategy. In pharmaceutical products or in perishable products if marketer used inappropriate packaging, it may cause a business as well as life of customers. Furthermore, convenient and shopping goods have a basic demand to package so well that saved all the preservatives under one package. Taking consideration on these important factors, packaging has gain fundamental importance and supposed to be the most vibrant tool for competition in current market era.

For many decades people has shifted their purchasing habits from shops to grocery stores and supermarkets. This major change in purchasing pattern shifted the priority of marketing manager as well to sell a product towards make a brand; by using an effective packaging strategy. Packaging for any product itself is supposed to be the factor of communication between customer and company. The non-verbal attributes; especially in food product categories are of low even no regulations and offer a field of unlimited creativity (Sioutis, 2011). Consumer preferences widely depending upon its appearance i.e. it creates impulse buying nature at purchasing point. The essentiality can be measured with the percentage of delivering the necessary information to the customers via package. It will eventually motivate customers to get involved with the product. Marketers mostly consider these factors in consideration while designing packaging attributes or finalizing the packaging strategy. Underwood (2003) mentioned that packaging is very important factor that can play significant role in buying decision process because it communicates with customers at the time they decide to purchase.

Packaging design is in growing phase of importance being a mode of communication (Rettie & Brewer, 2000). According to Silayoi & Speece (2007) packaging has a similar importance as other communication tools. In regards of communication role of packaging; food product brands employ multiple attributes in packaging such as shape, symbols, designs, color and messages (Nancarrow et al., 1998).

2. Problem Statement
This study focused on consumer’s view regarding influences of packaging attributes specifically for food item categories (beverages, dairy products, fast food, grocery items, etc). Study also unveils the effect of different packaging attributes over consumer recall, retention, purchase intention and actual purchasing behavior correlated with their strata and lifestyle.
3. **Objective of study**

To identify and assess the role of multiple packaging attributes over consumer behavior in food business also in terms of latent and active responses of customer’s.

4. **Hypothesis**

   \[ H_0 = \text{Food product packaging does not make an impact on consumer buying behavior at the time of purchase.} \]
   \[ H_1 = \text{Food product packaging does make an impact consumer buying behavior at the time of purchase.} \]

5. **Literature of the Study**

   Moon and colleagues (2012) explained that defining, consuming, withdrawal of goods and acquiring, ideas and experiences; all are a part of complex consumer behavior. Social and psychological factors can be considered as most impactful factor while developing the complex consumer behavior especially in sale/purchase. According to Schiffman (2000) consumer behavior can be depend on how people make their decisions over product on personal or household consumption, under the limitations of cost that a customer can pay. Customers usually get affected by how they feel and act. Sometimes choices based on the physical actions of customers that can be measured and seen easily.

   According to Ampuero & villa, (2006) “packaging protects and prevents product from environmental exposure, offers the appealing identification to it, and allows easy transportability”. Product packaging is uses widely as ranging from preservation to commutation. Packaging helps in marketing consumers as well as non-consumers good (Roosta, 2010). Schoell (1985) studied that packaging has strategic importance to work as communication tool as well as an integrative factor between customers and brand that offers success or failure to a product. Packaging act as protecting agent for product’s contents; from a long chain of production to transportation to its final reaching point, where it supposed to planned initially (Panwar, 2004). The communication aspect of packaging makes it more important in current competitive and fast world.

   The core function of packaging is transforming from protection and storage to “selling”. Packaging is widely used to sell a product, and built a company’s image in customers’ knowledge. Package can be used to add unique value to product while making it a brand; and can also considered as centre of attraction to the shelf for a customer. Kotler et al. (2008) explained that packaging is the most essential tool in 21st century to promote and position a product as a brand, attract the prospect customer’s attention and deliver the actual value of product. Packaging of any product allows customers to physically meet the product at purchasing point and act as a verbal & nonverbal factor of communication.

   According to Silayoi & speece (2004) packaging most commonly worked as a differentiation tool in modern competitive market and it will suppose to be a source of identification in near future. Alice Louw (2006) has conducted a research on product’s package as position setters for brand to carve at modern market place. Shimp (2010) discovered that package is often act as a silent sales man at point of sale and can be more effective than a five second commercial. Packaging is not only used as communicative mode; but also it is used to influence and assist customers in making careful decisions at the time of purchase (Ahmed, Ahmed & Salman, 2005). In this context, package is considered as reliable source to customers about any brand. It provides information on pricing, quality, quantity and carries detail about ingredients and direction to use.

   According to Hoffman (2003) packaging is “the process of selection, interpretation and organizing the stimuli of an individual to a meaningful picture”. Packaging develops perception as it deals with the five senses that human possess. As marketing person develops the strategy to design a package, he invokes the color, design, shape and other factor should be pleasant to a customer. Perception building often leads to expectations that might cause negative impact if not fulfilled by a product (Schiffman, 2000). Physical appearance of product can be the most persuasive tool at market place. On bigger scale, package is not only used to protect a product but also a consumer. Product’s package supposed to get along with product through all the marketing channels till it is consumed. It also prolongs the shelf life of any product. For this instance, proper packaging is necessary especially in fast moving consumer goods. Packaging act as a supporting factor to marker, to middleman, & to final consumer as well. Bix et al, (2002) mentioned that problems compere with insufficient packaging is considered as insufficient protection, leads to the customers dissatisfaction. Hence, it is evident that despite of all the modernization, primarily function of packaging is protection. In short, protection leads to the delivering of anticipated value to customers.

   Packaging can drop considerable impact on consumer behavior as it supposed to be the strongest tool to build a perception. It delivers the persuasive information about a brand that eventually dragging them to purchase a product. In order to design an appropriate package; marketer need to understand the psychology of customer as well as the nature of the product to derive a perfect combination. Packaging factors are more considerable in food items/ brands as compared to other categorical products. Packaging attributes; like shape, color, size, typographic and design can deliver the quality features of any product at purchasing point. Effective and efficient packaging can bring more productive outcome than any other marketing activity if properly managed and deliver.

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Kriti Bardhan Gupta (2009) divided food products into four categories and observed the changes that occur in consumer behavior due to the differences in packaging of four categories of; food and vegetables; milk and milky products; food grains and Pulses; and processed food. Abbas et. al (2012) studied packaging brand name, quality and price as an influencing factor on purchasing decisions.

5.1. Package design
In global competitive era, Marketers striving hard to draw attractive package designs for the retention of their product on store shelves. The expectation of customers varies as the class of product changes with country’s culture, and the market of origin (Saba et al. 2010; van Trijp & van der Lans 2007; Verbeke, Scholderer & Lähteenmäki 2009). If package design derived by eye tracking technique, it could possibly allow customers to make their decisions in seconds. Package designs can ultimately change the habitual nature of customers due to the visibility; but marketers need to think about the social desirability. Emerging technology, material development, choices of consumer and their desires are the most crucial elements while planning a package design that drive the marketing process (Ksenia, 2013). An attractive and unique packaging design; works as on-spot advertisement for consumers before they decide which product or brand to purchase (Wells, Moriarty, & Burnett, 2006).

5.2. Package psychology of color
Colors; in general affects consumer attitude and perception about brand. Colors creates an impact and embody a personality all of its own (Schiffman, 2000). Psychologists indicate about colors that it can create an account up to 60% on customer’s preferences and reasoning to purchase a particular product (Shelley). Color choice is as important as any other factor in branding strategy, where color can build a combination with symbol and names together to embrace a memorable impression. Colors can set the customers’ mood (Gobe, 2001). Packaging can be made memorable if marketers could create a striking impact by playing wisely with colors; as human brains quickly respond to signal of eyes than ears.

5.3. Packaging Typographic
Being most efficient communication tool, package must contain a perfect combination of knowledge about the nutrients a product contain (Zarkin, 1992). Package labeling is most considerable factor in food business. On food packages, labels containing details regarding nutrition are measured as supreme source to deliver the nutritious information to health conscious customers (Hasan, 2012). Labeling communicate product’s feature to persuade buyers to purchase a product with satisfaction (Ruhn, 2005). Parmar (2012) explained labeling as a source of communication that delivers the product features to end user. According to Parmar, typography should be written in a manner that defines the motive of product or clarify the value proposition of product.

5.4. Package size & Shape
Packaging size and shape is important for new product as well as for the most familiar products. The core nature of consumer is to get attracted by the size, because the general psychology relates the size with the quantity. Raghbir (2006) found some rectangular shaped packages with slightest changes in dimensions. He derived the results that dimensions can create a drastic effect on the consumer’s purchasing intentions. Package shape and its size resemble to volume and it will actually attract customer’s attention instead of repelling it (Folkes and Matta, (2004). Larger package size can fulfills the customer needs of mass utilization.

5.5. Package Quality
Product’s quality determines by its package quality in the eye of customers. Product quality relies on the nature of product; it changes with product’s standard. If marketer planned to change the products quality, customers expect a change in its quality too. “High quality packaging material for a low quality product might have been useful strategy in evolving market and vice versa.” If companies fail to design a quality package for a sensitive product like milk & juices; it would take companies image at stake.

Kotler (2003) mentioned the packaging as impactful elements at purchasing point are: material, form, size, text, color and brand. Rita Kuvykaite (2009) studied the overall impact of these six factors all together on the purchasing behavior of consumer.

6. Research Method
To draw an appropriate problem statement, an exploratory research has been done initially. Secondary supporting data was gathered with the help of previous studies and experiences. For primary data collection, online questionnaire and a social media page has been built to find out the best possible results. Questionnaire used as a tool in accordance with the variables; Food product packaging & Consumer Buying behavior. It was designed on five point likert scale, surveyed to the 203 respondents based on convenience based sampling those are selected in a systematic manner to household customers, recommenders, influencers and decision makers.
For results finding, this research followed descriptive research approach. It allows individuals or groups to consider the issue with facts and put forward the solutions. According to Gay (1992), data collected in this type of research used to test the hypothesis and discover the answer of research question subject to the study. Therefore, for this study descriptive research was suitable to reveal the phenomenon. The results are based on the analysis of basic measurements/statistical tools like, central tendencies and correlation between variables.

7. Results & Discussion

7.1. TABLE 1: Gender of respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>91</td>
<td>45</td>
</tr>
<tr>
<td>Female</td>
<td>112</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>203</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Data, 2015

Gender as mentioned in above table shows the percentage of total male and female showing interest in grocery shopping. Total percentage of females (55%) was more than males (45%). This percentage specifically implies to Pakistani tradition, & confirms that females are more likely interested in grocery shopping as they have been involving in day to day home activities & considered as home makers.

7.2. TABLE 2: Age group of respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>below 20 years</td>
<td>41</td>
<td>20</td>
</tr>
<tr>
<td>20-30 years</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>30-40 years</td>
<td>56</td>
<td>27</td>
</tr>
<tr>
<td>40 &amp; above</td>
<td>39</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>203</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data, 2015

Table 2 indicates the age of respondents. The highest percentage of obvious young adults (33%) those have economically active; between the ages of 20-30 while rest of the age groups constitute 67%made up of respondents below 20, between 30 and 40, and 40 years and above as mentioned. This suggests that, the above age group within the region understands the importance of their choice in food products. This also implies the attention of youngsters on this important health related issue. Age and gender plays a prominent role in determining the effect of food packaging over consumer buying behavior.

7.3. TABLE 3: Descriptive of the Study

<table>
<thead>
<tr>
<th></th>
<th>Buying behavior</th>
<th>Food packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>203</td>
<td>203</td>
</tr>
<tr>
<td>Minimum</td>
<td>1</td>
<td>1.43</td>
</tr>
<tr>
<td>Maximum</td>
<td>3</td>
<td>4.5</td>
</tr>
<tr>
<td>Mean</td>
<td>1.5419</td>
<td>2.4314</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.8396</td>
<td>0.60663</td>
</tr>
</tbody>
</table>

Valid N (list wise) 203

Source: Field data, 2015

Results imply rating of independent variable food product packaging with highest mean(2.4314)& dependent variable with a mean of (1.5419).Standard deviation of bivariate study showed consumer buying behavior as the highest one(0.83960), as compared to comparative dimension of food product packaging (0.60663).

7.4. TABLE 4: Correlation of variables

<table>
<thead>
<tr>
<th></th>
<th>buying behavior</th>
<th>food packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>buying behavior Pearson Correlation</td>
<td>1</td>
<td>.371(***), N 203</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food packaging Pearson Correlation</td>
<td>.371(***), N 203</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data, 2015

Responses have been analyzed through SPSS (statistical package for social sciences) and calculation
indicates the relationship among both variables; food product packaging and consumer buying behavior. Correlation (0.371**) shows that there is a strong positive correlation between consumer buying behavior & food product packaging. It shows the strong involvement & impact of both variables on each other.

7.5. TABLE 5: Calculation of ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>19.621</td>
<td>1</td>
<td>19.621</td>
<td>32.122</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>122.773</td>
<td>201</td>
<td>0.611</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>142.394</td>
<td>202</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field data, 2015

Table 5 shows the degree of freedom &total variability around the mean. Fisher’s Test (32.122) shows the high combination of both dependent and independent variable. Results found zero error while analyzing the data of strata. The data was normally distributed for the study. Correlation values are significant enough to conduct as supporting factor while conducting this study.

7.6. TABLE 6: Calculation of Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>0.293</td>
<td>0.227</td>
<td>1.289</td>
</tr>
<tr>
<td></td>
<td>Food packaging</td>
<td>0.514</td>
<td>0.091</td>
<td>0.371</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Field data, 2015

Regression analysis shows the statistical sampling fluctuations. The larger the sample size, the less the standard Error. Standard error for the study (9%) shows fewer fluctuations in data, as sample size is less but represent the actual respondents. Standardized Coefficients is the coefficient that would obtain if the Predictors and the outcomes variable were standardized prior the analysis and the Comparing the size of the coefficient across variable. The t value of independent variable (food product packaging) (5.668) shows coefficient calculation is greater than 2 (t>2.5) than null hypothesis is rejected and alternate hypothesis is accepted.

Conclusion & Future goals

The study highlights the essential factors of food packaging that can create an impulse buying effect in food items & build long term buying habit of customers. The study was inspired by the modern marketing techniques followed by multinational organizations. It showed the expected benefits that can be achieved by using a less important “P” of marketing mix; packaging. Overall results have shown the great influence of packaging on creating a good sale for any category of food item. Intensive factors and local business ecosystem will always find an intended future work. The traditional marketers always needs to assess these results while driving their promotional strategies & this study will also discover some other modern ways of packaging and protecting a product through modern technology based induction.

References


