A STUDY ON THE OPINION OF CUSTOMERS IN THE CHIPS INDUSTRY IN TAMIL NADU

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ABSTRACT
The Indian snack industry is one of the largest in the world. The customer satisfaction is the key to snack industry which made the firms in need of regularly in evaluating the customer’s opinion on their products. The study aims to analyse customer opinion on the firms producing chips in Tamil Nadu. Descriptive design was used for the study. The population constitutes the customers of chips companies in Tamil Nadu. Primary and secondary data was used for the study. Primary data was collected using a questionnaire. Convenient sampling was used to collect the sample. The sample size was 200. The analysis was done using percentages, Likert Scale and statistical test. Overall, customers belonging to age group between 20 and 30 are very happy and satisfied with the products. Overall opinion of customers is the products are good.

KEY WORDS : Snacks, Chips, Likert Scale, Chi-Square Test

Introduction

India is one of the world’s major food producers. India's food processing sector covers fruit and vegetables; meat and poultry; milk and milk products, alcoholic beverages, fisheries, plantation, grain processing and other customer product groups like confectionery, chocolates and cocoa products, Soya-based products, mineral water, high protein foods etc. A snack is a small portion of food, as contrasted with a regular meal. Snacks are a part of Customer Convenience/ Packaged Foods segment. Snack is described as a small quantity of food eaten between meals or in place of a meal. Snack food generally comprises bakery products, ready-to-eat mixes, chips, namkeen and other light processed foods. Traditionally snacks were prepared from ingredients commonly available in the home, often leftovers, sandwiches made from cold cuts, nuts, fruit, and the like. With the spread of convenience stores, packaged snack foods are now a significant satisfying. Processed snack foods are designed to be less perishable, more durable, and more appealing than prepared foods. They often contain substantial amounts of sweeteners, preservatives, and appealing ingredients such as chocolate, peanuts, and specially-designed flavors (such as flavored potato chips). A snack eaten shortly before going to bed or during the night may be called a midnight snack.

The Indian snack industry is one of the largest when considered in the global level. Ready-to-eat foods, samosas, kachoris, namkeen, chips, are few of the snacks that are most preferred by Indians. As aforementioned with rising standard of living, people are more resorting to snacks items during breakfast, supper or any time; snacks most often take the place of meals. Right from production, using up, export and growth prospects owing to emerging markets,
increasing demand, and incorporation of latest technologies, the snack industry in India has witnessed a dramatic change. Given the rising demand, the snack industry is going to witness further growth in the future. According to the ministry of food Processing, the snack food industry is worth Rs 100 billion in value and over 4,00,000 tonnes in terms of volume. Though very large and diverse, the snacks industry is dominated by the unorganized sector. The branded snacks are sold at least 25% higher than the unbranded products. Savory snacks have been a part of Indian food habit, since almost ages. Though there is no particular time for snacks, normally they are consumed at teatime. The variety is almost mind-boggling with specialties from all regions, which have gained national acceptance. The industry has been growing around 10% for the last three years, while the branded segment is growing around 25% per annum to stand at Rs 5,000-Rs 5,500 crores, due to various reasons like Multiplex culture, snacking at home while watching TV, pubs and bars (where they are served free). The snack industry in India is very competitive. Potato chips are by far the largest product category within snacks, with 85% of the total market revenue. Snack nuts and savory snacks follow this. With this background, the study was had conducted on customer opinion on snacks companies in Tamil Nadu.

Need
All marketing starts with the customer. So customer is a very important person to a marketer. Customer decides what to purchase, for whom to purchase, why to purchase, from where to purchase, and how much to purchase. In order to become a successful marketer, he must know the liking or disliking of the customers. The manufacturers produce and the sellers sell whatever the customer likes.

As learning is a human activity and is as natural, as breathing. Despite of the fact that learning is all pervasive in our lives, psychologists do not agree on how learning takes place. How individuals learn is a matter of interest to marketers. They want to teach customers in their roles as customers. They want customers to learn about their products, product attributes, potential customers benefit, how to use, maintain or even dispose of the product and new ways of behaving that will satisfy not only the customer’s needs, but the marketer’s objectives. The customer satisfaction is the key to snack industry. The firms are in need of regularly evaluating the customer’s opinion on their products and services. The study aims to analyse customer opinion on the firms.

Objectives of the Study
The primary objective of the study was to analyse the customer satisfaction and preference on chips industry in Tamil Nadu. The secondary objectives include studying the preferences on factors affecting purchase of chips in Tamil Nadu and studying the opinions on the variety of chips on the variables like flavor, packing, availability, price, durability, shape and colour.

Literature Review
Some studies which were found useful during the study are summarized below. Rima Halani (2010) in the study reveals that promotion, sales, price offs, discounts the by words of discount retailing have now become part of the Indian shoppers vocabulary. With prices soaring, the thrifty Indian customers out for a bargain, is looking at discount retailing in a big way to stretch her monthly budget. Giving added impetus to discount retailing, is the proliferation of discount retailers and the huge amounts of investing pouring into sector.
Philip Kotler et al. (2003) explain that the perceived value comes as a natural assessment in the mind of a customer. It denotes excess of benefits over the costs which a customer incurs or perceives to incur in acquiring a product/service. This value influences the decision of a customer at the time of purchase and later on, the overall level of satisfaction may result in repeat purchase or recommendation of the product or service.

C. Anandan, K. Ravichandran, M. Prasana (2006) explain that the customers compare many features like quality, price, durability, brand image etc. to decide which product they want to buy for their need satisfaction. When a customer repeatedly purchases a product, showing favorable attitude towards the brand, he/she will be a loyal customer to the brand.

Chandan A Chavadi et al. (2008) explain that the nutritional value, ethical value and food quality influence the purchase behavior of customers.

**Research Methodology**

Descriptive design was used for the study. The population constitutes the customers of chips companies in Tamil Nadu. Primary and secondary data was used for the study. Primary data was collected using a questionnaire and the secondary data was collected from journals, magazines, websites etc. Convenient sampling was used to collect the sample. The sample size was 200. The questionnaire was tested for reliability by calculating Cronbach Alpha. The value was calculated to be 7.89 which indicated that the questionnaire was reliable. Likert scale, ranking scales and statistical test were used for the analysis.

The limitations include the difficulty in collecting data with the busy work schedules of customers making it hard to interact with them, bias and hesitancy in disclosing facts.

**Analysis and interpretations**

An analysis was done on the demographic factors of the respondents. The interpretations are given below.

- It is seen that 12% of respondents belongs to age group between 10 to 20, 42% of respondents belongs to age group between 20-30 and 46% of respondents belong to age group above 30.
- It is seen that 42% of respondents are males and 58% of the respondents are females.
- It is seen that 71% of respondents belong to family size 2 to 4 and 29% of respondents belong to family size 5 to 7.
- It is seen that 23% of respondents are students, 61% of respondents are employees and 16% of respondents are home maker.

The responses towards preferred types of chips is represented in Figure No. 1.

**Figure No. 1: Preferred types of chips**

![Figure No. 1: Preferred types of chips](source)
• It is clear that 66.66% of the respondents belonging to age group between 10 to 20 prefer potato chips. 42.857% of customers belonging to age group between 20 to 30 prefer both banana chips and potato chips. 47.826% of customers belonging to age group above 30 prefer banana chips. Overall, 46% of customers prefer potato chips. The responses towards preferred types of packing is represented in Figure No. 2.

![Figure No. 2: Preferred types of packing](image)

Source: Primary Data

• It is seen that 75% of age group between 10 to 20, 54.76% of age group between 20 to 30, 67.39% of age group above 30 prefer volume packing. When considering all the age groups 63% of customers prefer volume packing. The responses towards availability is represented in Figure No. 3.

![Figure No. 3: Availability of chips](image)

Source: Primary Data

• It is seen that 50% of age group between 10 to 20, 64.29% of age group between 20 to 30 and 65.22% of age group above 30 have agreed that availability is good. Overall, 63% of respondents are agreed that the availability is good. The responses towards packing is represented in Figure No. 4.
It is seen that 25% of age group between 10 to 20, 38.1% of age group between 20 to 30 and 41.3% of age group above 30 are satisfied with packing. Overall, 59% of respondents are satisfied with the packing. The responses towards flavour is represented in Figure No. 5.

It is seen that 58.33% of age group between 10 to 20 and 56.52% of age group above 30 are satisfied and 57.14% of age group between 20 to 30 are highly satisfied with the flavour. Overall, 49% of respondents are satisfied with the flavour. The responses towards price is represented in Figure No. 6.
It is seen that 66.67% of age group between 20 to 30 and 65.22% of age group above 30 are satisfied with the price and 50% of age group between 10 to 20 have neutral opinion. Overall, 61% of respondents are satisfied with the price.

The responses towards shapes is represented in Figure No. 7.

It is seen that 75% of age group between 10 to 20, 85.71% of age group between 20 to 30 and 73.91% of age group above 30 are satisfied. Overall, 79% of respondents are agreed with the shape.

The responses towards colour is represented in Figure No. 8.
It is seen that 58.33% of age group between 10 to 20, 71.43% of age group between 20 to 30 and 58.695% of age group above 30 are satisfied. Overall, 64% of respondents are satisfied with the colour.

The responses towards durability is represented in Figure No. 9.

It is seen that 66.66% of age group between 10 to 20 and age group between 20 to 30 and 65.22% of age group above 30 are satisfied. Overall, 66% of respondents are satisfied with the durability.

The responses towards purchasing factors is represented in Figure No. 10.
It is seen that 41.66% of respondents belonging to age group between 10 to 20 shown response towards the purchasing factor such as suggestion from friends. 57.142% of respondents belonging to age group between 20 to 30, 52.173% of customers belonging to age group above 30 shown response towards the purchasing factor such as ingredients. Overall, 52% of customers suggested ingredients.

The responses towards frequency of purchase is represented in Figure No. 11.

It is seen that 66.66% of respondents belonging to age group between 10 to 0, 52.38% of respondents belonging to age group between 20-30, 67.39% of respondents belonging to age group above 30 purchase weekly. Overall, 61% of respondents purchase weekly.

The responses towards characteristics is represented in Figure No. 12.
Figure No. 12: Characteristics of firms

Source: Primary Data

- It is seen that 58.33% of the respondents belonging to age group between 10 to 20, 69.05% of respondents belonging to age group between 20 to 30 and 58.7% of respondents belonging to age group above 30 rate the brand in terms of trustworthiness. Overall, 63% of respondents rate the brand in terms of trustworthiness.

Using ranking scales, relative judgments are made against other similar objects. The respondents under this method directly compare two or more objects and make choices among them. The characteristics that lead to purchase are ranked and represented in Figure No. 13.

Figure No. 13: ranking of purchase characteristics

Source: Primary Data

- It is found that respondents belonging to age group between 10 to 20, respondents belonging to age group between 20 to 30, respondents belonging to age group above 30 rank that “flavour” as their first choice and “price” as their second choice. Respondents belonging to age group between 20 to 30, respondents belonging to age group above 30 rank that “colour” as their last choice. Respondents belonging to age group between 10 to 20 rank that “packing” as their last choice.
Using Likert scales, the responses were recorded in a 5-point scale. The points for each factor is represented in Table No. 1 and Figure No. 14

### Table No. 1: Points through Likert scaling

<table>
<thead>
<tr>
<th>Factors</th>
<th>Age Group</th>
<th>10-20</th>
<th>20-30</th>
<th>30</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td></td>
<td>4.08</td>
<td>4.36</td>
<td>4.26</td>
<td>4.28</td>
</tr>
<tr>
<td>Packing</td>
<td></td>
<td>4.17</td>
<td>4.38</td>
<td>4.37</td>
<td>4.35</td>
</tr>
<tr>
<td>Flavour</td>
<td></td>
<td>4.42</td>
<td>4.52</td>
<td>4.43</td>
<td>4.47</td>
</tr>
<tr>
<td>Price</td>
<td></td>
<td>3.50</td>
<td>3.81</td>
<td>3.91</td>
<td>3.82</td>
</tr>
<tr>
<td>Shape</td>
<td></td>
<td>4.08</td>
<td>4.14</td>
<td>4.02</td>
<td>4.08</td>
</tr>
<tr>
<td>Colour</td>
<td></td>
<td>4.42</td>
<td>4.00</td>
<td>3.89</td>
<td>4.00</td>
</tr>
<tr>
<td>Durable</td>
<td></td>
<td>4.33</td>
<td>4.24</td>
<td>4.26</td>
<td>4.26</td>
</tr>
<tr>
<td>Consolidated Value</td>
<td></td>
<td>4.14</td>
<td>4.21</td>
<td>4.16</td>
<td>4.18</td>
</tr>
</tbody>
</table>

Source: Primary Data

### Figure No. 18: Points through Likert scaling

Source: Primary Data
On availability, opinion of respondents belonging to age group between 10 to 20 about the availability is “good”, for age group above 30 it is “good” and for age group between 20 to 30 it is “Very good”. Overall, the age group between 20 to 30 are very much satisfied about the availability.

On packing, opinion of respondents belonging to age group between 10 to 20 about the packing is “good”, for age group above 30 it is “very good” and for age group between 20 to 30 it is “Very good”. Overall, age group between 20 to 30 and age group above 30 are very much satisfied about the packing of chips.

On flavour, opinion of respondents belonging to all agegroups is “very good”.

On price, opinion of respondents belonging to age group above 30 about the price is “reasonable”, for age group between 10 to 20 and for age group between 20 to 30 the price is “not reasonable”. Overall, age group above 30 are satisfied with the price of chips and the respondents belonging to age group between 20 to 20 and 20 to 30 are neither satisfied nor dissatisfied about the price.

On shape, opinion of respondents belonging to all agegroups is “good”.

On colour, opinion of respondents belonging to age group between 10 to 20 about the colour is “very good” and for age group between 20 to 30 and above 30 it is “good”. Overall, age group between 10-20, are very much satisfied about the colour of chips.

On durability, opinion of respondents belonging to age group between 10 to 20 about the durability is “very good”. Opinion of respondents belonging to age group between 20 to 30 and above 30 about the durability is “good”. Overall, age group between 10-20, are very much satisfied about the durability of chips.

The consolidated values showed that opinion of customers belonging to age group 10 to 20 is “good”, opinion of customers belonging to age group 20 to 30 is “very good” and opinion of customers belonging to age group above 30 is “good”.

By comparing all the three age groups, customers belonging to age group between 20 and 30 are very happy and satisfied with the chips. The overall consolidated Likert value of customers is 4.18. Opinion of all the customers is “good”.

Chi-square test was conducted to understand whether there is any significant difference in opinions among the customers of different age categories on chips in Tamil Nadu. Hypotheses for the study are given below.

- H₀: There is no significant difference among the opinions of customers of chips in different age category in Tamil Nadu
- H₁: There is significant difference among the opinions of customers of chips in different age category in Tamil Nadu
The observed values are represented in Table No. 2.

### Table No. 2: Observed Values

<table>
<thead>
<tr>
<th>Factors</th>
<th>10-20</th>
<th>20-30</th>
<th>30</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>408</td>
<td>436</td>
<td>426</td>
<td>1270</td>
</tr>
<tr>
<td>Packing</td>
<td>417</td>
<td>438</td>
<td>437</td>
<td>1292</td>
</tr>
<tr>
<td>Flavour</td>
<td>442</td>
<td>452</td>
<td>443</td>
<td>1337</td>
</tr>
<tr>
<td>Price</td>
<td>350</td>
<td>381</td>
<td>391</td>
<td>1122</td>
</tr>
<tr>
<td>Shape</td>
<td>408</td>
<td>414</td>
<td>402</td>
<td>1224</td>
</tr>
<tr>
<td>Colour</td>
<td>442</td>
<td>400</td>
<td>389</td>
<td>1231</td>
</tr>
<tr>
<td>Durable</td>
<td>433</td>
<td>424</td>
<td>426</td>
<td>1283</td>
</tr>
<tr>
<td><strong>Column Total</strong></td>
<td><strong>2900</strong></td>
<td><strong>2945</strong></td>
<td><strong>2914</strong></td>
<td><strong>8759</strong></td>
</tr>
</tbody>
</table>

Source: Primary Data

- The calculated value of Chi-Square is 7.94.
- The Degrees of Freedom is 12 and the Level of Significance is kept as 0.05%. The table value of Chi-Square is 21.026. The table value is greater than the calculated value. So, the Null hypothesis is accepted.
- Hence, it is inferred from the study that there is no significant difference among the onions of customers of chips in different age category in Tamil Nadu.

### Findings

The findings from the study are given below.

- Three different age groups are giving more preference when purchasing chips.
- Majority of customers prefer potato chips among other varieties of chips.
- Majority of customers prefer volume packing than cost packing.
- Majority of customers belonging to age group between 10 to 20, majority of of customers belonging to age group between 20 to 30 and majority of customers belonging to age group above 30 are satisfied with the availability.
- Some of customers belonging to age group between 10 to 20, some of customers belonging to age group between 20 to 30 and some of customers belonging to age group above 30 are highly satisfied on the packing.
- Majority of customers belonging to age group between 10 to 20, majority of age group above 30 are satisfied and majority of age group between 20 to 30 are highly satisfied with the flavour.
- Majority of age group between 10 to 20, majority of age group between 20 to 30, and majority of age group above 30 are satisfied with the shape.
• Majority of age group between 10 to 20, majority of age group between 20 to 30, and majority of age group above 30 are agreed. Overall, majority of customers are satisfied with the colour.
• Majority of customers belonging to age group between 10 to 20 and age group between 20 and 30, majority of age group above 30 are satisfied with the durability.
• Majority of customers suggested ingredients as their purchasing factor.
• Majority of customers purchase chips weekly.
• It is found that customers belonging to age group between 10 to 20, customers belonging to age group between 20 to 30, customers belonging to age group above 30 rank that “flavour” as their first choice and price” as their second choice. Customers belonging to age group between 20 to 30, customers belonging to age group above 30 rank that “colour” as their last choice. Customers belonging to age group between 10 to 20 rank that “packing” as their last choice.
• When comparing all the three age groups, opinion of customers belonging to age group between 20 to 30 are very much satisfied about the availability.
• When comparing all the three age groups, age group between 20 to 30 and age group above 30 are very much satisfied about the packing of chips.
• Opinion of customers belonging to age group between 10 to 20, customers belonging to age group between 20 to 30, customers belonging to age group above 30 about the flavour is “very good”.
• When comparing all the three age groups, customers belonging to age group above 30 are satisfied with the price chips and the customers belonging to age group between 10 to 20 and 20 to 30 are neutral in opinion about the price.
• Opinion of customers belonging to all age groups about the shape, colour and durability are good.
• Consolidated Likert values for age group between 10 and 20 is 4.14, for age group between 20 and 30 it is 4.21 and for age group between above 30 it is 4.16.
• Overall, customers belonging to age group between 20 and 30 are very happy and satisfied with the products. The overall consolidated Likert value of customers is 4.18. Overall opinion of all the customers is “good”.
• It was inferred from the study that there is no significant difference among the onions of customers of chips in different age category in Tamil Nadu.

Suggestions
• The firms need to start more branches in various cities to serve more markets and to maximize profit. This improves the brand awareness.
• Companies can go for gift coupons during festival seasons for promotional offers.
• Companies can provide door to door service, if customer places bulk order.
• Companies can take regular feedbacks from the customer.
• Company can provide discount cards for regular customers.
• Companies can go for advertisement through advertising media such as FM and other local telecast channels for attracting more number of customers in rural as well as urban areas.
Conclusion
This study was undertaken with to understand the opinions of the customers on chips companies in Tamil Nadu. Survey has been conducted and the analysis was conducted by dividing the respondents in to three different age groups. It is concluded that almost all customers preferred potato chips. It is thus concluded from the facts collected that almost all customers prefer family pack.

Bibliography
- C. R. Kothari, Research Methodology And Techniques; New Age International Publishers, New Delhi, 2nd Edition
- http://www.alchips.in
- http://www.emeraldinsight.com/0007-070x.htm
- http://lamar.colostate.edu/~pr/consumerbehavior.doc
- http://www.bola.biz/marketing/lectures/consumerbehaviour
- http://www.fppsm.utm./-the-influence-of-customer-characteristics
- Joseph A. Gliem, Rosemary R. Gliem, Calculating, Interpreting, And Reporting Cronbach’s Alpha Reliability Coefficient For Likert-Type Scales, Presented At The Midwest Research-To-Practice Conference In Adult, Continuing, And Community Education, The Ohio State University, Columbus, Oh, October 8-10, 2003.
- Philip Kotler And Kevin Lane Keller (2003), Marketing Management, Prentice- Hall Of India Pvt Ltd, New Delhi, 12th Ed.
- Rajendra Nargundkar, Multidimensional Scaling For Brand Positioning Marketing Research - Text And Cases, Tata Mегraw Hill, New Delhi, 2003