Introduction

This study aims to analyse the perception and behaviour of consumers for the packaged fruit juices in Mumbai. This Project will try to give some vital insights on why, how and which circumstances influence a consumer’s buying decisions and, offers various inferences made out of analysis.

Since time immemorial, Consumer Products have been on a rise and gained immense attention in the market. However, with time and trend, a consumer’s conventional ideologies and way of living have changed to a great extent. In the world of consumer products, packaged fruit juices have been one such product line that shelves a distinct place in hearts of a million consumers in metros like Mumbai. With change in lifestyle and health consciousness, consumers give importance to nutritional value as compared to plain water.

So, what leaves a customer with wonderful buying experience?

Consumer Behaviour Study

Consumer behaviour study blends the elements such as psychology, sociology, social anthropology and economics. These elements influence the buyer decision-making process, both individually and in groups. It studies and analyses consumer characteristics such as behavioural variables and demographics with an attempt to understand people’s want. It also tries to access the influential factors of the consumers from groups such as family, friends, reference groups and society in general.

According to Beverage Digest, it has an astounding 85% consumer base in the world. The beverages industry is dominated by the carbonated drinks. Brands such as Parle agro, Pepsi and Coco-cola have been intense rivals with fruit juices. However, Cavinkare, Dilate & other new entrants also share the market share.

As per ‘Drink Technology India Fair’, “India is the country that offers the greatest potential, as compared to China. Right now, India accounts for about 10% of global beverage consumption. That makes beverage consumption in India the third largest in the world, after the United States and China. The market isn’t properly tapped yet. The situation is similar in the case of bottled and packaged juices and water and PET packaging. Given its size, the Indian market is still in its infancy”.

Mr. Ruben Rausing first created a product called ‘Tetra Brik’ which contained more of milk. This novel gained instant popularity because the product was efficient and a major space saver compared to the canisters that were previously used. The juice box was officially
incorporated in the U.S. market in 1980. This invention made a mark in the world of packaged juices.

Today, Packaged fruit juices like ‘Tropicana’ have bagged the top position in the Indian and foreign market. Founded in Bradenton, Florida, USA, in 1947, Tropicana was launched in India in the year 2004. Till a few decades, the Indian public was unaware of the brand’s existence. The product took a further leap with rising competitors in the market like ‘Real Active’, Real, ‘Dabur Real’ Fresh Gold and many more.

Be it Kiwi juice prepared from clarified Kiwi pulp, orange juices or varied mango flavours of Tropicana fruit juice, all serve nutritious value of real fruit beverages which is far greater than that of synthetic products which have been bottled and sold in large quantities throughout the country. If real fruit juices could be substituted by synthetic preparations, it would have been a boon to the consumer as well as the fruit grower.

India is known for its diversity in terms of income, product prices, culture and growing trends. India is a very unpredictable market as it is moving through a phase of drastic transformation in lifestyle, with its young population and growing per capita income. The beverage market is worth $55 billion worldwide. While carbonated soft drinks and beer categories are trading water with flat sales, the category of packaged fruit juices is surging ahead like never before. The entire confusion on consumer buying behaviour aimed at one point i.e. too many options which affect the decision making process of a consumer.

Sophisticated cocktail culture lead to increase in disposable incomes and most importantly, the increase in health consciousness among consumers which are the major growth drivers in the fruit juice market.

Consumers purchase products which have routine utility value, but the cost is low such as detergents tooth-paste etc. Customers purchase low involvement products which is known as ‘Variety Seeking Behaviour’. With this perception, the present study has been designed with reference to processed tetra packed juices. The study also examines the consumer behaviour and brand loyalty for tetra packed juices in Mumbai Metro.

**Problem points**

Today the majority of fruit juice products target children. There is a need for a nutritional drink for the adult too. The purpose of this study is to develop a better understanding of consumer preferences for 100% fruit juice packages and labels. Specifically, to evaluate the factors that influence consumer’s intention to purchase as well as the factors that affect these preferences.
The residents of Mumbai are more willing to try new foods and packaged fruit juices as compared to those in other Indian cities. As Mumbai is home to a more progressive and skilled labour force than other parts of India, many multinational corporations test market new products in the city.

Consumer spending has grown at an average of more than 11.5% a year for more than decade as in most developing nations, a large chunk of Indians consumer expenditure is based on basic necessities, especially food consumption. Hence it is not surprising that food, beverages and tobacco account for as much as 50% of consumption expenditure in 2006. The remaining 50% is related to non-food items are expected to rise, due to the growth of per capita income.

**Growing trend of Indian Fruit Juices**

Within the beverages market, the fruit-based beverages category is one of the fastest growing categories, and has grown at a CAGR of over 30% over the past decade.

At present, the Indian packaged juices market is valued at INR 1100 crore (~USD 200 million) and is projected to grow at a CAGR of ~15% over the next three years.

The packaged fruit juices market can be divided into three subcategories, viz. fruit drinks, juices, and nectar drinks. Fruit drinks, which have a maximum of 30% fruit content, are the highest-selling category, with a 60% share of the market. Frooti, Jumpin, Maaza, etc. are the most popular products in this category. Fruit Juices, on the other hand, are 100% composed of fruit content, and claim a 30% market share at present. In contrast, nectar drinks have between 25-90% fruit content, but account for only about 10% of the market.

**Consumption Habits**

Around 81% of fruit juice consumption in India is unplanned and 38 % was pure impulse. Planned purchase of fruit juice was prevented only in metros. 60% of fruit juices consumption take place outside homes. Only 2 % of population was involved in consuming fruit juices as Indians prefer fresh juices made in front of their eyes. Their preferences of deciding whether to buy a fruit juice or not depends upon the belief that is ‘packed loses freshness’.

In the last 15 years, over 10 brands of tetra packs and bottles fruit juices have been launched in India. In a country like India which limits itself to packaging budgets with low disposable income level, the introduction of packaged fruit juices resulted in lack of transparency and discomfort levels of consumers for opting for it. The reason being, Tetra packs do not allow consumers to see the product which follows several assumptions.
Research shows that more than 60% of population in India preferred to see the fruit juices they were buying. This posed a great challenge for the packaged fruit juice category as India is becoming a country with adapted western style packing with an Indian style taste as well as limited cold storage capabilities.

Table 1: The below table depicts the average production of fruit juices in India as of 2002, 2003, 2004. It shows the emerging trend of various fruit and flavours that indicate a rise in the production of fruit juices.

<table>
<thead>
<tr>
<th>Fruit Juice Type</th>
<th>Average (1992/1994)</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banana juices</td>
<td>9718</td>
<td>16820</td>
<td>16820</td>
<td>16920</td>
</tr>
<tr>
<td>Mango juices</td>
<td>10108</td>
<td>10640</td>
<td>10780</td>
<td>10800</td>
</tr>
</tbody>
</table>

Source: [http://www.slideshare.net/rajat124oberoi/fruit-juices-1](http://www.slideshare.net/rajat124oberoi/fruit-juices-1)

According to recent market trends in the consumption of fruit drinks, the Rs. 100 Crore packaged fruit juice market is estimated to be growing at 20% to 25% annually, with Tropicana and Real holding 40% market share each.

The market is categorised in terms of product content with three major product contents available.

**Drinks:** Juice with pulp content less than 40%

**Nectars:** Juice with pulp content between 40 – 80%

**Juices:** Juice with pulp content more than 80%

A report from *Juice and Juice Drinks (The Consumer - US - January 2011)* states the following inferences:

- Key juice/drinks consumer—teens, blacks, and Hispanics—hit hard by unemployment.
- Households with children are key driver in juice and juice drinks market in 1999-2009.
- Kids’ population growth lower during 2011-16, compared to 2006-11.
- Teen population promises no growth during 2006-11; better outlook during 2011-16.
- Women less active than men in the juice/drinks market.

The below composition rule how form total utility of products for consumption. For example, a fruit juice has two attributes with two respective levels, flavour (grape and orange), and price ($1.20 and $1.60). Let’s suppose the part-worth utilities of each level are (1 and 2) for the flavours and (3 and 5) for the prices. We can calculate the total utility of four possible stimuli.

**Table 2. Additive Model**

<table>
<thead>
<tr>
<th>Stimulus</th>
<th>Levels Defining Stimulus</th>
<th>Part-Worth</th>
<th>Total Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Orange and $1.20</td>
<td>2 + 3</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Orange and $1.60</td>
<td>2 + 5</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Grape and $1.20</td>
<td>1 + 3</td>
<td>4</td>
</tr>
</tbody>
</table>


In the interactive model the consumer sums the part-worths to get an overall total across the set of attributes. However, it allows for some combinations of levels to be more than just their sum. The respondent choice task and the estimation procedures are more complicated than the additive model.
In order to examine the relationship between consumer preferences for fruit juices and consumer characteristics, a ‘conditional Logit’ was estimated based on the market segments.

Table 3. Conditional Logit Results of Consumer Segments Based on Cluster Analysis for 100% Fruit Juice Products.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pet Bottles</td>
<td>1.35*** (0.274)</td>
<td>1.86*** (0.499)</td>
<td>2.29*** (0.435)</td>
<td>1.73*** (0.231)</td>
<td>1.63*** (0.503)</td>
</tr>
<tr>
<td>Tetra-Pack</td>
<td>-0.300 (0.283)</td>
<td>0.591 (0.436)</td>
<td>0.333 (0.456)</td>
<td>-0.076 (0.234)</td>
<td>0.853 (0.542)</td>
</tr>
</tbody>
</table>

**Health and Nutritional Claims**

- **No Sugar Added**
  - 1.09*** (0.344)
  - -0.359 (0.425)
  - 0.301 (0.472)
  - 0.298 (0.241)
  - 0.781 (0.508)

- **Vitamin C**
  - 0.257 (0.335)
  - -0.424 (0.472)
  - 0.321 (0.472)
  - -0.185 (0.257)
  - 0.685 (0.546)

- **Nutritional Index**
  - 0.522 (0.350)
  - 0.200 (0.475)
  - 0.003 (0.526)
  - -0.292 (0.279)
  - 0.311 (0.587)

- **Locally Produced**
  - 0.047 (0.199)
  - 0.109 (0.323)
  - 0.207 (0.334)
  - 0.017 (0.167)
  - 0.298 (0.348)

- **Organic**
  - -1.85*** (0.274)
  - -1.53*** (0.389)
  - -2.70*** (0.353)
  - -1.01*** (0.213)
  - -1.95*** (0.389)

- **Price**
  - -2.19*** (0.407)
  - -2.61*** (0.567)
  - -1.92*** (0.580)
  - -1.61*** (0.304)
  - -1.754 (0.615)

Neither Option (ASC)

<table>
<thead>
<tr>
<th>Environment Conscious and Info. Seeker</th>
<th>Convenience Product User</th>
<th>Price Conscious</th>
<th>Diet Product User</th>
<th>Health Conscious</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.717 (0.485)</td>
<td>-0.751</td>
<td>-1.92***</td>
<td>-1.61***</td>
<td>-0.754 (0.821)</td>
</tr>
</tbody>
</table>


* Significant at 10% level, ** Significant at 5% level, *** Significant at 1% level.

**Inference**: Cluster 1, the environmentally conscious and information seeker group, showed that PET bottles, no sugar added, price, and the ASC for the neither option were significant in the model. The rest of the health claims (vitamin C and the nutritional index), and the attributes of organic and locally produced were not significant in the purchasing decision of fruit juices; however, they have the expected signs.
To achieve a clearer view on the factors that affect the consumer demand of fruit juices, the below insights and statistics through Environment Conscious and Information Seeker Segment are explained in detail.

The environment conscious and information seeker segment consider material of the package the most important attribute, followed very closely by price. 0% Fruit Juice Products.

<table>
<thead>
<tr>
<th></th>
<th>Environment Conscious and Info. Seeker</th>
<th>Convenience Product User</th>
<th>Price Conscious</th>
<th>Diet Product User</th>
<th>Health Conscious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>31%</td>
<td>27%</td>
<td>37%</td>
<td>23%</td>
<td>34%</td>
</tr>
<tr>
<td>Package Material</td>
<td>34%</td>
<td>42%</td>
<td>38%</td>
<td>51%</td>
<td>35%</td>
</tr>
<tr>
<td>Nutritional and Health Claims</td>
<td>25%</td>
<td>13%</td>
<td>6%</td>
<td>19%</td>
<td>17%</td>
</tr>
<tr>
<td>Locally Produced</td>
<td>3%</td>
<td>3%</td>
<td>14%</td>
<td>2%</td>
<td>13%</td>
</tr>
<tr>
<td>Organic Ingredients</td>
<td>6%</td>
<td>15%</td>
<td>5%</td>
<td>5%</td>
<td>2%</td>
</tr>
</tbody>
</table>


**Inference:** The nutritional and health claims have the highest percentage compared to the other segments. The convenience product users consider material of the package very important (42%). In the price sensitive segment, price and package are the most important attributes.

**Willingness to Pay of Consumer Segments**

**Relative Importance of Consumer Segments Based on Cluster Analysis**

**Willingness to Pay of Consumer Segments Based on Cluster Analysis for 100% Fruit Juice Products.**
Inference: On average, respondents in the environment conscious and information seeker segment are willing to pay more for the nutritional & health claims than other segments.