

# Managing the Diffusion of innovation in Ready-To-Eat Food Products in India

T.Sarathy<sup>1</sup> and Shilpa Gopal<sup>2+</sup>

<sup>1</sup>Periyar Institute of Management Studies, Periyar University, Salem

<sup>2</sup>University Research Fellow, Periyar Institute of Management Studies, Periyar University, Salem

**Abstract:** Food occupies a major purchase amount of the normal consumer. Food consumers have moved up Maslow's hierarchy of needs pyramid from satisfying basic physiological needs. Rapid demographic and socioeconomic changes, such as the massive entrance of women into the workforce and increasing multi-ethnicity, are fundamental drivers of food- buying and dietary patterns.

This has led to the entry of Ready -To-Eat category of Food products.

Ready to use food products are those which are prepared in advance and that which can be consumed as it is purchased. The shelf life of such products will be less than 18 months. The present study tries to identify the important factors that determine the buying behavior of Ready-To-Eat food. This study also analyses how the behavior of the customers is getting diffused from an innovative product like Ready-To-Eat Food. The results of the study shows that the consumers are more positively inclined towards Ready-To-Eat Food Products and this is mainly due to the convenience factor and changes in the lifestyle of the people.

**Keywords:** Brand loyalty, Brand switcher, Food Consumer behavior, Novelty, Organized retail

## 1. Introduction:

Ready-To-Eat (RTE) foods market in India is currently worth Rs. 130Cr. And it is expected to further expand to Rs 2900 Cr. by 2015. The factors contributing to this growth would be changes like cold chain development, disintermediation, streamlining of taxation, economies of scale on the supply side, coupled with increasing disposable incomes, diminishing culinary skills and the rising need for convenience on the demand side. Emerging brands in the Ready to eat category are:

Amul, Gits, Haldiram's, Ethinc Kitchens ,Kitchens of India ,ITC, MTR, Priya Foods, Rajbhog Foods Inc, Rainbow Foods India, Satnam Overseas Ltd, Shana ,Tasty Bite,Veekay Impex.com, Ashoka Ready to Eat and Vimal Agro Products.

Though the success of this category is a big success in the foreign markets (especially with the NRIs), the success of these items in India is still on a growing stage. Thus it requires an in-depth analysis to understand the expectations of the consumers towards the Ready-To-Eat food.

A study was conducted to identify the important factors that determine the buying behaviour of Ready-To-Eat food. When it comes to buying Ready -To-Eat food products customers may be quality conscious because it affects their health. It is well known that Indian customers are price sensitive and therefore customer perceptions that Ready-To-Eat food category are priced low may influence buyer decisions positively.

## 2. Research Methodology

### 2.1. Objectives

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<sup>+</sup> Tel: 99945 17750

E-mail address: shilpago@gmail.com

- The primary objective is to identify the factors that favorably influence and expedite or slow down diffusion of innovation in the case of Ready-To-Eat in food.
- To study whether or not price is an important factor that favors purchase of Ready-To-Eat food.
- To study whether or not consumers look for quality in food brands and whether that influences their purchase behavior.
- To study the risk perceptions that consumers have in buying Ready-To-Eat in food.

A questionnaire was designed for the purpose of the study and the questionnaire included questions relating to the different variables which affects the consumers behavior .

## 2.2. Statistical tools used

**Factor analysis** was used to analyse the data collected from the consumer survey on perception of consumers. The data fed for factor analysis consisted of the data obtained from a sample of 506 on different variables. These component factor data were further treated with varimax rotation.

Kaiser or Eigen value specification is one of the most popular methods used for determining the number of factors to be extracted. The method suggests that eigen values greater than one be retained. . The Scree-Test is also performed for determining the number of factors.

## 3. Findings and Analysis

### 3.1. Grand Means And Item Means

The grand mean score obtained by respondents reflecting their positive or negative inclination towards private labels was 3.308. This indicates that on the whole, the consumers are favourably inclined towards Ready-To-Eat Food products. Table I presents the item mean scores of the variables.

From the table it is very clear that Awareness level of Ready-To-Eat food has recorded the highest mean rating of 3.87. Further, it can be observed that respondents are happy welcoming new retail formats (3.62) in Salem and that they also think that the quality of Ready-To-Eat food is reasonably good (3.62). Respondents have also confirmed that while arriving at conclusions (3.6) on quality and other parameters they use their discretion and form independent opinions.

The following variables that reflect the inclination of respondents towards Ready-To-Eat food have got ratings between 3.4 and 3.5.. These factors are: welcome with open mind (3.42) , willingness to recommend (3.52), willingness to receive suggestions (3.46), frequency of visit (3.41), Convenience (3.45)

Table 1 (Mean scores of the variables)

	Mean	Std. Deviation	Analysis N
Awareness	3.87	.829	106
like change	3.57	.926	106
brand loyalty	3.35	.884	106
interest factor	3.37	.989	106
welcome	3.62	1.000	106
suggest to others	3.52	.948	106
reliability	3.23	.887	106
Welcomewith open mind	3.42	.882	106
Convenience	3.45	.794	106
status symbol	3.11	.887	106
risk	2.69	.960	106
lower price	2.96	1.004	106
hygene	2.72	.954	106
quality	3.62	1.073	106
future cons	3.30	.807	106

Thus it can be concluded from the analysis of means of the variables that consumers appear to be open minded and the curiosity factor towards a novel idea has created a favourable inclination towards Ready-To-

Eat Food. However, there is also a risk with buying Ready-To-Eat Food (reliability, hygiene) .The average ratings for willingness to purchase (3.25) is positive.

### 3.2. Factor Analysis

Eigen values and the percentage of variances were considered for interpretation of factors and greater weights were given to high loading variables

A total of 9 factors had obtained Eigen values greater than one. For the purpose of interpretation 6 of these were considered.

#### 3.2.1. Factor I : “Interest as a result of the novelty factor of Ready-To-Eat food”

Factor I has an Eigen value of 3.543 and has four variables clubbed under it. The reliability of the variables that constitute the factor is ‘.64’ (Cronbach’s alpha).

- **Awareness level (.646):** In the introductory stage of a new product awareness level needs to be high and it is significant that this variable has obtained the highest rating of 3.87. In Ready-To-Eat Food , consumers have a new alternative in the place of regular cooking and eating
- **Change factor (.531):** This variable has obtained a mean rating of 3.57 and the 3.5 plus ratings obtained endorses that novelty factor plays an important role in diffusion of innovation in the case of new products and ideas.
- **Open to suggestions from others and recommendations from others (.752):** Consumers are equally open to suggestions from referral groups (mean rating -3.46). This openness to suggestions would definitely contribute to word of mouth publicity resulting in trial of new innovative products.

#### 3.2.2. Factor II : Preference towards Ready-To-Eat food

Factor II has been named as ‘Preference towards Ready-To-Eat Food’. The Eigen value observed in the case of second factor is ‘2.17’ and the factor totally accounts for 9.45% of the variance. The following are the variables under this :

- **Acceptance of quality of Ready-To-Eat Food (.672)**

In the case of Ready-To-Eat Food in the given research study it has been observed that consumers have endorsed (mean rating -3.42) the statement that they have an open mind towards these products particularly with reference to the quality of these products

- **Convenience (.836):** Consumers have further endorsed (mean rating – 3.45) that Ready-To-Eat are for convenience.
- **Prestige Factor (.591)**

Consumers have endorsed the statement that purchase of Ready-To-Eat adds to their status and this definitely indicates a very favourable and positive belief towards Ready-To-Eat food segment which is still in its infancy stage in the market.

#### 3.2.3. Factor III : Behavioral aspects with respect to Ready-To-Eat Food Products

Factor III includes three variables and all the three pertain to conation, ie ‘likelihood of purchase’, ‘willingness to buy retail brands in food in the future’ and ‘mindset to judge Ready-To-Eat Food based on merit standards’.

- **Judgement (.633) :** Ready-To-Eat Food consumers have not been influenced by stereotyping or any other negative view point that may prevail amidst the general public.
- **Like to buy Ready-To-Eat food (.81) :** Consumers have indicated their liking to buy Ready-To-Eat Food (mean rating -3.25).
- **Will buy Ready-To-Eat Food in the future (.558) :** Likelihood of buying Ready-To-Eat Food in the future has obtained a mean rating of 3.3 and this may be considered positive considering that Ready-To-Eat Food is still in its infancy stage.

#### 3.2.4. Factor IV: “The modern consumer –a brand switcher’.

The modern consumer is bombarded with a number of innovative, new products and services. He is willing to try out new products and in the process is willing to switch brands. He is also willing to try out

new brands and this includes Ready-To-Eat Food as well. Factor IV has been named “The modern consumer –a brand switcher’ and the reliability for Factor IV as reflected by Cronbach’s Alpha is ‘.535’.

- **Frequency of visits to new retail outlets (.708):** It can be observed that consumers are willing to **experiment** (mean rating – 3.41) and try out new retail formats. Initial trial of a new product or idea may depend on the curiosity of interest factor.
- **Brand switchers (.759)** This variable is indicative of the modern consumer who likes to switch **brands** and loves to try new, innovative product and service brands. “The modern consumer –a brand switcher’.

### 3.2.5. Factor V: Ready-To-Eat brands – Unfavourable aspects

When a new, innovative product is introduced it has to keep in mind the shortcomings of the existing products. It may also be observed that the variable ‘welcoming organized retail’, has been negatively loaded (-.759) under Factor V. Factor V has obtained an Eigen value of ‘1.455’ and accounts for 6.3% of the variance.

- **High price of Ready-To-Eat brands (due to advertisement cost) (.531)**

Consumers have endorsed the statement (mean rating -3.13) that the price of these brands are high perhaps due to advertisement cost.

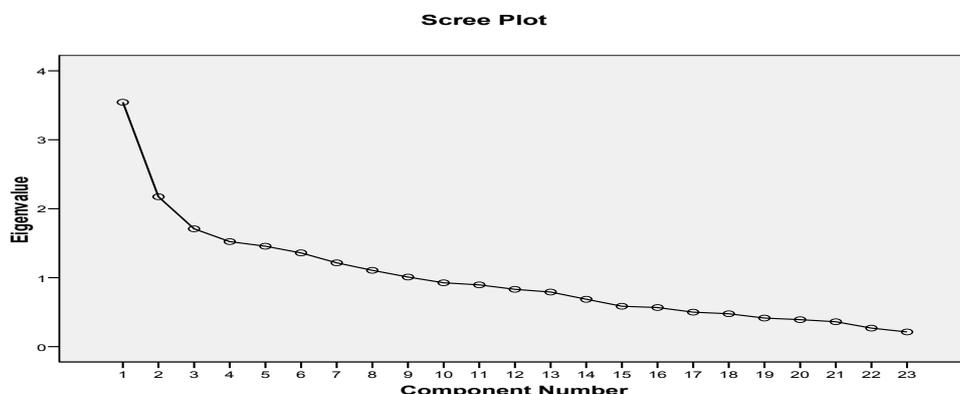
- **Welcome organized retail (-.759)**

Consumers have endorsed (3.62) the statement that they welcome organized retailers like Walmart, Tesco, Reliance fresh, etc., to Salem’. This variable has been clubbed under Factor V with negative loadings as high as ‘-.759’.

Table 2 : Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.543	15.406	15.406	3.543	15.406	15.406	2.106	9.157	9.157
2	2.173	9.448	24.854	2.173	9.448	24.854	2.026	8.807	17.963
3	1.709	7.431	32.285	1.709	7.431	32.285	1.765	7.676	25.639
4	1.524	6.625	38.910	1.524	6.625	38.910	1.712	7.444	33.083
5	1.455	6.327	45.238	1.455	6.327	45.238	1.654	7.190	40.273
6	1.359	5.911	51.149	1.359	5.911	51.149	1.618	7.035	47.308

Extraction Method: Principal Component Analysis.



## 4. Suggestions and Conclusions

The study provides insights on the factors that may contribute to the diffusion of innovation of Ready-To-Eat food. Three major factors reflecting the curiosity and convenience aspect, the overall positive inclination aspect and the likelihood of purchase of Ready-To-Eat food, have emerged as significant factors. On the whole the consumers have accepted the Ready-To-Eat Food products due to the convenience factor and taste factor. The findings can be generalized and it can be taken that these three factors would definitely play a major role in diffusion of innovation of any new product. Researchers can take up any of these factors for further research and provide insights on the subject.

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