Volume 2022, 9 pages Article ID : JSMTL-2206302112794



# Journal of Science, Management and Tourism Letter

http://www.htpub.org/Journal-Of-Social,-Management-And-Tourism-Letter/

ISSN: 2783-4239



# **Determination of Agents Affecting New Product Classification**

#### Mehdi Ramyar

Faculty of Industrial Management, Shahrod University, Semnan, Iran

#### Article

Article history: Received: 31<sup>th</sup> June 2022 Received in revised form: 20<sup>th</sup> June 2022 Accepted: 29<sup>th</sup> 2022

Keywords: Brand Relevance, Classification, New Product Classification, Drinking yoghurt

#### Abstract

Defining and managing a new product category is a new issue for brands and marketing strategists. In this qualitative study, an attempt was made to consider the factors that the customer or consumer believes in accepting the new product category and pay attention to them to be identified. Besides, the product depends on the ground, consisting of competing alternatives. For products where credibility, uniqueness or innovation are essential, an unusual appearance is recommended; Such a preference for products that are widely available and have a regular appearance is reduced; because customer valuation for them is based on the uniqueness of the product. The present study is purposefully applied, and the data collection method is considered qualitative research. The study's statistical population included all citizens of Sari and Tehran who were exposed to Lactovia yoghurt advertisements or have consumed them. From these individuals, 39 samples were selected by the non-probabilistic purposive method. The high importance of the properties and characteristics of the new product, the direct relationship between product assignment in the category related to its name and appropriateness perceived between the shape of new product name, new product shape, initiative in how to use a new product, new name, shape and the colour of the new packaging and the inclusion of the parent brand on the packaging to help the customer to assign the product to a new category of these are the most important results that the present study has achieved.

#### 1. Introduction

Changing consumer tastes and demand for food, new opportunities to introduce new products to producers. To meet the diverse needs of customers, new products and services are constantly produced; hence, to succeed in this rapidly changing environment, managers must pay attention to new products and services [1]. Managers must form the third class and influence the industry's survival. A new product or subcategories of products and services they are currently offering; for a new product or service, classifications can give existing brands a unique chance to survive. On the other hand, the failure rate of new food products has increased to between 60 and 80% [2].

In some cases, this failure has been reported between 85% and 95%. This shows that managers' perceptions of their product innovation are not always shared with consumers. Also, recent research has shown a gap between what new marketers think and what consumers believe; they understand

there is a gap. Creating a new product category needs a new brand and marketing perspective, but brand management alone is not enough; it is necessary to understand the class or subclass [3].

Drink yoghurt is a new product category that Kaleh Company has recently produced under the Lactivia brand in the Iranian market. In a study conducted by the researchers of the present article in the year of introducing of this product to the market, most consumers place this product in categories such as buttermilk and milk juice and consider it different from the company's claimed type [4]. These results indicate that the development of new products is one-sided. Therefore, in the present study, the factors that lead to the consumer are Lactivia beverage as a new product category in a particular category and the importance in the classification. Some practical suggestions for marketing and product development managers can provide vital information to identify the consumer as the ultimate determinant of class success have a new product with you [5].

### Research Gap

Manage and influence the class or subclass people buy against their preferred brands. Classification is defined as categorically grouping objects and events based on perceived similarities [6]. However, it can be said that the reason for many failures in new products is that it has been only from the producers' point of view, and the consumer is often ignored in this process [7]. Research so far in classification results in the apparent complexity of the stimulus in the product classification for the effect of visual dimensions of the product classifications and the negative impact of disability on easy classification product evaluation obtained. The gap in past research has been neglected. The role of the consumer in the product classification process [8]. In other words, being new happens to the consumer when he does not consider that product similar to any of the products he has ever seen and gives it a distinct identity. In other words, the new benefits of the product must be relevant to the customers [9].

#### Theoretical Background of the Research

The word categorization refers to categorizing, classifying, or classifying. Hence, classification is when two objects are grouped based on principles. Classification of identifying similarities between three options within the class and the options between the types. In other words, people group objects and events based on perceived similarities. When a new category is formed, it acts as a knowledge framework to gather further information. They analyze classification function, inferences, and conclusions from known concepts to new concepts. The critical classification function enables people to make predictions [10]. In other words, they state that the classification of seven objects in a category can be from the knowledge of the class used to deduce the object's properties. This enables people to classify themselves by benefiting from past experiences and the knowledge they have acquired. Classification adapts the information processing process and mental stability to the new situation. Classification allows us to see recent events identify them, and respond to them in terms of membership in a unique and meaningless category to reach their conclusion, make causal judgments and evaluate them [11].

This is why classification theory is essential in examining consumers' responses to new products. Many classification theories hypothesise that the similarities between objects and some mental indexes in a category determine classification. Prototype theories show that all classes have a prototype, a set of primary attributes that most class members have some similarity to this pattern are direct and determine their membership in that class; the general concept is that individuals, based on classification experience, mental representations form an abstraction of the course in their minds in the abstract; then this mental show as the reference point is used to determine class membership [12]. Sample theories that objects are compared to specific class instances in mind and that similarities determine class. These

theories predict that examples of the course that, the more similar they are to the object in question, the more significant their impact on classification. A point of comparison or reference between prototype theories and sample theories. Based on early prototype theories, the reference point is the floor prototype, whereas the contrast issue is a class-specific sample according to sample theories. However, both approaches are based on similarity, either similar to the prototype or identical to the particular model [12].

Hence, general current classification theories are based on some references as determinants of classification are built. Gaining brand preference and unrelating competitors are two ways to compete in available markets. The most common way to gain customers and sales is to create a preferred brand [13]. Brand choices are considered by customers, which is a difficult path to success in today's dynamic market; For customers have no desire or incentive to change loyalty to the brands they are using. The second way to change is what people buy. This is done by creating new floors and subclasses and looking at customers' purchase decisions and consumption experience changes. He believes the goal is to purchase competitors by attracting customers' attention [14].

Existence of perceived need or desire in the customer to the target class or subclass and passing the relevant brand through the screening test in the collection. The brands considered by the customer represent the affiliation of the brand [15]. As a result, the customer most likely replaces the brand with the category that will make a new product. An unrelated class or subclass to which most or all of the alternative brands are not related; as a result, you can market find that competition was reduced or non-existent and that this would be the basis for continued financial success [14].

### **Research Methodology**

The present research is applied in terms of purpose and duration of data collection method is among the qualitative studies that use qualitative data analysis, the factors that the consumer considers for the novelty of a product category. The study's statistical population is all Sari and Tehran exposed to yoghurt advertisements formed or consumed by lactobacilli. Lactivia drink yoghurt is a new product of Kaleh Company. In the initial stages of entering the market, it was more frequent and accessible in the centre of Mazandaran province. Access to the people who come with this product familiar or had consumed it, 39 samples were selected by non-probability purposeful method from February 2020 to May 2021. Since there was no database for those who saw or used the product ads, and such a database is impossible, it was decided to collect the data from stores.

Accordingly, statistical samples were selected in these stores to have the slightest possibility of encountering the product and remembering the advertisements when they see the product. If they have consumed it, they can more easily recognise the information they received. Accordingly, the purposive sampling method was considered. This study selected Lactivia beverage yoghurt as the new product that created the new beverage yoghurt product category. This product is one of the dairy products of Kaleh Amol Company, which was introduced to the Iranian market in 2019. According to the International Research Institute Euromonitor, which provides independent world research in the field of strategic needs, the activities of Kaleh Company over the past years have placed this brand (Kaleh) in the forty-eighth place in the world food industry. Lactivia yoghurt contains millions of active probiotic bacteria. Lactivia is the only dairy product in Iran with an active probiotic bacterium called lactivar. This bacterium has a significant effect on improving the digestive process of people, especially people with constipation.

### **Research Findings**

Of the 39 participants, 27 were male, and 12 were female; nine had seen advertisements. They had consumed it, eight people had seen only advertisements, and 22 people had consumed only the product.

### **Analysis of Findings**

## **Labelling and Coding**

After the researcher identifies a statement related to the research topic, they choose a label or words. This Labels ultimately indicate the sub-themes of the research. In the present study, the themes are in class markings extracted. The researchers' goal was to identify the consumer's factors to classify the new product and what these factors originate from, or more simply, the source of the symptoms.

Product	Product shape	Product propert ies	Taste	Packaging	Brand
Yogurt	0	0	P20	0	0
Has been diluted	P4, P5, P7, P23	Р5	P7,P22	P5	P5
Drink yogurt	P6	0	0	P6	0
Dry milk	0	0	Р9	0	0
Total	5	1	4	2	1
Source	Similar to previous products, Figure Packaging, consumption	Similar to previous product	Identical to previous products, Consumption experience	Similar Products previous	Signs Writing

experience

Table 1. Only Lactivia consumer

Interviews related to assigned classes and reasons for the assignment were written in total, and these posts are the basis for analysis. The data have analyzed the considerations of each individual who played a role in assigning the product category. 13 product categories and nine tokens were given to set a new product to product categories. 62% of people who had only experienced lactovia rated it as "diluted yoghurt", and the most commonly used symbol for the class assignment was "product shape". For example, a person who, in addition to the sign, also paid attention to the product's packaging, referring to the traditional background of the product. There is a device at the end of our alley that is constantly stirring, and there is yoghurt. It is diluted and does not harden anymore, and it is exactly like this product. In the past, such a product there have been no new. This product is the same yoghurt that has existed for a long time. They have made it industrial by adding a few new features for a woman suffering from gastrointestinal disease. The product has properties good for digestion, and it is not buttermilk. Still, this yoghurt has been diluted, and it tastes good. Individuals also pointed to the colour of the packaging and the new functional aspect of the product and said: It is effortless to eat, it means it is like the past. Its green colour differentiates it from other beverages because of its different drinks. The new product and its brand were relevant to this person.

**Table 2.** Lactivia advertising viewers only

Product	Product shape	Product Propert ies	Product name	Packaging shape	Advertisin g message	Pointer
Yogurt	P33	P32	0	0	P14, P19	0
Has been diluted	0	P3, P12	0	0	0	0
Doug	0	P18	P10	P29, P30, P31	0	0
Medicine yogurt	0	P15, P16, P24	0	0	0	0
Drink yogurt	P25	0	0	P27	0	P25
Laktigora	0	P34	0	0	0	0
Laktivia	0	P31	0	0	0	0
Digestions	0	P35	0	0	0	0
<b>Drink with</b>	0	0	0	0	P38	0
yoigurt						
Medicine drinl	0	P39	0	0	0	0
Total	2	11	1	4	3	1
Source	Advertising message	Advertising message, not similar With another product on the market	Similar products Previous in terms of shape Appearance	Advertising message, experience Product vision, Similar products previous	Emphasis topics In the message Tablighi, Nahwa Product manufacturing	shape Packagin g

Most people in this category referred to two classes of buttermilk and yoghurt with an equal percentage (23%). The focus of this hand attracted people and led to our course's attribution: advertising message, properties and shape of the product also, signs of product name, product properties, and packaging form. For example, one of the people who knew Lactivia was ours. Because it is thick and comes from us, another opinion was that: in general, its advertisements are on us and its properties, such as containing a type of bacteria and being beneficial for digestion, were emphasized. Another person pointed to the weakness of product advertisements and said: my inference from these advertisements is ours. Anyone who looks at this ad for the first time will consider it ours; Because the person who promotes the product says he eats a spoon and does not talk about drinks with it. But people who think the product is buttermilk said: I did not eat it, but because it comes from yoghurt, it reminds me of buttermilk, and all the buttermilk on the market is the same. A particular product category is considered in the group of people who have seen and consumed Lactivia ads. Most of them were not obtained and were generally referred to as yoghurt, diluted buttermilk, medicine, and digestive pills. At the same time, the signs, the source of the characters and the statements made by this group it was more critical and comprehensive than what other groups said. For example, a person who has noticed four signs of a product and finally, he put the product in our class, stating: the advertisement I saw did not seem to me to be a new product and in there is no market, it seemed to me that this product is unique to that brand. Kaleh did not have probiotics before; now, it has mixed probiotic products named Lactovia. There is nothing new in terms of taste. Only its packaging makes it possible to pick it up and eat it on the street. Inside this package is its drinkability: It does not give me the pleasure I expect from a drink as it is known, in the statements of this person to these signs mentioned: advertising message, taste, the form of production and shape of the product. Someone called it medicine. The regular yoghurt makes my stomach ache, but I feel bad, and my stomach does not hurt. Specific due to the product's properties, this person knows it is an alternative to chemical drugs. They knew it was new, and according to what was written on the product, they called it drinkable yoghurt and stated: It is thick, and it is like pouring a little water in yoghurt, and it is not buttermilk, it tastes like yoghurt and is like watery yoghurt. These people use product shape and taste as the basis of their classification.

Table 3. Both viewers of advertisements and consumers of Lactivia yoghurt

Product	Product shape	Product Properties	Taste	Packaging shape	Advertisin g message
Yoghurt	P1	0	P1	P1	P1
Has been diluted	P2	0	P2	0	0
Drink yogurt	P21	0	P26	0	0
Medicine yogurt	0	P17	0	0	0
Doug	P8	0	0	0	0
Medicine	0	P13	0	0	0
Digestions	0	P36	0	0	0
Total	4	3	3	1	1
Source	Consumption experience was not Similar product	Experience the issue In the promotional message, Suggest others	Consumptio n experience, Existence of products Similar	Emphasis topics It happened similar products	Emphasis topics It happened similar products

## **Count the Main Themes**

After examining the sub-themes or the signs' source, the main themes responding to research questions were finally developed. Sub-themes with the highest semantic and conceptual similarity were placed together, and meanings and new words were created. The final results are listed in Table 4.

**Table 4.** Indicators and factors affecting new product classification

Main Topics	Sub-themes		
Communication with customer experience	Experience of using the same product as before, the experience of the issue raised in the advertising message, visual experience product in store		
The uniqueness of the product mix	There was no similar product, no new packaging, and new manufacturing technology.  Product with similar properties, no product		
	with similar taste		
Comments of relatives about the product	Suggest others		
Advertising message	The general content of the promotional message, the topics emphasized in the promotional message		

In Figure 1, the research model is depicted based on the results of the interviews. As it turns out, the four main themes in the form of the shaping factors of the class or subclass of a new product from a customer or consumer perspective were identified. The numbers in the figure indicate the frequency of the sources mentioned; in such a way that the numbers are more significant, they show more importance for the consumer in classifying the new product.

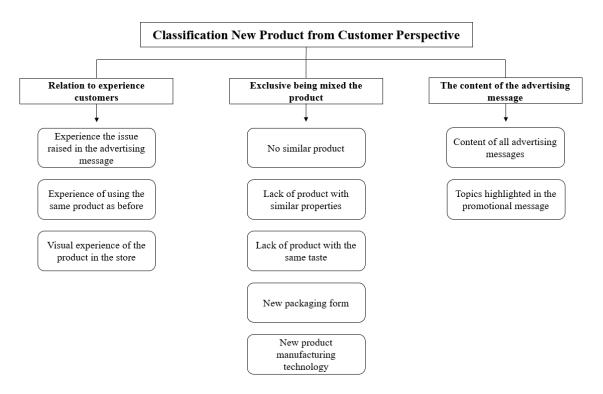


Figure 1. Factors affecting new product classification

#### **Conclusions and Suggestions**

In this qualitative study, an attempt was made to consider the factors that the customer or consumer believes in accepting the new product category and pay attention to them to be identified. Based on the research findings, the following results were obtained:

- 1. In terms of properties and characteristics of the product and according to the importance of this origin for the customer, the classification of the effect is different; if more critical, the main factor of variety is the properties and characteristics of the product. When this sign is less essential to the customer, it is similar to the existing products that determine the class. They noted that this result is consistent. The product's value, properties, and characteristics can be enhanced with a different appearance to be more important from the consumer's point of view. In other words, it can be most important for groups of consumers who differ in the value of the product because of their choice, creating a different look. Also, practical product applications can be directly seen. The product's appearance can bring more critical product features that are less available.
- 2. Increasing the perceived fit between the shape and the product's name causes it to be in the category related to its name.
- 3. The incompatibility of the product form with the existing classes causes it to be classified as a new product.

- 4. Innovation in how a new product is consumed increases the likelihood of being considered a new class. There is intangibility about the quality that we may not explain when we do. We recognize that physical appearance is an essential indicator of consumer product quality.
- 5. At high levels of importance of product properties, the determining factor of the product category is the dominant property. The product's shape determines the extent of the properties in classes.
- 6. New product name is one of the most basic features to classify it as a new product.
- 7. The difference in shape and colour of the product from similar products is one of the necessary conditions for it to be classified as a new product.

The product depends on the ground, consisting of competing alternatives. For products where credibility, uniqueness or innovation are essential, an unusual appearance is recommended; Such a preference for products that are widely available and have a regular appearance is reduced; because customer valuation for them is based on the uniqueness of the product. On the other hand, when one the product should be different from other products in its category, an unusual appearance is recommended. For example, when many competitive options attract a product, the ability to go can be increased by increasing its size or using bright colours. In addition, people pay attention to a new stimulus that contrasts with what they have seen. The new functional features better communicate with the unusual appearance; Separation and differentiation of this class compared to other products, the type is reduced; as a result, distinctive features are better recognized, and they become more critical. Inserting the parent brand on the product causes the consumer to classify it as a new product. Every new product category needs a new brand. On the other hand, the obvious is that the parent brand name recalls the previous products of this brand. One of the alternatives to not including the parent brand name on the product is to focus on the appearance.

The product's appearance or packaging can enhance the brand image; the brand identity visually in the formation of products is reflected. This research can be done by quantitative method, and a larger statistical population and its findings can be based on the results obtained from this study. It is also suggested that marketing and product development managers do the following at different stages considering new product development:

- Carrying out more research on the product's target market to obtain information about the importance of the product's properties among consumers of consumer goods. Add a different flavour from similar products on the market to a new product. Designing a shape and choosing a new name for a product that does not have the mental associations of similar products.
- Using a new mechanism to produce and display a product in a promotional message.
- Design a new and different look for a new product.

In the present study, using a qualitative method, factors were identified that were customer or consumer in the classification. One of the research limitations was the role of the customer in the purchasing process; less attention was paid. Each family member has a separate role in different family decisions that have not been fixed. It changes from family to family, from the decision to decision, and time to time. Based on this, it is suggested how to classify the new product from the point of view of each family member and determine the indexes. To be mentally examined in assigning the product to the intended class because the importance of different apparent dimensions and the product's interior is different for additional family members who have other purchasing decisions is an issue. It is effective in assigning a new product to a specific category. Another limitation was the mental engagement of individuals at the time shopping, which is a personality category that was not focused on and was considered at the lowest

level. The result of previous research has shown that product mental engagement can affect the product decision-making process, to the extent that the consumer searches for information about the product, the type of attitudes and consumer preferences about alternatives in the category of similar products and brand loyalty. Therefore, it is suggested that in research related to product classification, the sample be selected in such a way that first with people about the importance of the new product and its various dimensions. Interviews should be conducted to determine the level of their mental involvement that determines the extent of product features for them.

#### Referencess

- 1. Paddock, J.R., *Changing consumption, changing tastes? Exploring consumer narratives for food secure, sustainable and healthy diets.* Journal of Rural Studies, 2017. **53**: p. 102-110.
- 2. Krause, D. and M. Pullman, *Fighting to survive: how supply chain managers navigate the emerging legal cannabis industry.* Journal of Supply Chain Management, 2021. **57**(3): p. 50-71.
- 3. Grunert, K.G. and H.C. van Trijp, *Consumer-oriented new product development.* Encyclopedia of agriculture and food systems, 2014. **2**: p. 375-386.
- 4. Lonkila, A. and M. Kaljonen, *Ontological struggle over new product category: Transition potential of meat alternatives.* Environmental Innovation and Societal Transitions, 2022. **42**: p. 1-11.
- 5. Parmentier, G. and R. Gandia, *Redesigning the business model: from one-sided to multi-sided.* Journal of Business Strategy, 2017.
- 6. Di Dio, S., et al., *Involving people in the building up of smart and sustainable cities: How to influence commuters' behaviors through a mobile app game.* Sustainable Cities and Society, 2018. **42**: p. 325-336.
- 7. Derbyshire, J. and E. Giovannetti, *Understanding the failure to understand New Product Development failures: Mitigating the uncertainty associated with innovating new products by combining scenario planning and forecasting.* Technological Forecasting and Social Change, 2017. **125**: p. 334-344.
- 8. Sinclair, M. and I. Campbell, A classification of consumer involvement in new product development. 2014.
- 9. Madhavan, M. and C. Kaliyaperumal, *Consumer buying behavior-an overview of theory and models.* St. Theresa Journal of Humanities and Social Sciences, 2015. **1**(1): p. 74-112.
- 10. Schauer, A., A.C. Vasconcelos, and B. Sen, *The ShaRInK framework: a holistic perspective on key categories of influences shaping individual perceptions of knowledge sharing.* Journal of knowledge Management, 2015.
- 11. Kjellström, H., J. Romero, and D. Kragić, *Visual object-action recognition: Inferring object affordances from human demonstration.* Computer Vision and Image Understanding, 2011. **115**(1): p. 81-90.
- 12. Allen, K., et al. *Infinite mixture prototypes for few-shot learning*. in *International Conference on Machine Learning*. 2019. PMLR.
- 13. Zulkarnain, Z., et al., *Outcome or process regret in online purchasing: Consequences of brand trust to consumer purchase regret.* International Journal of Supply Chain Management, 2019. **8**(6): p. 75-80.
- 14. Chen, L. and M. Gao, *Novel information interaction rule for municipal household waste classification behavior based on an evolving scale-free network.* Resources, Conservation and Recycling, 2021. **168**: p. 105445.
- 15. López, M., M. Sicilia, and A.A. Moyeda-Carabaza, *Creating identification with brand communities on Twitter:* The balance between need for affiliation and need for uniqueness. Internet Research, 2017.