

EDIBLE PACKAGING: A TOOL FOR GREEN MARKETING

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Abstract: Packaging is a required material for food quality maintenance in order to keep it in good condition. Plastic often used as a type of package. The use of plastic as a material of food packaging gave rise to a variety of problems to the environment due to its inability to be recycled and decomposed naturally by microbes. To resolve this problem, the alternative to reduce packaging material is with changes in the use of plastic with an edible film. Edible coating or film defined as primary packaging made from edible components. Edible films and coatings have received considerable attention in recent years because of their advantages, including use as edible packaging materials over plastic films. It could contribute to the reduction of environmental pollution. The main advantage of edible films over synthetics is that these may be safely eaten as a part of the food products and are environment-friendly at the same time as they increase the shelf life of fresh products.

Keywords: Edible Film, Green Marketing, Edible Food Packaging.

INTRODUCTION

Plastic becomes an integral part of our daily life. Its broad range of application is in packaging films, wrapping materials, shopping and garbage bags, clothing, toys, household, and industrial products, as well as building materials. Once the plastic discarded after its utility then, it becomes plastic waste. Only small percentages of this plastic waste are recycled, and most will end up in landfills, beaches, rivers, and oceans. It is a fact that plastics will never degrade and remains on the landscape for several years and subsequently raises environmental issues. Several approaches aim to solve the plastic problem. This article is going to focus on food-based packaging and its role in green marketing for a sustainable environment. It discuss about the edible film and coating, it analyses the green marketing strategy, SWOT analysis, Green segmentation, target marketing, differentiation, positioning, green marketing mix.

EDIBLE PACKAGING

Edible packaging is a type of packaging that is designed to be eaten or can biodegrade efficiently as the food it contains. An edible film or coating simply defined as a thin continuous layer of edible material formed on, placed on, or between the food components. Both films and coatings which regulate the transfer of oxygen, carbon dioxide, moisture, lipid, aroma, and flavour compounds in food systems. They can increase the shelf life of food products, improve food quality, and decrease the amount of conventional synthetic packaging materials needed to preserve and protect foods. Edible films improve package recyclability by decreasing the need for co-extrusion and lamination.

Generally, edible films are prepared separately and then applied to the surface of the food, whereas coatings are formed directly onto the food surfaces. The food-grade biopolymers extracted either from plant or animal sources like polysaccharides, proteins, lipids, and their composites are the materials used for making edible packaging materials. Moreover, seaweed, as such, can be used for the purpose. Fruit and vegetables, the protective foods gifted by nature, are also used for making edible food packaging materials.

Edible coatings and films have received considerable attention because of their advantages over plastic films. One of the key benefits of using edible packaging systems, as compared to synthetic packaging systems, is that they are an integral part of the food product; they can be eaten, without unpack or can throw back to nature, which will not harm our environment.

GREEN MARKETING

Green marketing refers to an organization's efforts at designing, promoting, pricing, and distributing products that will not harm the environment. Today green marketing has incorporated a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. Other related terms used for green marketing are Ecological Marketing, Environmental Marketing, and Sustainable Marketing. The American Marketing Association (AMA) defines green marketing as the marketing of products that are presumably safe for the environment, generate minimal harmful effects to the environment and efforts made by organizations to create products that are beneficial to the environment. Green Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with a minimal detrimental impact on the natural environment.

Green marketing refers to the process of promoting products or services based on their environmental benefits. Such a product or service may be environmentally friendly in itself or produced in an environmentally friendly way. Green marketing include products: Manufactured sustainably, Made from renewable materials (such as bamboo, etc.), Not making use of excessive

Packaging, Not containing toxic materials or ozone-depleting substances, Produced from recycled materials and/or able to be recycled, Designed to be repairable and not throwaway.

Due to the keen concerns of people and the government of different countries in environmental safety, day by day, green marketing is getting more important. Seeing the importance of green marketing in our basic life, we can say that green marketing has become inevitable.

SWOT ANALYSIS

1. Strength: The main advantage of edible polymer over traditional synthetics was that they could consume with the products. There is no package to dispose of, and even if the films not consumed, they could still contribute to the reduction of environmental effluence. The edible polymers were produced exclusively from renewable, edible ingredients and therefore anticipated to degrade more readily than other polymeric materials. It will help to reduce the packaging waste associated with processed foods and will support the preservation of fresh foods, extending their shelf life.

Edible polymers seem to be an excellent alternative to the plastic foil. They defined as material that can be consumed and provides an excellent barrier to moisture, oxygen, and solute movements for the food.

It is also convenient to be used by consumers as the thin layer of film will melt once it is in contact with saliva. The films can customize according to the demand of the market. They can be tasteless, colorless, and odorless or can customize with different shades of colors, flavors, and even sweetness. Instead of being a mere layer to shell food, it also adds nutritious value to food as the composition made of natural ingredients.

Edible films are easy to produce and handle since they require less heat and no toxic solvents when compared to traditional petroleum-based food packaging (e.g., polyethylene, polypropylene)

2. Weakness: The weakness of the edible packaging is its permeability, and mechanical properties were generally weaker than synthetic polymer and the image of the technology as it is still very new in the market. Many people may not have heard of it, so consumers may lack confidence or do not see a need for this technology in the present market.

3. Opportunities: As consumers are more aware of environmental concerns, they are more motivated by green products and technology. Fruit and vegetable-based films used as food wraps such as sushi wraps and sandwich wraps. Thermally stable films used as oven bags or cooking bags can tolerate high temperatures. The fruit and vegetable-based films itself consumed as snacks called fruit leather, which has a leathery, chewy consistency.

4. Threats: There is a chance for the entry of new competitors and can expect the threats from suppliers. Another challenge would be the consumer's attitude towards the edible feature of the

packaging. It might not be easy to change the culture of consumers who will always unwrap and throw the packaging before consuming food and also consumers may lack confidence

GREEN SEGMENTATION

Segmentation is the process of a grouping of customers into different segments based on some type of shared characteristics. Green segmentation involves splitting the market based on a consumer's level of concern about environmental issues and the actions they take to deal with those concerns.

Green segments as per credit reference agency

1. Behavioral greens

This segment geared toward being green. They think and act in a green manner. Their opinion about the organizations which are not following green strategy is harmful. They ready to pay a premium for green products.

2. Think Green

They are not regular consumers of green products. They think about green issues but not always act as per their thinking.

3. Potential Greens

They are young and below-average income consumers and like to have the latest up-to-date products. They do not act as green consumers, nor is it at the forefront of their minds; however, they swayed as they are young, and their opinion is developing. They believe in recycling of packaging materials.

4. True Browns

They are entirely against the above groups. They believe the green act is a waste of time and money. Their views are very harmful. They are young and high-income groups and conservative in their thoughts.

Green segmentation based on Learners Marketing

1. Diehard greens

Often well-educated consumers and they care about the environment. They teach their family about the importance of green principles. Encourage their children to recycle.

2. The Laissez Fair Greens

They show concern about the environment but think about the financial benefits first before the environmental benefits.

3. Not so green.

They are the people above 40 years old and do not like green principles. They believe that it is not their job to save the world.

TARGET MARKET

The primary target market would be those who are in the Behavioral greens & Diehard greens segment. Because they have a higher consciousness of green products. Besides, they have higher spending power, and they are more motivated in purchasing eco goods, and they are well aware of the use of eco-friendly products and green principles. They are also ready to recycle.

DIFFERENTIATION

Product differentiation is the process of distinguishing a product or service from others, to make it more attractive to a particular target market. Which involves differentiating from competitor's products well as the firm's products. The edible films customized according to the demand of the market. They can be tasteless, colorless, and odorless or customized with different shades of colors, flavors, and even sweetness. Instead of being a mere layer to shell food, it also adds nutritious value to food as the composition made of natural ingredients.

POSITIONING

The process of creating an image of the product in the minds of the customer called positioning. It helps to create a perception of product or service amongst the consumers. Green products have a positive value in the consumer's mind. So the edible film can easily capture the minds of consumers. It can do through making effective strategies in the green marketing mix.

GREEN MARKETING MIX

It is essential to evaluate the green marketing mix in order to understand the position of the green product. According to Wang, the four elements are (1) Product; (2) Price; (3) Promotion and; (4) Place.

Product: A producer should offer eco-friendly products that not only must not contaminate the environment but should protect it and even liquidate existing environmental damages. This green technology is able to produce better quality products. This is because it carries a higher value than typical products. This value comes from the convenience of eco-friendly packed food and beverages. For instance, upon opening a large packet of 30 individual sachets of instant coffee,

one can quickly put a sachet in a cup of hot or cold water without peeling off the seal. The edible layer which holds the coffee powder will dissolve upon contact with water.

Price: Prices for such products may be a little higher than conventional alternatives. Target groups are willing to pay extra for green products. The white rabbit sweet, which uses such edible films, is priced at a highly affordable price in comparison to the other sweets and candy. Hence price-wise, a product with edible packaging does not necessarily have to be priced beyond affordability.

Place: A distribution logistics is of crucial importance; the main focus is on ecological packaging. Marketing local and seasonal products, e.g., vegetables from regional farms, are more comfortable to be marketed "green" than products imported. With the combination of all the factors, the medium for distribution is also significant. For this technology, the intensive distribution could be practical. Grocery stores would be suitable for households to obtain packets of instant coffee or chocolate, yogurt, and frozen food, while coffee shops can provide deserts wrapped in edible packaging.

Promotion: A communication with the market should put stress on environmental aspects, for example, that the company possesses a CP certificate or is ISO 14000 certified. Promotions are to improve a firm's image. Furthermore, the fact that a company spends expenditures on environmental protection is advertised. Third, sponsoring the natural environment is also very important. Moreover, last but not least, eco-friendly products will probably require special sales promotions.

Advertisements of products featuring edible packaging should focus on its convenience, uniqueness, and its green properties. Consumers should also be informed of the firm's contribution to the community and the food industry. The edible skin for food and dissolvable properties for beverages should be introduced and demonstrated to stakeholders as something very exclusive. With the rising usage of the societal marketing concept in today's business marketing strategy, this technology can easily find its place amongst businesses within the food industry. Furthermore, when a company considers the adoption of this technology, in the long term, they would be serving the well-being of the society in a much more excellent way than could ever be imagined.

CONCLUSION

The edible film and coating is an innovative technology that is used in the field of packaging. The concept of good packaging material represents a stimulating route for creating new packaging materials. This is because they are available with a wide range of properties that can help to alleviate many problems encountered with foods. It helps to reduce plastic wastage, and also it promotes sustainable development. It can achieve by promoting green marketing strategies.

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