

Procedia of Theoretical and Applied Sciences

Volume 9 | Jul 2023

ISSN: 2795-5621 Available: http://procedia.online/index.php/applied/index

THE CONCEPT OF FOOD INNOVATION AND ITS SIGNIFICANCE TODAY

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Annotation: This article devoted to open the term food innovation, its importance and role in our society. Moreover, steps of making the latest food innovations are observed.

Keywords: food industry, globalization of food markets, business owners, productivity, beverage companies, food innovations, unconventional ingredients.

Every year, the food industry comes up with new ways to make life easier for people who buy food and for people who own food businesses. They also try to help people get more done. In recent years, the food industry has experienced many new and improved ways of making food. This is mostly due to changes in the global food market and the effects of climate change. Business owners now have more chances to grow and improve. From improving the eating habits of consumers through healthier options to automating food business operations for businesses, the industry does not shy away from any food innovation. Food innovation definition refers to the development of new food processes, products, and services that significantly contribute to the industry's productivity and market choices. Innovations in food aim to improve the consumer's life and the efficiency of food business operations.

Food industry Innovation involves all aspects of the food supply chain. Where there is room for improvement, innovations can be applied. Food and beverage companies continuously find more ways to produce healthier and newer options for consumers [1]. Food innovations are usually found in products that have healthier or different ingredients and offer more advantages compared to the usual ingredients used in food. Also, a person who creates new types of food concentrates on finding additional ways to make the process of preparing and producing food more precise, secure, and environmentally friendly. Simplifying processes usually means using technology to make them better and less likely to have errors. Innovations in the food industry undergo several stages of studying and experimentation. This field of science uses behavioral, natural, and applied food science principles to understand which solutions are required and suitable for current pressing problems.

Research in innovation combines scientific expertise, product development research, and behavioral studies to develop useful concepts. Several studies and surveys are performed to understand what current problems the industry is facing, and which ones can be resolved with innovations. Innovation research uses marketing and business strategies to determine how the solution will be introduced to the public. Food innovation is a multi-step process that involves long hours of conceptualization, testing, and implementation. The process usually comes from a small idea that can hugely impact the food supply chain. Food innovation and product development share the same fundamental steps[2]:

1. **Product strategy and idea generation.** Innovative ideas for the food business start with a particular problem in the food industry. Food innovation companies gather information on current pressing matters in the industry, find ways to solve them and improve the customer's way of living. Gathering information for food innovation can be done through market research and feasibility studies. Research studies that produce useful innovations consider the following factors:



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- Market problem
- > The present gap in the market
- Currently existing solutions
- ➤ Economic value

The first step involves considering these factors and combining them to produce a detailed product concept.

- 2. Process development and testing. After proving that the conceptualized food innovation ideas will provide significant solutions to an identified problem, innovators will create an initial process and sample of the product. This step involves studying the dependability of the suggested innovative effects and reproducing the results. After a series of studies, the product will then be tested for the target market's acceptance and analyzed points for improvement.
- 3. Product commercialization and launch- Once the innovation is proven acceptable and effective, it is commercialized and introduced to the market. At this point, further improvements may be applied depending on the acceptance of the general market. Food innovation undergoes more detailed steps. This outline represents how innovations in food and processes are made. Innovations in the industry are products of finding ways to solve real-time problems with smarter and more efficient solutions.

This exact process and objective are how FoodDocs' digital Food Safety Management System was created. To help make food safety compliance more accessible, our team developed an intuitive digital solution. Using our software, food businesses can get a quick overview of their operations and immediately understand which areas require more attention. Such a solution can help improve efficiency significantly. The food industry survives and grows because of food innovation. Modern solutions to food safety, security, and quality issues have been resolved through innovations. In addition, more choices have become increasingly available as every food market opened up for globalization. In particular, food innovation brings the following positive effects:

<u>Growth and new market.</u> Through food innovation, food businesses discover competitive advantages and economic opportunities for growth. New products and processes keep a food business updated with the <u>newest food safety trends</u>. They also help businesses expand and cater to more market segments. Innovative food brands are more likely to stay in the market.

<u>Increase productivity.</u> Innovations targeted toward processes often aim to increase the efficiency and effectiveness of operations. These include solutions for fewer errors and even human intervention. Innovative solutions can help companies produce more for less cost.

<u>Less error.</u> Food innovations, such as the automation of processes, make operations more accurate, thereby producing less waste and higher yield. Through such solutions, businesses can focus more on growing their operations and earning more. A good example of this is when food businesses use <u>a point-of-sale system (POS)</u>. This automated software automatically accounts for the expenses and profits of a business and connects them with other aspects of operations, including inventory management and accounting. There is no need for excessive manual intervention. Not all methods of food production are sustainable, but thanks to food innovation, our agricultural and distribution processes are becoming more sustainable every year[3]. Greater sustainability means protecting the environment and ensuring the possibility of food production for many years to come.

Food tech is any technology that improves food production, distribution and supply, and it affects the way people sell, produce and distribute food [4]. Food innovations open the door to the accessibility of food worldwide. One of the main objectives of food agencies is to provide safe, adequate, and



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sustainable food to all citizens of a nation, and innovations contribute to this. An example of a significant innovation that contributes to security is the use of active packaging and food preservation. Such innovations allow food distributors to reach farther places while ensuring that the food is still safe to eat when it arrives to the consumers. Food innovation also addresses issues of negative environmental impacts that significantly affect food security. Friendlier processes that generate less greenhouse gas emissions are discovered through food innovations. Accessibility and efficiency of food safety. Food innovations also help make smarter tools that will maintain compliance with less effort. Innovations such as FooDocs' digital Food Safety Management System automatically generate monitoring logs that would normally take hours or days to produce manually. In addition, this digital solution also offers a smart notification system through a mobile app that notifies food workers of tasks that need to be done.

To sum up all given facts it should be noted that as the food industry moves toward a more sustainable diet and technology-centric approach, food business operators and customers can expect smarter solutions and more choices. Food innovation is a vital part of the industry. It addresses consumer demands and allows businesses to become more competitive. Recently, consumers and business owners collectively moved toward more sustainable products and healthier diet options. This trend is the result of increasing public health concerns. The food service and manufacturing industry's response to issues in food safety and quality is to adapt with smarter, more accurate, and safer solutions.

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