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# Insights



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## **FBM INSIGHTS**

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# APPLICATION OF TECHNOLOGY IN FOOD INDUSTRY

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## INTRODUCTION

When it comes to cooking and eating, technology is unnecessarily the first thing that springs to mind. On the other hand, technology has changed the way we create and find food over time because of applications, robotics, data, and data processing techniques, among other things. Technology helps food companies produce more effectively to meet the demands of a growing global population. Given that there are currently 7.5 billion people on the planet, it follows that the need for food is increasing on an annual basis (Martin, 2019). It is possible to increase the shelf life and safety of food by applying technology to improve the processing and packaging of the product.

In the food sector, automation improves quality while also reducing costs for the company. The use of robotics lowers the cost of food preservation while simultaneously increasing the amount of food produced. It is estimated that over 30,000 robots work in the European food business, with the number of robots per 10,000 workers increasing from 62 in 2013 to 84 in 2017 (Adamo Software, 2020). Not only do countries such as Sweden, Denmark, the Netherlands, and Italy, have a large market, but also the highest robot densities. Robotic equipment can aid in reducing safety issues in the food industry's more dangerous tasks, which are becoming increasingly common.

Precision agriculture is important when it comes to determining how technology may be used to benefit farmers. GPS tracking devices and satellite photos are being used to monitor agricultural production, soil levels, and weather patterns to increase farm efficiency (Marketing Tutor, 2019). These technologies do not only see what is going on in the fields, but they may also use the results of the analysis to determine the health of the soil and the crop's yield.

Drones are one of the most important devices farmers are using to accomplish this. They can locate and detect ill or damaged crops and they may also provide urgent treatment. The implementation of these drones does not eliminate the need for labourers but aids them to become more efficient in their work through increased productivity. With strict product standards in vast quantities, as well as a need to reduce costs, robotic elements assist in establishing a faster environment that produces more goods than what would be possible with traditional labour (Marketing Tutor, n.d.).

## TECHNOLOGIES THAT REDUCE COSTS

When the food and beverage business uses technology for record keeping, smart broilers and ovens in the kitchen, and an online ordering system, the entire process becomes more efficient, with no delays or kitchen-related safety issues (Martin, 2019). Even though such

catastrophes are infrequent, they can have a significant monetary impact on a business. To remain competitive, some world's biggest food and beverage companies are bringing their operations online (Marketing Tutor, 2019). The ability to place orders for their favourite delicacies and have them delivered to their doorstep would be available to the public. Upon receiving the online order from the customer, the business would then process it and subsequently bring the necessary food goods to the customer's residence.

Because of technological advancements and the availability of online purchasing, it is much easier to get started in this business nowadays. As a result, there has been a significant increase in the level of competition in the food and beverage industries. Customers can now order a specific product from a range of different suppliers in a single order. It is available for purchase from a variety of different companies. Customers are more inclined to purchase items if they learn about the dish's unique selling point. The knowledge gained from food business experience allows businesses to save money by selecting the optimal combination of components rather than relying on trial and error. Saving money on food waste can be accomplished by preparing the necessary amount of food at any appropriate time of day. The cost-effectiveness of your company contributes to the acceleration of its growth.

## **CUTTING-EDGE TECHNOLOGIES IN THE RESTAURANT INDUSTRY**

In the context of food processing technology and technology in the food service industry, automated equipment and robots are being implemented to regulate food quality. Furthermore, it promotes consistency for food businesses or even restaurants that require inventory management optimization to operate efficiently. It may be claimed that the robot edge is the best representation of the concrete spirit of food technology (Adamo Software, 2020). Robots are being used extensively in most parts of North Europe, with the number of robots increasing by 20 percent per year. In Europe, around 30,000 robots are presently in charge of the production of goods. Automated systems assist the food and beverage industries in overcoming the limitations of risky or high-accuracy job roles.

The pandemic had a significant impact on the global restaurant technology market in 2020. On the contrary, it was hailed as an exhilarating time for reconstruction and rehabilitation after the disaster. The world is currently on the lookout for creative solutions to bridge the gap between corporate complexes and their customers. In terms of potential, the meal delivery service is the most promising technology now, attracting both restaurateurs and investors. On average, earnings from food sales with the option of delivery have accounted for over 6 percent of total restaurant revenues (Shaw, 2021). More importantly, with an estimated annual growth rate of 10 percent, the meal delivery service is expected to have a prosperous future. On-demand food delivery software development would become more realistic because of the tremendous demand for establishing a customised system that matches the specific needs of each firm.

## **CONCLUSION**

As a result of all these technical developments, there is a plethora of possibilities that might completely transform the way we produce food. The only thing we can do now is wait and see if advancing technology is the answer to alleviating world hunger and resolving our waste crisis. The food and beverage industry has the potential to be a very profitable business. Although it is incredibly competitive and necessitates a substantial initial expenditure. The most recent COVID-19 pandemic, on the other hand, has done considerable damage. Online ordering and home delivery are excellent options for first-time customers as well as those who have yet to start.

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