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Technology: Changing How We Eat

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Technology as we know it is ever changing. The impact and role that technological advances have in numerous industries is continually influencing and reshaping the infrastructure of modern day. Professor of Environmental Systems at The Open University, Andy Lane describes technology as an understanding of how “knowledge is creatively applied to organized tasks involving people and machines that meet sustainable goals” (Lane). According to Lane, the aims and objectives of technology can be divided into three important categories.

The first category being that technology centers on meeting a human need or demand by taking action, which has enabled us to better understand the inner workings of the world and to develop more improved technologies to meet those requests. The second category describes technology as going beyond scientific knowledge, and further denotes it to include “values as much as facts and practical craft knowledge as much as theoretical knowledge” (Lane). The third category explains technology as an organized way of completing tasks. It covers the intentional and unintentional interactions between products, people, and systems through various processes. This not only helps us to better understand technology, but the importance it plays in the industry of consumer packaging and food processing.

Unlike the numerous technological advances, we see today, the earlier stages of technology looked much different. The importance of technology and the role it plays in the food processing industry can be traced back to the 16th century with the invention of the steam engine in Devonshire, England by Thomas Savery. This invention led to the “Industrial Revolution”, which brought about a wide range of new tools and machinery, and the “acceleration in the processes of technical innovation” (Wilkinson). The lasting effects of which can still be seen in the present day with the merger of technology and industry.

In the 20th century technology is now being used by a wide array of industries. The food industry is one of many who rely on technology to meet the ever-increasing demands of consumer needs. The food processing industry serves to produce food from raw ingredients for human consumption, and the ever-growing world population. The food processing industry is the largest growing industry employing more than “1.7 million workers in 2018” (Zeballos). For the food industry to be successful they must not only meet consumer demands of quality, but also of price, choice and convenience

A company that models these truisms well would have to be Tyson Foods. Tyson Foods founded in the 1930s uses technology as a tool, which serves to increase food productivity and safety. The use of machinery and advanced equipment in the food processing industry allows food to be processed at an increased rate in an order that substantially promotes productivity and safety for both the employees and employers. Through the use of robotic machines, safety issues concerning some of the more dangerous jobs in the food industry can help to be eliminated (Martin). Food is then able to be sorted in an efficient manner, while also meeting quality standards through the use of measurement systems analysis, statistical process controls, capability analysis, and control charts. This allows the food industry to effectively sustain consumer demand, while also creating demand for new company products and services through innovative convenience.

The role of technology in the food processing industry is constantly evolving. It revolves around the greater use of machines and software’s to ensure quality standards, customer satisfaction, and higher productivity (Geijer). Through this technology, manufacturers are able to provide a wide variety of foods to meet the needs of a growing world population.

Another important role of technology is in that of consumer packaging. Consumer packaging refers to the packaging that is used to deliver products from the producer to the consumer. Packaging serves to provide information, protect the product, market the brand, and aid in environmental sustainability. The use of technology to improve “processing and packaging” can improve the safety and shelf life of food products while also including added convenience and accessibility (Martin).

The consumer packaging industry has changed in most recent years to become more environmentally friendly. The materials used to package products are now just as important as the products in the package, especially to the environmentally conscious consumer. Manufacturers are taking greater awareness by using technology to produce packaging that results in less waste and fewer carbon emissions. This is done through the use of raw organic and natural materials to produce eco-friendly packaging. As a result, the materials require less energy overall to be produced, and are healthier for both the consumer and the environment. In addition to companies becoming more environmentally sustainable, many are also using the help of technology through robotics and digitization to further “find alternatives to plastics and other harmful packaging to the environment” (Martin).

The evolution of technology over the past few centuries has definitely shaped how food is prepared, processed, and packaged. It not only affects how we eat, but what we choose to eat.

The demands of the consumer are ever-changing, so the role of technology must change to meet those needs. Technology has not only altered how food is produced and processed, but also how food is consumed. Whether it be through consumer packaging or food processing, technology will continue to influence and reshape the infrastructure of modern day.

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