



MARI

Homepage: <http://publisher.uthm.edu.my/periodicals/index.php/mari>
e-ISSN :2773-4773

Pre - Programmed Chef

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DOI: <https://doi.org/10.30880/mari.2021.02.03.032>

Received 05 September 2021; Accepted 05 October 2021; Available online 15 December 2021

Abstract : Preprogrammed Chef is a new era of digital technology application of food and beverage (Digital Food & Beverage). The program is an advanced technology application to help upgrade food and beverage service. This program is designed to minimize human interaction due to our continuous battle with the pandemic. The auto features that are being applied in this idea are to help ease any discomfort or trouble that are experienced by the customers at any food and beverage establishment. The machine will be programmed in detail to complete tasks like taking customer's orders, cooking the food, packing prepared food and serve complete food to the customer. Therefore, with the idea that combining food and beverage and technology, the desire is to give new hopes in the future of food and beverage businesses.

Keywords: Pre-programmedmme, Covid-19, Digital Technology, Application

1. Introduction

The introduction of automated systems had not impacted on staff numbers and the process had let the business invest in new ventures, which then created new opportunities and a chance for some workers to develop skills by learning to operate computer-controlled machinery [1]. Due to Covid-19 pandemic, social distancing guidelines and self-isolation rules have presented challenges for business, including frequent staff shortages. People and companies have been forced to turn to automation and use machines like to ensure they can still open the doors of their business during the pandemic. According to report by [2], seen a major increase in demand for automation with technologies can be used in a way which is positive for the workforce. Some of the benefits of using the machine especially during the pandemic includes helping with reduced numbers of staff and measures such as social distancing.

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Pre-programmed Chef is a system that is believed could help the food and beverage industry. The function that is carefully planned is a new digital technology to boost food industry culture. As the system is a fully pre-programmed system, the business will be self-run by an automatic machine. The function is set to help food and beverage service during Covid-19 pandemic by minimizing human interaction. As mentioned on the name of the product, the whole system of the restaurant will be conducted through a pre-programmed system that could fulfill a human role in serving the customer. The program will be automatically operated starting from ordering until collecting the food. All steps along preparing the food will be prepared by the automatic machine. This type of system is very unique and is really rare in Malaysia. The uniqueness will be a type of invitation to attract more customers as they are curious about the system. This type of service will also be a game changer in the food and service industry.

As we are living in an era where standard operation procedure is compulsory everywhere we go, thus, the idea to make a fully contact free establishment, a pre-programmed machine that could fulfill the human role to serve customers. The original idea was to programme a machine that is capable of acting as a chef and preparing food to serve. The machine will be programmed in detail to complete tasks like taking customer's orders, cooking the food, packing prepared food and serve complete food to the customer. The programme is designed to help the customer to avoid any contact with anyone and complete their buying process with a machine from start until the end. To offer a convenience solution to customers to complete the buying process, the program is installed with a cashless payment method to minimize any complication. The main reason why this idea was suggested is because there are many food and beverage businesses that could not survive due to the ongoing Covid-19 pandemic. The reliance on technology is forecasted to move forward and the pace at which it will progress will be entirely based upon how quickly new inventions, new innovations come to market [2], and businesses and the industry have to work to satisfy consumers demands.

2. Materials and Methods

All components for Pre - Programmed Chef were assembled as illustrated in Figure 3. Idea for this innovation was adapted from [3] and [4]. The hardware components involved a camera, a computer with connected network, and power. The hardware components are attached to the pre-programmed chef components which include the manipulator frame, joint motors, and motor controllers. Every setting will be monitored by a programmer to ensure that the system is working correctly. The machine will be programmed in detail to complete the tasks of a chef in food and beverage personnel such as taking customer's orders, cooking the food, packing prepared food and serve completed food to the customer. The marination and temperature will be pre set by the programmer, therefore every order will have the same result.

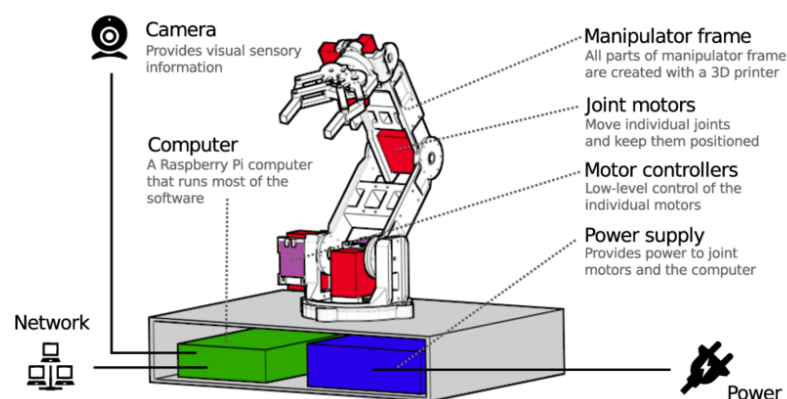


Figure 1. Assembled of Pre-Programmed Chef**3. Conclusion**

Covid had highlighted how much technology was changing lives. The use of technology has shaped the world and benefit people in the future. Pre-programmed chef was designed to overcome problems facing by the food and beverage industry. With the ongoing pandemic problem the system will be a big help to minimize direct human contact. By using a pre-programed system, unnecessary errors can be avoided. It can help to minimize unwanted wastage problems. The system will be a great help in improving the food and beverage industry while battling against economic problems in pandemic season. In the future, technology improve our public services and create a culture of innovation and collaboration.

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