

ABSTRACT

Abstract

Today, robotics technology has penetrated various sectors, including entertainment, education, healthcare, and the food and beverages (F&B) industry. In the face of tasks that require precision and to minimize human error, the development of robots with unique capabilities is becoming increasingly important in modern society. One example of applying this robotics technology occurs in the food service profession, where customer service accuracy is critical. As a solution, the concept of Representative Robot (REBOT) servers that can be controlled remotely is an exciting research focus. REBOT is designed for production cost efficiency and order service time. The interactive capabilities of REBOT, both audio and visual, are an added advantage in meeting customer service needs. Marvelmind Indoor Positioning technology is used by utilizing an indoor GPS Beacon to map the location of REBOT. The test results show that the manual control system successfully moves the REBOT remotely according to the directions. The delay measurement of the manual control system offers an average of 68.875 ms based on delay data taken from 20 samples. This shows the ability of REBOT to provide an efficient and accurate solution in order service with the potential for further development.

Keywords: Teleoperation, Robotic, Marvelmind, Control, Technology