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Determination of Quality of Food and Service in Restaurants by Obtaining Tipping Percentage with the Help of Fuzzy Inference System

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Abstract

Background: - Fuzzy Inference System is a system which contributes the Fuzzy logic and represents the method based on the grade of truth to a certain degree than the usual true or false such as poor, average, hot, cold, high, old etc. [1]. So, basically Fuzzy logic helps to give the decision like good or bad, hot or cold etc. [2].

Objective: This paper represents, the quality of the food as well as the quality of the service in the restaurants by generating the percentage of the tips means the percentage of the tip will decide the quality of the food and the service [2].

Methodology: So, the main concept or the methods are if the food is bad OR the service is poor, then the percent of the tip will be low, in the same way if the service is acceptable then the percent of the tip will be medium, in the last if the food is great OR the service is amazing, then the tip will be high [2]. So, by considering these methods it was determined the quality of the food and the services of that particular restaurant. So, the concept of this paper will be benefited for the restaurants so that they can be able to rectify their faults and also be able to increase their perfections [3].

Result and discussion: As in this study, it was used to calculate the tipping percentage for which the quality of the foods and the service was determined. The method used in this study is the fuzzy logic where the centroid method is used and which helps to find that the tip percentage is 20.2% among the range between (0 to 25) % which also generated in a graphical format where it was shown that the quality of the food and service was excellent.

Conclusion and Future scope: So, this paper helps to evaluate the quality of the food, service with the help of tipping percentage which helps to increase the rate of the restaurants [2]. With the help of this paper, we can able to evaluate the concept in the different sectors like weather forecast and also in different fields [3]. We can be able to implement this process in different fields like in electrical, in electronics, in mechanical [4].

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