Universiti Teknologi MARA

The Implementation of Market Basket Analysis in Menu Association Model for Corm Café

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STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Nowadays, with the challenging of business environment such as customer demand and increasing in customers, it gives a lot of pressure to every business operations. From the preliminary studies, the researcher had identified that Corm Cafe is lack of marketing strategy. Market basket analysis is one of the techniques to find associated items using the order sheets of Corm Cafe. The main objectives of this study are to identify the current business process and business strategy of Corm Cafe, to propose menu association model using market basket analysis techniques and to visualize the result based on the proposed model. Besides that, CRISP-DM is used as a method throughout this research which is starting from business understanding, data understanding, data preparation, model building, evaluation and testing and lastly deployment. To find the frequent item mining, the researcher had proposed some efficient algorithm which is FP-Growth. By using the different type datasets, the researcher had explored and compares the result based on the previous case study. Rapid Miner is used in implemented the FP-Growth and the association rules produced are shown in a result workspace. As a result, the researcher find the most associated items are Krush and Pasta, where 199 from 1026 order sheets are appear together in the transaction. From the association rules produced, the researcher was visualized them in the dashboard and recommend the new marketing strategies for Corm Café such as promotion, combo treats and functional menus. In conclusion, this research is expected to help the decision maker in making a new marketing strategy for their business in order to increase the customer's retention and also increase their profit day by day.

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