

Management Problem

Family style eating is one of the top five activities in Wisconsin Dells and the ownership would like to explore an approach for how to increase their volume of customers by implementing a targeted direct marketing effort. The marketing plan involves identifying the other activities most of their restaurant customers frequent the most. In order to achieve this, the family style eating ownership is looking to our firm to provide a suggested implementation strategy.

Approach

In order to identify the other establishments the family style eating customers visit most often, the logical approach is to leverage an association analysis algorithm. The first step was to identify the most frequented activities in the Wisconsin Dells area which include the following:

1. Shopping
2. Water Park
3. Shop Broadway
4. Eat Family Style*
5. Scenery

The frequency ranking provided the firm a baseline understanding of how popular family style eating is to Wisconsin Dells visitors (ranked 4th out of 33). A little over 70% of survey respondents visited the family style eating establishment while in the area. Using an **apriori** algorithm, we were able to identify many other activities the family style eating customers frequent most often:

1. Outdoor Pool (confidence level = 79%)
2. Water Park (confidence level = 78%)
3. Scenery (confidence level = 77%)
4. Shopping (confidence level = 76%)
5. Shop Broadway (confidence level = 76%)
6. Amusement Park (confidence level = 75%)

Recommendation

Given family style eating is already a very popular attraction, the best way to increase their number of customers is by placing advertisements at other locations where their potential customers also visit based on the results of the apriori algorithm rules. First, the firm will place advertisements in high traffic areas at the Outdoor Pool and Water Park locations. We will test the number of customer trends over the next few months and later expand our advertising to the Scenery, Shopping, Shop Broadway, and Amusement Park locations if we see an upward trend in visitors to the family style eating restaurants.

Attachments

- Activity Frequency Horizontal Bar Chart (Activity Frequency.png)
- Frequency Ranking
- Apriori Rules Output