RFM

**Discussion based on Case Study:**

MGM Grand Hotel, which is part of MGM Grand Resorts Group and that is Part of MGM Mirage has its strong roots in Las Vegas when it comes to Casinos and other Leisure activities. (Case document is dated Sep-12,2006, business model of MGM Grand’s activities are solely based on Case Document and it might not reflect current business scenario). MGM Grand Hotel was performing very well when it comes to Casino or other gaming activities. It also leads the trend by using Non-gaming entertainment as an attraction to pull crowd to casinos and boarding hotels for them to stay. To boost the profit in Casinos, MGM Grand uses something called Comps (Complementary or a gift) for the gamers who spends enough or prospective spenders in the form of discounts in boarding, food, entertainment or beverages etc., MGM Grand hotel as observed recent surge in revenue from this non-gaming entities and preparing for a paradigm shift if it can find answer to “how non-gaming leisure and entertainment business could be exploited independently and profitably?”. There are several questions that need answers for answering this question, they are,

1. Are we capturing all the data from non-gaming customers? If not, How the non-gaming customer profitability could be better captured.
2. How much of profitability in non-gaming sectors was driven by gamblers, and their families, by non-gaming customer segment.
3. Non-gaming activities at the MGM Grad were highly profitable enterprises, Customers were not fully understood. Not better segmentation of Customers in Non-Gaming activities. How can we segment non-gaming customers?
4. Could the Comps provided to Gaming customers to improve profitability could be applied to non-gaming customers.

The answers for all the above questions can be found if we can do following

* Creating customer segments based on profitability by adding up earnings from casino and hotel stay.
* Customer segment wise, Calculate proportion of earnings from hotel stay as a % over total earnings (casino + hotel)

**Approach**

To Segment the customer and break the profits in segments, we can use RFM Technique.

Using RFM Technique we can segment the customers based on Recency, Frequency and Monetary. Number of Segments is subjective and based on the business problem. Here, assigning weightage preference was given to recent transactions and visits over very old transactions. We believe that customer who’s visited recently has more probability of visiting again., esp. for leisure and entertainment activities. It might not be ideal, but for this study we took this approach.

**Recency**

|  |  |
| --- | --- |
| **Condition** | **Weightage** |
| When Last transaction is after 17-Sep-2004 | 5 |
| Transaction between 24-Dec-2003 to 16-Sep-2004 | 4 |
| Transaction between 03-Oct-2002 to 23-Dec-2003 | 3 |
| Transaction between 08-Jun-2002 to 02-Oct-2002 | 2 |
| Transaction between 01-Jan-2002 to 07-Jun-2002 | 1 |

**Frequency**

|  |  |
| --- | --- |
| **Condition** | **Weightage** |
| More than 10 Transactions | 5 |
| Between 5 and 9 Transactions | 4 |
| Between 3 and 4 Transactions | 3 |
| Only 2 Transactions | 2 |
| Only 1 Transaction | 1 |

Monetary

|  |  |
| --- | --- |
| **Condition** | **Weightage** |
| Roughly More than $153 | 5 |
| Roughly Between $71 and $152.99 | 4 |
| Roughly Between $35 and $70.99 | 3 |
| Roughly Between $13 and $34.99 | 2 |
| Roughly Up to $12.99 | 1 |

**Assumption**

Customer visiting to any of the hotels provided below as revisit as everything sums up to MGM Grand Resorts.

The Mirage, Treasure Island, MGM Grand Las Vegas, New York-New York, MGM Grand Detroit, Bellagio, Beau Rivage.

**Data Preparation**

1. Removed all lines without “Player ID” from Casino and Hotel data.
2. Net earnings for the casino are calculated as “Total Theo” less “Comp”.
3. Calculated individual earnings from “Room”, “Others”, “FNB” – Food & Beverages, “Entertainment” and “Retail”, using the formula Debit-Credit
4. Used Profit % given in the question to arrive at individual Profit Share.
5. Calculated Total Earnings using individual earnings.

**Steps to Score RFM**

**Insights and Observations**

**Segment Classification**

|  |  |
| --- | --- |
| **Pawns** | These are the customers who visited long back and with maximum of 4 visits and revenue is not more than $70 including all. |
| **Jacks** | Visiting once or twice and rarely thrice.  Mostly last visited was before 3 years and negligibly few in recent times.  On an Average giving Revenue $70 and $150 |
| **Queens** | Mostly visited before 1 or 2 years, usually visiting 3 to 9 times and spending averagely between $34 and $150 |
| **Kings** | These are all the people who visited in last 1 ½ years, visiting more than 10 times or 20 averagely and spending $450 roughly |
| **Aces** | These are the customers who visited in recent months, and visiting averagely 40 times, astonishing! And spending $1700 roughly! |

**Views and Recommendations**