

POS Data Analysis

By: Vered Negbi, Director, Head of Synergy Advanced Analytics
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1. Background

In the past, a retail organization's marketing strategy was based on customer accessibility. A store located in the vicinity of the customer's workplace/home generated new and loyal clientele.

Emerging chain stores began their deployment to leverage their growth, but they soon reached the glass ceiling. Real estate limitations on the one hand and stores being devoured on the other hand, created a different type of strategy. Retailers needed to find new ways to maximize their profits.

At the same time, loyalty programs designed to motivate customers to shop by providing added value and branding began to emerge. Many organizations attempted to create some sort of loyalty club, notably life style companies in industries such as fashion, jewelry, accessories, home ware and even tourism.

In fact, many retail companies already offer membership clubs (loyalty programs) on a regular basis, and predict an increase of anywhere between 5-30% in the number of members during the next year.

Conversely, many organizations are still struggling with the hurdle of membership clubs. Initiating such a program is a significant and expensive move, and is usually not considered in the operation budget forecast. Many employees might object to such a move, claiming that "the organization has held its own quite nicely thus far", or wondering why "should we take such a risk", etc.

These concerns are understandable, and the decision should not be rushed, just because membership clubs are the new trend. In order to make an educated decision one should thoroughly examine the organization's data and customer base, and identify the customers with the highest business potential, i.e. highest revenue potential for the organization through a loyalty program.

For organizations that have not yet established a loyalty program – an analysis of the organization's data enables it to design the most effective strategy, and to examine potential revenues from said strategy.

For organizations that have already established a loyalty program – a more comprehensive data analysis shows that most of these programs add up to sporadic yearly discounts/sales, which don't necessarily generate higher customer loyalty, due to the lack of targeted and personalized campaigns and the lack of communication continuity.

The key to loyalty programs' success is the organization's knowledge of its customers, their purchase patterns, and the design of personalized marketing strategies that answer their specific needs.

In the past year alone, Synergy Advanced Analytics has performed over 6 POS data analyses in retail organizations which do not yet have membership clubs. These organizations have anywhere between 100,000 – 1m customers. This article details the methodologies and insights drawn from these analyses.

2. Database and Premise

Retail organizations that don't have membership clubs usually entail of one central operation system that serves all points of sale: a POS system.

The data registered in this system is usually just detailed information about business transactions, such as: date of purchase, credit card type, credit card number, amount paid, number of payments, store in which the purchase was made, item type, item code.

This information is kept for at least 2 years, a fact which enables analysis that categorizes the customers into different groups.

The premise of the analysis is that each credit card represents a customer. This premise will enable us to identify returning customers, should they use the same credit card on different occasions.

In our experience, the rates of credit card purchases vary from 20% in low cost retail stores, such as convenient stores, to 70% in the high end retail chains.

3. Data Analysis Technique

There are many techniques designed to differentiate between customer behavior patterns. Among the recommended techniques are: the RFM model and the clustering model (not obligatory in many of these cases).

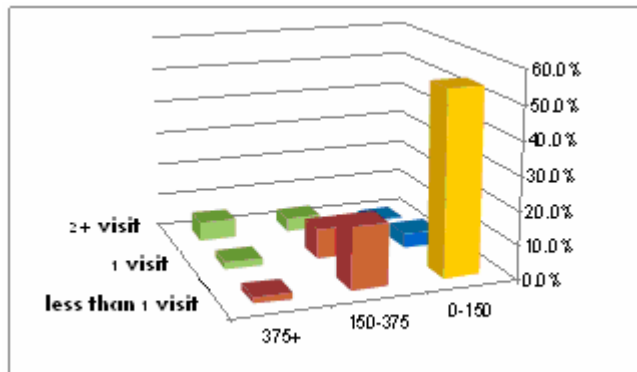
RFM based segmentation

This segmentation type is based on 3 key parameters:

- Recency (R) – time lapsed from last purchase – helps in identifying customers relevant to the activity in real time
- Frequency (F) – may attest to loyalty
- Monetary (M) – amount paid – helps in indicating the more valuable customers.

The analysis usually categorizes the frequency and the monetary into 3 main categories which are then cross referenced, and after all the parameters are examined for each possible combination, they are then typified into 3 main customer types.

The customer groups are chosen based on both business and statistical considerations.



Cross referencing frequency and monetary and identifying 4 main customer groups (in 4 different colors) in a fashion retail organization

For each identified segment, we perform a comprehensive analysis, examining the number of customers, the number of purchases, total income from customers, average purchase amount, etc.

4. Examples of Interesting Findings in Different Organizations

- The average number of visit to the organization: in the fashion industry the number will usually amount to only 1-1.8 visits per year. This number usually stuns organizations who don't know much about their customers. They tend to think the average number of visits is much higher.
- The number of customers vs. the number of purchases: for example, in an analysis of a fashion chain store that opened many stores in the past year, we found that the number of customers in the larger stores dropped (due to the stores being devoured), but the average amount paid grows.
- The amount paid vs. the number of purchases per customer: for example, in a jewelry and accessories chain store, the rise in item prices raised the amount paid per purchase, but reduced the number of purchases per customer.

5. Insights and Business Implications

Now that we have segmented our customer base, we can recommend the marketing activities required for each segment, evaluate their potential and generally define the membership club.

Recommending marketing activities and identifying segments with unrealized potential

We will recommend the following marketing activities per segment:

- **The "loyalty" segment** – preserving the most significant customers, promoting their purchase behavior and dissuading them from referring to competitors
- **The "functional" segment** – promoting recurring purchases
- **The "sales" segment** - fewer customers, promoting the increase of amount per purchase
- **The "testing" segment** – first time visitors who don't come back, promoting recurring purchases.

The segments with most potential of purchasing increase are the functional and sales segments. For instance: a customer who spends large amounts per purchase, but seldom visits the store, should be encouraged to visit more often.

Defining the target audience and membership club strategy

The targeted customers to be included in the club will be chosen out of the segments with the highest potential, as well as the loyalty segment, which is the most important one to preserve.

Next, the strategy of club activities will be defined in detail: Objectives, target audience, program type, positioning, hard and soft benefit programs, means of customer acquisition and follow up, content worlds, etc.

There are many different ways of designing the membership club. After reviewing a few possible strategies, other alternatives should be examined using a financial model.

6. Summary and Conclusion

In summary, below are the conclusions of POS data analysis detailed in this article:

- Retail organizations' customers exhibit several recurring behavioral patterns
- These behavioral patterns are available for identification and analysis
- Getting to know the customers helps the organization identify problematic issues which can be tended to by some type of loyalty program
- Most organization view their customers as more loyal than they actually are

- Statistical methods of segmenting the customer base enables a more precise definition of the differences and purchase patterns among the different customers
- Constructing a financial model based on customer analysis enables lowering the risk of establishing a loyalty program

About Synergy

Synergy is a consulting company specializing in information-based customer management, and enabling organizations to maximize the business potential of their end customers, while providing these organizations the tools to improve their marketing, service and preservation activities.

Synergy's customer management solutions involve Analytical CRM, Operational CRM, Loyalty and Web strategies, as well as Marketing Research Management solutions.

Synergy was established in 2003 and has operations in Israel, Poland and the UK, working with both local and international organizations. Our customer base includes some of the largest foremost organizations in the Israeli and international communications, finance and retail markets. We provide solutions to banks, credit card companies, insurance companies, mobile operators, internet providers, long distance call providers and television networks, as well as leading member clubs in the fashion, airline and food industries.

For more information, visit our website at: www.il-synergy.com

or write us at: info@il-synerby.com

ISRAEL
1 Ben Gurion st. Bney-Brak,
2 Besser Towers, Israel.
Tel. +972-(0)3-5788861
Fax. +972-(0)3-5788862

POLAND
Representative office:
Ul. Wilcza 66/68, Warsaw, Poland
Tel. +48-(0)22-622-3221
Fax. +48-(0)22-625-3688

UK
Sams Barn, The Greenway, West Hendred,
Wantage, Oxon OX12 8RD, UK.
Tel. +44-(0)1235-821-353
Fax. +44-(0)1235-861-678