Abstract

SAS® Marketing Automation provides a variety of functions which is needed for personal loan marketing campaign process in the insurance industry.

This paper, illustrated from the insurance industry, describes a case study for SAS Marketing Automation which was implemented to perform personal loan marketing activities effectively and efficiently, - identify campaign targets among the existing insurance policy holders.

For example, who is in more need of a personal loan? Who is seeking additional credit? What characteristic of customers is associated with loan potential? How do you design a marketing data mart that can accommodate the above issues?

In this case, the insurance company implemented a personal loan marketing campaign system through the components and functions provided by SAS Marketing Automation.

Prior to SAS Marketing Automation, marketers and analysts dedicated most of their time performing their daily routines manually, but post implementation, the system would execute routine tasks automatically and allow the business users to focus on making strategic decisions and developing marketing strategies.

Business users’ routine tasks would include, downloading insurance policy holders and customer contact data into their desktop from Enterprise Data Warehouse (EDW) for target list generation, then applying campaign selection rule and exclusion rule, which typically required days of work - Needless to say, the new marketing system now requires only couple of hours to perform similar task.

Generating reports for campaign performance analysis also consumed bulk of time as it involved several steps of manual task. However implementation of SAS Marketing Automation also allowed this manual task to be simplified, only requiring couple of clicks from the business user. The underneath data source which is used to generate these reports such as insurance policy information, customer contact history information, loan history information and campaign history information, etc are merged and uploaded to the marketing mart automatically.

Introduction

This paper focuses on describing how SAS Marketing Automation can be applied to the insurance industry and would like to start by sharing the voice of customer, how it led to defining user requirements and finally share how it was implemented into a system.

Voice of customer

Below is how the client described what “marketing” is
- Marketing activity is time based.
- Marketers should concentrate on new strategies while allowing the system to manage the tactics.
- Main objective of marketing is to accomplish the Marketing ROI.

Defining User requirements

To rephrase the above from an IT perspective

- Business side:
  1) need to be flexible and spontaneous
     The system should be flexible and spontaneous enough to accommodate not only the periodic campaigns but also out
of the box events such as new product release campaigns.

2) **minimize marketer intervention within the marketing process (maximize automation)**
   As marketing resources are allocated mostly to periodic campaigns and report generation, development of new strategies tend to get less focus.
   Because of this reality, it is important for simple and repetitious task to be automated by the system so that the marketer is protected from this and thus be allowed to focus more on value added tasks such as enhancing customer understanding.

3) **continuous improvement of activity effectiveness**
   As various KPIs are introduced, these KPI need to be gradually improved by refining, controlling and managing campaigns. For example improving response rates are not only accomplished by better targeting but also by being able to reduce the target population (denominator).

- **IT side :**

  1) **Data management (sharing and integration)**

     the data each marketer holds individually should be integrated and be uploaded to a shared repository. Each point of time – analysis of customer, extraction, contact – should be consistently monitored so that future analysis be consistent.

  2) **User application**

     Windows Friendly or intuitive interface

**Implementation results**

The below is a case of implementing SAS Marketing Automation.

**Picture 1. Conceptual System Diagram**

A. **Data integration process**

   Before system implementation, marketers would download data from EDW to their own PC and perform the necessary data manipulation to be used in campaigns. The system now enables the data to be shared through the common data mart. Data mart includes data such as insurance policy, customer contact, loan history, campaign history, response history.

B. **Annual revenue forecast**

   A model was developed to forecast annual revenue using campaign history/response data such as individual response rate and expected loan size. This model will be used to control and manage the upcoming annual campaigns. When needed, the forecasted information can be updated periodically.

C. **Customer segmentation and customer contact strategy**

   Used annual contact strategy and loan usage pattern to segment potential customers. In principal, contact is limited 4
times a year (once a quarter) and was able to devise segments based on loan usage pattern - initially did a macro level segment and refined into a micro segment.

**D. Implemented campaign strategy**

There are 2 main types of cases – credit loan, collateralized by policy loan. Collateralized by policy loan is a service provided to insurance policy holders which aims both for customer satisfaction and insurance profitability. Credit loans can be offered to non-policy holders but mainly targets existing customers. Collateralized by policy loans and credit loans are executed by DM and call centers respectively.

Credit loan are offered daily by the call center agent, while collateralized by policy loans are offered on a monthly basis – extracts the targets monthly and sends the DM, for those who did not respond but have high likelihood of responding will get another offer by SMS.

In order to follow such a refined process, a complicated rule was embedded into the campaign management system. For example, for those included in the target within the last 60 days ago and have been contacted within last 30 days are excluded from the current campaign.

For credit loans, those who have enquired about the collateralized loan or have taken up the loan previous day, it is mandatory to make a happy call regarding customer service and cross selling credit loans.

**Display1. A example of Campaign diagram for EBM**

Campaign Diagram for event based marketing

**E. Campaign reporting**

Also developed various campaign related reports. For example, expected campaign revenue, daily monitoring report., ROI reports. In order for the reports to not only vary but be accurate, an underlying report mart was also built. The report mart consists of contact history, channel response rate, etc.

**Display 2. DM Campaign Report in Premium Collateral Loans**
Campaign results using DM channel for premium collateral loans. Colored area is the net balance increase.

Table 1. SAS Solution that was applied

<table>
<thead>
<tr>
<th>ITEM</th>
<th>TASK</th>
<th>SAS Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Integration</td>
<td>Used SAS DI to construct a data mart organized by personal loan business subject area.</td>
<td>SAS DATA INTEGRATION</td>
</tr>
<tr>
<td>Data Mart &amp; Campaign Mart</td>
<td>Data mart is saved in SAS SPDS which is appropriate in an analytic business environment.</td>
<td>SAS Scalable Performance Data Server</td>
</tr>
<tr>
<td>Annual revenue forecasting</td>
<td>We also used SAS Enterprise Miner to forecast revenue models at a customer segment level.</td>
<td>SAS Enterprise Miner™ software</td>
</tr>
<tr>
<td>Customer segmentation and customer contact strategy</td>
<td>We also used SAS Enterprise Miner to segment customers and build contact strategy</td>
<td>SAS Enterprise Miner™ software</td>
</tr>
<tr>
<td>Campaign strategy implementation</td>
<td>Also used SAS CAMPAIGN MANAGEMENT TOOL to extract/exclude the target customer list. It also enables marketers to share campaign diagram, which holds the complicated business rules that reflect customer change and internal policy. Marketers are now able to spontaneously control and manage the campaign. Through the sharing of campaign diagrams, marketer can now manage and control campaigns more spontaneously.</td>
<td>SAS CAMPAIGN MANAGEMENT</td>
</tr>
<tr>
<td>Campaign reporting</td>
<td>Have used SAS AMO for the users to directly build customized reports. Underlying technology was SAS STORED PROCESS.</td>
<td>SAS BUSINESS INTELLIGENCE</td>
</tr>
</tbody>
</table>

Below are some of the expectations from the insurance company.

1) Data mart was designed to support the insurance lending line of business.
2) Via common user interface, was able to make the whole process transparent and sharable.
3) As the campaign process including monitoring was automated, business users were able more focus on strategic decision making.
4) Provided a testing environment to support testing of new products and strategies, which resulted in reducing overlapped targets.
5) As the whole process is captured in data, was able to minimize loss of data or user errors. Also as marketer activities are saved into data, their activities have gained more transparency and credibility internally.

**Conclusion**
The case introduced in this paper, is an example of where SAS business solution strength was appropriately applied.
- a single platform that supports the various functions required for a personal loan marketing.
- the capability to meet the balance between operational and analytical needs that is typically required from the marketing

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