The top 10 secrets to using data mining to succeed at CRM

Discover proven strategies and best practices

Highlights:

- Plan and execute successful data mining projects using IBM SPSS Modeler.

- Understand the roles and responsibilities of project team members.

- Determine which data maps to your project goals.

- Expand the scope of data mining to achieve even greater result.

Introduction

Data mining has clearly moved into the mainstream. This approach to discovering previously unknown patterns or connections in data was developed in academia and first employed by government research labs. Now it plays a central role in helping companies in virtually every industry improve daily business decision-making. IBM® SPSS® Modeler is an effective data mining tool for supporting improvements in customer relationship management (CRM).

More cost-effective customer acquisition and retention, better targeting of marketing campaigns, improved cross-selling and up-selling to increase customer value – these are just some of the customer issues that leading companies address through data mining. IBM SPSS data mining is a key component of predictive analytics. Through predictive analytics, your company can use insights gained by analyzing data to direct, optimize, and automate customer-focused interactions, anywhere in your organization.

SPSS was one of the pioneers in the field of data analysis; it was first on the scene and continues to be one of the most popular and widely used software applications. As a new member of the IBM organization, SPSS brings its leading-edge analytic tools to a broader number of customers worldwide.

IBM SPSS offerings include industry-leading products for data collection, statistics and data mining, with a unifying platform supporting the secure management and deployment of analytical assets. IBM SPSS data mining tools are based on industry standards and can easily integrate with your existing infrastructure to improve accuracy, decrease manpower and minimize loss. The combined effort of IBM and SPSS brings you the utmost in flexibility in the kinds of data you mine and how you deploy results.

Summary:

Companies that have successfully used IBM SPSS data mining to boost their CRM efforts have a wealth of experience to share. This white paper provides ten tips that your organization can benefit from if you're looking for ways to initiate or improve CRM activities.

If your company is relatively new to IBM SPSS data mining, you can benefit from the experience of companies that have used it successfully. They have discovered a number of tips and tricks to achieving the maximum return on their investment (ROI). What follows is a distillation of this experience: *The Top 10 Secrets to Using Data Mining to Succeed at CRM*.

1. Planning is the key to a successful data mining project

As with any worthwhile endeavor, planning is half the battle. It is critical that any organization considering a data mining project first define project objectives from a business perspective and then convert this knowledge into a coherent data mining strategy and a well-defined project plan.

Plan for data mining success by following these three steps:

- Start with the end in mind. Avoid the "ad hoc trap" of mining data without defined business objectives. Prior to modeling, define a project that supports your organization's strategic objectives. For example, your business objective might be to attract additional customers who are similar to your most valuable current customers. Or it might be to keep your most profitable customers longer.
- Get buy-in from business stakeholders. Be sure to involve all those who have a stake in the project. Typically, Finance, Sales and Marketing are concerned with devising cost-effective CRM strategies. But Database and Information Technology managers are also "interested parties" since their teams are often called upon to support the execution of those strategies.
- Define an executable data mining strategy. Plan how to achieve your objective by capitalizing on your resources. Both technical and staff resources must be taken into account.

2. Set specific goals for your data mining project

Before you begin a data mining project, clarify just how IBM SPSS data mining can help you achieve your goal. For instance, if reducing customer defection or "churn" is a strategic objective, what level of improvement do you want to see?

Next, commit to a standard data mining process, such as CRISP-DM (CRoss-Industry Standard Process for Data Mining). CRISP-DM is a comprehensive data mining methodology and process model that makes large data mining projects faster, more efficient and less costly. IBM SPSS subscribes to this best practice approach to data mining – which it co-authored with several other leading companies – and brings it to your organization to deliver actionable results. The CRISP-DM model offers step-by-step direction, tasks and objectives for every stage of the process, including business understanding, data understanding, data preparation, modeling, evaluation and deployment. This methodology can provide an excellent starting point for your data mining efforts by helping you:

• Assess and prioritize business issues
• Articulate data mining methods to solve them
• Apply data mining techniques
• Interpret data mining results
• Deploy and maintain data mining results

For more information about CRISP-DM, see www.crisp-dm.org.

Then create a project plan for achieving your goals, including a clear definition of what will constitute "success."

Finally, complete a cost-benefit analysis, taking care to include the cost of any resources that will be required.

3. Recruit a broad-based project team

One of the most common mistakes made by those new to data mining is to simply pass responsibility for a data mining initiative to a data miner. Because successful data mining requires a clear understanding of the business problem being addressed, and because in most organizations elements of that business understanding are dispersed among different disciplines or departments, it's important to recruit a broad-based team for your project. For instance, to evaluate the factors involved in customer churn, you may need staff members from Customer Service, Market Research or even Billing, as well as those with specialized knowledge of your data resources and data mining.

Depending upon your objective, you may want to have representatives from some or all of the following roles: executive sponsor, project leader, business expert, data miner, data expert and IT sponsor. Some projects may require two or three people; other projects may require more.

4. Line up the right data

To help ensure success, it is critical to understand what kinds of data are available and what condition that data is in. Begin with data that is readily accessible. It doesn't need to be a large amount or organized in a data warehouse. Many useful data mining projects are performed on small or medium-sized datasets – some, containing only a few hundreds or thousands of records. For example, you may be able to determine, from a sample of customer records, which of your company's products are typically purchased by customers fitting a certain demographic profile. This enables you to predict what other customers might purchase or what offers they might find most appealing.

5. Secure IT buy-in

IT is an important component of any successful data mining initiative. Keep in mind that the data mining tool you select will play an important role in securing buy-in from your IT department. The data mining tool should integrate with your existing data infrastructure – relevant databases, data warehouses, and data marts – and should provide open access to data and the capability to enhance existing databases with scores and predictions generated by data mining.

6. Select the right data mining solution

IBM SPSS Modeler saves organizations time and improves the flow of analysis by supporting every step of the process and ensuring an efficient and successful data mining project. An integrated solution is particularly important when incorporating additional types of data, such as text, web or survey data. That's because each type of data is likely to originate in a different system and exist in a variety of formats. Using an integrated solution enables your analysts to follow a train of thought efficiently, regardless of the type of data involved in the analysis.

Integration is also important during the "decision management" phase of predictive analytics. Decision management determines which actions will drive optimal outcomes, and then delivers those recommended actions to the systems or people that can effectively implement them.

To support decision management, you will want a solution that links to operational systems, such as your call center or marketing automation software. Such a solution supports more widespread and rapid – even real-time – delivery of predictive insight.

7. Consider mining other types of data to increase the return on your data mining investment

When you combine text, web or survey data with structured data used in building models, you enrich the information available for prediction. Even if you add only one type of additional data, you'll see an improvement in the results that you generate. Incorporating multiple types of data will provide even greater improvements.

To determine if your company might benefit from incorporating additional types of data, begin by asking the following questions: What kinds of business problems are we trying to solve? What kinds of data do we have that might address these problems? The answers to these questions will help you determine what kinds of data to include, and why. If you are trying to learn why long-time customers are leaving, for example, you may want to analyze text from call center notes combined with results of customer focus groups or customer satisfaction surveys.

8. Expand the scope of data mining to achieve even greater results

One way that you can increase the ROI generated by data mining is by expanding the number of projects you undertake. IBM SPSS Modeler is the data mining solution that eliminates the need for additional staff by automating routine tasks. Gain more from your investment in data mining either by addressing additional related business challenges or by applying data mining in different departments or geographic regions. If your company has already made progress on your top-priority challenges – increasing the conversion rate for cross-selling campaigns, for example – consider whether there are secondary challenges that you might now address – such as trimming the cost of customer acquisition programs.

9. Consider all available deployment options

When mining data, organizations that efficiently deploy results consistently achieve a higher ROI. In early implementations of data mining, deployment consisted of providing analysts with models and managers with reports. Models and reports had to be interpreted by managers or staff before strategic or tactical plans could be developed. Later, many companies used batch scoring – often conducted at off-peak hours – to more efficiently incorporate updated predictions in their databases. It even became possible to automate the scheduling of updates and to embed scoring engines within existing applications.

Today, using the latest data mining technologies, you can update even massive datasets containing billions of scores in just a few hours. You can also update models in real time and deploy results to customer-contact staff as they interact with customers. In addition, you can deploy models or scores in real time to systems that generate sales offers automatically or make product suggestions to website visitors, to name just two possibilities.

10. Increase collaboration and efficiency through model management

Look into data mining solutions that enable you to centralize the management of data mining models and support the automation of processes such as the updating of customer scores. These solutions foster greater collaboration and enterprise efficiency. Central model management also helps your organization avoid wasted or duplicated effort while ensuring that your most effective predictive models are applied to your business challenges. Model management also provides a way to document model creation, usage, and application.

Conclusion

In spite of the often uncanny accuracy of insight that data mining provides, it is not magic. It's a valuable business tool that organizations around the globe are successfully using to make critical business decisions about customer acquisition and retention, customer value management, marketing optimization, and other customer-related issues.
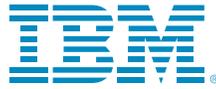
Similarly, the keys to effectively using data mining are not secret or mysterious. With a solid understanding of the issues to be addressed, appropriate resources and support and the right solution, you, too, can experience the business benefits that other organizations are reaping from data mining.

For more information about getting started with data mining, or expanding the benefits you're already receiving from your current data mining efforts, please contact your IBM SPSS sales representative.

About IBM Business Analytics

IBM Business Analytics software delivers complete, consistent and accurate information that decision-makers trust to improve business performance. A comprehensive portfolio of business intelligence, predictive analytics, financial performance and strategy management, and analytic applications provides clear, immediate and actionable insights into current performance and the ability to predict future outcomes. Combined with rich industry solutions, proven practices and professional services, organizations of every size can drive the highest productivity, confidently automate decisions and deliver better results.

As part of this portfolio, IBM SPSS Predictive Analytics software helps organizations predict future events and proactively act upon that insight to drive better business outcomes. Commercial, government and academic customers worldwide rely on IBM SPSS technology as a competitive advantage in attracting, retaining and growing customers, while reducing fraud and mitigating risk. By incorporating IBM SPSS software into their daily operations, organizations become predictive enterprises – able to direct and automate decisions to meet business goals and achieve measurable competitive advantage. For further information or to reach a representative visit www.ibm.com/spss.

IBM

Business Analytics software