From Insight to Foresight: Using IBM Cognos Customer Performance Sales Analytics and IBM SPSS for Cross-sell Up-sell





Overview

For most companies, it's far more cost-effective to retain and grow sales from existing customers than to attract new ones. And in these lean economic times, it makes a tremendous amount of business sense to do so.

Organizations in all industries are making concerted efforts to know their customers better. The recession is certainly the short-term trigger, but prudent organizations are taking a longer view – one that includes navigating consumer buying behaviors to build sustained and profitable customer relationships.

IBM makes this point in its 2010 global survey of CEOs.¹ Getting closer to the customer ranked as the top priority among CEOs in companies that the survey identified as "Standout" organizations. In addition, nearly 9 in 10 CEOs told IBM that they will focus on getting closer to their customers in the future. This makes customer focus the number one priority in the new economic environment.

In this white paper, we will present a solutions approach to helping organizations not only establish greater transparency in how they manage their sales cycle, but also in assessing which customers and channels are most likely to be profitable. We will explain how organizations can achieve this by using an analytic foundation that transforms data into an operating lens on customers' buying behavior, and is sufficiently extensible to incorporate predictive capabilities that can anticipate their purchasing intent.

Creating a Foundation – Gaining Insight into Sales and Your Customers

For many organizations, increasing revenue is achieved through the obvious means of increasing sales. The challenge of increasing sales, however, is not limited to the sales organization. Rather, it's interconnected across business functions and data sources.

Bridging islands of information and transforming data into a strategic asset is critical to competitive differentiation and growth. In the context of sales, there are key areas of analysis that indicate how well sales reps are performing, how fast revenue is being generated and how sales talent is being coached and compensated, as well as which products and channels require attention.

What's unfortunately missing in all of this analysis is the customer's relationship to the sales process. This lack of analysis can have a profound impact on the strategy and tactics of an integrated sales and marketing organization. It can affect the capacity of a sales team to generate revenue cost-effectively, as well as retain and grow its share of customers' wallet. In the absence of facts, decisions become arbitrary and expensive.

IBM® Cognos® Analytic Applications offer a fundamentally different model for managing information and providing insight at the point of business impact. These applications deliver packaged reporting and analytics using a common business model that helps companies gain insight into performance far more quickly and cost effectively than if they were to build a solution themselves or use an ERP or niche vendor.

The underlying value of these applications – from workforce to finance to supply chain, and in this case, sales – lies in their ability to deliver faster insights through packaged, out-of-the-box reports, and the capacity to change these reports and analysis by streamlining the configuration of reporting content to meet business change head-on. For sales, the capacity to get consistent reporting and analytics on pipeline conversion, channel and forecasting is critical to accelerating the sales cycles and capitalizing on latent customer demand. Analysis offers guidance on how the sales team can sell to more people, more quickly, more often. But more importantly, the insight provided by the application sheds light on the customer's relationship with the company's brand, sales channel and with the variability of demand – effectively linking customer preferences to the demand channel including the Web, social media, store fronts and sales reps.

The IBM Cognos Customer Performance Sales Analytics application is based on fundamental business drivers and the questions that set the context for measuring performance in the following areas:

- · Increasing revenue How efficient is our pipeline?
- Retaining customers How frequently do our customers make repeat purchases?
- · Forecasting accuracy Are our pipeline figures accurate?
- Sales force effectiveness Are our reps meeting quota across different products?
- Channel optimization What are the most efficient sales channels?

Using these business driver questions as a starting point, the application enables users to conduct analysis across various dimensions of the business for a consistent view of sales productivity, forecasting accuracy, conversion and revenue growth. It helps establish selling priorities by providing insight into the sales pipeline that's historical, variance-based and cross functional, with visibility into corporate performance from the highest levels of the organization down to the individual sales reps. Sales segmentation, for example, is one area of analysis that the application provides. It delivers insight into channel, item and customer across factors such as amount, forecast, margin, cost, profit and volume. Some of the key business questions that can be addressed with Cognos Customer Performance Sales Analytics are:

- Which product sales plans are succeeding?
- What is the ranking of customer segments for these items?
- Which sales channels are most effective?
- Which products are customer groups buying?



Figure 1. Sales segmentation dashboard – consolidated view of Cognos Customer Performance Sales Analytics packaged reports

Extending Insight into Foresight – Cross-Sell Up-Sell with Sales Analytics and SPSS

But what if organizations want to extend this analysis?

For sales and marketing, retaining important customers and growing their business is always a key objective. In his book *The Loyalty Effect: The Hidden Force Behind Growth, Profits and Lasting Value*,² Frederick Reichheld revealed that if companies could increase their customer retention rates by 5%, they could grow their profits by 25% -100%.

Cross-sell/up-sell programs are a key tactic for doing just that. But first, organizations need to determine the fastest route to revenue by channel, identify which customers to target and the best products to cross-sell or up-sell to gain deeper loyalty of customers and maximize profitability.

This is where the analysis gets tricky. There is so much data about customers that it is often difficult to cut through the clutter and get a complete picture, never mind figuring out what to offer them next. In addition, the specialized marketing and sales analysis skills needed make it difficult to ascertain these kernels of insight and foresight residing in customer data.

So what happens? The sales team struggles to identify potential opportunities, while marketing relies on its best guess to identify meaningful segments to target with relevant offers.

This is where Cognos Customer Performance Sales Analytics, in conjunction with the latest SPSS technology, IBM SPSS Decision Management, can help companies grow revenue with existing customers. The insight generated by the sales application gives businesses a clearer picture of their customers' buying behavior, and helps them understand which customers offer the greatest potential for cross-sell and up-sell. The sales application also serves as a key input to SPSS, which in turn recommends whom to target with offers, and most importantly, what is the best offer to make next. Finally, the application can help businesses understand the impact of executing those recommendations, as the SPSS information is fed back into its packaged reporting content. The sales application captures dimensions such as customer, product and channel, which are key to segmenting customers and answering questions about which customers are likely to buy. Using this information, SPSS provides an understanding of the relationship between products, customers and channels. For example, what products should the organization sell as a bundle? What products influence the sale of other products? The sales application incorporates the insight derived from SPSS into its packaged content to evaluate the performance of cross-sell and up-sell programs. For example, were the sales and marketing campaigns effective? Have revenue and sales pipeline grown? These are all critical questions that address not just sales performance, but corporate performance and the bottom line.

Let's go from theory to a tangible scenario.

Growing Revenue with Analytics -A Customer Scenario

Sales and marketing senior managers of a billiard table manufacturer have decided to focus on a specific product category that targets their existing customers in the second half of the year. As they consider the most efficient way to do this, a couple of questions need to be asked. Who are the best customers to target with billiard tables and how do the managers balance this with their existing opportunities and marketing campaigns?

Information found in the sales application is used to feed the predictive capabilities of SPSS. SPSS provides a list of recommendations that are brought back into the sales application to create both a cross-sell and up-sell dashboard and supporting reports. This will help the managers define and focus their tactics.



Figure 2. Predicted sales dashboard by geography, channel and customer

Using the recommendations from SPSS with the sales application, sales and marketing have decided to create campaigns in France and Ireland, with marketing support to further segment their target customers. Sales can take the customer lists for those regions and align them with their current account planning processes and the opportunities they currently have in play. Marketing needs to balance this new campaign with other campaigns to make sure they do not compromise overall revenue and profit goals.

This is where a marketing manager can use SPSS Decision Management. It will help the manager optimize the marketing campaign process and avoid offering more than is necessary in the way of incentives to any one customer. A marketing manager logged into Decision Management can go to the project that has been set up to optimize the cross-sell/up-sell campaigns. Billiard tables, for example, can become a campaign alongside other products to optimize offers to customers.



Figure 3. SPSS Decision Management

In this case, however, the marketing manager limits the offers to deluxe pool tables and standard pool tables in the product category of billiard tables. And because she knows that the sales team is focusing on France and Ireland, she will limit the targets for this campaign to customers in those two countries.

The last dashboard (Figure 2) shows an alignment between female customers and these pool table offers. Marketing will target deluxe pool tables specifically to female customers and allow the remainder of the campaign to focus on customers for standard pool tables.

Once the campaign rules have been established, marketing can simulate running all of these campaigns at the same time, and try to determine what mix of offers would maximize revenue and profitability. Adding billiard tables to the offer mix, for example, will balance out the offers across all the campaigns. This simulation provides the marketing manager with quick insight into the impact of adding a new campaign to the existing mix of cross-sell/up-sell campaigns. The marketing manager will also want to prioritize the offers based on revenue and profit goals, not only for individual campaigns, but across all the cross-sell/up-sell campaigns she is planning to run. The manager runs a what-if scenario analysis that will provide the potential revenue and expected profit and then optimize the offers for those various campaigns.

This scenario shows how an organization can target customers, determine offers and estimate the profit that the campaign will generate. Our marketing manager can revise the numbers across all the different campaigns and then rerun the what-if scenario multiple times to determine the optimal mix that will generate the target profit and revenue. Once she gets the acceptable mix, she can actually deploy the campaign.

She will then output a list of customers to target, retrieving the customer name and the country where the customer resides. She can preview that output before scoring her customers. Once she has scored this information, she can see a list of customers to target for billiard tables in France and Ireland. She can view customers across all the different campaigns and use this information as an input to the sales and marketing automation tools as the sales organization executes the marketing campaigns.

After executing the SPSS Decision Management recommendations, the last important step for sales and marketing is measuring the impact of those campaigns. This is where the sales application becomes vital.

Feeding the results back into the sales application, the manager can review the packaged report titled "program contribution to sales," which shows the impact of different marketing campaigns and how they've contributed to sales. Our marketing manager can use this report in conjunction with other reports available in the sales application to look at sales by customer or product, or at sales trends over time.

From Insight to Foresight – Knowing Customers: Growing Revenue

So what have we learned?

This scenario has shown how the Cognos Analytic Applications can be used as an input to the SPSS predictive model, which helps the organization make strategic and tactical decisions at the point of business impact.

The marketing manager used the latest versions of Cognos Customer Performance Sales Analytics, SPSS Modeler and SPSS Decision Management. The process involved segmenting customers based on their buying behavior and demographics, and finally, providing recommendations on who best to target and what to sell them.

Because the dimensions are already established within the sales applications, the sales and marketing managers can easily slice and dice the information and see recommendations by customer type, by geography and by channel. In addition, the manager calculated potential revenue and customer accounts to get a high-level view of information that you can't get by simply looking at a list of customers and offers.

Using the same SPSS predictive model, SPSS Decision Management optimized the list of offers, putting it in the context of key business processes, such as campaign planning. The refined offer list could then be used within existing marketing processes and applications, such as marketing automation tools. Information can also be fed back into the application using the same mechanism that was used to create the initial list of recommendations.

How IT Can Benefit - Insight to Foresight

For IT, a solution must be sustainable, cost-effective and connected to the larger business imperatives of the organization throughout its lifecycle. It must provide the capacity to manage, explore and anticipate information so that employees can effectively respond to the risks and opportunities they confront 24/7. Moreover, a solution should deliver transparency along the decision making continuum, from insight to foresight. Cognos Analytic Applications enable this continuum. And in a sales and marketing context, it can have an immediate bottom line impact.

Within the analytic applications, metadata is used to drive the process, saving time for IT. The sales application utilizes an application management model that lets business analysts define the analysis and a logical model of hierarchies of measures can be used by the marketing manager.

This eliminates most of the technical steps associated with moving data, managing the extract, transform, load (ETL) process, creating the table and optimizing indexes, as well as creating the reporting model. More specifically, it streamlines and automates the configuration of new content quickly and cost-effectively – eliminating the need for specialized experts who typically handle changes to the underlying data model in the application.

The results of an activity in Decision Management will be integrated with a marketing campaign tool at the data level, whether that involves exporting data to a flat file, which might later be uploaded into the campaign management tool or through a standard relational database or whatever that marketing campaign tool happens to be based on. Businesses can also schedule the scoring process so IT doesn't have to worry about keeping everything up to date. Jobs can run behind the scenes that will schedule that process. The other alternative is a batch solution. Other data, meanwhile, can feed into a cross-sell or up-sell predictive model. If there is specific customer demographic information (key factors to driving cross-sell/up-sell), it can easily extend the model at the metadata level.

In the case of our billiard table scenario, key input factors from the sales application for the cross-sell/up-sell model consisted of buyer behavior, specifically the order history of customers. We looked at what customers have bought in the past, how often they buy, and their total purchase amounts. If customers have bought often and in large volumes, the tendency for them to buy again would be quite high. Demographics are another factor, and a significant influence in terms of cross-sell/up-sell.

Using the Sales Analytic application as an input into the SPSS Predictive Model for cross-sell/up-sell, we can take that rich insight from the historical information and analytics that we perform in the Sales Analytic application and tie it together with the SPSS Predictive Model to drive a cross-sell/up-sell solution.

For sales and marketing managers, the solution allows them to grow revenue more cost-effectively by targeting their existing customers, ultimately improving loyalty and overall profitability.

¹ IBM Institute for Business Value, *Capitalizing on Complexity: Insights from* the 2010 IBM Global CEO Study, May 2010

² Reichheld, Frederick F., The Loyalty Effect: The Hidden Force Behind Growth, Profits and Lasting Value, Harvard Business School Press, 1996 (Revised 2001)



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Business Analytics software

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, advanced analytics, financial performance and strategy management and analytic applications gives you 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 IT productivity and deliver better results.

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