

BUYER CASE STUDY

Cablecom Delivers Unique Customer Experience Through Its Innovative Use of Business Analytics

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IDC OPINION

Organizations in most industries face increasingly competitive environments where differentiation and the ability to take effective and timely action based on the best available information are imperative for success. Telecommunications industries in many countries are no exception to this trend. One of the leading cable operators, Switzerland's Cablecom, is a prime example of a company that has made the appropriate investments in its business analytics capabilities and benefited as a result of:

- ☑ Increased number of analytical and related customer retention staff and new business processes driven by analytics
- ☑ Expanded use of information from traditional behavioral data to also include attitudinal, interaction, and descriptive structured data and unstructured text and rich media content
- ☑ Steadily growing the investment in appropriate technology, in this case predictive analytics software from SPSS, including tools for data integration, data mining, text mining, and customer survey execution as well as driving analytic and information delivery functionality into operational applications for marketing, sales, and customer service

IN THIS BUYER CASE STUDY

This IDC Buyer Case Study describes the adoption, deployment, and utilization of business analytics software at the cable operator Cablecom. The case study identifies Cablecom's business challenges, its reasons for turning to business analytics software, the benefits it derived from the software, and the business process changes it made as a result of analyzing its operations.

SITUATION OVERVIEW

Organization Overview

Cablecom is Switzerland's largest cable network operator. It provides a wide range of services to customers, including analog and digital television, digital radio, broadband Internet access, and telephony. Cablecom also offers special packages for business

customers. Combined with its partner networks, Cablecom serves approximately 2 million households. Cablecom and its partner operators currently have a share of approximately 73% of the Swiss cable television market and have a major presence in 14 of the 16 largest Swiss cities.

Challenges and Solution

As any major cable operator could attest, one of the key determinants of long-term success is the ability to retain profitable customers.

Challenges

Prior to 2005, Cablecom's market underwent a period of rapid growth. Its marketing organization was almost exclusively focused on acquiring customers, with little attention paid to customer retention. In 2005, as the market was reaching saturation, Cablecom's top management realized that their strategy must be refocused to prevent customer churn. The marketing organization needed to develop a core competency in retaining current customers through a better understanding of customer attitudes and behaviors. As the retention stage of the customer life cycle grew in importance, it became evident that the quality of Cablecom's analytics staff, tools, and processes could become a key competitive differentiator.

Solution

To address the challenges facing it in the new, more competitive environment, Cablecom launched an initiative to expand its customer analytics staff, invest in supporting software tools, and establish new processes for retaining customers.

Customer Insight and Retention Team

In 2002, Cablecom's customer analytics "team" consisted of two people primarily focused on building the company's marketing database. As Cablecom's focus shifted toward customer analytics, so did the investment in the customer analytics team. Today, one of the two original team members, Federico Cesconi, is the director of customer insight and retention and leads a team consisting of 15 full-time employees. Cesconi reports directly to Cablecom's chief marketing officer, which highlights the strategic position of his team within the company.

The customer insight and retention team is responsible for analyzing behavior of the customer base and for a particular stage in the life cycle of the customer — namely the decision point at which a customer might consider leaving Cablecom. For example, when a customer starts having issues with Cablecom or shows signs it could churn, the team needs to identify those at risk of churn and evaluate the business case for preventing such churn. The latter is a necessary step for evaluating the profitability and potential lifetime value of the customer. As Cesconi puts it, "The customer is king, but a profitable customer is above the king."

The customer insight and retention team consists of two subteams:

- ☒ The customer insights group specializes in analytics and data mining. It represents about half of the overall team and consists of business analysts, data mining experts, database specialists, and competitive intelligence analysts.
- ☒ The customer retention group focuses on taking action based on the results of the analysis and insight. The majority of the staff of this operational group are positioned within the call center and are tasked with executing one-to-one customer retention processes.

As the customer insight and retention staff grew, Cablecom instituted new processes and procedures for executing its customer retention strategy.

Processes

Cablecom's customer insights group initially focused exclusively on analyzing behavioral customer data, such as orders, transactions, and payment and usage history, among others. Analysts came up with daily results for interpretation by the customer retention group. This approach gave Cablecom a good view based on transactional data, but as Cesconi said, "This gave us only a single perspective from the company's point of view; we also needed data that would add the customer viewpoint to our analysis."

Soon afterward, Cablecom began collecting attitudinal data, such as customer opinions and preferences, and integrating it with behavioral data. The customer insight and retention group now collects feedback from customers at different touch points and during different times in the customer life cycle. This includes questions such as: How satisfied are you? What is important to you? Where can we improve? The goal is to evaluate the main drivers of satisfaction with Cablecom's services at each touch point.

Cablecom now has a broad view of customer data that includes behavioral, attitudinal, interaction (offers, results, click-stream, etc.), and descriptive (demographics, characteristics, etc.) data. By combining multiple data sources, Cablecom can now see both the company viewpoint and the customer viewpoint. For example, the customer insights group can now evaluate customer expectations and whether the company is meeting, exceeding, or failing to meet those expectations. The customer retention group, whose processes also changed as a result of this analysis, uses the resulting metrics.

In the past, the marketing team was focused on one-to-many approaches for mass communication with segments of customers identified and grouped through customer analysis. Although valuable, today this approach is supplemented by one-to-one customer interactions based on specific customer issues and customer lifetime value metrics. When a dissatisfied customer is discovered, a problem resolution and customer call-back process is initiated. In cases where the problem can be solved by Cablecom without further customer contact, it does so before calling the customer. When the call is returned, the customer can be immediately advised that its problem has already been solved. This has two beneficial results. First, the customer is not expecting to receive a call, and second, the customer service representative, while on the phone with the customer, can advise the customer of the problem resolution.

In fact, a report of customer dissatisfaction drivers and related problem resolution outcomes is provided to the board of directors of Cablecom on a monthly basis.

To support the needs of the expanded customer insight and retention team and its new processes, Cablecom needed to reevaluate and subsequently invest in new customer analytics technology.

Technology

The technology needed to support the analytic needs of an organization range from data integration and data management to business intelligence tools (including predictive and descriptive analytics and information delivery tools) and packaged analytic applications. Increasingly, these technologies need to be capable of dealing with both structured data and unstructured content in the form of text, audio, images, or video.

Cablecom used data mining software in the past when the source system was limited to a single primary data feed and the data mining software was used for the limited purpose of creating decision trees. However, Cablecom's requirements quickly grew to require support for robust multisource data integration, expanded data mining algorithms, text mining, and customer surveying.

Selection

Cablecom's customer insight and retention team went through an extensive software evaluation process, narrowing their choices to two primary candidates. The company decided to select software from SPSS because of its ability to integrate Cablecom's various customer data sources. In addition, SPSS allowed the company to make a small initial investment that could be scaled later (in terms of investment). For example, Cablecom started with a single workstation license that has incrementally grown to 2 server licenses with 15 clients. Besides the SPSS Base statistics and Clementine data mining products, Cablecom has also acquired the SPSS Dimensions product for customer survey research as well as SPSS' text-mining product. The characteristics contributing to Cablecom's very favorable view of SPSS included both the breadth of functionality offered by SPSS' software products and the ability for Cablecom to expand its deployment of licensed software as incremental budget increases allowed.

Deployment

Cablecom's SPSS customer analytics software accesses behavioral data from multiple sources managed within its Oracle data warehouse including data from the call center, call detail record (CDR) data, demographic data, and externally purchased data. Over 60 criteria are used to analyze customers. The data warehouse is updated weekly, with one source updated every 24 hours. Since 2006, Cablecom has also used the data warehouse to calculate weekly customer lifetime value.

Customer lifetime value is a key metric that helps the company decide how to treat customers. Segmentation based on lifetime value helps Cablecom decide what level of investment it can afford to retain each customer. Cost data for each customer — a key variable for creating the customer lifetime value metric — is provided by the

finance department, which provides net margin values to the customer insight team through the data warehouse.

In addition to the data warehouse, managed by Cablecom's central IT department, the marketing department has its own data mart based on Microsoft SQL Server. This approach enables the marketing group to source key standardized data from the central data warehouse while supplementing it with marketing-specific data (e.g., attitudinal data from customer surveys). The result is that the marketing group can stay more nimble in executing its customer analysis and retention processes by not relying on sometimes lengthy change request processes controlled by the central IT department. At the same time, it can utilize the SPSS software to access data from both Oracle and Microsoft SQL Server databases.

The various structured data sources at Cablecom are supplemented by unstructured data sources such as free format text fields from customer interactions as well as audio content coming from the company's interactive voice response (IVR) systems. In the case of the IVR content, MP3 audio files are turned into text, which can then be analyzed using SPSS text mining software.

Results

Benefits

The focus on business analytics has benefited Cablecom in several ways over the past five years. The company has been able to:

- ☑ Discover 80% of customers at high risk by building churn-risk models on 20% of the customer population. In early results from targeting at-risk customers identified by predictive models, churn was reduced from 19% to 2% in the treated group.
- ☑ Optimize its customer contact strategy by avoiding overcontacting customers and thus improving cross- and upselling results through better understanding of the customer life cycle, including when to contact a customer and with what offer. With its analytic models, Cablecom tries to anticipate one or two months in advance of a given customer's next move along its service life cycle.
- ☑ Decrease customer acquisition costs by using a new propensity-to-buy model to better target new customers and change previous inefficient and costly mailing practices that resulted in 1 million monthly mail pieces sent to everybody regardless of their propensity to purchase services.
- ☑ Improve customer satisfaction by employing more one-to-one customer contact and preemptively resolving customer complaints. Cablecom has been able to change its processes by using SPSS Clementine's data and text mining functionality to identify customer satisfaction and dissatisfaction drivers and combine them with specific customer feedback or complaints. Although as of November 2007, Cablecom had been using SPSS' text mining software for only six months, it was able to increase customer satisfaction in 53% of cases.
- ☑ Provide actionable information to customer retention staff and frontline call center staff, who now have an icon on their call center application screens showing the

customer lifetime value metric. This information influences how customer service staff interacts with customers and is likely to lead to further development by the analytics team to provide customer-facing staff with interaction guidance based on ongoing analytics rather than static prebuilt scripts.

All these benefits have led to improvements in customer retention and acquisitions, contributing to Cablecom's competitiveness.

ESSENTIAL GUIDANCE

Lessons Learned and Actions to Consider

Cablecom's experience with its customer analytics initiative highlights several best practices for consideration by any organization reevaluating its own strategy:

- ☒ **Staff.** Ensure enough skilled analysts and supporting information management experts to accommodate organizational demand for more business analytics. Cablecom found it is not easy to find people with data mining skills. However, it is even more difficult to find staff with both analytic and business (e.g., mapping data to business processes) knowledge. Cablecom tends to train new hires internally to supplement their experience in one or both areas. It also looks to technology to ease the skills gap. Cablecom found that a key benefit of SPSS Clementine is that it doesn't need to have the most experienced data mining experts. An analyst needs to have basic knowledge of databases and an understanding of the business process to be modeled. Training such staff on SPSS Clementine's step-by-step graphical user interface (GUI) proved relatively simple. Cablecom found that it takes three to four months to develop employees to the point at which they can perform most of the core data mining tasks.
- ☒ **Technology.** When evaluating an organization's business analytics needs, it is important to expand the definition of what constitutes analytic technology. There is value to having appropriate query, reporting, and multi-dimensional analysis tools for understanding historical, transaction-based information. However, as business strategist Dr. Chester Richards has noted, "Reaction as a strategy may temporarily avoid defeat; it rarely delivers victory." It is therefore necessary to include advanced analytics tools for both descriptive and predictive analytics in one's business analytics technology portfolio. With the SPSS technology, Cablecom can perform data and text mining to not only evaluate historical trends and correlations but also predict future events and thus expand from "sense and respond" to "anticipate and respond" processes.
- ☒ **Data.** It is important not to limit the data used for analysis to support decision making only to structured data from transaction processing systems. Interaction data, descriptive data, attitudinal data, behavioral data in structured alpha/numeric, and unstructured text or rich media (audio, image, video) formats should be considered as inputs into an organization's broader business analytics solution.
- ☒ **Process.** Thomas Jefferson said, "The possession of facts is knowledge, the use of them is wisdom." Many organizations do a good job at analyzing customer data but don't always close the loop between analysis and action. By placing analysts and customer churn prevention specialists under the same management

structure, Cablecom was able to succeed in creating a closed-loop solution for customer retention. It was also able to fundamentally change some of its processes by being able to identify and correct customer issues at an early stage, thus preventing customer desertion and increasing customer satisfaction.

LEARN MORE

Related Research

- ☒ *Worldwide Business Analytics Software 2007–2011 Forecast Update and 2006 Vendor Shares: Business Intelligence, Data Warehousing, and Analytics Applications Forecasts Point to Continued Strength* (IDC #208699, September 2007)
- ☒ *Unified Access To Content and Data: A Progress Report* (IDC #207807, July 2007)
- ☒ *Worldwide Information Access 2007 Top 10 Predictions: The Last Great Computing Platform Arrives* (IDC #205154, January 2007)

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