

хозяйственной деятельности предприятия практически во всех ее аспектах. Эффективное управление финансовыми потоками обеспечивает финансовое равновесие предприятия в процессе его стратегического развития. Темпы этого развития, финансовая устойчивость предприятия в значительной мере определяются тем, насколько различные виды потоков финансовых ресурсов синхронизированы между собой по объемам и во времени. Высокий уровень такой синхронизации обеспечивает существенное ускорение реализации стратегических целей развития предприятия. Рациональное формирование финансовых потоков также способствует повышению ритмичности осуществления операционного процесса предприятия, поскольку любой сбой в осуществлении платежей отрицательно сказывается на формировании производственных запасов, уровне производительности труда, реализации готовой продукции и т.п. В то же время эффективно организованные финансовые потоки предприятия, повышая ритмичность осуществления операционного процесса, обеспечивают рост объема производства и реализации его продукции. Управляя финансовыми потоками, можно обеспечить более рациональное и экономное использование собственных финансовых ресурсов, формируемых из внутренних источников, снизить зависимость темпов развития предприятия от привлекаемых кредитов. Управление финансовыми потоками является важным финансовым рычагом обеспечения ускорения оборота капитала предприятия, поскольку этому способствует сокращение продолжительности производственного и финансового циклов, достигаемое в процессе управления финансовыми потоками, а также снижение потребности в капитале, обслуживающем хозяйственную деятельность предприятия. Кроме того, управление финансовыми потоками позволяет предприятию получать дополнительную прибыль посредством его финансовых активов. Речь идет в первую очередь об эффективном использовании временно свободных денежных средств в составе оборотных активов, а также накапливаемых инвестиционных ресурсов в осуществлении финансовых инвестиций. Высокий уровень синхронизации поступлений и расходования финансовых ресурсов по объему и во времени позволяет снизить реальную потребность предприятия в текущем и страховом остатках финансовых активов, обслуживающих операционный процесс, а также резерв инвестиционных ресурсов, формируемый в процессе осуществления реального инвестирования.

*Lange Steffen
(Germany)*

CUSTOMER RELATIONSHIP MANAGEMENT - PREDICTING CUSTOMER BEHAVIOR

Customer relationship management (CRM) has become a fundamental operating requirement for any service provider or merchant. CRM is about maximizing customer relationships: addressing the needs and opportunities associated with each customer, increasing revenue per customer, customer loyalty

and overall customer base.

While CRM is essential to profitability, its benefit is limited without the ability to predict customer behavior before it occurs. To illustrate, let's look at a few scenarios that typify the kind of lost revenue opportunities new economy businesses face every day.

Thomas is a high-tech road warrior who doesn't like his cell phone service. Making calls home to his family while he's on the road is too expensive, and the phones that are compatible with his service don't have the features he needs. Not surprisingly, he's become increasingly attentive to offers from other cell phone service providers.

Sarah is a reader and a music lover. She bought books and CDs on the Internet three times last year, each time from a well-known e-commerce site. Over the same period, she's visited the site a dozen times and abandoned several half-full shopping carts.

Steve loves gadgets and has a new WAP-enabled phone that can surf the Web. It has a sharp, 2 x 2-inch screen and a tiny stylus you can use to touch hyperlinks. But after a few attempts to look up the information he needed while traveling and checking his e-mail, he mainly uses it as a phone.

For the cellular service provider, the e-commerce site and the wireless Internet company, Thomas, Sarah and Steve are lost opportunities. Thomas is a high-value customer about to chum, or jump to a competing provider. Sarah would be happy to buy all her book and CDs on the Web, if only she could find what she wants. Steve is a classic early adopter. If the wireless Internet startup can't convince him to use their new browser, good luck convincing the rest of us.

Predicting customer behavior is the key to maximizing the value of the customer relationship in each of these situations - maximizing value both to the company, in terms of revenue and profitability, and to the customer, in terms of convenience and satisfaction.

At the core of any CRM system is customer information - collecting it, managing it, distributing it. As CRM systems become ubiquitous, they both create an opportunity and highlight a problem. How can companies that want to understand and effectively meet the needs of their customers put all these new data to work? The volume of CRM-generated data overwhelms traditional methods of analysis. As a result, the intrinsic value of the data is largely ignored.

Potentially, that information has value throughout the enterprise. In sales, it helps companies make the offers that are most likely to be accepted and focus sales efforts on the highest lifetime-value customers. In after-market service, it reduces customer hassles, lowers costs and streamlines repair and return processes. In marketing, it is a key to planning, executing and evaluating campaigns. In manufacturing and distribution, it helps forecast optimal inventory. In design, it guides development of product features and styles. In finance, it helps manage credit risks and opportunities.

In reality, though, only a fraction of these multiple values is realized. The two methods companies traditionally use to make sense of customer information - rules-based systems and statistical analysis - are both proving inadequate.

Rules-based systems are usually either too crude to model real customer behavior or too difficult to implement. Most often, experienced marketing experts use them informally to plan campaigns based on rules they have derived from previous campaigns. In today's environment, this approach is too slow: it can't catch emerging behavior patterns and, with its reliance on skilled marketing people, it doesn't scale. Automated rules-based systems are similarly inadequate. The complex, shifting set of relationships between a company and its customers is more like an ecology than a simple mechanism.

Statistical analysis is not crude and can identify new behavior patterns, but even using the most sophisticated statistical software, the process is iterative, time-consuming and requires intervention by experts. It takes three to four weeks to build a statistical model of a particular customer segment's behavior toward a particular product. Because customer behavior tends to shift over a three-month period, the value of that expensive model building effort is slashed by a third.

What if you have customers who fall into 15 meaningful segments? What if you have 15 different services or products you want to sell to each segment? What if you have 15 different questions you want to ask for each product / customer relationship, such as questions about pricing, cross-selling, upselling or credit risk?

Neither rules-based approaches nor statistical analysis tools can help companies maximize the value of their CRM investments. Companies need an automated analysis to complement their CRM data tools. They need an industrial-strength, fully integrated pre-diction factory.

Enter predictive customer relationship management. This is the art and science of putting customer data to work. Predictive CRM holds the promise of enabling companies of any size and scope to treat each customer as he or she wants to be treated. It is the capstone of the customer focus revolution. For predictive CRM to meet this promise, system providers must offer a compelling business case that goes beyond effective data analysis. The finish line is a system that enables companies to meet the needs of customers like Thomas, Sarah and Steve. Getting to the finish line requires eight key components:

Seamless data uptake. Predictive CRM systems must integrate with the data acquisition APIs of the company's CRM system so that customer data can be analyzed rapidly for real-time applications such as call center screen pops, as well as for offline applications such as modeling marketing campaigns.

Effective modeling. The algorithms used to identify and model patterns in customer behavior must be highly accurate and must begin to show customer-level results based on relatively few data points. This requirement is particularly pressing for e-commerce and other product-based applications, which tend to generate less customer data than service-based applications such as ISPs and wire-less service providers.

Rapid modeling. Offline model building must be fast, so users can implement campaigns quickly and build multiple models to cover the wide variety of company / customer / product situations.

Simple modeling. Modeling must be simple and intuitive enough so that stakeholders throughout the enterprise can create and use models on an ad hoc

basis. Systems that require statisticians to operate are no good to organizations that do not employ statisticians. Even large companies that have deep statistical resources are better off with systems that marketers, financial personnel and others can operate for them-selves rather than relying on a centralized resource.

Integrated campaign design and management. The key to transforming a system that models customer behavior into one that influences customer behavior is campaign support. Designing behavior models is the first step. The next step is integrating those models into a system that helps users choose the appropriate model for every application. That system should guide users through the whole process of designing, optimizing, deploying and benchmarking marketing campaigns.

Just-in-time / just-in-place results distribution. The results of predictive CRM behavior analysis may include tailored offers for customers presently online or on a call center queue, a credit risk list, on personalized Web pages served in real-time or product documentation picked from a database. Distribution platforms may include screen pops at a call center, automated e-mail, personalized Web pages, automated faxes or IRC file transfers. For maximum effectiveness, predictive CRM systems must be integrated throughout the enterprise so whatever the content type, and whatever the appropriate distribution platform, the customer information arrives at the right place at the right time.

Efficient process flow. The goal of a predictive CRM system is to allow stakeholders from anywhere in the company to create appropriate predictive knowledge and distribute it to the right place at the right time. Realizing this vision involves not only analysis and modeling, but a supportive, user-friendly process flow that uses wizards and other heuristic devices to guide users through the entire prediction loop process.

Superior ROI. Maximizing customer relationships is a concrete value with tangible impact on both profitability and revenue. Predictive CRM systems compete for software budget share in a wide arena that includes a variety of enterprise applications. However, wherever the business environment includes high marketing and customer acquisition costs, predictive CRM systems have an advantage. Predictive CRM systems are extraordinarily attractive on an ROI basis because they can enable companies to dramatically reduce customer churn, target their marketing campaigns more effectively and tailor individual product offers so they are more likely to be accepted.

As the Internet continues to create paradigm shifts, new markets mature and e-commerce migrates toward mobile computing, saturation will increasingly become an issue. Marketers can no longer be concerned merely with acquiring new customers, but must also focus their efforts on establishing meaningful, long-term relationships to maximize customer value and loyalty. This means it is imperative for operational CRM to include the complexities of customer behaviors and be able to use predictive technologies to address them in a proactive manner.