

## Collecting in a Tough Economy Using Statistical Collection Scoring Technology

### Introduction

Managing collections cost-effectively has never been more critical than in today's economic times. Companies are dealing with resource constraints and more and more accounts are paying slower, leading to more accounts in collections, which produce rising collection costs, and higher DSO and write-offs. Tight capital markets coupled with rising delinquencies have forced those companies that are over-extended into merger or in some cases bankruptcy. Those that are going to survive and succeed during this recessionary storm need to focus on maintaining portfolio quality by keeping cash flow steady.

*"Corporate cash flow growth is becoming more difficult to sustain as the economy continues to slow down. Average DSO now at 41 days and counting," according to a survey by consulting firm REL. "You are going to have to look at your own efforts internally to improve your liquidity, said Karlo Bustos, an REL financial analyst. Financial Week, Customers taking a lot longer to pay, squeezing corporate cash flow, by Hilary Johnson, September 10, 2008.*

Change in decision strategy for managing your portfolio is a must. Companies have to adapt to changing times. Mishandling accounts results in high DSO's, late payments, and ultimately losses on the portfolio. At the end of the day, losses due to the uncollectability of certain accounts receivable can make or break a company's bottom line. Most companies need to develop better ways to improve their cash flow and reduce losses, which all stems in the improvement of their collection activities.

Information availability and leading edge information technology is a trademark of successful companies. In a tough economy it is even more important to leverage that information and technology to build knowledge. A statistical-based collection scoring solution provides knowledge to weather and even prosper during tough times. Those companies that have implemented a knowledge-based decision system as the main component of their collection strategy are realizing a dramatic reduction in DSO, write-offs, and operational costs while expending their limited resources and personnel more effectively.

### How Collections are Typically Managed Today

If your company has one internal collector for hundreds of customers, how does the collector determine which customers they should focus on, what type of treatment should be used for a given customer, and when they should apply that treatment?

Today most credit and collections departments use aging based collection strategies to manage and prioritize internal collection activity. The customer who owes the most money for the longest period of time receives the highest priority in the collection process. Typically, an accounts receivable' portfolio will be reviewed on a periodic basis and segmented and sorted based on dollars and age of the amounts due. Collectors will use these reports or aging information in an automated environment to develop and manage their collection strategies and activities.

However, a company that is 55 days late and has a high balance may be the type of company that notoriously pays in 60 days and is relatively a low risk of becoming 90+ days delinquency. Conversely, a company 35 days late with a low balance, but has a high probability of becoming 90+ days delinquency and may not pay you at all. Using the traditional aging method can result

in customers who owe low dollars, but are high risk to be ignored, while unfortunately a lot of time is spent on customers who owe higher dollars, but are not at risk and will self cure before becoming severely delinquent. Customer satisfaction also becomes an issue; obviously you do not want to treat a low risk customer like a high risk customer. If you do, you could possibly lose that customer's business.

If 80% to 90% of the credit and collections department's time and resources is spent managing the customer portfolio and collecting money, wouldn't they be better off knowing the specific probably of payment delinquency months before the delinquency occurs? By knowing the probability of delinquency they can better allocate their time and resources and more efficiently manage what is typically the company's largest asset: accounts receivable. Applying knowledge-based collection scoring as the basis for developing optimal customer management strategies has been proven to drive significant cash flow improvement, even in a down economy.

### **A Smarter, Better Approach to Collections – Statistical Collection Scoring Technology to Drive Risk Based Collections**

Statistical collection scoring models are designed to monitor an existing customer's risk to become severely delinquent or written-off for proactive decisioning. These models are developed and validated by applying statistical analysis to internal accounts receivable and collection performance data, and sometimes external bureau data using advanced technology to predict the probability that a customer in good standing today will become severely delinquent, go to charge-off, or bankruptcy at some point in time in the future. Collectors are primarily concerned with having the most predictive tools for the here and now, so prediction period is generally six months or less.

The key to model accuracy is three-fold. First, is leveraging a company's internal accounts receivable and collection performance data, which is proven to be a much more powerful predictor of existing customer risk than a model based on bureau data exclusively. The best predictor of future customer payment performance is the company's own existing customer payment history. It is information that you have on every customer and it doesn't cost you anything. However, if you do want to add additional predictiveness to the model, external bureau data and other sources can always be added. Next, statistics chooses and optimally weights the most predictive data elements subject to an experienced analyst's review. Finally, a retrospective validation analysis of the score is performed on your portfolio of customers to prove how well the model predicts payment risk for your business. Some scoring companies will perform a retrospective validation analysis for free.

When statistical-based collection scoring models are implemented to drive risk based collections, companies can expect:

- Scoring data available on 90-98% of the customer portfolio
- Reduced DSO, Average Days to Pay and Bad Debt Write-Offs
- Increased collection department efficiency and effectiveness
  - Segmenting accounts by risk to prioritize collection decisions
  - Lower costs
  - Better resource allocation, possible FTE reduction
  - Improved customer satisfaction because only the right accounts are worked

- Improved cash flow

## Why Statistical Collection Scoring Outperforms the Age-Based Collection Method

Based on industry analysis, using only the aging method to prioritize collection activities can often result in the wrong treatment being applied to the wrong customer at the wrong time. If your collector has 70 customers to contact today in their collection queue and can only make 50 calls, they are going to call the customers that owe the most money for the longest period of time. Due to the primary focus on high dollar accounts, high risk, lower dollar accounts may be ignored. Accounts that may have higher dollars at risk (DAR) may become lower priorities, because they owe less actual dollars, even though the percent of these dollars that are at risk is far greater than many higher dollar accounts. In fact, by not taking into account the customer's inherent risk the wrong strategy is frequently applied.

**Research has shown that the age of an account and the amount due are substantially less effective to use if you want to optimize collection efficiency, improve DSO, and reduce write-offs.**

Statistical-based collection scoring proves time and time again that the ability to get paid, in a timely fashion, from a customer is based on the customer's inherent risk, which encompasses a multitude of factors including: payment trends, magnitudes, variability and other customer characteristics.

For example, let's say you have two customers Customer A and Customer B that need to be worked:

Customer A	Customer B
<ul style="list-style-type: none"><li>▪ Low risk</li><li>▪ Owes \$100,000; 30 days past due</li><li>▪ Probability of BAD (PBAD) is 1.1%</li><li>▪ Dollars at risk (DAR) is 1.1% x \$100,000 or \$1,100</li></ul>	<ul style="list-style-type: none"><li>▪ High risk</li><li>▪ Owes \$10,000; 10 days past due</li><li>▪ Probability of BAD (PBAD) is 65%</li><li>▪ Dollars at risk (DAR) is 65% x \$10,000 or \$6,500</li></ul>

Using aging based collection strategies, customer A would always be the higher priority based on the amount of money they owe and the age of the receivable. However, if you compare these two customers and take their risk level and probability of delinquency into consideration, Customer B would be the priority. To illustrate this point, multiply the \$10,000 that Customer B owes by the account's expected BAD Rate (in this example, BAD is defined as a 90+ day delinquent, write-off, or bankruptcy) of 65% and you get the estimated DAR for this customer of \$6,500. Take the \$100,000 that Customer A owes and multiply it by the 1.1% estimated BAD Rate and they have an estimated DAR of only \$1,100. Customer B, who owes only 10% of the amount that Customer A owes, and is only one third of the days aged out is actually about six times the risk as Customer A. Risk based collections says focus on Customer B, which represents a far greater risk to your company. Keep in mind, that the probability of bad is quite accurate, since the collection model typically would be validated historically on your customer base.

The monthly statistical portfolio analysis of your customer's accounts receivable can provide a tremendous amount of information, not only to drive your internal collection strategies based on inherent risk, but to quantify the risk from a dollar perspective.

<b>DOLLARS AT RISK (DAR) - OCTOBER 2007</b>										
<b>ALL ACCOUNTS</b>										
RISK CLASS	Score Range	Expected BAD* Rate in Risk Class	Number of Accounts in Risk Class	% Scored Accounts in Risk Class	Cum % Scored Accounts Thru Risk Class	A/R in Risk Class	% A/R in Risk Class	DAR in Risk Class	% Scored Accounts in Risk Class	Cum % Scored Accounts Thru Risk Class
Extreme Risk	≤ 21.19	63.5%	1,477	3.4%	3.4%	\$ 12,318,685	4.4%	\$ 7,173,161	12.7%	12.7%
Very High Risk	21.2 to 32.93	48.9%	2,427	5.7%	9.1%	44,956,336	16.0%	23,006,237	40.7%	53.4%
High Risk	32.94 to 43.92	27.7%	5,166	12.1%	21.2%	41,347,384	14.7%	11,798,327	20.9%	74.3%
Moderate Risk	43.93 to 60.5	13.7%	10,416	24.3%	45.5%	82,031,500	29.2%	12,389,681	21.9%	96.3%
Low Risk	60.51 to 64.62	6.8%	5,501	12.8%	58.3%	13,792,115	4.9%	934,553	1.7%	97.9%
Very Low Risk	> 64.62	3.7%	17,842	41.7%	100.0%	25,368,883	9.0%	1,174,922	2.1%	100.0%
<b>Total Scored Accounts</b>		<b>14.0%</b>	<b>42,829</b>	<b>100.0%</b>		<b>213,814,904</b>	<b>78.2%</b>	<b>56,476,881</b>	<b>100.0%</b>	
<b>Percentage of Scored A/R Portfolio at Risk</b>									<b>25.7%</b>	
Bad at Score	999	100.0%	5,531			27,302,593	9.7%	27,302,593		
Too Thin to Score	998	-	7,639			3,247,621	1.2%	-		
Other	997	-	25			30,606,760	10.3%	-		
<b>Total Un-scored Accounts</b>			<b>13,195</b>			<b>61,156,975</b>	<b>21.8%</b>	<b>27,302,593</b>		
<b>Total All Accounts</b>			<b>56,024</b>			<b>\$ 280,971,878</b>	<b>100.0%</b>	<b>\$ 83,779,474</b>		
<b>Percentage of Total A/R Portfolio at Risk</b>									<b>29.8%</b>	

The above table represents a Dollars at Risk (DAR) Analysis for a scored portfolio of 42,829 accounts. A review of the accounts that were scored indicates that the Extreme and Very High Risk Categories, while representing only 9.1% of the scored population, contain 53.4% of the scored DAR. If you add in the High Risk category then 21.2% of the scored population, contains 74.3% of the scored DAR. Identifying almost three-quarter's of your scored account risk within less than 15% of your scored portfolio demonstrates statistical collection scoring's predictive power to segregate accounts into HIGH RISK and LOW RISK groupings, allowing you to focus on the real problems and not waste valuable resources on areas that are not really a concern.

A possible collection strategy could be:

- For Extreme Risk accounts – Don't ship or mitigate risk!
- For Very High and High Risk accounts - Ship and implement aggressive collection procedures from the day of shipment.
- For Moderate to Low Risk accounts – Ship and implement moderate collection procedures from the day of shipment.
- For the remaining accounts - Utilize normal collection procedures for the lowest risk customers. Target for revenue generation and auto clear.

## **Conclusion**

During this recession companies are seeing slower payments or no payments by their customers. This will result in more accounts going into collections, which will attribute to rising collection costs, higher DSO, and bad debt write-offs. Companies will fall behind if they do not start making smarter portfolio management and collection decisions. Those that have successfully implemented statistical collection scoring technology to segment and prioritize collection activity based on risk have experienced reduced DSO, lower delinquencies and losses, and increased cash flow. Statistics is a science that quantifies results and can have a significant impact on your bottom line. In this economic environment, no company has enough collection resources, so it is more important than ever to have your collectors apply the appropriate collection strategy, based upon collection risk that is validated with statistical science!

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