

# Behavior Scoring

## Monitoring your customers for active decisioning

PredictiveMetrics helps you “keep a close eye” on your customers by developing custom Behavior Scoring models to assess and manage existing account credit and collection risk. To attain more profitable results, PredictiveMetrics validates your policy rules and combines them with the behavior score.

### Return On Your Investment

- ◆ Reduce DSO and loss
- ◆ Reduce costs by leveraging the predictive power of your internal data - It's FREE
- ◆ Drive efficiency of scale into operations
- ◆ Improve customer satisfaction using risk based scoring
- ◆ Accurately measure portfolio risk to develop risk based collection strategies
- ◆ Multifunctional decision tool: credit & collections
- ◆ Objective decisions for better internal control to comply with the Sarbanes-Oxley Act

### Knowing the Score

Building upon your business expertise and objectives, PredictiveMetrics develops behavior models to predict an unacceptable level of payment risk such as delinquency, loss, or bankruptcy.

These models are customized using your actual portfolio of customers, which are much more powerful predictors of existing customers' future performance. Since most credit exposure comes from existing accounts, behavior models based simply on external bureau data and limited internal data are **not** as predictive.

Your data is the most predictive, and it's FREE. External demographic or bureau data can be added at additional cost.

Behavior Scoring models are based on many different variables that statistics chooses and optimally weights. The output of the model is a score that can be combined with other information to determine an existing customer's credit rating or credit line.

### Using the Score

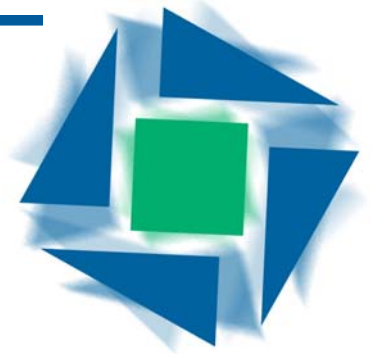
A Behavior Scoring model produces scores that provide credit and collection managers the capability to continuously monitor existing accounts. The model helps better evaluate and understand changes in risk to make more consistent decisions at the portfolio level.

This multifunctional decision tool can be used to credit decision new deals with existing accounts, develop credit lines for credit and marketing support, collections, and to conduct portfolio analysis and monitoring.

### Implementing the Score

**You Implement:** PredictiveMetrics provides technical specifications, which are detailed instructions used to program the model. PredictiveMetrics works closely with your IT to ensure the model is coded correctly. This process entails the model being coded internally and/or externally.

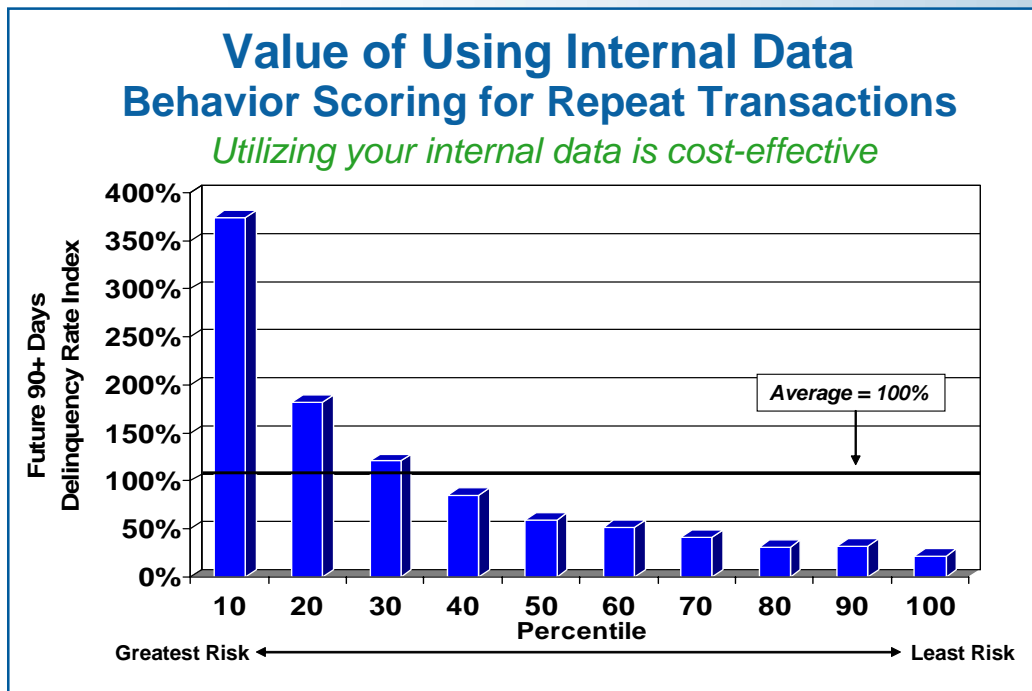
**PredictiveMetrics Implements:** The behavior model is programmed on PredictiveMetrics' computer systems, which reduces IT implementation time, resources, and costs. File transfer occurs through encrypted FTP Internet exchange, which creates greater speed and efficiency as well as protecting data and customer security.



Turning  
Probabilities  
Into  
Profits™

## Proving the Score

The following Behavior Scoring case study confirms the predictive power of having custom statistical behavior scoring models developed and implemented using internal data exclusively. Most companies are faced with making day-to-day credit authorization decisions for repeat business with existing customers. PredictiveMetrics developed this Behavior Scoring model for a financial services customer utilizing internal accounts receivable, application, demographic, invoice specific, and other predictive internal data to predict the probability of a customer going 90+ days delinquent or to loss. The model was built to produce monthly scores, which means credit authorization decisions are based on very “fresh” data.



In the above case study, the future 90+ days delinquency rate is calculated on a marginal basis retrospectively within each percentile. The x-axis is a ranking from highest to lowest risk by employing the model score within each percentile. Then, percentiles are developed by dividing the portfolio into 10 equal size risk classes, with percentile 10 being the highest risk 10%, percentile 20 being 11%-20%, etc. An indication of an effective model is when the future 90+ days delinquency rate monotonically improves from highest to lowest risk as shown in the model results above.

The graph reveals that in the 10<sup>th</sup> percentile, the model identifies 37% 90+ days delinquency rate in that grouping; in the 20<sup>th</sup> percentile, the model identifies 17% 90+ days delinquency rate, etc. These results show that rank ordering accounts by the probability of going severely delinquent using internal data, as estimated by the model, yields a strong separation effect in separating good from poor performing accounts. This allows you to determine which orders get authorized and which customers are eligible for credit line increases based upon statistically measured risk from your portfolio.

## Scoring with PredictiveMetrics

PredictiveMetrics turns probabilities into profits. Statistical modeling is our business and we make it yours by helping you understand risk on your portfolio. Our analytical team works with you to ensure that your company's resources are optimally utilized to make automated, knowledge-based decisions that are proven accurate through statistical validation. Your solutions are delivered on time, to specifications, with definitive results!

For more information about PredictiveMetrics' custom Behavior Scoring models, call 732-530-9303 and ask to speak with a sales representative.



106 Apple Street, Suite 303  
Tinton Falls, NJ 07724  
732-530-9303  
www.predictivemetrics.com