

Modern Analytics' DataPipe™ and Model Factory™

Easy-to-Use, affordable, and flexible analytic solutions that scale with your organization

Overview

Today's competitive marketplace requires organizations – regardless of size – to face increasing pressure to sustain profits, do more with less and operate more efficiently. Achieving these goals requires faster and improved decision making.

Nowhere is the importance of making timely, cost-effective decisions more relevant than in today's market place. This is true for any business where the competition for profitable clients is high and the ability to curb risk early is an imperative.

Budgets are limited and staff reductions common; hence, an organization must be armed with the right tools to produce under economic constraints – without errors and at the highest productivity.

Modern Analytics' DataPipe™ and Model Factory™ offer an integrated set of software tools that can be customized to exceed your existing needs – and fit your budget:

Challenges

- **Insufficient Modeling:** Manual and time-consuming data manipulations increase the chance of error during model building and scoring.
- **Scattered, Untrustworthy Data:** Multiple locations make it difficult to create consistent data suited for the sensitive and delicate modeling process.
- **Limited Deployment:** The intensive and highly skilled labor requirements in traditional modeling cause difficulty in sustaining existing predictive models and deploying new analytical models.
- **Over-Taxed Resources:** Current modeling methods require many different types of resources, including IT professionals, statisticians, product managers, and business analysts.
- **Complicated Analytical Data Manipulations:** The predictive process of quantifying analytical information is time consuming, error prone and difficult.

DataPipe™

$D^4 \Rightarrow$ Data Driven
Decisions *on Demand*

ModelFactory™

$P^4 \Rightarrow$ Proven Predictions
for *Profit Performance*

$D^4 \Leftrightarrow P^4$

The Solution

Modern Analytics' DataPipe™ and Model Factory™ gives organizations opportunities to implement affordable, sustainable and easy-to-use analytical solutions. Modern Analytics' analytical solutions integrate data from a variety of sources across your organization and provide a self-service analytical engine that delivers predictive models, forecasting, and reporting on demand. Decision makers spend less time doing boring data integration work, and more time driving strategic decisions and deriving quantitative value from your organization's data – data driven decisions on demand.

Modern Analytics' DataPipe™ and Model Factory™ can be customized to fit your current and future analytical business needs by giving you the following abilities:

- Meet the predictive modeling needs across the organization.
- Define and maintain predictive models through a simple interface.
- Support all aspects of predictive models with one data source.
- Easily integrate new data sources.
- Forecast revenues across product lines and/or geographies, down to the branch/product level.
- Standardize quantitative variable creation.
- Leverage multiple powerful analytical methods to improve model accuracy.
- Create automatic and consistent predictive models, reports and scheduled scoring.
- Easily integrate into Business Intelligence tools.
- Provide many views of your organization.
- Protect intellectual property pertinent and crucial to your business.
- Optimize your work force using forecasts to handle peak visits.
- Achieve virtually limitless predictive modeling and forecasting.

- Control costs and get more value with one solution that's developed to address what you need today – and can scale to meet your growing business needs.
- Deploy analytical models to help you make smarter decisions.
- Eliminate long lead times to deploy analytical models.
- Provide decision makers and product managers of all skill levels with an easy and intuitive way to define predictive modeling requirements.
- Create accurate predictive models that are easily scored and deployed.
- Collect analytical capital in one common place so it can be applied to all of your data.
- Integrate a variety of inference engines to make the best and most informative decisions.
- Consistency of data between reporting, predicting and forecasting.
- Accurate backend analysis to help you refine your analytical strategies.

Why Modern Analytics?

Meet the predictive modeling needs across your organization.

Whether defining financial models such as PD (probability of default), EAD (exposure at default), LGD (loss given default), or time-to-default (T2D) models for risk applications or first-time buyer, repeat buyer or attrition models for marketing applications – Modern Analytics' DataPipe™ and Model Factory™ can easily handle a large variety of predictive models – virtually limitless modeling.

A simple interface defines and maintains predictive models.

Modern Analytics provides a simple interface to establish reporting and modeling attributes, define product lines, and deploy predictive models and forecasts. As your organization's

product lines and product definitions change, Modern Analytics' solutions can easily accommodate those changes, regardless of frequency.

One data source supports all aspects of predictive models.

DataPipe™ is a complete data integration solution that handles all aspects of predictive modeling including a variety of sampling schemes, quantitative data preparation, the creation of scoring universe(s), model validation and testing environments.

Easily integrates new data sources.

DataPipe™ was created with ever-changing data structures in mind. Whether old fields are eliminated or new fields added to an existing data source, DataPipe™ can easily handle it. Even completely new data sources can be easily integrated once a common key exists.

Forecast revenues across business units, branches or product levels.

DataPipe™ can feed a variety of forecasting engines to deliver top-line or product level forecasts. These forecasts can be used to validate trends or provide accurate budgeting numbers.

Standardize quantitative variable creation.

Model Factory™ comes with a complete analytical data manipulation and transfer engine. This includes creating ranked variables, finding the best interactions, deriving dichotomous attributes, finding the optimal power transformation – and much more.

Leverage multiple powerful analytical methods to improve model accuracy.

Whether simply evaluating the best inference engine to use, or predicting the same event using many inference engines, DataPipe™ and Model Factory™ can easily handle this.

Provide consistent and automatic predictive model reporting.

Because of the common data structure that DataPipe™ provides and Model Factory™ utilizes, reporting of model results is standardized and consistent.

Accommodate scheduled and on-demand scoring.

Model Factory™ is capable of creating its own scoring code, eliminating the human error element and making sure that scores are available when you need them.

Easily integrates into Business Intelligence tools.

Besides feeding the Model Factory™, DataPipe™ is also capable of feeding Enterprise Business Intelligence tools, such as automatic cube creation and refreshing of those cubes. In addition, DataPipe™ can also provide Key Performance Indicators (KPI's) and help develop new ones.

Provide many views of your organization's data such as a client view, employee view, household view, or even a site-level view.

Some problems may not require predictive models or forecasts to solve. Attrition can be addressed through predictions, but often simply looking at your data through a different view can provide answers. An employee view by site/location may be your best indication of who is causing attrition.

Collects and protects intellectual property pertinent and crucial to your business.

Talent comes and goes at most organizations. Often companies will not invest into advanced methods because of the sustainability of those processes when the highly qualified talent decides to leave an organization. With Modern Analytics' DataPipe™, this can easily be addressed and managed to your organization's advantage.

Use forecasts to optimize work force staffing handle peak visits.

Forecasts can be used to properly schedule at the branch level or make phone centers more efficient while operating at a chosen service level.

Deploy virtually unlimited predictive models and forecasts.

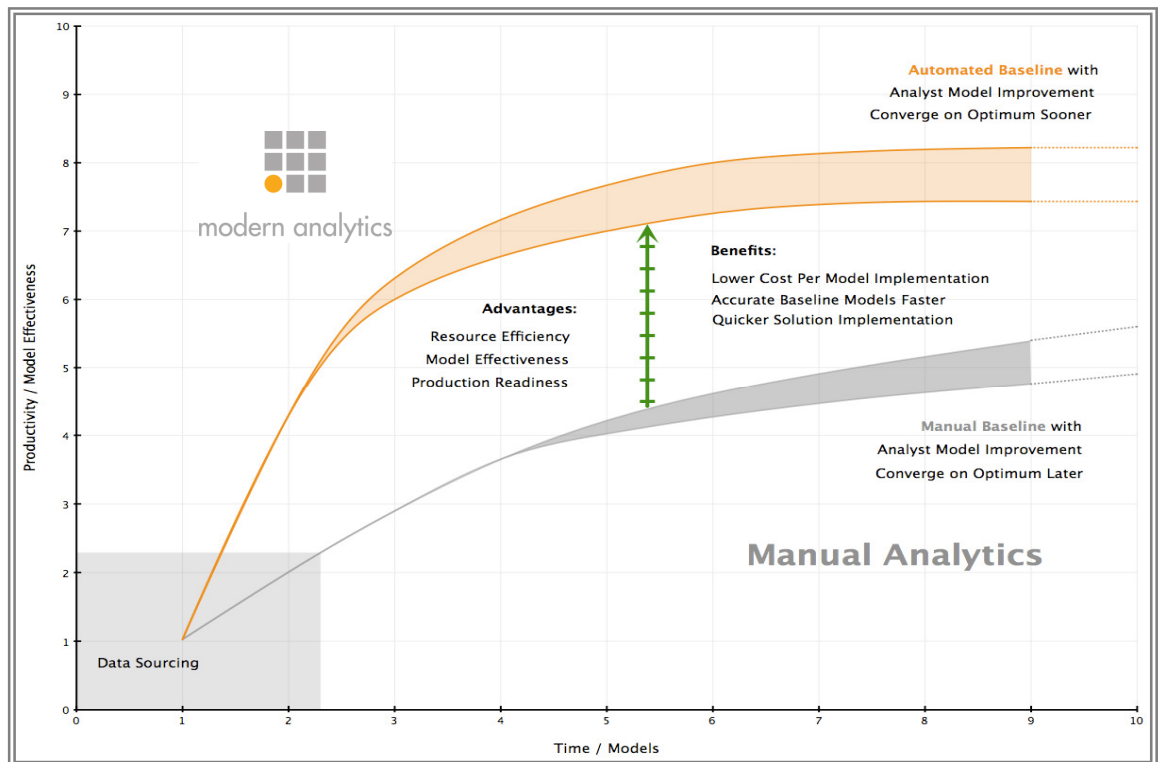
With Modern Analytics' technology, only computer hardware limits the amount of models and forecasts that can be produced and put into production.

The Modern Analytics Difference

Fast – Modern Analytics' DataPipe™ and Model Factory™ provides fast access to predictions and forecasts so that users have the information they need when they need it to make the best possible decisions.

Simple – Modern Analytics offers capabilities appropriate for users with different skill sets at all levels of the organization. It provides the information in a familiar, easy to understand, and simplified format.

Complete – Modern Analytics' solution is a complete and comprehensive analytical environment to support all aspects of the analytical process, starting with comprehensive data integration, consistent reporting, world class analytical predictions and forecasting and automatic operational deployment.



Modern Analytics is an industry-leader in data processing automation, business intelligence, advanced forecasting and predictive modeling.

We create automated data marts that provide the foundation for analytic solutions as well as the models, tools and systems that reveal true business intelligence and identify business performance opportunities.

Companies often collect and store data in systems that no longer support their decision-making needs. Although these systems may be specific to their industry, they require time-consuming manual intervention to extract, load and transform. In today's business environment, accurate, consistent, on-demand analysis, forecasts and reports are essential ingredients in optimizing business intelligence and company performance.

Modern Analytics' DataPipe provides data driven decisions on demand, while Modern Analytics' ModelFactory delivers proven predictions for profit performance.

With over 150 clients served, our expertise extends across retail, high-tech, banking and service industries. We have enabled clients to manage risk, forecast product demand, originate new customers, prevent customer attrition, cross-sell and up-sell new products, identify fraudulent charges, isolate fraud in returns, prioritize workloads, dynamically model their sales pipelines and most importantly increase revenues.

For example, in the banking industry, we have improved on risk weighted capital calculations and established predictive systems that increase customer lifetime values and reduce attrition.

Our computational finance expertise and on-line scoring capabilities have enabled clients to prioritize stocks, set signals for futures trading, manage the risk of trading positions, automate the finding of real-time trading rules and even automate the trading itself.

Modern Analytics' partners have over 50 years combined experience in developing, deploying and integrating predictive analytics. Call us or visit us on the Web at www.modernanalytics.com for more information.



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