



PANNASOFT ASTUTE™

Credit Rating Engine

experience the difference in predictive power!

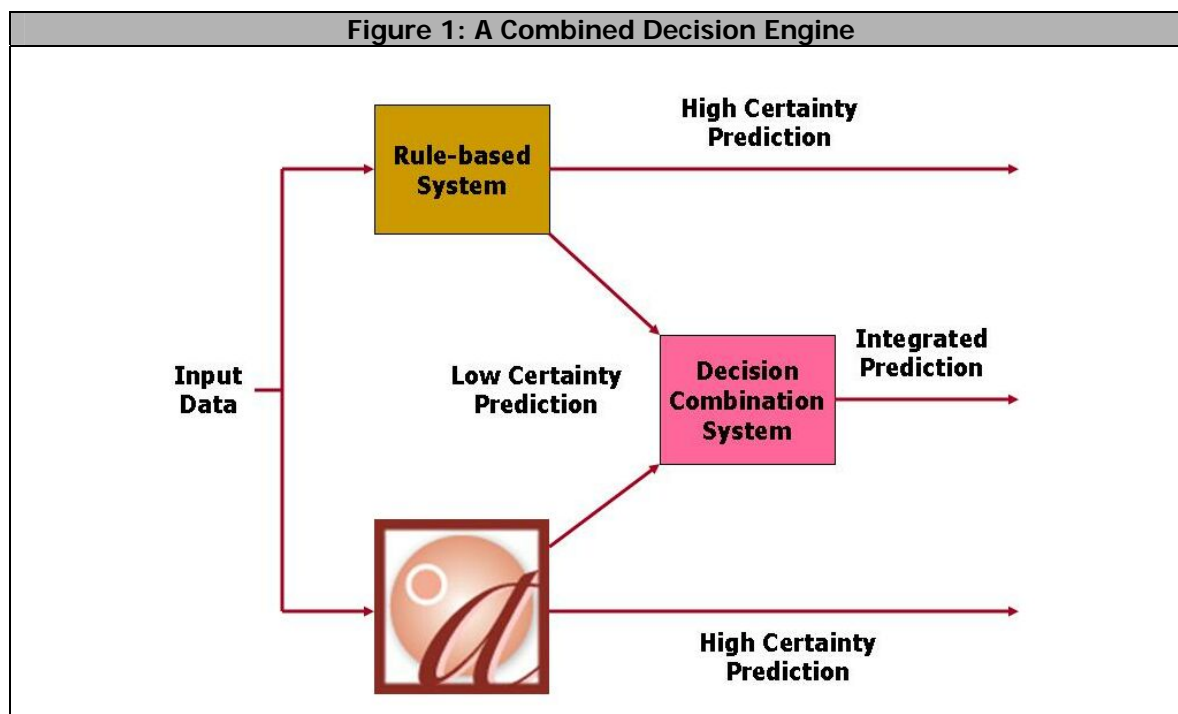
Pannasoft Astute™ is specially developed to enhance the credit rating process. It intelligently rates customers using *Autonomous Adaptive Algorithm (AAA)* technology to predict their inherent risks and credit worthiness. The AAA uses hybrid soft computing technology, combining neural networks with fuzzy logic for superior predictive capability.

FEATURES AND BENEFITS

- o Flexible and Customizable Decision Engine

A flexible and customizable decision engine, combining AAA and a rule-based system can be configured to meet user's requirements. Besides the benefit of allowing the user to use AAA while maintaining the existing rule-based engine (if any), the combined decision engine capitalizes on the unique complimentary strengths of both rule-based and neural networks.

In the combined decision engine as shown in figure 1 below, rule-based can provide an explanatory platform using "IF-THEN-ELSE" rules while AAA can adapt and learn continuously in a dynamic data environment. Input data is fed into both engines simultaneously. The rule-based and AAA engines initially operate independently. When a high-certainty prediction (above a user-defined threshold) is produced by either the rule-based engine or the AAA engine, the prediction will be accepted. However, if a low-certainty prediction is reached, the decision combination engine will be activated to integrate the predicted results in order to produce a better prediction.



○ Controllable Learning Process

The AAA is capable of learning from historical data to provide profiling and predictive analytics. The learning process is fully controllable. Users can define the learning parameters as being fixed at up to a particular point in time or opt for continuous learning in a dynamic environment setting.

The benefit of controllable learning process is that it allows user to set the time for AAA to learn without waiting for the entire process or let AAA continuously learn to keep the knowledge current for better predictive capability.

○ Predictive Modeling

Based on historical data, the AAA can be utilized to provide predictive models for analysis and decision making. In other words, new cases can be best evaluated by applying the appropriate models based on the knowledge learned from the historical data. Multiple models can also be built and used simultaneously to achieve best predictive results.

○ Fine-Tuning Capabilities

The AAA engine can be fine-tuned to optimize processing efficiency, improve solutions accuracy and further reduce false positives.

BUSINESS BENEFITS

○ Profitability

- Increases profitability from reduced losses on delinquent accounts.
- Increases profitability, account retention and customer relationships by identifying the most creditworthy customers. Higher revenue can be achieved by grooming the volume of good accounts.

○ Cost

- Saves cost from the decrease amount of write-offs for non-performing loans and bankrupts.
- Reduces operating cost to pursue and monitor default cases.

○ Time

- Significantly reduces the time needed in the loan approval process. This benefits the business institution in terms of cost savings. Customers would experience shorter time for the application process as they only provide the necessary information for the credit rating system.

○ Efficiency

- Increases efficiency as credit analysts could focus more on the less clear-cut cases.
- Promotes prudent lending as business institutions can assess risk more accurately and have a much better understanding of the portfolio's risk characteristics.
- Achieves greater monitoring efficiency and reduces false positives.
- Improves default detection capabilities.



- Objectivity
 - Improves objectivity by applying the same conditions and criteria to all borrowers in the loan approval process.
- Competitive Advantage
 - Offers competitive advantage in terms of identifying major revenue contributors or large defaulters and better segmentation of borrowers in terms of risk to enhance portfolio management decisions.

Pannasoft Astute™ is suitable for hire purchase companies, leasing companies and financial institutions.

Optimizing Businesses
Through Intelligence





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