

## Mentys™ vs. Data Mining software

Although Mentys and traditional data mining software both involve knowledge discovery, they each use different types of knowledge for different purposes. Whereas traditional data mining aims to use discovered knowledge or patterns for marketing, sales, enterprise resource planning, etc., Mentys aim to assure these patterns for robust decision-making.

For instance, like data mining software, Mentys can be used to predict which customers in a purchasing database are likely to be good credit risks. Mentys can further detect, predict, and explain the implications of changes in those attributes that account for credit risk. In other words, Mentys assesses the sensitivity of the purchase attribute pattern to data “surprises” or anomalies, whichever the base may be.

If one or more of these purchasing attributes that go into a credit risk assessment are missing, data mining software cannot normally fill those gaps. However, Mentys can fill these gaps through its integrated knowledge base of statistical and prior (human) knowledge that “understands” and “learns” new patterns of complex relationships in the data.

The table below provides a high-level, thematic comparison of Mentys and data mining software.

	Mentys	Data mining software
<b>Objective</b>	Knowledge discovery.	Knowledge discovery.
<b>Goal</b>	Find <i>threshold</i> patterns in data.	Find <i>arbitrary</i> patterns in data.
<b>Focus</b>	Diagnostic Implication + Classification.	Classification.
<b>Approaches</b>	Statistics + prior knowledge.	Statistics.
<b>Assumptions</b>	Completeness and correctness knowable but possibly uncertain.	Data complete and correct.

The figure below illustrates the relationships among Mentys, data cleansing software, and data mining software. (See the white paper “Mentys versus Data Cleansing” at [www.informeta.net](http://www.informeta.net).)

Note the complementary overlaps and sequence of application.

