FICO® Xpress Insight makes it easy to create, deploy and utilize business optimization solutions with scalable high-performance algorithms, a flexible modeling environment, and rapid application development and reporting capabilities. Xpress Insight lets teams work in a collaborative environment with interactive visualization and an interface designed for the business user to work with models in business terms and understand trade-offs and sensitivities implicit in the business problem.

Solving large, complex optimization problems can be the difference between success and failure in today's highly competitive marketplace.

Xpress Insight meets this need by providing an intuitive platform designed specifically for business experts to build optimization solutions that drive better business decisions.

The Structure of Successful Optimization

A successful optimization solution includes three key components: effective modeling, robust solvers and a user-friendly interface.

With Xpress Insight, you can model your business problem in business terms, allowing you to capture constraints and objectives with high accuracy. Under the hood, Xpress Insight is powered by FICO® Xpress Optimization, which provides high-performance and robust optimization engines. This allows Xpress Insight to take advantage of modern CPU architectures and to process millions of variables at great speed and scalability.

Xpress Insight provides business experts with greater control through an intuitive user interface that can be customized to fit any problem.
Extending the Power of Optimization

Xpress Insight capabilities are integrated within the FICO® Decision Management Suite, which also includes:

- **Decision rules** provided by FICO® Decision Modeler to develop and deploy decision management services.

- **Predictive analytics** provided by FICO® Analytic Modeler to help target decisions based on future behavior.

The complete decisioning cycle that leverages these capabilities, plus optimization modeling, help ensure the best decisions by accounting for economic ebbs and flows, compliance challenges, evolving customer demands and strategy shifts.

Through this platform you can integrate with additional best-of-breed components, including data visualization and reporting tools such as expanded link analysis and unstructured data query support.

Utilizing FICO Decision Management Platform, Xpress Insight is available on the FICO® Analytic Cloud, enabling organizations of all sizes to leverage the power of optimization by eliminating the need for significant capital investment.

Model Building

Don’t let the ease of use fool you. Xpress Insight packs a powerful punch with the most advanced mathematical modeling and optimization software on the market.

Xpress Insight solutions are driven by models implemented in Xpress-Mosel, a fully functional, compiled programming language that lets users formulate and solve problems using one solver engine. It supports distributed modeling and optimization to handle very large problems.

A wide variety of data sources can be accessed easily, like XML, CSV and Excel files, Hadoop’s HDFS, databases as well as web services.

**Optimization Execution**

Xpress Insight supports numerous linear, mixed integer, non-linear and constraint programming. This allows you to make use of the broadest range of optimization engines within one integrated product. Xpress Insight provides reliable high-performance solvers which are based on more than 30 years of continuous innovation.

The vast array of optimization algorithms include:

- Linear programming
- Mixed integer programming
- Quadratic and mixed-integer quadratic programming
- Quadratically constrained quadratic and mixed integer quadratically constrained quadratic programming
- Second order conic and mixed integer second order conic programming
- Non-linear and mixed integer non-linear programming
- Constraint programming

These modeling and optimization capabilities allow you to model your business problems precisely and quickly solve them with high accuracy.

**Turnkey optimization modeling**

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The intuitive interface and interactive visualization capabilities of Xpress Insight give business users the ability to easily create optimization models in the FICO® Analytic Cloud.
**Accessible Optimization**

Businesses have recently come into a wealth of data to help them make decisions about their customers. Modeling and optimization have become increasingly important in helping make these decisions. Meanwhile, there aren’t enough operations researchers to keep up with demand, and it has become necessary for business experts to do their own modeling and optimization.

Xpress Insight supports business experts with:

- **Customized interfaces**, such as large network visualizations and map views, to represent the optimization model in business terms.

- **Scenario creation and comparison** to carry out what-if analysis and to understand dependencies and sensitivities within the problem.

- **Collaboration features** to share your work with colleagues, work together to create an optimized strategy or present results for review to your manager.

- **Flexible interfaces** to provide tailored access to certain functionality based on roles or privileges.

**Interactive visualization**

Users can explore various optimization scenarios and do side-by-side comparisons to determine the effectiveness of each strategy. Engaging visualization features help the user easily navigate the model and key in on important information.