

TRANSPARENT MACHINE LEARNING - ALTAIR® KNOWLEDGE STUDIO®

Operationalize your machine learning without introducing risk in decision making because of lack of model transparency. Knowledge Studio automates machine learning tasks and delivers explainable AI so users can be confident in making decisions from data. Explainable AI displays the fine details of a model's configuration so you can better understand how the prediction was made - even for black-box models.



**Transparent,
Explainable AI**

**Automated Machine
Learning**

**Designed for many
skill levels**



Try Product Today:
[Request a Demo](#)

Who Benefits from Knowledge Studio?

Analysts may not be familiar with modeling or ML processes, but they can quickly uncover insights to help solve complicated problems. Data scientists can fine tune model parameters and attributes for models of any complexity.

What is Knowledge Studio?

Knowledge Studio is known for its no code ease of use modeling approach and its market leading, patented decision trees and strategy trees. An interactive and intuitive interface allows users to quickly connect to a wide range of data sources, transform disparate data formats into usable datasets, and generate insights by using a wide range of modeling techniques and algorithms.

Why Knowledge Studio?

No Code Machine Learning Modeling

An interactive and intuitive interface allows users of different skill sets to quickly connect to a wide range of data sources, transform disparate data formats into usable datasets,

and generate insights by using a wide range of modeling techniques and algorithms, from decision trees to regression models to deep learning (neural networks).

Responsible, Explainable AI

Explainable AI in Knowledge Studio visually details about how a model is configured and what the model's results mean. Combined with AutoML, responsible AI is achieved. Knowing how and why a prediction was made from a ML model, you can be confident in making decisions from your data.

Predictive to Prescriptive Analytics

Knowledge Studio's patented strategy trees combines your knowledge of the business with predictive modeling results, allowing you to prescribe treatments to different segments of your customer bases. Optimize strategies and campaigns by scoring the impact of controllable change to multiple scenarios. Maximize the ROI you are looking for as you drive towards new business opportunities.

Knowledge Studio Features

Automated Machine Learning

Automate data preparation, model building, and model comparison using AutoML. The pre-configured design uses modeling best practices, taking the guess work out of modeling. Control over model configuration is not compromised so that you can tweak model configurations, tune model performance, and generate results in minutes.

Efficient Modeling

Sometimes modeling requires the manual touch. Create predictive models and generate deployment code using a single workflow. 80+ preconfigured wizard-based nodes facilitate analysts building models but are flexible to suit the requirements data scientists. Share insight with your BI tools of choice or export models to decision engines, databases, or real-time scoring systems.

Use the Models You Want

Profile and segment data before building a model. Visually understand what your data includes before using AutoML or building a model from scratch. Choose your preferred machine learning algorithms including regression models, cluster analysis, bagging and boosting, neural networks, scorecards, and other model types. Evaluate models using Lift Charts, ROC Curves, K-S Chart, Profit Chart, Confusion Matrices, and more. Move from predictive to prescriptive analytics using optimization to deploy model predictions under realistic business constraints.

Avoid Coding Errors

Generate model code in Python, R, SAS, SQL, PMML, and other programming languages with a simple click of the mouse. Write and execute R and Python code within Knowledge Studio workflows. Accelerate model building and deployment. Integrate with R, Python and other programming languages. Leverage previously written code to save time and future effort.

Built to Solve Business Problems

Knowledge Studio is a perfect fit to help manage credit and fraud risk, marketing analytics, product lifecycle design, customer loyalty programs, and supply chains. From healthcare to financial services, telecommunications to product warranty claims, Knowledge Studio enables analytics teams to gain useful, actionable insight from their data.

Designed for All Skill Sets

Knowledge Studio is designed to enable collaboration across the business. Data scientists and business analysts can complete complex projects in minutes or hours, not weeks or months. Results are easily understood and explained.

Related Data Analytic Solutions from Altair

Altair Knowledge Works™ enables people of different skill sets to easily build analytical applications, or augment analytics into existing applications to make better decisions.

Data Preparation

Altair's desktop and browser-based solutions offer a collaborative workspace for users to share work in a governed, secured environment while tracing every step made during the transformation process. Automate data transformation tasks and pass trusted, accurate datasets to Altair's Machine Learning solutions to solve for complex problems.

[Learn more about Data Preparation](#)

Big Data Analytics

Altair's advanced analytics software on the Apache Spark framework provides businesses with unprecedented analytics and data processing capabilities that overcome challenges encountered with Big Data access and insight discovery. An intuitive and interactive experience means users can transform and analyze billions of datapoints in a manner of minutes, leading to quicker and more informed decisions.

[Learn more about Big Data Analytics](#)

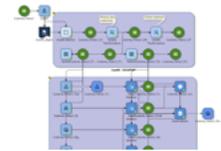
Data Visualization and Stream Processing

Altair Panopticon lets the people closest to the action build, modify, and deploy sophisticated streaming analytics and data visualization applications without needing to code. They can connect to virtually any data source, including real-time streaming feeds and time series databases, develop complex stream processing programs, and design visual user interfaces that give them the perspectives they need to make insightful, fully-informed decisions based on massive amounts of fast-changing data.

[Learn more about Data Visualization and Stream Processing](#)



Altair's patented decision tree technology leads the market with its flexibility and easy-to-understand results.



Automated data preparation, modeling building and comparison means insight is found in minutes, not hours or days.