



Having access to industry and customer trends allows companies to stay competitive and meet market demands. But gathering market intelligence data comes with a lot of challenges: accuracy and reliability of data sources, ensuring timeliness of the data, the need to collect from multiple and disparate sources, and the need to pull only specific information.

Once you're past those battles, you need to tackle data prep: cleaning the data, combining the data, and making it usable. That's not easy when you're dealing with very large data sets, especially if you're working in spreadsheets that can only handle so much. Documentation is also a challenge if the tool you're using doesn't allow you to easily retrace your steps and debug errors.

The constant battle of having "so much data"

These are the everyday challenges of Market Insight Manager Laura Rutledge, and her team at AMD. As a market intelligence team in the semiconductor industry, they analyze total addressable market (TAM) data for strategic business decision making. They deliver this data to the business via Excel flat files/pivots and through automated delivery systems (PowerBl dashboards, etc.). Meaning they need a seamless and fast way to get market data and forecasts over to line of business individuals and other stakeholders.

Her team gathers data from multiple sources daily, using third-party data and their own forecasts. They purchase syndicated data (retail and distribution) on a weekly and monthly basis, review supply chain data (e.g., AMD selling components to Dell), and track data through three different stages of the supply chain. Additionally, they use TAM data to size markets, which is then used to calculate AMD market shares by account, geography, and more. Their goal as a team is to ensure they are using the most up-to-date data for their forecasts and present it in a way that provides the entire business with a single source of truth.

Company

AMD

AMD was founded in 1969 as a Silicon Valley start-up. Their focus is on computing, graphics, and visualization technologies, building products and services that advance the future of data center, embedded, gaming, and PC markets.

Computing

Marketing

Marketing Analytics





Streamlining the entire ETL process

This is where Laura and her team use KNIME Analytics Platform, a free and open source data analytics tool that can handle large data sets and connect to any data source or database. This makes it much easier for Laura and her team to process the vast amount of data they need daily and consolidate data from different sources. They also use KNIME to clean their data, analyze it, and visualize the results.

Because KNIME uses visual workflows for data science, every step taken is documented and easily re-traceable, meaning she and her team can go back and revisit any workflow to spot and fix errors (something very difficult to do in spreadsheets or when using code). Laura's team can visually understand the data flow and modify it, which allows them to account for different versions of their process and go back and look at the data at each step.

Using low-code to learn and apply data science

Laura loves that KNIME Analytics Platform is intuitive, allowing anyone on her team (regardless of experience) to both learn data science and cross-train other teams and individuals. No one needs to know or learn complex coding languages to carry out advanced tasks. When an analytics workflow is built, it can be shared and reused in a few clicks with someone who has no experience as a data scientist.

An added benefit is that KNIME is free to download and doesn't include any trial periods or functionality limitations. Anyone at AMD was able to download and start doing data science without licensing requirements or the need to involve IT.







Why AMD uses KNIME for analytics and sharing insight

In Laura's words, KNIME is "elegant, simple, powerful, and flexible." She has been at AMD for almost 6 years and is happy to say she doesn't know what life was like before KNIME. Here are a few of the benefits she's seen using KNIME over the past six years:

Building and sharing workflows is easy

AMD says that KNIME provides a straightforward way of building forecasts and a more streamlined way of sharing them. Now they are able to simply drag and drop KNIME nodes — each of which represents an analytic function like filtering or aggregating data — onto a canvas and build their entire data science workflow that way. Each node is customizable, and so are the ways you visualize your data. One key benefit when working in a team is that all steps are documented for others to easily follow, and anyone can execute the workflow.

Reduced time to delivery

In terms of productivity gains, AMD can now build a workflow from scratch in just a couple months. With programming languages, it took much longer to gather and clean the data, then build and deliver a forecast to different end users. KNIME removes this layer of complexity because the code is already written for each task and bundled up into pre-packaged drag-and-drop nodes. KNIME also removes the 'ceiling' of how much data you can work with, which you might run into with spreadsheets that break if they can't handle the size of your data set.

Seamless integrations and automation

With KNIME, Laura's team has been able to automate the integration of multiple syndicated datasets, apply custom forecasting algorithms, enhance forecast outputs with internal market intelligence, load historical and forecast TAM data into SQL databases, integrate Snowflake and deploy as their cloud provider, and more.

AMD plans to scale their KNIME usage beyond TAM forecasting to developing more market models, building a company-wide market view (across different business models/frameworks), building forecasts for the entire business, broadening the modeling, and adding additional detail to their analysis.

Give KNIME Analytics Platform a <u>try for free today</u>. Anyone in your organization can download it and start automating the collection and transformation of complex, massive data sets, sharing reusable data science solutions, and streamlining the delivery of insights.

