Open for Innovation
KNIME

5 Reasons Executives are Switching from Alteryx to KNIME

As the landscape of data analytics and AI continues to evolve rapidly, executives must stay vigilant in selecting platforms that deliver positive ROI and align with their organization's goals and priorities. They need to be prepared to let go of old approaches that no longer keep up with their needs and bring in those that truly provide strategic advantage.

KNIME, the open source no-code low-code platform for end-to-end data science offers executives a compelling choice that not only meets their current needs but ensures adaptability and scalability for future growth and innovation.

In this guide, we will explore why teams choose KNIME so you can make an informed decision about the future shape of your data science capabilities.

1. Analytic breadth and depth for your organization

Switching to KNIME means you get more analytic breadth and depth than most other tools.

People tend to start using KNIME with a particular use case in mind such as automating repetitive spreadsheet manipulation or analyzing text. However, as they cross over into new territory such as geospatial data analysis, image mining, and generative AI, they quickly realize that KNIME seamlessly accommodates all of these needs with its depth and breadth of coverage.

Let's look at this in detail.

Getting the data you need

The success of many data projects relies on quick adjustments to changes in data repositories and the availability of new data sources. One of the most useful features of KNIME Analytics Platform is its versatility to connect easily to a wide variety of data sources, from local file types on your hard drive, to databases, to remote files on the cloud.

Because it's open source, KNIME will consistently integrate any new types of data sources, ensuring that your analyses are future-proof. In addition to connecting to any data source, KNIME also lets you work with any type of data – strings, integers, images, text, networks, audio, molecules, and more.

Intuitive enough for business users, sophisticated enough for data experts

KNIME gives users access to a complete range of analytic techniques, from automating repetitive ETL tasks to accessing all popular machine learning libraries like TensorFlow, Keras, and H2O to build advanced models.

Users can choose to use any of these techniques without writing any code, or integrate their favorite scripting language. You also have the choice of using a generative AI assistant to get guidance on building analyses or have them automatically built by AI based on your instructions.

How do you keep data scientists happy?

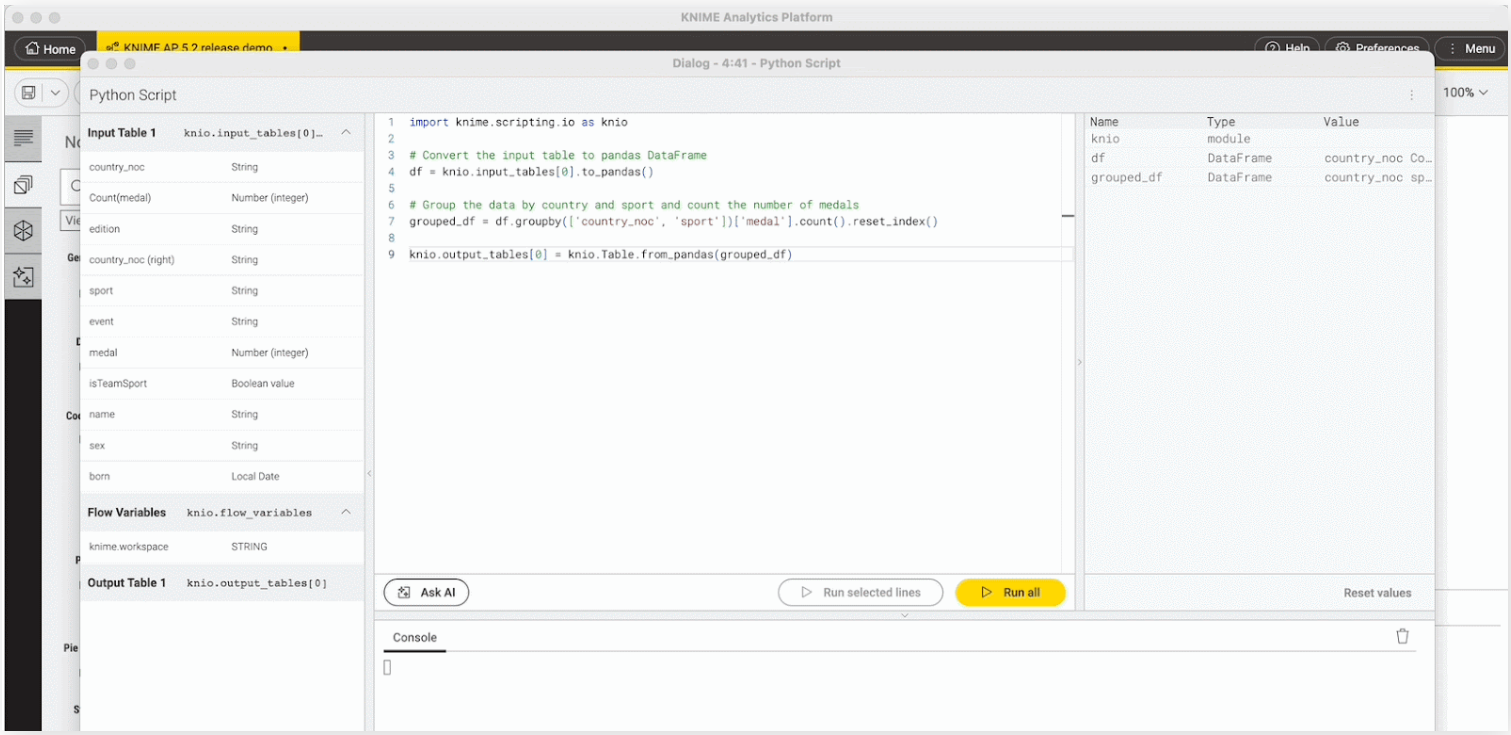
In **73% of organizations** data science teams are mostly, if not completely, centralized. That means one data science team is usually responsible for supporting all data science-related projects across the organization. The burden is therefore on these data scientists to solve all data problems in the organization.

With data science skills being both scarce and expensive, how do you ensure that your data experts remain happy and satisfied?

The answer is by enabling them to focus on what they do best — solving data analysis problems using their favorite scripting language.

KNIME's scripting support is valuable for individuals who have a strong background in scripting languages like R, Python, or JavaScript. Despite being a no-code low-code tool, KNIME enables data scientists to leverage their programming skills within the KNIME environment. Instead of forcing and locking them into a proprietary solution, KNIME's integrative data science environment allows different technologies to be combined and enables the experts to collaborate, including by adding custom scripting to workflows.

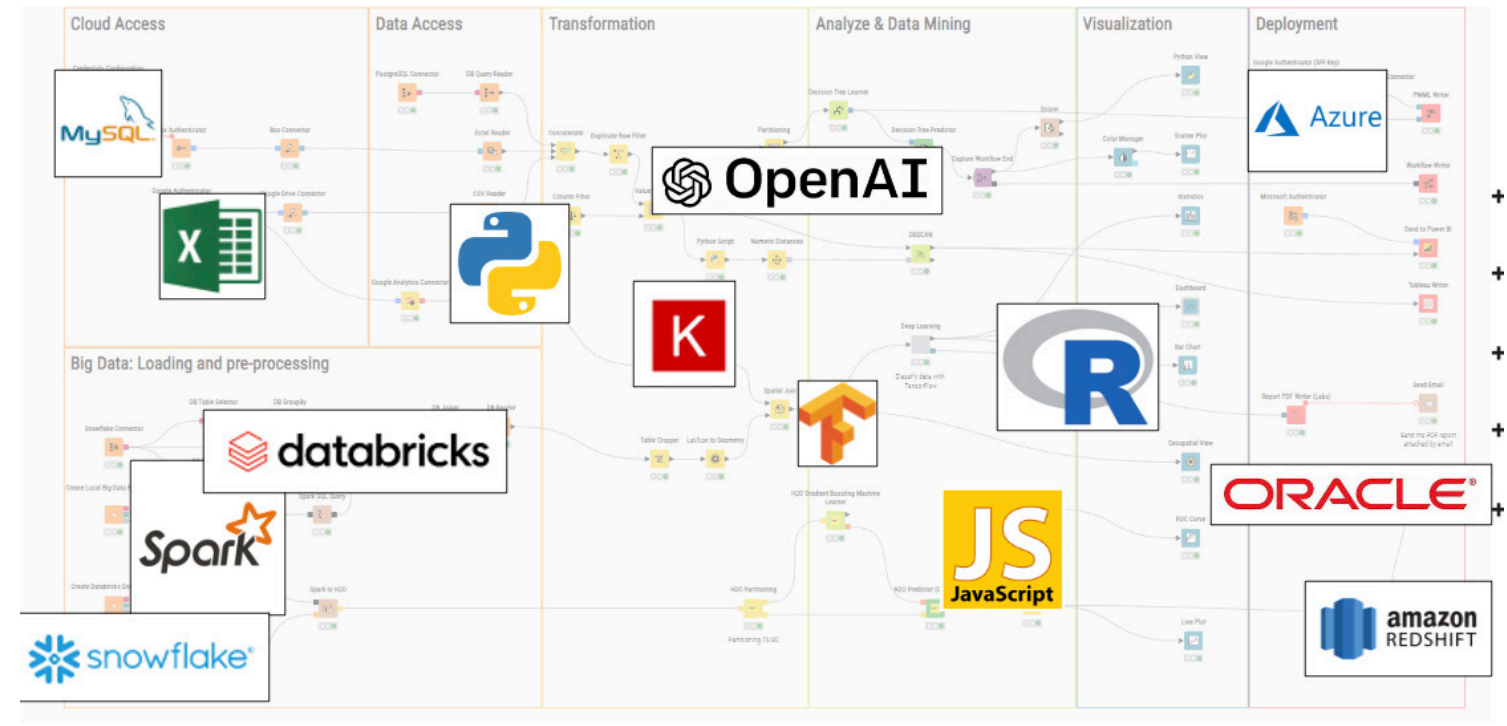
For example, if a data scientist is proficient in Python, they can easily write snippets of code that can be embedded into a workflow. If they are a more experienced Python coder or have written Python libraries, they can package these and build a no-code front-end in KNIME for their team or even the broader community to use. Developing Python-based KNIME extensions means that they can build KNIME nodes that package the capabilities of a Python library that they built or want to use. To end users, they can only choose to show the parameters that need to be configured in the node dialogue. In this way, it is very easy to make Python capabilities accessible to everyone.



The low-code advantage for data experts

While scripting is unarguably powerful, starting with a low-code platform allows data experts to focus on actually doing data science from day one.

With low-code, users don't waste time learning how to stitch together different libraries or technologies.They can use the low-code environment to eliminate the need to be software developers. They use code (or low-code) for their statistical or AI/ML models but then don't worry about the underlying technologies for the rest of the work like accessing and preparing data, then ultimately integrating, deploying, and monitoring.



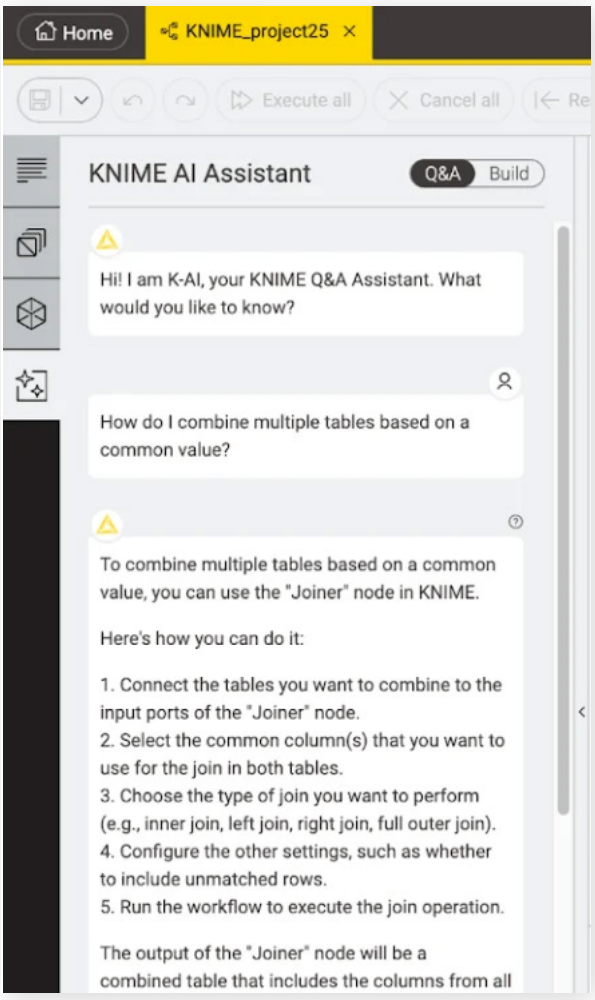
GenAI to speed up mundane work

Experienced data scientists can also use KNIME's generative AI assistant to speed up the repetitive aspects of analysis. They can use K-AI as a peer to automatically generate workflows with a chat in plain English and take over when the analysis gets interesting. They can also rely on K-AI for guidance and recommendations when they get stuck while tackling a new technique or discipline.

K-AI also has text-to-code translation capabilities and can create Python scripts and Apache ECharts visualizations based on prompts to assist data scientists.

Additionally, with KNIME's AI extension that connects to cutting edge AI models provided by OpenAI, Hugging Face Hub and GPT4ALL, they can build their own assistant for their specific use cases or enhance their workflows with AI.

Ultimately, KNIME gives users all the tools needed to make sense of data in one toolbox — the ability to create analyses of any complexity level without code, the choice to work in any scripting language, access to all relevant data sources, and to every relevant analytic library or technique.



2. Benefit from the power of open source

Open-source platforms are transparent, highly customizable, and extensible. KNIME operates without a black box. Its workflows consist of nodes that handle specific tasks, and the source code is publicly accessible. In today's technology ecosystem littered with AI-based tools, it's hard for organizations to know what decisions a software vendor is making on their behalf. With KNIME, you can inspect and audit the source code to gain a full understanding of how your data is treated.

Open source also means that you do not have to worry about a product being discontinued or being pushed to more expensive commercial editions.

Most importantly, an open and integrative environment is necessary for organizations to stay on the bleeding edge of innovation and be ready for the future.

After all, do you know what kind of data you will want to analyze in a few years? Do you know which tools will be available and what the newest trends will be? An open environment will allow you to add any new data sources, formats, and analysis technologies to the mix quickly.

Customize and extend capabilities based on your needs

KNIME's open-source and customizable nature empowers users with the freedom to extend the platform according to their needs and preferences. Whether it's a specific data preprocessing step, a novel machine learning algorithm, or a visualization technique, users can extend KNIME's functionality to address their specific analytical challenges.

The dynamic open-source community surrounding KNIME also consistently creates and shares extensions, widening the platform's capabilities beyond those found in closed-source alternatives. These include a wide variety of community-contributed extensions for specialized tasks like sentiment analysis, text mining, and network analysis. These extensions augment KNIME's functionality and provide solutions for diverse use cases.

The **KNIME Community Hub** serves as a centralized repository where users can share these extensions, workflows, nodes, and components, creating a rich library of resources that the community can benefit from. This collaborative environment allows users to build upon each other's work and rapidly adapt to evolving data science challenges.

Moreover, KNIME regularly engages with users on the KNIME forum, hosts Q&As with the product team, and holds user meetups and conferences to ensure that the platform evolves in alignment with user feedback and meets their needs.

Stay on the bleeding edge of innovation

Openness means that the platform is often the first to integrate any new technological breakthrough. When new technology becomes available and even omnipresent the way that GenAI has, the platform can easily be extended and adapted to work with those technologies. KNIME has integrated every "AI" type technology as it's become available – data mining, machine learning, deep learning, and now, Gen AI.

In contrast to closed-source platforms that may have constraints and tie users to the company's development schedule, KNIME users experience unparalleled flexibility and innovation.

In fact, **according to an ESG survey**, more than 88% organizations cite being open source as critical for innovation, and over 25% consider compatibility with open source technologies one of the most important criteria to consider when making purchases, likely foreshadowing a larger open source trend going forward.

23% **Business impact** (i.e., projects with highest potential business impact)

7% **Time to market** (i.e., projects with shortest time to market)

14% **Customer feedback** (i.e., projects that address customer feedback)

23% **Technical complexity** (i.e., projects with highest technical complexity)

13% **Resource availability** (i.e., projects that can be completed with available resources)

19% **Executive leadership** (i.e., priorities are dictated by the executive leadership team)

88%

of organizations agree that **open source is critical to innovation in data science and marchine learning.**

3. No barrier to entry

Access data science regardless of background

Research indicates that the use of analytics within organizations has remained stagnant at approximately **25% of all employees**, reflecting minimal growth for more than a decade. This is largely due to the complexity of analytics platforms and the extensive training needed to master them.

KNIME offers a visual low-code, no-code environment that enables anyone, regardless of their background, to easily engage in and upskill on data science.

Its intuitive interface allows users to construct analytics workflows by simply connecting pre-built nodes, with each node representing a specific data processing or analysis task. This eliminates the need for extensive coding, making it possible for individuals with diverse backgrounds, from supply chain specialists to accountants, to participate in data analysis without the necessity of learning complex programming languages.

An AI-powered guiding hand for faster upskilling

KNIME's AI assistant makes it easier for beginners to build workflows from scratch. They can either chat with it to get guidance or instructions on how to build a workflow or they can use it to create workflows based on their prompts.

Learning resources and an active community to lean on

KNIME offers plenty of **online courses** that teach users how to use low-code for any data task. Users can also validate their knowledge with an on demand, industry recognized **certification**.

KNIME's active and vibrant **community** is another rich resource that helps new users upskill faster. Users can upskill through the vast knowledge base of the community by using community-built analytics blueprints and asking questions on the **forum**. Instead of starting with a blank slate, users can download the freely available blueprints and make their own customizations as they become familiar with the tool.

Providing plenty of ready-made examples helps users get started with data analytics platforms quickly and confidently. It encourages exploration and experimentation without the fear of starting from scratch, allowing users to create more advanced workflows faster.

There are no limits to the level of mastery users can achieve: ETL, automated reports, data apps, AI/ML, all without the need to code.

4. Enterprise-grade scalability

Collaborate at scale

Enterprises are still struggling to get a lot out of their data, and this is, at least in part, due to the silos between data and domain expert teams, as well as the burden on data scientists to solve all data problems in the organization. By creating a common, intuitive language between the two teams and giving domain experts more powerful data tools, organizations can start to remedy these issues.

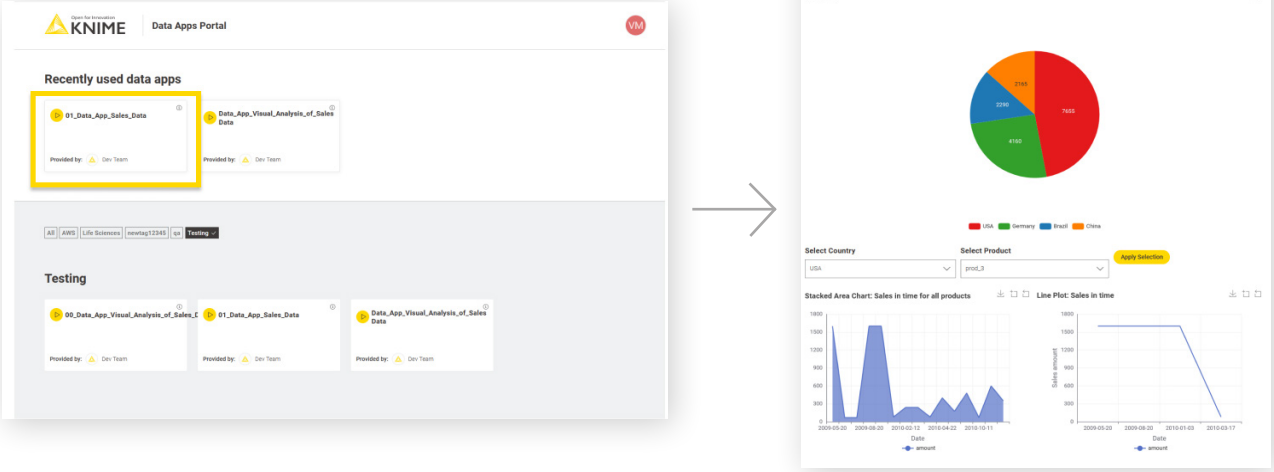
KNIME serves as this common language that facilitates collaboration and knowledge-sharing among various stakeholders involved in data analytics initiatives — data scientists, data engineers, business analysts, and line-of-business users. At the same time, it enables more such stakeholders to self-sufficiently engage with data. It allows Python experts, ML engineers, and other technical experts to share their work as features non-experts can later access and reuse.

It also enables teams of people with similar experience to easily work on the same project, building on each other's developments by letting them easily share, version-control, and see what's being done to data at each step.

Deploy at scale

Data teams still encounter significant technical and bureaucratic obstacles when attempting to scale their insights effectively. A common issue is the transfer of analysis results to separate environments, leading to friction, delays, and increased risk of errors.

KNIME offers a consistent, repeatable path to deployment by making the results of analysis available for end users to consume through dashboards or data apps, or making them available as APIs for integration with a third-party tool. And it lets you deploy data science outcomes in the same no-code/low-code environment where the analysis was performed.



1. Click on the title with the name of your deployment to run its respective Data App

2. The Data App opens in a new browser page

Through its integrated deployment process, KNIME simplifies the capture of preprocessing, preparation steps, models, and analyses for reuse in production environments. Moreover, KNIME facilitates large-scale productionization of data science by providing all the infrastructure appropriate for the testing, validation, deployment, and monitoring of models.

KNIME's integrated deployment capabilities give organizations the true value data science can provide – continuously adjusting to new requirements and data, applicable to new or variations of existing problems, and providing new insights that have profound impact on our business.

All capabilities available in a unified platform

If you don't pick a platform that supports all types of users and use cases, you'll end up buying more tools and trying to fit them together, making it harder to reach your data and AI goals.

KNIME offers a unified platform that can be used by everyone whether they are business users or data experts and can support all types of data analysis use cases. It provides a single environment for advanced, domain-specific, and basic ETL tasks as well as secure productionization of those tasks.

This reduces software costs for businesses and boosts overall data literacy among employees, enabling them to extract valuable insights from data more effectively.

Investing in a platform that does cover the entire data science life cycle, when the time is ripe, sets the stage for future ambitions.

5. Lower total cost of ownership (TCO)

An open source platform like KNIME helps keep TCO low, but equally importantly, it makes upskilling everybody in the organization feasible because they can all start with the open-source platform. Low start-up costs are essential to getting buy-in across an organization before investing in features that support large-scale data science productionisation.

KNIME offers plenty of flexible options depending on how and when you want to scale up.

Anyone can use the free **KNIME Analytics Platform** on their desktop for as long as they like. If and when they feel the need to collaborate in small teams and automate the running of their workflows, they can get a subscription to the paid **SaaS Team plan on KNIME Community Hub**.

Once there are large quantities of employees on both sides of the business using the KNIME Analytics Platform, organizations can choose to upgrade to **KNIME Business Hub**, to enable large (or small) scale deployment of analytics as REST APIs or Data Apps in a secure, governed environment.

KNIME and Alteryx: Choosing the right platform for your needs

With its intuitive interface, open source nature, extensive library of algorithms and extensions, and the ability to integrate with programming languages like Python and R, KNIME is a complete solution for data workers of all levels of expertise. Whether you want to handle basic data processing tasks or build complex deep learning models, KNIME helps you get the job done.

Here's a quick look at why KNIME might be the better choice for you compared to Alteryx:

Why KNIME	Alteryx Limitations
✓ No barrier to entry: build workflows with KNIME Analytics Platform completely for free	✗ Cost to use the platform after trial period ends, plus additional costs for advanced features
✓ Offers the most complete range of advanced analytic techniques available	✗ Compromised flexibility for ease-of-use
✓ Open source allows users to access and enhance source codeaccount mapping support	✗ Fewer analytic techniques available due to limited machine learning capabilities
✓ Open platform means all latest and greatest technology is accessible through KNIME	✗ Fewer data types & data sources supported
✓ Consistent visual programming environment for building and deploying data science solutions	✗ Closed source confines speed of innovation and community growth
✓ Tools to define and automate a custom ModelOps process to scale the validation, testing & deployment of models	✗ Limited deployment capabilities
✓ Comes with a large, active community with a common goal to push data science forward	✗ Community can't easily extend or access the latest technology because of proprietary restrictions

Learn more about transitioning from Alteryx to KNIME

The decision to migrate is not just about seeking change; it's about embracing a solution that keeps pace with innovation and allows everyone in the organization to make data-driven decisions.

That's why it's crucial to adopt analytics tools that make working with data intuitive for everyone. When you let people focus on what truly matters, everyone can work with data at their level of expertise. This is when you'll truly see data analytics investments making a difference for your enterprises.

Ready to start transitioning?

Here's an ebook that maps the most commonly used Alteryx functions and techniques to their KNIME equivalents.

Take a look at this Alteryx to KNIME cheat sheet to speed up your transition.