

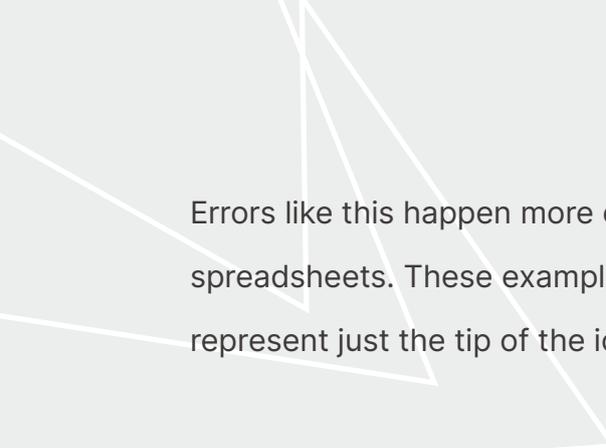
Why finance teams are moving from spreadsheets to low-code data analytics



Spreadsheets have become an essential tool since their introduction in the 1980s. Before spreadsheets, financial teams and businesses relied on time-consuming paper-based systems to manage data, perform calculations, and generate reports. The launch of Microsoft Excel brought about a significant shift, offering a digital solution that was faster, more shareable, and easier to use. Today, spreadsheets remain a cornerstone of financial operations across all industries.

However, the heavy reliance on spreadsheets has its drawbacks. Although spreadsheets have dominated in the past two decades, they have limitations. Spreadsheet errors, often due to human mistakes such as incorrect formulas, misentered data, or overlooked changes, can lead to significant financial losses and operational disruptions. These errors are all too easy to make and can be high stakes in finance roles, for example:

- In January 2024, Norway's sovereign wealth fund disclosed a loss of roughly **\$92 million** due to a manual error where an incorrect date – December 1st instead of November 1st was entered.
- In December 2023, Cambridge University Hospitals NHS Foundation Trust revealed **two significant data breaches** involving patient information. The breaches were due to mistakenly including sensitive data in Excel spreadsheets. One breach exposed information from a pivot table that contained details of over 22,000 maternity patients, while the other involved data exposed information about 373 cancer patients.
- In October 2023, inconsistent use of Excel functions like VLOOKUP at the Anaesthetic National Recruitment Office (ANRO) led to **top doctors being deemed "unappointable"**, despite high interview scores. The ANRO made a critical mistake by mismanaging spreadsheets, causing candidate scores to be incorrectly transferred and ranked.

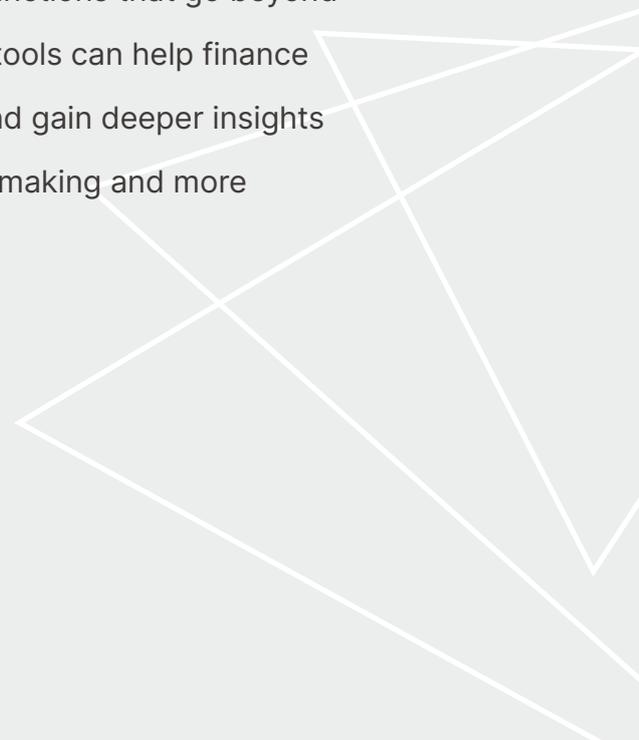


Errors like this happen more often than you might realize when sharing spreadsheets. These examples are just a handful that went public and represent just the tip of the iceberg.

Consider what could happen if similar mistakes crept into your own Excel expense reports. A simple error in an expense report, such as a misplaced decimal point or a duplicated entry, could lead to overstated financial statements, budgeting errors that lead to overspending, or significant financial loss through the overpayment of suppliers. These inaccuracies could undermine decision-making, erode stakeholder trust, and even result in financial penalties or loss of business opportunities.

Spreadsheets, while powerful, are not designed to handle the scale and complexity of modern financial data management needs. They lack the advanced capabilities needed to integrate data from all your financial systems, to do real-time analysis, or for real collaboration which is essential in today's complex and data-driven business environment.

To address these limitations, many organizations are turning to low-code data analytics platforms that offer enhanced data integration capabilities, automated workflows, and sophisticated analytical functions that go beyond the basic functionalities of spreadsheets. Low-code tools can help finance teams improve accuracy, reduce the risk of errors, and gain deeper insights from their data, ultimately leading to better decision-making and more effective financial management.





Understanding the limitations of spreadsheets

Spreadsheets have long been the go-to tool for financial analysis due to their ease of use and familiarity within finance teams. They aren't going anywhere. However, it is important to be clear that relying solely on spreadsheets has its limitations, which become apparent as the complexity and scale of financial operations grow. So how do you know if you and your team have grown out of spreadsheets?

“With its no-code visual interface, logical flow, and Excel-synonymous functions, professionals can easily leverage KNIME to automate their spreadsheet processes. KNIME provides an opportunity for Finance staff to build analytical automation tools without IT support while remaining nimble to changes in business.”



Director
CAS Finance
Day5 Analytics

1. The time sink of manual data entry

One of the most significant drawbacks is the time-consuming nature of manual tasks, which permeates every essential task when using Excel. For example, finance teams often need to consolidate data from various sources, such as bank statements, ERP systems, CRM databases, and external market data. Each source may provide data in different formats. This requires manually adjusting and reformatting data. Essentially, stitching different data together in a coherent manner to ensure consistency. Even after consolidating the data, the journey remains challenging because tasks like data cleaning, preparation, and formatting recur every single day, week, or month. This process can be incredibly time-consuming but ultimately necessary to start building charts and other visuals that tell a story about how a company is performing.

2. The repetitive cycle of manual Excel processes

Solely relying on spreadsheets makes many financial tasks highly manual. Tasks such as reporting, invoice checking, cash reconciliation, and data imports, require the same steps to be performed repeatedly. Using spreadsheets for these tasks means that finance professionals spend a significant portion of their time on mundane, repetitive work. This not only reduces overall productivity but also increases the risk of errors through lack of automation.

3. The risk of errors in Excel

Spreadsheets are inherently prone to errors, whether due to manual data entry mistakes, formula errors, or incorrect data manipulation. Even minor errors can have significant consequences in financial contexts, where accuracy is paramount. Mistakes in accounting can lead to substantial financial losses, compliance issues, and damage to the company's reputation. The difficulty of spotting and correcting errors in complex spreadsheets compounds this problem, making it challenging to ensure the accuracy and reliability of financial data.

4. The struggle to collaborate and maintain version control

Maintaining version control in spreadsheets is notoriously difficult. As multiple team members collaborate on the same document, keeping track of changes and ensuring that everyone is working with the latest version becomes a significant challenge. This can lead to confusion, duplicate work, and the risk of outdated or incorrect data being used for decision-making.



5. The transparency issues with Excel

Spreadsheets, while versatile, often lack transparency when it comes to documenting the analysis process. The rationale behind calculations and the data manipulation steps are not always immediately clear, especially to those who did not create the spreadsheet. This can make it difficult for finance teams to explain their analysis to stakeholders, auditors, or new team members.

Spreadsheets are not going anywhere and will likely remain a staple in financial analysis. However, their inherent limitations highlight the need for more robust tools. If any of these limitations resonate, you might benefit from incorporating more automation through a low-code data analytics platform to address these issues. Tools like KNIME offer streamlined data integration, automation of repetitive tasks, enhanced accuracy, better version control, clearer documentation, and advanced analytical capabilities, and they're easy to start using if you're already familiar with spreadsheets. By complementing spreadsheets with such a platform, finance teams can achieve greater efficiency, accuracy, and insight, which translates into cost savings and reduced risk of error.



How can low-code data analytics can help you?

Finance teams are increasingly turning to low-code data analytics platforms to overcome the limitations of spreadsheets and get new insights from their financial data. Low-code platforms offer sophisticated analytical capabilities that cover all the basic functions you're used to in spreadsheets while also enabling predictive modeling, complex statistical analysis, and large-scale data visualization.

“KNIME has generated a new-found excitement and change in approach towards self-service ETL and data science. This has resulted in significant time savings, improved auditability, and centralization of information via other projects.”



Paras Gupta
Director, BI & Advanced Analytics
BGIS

Five ways finance teams benefit from low-code data analytics

Low-code data analytics tools enable finance teams to streamline complex data analysis and modeling tasks without the need for extensive programming expertise.

Although spreadsheets will always be the perfect tool for some tasks, you may want to adopt a more efficient approach for others. Financial analysts can quickly develop predictive models, automate reporting, and perform real-time data analytics by using the visual and intuitive interfaces and pre-built components that a tool like KNIME offers.

For people spending their days in and out of spreadsheets, performing the same analysis in combination with a low-code data analytics platform is not only more efficient, it's also easier and it doesn't require picking up a coding language.

Low-code platforms also facilitate better collaboration between technical and non-technical team members, fostering a more agile and responsive financial environment. Every spreadsheet user can benefit from combining their work with a low-code/no-code data analytics platform in five major ways.

1. Streamline operations for higher efficiency

Low-code data analytics platforms empower finance teams to perform complex calculations and analyses with precision. Automating repetitive tasks and standardizing procedures, reduces the likelihood of errors inherent in manual processes. By combining spreadsheets with low-code platforms, you can do away with the most repetitive, time-consuming, and truly laborious aspects of your jobs like cleaning and aggregating data. This ensures consistent results and enhances the overall accuracy.

Webbankir processed **200,000 loan application**

requests per month, spending less than 10 seconds to process each request after switching to KNIME.

[Learn more here](#) →

“KNIME allows almost any type of machine learning model to be used. It can also complete almost any kind of required data transformation needed for a given project. The visual drag and drop way of building a workflow, not only speeds up the work on models and processes, but it also enables non-coders to work freely and independently.”



WEBBANKIR

Sergey Bazov
Portfolio Manager - Risks
Webbankir

2. Effortless and accurate time-saving solutions

With an intuitive interface and drag-and-drop functionalities, KNIME expedites the development and deployment of data analytics solutions. Finance professionals can quickly create custom reports, visualize data, and generate insights without spending extensive time on coding or programming. This time-saving aspect allows teams to focus their efforts on strategic initiatives and value-added tasks, rather than getting bogged down by technical complexities.

95% time savings

transitioning away from labor-intensive and error-prone Microsoft Excel processes.



3. Automating repetitive tasks for increased productivity

Low-code data analytics tools enable finance teams to automate routine processes such as data extraction, cleansing, and analysis. By setting up automated workflows and triggers, repetitive tasks can be performed without manual intervention, freeing up valuable time and resources. This automation not only increases efficiency but also reduces the risk of human error, ensuring consistency and reliability in financial operations.

BGIS (Brookfield Global Integrated Solutions)

saved \$400k annually

by automating work order parsing with KNIME.



4. Empower your team and reduce workload through independence

By simplifying the data analysis process and eliminating the need for extensive programming knowledge, low-code tools alleviate the burden of data analysis on finance professionals. These tools empower team members to independently create and execute data analytics projects, reducing dependency on specialized IT or data science teams. As a result, finance teams can operate more autonomously, respond quickly to changing business needs, and scale their analytics capabilities without adding significant overhead.

Day5 Analytics
saved 5 weeks of analyst time
per year using KNIME.

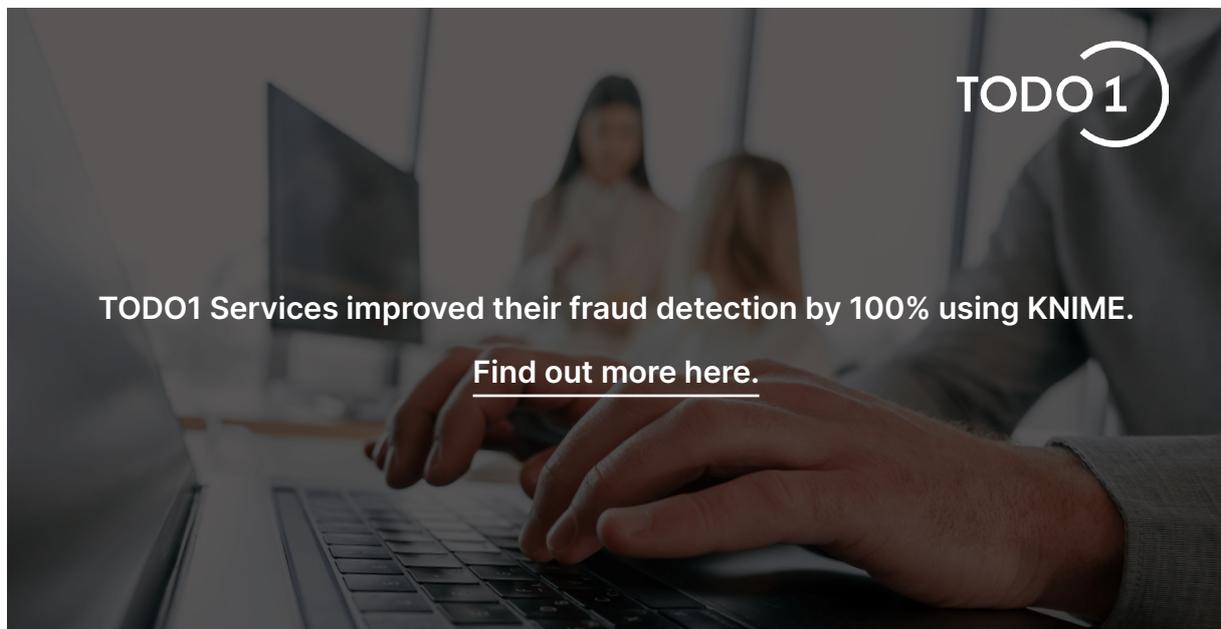


5. Optimize resources for proactive, sustainable growth

Low-code data analytics platforms equip finance teams with advanced forecasting capabilities including predictive modeling, machine learning, and data visualization, allowing you to uncover patterns, trends, and relationships that might not be immediately apparent in a spreadsheet. This proactive approach enables finance teams to anticipate challenges, optimize resource allocation, and drive sustainable growth in a rapidly evolving business landscape.

**100
milliseconds
average fraud
detection time**

**managed 650+ million
transactions with no
downtime after moving
to KNIME.**



Getting started with KNIME Analytics Platform

Spreadsheets are very easy to use, which is one of the reasons why they are deeply ingrained in finance teams. A low-code tool like KNIME Analytics Platform makes it just as easy for spreadsheet users to start using visual workflows for analysis. And it's free to get started. Automate financial analytics and reallocate your time to what matters. Overcome manual data aggregation and eliminate errors by using KNIME in FP&A, Controlling, Treasury, Tax, Audit, and Compliance.

You don't have to start with a clean slate. Check out [how KNIME powers finance teams](#) across industries. We have created a set of jump-start workflows for common operations in finance. All those blueprint workflows have been stored in a dedicated repository on the [KNIME Community Hub](#), named [KNIME for Finance](#), and are available for free download and usage. We also have a [cheat sheet](#) that highlights the most important nodes and verified components you need to know when it comes to using KNIME for finance.



KNIME Analytics Platform is a low-code tool, suitable for employees who are not programmers but have a business background. KNIME Analytics Platform is also open source and **free to download** and use. It offers a large variety of connectors, all standardized, all presenting the same UI, making it very easy to connect to all types of data sources: databases, ERP systems, CRM software, web resources, files, cloud repositories, and more.

KNIME Business Hub, the commercial counterpart of KNIME Analytics Platform, allows for collaboration, productionization, and scheduling of all implemented operations. Which means it allows for automation. This is very practical in finance departments, as you can generate the report you need on Monday morning, regularly, using the latest data, on time, and at a low cost, without any manual work.

These examples just scratch the surface of what is possible when organizations incorporate spreadsheets with a low-code data analytics platform like KNIME. Take the first step towards transforming your financial analysis workflows by downloading the **KNIME Analytics Platform** today.



FAQ

What are the cost implications of adopting KNIME?

KNIME Analytics Platform is free and open-source software. You can **download** and start to build intuitive visual workflows to solve any data problem. **KNIME Business Hub**, the commercial counterpart of KNIME Analytics Platform, allows for collaboration, productionization, and scheduling/automation of your data operations. You can find the pricing **here**.

How will KNIME integrate with our existing financial systems and data sources?

KNIME has over 300+ connectors to data sources. You can consolidate, cleanse, and process data from all new and legacy sources on a single, intuitive platform. **Watch this video** to learn more about all the data sources you can access with KNIME.

What security and compliance measures does KNIME offer to ensure our financial data is protected and meets regulatory requirements?

This PDF provides a detailed overview of the KNIME Software development framework and security approach. **This page** shows a summary of all security advisories for KNIME Software products and services, including KNIME Analytics Platform, KNIME Business Hub, and KNIME Community Hub.

How does KNIME support scalability and adaptability to accommodate future growth and changes in our financial processes?

KNIME firmly believes in open source and the power of the community. This can help you stay ahead of the changing landscape with constant advancements and innovation. With KNIME, you can build solutions from scratch and scale workspaces across and within teams. **Read this blog** to learn more about how to scale analytics.

What training and support resources are available to facilitate a smooth transition to KNIME for our team?

You can get access to [KNIME Professional Services](#) that can help you realize the impact of your data faster and make the most out of KNIME. With this, you can ramp up your teams quickly with KNIME training for all expertise levels and backgrounds, fast-track your data analytics and data science use cases with onboarding services and onsite workshops, and allow your teams to focus on analytics while KNIME experts handle installation and integration. We also have a [KNIME Learning Center](#) where you can enroll in self-paced or instructor-led courses.

My question isn't answered here, what should I do?

Here's a [link to a collection of some of our most commonly asked questions](#), check out the forum if your answer isn't here! If you have additional questions, feel free to [contact us](#) and we'll be happy to help you.

Explore more resources:

- [Ebook: From Excel to KNIME](#)
- [Cheat Sheet: KNIME for Spreadsheet Users](#)
- [KNIME for Finance](#) Youtube Playlist
- [KNIME for Finance](#) Community Hub Space with pre-built workflows
- [KNIME for Finance: Customer churn KPI](#)
- [KNIME for Finance: Transfer pricing recharge](#)
- [KNIME for Finance: Monthly and year-to-date revenue aggregations](#)
- [KNIME for Finance: Sales tax reporting](#)
- [KNIME for Finance: Invoice and dunning process management](#)