



Finance Process Centralization with KNIME

Day5 Analytics' customer is a global leader in Integrated Facility Management (IFM) solutions, entrusted to manage the real estate finances of various Corporate Real Estate (CRE) clients. Financial management includes financial accounting, budgeting, innovation, and reporting, among other offerings. Each client is serviced by an account team, which constitutes staff in several departments. The Centralized Accounting Services (CAS) team is a shared services team that spearheads efficiency, automation, and the sharing of best-in-class practices across the Finance department.

Scaling the business without a proportional cost increase

For many finance organizations, significant amounts of time are spent each month performing repetitive, manual tasks in spreadsheets. These tasks are time consuming and prone to human error. Moreover, most Excel processes are inherently not well documented, cannot be scaled easily, and many are not easy to centralize due to business rules and nuances. Also, these are not easily codified by IT as they involve complex financial methods built by Finance professionals. The centralization of financial processes across multiple accounts presented an opportunity to optimize processes and drive efficiencies, allowing the business to scale without a proportional increase in cost.

Automating financial cost accruals based on multiple business rules

Cost accruals form a significant component of monthly costs for most companies. Accurate accruals result in accurate monthly financial statements, which CRE clients use to monitor spend and make strategic budget decisions.

Previously, several account teams would complete similar accrual calculations each month. This manual process involved downloading CSV files from the Financial ERP, converting to Excel, and performing several sequential calculations to determine the accrual amount. Each account team would apply its own specific business logic to ensure accruals were relevant to the specific CRE client. These processes were carried out in standalone Excel models and were disconnected from one another. Consequently, the methods deviated substantially from a standard process. Once these individual account accruals were generated by Finance, they would be reviewed and approved by the Operations teams, and uploaded to the Financial system.

This process was an ideal candidate for centralization and automation due to its well-understood, predictable nature. As multiple account teams were repeating the same procedures each month, albeit with slight differences, this process happened hundreds of times a year. Therefore, any improvement in efficiency to the core process could be delivered across each account.

The CAS team consolidated the cost accrual process across 20 accounts by exploring customized accrual processes, defining global and account-specific business rules, and automating the accrual generation process with KNIME. Finance ERP reports are now automatically downloaded into a single folder. KNIME reads through each of the files and applies business rules, tailoring accruals to each CRE client's nuances. The generated accrual is then reviewed by Operations staff, who ensure the cost aligns with the actual work delivered. KNIME then consolidates the input received from Operations and creates upload-ready templates for the Financial ERP system.

Saving 5 weeks per year with a new, nimble business process

Previously, an analyst would use Excel to perform the end-to-end process, taking around 2.5 days each month. By centralizing this task with KNIME, the process is now completed in under half a day each month - resulting in time saving of 2 days per month, or almost 5 weeks a year. The time saved by centralization is recovered by each account team at the most stressful time of the month: month-end close. As this process scales to support more account teams without a proportional increase in headcount, it will result in additional value-added work for the IFM customer and its clients.

Company

Day5 Analytics executes on data analytics consulting projects and provides KNIME training to clients' Finance, Operations and Analytics departments. With KNIME as a core platform, Day5's goal is to accelerate clients through the data evolution cycle, promoting existing infrastructure and forward-looking solutions to achieve future-readiness. Day5 prides itself on understanding the intricacies of clients' businesses, creating solid data foundations, and deploying custom solutions.

Customer: Day5 Analytics' customer is a multinational Integrated Facility Management (IFM) solution provider. Globally, the customer manages over 30,000 facilities totaling more than 340 million square feet across several markets including Government, Higher Education, Utilities, Telecommunications, Financial Services, Oil & Gas, Healthcare and Cloud Enterprise.

Solution highlights

Saving 5 weeks per year through process automation.

Real Estate Finance
Finance Automation

"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

A hard-coded ETL solution would not work for such a process, simply due to constant changes in CRE clients' business rules. As this process was built independently by Finance experts as KNIME workflows, teams can nimbly respond to changes in business processes which impact cost accruals. The project increased the transparency of the accrual process and unveiled numerous improvement opportunities during the conversion from Excel to KNIME. The standardized, built-in documentation within KNIME allowed for more focused testing and efficiency in the annual audit process. As a primary venture into self-service automation, this project sparked interest in further automation and drove increased centralization across the department.

Managing more than 600 individual processes, automatically, to add value where it matters

With Finance centralization comes the challenge of handling peak workloads. Certain manual processes, such as ensuring accounting entries are uploaded correctly in the system, need to be independently automated to ensure any centralized solutions are scalable. Every month there are over 600 individual processes managed for various account teams – including accrual uploads, account reconciliations, expense card reviews, budget uploads, and more. Keeping track of such a large volume of critical deliverables is not feasible using spreadsheets.

To ensure delivery and accuracy in client commitments, the CAS team created a transaction scheduling solution in KNIME. This involved creating a single calendar encompassing each process for each account team. Working backwards from the final deadline for each process, milestones were assigned and tracked for each step of every task. The tool provides visibility into upcoming deadlines, highlights potential delays, and supports staff scheduling by considering projected deliverable timelines, weekends, statutory holidays, and staff vacations.

Workload redistribution drives team engagement

The KNIME solution enables these individual processes to be completed routinely through the month, rather than accumulating for month-end. This relieves staff workload at peak periods, reducing stress and burn-out. Built into the KNIME solution are important validation checks, which identify and correct mistakes in manual sheets, such as those requiring foreign exchange conversions. KNIME automatically accesses completed reports generated from the system, ensuring the approved uploads have been successfully posted in the ERP - which prevents omissions from occurring. Furthermore, as these validations are built and embedded into the model, the model can be run independently by junior analysts, allowing senior staff to focus on more engaging value-add analyses.

Why KNIME?

KNIME has been embraced by Finance staff due to its simplicity and relevance. Finance tasks rely on structured data from official Finance systems and well-defined logical sequences of calculations. As an open-source tool, there are no costs for licenses, the community is engaged and supportive, data is secured, and learning resources are abundant.

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.

KNIME was introduced to this IFM customer in 2019 through a formal training program, available commercially through Day5 Analytics. The approach was to introduce staff to the tool, challenge them to tackle

small-scale Finance problems, and then demonstrate their solutions across the department – inspiring others to give it a fair chance. This gradual pressure-testing by Finance staff themselves proved to be a strong motivator for others to learn and apply the tool. Today, a second generation of trainees teaches others, forming an internal community that enables KNIME expertise to flourish.

With KNIME deployed as a core tool across the department's workstations, many traditional Finance and Accounting professionals have learned and applied KNIME to ease their day-to-day roles. With over 50 automation projects delivered, each saving between 2 and 4 weeks of effort on an annualized basis, the customer has realized long-term efficiencies across the board. New projects are now rolled out faster than ever before, and KNIME has driven engagement across the department by shifting the work focus to value-add.



Day5 Analytics, a KNIME Partner, advocates for business data self-sufficiency, and supports acceleration of clients' data evolution through KNIME training and custom solutions. Day5 offers customized KNIME training to guide clients to achieve analytical innovation in Finance, Operations, Marketing, and other data-driven departments. Visit Day5 Analytics (www.day5analytics.com) to learn more.