

10 Biggest Reasons to Avoid Spreadsheets in Resource Management

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Spreadsheets' Long Legacy of Failures

We use them because they're easy. Getting started, setting up, inputting data—the simplicity is alluring. But within the simplicity of spreadsheets lies so many failure points—many of them costly, time consuming, and embarrassing.

*"... while it is incredibly easy to get started making spreadsheets, it's also incredibly easy to make mistakes that cost companies millions or even billions of dollars."
-InsightsSquared¹*

We're not just talking about internal errors. The full list of public horror stories² from the past two decades is too long³ to include here, but they include a mistaken overpurchase of \$24 million and the sale of 10,000 nonexistent tickets to the Olympics. In fact, nearly 1 in 5 large businesses has suffered financial losses due to spreadsheet errors, and 1 in 3 large businesses report poor decision making as a result of spreadsheet problems (Forbes)⁴.

It's easy to laugh or shake our heads at such blunders, most of which are caused by human error within a single spreadsheet cell. A missing negative sign. An extra zero. One out-of-place decimal. While it's possible and recommended to use data validation features, it's humans that account for errors found in over 88% of spreadsheets⁵.

Even the Workarounds are Costly

Most of the advice about spreadsheets exists to help users apply complicated and time-consuming workarounds⁶ because of engrained problems within the spreadsheet program. Many forums are dedicated to troubleshooting⁷ spreadsheets, outsourcing solutions to savvy users who have the time to figure out clever tricks.

"What's truly shocking is that there seemed to be a culture of total acceptance that mistakes were simply part of working with spreadsheets"
-Business Insider⁸

In the end, we never really overcome the problems—we just live with them and try to minimize the damage.

Moreover, the core problems reported by users don't have workarounds. According to Forbes⁹, the top 5 reasons spreadsheets cause problems are 1) user aversion; 2) loss of important data; 3) they're difficult to analyze; 4) they don't store historical data; and 5) they're difficult to share. These shortcomings and lack of capabilities can't simply be compensated for with a little creativity. Spreadsheets just don't work for businesses.

Resource Management Needs More Powerful Tools

Far beyond scheduling and timesheets, resource management has become a central feature of organization-wide strategic planning and execution. Without the right people, in the right place, at the right time, work doesn't get done and targets aren't hit. It all begins with resources.

Resource Managers themselves will tell you what they need, and that these are the very reasons they avoid using spreadsheets.



1.) Multiple Users

Most resource management is handled across a team, with different levels of access and authorization, and often spread across different locations. These managers need a centralized tool that can identify and track changes by user for validation and auditing purposes. They also need to be able to edit concurrently with visibility across all users.

Spreadsheet changes can't be tracked, and they most often can only be made by one user at a time. Herein lies the danger of knowledge drain—when the sole spreadsheet owner and user is absent or even leaves the organization, they take with them all of their singularly contained knowledge, leaving others or the organization at large unable to make progress and vulnerable.

There's another layer to consider: when using a standard spreadsheet, resource managers have to take the extra step of re-entering resource information like timesheets, profiles, or upcoming availability, rather than allowing resources themselves to have appropriate access and control of these items.





2.) Transparency

Obscuring the flow of work can be a dangerous side effect of having single-user access to a spreadsheet. Shortcuts and other esoteric systems that feel comfortable to one person don't naturally translate as systems for other users to understand, let alone participate in.

Sometimes, spreadsheet owners will create links between workbooks¹⁰ to attempt collaboration. However, there is enormous room for error in linked workbooks. If one person forgets to update, move, or simply close a file, the entire system can be compromised.

Lastly, there's the issue of bias that goes unchecked when others don't have access to verify a spreadsheet's data. A single user's objective and subjective approach can mean trying to achieve desired results at the expense of confirming accuracy and sharing the auditing responsibility across the team.



3.) Analysis

All that data gains value when it gets turned into action, and resource managers will tell you they're looking for insights into where resources are overextended or underutilized. They want to know how changes in one project will impact the whole portfolio and they want easy-to-digest reports on everything from their resources' updated skillsets to project and portfolio financials—and they want it to be visually appealing and accessible.

Spreadsheets are both difficult to analyze and primed for misinterpretation. Additionally, "people only familiar with spreadsheets and their associated tools tend to make charts and graphs that often distort data, including 3D graphs and pie charts, simply because the tool (like Excel) makes them easy to create." Moreover, they aren't designed to store historical data, making it impossible to identify trends over time or generate truly useful insights¹¹.





4.) Reporting

Turning analysis into decisions requires getting information in front of stakeholders and executives who need simple, visual, and data-driven reports. Reporting is more than just presenting insights—it's finding the meaning inside of data, mining for the right support, and turning insights into decision-supporting materials.

Resource managers are continuously making the case for strategic decisions—increasing resources, moving resources, adjusting timelines and budgets—and doing so with professional polish is the key to impacting crucial decisions. Spreadsheets can't make use of your data or transform it into meaningful reports or recommendations, leaving resource managers all the tasks of creating, designing, and updating.



5.) Security

It may seem like a safe method but keeping a spreadsheet under control of one person is actually the opposite of security. It means that you assume only one person has access and control, but without any mechanism for actually securing your data privacy or integrity. Multiple insecurities live within spreadsheets, including macros. These can easily become security breaches as malicious macros¹² that compromise work stations¹³ or exfiltrate sensitive information. Securing against such threats requires the time and expense of ongoing third-party review.

Resource management teams need security that includes traceability, auditability, distinct permission levels, and other ways not just to fill in a spreadsheet but actually govern it.



6.) Data Validation

Spreadsheet data can become outdated at any moment and without notification. Without any mechanism to know if or when data has been updated, there's no way to know, within the spreadsheet, how accurate or up to date it is. While spreadsheets do have data validation functions, they require setting up validation rules and lists for every sheet. And technically, you're setting up restrictions, formulas, or limitations on the data that can be entered into any cell. There's no actual verification for accuracy against all those human errors. With the volume of data resource managers are handling, they need time saving and trusted automated checks for accuracy.





7.) Purpose Built Features

Spreadsheets are simple, convenient, and not overly complex, but that also means they are blank slates that the user must make useful. Starting from scratch or creating a template is time consuming, often requiring establishing a new mechanism or methodology before even beginning.

Resource managers are eager for a tool that is made especially for their needs. Usually they find themselves trying to make project management software work for their needs, which go far beyond timesheets or task management. They want something created for resource managers—just as simple as a spreadsheet, but far more powerful.



8.) Demand Planning

This particular kind of purpose-built tool is designed for resource managers to use generic, unnamed roles for forecasting. Resource management isn't just about working with who you've got at the moment. Decisions about hiring, moving, or removing resources are constantly in play, and forecasting tools like this are needed to plan effectively, make proactive strategic moves, and maintain visibility and control of the entire portfolio.



9.) Workflow

The dynamic nature of resource management means that managers' work doesn't stop once resources are entered into a spreadsheet. There's the entire workflow to consider, manage, and assess. Beginning with resource requests, continuing through approvals, changes, updates, and completion, the process of managing resources is complex and multi-faceted, connected to every part of the organization at-large.

Instead of having everything centralized, resource managers are too often working across many programs, spending too much time on the cumbersome tasks of managing the data instead of contributing to wider strategy. Spreadsheets become just one more item among many others—financial statements, to do lists, contracts, purchase orders—to manage, rather than serving as a real resource management tool.





10.) Scenario Building

We've already mentioned the value of reporting, but resource managers need more than just in-the-moment reports. Real strategic decision-making requires what-if reporting because organizations can't afford to go blindly into the future and resource managers need a future-oriented way to leverage all of their data.

Research shows¹⁴ that scenario building and scenario planning are key elements of any strategic planning. We risk decision paralysis under the pressure of all the possibilities and unknowns. Therefore, possibilities generated from real internal data can provide organizations with a comprehensive way forward—a series of real options to choose from so organizations can act with confidence, knowing the various potential impacts of their decisions.

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