

5 Best Practices for Preparing Data for Reports and Presentations

Transforming the Finance Function

Introduction

Ask CFOs, and nearly all will tell you finance should be playing a larger role in decision-making—and deservedly so. After all, the finance function has taken on more responsibilities in recent years. [According to a 2016 survey from McKinsey & Company](#), CFOs are now overseeing everything from risk management to regulatory compliance to IT.

Unfortunately, increased enterprise data leads to increased reporting complexity. Unifying datasets from multiple systems. Layering on unstructured data for context. Turning raw data into reader-friendly outputs for reports and presentations. These are involved, cross-department processes that were not intended for traditional business software such as Microsoft® Excel.

“Excel just wasn’t designed to do some of the heavy lifting that companies need to do in finance,” [Paul Hammerman](#), business applications analyst at Forrester Research Inc., told *The Wall Street Journal*.

With endless streams of data at its disposal, finance has the opportunity to elevate its strategic role unlike any other business function. Key decision-makers already rely on finance for repeatable reporting and ad hoc

requests. However, [according to a recent FSN survey](#), 85 percent of CFOs and their senior finance executives believe innovation is needed to drive better insights about the business.

Modern technologies are now available that put powerful data tools directly in finance’s hands, enabling them to improve data management throughout the capture, preparation, and reporting process.

The divide between data and decision-makers

Big data has been at the forefront of the reporting conversation for the last several years. Although organizations invested heavily in big data initiatives—ranging from data warehouses, data lakes, and business intelligence (BI) projects—many finance professionals have not seen the benefits translate to reporting and decision-making processes.

[Forrester research](#) shows that less than 0.5 percent of all data is ever analyzed and used. That unseen, underused data could be costing millions, according to Richard Joyce, a senior analyst at Forrester. Joyce reported that a 10 percent increase in data accessibility would result in more than \$65 million in additional net income for a typical Fortune 1000 company.

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Putting that data to use for decision-making is where finance should be able to shine. Unfortunately, the data continue to be locked away in hard-to-access legacy systems and disconnected general ledgers (GLs) managed by understaffed IT departments.

If finance wants to assert a more strategic role, it should be able to deliver recommendations based on what reporting reveals. There are a number of reporting challenges that limit the ability to unlock insights and present findings, however. These include:

- Combining large, disparate datasets from multiple sources
- Accessing data from source systems without IT involvement
- Addressing ad hoc reporting requests from business leaders
- Generating custom views of data with a business focus
- Defaulting to traditional reporting tools that cannot manage or prepare data at scale
- Navigating between structured accounting data and unstructured contextual data
- Creating repeatable processes and providing consistency in the quality of end reports

The list goes on: Finance does not have the option of waiting. Business leaders want to be proactive in their analysis and decisions. And business decisions are only as strong as the data they are built upon. Therefore, finance needs to provide data in extremely informative, easily consumable ways—presentations, performance reports—without blind spots, outdated numbers, or inconsistencies in the data.

5 best practices for preparing financial data

Improving the use of enterprise-level data begins with empowering the finance professional to improve the data capture and preparation process. Here are five best practices to consider embracing for your financial transformation and reporting modernization.

1. Avoid the bandage approach

Most businesses have a back-office mix of general ledger, consolidation systems, BI tools, and more. To get data ready for the actual state of reporting, finance needs to be able to tie together multiple systems and data streams. Due to the complexities of connecting all this source data, many organizations take a shortcut and bring everything into Excel.

Excel serves as a bandage for reporting data. Why? Because it is an easy fix. Everyone has it. Everyone knows how to use it. However, just like bandages, Excel is a short-term solution that covers up a larger problem. The primary downfalls of Excel center around the lack of security, fragility, audit trail, and version control.

In Excel, you must often use a combination of pivot tables and formulas, which is time-consuming, fragile, and error-prone. Having to work around Excel issues is one reason [finance teams indicate that 80 percent of their time is wasted](#) preparing data for reporting.

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Storing highly sensitive data in a spreadsheet on an individual computer leaves a company at risk to significant exposure from a security standpoint. Spreadsheets can also be corrupted, Excel can crash, and you can lose valuable data and hours of work.

In Excel, there is a severe absence of data governance. There is no easy way to track where and when changes were made to calculations, formats, or data, which can

lead to a lack of trust. Finance must have visibility into how the data was transformed with a comprehensive audit trail throughout the entire process.

Teams commonly share data by emailing and copying and pasting across spreadsheets, which takes data out of its original context. Without the right context, what seemed like an innocent move in the name of efficiency could affect the final analysis.

Finance would see greater benefits from a purpose-built solution for data preparation. It should deliver capabilities that finance uses every day—including common functions such as join, union, group, select, filter aggregate, and standard calculations—with the ability to conduct more complex transformations using advanced SQL scripting. Modern finance professionals also need to be able to add metadata to enable easy, query-based reporting.

2. Use modern technology built for today's expanded finance function

With the abundance of business data pouring in from accounting, operations, supply chain, and other areas, finance has its own set of scale, volume, and performance requirements.

If it seems like there is more data to parse through every year, quarter, even month, that's because there is. Data is exploding at an exponential rate and shows no signs of slowing down. [IDC predicts](#) that by 2025, the world will create and replicate 163 zettabytes of data annually. (For reference, 1 zettabyte equals 1 trillion gigabytes.) Businesses will account for 60 percent of that total.

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Not only is the amount of data expanding, the number of sources housing that data continues to increase. [According to an EY study](#), 74 percent of the enterprises surveyed rely on more than six different reporting systems—such as ERP, SAP, and ledger systems—while 20 percent had more than 15 systems.

Finance currently lacks the tools needed to manage data at this scale. Furthermore, the tools out there are impractical

for business users. Microsoft Excel and Access have a pivotal role, but their capabilities have not kept up with finance's needs.

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For example, Microsoft Excel has known issues that prevent it from being a full-fledged financial data power tool. Data is truncated after 1 million rows. Long before reaching that threshold, Excel already shows the effects, slowing down as rows are added. The potential to freeze, crash, and lose valuable work is a risky proposition for business users.

The truth is, Excel has always been a limiter. In its infancy, Excel was limited to 16,000 rows. Today, Excel still shuts down when you reach 100 million rows and/or 16,000 columns.

More hands-on users made the switch to Microsoft Access when the application was first introduced in the mid-1990s. It added more stability and features that finance was looking for, with the ability to join, append, and merge datasets. However, Access also suffers from limitations—which any business that wants to use more than 2GB of data will tell you.

If you are a large corporation or department, Access may not offer enough bandwidth for you. With around only 255 concurrent users, it is difficult to have many staffers working in the database at once. Access works best for smaller businesses with a handful of users.

Access may also not be the most user-friendly application as you get more advanced. The people creating most databases on Access are nonprogrammers. Though Access is easy to use in the beginning, it can be difficult to maintain, and IT is needed to keep things running smoothly.

Finally, Access is also not available in the cloud. Even though Microsoft Office 365 users can share/upload an Access database, the database is still isolated on someone's desktop. This creates a version control nightmare.

To truly create an operation that thrives on data, finance must have a solution that is scalable and supports datasets that grow over time. Even at enterprise scale,

finance should own the ability to refresh data on its own terms, as needed while maintaining output format.

The right solution will also enable you to gather and transform data in a matter of seconds. For example, modern data preparation tools can process dozens of gigabytes of tabular data in less than 10 seconds. By also storing that data in the cloud, you can manage hundreds of millions of records and terrabytes of data from anywhere, at any time, without slowing down.

3. Break free from IT bottlenecks

IT has long been the de facto gatekeeper on all things data. This leaves finance in a lurch, unable to access data in the format they need, when they need it, to support ad hoc requests from the business.

As a result, [70 percent of business users](#) cannot access the data they need. Even worse, [only 12 percent of enterprise data is used](#) to make decisions. That is a lot of data left on the cutting room floor that could significantly impact decision-making.

Requesting new datasets can take weeks or months to process, frequently requiring IT to write custom scripts and further slowing down finance's ability to deliver timely and accurate insights. This also runs the risk of finance defaulting to outdated numbers because they cannot wait for the refresh process.

Finance must be able to quickly acquire data regardless of volume, type, or source. This requires automation of data transfers from ERP, CRM, CPM, and other on-premise and cloud systems.

Not only are there issues with accessing data, but IT also has a role in the reports themselves. Finance is often constrained by the inability to alter pre-built reports created by IT, and it can be time-consuming to roll forward or refresh data from existing reports that do not fit neatly into a new format.

Ad hoc has become the new normal. No matter how much you invest in structured warehouse, transactional, and consolidation systems, today's finance professional is going to receive a request for something that does not

exist. Repeatedly, finance comes up with new ways to combine data to meet the incremental ad hoc requests. Finance simply cannot continue to submit tickets to IT for every data need.

Ad hoc requests are only going to continue grow. [More than 8 in 10 finance executives](#) (84 percent) agree that, over the next two years, the demand for finance-driven ad hoc decision support and analysis is likely to increase. In addition, [90 percent of finance professionals](#) believe that the demand for highly responsive, interactive, and flexible business analysis is likely to increase during that same time period.

Finance should seek an FP&A-focused solution to perform faster and more reliable ad hoc analysis. Look for a report builder with an advanced mode to generate custom reports, the ability to set up separate views for analysts versus management, and complete data governance from source system to end reports. You should be able to inspect data transformations down to individual cells and users.

4. Connect and control your data in the cloud

There is a growing trend toward financial transformation, which is rooted in making traditional finance functions faster, easier, and more efficient. Nearly two-thirds (65 percent) of respondents in an [EY survey](#) said that "standardizing and automating processes and building agility and quality into processes" is a significant priority for finance. More than half (58 percent) said that "combining state-of-the-art technology with process improvement" is a significant priority.

Forward-looking CFOs are examining ways to cut waste, standardize approaches, and overcome bureaucracy and rigidity through technology. Finance has found its answer in the cloud. Data management deserves the flexibility, security, and scalability only the cloud can deliver.

With the cloud, finance can work from a centralized, as-reported data catalog that is extremely accessible and owned and managed by finance. This accessibility frees up finance to collect, manage, manipulate, and enrich data for specific needs.

With a new level of control, finance can begin to apply key data transformations that support the business. Modern tools enable you to:

- Append tables and manually add data that may not exist in ERP, CRM, GL, and other source systems
- Apply metadata to each dataset to enable query based reports, such as data source, date or time period, and budget, forecast, or actual
- Enable different teams to filter down and slice and dice data for reporting purposes
- Add context or structure to the data to create different views or cuts of the data outside the constraints of predefined system mappings
- Use a drag-and-drop report builder to perform common data functions including join, union, group, select, filter, and standard calculations
- Allow more hands-on finance professionals or powers users to supplement basic functions with advanced SQL scripting and conduct more complex data transformations
- Publish reports for the business user to access

Now you can complete these data preparation processes and more all in the cloud and easily move onto the reporting stage. Cloud platforms make transitioning from data management to document management a matter of clicks. By combining FP&A with cloud capabilities, datasets and final reports share the same DNA. You can quickly refresh inputs from multiple source systems without impacting end-report formatting or templates.

5. Turn enriched data into useful outputs

Finance is responsible for creating an abundance of reports. Narrative reports and board presentations are composite documents that compile data from multiple sources to tell a greater corporate performance story. The traditional method of gathering that data—cutting and pasting between different software and emails—is choppy, intermittent, and inconsistent. Today's finance teams

also need to combine data with context to make analysis meaningful for stakeholders.

While BI tools have improved finance's ability to check on the pulse of the company, they are not always an elegant solution for repeatable, complex, composite reporting. By definition, BI tools have been built for ad hoc analysis. Ask a question, get a filtered response. Finance should continue to use BI tools for what they are designed for: dynamic visualizations, performance indicators, and at-a-glance insights.

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BI dashboards fail to provide the level of professionalism and depth of analysis needed to present to executive management, board of directors, investors, or regulators. Limited export options prevent you from customizing outputs that adhere to company style guides.

BI can produce sleek, colorful charts and graphs with widgets galore, but its real-time dashboards cannot easily be included in final reports and presentations. More modern systems enable you to embed live-linked dashboards in the reports themselves, eliminating the recurring nightmare of many finance professionals: presenting to the board with the wrong screenshot and old data.

Finance also needs a system that supports a continuous reporting process. With multiple contributors and the increased adoption of the remote workplace, everyone must be able to work on the same document, at the same time, regardless of department or time zone. All that shared data should be linked and leveraged within a single reporting ecosystem.

With data preparation tools, finance can provide faster insight in an automated way, with a full audit trail for complete confidence in the numbers. The result: contextual data that leaders find useful and actionable.

Final thoughts

Data preparation empowers finance to explore complex datasets at scale and manage precise data transformations while saving time and accelerating data usage across the organization.

By taking control of data preparation, finance can support impromptu and ever-evolving requests from business partners. React to changes in the market or competitive environment. Address existing or emerging corporate risks. Drive strategic, operational, and financial decisions.

Finance has the opportunity to elevate its role by enhancing FP&A through data transparency and transformation and embracing cloud technology that connects critical business data with current and future reporting methods.

Key takeaways

- Finance faces outdated methods of data management and analysis due to constraints and risks of desktop spreadsheets, underpowered or over-complex databases, and disconnected datasets
- Finance needs to be able to access, enrich, and apply data from across the enterprise to accurately assess company conditions and make thoughtful analysis and informed recommendations
- Ad hoc analysis keeps finance professionals involved in company strategies and invested as a business partner
- To support ongoing finance transformation, teams should evaluate the most modern tools available—including cloud data preparation tools and reporting platforms that enable finance to create information-rich reports faster, easier, and on a repeatable basis

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