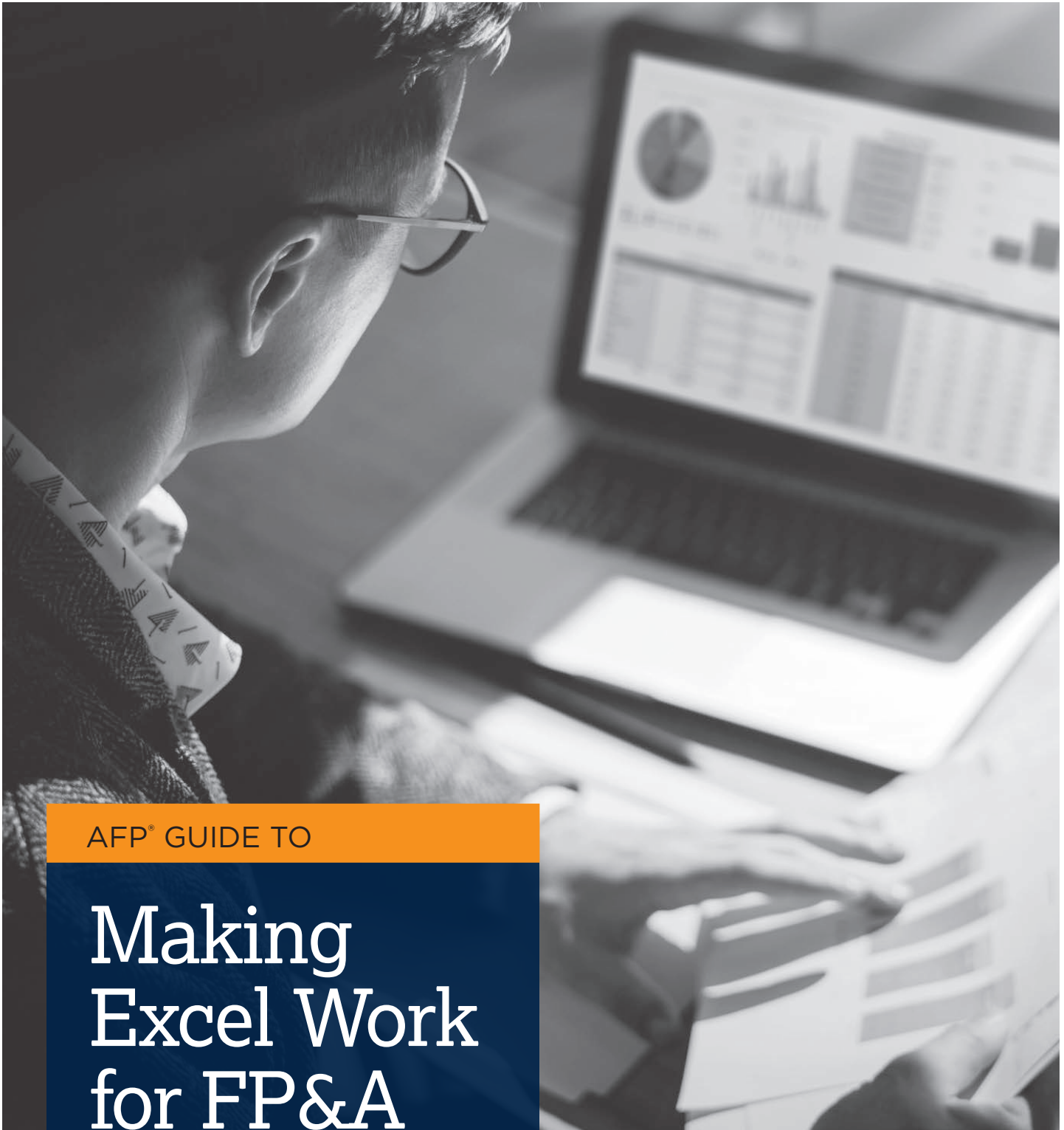**AFP**®
ASSOCIATION FOR
FINANCIAL
PROFESSIONALS

AFP® GUIDE TO

Making Excel Work for FP&A

FP&A GUIDE SERIES

Underwritten by:

Vena

AFP® GUIDE TO
Making Excel Work for FP&A

CONTENTS

Greetings!

After more than 30 years, Microsoft Excel remains the undisputed king of finance software. It's flexible, familiar and powerful, and it's everywhere. You'll still find Excel on virtually every finance desktop on the planet. Some fans have even made headlines declaring they'll give up Excel only if you pry it from their cold, dead hands!

Vena was founded on Excel's enduring value and – in stark contrast to traditional FP&A software – a belief in its potential to be a finance workhorse for years to come.

To check this belief against the pulse of the profession, Vena partnered with AFP to produce this guide. To examine the pros, cons and many uses of Excel in FP&A, directly from expert practitioners.

As you might expect, participants described a give and take relationship with Excel. End users love it, but finance teams also know its limitations. At some point, most FP&A leaders find themselves having to choose between the security and control they need, and the spreadsheets they know and love.

What might surprise you is that you don't have to choose between the two.

If you learn just one thing from this guide, I hope it's that *best of both worlds* solutions like Vena are out there, and they're only growing. Beyond that, I hope the guide helps you discover the best way to make Excel work for your FP&A needs.

Enjoy the guide and thanks for reading.

Don Mal
CEO, Vena Solutions
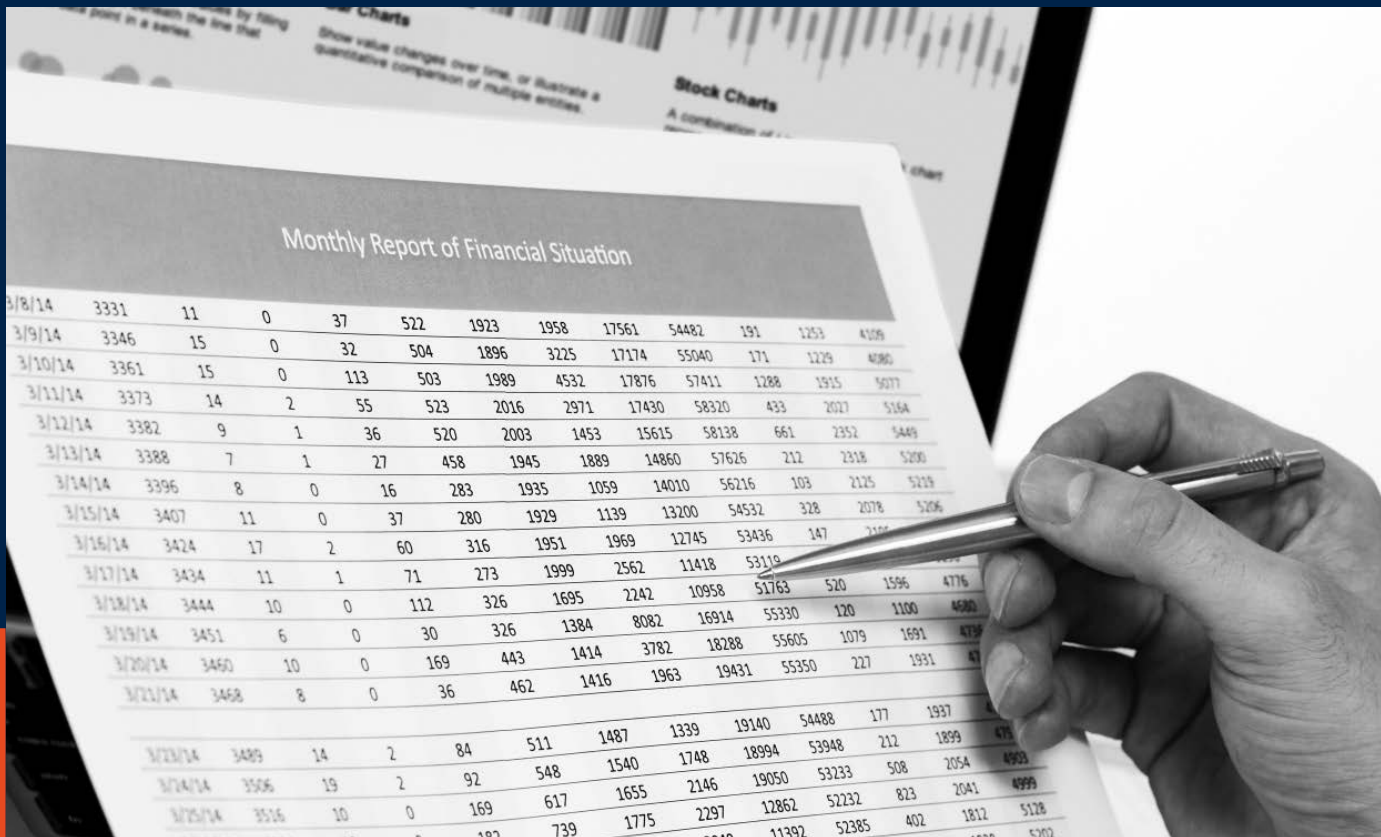
1 INTRODUCTION

Excel is a tool that every financial planning and analysis (FP&A) professional knows all too well. Some use it for nearly everything, while others would leave it behind if they could. But there have been advances in Excel in recent years that many financial professionals may not know about.

In this new FP&A guide, underwritten by **Vena Solutions**, we will look at how Excel has evolved, and continues to persevere over more than 30 years. We'll hear from multiple practitioners—some who are true Excel evangelists and others who only use it when they need to. We will examine the spectrum of ways to apply Excel, including recent advances, add-ins and third-party solutions/offerings, to help you get the most out of this ubiquitous application.

2 TO EXCEL OR NOT TO EXCEL

FP&A professionals can apply Excel to a multitude of tasks, including financial modeling, visualization, data analysis, data storage, textual and quantitative data, and regression/statistical analysis. The primary reason is Excel's flexibility; while dedicated FP&A systems are ideal for very specific areas, Excel allows practitioners to tackle a throng of different responsibilities in a fairly inexpensive, intuitive platform.

That flexibility has made Excel an essential tool for not only finance professionals, but professionals across the entire organization. According to a survey by CEO.com, fully 70 percent of all companies rely heavily on spreadsheets across their business units. Additionally, a 2015 KPMG survey showed that 40 percent of companies rely exclusively on spreadsheets to produce their forecasts. And while there are other companies that offer spreadsheet software, Excel is by far the dominant player in the market.

According to Khaled Chowdhury, FP&A, corporate FP&A manager at KMG Chemicals, if Excel was a language, it would be one of the world's largest, with nearly 1 billion speakers. "If you take Excel away, the business is going to come to a stop," he said. "There's no ifs, ands or buts about that."

However, Excel is not an ideal solution to every problem. Indeed, as FP&A as a whole increases in complexity, practitioners sometimes require more complex tools, particularly in budgeting, planning and forecasting, with advanced functionality such as data analytics and warehousing.

"The biggest issue with Excel that I imagine people deal with is the processing time when you have significant amounts of data," said Matt Blickley, senior director of FP&A for Coca-Cola Consolidated. "Everything else that you can do—the calculations, the linking, the formulas, the whole functionality of Excel—I think is fantastic. But there are a lot of limitations with the amounts of data."

That's not to say that dedicated tools are the only way to go when handling huge amounts data and crunching numbers, noted Bryan Lapidus, FP&A, CFO Advisory for Allegiance Advisory Group and a contributing consultant for AFP. "Increasingly, Excel has added functionality that allows it to run across an enterprise and access the massive transactional systems," he said.

But Excel, as a standalone application, has some common weaknesses frequently cited by finance practitioners, such as a lack of enterprise grade security, collaboration and control features (workflow automation, version control, business rules or user permissions, detailed audit trails, and easy integration with companies' general ledger and other financial data source systems).

"Excel should be viewed as a fantastic productivity tool, but organizations get into trouble when it becomes a financial system," said Mitch Max, a partner at consulting firm BetterVu.

Rishi Grover, chief solutions architect for Vena Solutions, suggested that practitioners may be able to get by on Excel alone, depending on how sophisticated their needs are. "For ad hoc kind of processes, it's still really good—if it's not repeatable and doesn't involve as many users," he said.

But moving beyond Excel to some sort of dedicated system is a costly endeavor, so FP&A professionals should be sure that they really need to make the move. Grover advises practitioners to consider certain factors before making the jump, such as the number of data sources they are integrating, the amount of time they spend putting data into Excel, and how they ensure the accuracy of the data. Most of all, you need to make sure that any type of specialized software you're considering is going to be used across the entire department. "You have to involve the end-user in the process, because if it's not adopted, you're wasting your time or money," he said.

> "If you take Excel away, the business is going to come to a stop. There's no ifs, ands or buts about that."

3 EXCEL EVOLUTION

Rob Howard, director of Office 365 marketing for Microsoft, noted that, at its core, Excel is three things: cells of data laid out in rows and columns, a powerful calculation engine, and a tool for working with and making use of the data. "The result is an incredibly flexible application that hundreds of millions of people use daily in a wide range of jobs and industries around the world," he said. "This ability to adapt to a wide variety of business scenarios is a big part of what makes Excel one of the most loved tools in finance departments."

Recognizing Excel's ubiquity in the business community, Microsoft has continued to invest in the product, enhancing tools in Excel to meet the needs of the modern workplace. However, many practitioners aren't close to using all of it, Lapidus noted. "Microsoft has made some advances that practitioners aren't aware of in Office 365," he said. "It's better than it used to be. Microsoft has addressed some key challenges. We have moved into a world awash in data, and many of the enhancements to Excel are in the data management and data visualization areas."

For example, one of the biggest knocks on Excel is that it's static, added Lapidus. "You have to manually import data," he said. "But what if you didn't? Microsoft now has buttons that allow you to connect to an external database and external database or webpage, and import data—all with a single click." *Power Query*, the service he is referring to, was first made available as an add-in with the launch of Excel 2010, and is now a native experience in Excel 2016.

The crux of the problem may be that many finance professionals know Excel a little too well—or at least, they know the old version, which they've been using for their entire careers. Thus, they may not be aware of substantial upgrades by Microsoft, or how technology vendors are incorporating Excel into their solutions.

"I think there are still many FP&A groups that will push Excel to its limit and will then go no further because that's what they're comfortable with," said James A. Robertson, Jr., CTP, who manages technology finance for Matrix. "That's what they learned in business school, that's what they've used in their career—that's the only tool they know."

NEW FEATURES

Many of the features Microsoft has added in recent years are tools that practitioners can use for connecting to, modeling, visualizing, and collaborating on data, Howard explained. Many of these tools are powered by **intelligence services** that utilize AI to accelerate end-to-end workflow and can help uncover hidden insights in the data.

Get & Transform

Excel 2016 has a new set of features called Get & Transform that allows users to combine and refine data from a variety of sources. Get & Transform is designed to help analysts with the initial phases of their analytical workflow, explained Carlos Otero, senior program manager, Excel, for Microsoft. "It's really designed to help you bring data into Excel, connect to a number of different data sets, and transform, clean and prep data for your analysis," he said. "All of your transformations are recorded for you to automatically replay them, month after month, really making your analytical workflow much easier."

Power Pivot

Microsoft also offers add-ins, software utilities or other programs that can be added to a primary program. For example, Power Pivot, which was originally available as an add-in and is now a built in tool in Excel 2016, also enables users to meet complex data needs. With it, practitioners can perform more powerful data analysis and create more sophisticated data models than they can with standard Excel. Rather than just importing all the data from a data source the way that you

typically would in Excel, Power Pivot allows you to filter data and rename columns and tables while importing. "Power Pivot is a great tool for modeling millions of rows of data across multiple tables," Howard said.

Jonathan Crane, FP&A, senior manager for FP&A for Hamilton Company, noted that Power Pivot has greatly expanded Excel's capabilities. "Say you have company data from an ERP," he said. "You could directly link into that data, and pull it into Power Pivot, and you could then pull in different types of data tables and make connections between them. Then you can write formulas on top of that and put them into a PivotTable. The capability that it presents far exceeds anything you could do previously in Excel by putting stuff in the cells and writing VLOOKUPs. It's a night and day difference."

Speaking of PivotTables, they allow users to summarize, analyze, explore and present data quickly, providing a faster path to better decision-making. PivotTables can be easily adjusted depending on how you need to display your results, and can be used to create charts that automatically update when the table is updated.

> "Power Pivot is a great tool for modeling millions of rows of data across multiple tables."

Insights in Excel

However, it can be difficult to know where to start, especially when there is a lot of data on hand, Howard noted. That's why last year Microsoft introduced Insights in Excel, a new feature that automatically highlights patterns it detects, making it easier for users to explore and analyze their data. Users just click a cell in a data range, and then click the Insights button on the Insert tab, so Insight Services will analyze your data and return visuals about it in a task pane. "Powered by machine learning, Insights helps identify trends, outliers, and other useful visualizations, providing new and useful perspectives on data," Howard said.

> "We have moved into a world awash in data, and many of the enhancements to Excel are in the data management and data visualization areas."

HERE TO STAY

Whether or not finance professionals want to take advantage of Microsoft's Excel upgrades and add-ins, one thing that's not going to change is the software's ubiquity. As KMG Chemicals' Chowdhury pointed out, even dedicated FP&A systems that allow practitioners to move "beyond" Excel still tend to feature an "export to Excel" tab. This tab tends to be one of the most used features in these systems, due to users' familiarity with Excel and the ability to prototype in Excel before coding in a system that is designed for large data or massive calculations.

But using the "export" tab often leads to "shadow systems"— spreadsheets that exist outside of the controlled environment of the FP&A system. This essentially defeats the purpose of such FP&A systems, which are intended to address Excel's security and control limitations.

Chowdhury stressed that FP&A professionals should spend time training themselves on Excel, because it's far too easy to make errors on it. "Excel is the most misused tool," he said. "Have an expert look at it or get your team some proper training on how to properly use the tool. It is essential to learn those to stay relevant to be more efficient and effective."

Waterfall, Maps, and Histograms

Microsoft has also introduced new visualizations such as Waterfall, Maps, and Histograms, which allow practitioners to showcase specific data types. These tools make it easier for users to identify insights, trends and opportunities in data, right from within Excel. "As you know, financial planners often use various charts to describe variance budgets and analyze them over time," Howard said. "These new visualization capabilities in Excel give them an option to present that data more clearly than the standard table format."

Office 365

But it is when Excel is connected to Office 365 that it becomes a truly powerful data analysis tool, Howard explained. "Within Office 365, Excel users benefit from *real-time collaboration*, which not only cuts back on the time it takes to collect feedback, but eliminates the need to maintain multiple versions of a file," he said. "Collaboration works within an Excel file from anywhere—mobile, desktop and web."

Office 365 also addresses many of the security concerns users have with Excel, providing a universal toolkit for securely managing and sharing files. "This includes deep security and information protection, robust version control and auditing, and secure sharing and collaboration both within and outside your organization," Howard said.

Power BI

Power BI integration in Office 365 offers new visualization and dashboarding capabilities, as well as a centralized repository for data reports within your organization. Power BI is particularly useful for practitioners who frequently work with multiple data sets, as it brings various sources together into one cohesive dashboard.

HIDDEN SECRETS

Chowdhury noted that Excel has some "hidden secrets", that finance practitioners will discover with the proper training. Here are some tips to make the most out of the software:

Select only cells that are visible.
When data is grouped or subtotaled, there are rows that aren't displayed onscreen but are captured with a standard copy and paste. "Instead, to only select what you see, highlight the cells and go to Find & Select -> Go To Special ->Visible cells only, then copy and paste," said Bill Sayer, FP&A and finance manager at Voya Financial.

Eliminate outliers, zeros and #N/A errors.
Sayer advises practitioners to type "Ctrl+H" to find and replace. "Enter what you want to find, then leave the replace field empty," he said. "It will find the value and replace with an empty cell." This is a great tool for data cleanup.

Turn off the GETPIVOTDATA prefix.
For Excel 2007 or 2010, go to "Options" tab ("Analyze" in Excel 2013 or later), click on the drop-down arrow, and check off "Generate GETPIVOTDATA." This will make it easier to write PivotTables.

Create Data Analysis Expressions (DAX).
Excel can build formulas and operators that can be combined into more complicated formulas and expressions. Importing data into a workbook is the easy part—DAX allows you to create new information from data already in the model.

Build your own power query.
Power queries are add-ins that can help practitioners build their own data acquisition or transformation tools. They allow you to identify relevant data from multiple, disparate data sources and combine it, to prepare for further analysis. The queries you create can then be shared with others in the organization easily, via "Search."

AFP spoke with FP&A practitioners, each with a different approach to Excel, to get different perspectives on the software's strengths and limitations.

4 PROFILE: STICKING WITH EXCEL

Travis Lockhart, CTP, FP&A, finance manager for CALIBRE Systems, relies on Excel nearly exclusively. Early in his career, Lockhart was responsible for various spreadsheet-based processes, like budgeting exercises, and creating a spreadsheet-based forecasting system, where tracking changes across numerous inputs was important. Excel is ideal for these types of duties.

These days, Lockhart serves as more of an "information broker." He uses Excel to develop and maintain reports that project managers, directors, and senior leadership use to obtain information, develop insights, build their own views of the future, and/or monitor performance, depending on their role and needs.

When Lockhart first started at CALIBRE, there were major concerns surrounding a labor measure generated by legacy reports. "First, the folks who created the reports were either no longer with the company or were not sufficiently familiar with the finance/accounting side of things to dig deeper," he said. "Second, as we are services contractors primarily working with the federal government, we have extensive timesheet tracking needs and very many labor buckets—all in comparison to rather simplistic budgeting methods."

To resolve the issue, Lockhart took the raw data for the labor measure and put it into Excel. This provided him with a clean look at all of it, enabling him to determine both the accounts being considered within this measure, as well as those being excluded. He could then assess the impacts and use this information to make recommendations.

"It was clear to me that certain buckets of labor were being excluded in error, and perhaps too much was being included in other areas," he said. "With this information, I then made suggestions to management about how this type of labor measure might more accurately be calculated."

Over the years, Lockhart has trained fellow employees across the organization in Excel, and is more or less the go-to person for providing Excel support as needed. "It's vital to have people who deeply understand Excel and who can develop tools or processes that fit within its limits," he said.

IMPROVEMENTS

Lockhart noted that the advancements Microsoft has made in recent years have drastically improved his experience when using Excel. New versions of Excel tend to create new opportunities for him; there is not so much a data update required, but more of a discussion around what can be done better with that data, how to create efficiencies, etc.

Slicers

For example, Slicers in Excel have greatly improved data analytics for Lockhart. First introduced in 2010, Slicers provide clickable buttons that allow users to filter PivotTable data. They also indicate the current filtering state, which helps the user understand what is displayed in a filtered PivotTable.

"Slicers made it easier to add a PivotTable that users can control," Lockhart said. "It puts more power into the hands to the users."

Sparklines

Sparklines have also proven highly useful for Lockhart. Introduced in 2010, Sparklines are tiny charts in Excel that represent data visually. Much like in traditional charts, data can be displayed via lines or columns. Sparklines collect data from a selection of cells and display it in graph form in a separate cell on the same line.

"Sparklines can go side by side with the data," Lockhart said. "So rather than having one line chart that has 10 different lines on it, each row of data would have its own individual small, cell-sized line chart. It's very useful as a practitioner to have your data and your picture, side-by-side. What you'll

do is, you'll get the idea from one picture, and then you might want to dig back into the data."

Excel is really a user's tool, Lapidus added. So for presentations, FP&A practitioners might want to take those pictures that they created with Sparklines and do something else with them—put them on an output tab or move them over to Word or PowerPoint. "But as the user who is gathering and intimately involved with the data, having it side-by-side is great," he said.

Whenever Lockhart makes a PivotTable that is forward-facing to an internal client, Lockhart typically uses both Slicers and Sparklines. "I would use those specifically if I was creating dashboard-type reports for my internal clients," he said. "So it wouldn't just be for a standard report or a chart. If I wanted to create something that was more of a dashboard that users could interact with, that's where I'd use those tools."

Microsoft has also introduced autofill tools that enable Excel to recognize patterns. "You don't have to tell it what you're doing," Lockhart said. "It just recognizes patterns and makes suggestions to you. It will just know what you're doing."

However, for Lockhart, one of the factors that makes Excel so effective is the freedom it gives him. This is an important point; for complex models that run on dedicated, robust platforms, people will test calculations in Excel; for looking at large data sets, people will test cleanup methods and sample data in Excel. Hence the "Export to Excel" button.

"The reason why Excel is so powerful to me is because it's flexible; it's where I get to be creative and do what I want to do," he said. "It's where I prototype, it's where I design—it's a playground. And that's something Microsoft can't make easier in any way, because it needs to be an open slate."

Even when Lockhart applies add-ins in Excel, they are largely just used to enhance what he's already been able to do freely in the program. He uses Zebra BI, a third-party solution that provides stronger visualization in certain instances, as well as a Monte Carlo simulation analysis tool. "Those are add-ins that work well for me in Excel, because Excel is where I'm building my models," he said. "They're things that I can use with something I've already built."

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NOT FOR EVERYTHING

Though an Excel evangelist, Lockhart is also quick to point out that Excel isn't a universal tool for everything. Even he agrees that Excel does not work particularly well as a complex database. "Two months ago, I redeveloped our contract department's database for tracking all of the proposals we send out and what their statuses are," he said. "I used macros to actually timestamp these records, and that's really not what you want to use Excel for. But I was able to take a tool that was not being used appropriately, and create consistent titles, fields and definitions for how we calculate things and I was able to create more of a controlled environment for the users of that tool."

Now, CALIBRE is implementing a data integration and analytics tool from Pentaho that is designed to consolidate and rebuild its data warehouse. "They are planning to use that for more on-demand services; you'll go to our website and get a report. And that makes sense," he said.

Nevertheless, Lockhart expects to use Excel as a tool to aid in integrating third third-party solution. "I would be likely to dive into the data and make sure we're reporting things correctly in Excel. If it ever gets to the point where something is easily and consistently de-

fined and we produce it every month in the same way, that's probably something that doesn't need to exist in Excel long-term. So maybe the earlier stages are in Excel in this type of example, but perhaps we'll transition to a standard dashboard once it's been developed."

Lockhart encourages FP&A professionals to always consider specialized tools, when appropriate. "Learn what they can and can't do for you, understand their initial and recurring costs, and understand their implementation needs," he said. "Do a cost-benefit analysis and choose what makes the most sense for your organization. There are certain reports that are transitioning to specialized tools, and many others that will probably forever stay in Excel because you need that flexibility."

One such report is the analysis CALIBRE does for pricing proposals. "That's where we use that Monte Carlo simulation," Lockhart said. "Those are not standard. We've got a one-size-fits-all workbook, but it's never going to be one-size-fits-all because you need to approach these things differently every time, and you need to be creative and flexible."

Ultimately, Lockhart insists that no financial professional should never completely abandon Excel. "I'm always an Excel champion," he said.

5 PROFILE: EXCEL EXTENDED

Some FP&A professionals favor an extended approach, in which they use a combination of Excel and other tools. And while even Excel enthusiasts like Lockhart use tools in addition to Excel, taking an extended approach means using Excel a little less prominently.

Hamilton's Jonathan Crane uses a mixture of Excel and Power BI for his analytics. In his opinion, Excel's strengths lie in its abilities to help practitioners complete fairly simple tasks and perform ad hoc analyses. He also sees visualization as a strong suit. "I think it's very good at displaying information; they've done a good job of upgrading their charts," he said.

But like Lockhart, Crane sees weaknesses in Excel when it's used as a database. "Its shortcomings are when you try and add in large amounts of data, and when you want to regularly refresh the data," he said. "A lot of people use Excel to literally store the data in the cells in each worksheet—and that's where they see its shortcomings."

The good news is that Microsoft understands the issues that people have with Excel, and has taken steps to address it, Crane added. "They keep adding new ways to integrate data into Excel that works much more effectively," he said.
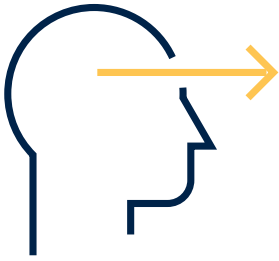
THE PATH TO POWER BI

About four years ago, Crane was tasked with creating a "heat map" so Hamilton's sales team could make better sense of their sales regions. He began using Power Pivot and Power Maps, which he found incredibly easy to use. "I've done SQL in the past, I kinda have database experience," he said. "A light bulb went off; this is a whole relationship database program hiding behind Excel."

He immersed himself in the program, learning everything he could. "There's a blog called Power Pivot Pro and there are some books on Amazon. I started consuming all this stuff," he said.

While the move to Power Pivot required the FP&A department to shake things up, other departments' processes weren't disrupted. "The Power Pivot add-in allowed us to create reports that were more dynamic, faster and easier to update," Crane said. "So I think people definitely got onboard with those reports we were sending them. They were coming in though the same formats that [other departments] were used to seeing; we were either making them a PDF off of an Excel report or sending them the actual Excel file. They didn't even know that we were doing the analysis in this new Excel add-in."

Still, that isn't the most efficient way of sharing information; if you can send someone an Excel file or a PDF, it will be almost immediately out of date. And the next time the data refreshes—in a week, a month, etc.—you have to send another file.

Fortunately, Microsoft introduced Power BI, which basically took Power Pivot's functionality and put it into a standalone application. But Power BI takes things a step further, giving the user a platform where they can publish a report and analysis on the cloud and share it with people throughout the organization. The data resides in the cloud and the visualization tools are with the end-user, so the data can refresh the report and remain relevant.

It took some time to develop the models and the reports in Power BI, but Crane ultimately found it to be highly effective. To date, his FP&A team has created about 20 different Power BI dashboards that departments all across the organization use.

For example, a few years ago, the sales team was producing reports that took hours upon hours because they were looking each transaction up individually. "I was like, 'Are you serious? Are you really doing this?' I created this Power BI module that produces reports in 15 minutes, and auto-refreshes. Once I did, then everybody wanted access to it."

Power BI also addresses many of the security concerns around data accessibility with Excel; given that it connects directly to data sources, data is never exposed to potential corruption. And it requires a unique user name and password, allowing the FP&A team to control who sees which reports. Reports also cannot be forwarded.

Even with all of the enhanced security measures, Power BI still allows for greater collaboration in Excel. Crane can assign certain permissions to team members; they can upload data models and then he can adjust the final layout and presentation. "The best collaboration is when I can be talking to someone from a different office that is looking at the same/updated report, allowing us to discuss the same information without any hassle of knowing if we both have the most up-to-date report," he said.

But according the Crane, where Power BI really shines is in its reporting/output capabilities. An FP&A professional can create a dashboard that contains summary visuals from multiple reports. "Power BI allows you to take the developed model and calculations and easily create a visually stunning report," he said. "The number of visuals is ever-expanding with a store of free visuals that could be from Microsoft or other users. The uniqueness of this custom visual community really sets Power BI apart."

PROFILE: COMBINING EXCEL WITH THIRD-PARTY SOFTWARE

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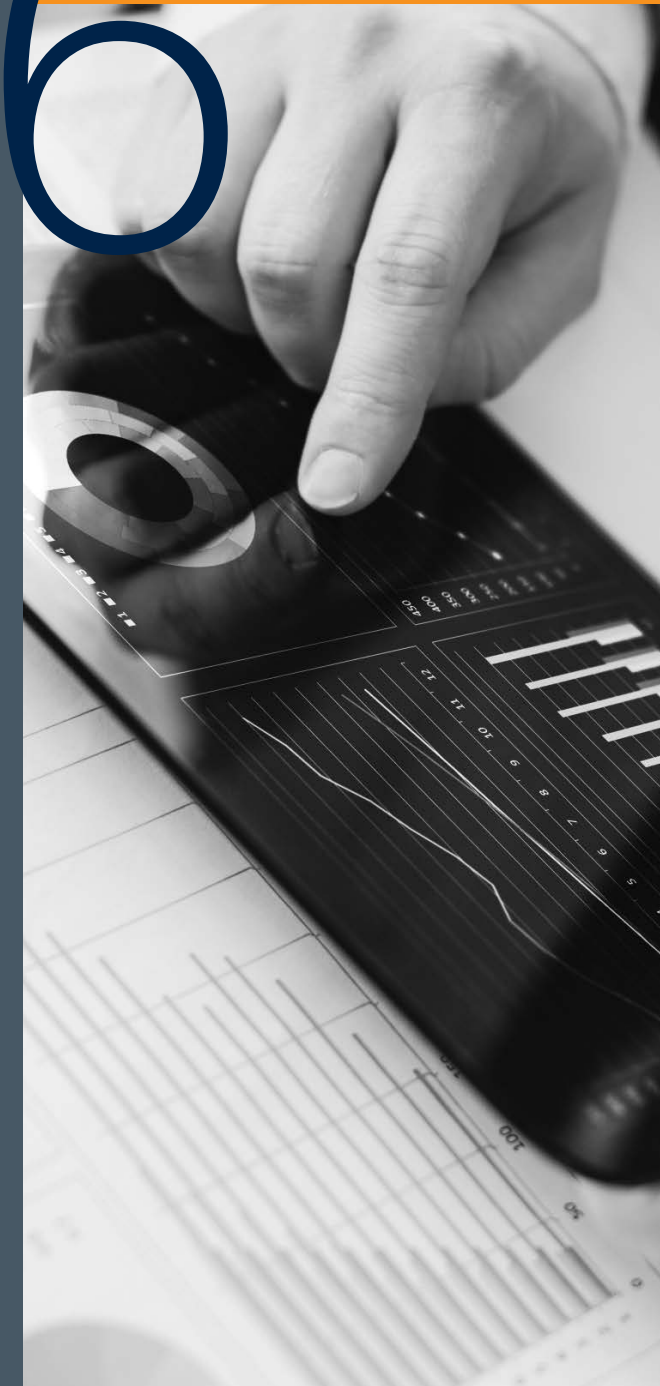
Coke Consolidated, the largest independent Coca Cola bottler in the United States, more than doubled its size following a series of acquisitions beginning in 2014. But even though the company was growing, it was also facing big challenges in the form of new competitors in emerging categories, as well as scrutiny from legislators over the beverages that fill its containers.

These new challenges required FP&A to be at the top of its game. Unfortunately, the software it was using was the equivalent of "duct tape and coat hangers," explained Matt Blickley of Coke Consolidated. "We needed something to really get our hands around because the business was changing so quickly."

FP&A had been running a legacy ERP system that was first implemented in the late 1990s. With the company acquiring new franchise territories, it had to join a shared ERP platform across the entire U.S. bottling system. "Moving to that platform was a phased approach, so we continued to operate on two different ERP systems," Blickley explained. "The quality and consistency of data was different between the two, so we needed something to really understand the whole picture of the business."

After an extensive search, Blickley's team settled on a Vena's corporate performance management (CPM) system, which offers advanced data analytics and management, but also maintains Excel. That latter point was important because Excel is ubiquitous, and used by all of Coke Consolidated's users. "From my point of view, Excel is probably the most powerful business tool that's used across all businesses," he said. "Why get away from that? We have something like 180 users. How are we going to get our user base to accept the changes? How do we get people to accept a new solution and a new way to go about planning the business?"

"The good thing about using a hybrid solution is, you have a very powerful database, powerful querying tools and powerful report writing tools on the back end. So if you're looking to do analysis on a certain part of data, you can write reports or queries that only include the data that you need. You have a database on top of Excel that's fast, secure and reliable, and you can get whatever data out of it that you want. You get all the benefits of Excel, without having to deal with the massive amounts of data."

ADDRESSING THE ISSUES

One key area where the solution has helped has been in Coke Consolidated's revenue and cost planning. Coke Consolidated uses a homegrown system for price/package revenue planning for different regions and customers, and interfacing that data to its consolidated planning tool was previously complicated and unreliable. "For example, if you think about a Wal-Mart in a specific area, like North Carolina—we would plan differently for that than we would for a Wal-Mart in Virginia or Maryland," Blickley said. "So we have a homegrown system that is planned at a very detailed level, and we had no way to interface with that system before. We basically just took the output of that system and assumed it would be correct for our financial information."

But the new CPM solution has allowed the FP&A team to integrate into that homegrown system and build a consistent set of data across all of the business. "We take the output from that system, run it through a model in Vena, and then disperse it throughout the business. So when we're talking about selling 100 cases in our sales system, there are 100 cases that are assumed to be sold in our operating expenses across the business," Blickley said. "So it's certainly helped us with consistency of data across systems, and working with one version of the truth."

Using the third-party system has also freed FP&A up to do deeper analytical work. "This year, when questions are asked, we now have the ability to get the data quickly and actually do the analysis," Blickley explained. "Before, it was just pulling data out of an ERP system and trying to understand what's going on. Getting reliable and consistent data was the challenge. So now we're certainly able to answer questions more rapidly and have confidence in the answers we're giving."

Security is another area that has been improved. This was a top concern for Coke Consolidated when it first began looking for a new system, given how FP&A handles salary and headcount data. The FP&A team can now customize security so that users can only see what they are allowed to see. "So, for example, if you have responsibility for Cost Center #123, I can limit you to only seeing Cost Center #123 data," Blickley said. "Or, if I want you to be able to see all data except headcount data, I can limit you to not see any headcount data. So there are certainly multiple levels of security that are easy to use."

Making the jump to a third-party solution also made processes easier for Coke Consolidated's users, particularly around the annual budgeting process. "Our users used to plan their labor using an old mainframe system that would interface with our old ERP system. So they had to move to an Excel-based user interface," Blickley said. "Before they would just take an Excel file and send it in, or receive an Excel file. Now they can go get that data on their own and enter it on their own to complete their budgets and view reports."

The response from the users has been overwhelmingly positive, Blickley explained. "I think people understand how to use it, because it is based on native Excel. It is native Excel; it's just adding something on top of it. We're two years into it now, and we're coming along," he said.

So for FP&A practitioners who are struggling with using Excel on its own, or even with Microsoft's add-ins, Blickley recommends looking into a third-party solution as soon as possible. "The good thing about using a hybrid solution is, you have a very powerful database, powerful querying tools and powerful report writing tools on the back end," he said. "So if you're looking to do analysis on a certain part of data, you can write reports or queries that only include the data that you need. You have a database on top of Excel that is fast, secure and reliable, and you can get whatever data out of it that you want. You get all the benefits of Excel, without having to deal with the massive amounts of data."

7 PROFILE: CODING FROM SCRATCH

Broadly speaking, Excel is used for modeling, analysis and communication, to varying degrees of success. Third-party software products add processing power and robustness to these functions. It is also worth noting that we live in a world where data science is growing in importance, and some of the best tools in this area are programming languages like Python and R. They are powerful and flexible, and every day the user community is adding new libraries to extend their range and scope. It is possible to leverage these tools and create your own data backbone with deep mining capabilities.

One such practitioner who has been able to pull this off is Igor Panivko, finance director at Konica Minolta in Ukraine. He struggled for year with Excel, ultimately concluding that it wasn't sufficient for his needs. "I was overwhelmed with requirements of business reporting and analysis," he said.

Hiring more staff or bring in a third party vendor wasn't an option, so Panivko took the unique approach of learning programming languages. Using open-sourced data and analytics software based on those languages, he built customized data and analytics programs.

"The R language is more designed for statistics, and Python is a universal programming language; you can do anything you want with it," Panivko said. "It allows you more control when working with data than Excel does. If I see somebody else's file, I can't understand what has been done by steps. I cannot follow the logic. But I see some of these languages, I can more easily follow the logic that's been applied, what has been changed, etc. That makes it more reliable."

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Software packages he uses include NumPy, a Python-based scientific packet; pandas, a data structure and data analytics package; and scikit-learn, a Python-based data mining and analysis tool. He also uses Microsoft SQL Server Business Intelligence for reporting and descriptive analysis, and RStudio for visual and statistical data analysis and forecasting.

Panivko described his home-grown system as a "financial cube built on an enterprise data warehouse system"—highly flexible and accessible by all sections of the organization. "Excel is connected to that cube, and the business lines can see whatever information they need," he said. "If they need to see P&L or revenue, they click

PivotTable in Excel and see what regions are behind any deviations."

Mastering code hasn't been easy; Panivko began this journey in 2011 and he claims to still be in a constant learning process. But the benefits have been incredible. It has allowed Panivko to automate most of his financial reports, free of errors. He has been able to pull data from many diverse sources, grabbing the underlying logic and incorporating it into an enterprise-wide, strategic picture.

More recently, he's been sharpening his data mining skills. "Sometimes, when the data is good, we can test some hypotheses between products," he said. "This is where I cross with some of the business lines' analytics. So

sometimes I double the work that they do, but we're actually fighting the same problem, such as the struggling sales of a product segment. So the question often becomes, 'Who will do that—the business line or corporate finance?' I think those who are capable of doing that should do it."

Though Panivko acknowledges that his approach is unique, he also believes that FP&A professionals who are struggling with Excel would do well to learn code. "It would definitely be beneficial; the only obstacle is that it's quite a steep learning curve," he said.

Furthermore, he has observed other professions go the same route, and feels finance practitioners would be wise to join the trend. "Other industries that are overwhelmed with the data are mastering data analytical skills for solving their industry-specific problems," he said. "For example, biologists and healthcare workers are active users of open-source statistical modeling tools. More and more are involved in intelligent working with data, so I do not think that corporate finance will stay aside from this process."

Panivko is especially confident that younger finance professionals will eventually follow in his footsteps. "Millennials are a digital generation," he noted. "Many of them already have those skills. So it will just be a matter of time for them to adapt to it."

8 CONCLUSION

Simply put, Excel is the universal language of business. Due to the software's ubiquity and flexibility, everyone in finance has access to it, and thinks they are very good at applying it. The truth is much more nuanced than that.

Excel as it exists today is more powerful than ever as a standalone application with new features and functions. Add-ins can extend its native functionality and take it to a higher level. Connecting Excel to third-party vendor software can apply the rigor of additional computing power and enterprise controls to make it even more robust. For the FP&A practitioner, the goal is elevate his or her skills within each of these paradigms, and perhaps even leap to a higher paradigm.

FP&A practitioners need to understand that the Excel of today isn't the Excel they grew up on. In the same way they upgrade and update other job skills, finance professionals need to keep up with what is new in Excel, what add-ins are available, and what third-party vendors are offering to improve the experience. Whichever path they choose, FP&A professionals need to make sure they're doing their homework, so that they can maximize their Excel use and be more efficient in accomplishing their everyday work.

"If you're going to stick with Excel, you need to be better at Excel than you are today," Lapidus said. "If you're using an add-in or third-party software, that will improve Excel's functionality—but you also have to get better. It's a false dichotomy to say that you have to either embrace or replace Excel. Just maximize the use of this tool, at all of these different stages. Understand that its value is its flexibility and its ubiquity—and incorporate that into your FP&A systems strategy."

KEY TAKEAWAYS

4

Connecting Excel to Office 365 allows users to benefit from real-time collaboration and enhanced security.

1

Excel's flexibility has made it an essential tool for not only finance professionals, but professionals across the entire organization.

5

Utilizing a third-party platform that offers advanced data analytics and management while maintaining Excel can make up for some of the software's shortcomings, while still leveraging its flexibility and ubiquity.

2

Excel, as a standalone application, is not an ideal solution to every problem. FP&A practitioners sometimes require more complex tools, particularly around data analytics and warehousing. Excel also has significant limitations around security, collaboration and control.

6

Third-party systems can free FP&A up to do deeper analytical work, and offer enhanced security, collaboration and control features.

3

Excel has evolved in recent years with the addition of Microsoft Office 365, Power BI, Power Pivot and a host of other features that practitioners can use for connecting to, modeling, visualizing, and collaborating on data.

7

For practitioners who find Excel insufficient to meet their needs, it may be worth learning programming languages like R and Python.

ABOUT THE AUTHOR

Andrew Deichler is the editorial manager for the Association for Financial Professionals (AFP). He produces content for a number of media outlets, including AFP Exchange, Inside Treasury, and Treasury & Finance Week. Deichler regularly reports on a variety of complex topics, including payments fraud, emerging technologies and financial regulation.

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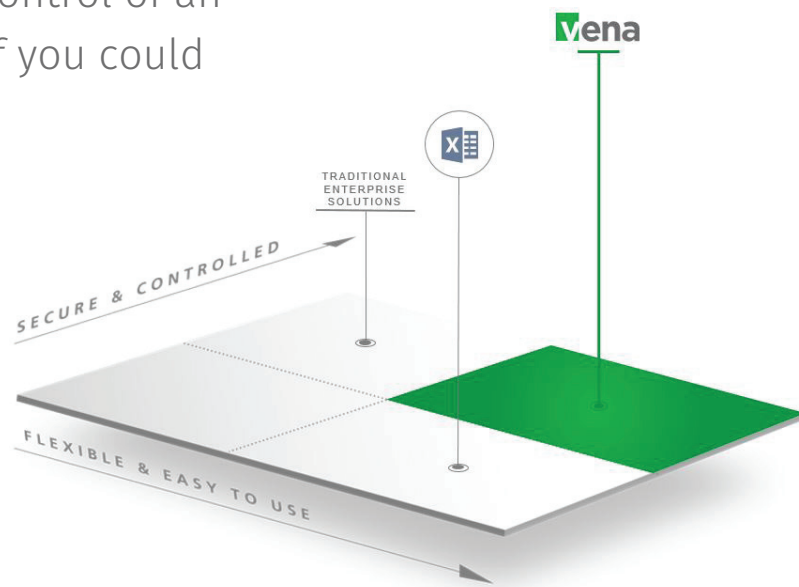
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