5 Things Your Spreadsheets Can't Do

Great hammer, lousy screwdriver.

Data analysis becomes more critical every moment of every day. For many, Excel is the go-to analysis tool of choice. But as useful as it can be, it just can't do it all. With pressure mounting to glean more insights from your data, spreadsheets don't always have the capabilities to deliver the information you seek. The good news? There are plenty more tools in the box.

Here are some ways to go beyond spreadsheets and unlock more value from your data.

1. Integrate All of Your Data

Regardless of the size of your organization, chances are, you've got data everywhere, and a lot of it. It's not just living in spreadsheets anymore, but it's also stored in the cloud and on-premise data warehouses. It's called big data for a reason. Social media data, transactional data, customer records, and web analytics are just a few examples of mushrooming information that can't be properly analyzed in a spreadsheet. Excel and Google users often find themselves forced to use subsets of data for ad hoc analysis—which will only yield a glimpse of the answers they seek. The reality is, with just a spreadsheet, at a million rows, you're going to hit a brick wall.

Whether you're filling your spreadsheet to its breaking point or working with smaller data sets, running sophisticated macros and calculations in a spreadsheet can often bring a program to its knees—leaving you waiting and miserable. You are too busy to spend cycles sorting out which set of data you can live without or budgeting time to refresh your calculations.

"Now all of the data is integrated into a secure database, but the visualizations and reports are available—not just for that one user who has the Excel spreadsheet, but for anyone to whom we've granted access."

— Roberto Bertolini, CIO, Granja Regina

For the most accurate data insights, it's important to have the capability to use as much data as is necessary to paint the whole picture.

Connect to and analyze all of your data, no matter what the size or where it lives—and make sure the process is fast.

Data Combining and Cleaning

A typical quarterly report might include data exported from your CRM system, more data extracted from your sales database, and yet more data posted by your finance team. With spreadsheets, you may spend hours on each set of data trying to connect the dots, making them seem unified, and then pasting them into a presentation.

There is a better way. The answer is using relationships to combine your data from multiple sources.

By establishing relationships between tables with a common field, you can get a single, holistic view of things like performance and track completion of goals at every step of your process. With the right tool, you can create links to your data sources, either live or extract, and easily combine them.

Regardless of data type, establishing relationships in your data on common fields will elevate understanding and decision-making. Learn how to do it in this quick tutorial.

While you're combining your data, it's important to keep it clean too. For example,
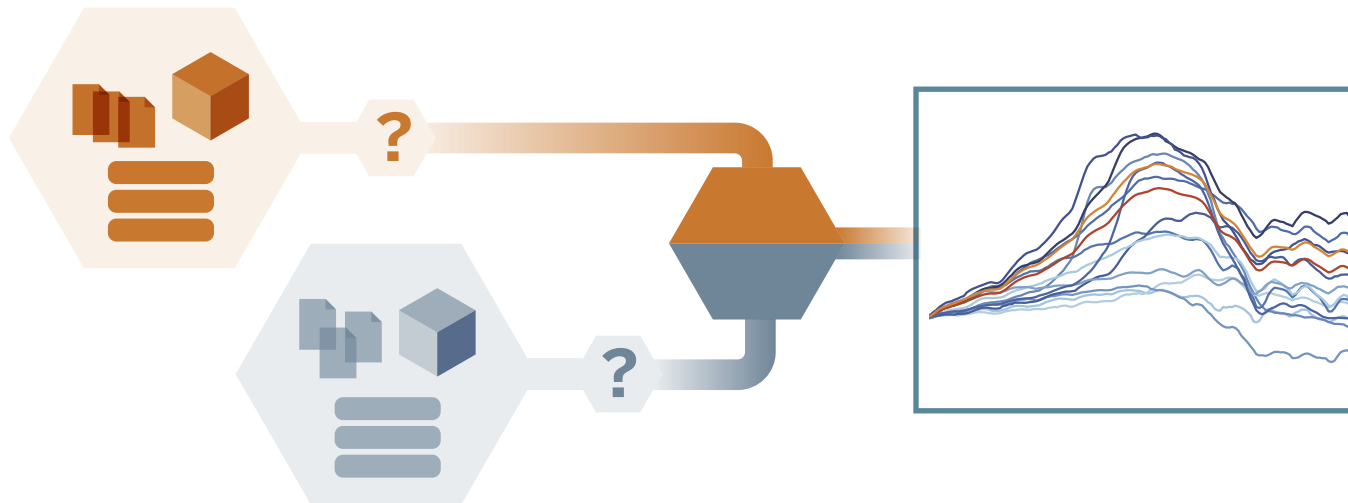
most spreadsheets store dates in lines across columns. This makes working with them painful and messy. You can easily fix this in Tableau Desktop. However, if your data needs cleansing above and beyond what Tableau Desktop can do, Tableau Prep makes short work of messy data issues and is included with a Creator license.

Having the ability to remove unwanted rows and the flexibility to rename dimensions and measures, regardless of original headings, is key. Even better, none of these changes will compromise your data updates or alter your underlying data.

2. Better Visualizations

Data visualizations are meant to be easy and fast to read. Number-based tables and spreadsheets are often the opposite. This is a use case where a picture really is worth a thousand words.

Sure, spreadsheet tools let you create some basic, built-in charts, but in today's marketplace, these standard graphs are just table stakes, and the real data wins are found in multiple types of advanced visuals. Does this scenario sound familiar?

You finish your analysis, confident you know just the chart to show in an upcoming presentation. You take the time and click through a whole series of steps and make the chart. You think it looks pretty good. All the while, hoping nothing changes before your meeting.

You get to the meeting, and there are questions that the chart doesn't give answers to right away. People ask to see a different visualization to answer their new questions. Now you have to start over and schedule another meeting.

Say goodbye to this situation and hello to better data visualizations.

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A well-crafted, thoughtful visualization makes the light bulb go on. You just don't get that with a spreadsheet."
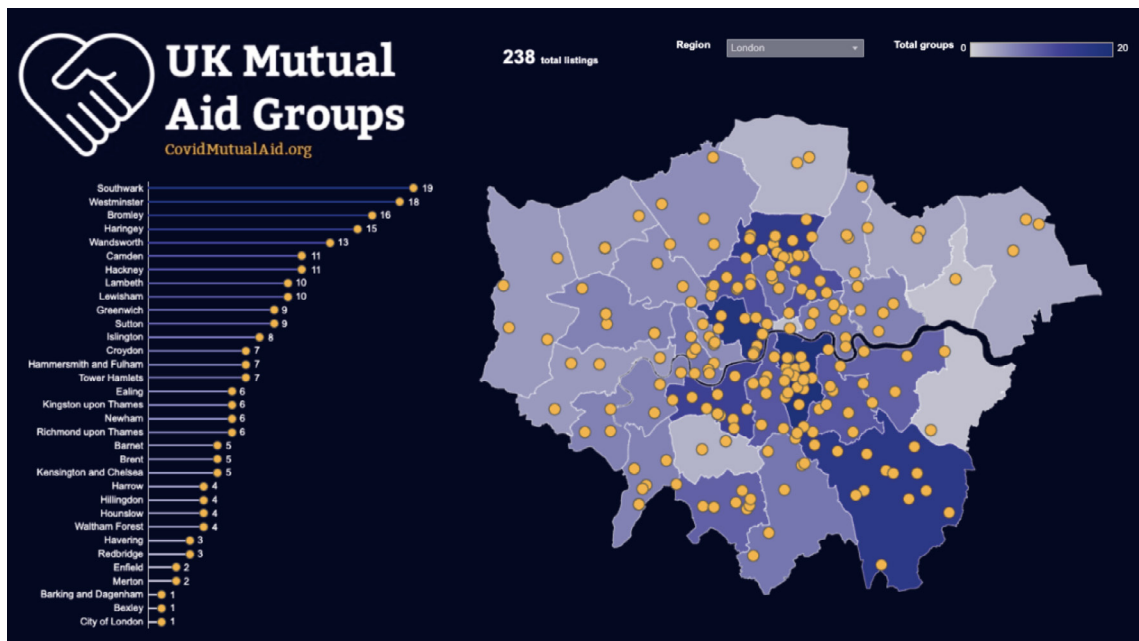
— Dana Zuber, Wells Fargo

Maps

Geographical maps are a great example of a better visualization— and no, maps are not standard-issue on a spreadsheet's lineup of chart types. Seeing your data on a map brings a level of intuitive understanding that no pivot table could hope to achieve.

Mapping your data will reveal patterns to inform decisions and guide your next steps.

This dashboard by Richard Speigal makes it easy to see Mutual Aid groups across boroughs in London, including support networks, self-isolation support groups, food banks, volunteer groups, and more. **Click Here** to view the interactive visualization.

3. Variety

Not everything has to be a pie or bar chart. The human brain processes a number, a visualization, or a picture as a single "chunk" of information. So it is faster and easier to comprehend and gain insights when data is visually displayed on a dashboard in various types of graphs and charts. Utilizing multiple types of visualizations, colors, and filters in a dashboard helps you quickly understand and share the complete picture and get to the bottom of all those questions that standard reports just don't anticipate.
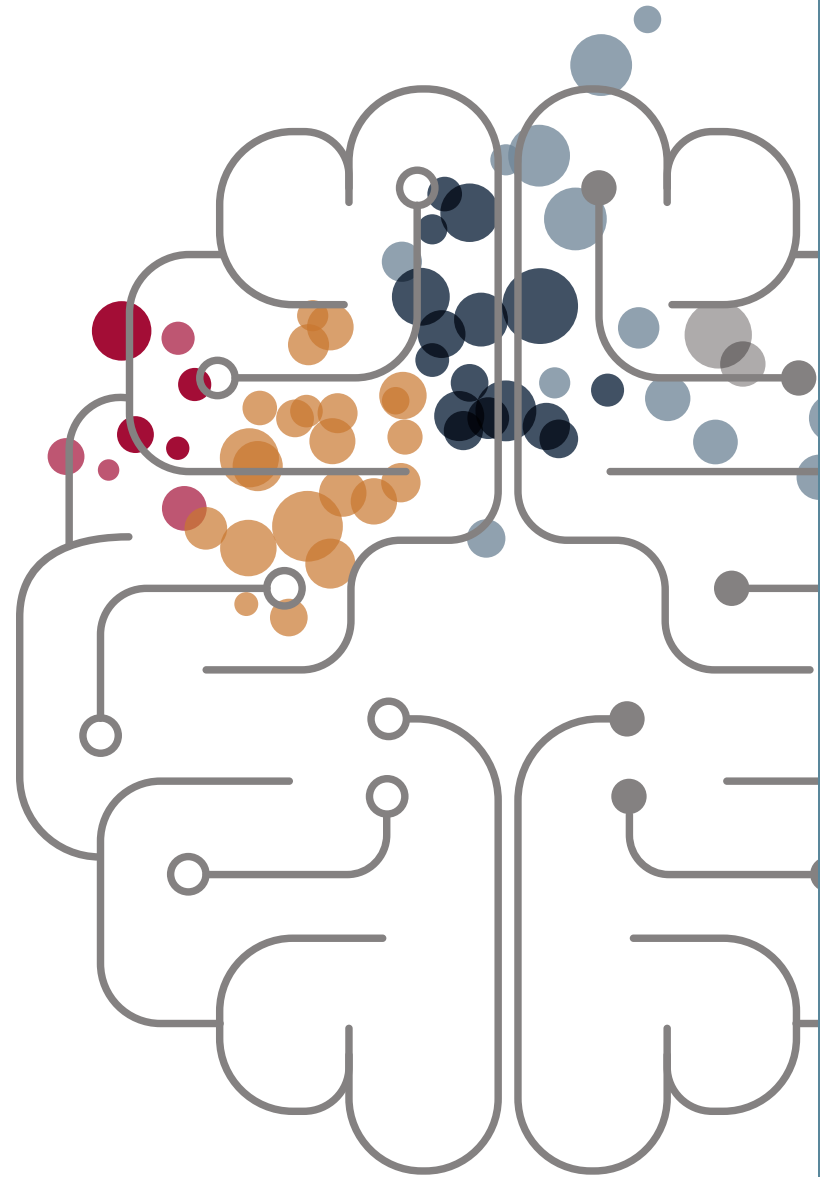
4. Forward-looking

Utilizing visuals to look at a time trend for a seasonal influence gives you the ability to forecast and plan appropriately. Make decisions by applying data for historically slow quarters, summer slumps, and end-of-year booms.

By understanding patterns over time, you can make more informed decisions about the future.
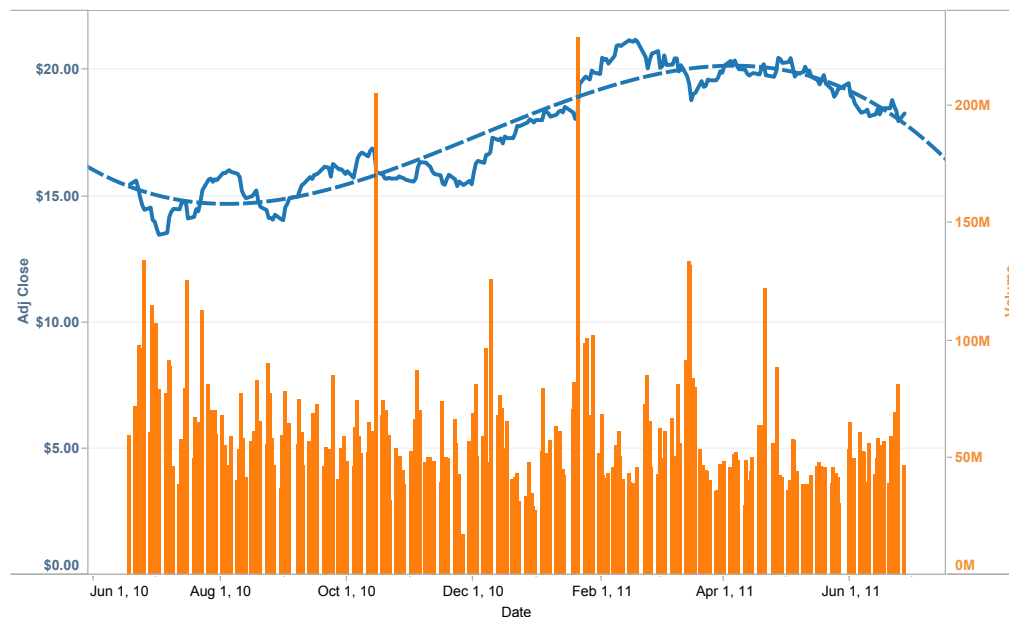
Here we see GE's stock price over a period of years. Looking only at the last year suggests the stock may be on a downward trend; extending the date axis conveys that the stock may hit $15 in the near future. Change the date range of analysis to see different trend lines.

5. Current and Interactive

It's never fun not to know the answer—especially in a meeting where you're trying to solve a problem. Set yourself up to answer questions on the fly by using interactive visualizations.

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People have rekindled their interest in asking questions."

— Rishi Kumar, Director of Analytics, Unilever

Interactive dashboards with a current data feed can enable important analytical tasks, such as filtering views, adjusting parameters, performing quick calculations, and drilling down to examine underlying data. Answer the unanticipated questions immediately with a few mouse clicks.

Data can be from this quarter, this week, this hour, or thirty seconds ago—there's no doubt about it, a current data feed or a feed within the right timeline for your organization will elevate your problem solving and your daily operations.

Drag and Drop Dashboards

Gathering all relevant information in one place is critical for driving focused, smart discussions. No, a pile of spreadsheet printouts doesn't count as putting all relevant factors in one place. Adding dashboards to your analysis toolkit equips you to consider all relevant factors for your decisions in one place.
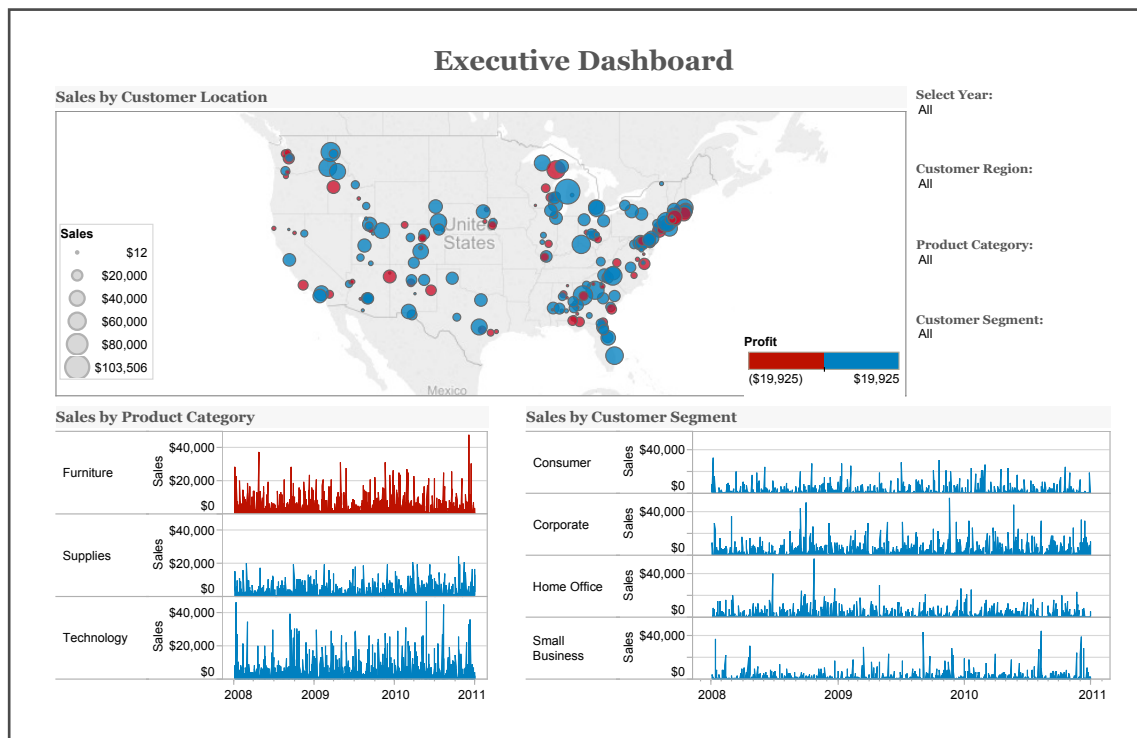
And yes, you can make a variation of a dashboard in some spreadsheets, but many business leaders avoid it. Why? For some, it's because creating a dashboard carries the assumption that a painful, long IT project is the only path.

Try building a dashboard using a drag-and-drop interface. Try creating filters and dropdowns that help you interact directly with your information with a click of a mouse.

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I'm finding it's a lot faster and more enjoyable to get analysis done. I'm freed up from manipulating the data into certain formats, and just being able to drag and drop to see trends easily is a great benefit."

— Adam Yeoman Senior Analyst, Supply Chain Development, Tesco

Automatic Updates

Your spreadsheet is only good until your next data extract or update. What if you created your dashboard once, and it stayed up-to-date every time you opened it?

Putting even a basic dashboard together in a spreadsheet can take hours. Often you get to what you think is the end, and an email arrives with new data attached. With the right analysis tool, your dashboards can be linked to your data sources and automatically update every time they are opened.

If you have team members who don't always have an Internet connection, you can use extracts and set them to update on a schedule. This kind of flexibility makes building dashboards faster and more reliable.

You don't have to ditch your spreadsheets altogether, but integrating them into your analysis with better data visualization is easier than you think.

Begin a free trial today at tableau.com/trial

Tableau Software helps people see and understand data, no matter how big or where it is stored. Quickly connect, combine, clean, visualize, and share your dashboards with a seamless experience from the PC to the Tablet. Create and publish dashboards with automatic data updates, and share them with colleagues, partners, or customers—no programming skills required.

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