



7 Essential Finance Dashboard Strategies

Mike Crook

Director of Finance Analytics, Tableau

Introduction

Great finance dashboards have the power to make a huge impact within every business. As someone who provides critical reporting that impacts and informs your business’s key decision-making, it’s crucial that the analysis and reporting you provide is carefully crafted to meet the needs of your business users, regardless of their level of data literacy. Well-designed finance dashboards can give your finance team, as well as your company’s practitioners and business leadership, the trustworthy and up-to-date analysis they need, when they need it, in a format that will resonate.

At Tableau, our finance team has been designing dashboards for those audiences since the very early days of our product. During that time, we’ve discovered a few dashboard strategies that have helped grow adoption within our finance team and beyond. We hope you can apply these techniques to create secure “sources of truth” your stakeholders need, support data-driven decisions, and address your company’s key business challenges.

Table of Contents

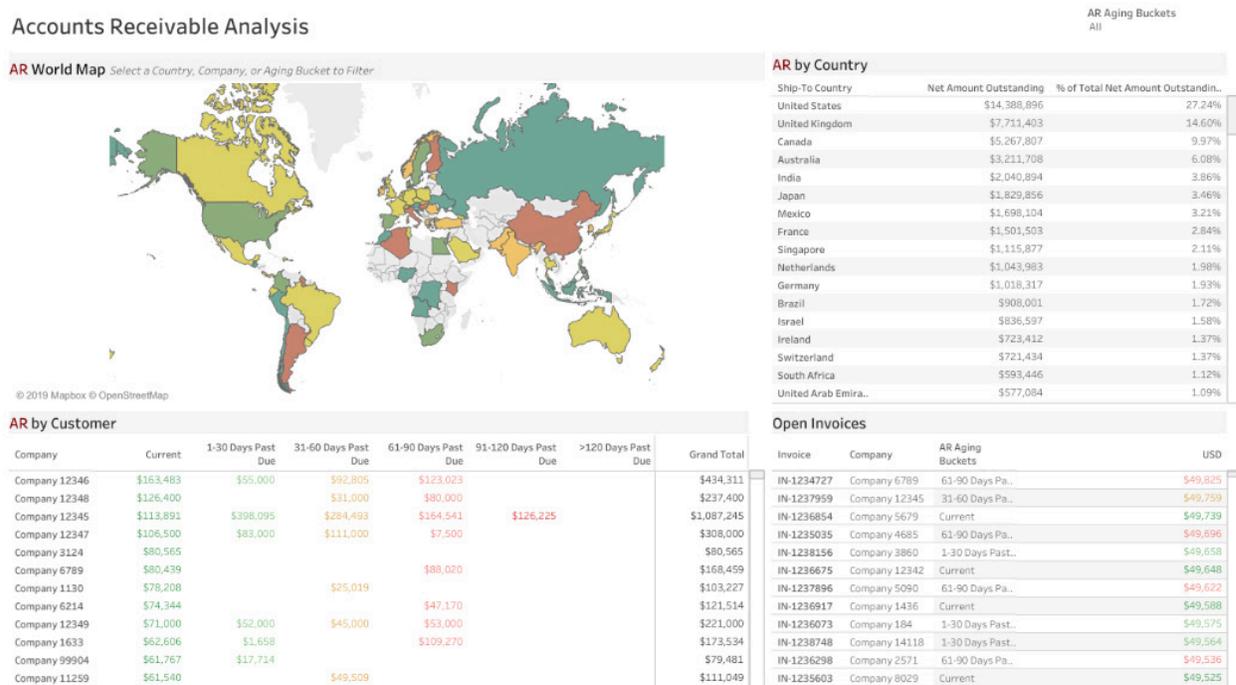
- Introduction 2**
- 1. Share cross tabs if and when you must, then phase them out 3**
- 2. Enable drill-down hierarchies from parent accounts and cost centers 4**
- 3. Bring together financial planning data and actuals into one view 5**
- 4. Visualize the difference between budgets, actuals, and forecasts 6**
- 5. Dig into the details of your data 7**
- 6. Share securely and set subscriptions and data-driven alerts 9**
- 7. Develop a style guide that brands your content and creates trust 10**
- Additional resources 12**

1. Share cross tabs if and when you must, then phase them out

Many finance professionals don't want to give up their spreadsheets because of their familiarity with the format. They want to see numbers to four decimal places or more or have numbers colored in a certain fashion. In the process of winning them over, create a dashboard with a cross tab to give them access to the format they crave. Introduce stakeholders new to Tableau and advanced analytics with a dashboard that offers hard numbers they can trust in an easy-to-understand, visual format.

The charts and graphs in your dashboard can serve as filters on the cross tabs, so people can immediately see the impact of actions they take as they explore the dashboard. While this technique will lose some screen space in the short run, it will grow adoption in the long run. You'll find you can ease the use of this technique as trust grows in the technology, eventually burying the numbers in drill down views and as users gain familiarity with options for [viewing underlying data](#).

The [Accounts Receivable \(AR\) Dashboard](#) is an excellent example of a finance dashboard that uses charts and graphs as filters on AR data.



View [this resource page](#) to help you learn how to set up filter actions on your dashboards.

2. Enable drill-down hierarchies from parent accounts and cost centers

When developing finance dashboards, preparing source system data and aggregating can be highly manual and take up valuable time. This slow process means that your numbers are often out-of-date by the time you've completed aggregating the data, also creating inflexibility around future changes or updates to your analysis. This can be solved by joining data with [Tableau Desktop](#) or [Prep](#), potentially automating processes to give you time back.

By aligning your account IDs to their parent account IDs and cost centers, you can quickly aggregate your data to the level needed to do actual vs. forecast analysis. At the same time, your team will be able to drill all the way down into the individual journal entries that are influencing those aggregated numbers and identify what is driving your variances.

This [income statement dashboard](#) shows the power of enabling these types of drill downs.

Stakeholders can view their income statement in its most summarized or detailed formats, all in the same place, as is appropriate for their needs.

Income Statement (YTD)

					Q1				2017 Q2		Period Ending Date (Must be a Month End) 1/31/2017 to 12/31/2017
					Actual	Forecast	Variance	Variance %	Actual	Forecast	
Income	Other	Other	10000	Income	\$64,703,410	\$90,042,000	\$25,338,590	28.1%	\$78,999,218	\$90,042,000	
				Total	\$64,703,410	\$90,042,000	\$25,338,590	28.1%	\$78,999,218	\$90,042,000	
Cost of Goods Sold	Other	Other	20000	Cost of Goods Sold	\$3,881,645	\$5,502,000	\$1,620,355	29.5%	\$5,269,836	\$5,502,000	
				Total	\$3,881,645	\$5,502,000	\$1,620,355	29.5%	\$5,269,836	\$5,502,000	
Expense	Development	Development	31000	Salaries & Benefits	\$14,704,446	\$13,367,000	(\$1,337,446)	-10.0%	\$16,362,335	\$14,875,000	
			32000	Human Resources	\$107,571	\$98,000	(\$9,571)	-9.8%	\$97,254	\$88,000	
			33000	Office & Supplies	\$85,399	\$78,000	(\$7,399)	-9.5%	\$24,679	\$22,000	
			34000	Computer, Equip & Oper..	\$81,880	\$75,000	(\$6,880)	-9.2%	\$97,706	\$89,000	
			35000	Travel & Entertainment	\$175,863	\$160,000	(\$15,863)	-9.9%	\$284,453	\$258,000	
			36000	Marketing	\$7,969	\$7,000	(\$969)	-13.8%	\$5,277	\$5,000	
			37000	Professional Services & ...	\$570,789	\$519,000	(\$51,789)	-10.0%	\$364,180	\$331,000	
	Marketing	Marketing	31000	Salaries & Benefits	\$2,038,408	\$1,853,000	(\$185,408)	-10.0%	\$2,227,197	\$2,024,000	
			32000	Human Resources	\$43,820	\$40,000	(\$3,820)	-9.5%	\$30,810	\$29,000	
			33000	Office & Supplies	\$66,581	\$61,000	(\$5,581)	-9.1%	\$72,104	\$66,000	
			34000	Computer, Equip & Oper..	\$154,588	\$140,000	(\$14,588)	-10.4%	\$408,810	\$372,000	
			35000	Travel & Entertainment	\$240,193	\$219,000	(\$21,193)	-9.7%	\$397,824	\$362,000	
			36000	Marketing	\$4,115,667	\$3,741,000	(\$374,667)	-10.0%	\$3,915,323	\$3,560,000	
			37000	Professional Services & ...	\$101,352	\$92,000	(\$9,352)	-10.2%	\$82,712	\$76,000	
			38000	Insurance & Regulations	\$135	\$0	(\$135)		\$337	\$0	
	Operations	Finance	31000	Salaries & Benefits	\$2,869,053	\$0	(\$2,869,053)		\$3,089,494	\$0	
			32000	Human Resources	\$109,724	\$0	(\$109,724)		\$357,677	\$0	
			33000	Office & Supplies	\$160,961	\$0	(\$160,961)		\$327,711	\$0	
			34000	Computer, Equip & Oper..	\$183,687	\$0	(\$183,687)		\$174,167	\$0	
			35000	Travel & Entertainment	\$167,439	\$0	(\$167,439)		\$233,189	\$0	
			36000	Marketing	\$13,829	\$0	(\$13,829)		\$61,894	\$0	
			37000	Professional Services & ...	\$1,801,348	\$0	(\$1,801,348)		\$1,726,577	\$0	
			38000	Insurance & Regulations	\$230,636	\$0	(\$230,636)		\$472,882	\$0	
			39000	Amortization/Depreciati..	\$745,346	\$0	(\$745,346)		\$875,378	\$0	
	HR		31000	Salaries & Benefits	\$1,198,010	\$0	(\$1,198,010)		\$1,275,083	\$0	
			32000	Human Resources	\$471,148	\$0	(\$471,148)		\$506,235	\$0	
			33000	Office & Supplies	\$17,579	\$0	(\$17,579)		\$19,402	\$0	
			34000	Computer, Equip & Oper..	\$10,813	\$0	(\$10,813)		\$1,177	\$0	
			35000	Travel & Entertainment	\$27,574	\$0	(\$27,574)		\$49,587	\$0	

Version
(Only select one Forecast)

2017_V0 (Plan)

2017_V1 (2017.01.26)

2017_V2 (2017.03.24)

Current (Actual)

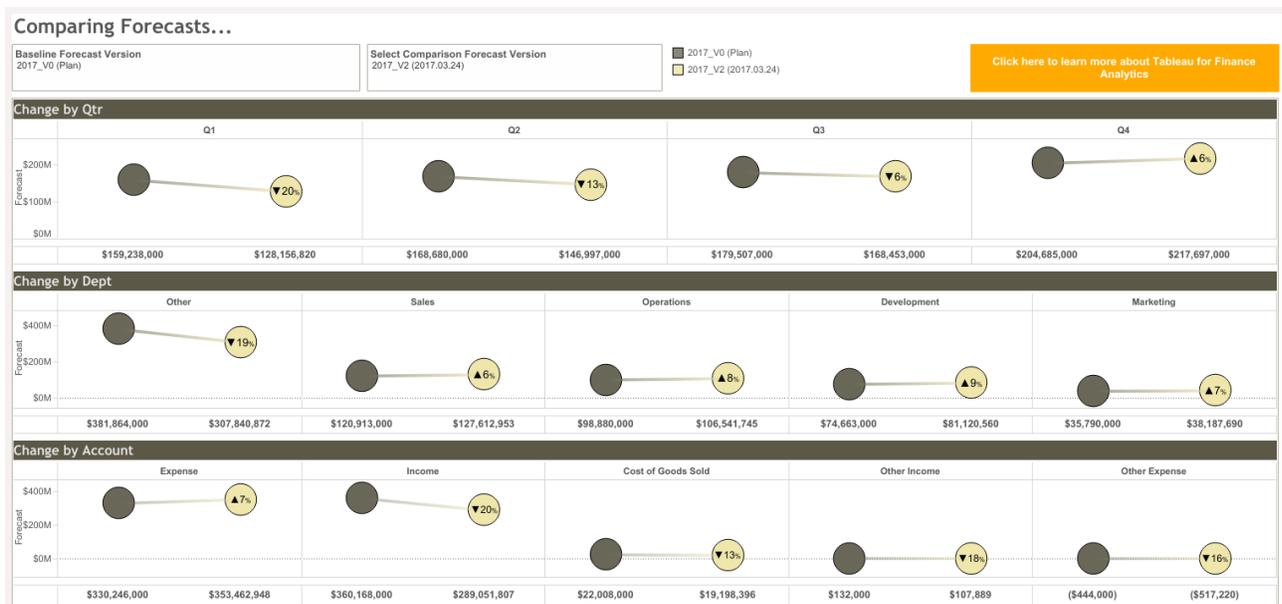
Gross Profit (Actual)	\$338,168,240
Gross Profit (Forecast)	\$338,160,000
Gross Margin % (Actual)	93.9%
Gross Margin % (Forecast)	93.9%
Operating Income (Actual)	\$7,920,629
Operating Income (Forecast)	\$37,945,000

Read more about how to establish ongoing financial data preparation and validation to simplify aggregation in [this whitepaper](#).

3. Bring together financial planning data and actuals into one view

Many finance teams have struggled to improve forecast accuracy because of the complex, time-consuming, and manual work required. The painstaking process involves repeatedly bringing data together with varying levels of detail to understand the difference between results and forecasts, continually honing accuracy by iterating on various financial scenarios.

It can be increasingly hard to understand how those forecasts change over time. By enabling users to add on new financial planning data sets and select them through drop-down menus, finance teams can quickly avoid repeating the same manual steps. This also makes it easier for your stakeholders to understand adjustments to the forecast as well. Instead, it's just a matter of comparing new versions to old versions, like in this [Comparing Forecasts dashboard](#).



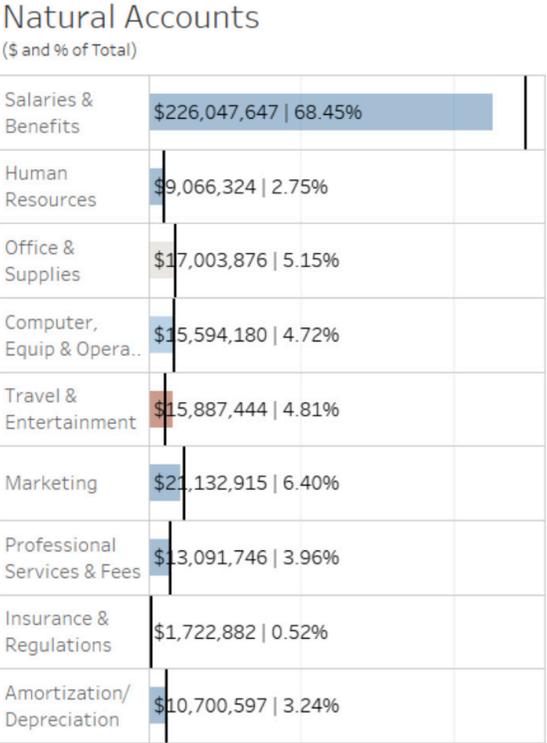
Here is a resource around creating [wildcard unions](#) in Tableau Prep to combine and clean data from multiple tables to speed up and improve the accuracy of forecasts. [The Price is Right: The Art of Visualizing Finance webinar](#) goes into detail on how to combine actuals from your general ledger and forecasts in Tableau Desktop. Our [Tips to prep and validate your finance data webinar](#) also demonstrates a similar process in Tableau Prep Builder.

4. Visualize the difference between budgets, actuals, and forecasts

Another strategy that will help you build more successful dashboards is to thoughtfully visualize the variances between your budgets, actuals, and forecasts. It's simple math, but it creates a tricky visualization problem: when comparing two numbers, the difference between them becomes a "third number." Effectively visualizing three numbers to tell an insightful story can be challenging.

The Tableau finance team has found that bullet charts and unstacked bar charts are two of the most compelling ways. The visual representation of the variance, whether as a bar within an unstacked bar chart or as the difference between a bar and a reference line in a bullet chart, quickly indicates the status of your variances.

- The [bullet chart](#) below enables viewers to see the status of actuals (the bar) relative to the forecast (the black line). The color of the bar also indicates whether the current account balance is above or below forecast. Using this graph, we can quickly see that salaries and benefits currently stand at 68.45% of forecast, but travel and entertainment expenses are exceeding forecast by 4.81%. Learn more about how to create bullet charts in [this article](#).



- The [unstacked bar chart](#) style displayed below shows variances in proportion to actuals and forecasts. This visual technique has the added benefit of incorporating time across the x axis, allowing forecast accuracy. Learn how to get started creating unstacked bar charts in [this video](#), then use the size feature in the marks card to finish the chart.



However you choose to represent your variances, Tableau offers the flexibility that makes the most sense for your team and your stakeholders. If you're seeking other methods to reveal financial insights with data visualization and analysis, [view this webinar](#) to see Tableau's dashboards for roles across the finance organization.

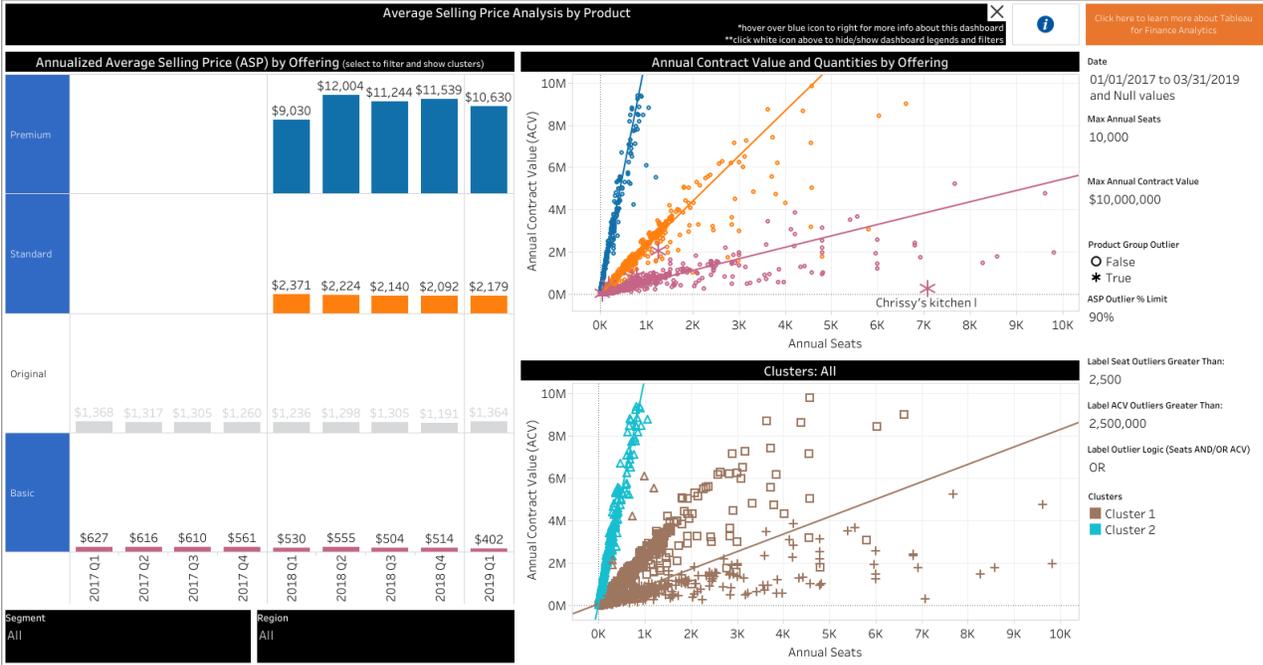
5. Dig into the details of your data

One of the areas where Tableau thrives and spreadsheets struggle is in dealing with big data sets. There are two main methods finance teams use to get around the spreadsheet's limitations: (1) They aggregate data and (2) They create samples of data as a means to perform testing.

Unfortunately aggregating data can prevent exploration of the patterns and trends that are driving results. Aggregation is important to create overarching understanding, but is made more powerful if underlying details are also available to provide context. Aggregated data can almost always answer questions like "What was our average deal size and discount last year?" but can rarely help with questions like "How is deal size related to our discount strategy?"

Similar to the limitations created by aggregation, sampling can also result in missed opportunities to spot patterns and trends, but sampling also carries the added drawback of potentially introducing errors or distrust in data.

Because Tableau has a powerful data engine that can process and visualize all of your data, you can avoid these pitfalls of aggregation and sampling. One of the key examples that demonstrates Tableau’s strength in this area is a scatter plot. The [Average Selling Price Dashboard](#) below shows all of Tableau’s transactions for a selected time range, not just an aggregate or sample of them.



Learn more about how to create scatter plots in Tableau by reading [this article](#). Learn how our FP&A team uses scatter plots to [analyze discounting compliance in this webinar](#) and how our auditing team uses scatter plots in this [blog post on four ways to use data analytics to identify corruption red flags](#).

6. Share securely and set subscriptions and data-driven alerts

Among the many stakeholders you support with financial analysis, there are senior leaders who have greater responsibilities and demands on their time. These executives can't explore dashboards everyday, so it's necessary to create reports with high-level views offering the ability to drill down into detail.

Proactively set up data-driven alerts for senior leaders to be notified when certain numbers fall below a specific threshold or band of confidence, or when there are data outliers regarding the close of a big deal, for example. You can also subscribe leaders to a snapshot of a view at regular intervals to inform of their most important data, whether they are summaries of sales activity, travel and expense spending by department, or more.

Our finance analytics team sets data-driven alerts and subscriptions on dashboards like the [Sales Tracker](#) below to help our executives monitor if sales teams have pipeline coverage ratios below specific ranges. If those pipeline coverage ratios are lower than they should be, we may investigate to see how we can support sales or take action to lower our forecasts.



Learn more about how to [subscribe to views](#) in this article and how create data-driven alerts in [this article](#).

7. Develop a style guide that brands your content and creates trust

An important aspect to designing dashboards that people will love and use is creating a report that looks familiar. Do this by developing a style guide or standardized look, which provides consistency and establishes trust with stakeholders, visually indicating that this is a verified, secure source of truth. Consistent dashboard design also makes it easier for viewers to quickly understand and interact with dashboards, because they are familiar with the location and functionality of key features.

While the authors of most style guides will admit their rules are meant to be flexible, the choice to break the rules should be an intentional one. A useful shortcut to get dashboard creators started down the right path is to save a workbook with default styling. It's also possible to copy the formatting of one worksheet and paste it into another worksheet to bring old projects up to brand standards faster.

As you develop your own style guide, take a look at the ones shared by our community below for inspiration.

Organization	Best Practices
University of Rochester	<ul style="list-style-type: none">• Put a timestamp of when the dashboard's data was refreshed in a standard place• Include an "About" button to communicate the dashboard's purpose, description, and additional details• Create a checklist of items to review before publishing to server
BBC	<ul style="list-style-type: none">• Supply approved iconography for commonly used buttons• Identify how flexible the style is and when the rules can be broken• Create your style guide in Tableau so samples can be repurposed
Southern Health	<ul style="list-style-type: none">• Use a logo to create consistency and trust• Use different color palettes to indicate different types of reports

Want to learn more? Watch [this presentation](#) by Tableau's Rafi Zelikowsky about implementing corporate design standard. Read [Format at the Worksheet Level](#) to learn how to format your vizs, and how to copy and paste that formatting to other worksheets.

With the application of these essential dashboards strategies, you'll create trustworthy and easy-to-use dashboards that people across the organization will use to inform critical decision-making. Providing well-designed finance dashboards enables your stakeholders to be successful with Tableau, with their own roles, contributing to the overall success of your business.

Looking to hear about dashboard best practices from your finance and analytics peers? Join the [Tableau Office of Finance community user group](#) to interact with your community and to hear from expert guests.

About Tableau

Tableau helps extract meaning from information. It's an analytics platform that supports the cycle of analytics, offers visual feedback, and helps you answer questions, regardless of their evolving complexity. If you want to innovate with data, you want an application that encourages you to keep exploring—to ask new questions and change your perspective. If you're ready to make your data make an impact, download a [free trial](#) of Tableau Desktop today.

Here are additional resources to grow your finance team's analytics maturity, supporting both day-to-day functions and digital transformation.

Additional Resources

[Tableau Finance Analytics solutions page](#)

[Fast, flexible webinar analytics series](#)

[Fundamental finance analytics webinar series](#)

Sample dashboards on [Tableau Public](#)

Download a free trial of [Tableau Desktop](#)

Download a free trial of [Tableau Prep](#)

