



# Adding value with embedded analytics

A guide to embedding with Tableau

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## Analytics when and where you need them

Imagine for a moment an HR Manager who needs to analyze employee retention data for a pilot project. Where does she find the data? How does she analyze it? Is a full time analyst assigned the task, or a ticket submitted to IT?

Business moves fast, and the HR Manager can't wait days, or even hours, for the analysis. To be actionable, data and the tools to analyze it must be immediately available—on her organization's intranet, within the business applications she relies on, and built into the mobile apps she uses everyday.

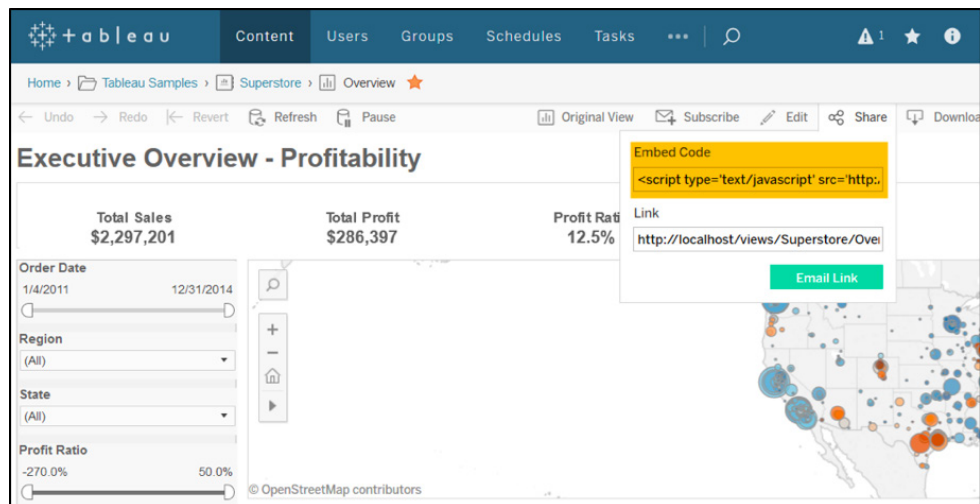
Only embedded analytics can provide this level of access to business intelligence. Unfortunately, custom solutions require significant time and resources to develop, while pre-built options usually fail to provide the insights users demand or the flexibility IT and engineering teams require. But it's different at Tableau. We believe embedded business intelligence should be fast to deploy and easy to manage. It should provide rich, intuitive visualizations when and where they are needed. And most importantly, it should help people quickly answer any question with data.

Embedding Tableau helps you take your product to market faster, quickly deploy new analytics content, and fulfill change requests in moments. Read on to discover how Tableau integrates with:

1. Simple web pages
2. Custom web portals
3. 3rd party applications
4. Customer-facing products

# 1. Analytics Embedded in Simple Web Pages

Any dashboard published to [Tableau Server](#) or [Tableau Online](#) can be easily embedded in a web page via a simple [HTML embed code](#) generated by Tableau. Visualizations embedded in this way update as the underlying data changes, or as the workbook is updated on Tableau Server or Tableau Online.



Embed codes are great for sharing data visualizations with large, general audiences. Blogs and news sites, for example, often use embedded Tableau dashboards. Data scientist Adam McCann publishes hundreds of visualizations to blog [Dueling Data](#) using embed codes. In Australia, the award-winning Sydney Morning Herald uses Tableau to analyze data for their stories, build visualizations, and embed them on their website, like in [this story](#) analyzing the data behind wedding plans.

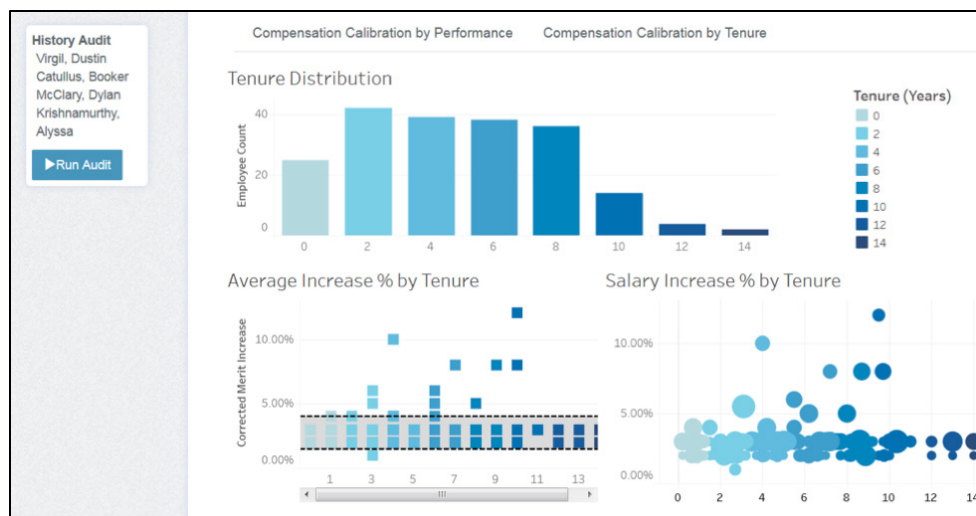
## 2. Analytics Embedded in Custom Web Portals

Ensuring the discoverability of your visual analytics is a critical step in helping people answer their questions with data. Web portals simplify this process by combining business-critical dashboards into a unified interface. Portals are commonly used to curate analytics both in-house for employees as well as externally for customers or clients.

Tableau makes it easy to embed content in custom web portals. Connect to your data and build dashboards in Tableau, then seamlessly deploy the content to your web portal using our [Javascript API](#). This method gives you full programmatic control of embedded analytics, including:

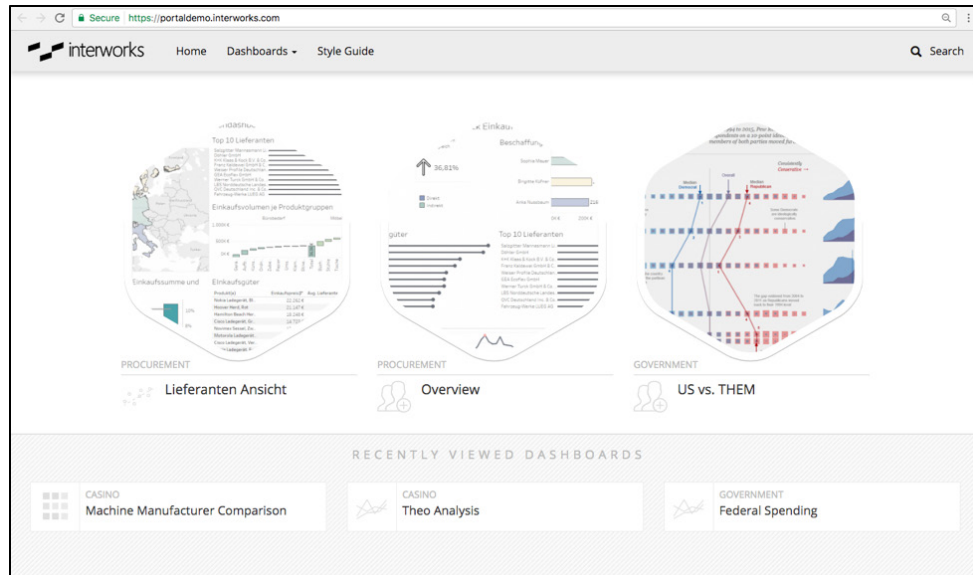
- **Preset dashboard filtering.** Embed your data visualization with filters or parameters applied upon page load. Doing so is helpful when a dashboard must be filtered to a specific view based on the context of your web portal.
- **Custom interface elements and actions.** Match your dashboard to the look and feel of your web portal by linking any HTML/CSS/JS interface element to an action in your visualization. For example, run a series of filters and set a parameter in your embedded visualization based on a user's menu selection elsewhere in the portal.
- **External integrations.** Run external actions based on a user's input within a Tableau visualization. For example, the Javascript API can be used to programmatically run an audit report filtered by the selections in an embedded dashboard.

The Javascript API enables you to create custom UI elements and actions, like a button used to run an audit report based on the selections made in an embedded Tableau dashboard.



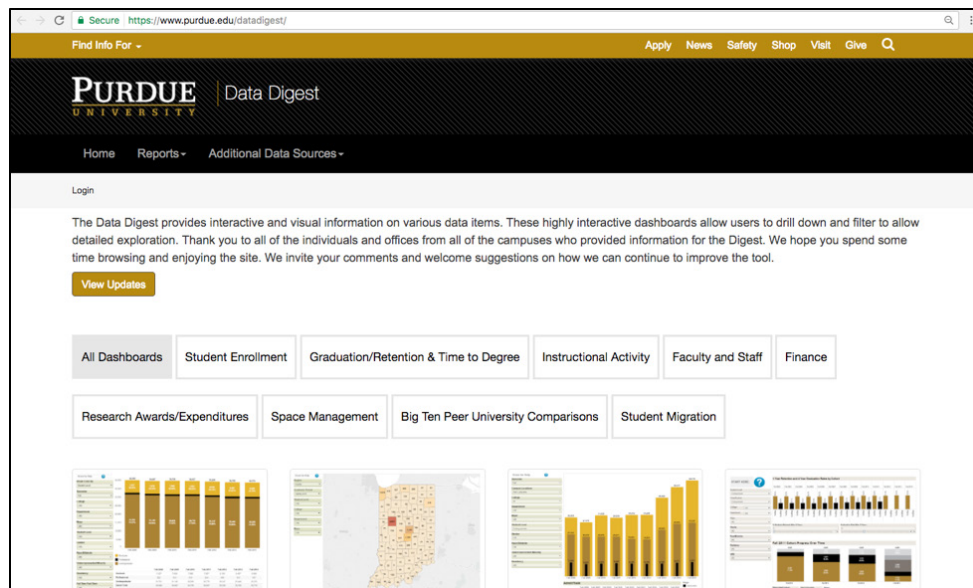
Many Tableau customers use web portals to house their organization’s business intelligence resources and promote important dashboards. Analytics consultant Interworks offers clients a customizable portal template that can be populated with embedded Tableau dashboards for internal use.

Interworks provides clients with a customizable web portal template designed for Tableau dashboards.



Purdue University also employs a web portal, [The Data Digest](https://www.purdue.edu/datadigest/), to curate the institution’s performance metrics for a public audience. The portal makes data discovery seamless and intuitive by helping users quickly find and interact with dashboards relevant to their interests.

Purdue University’s “Data Digest” web portal for Tableau dashboards.



### 3. Analytics Embedded in 3rd Party Applications

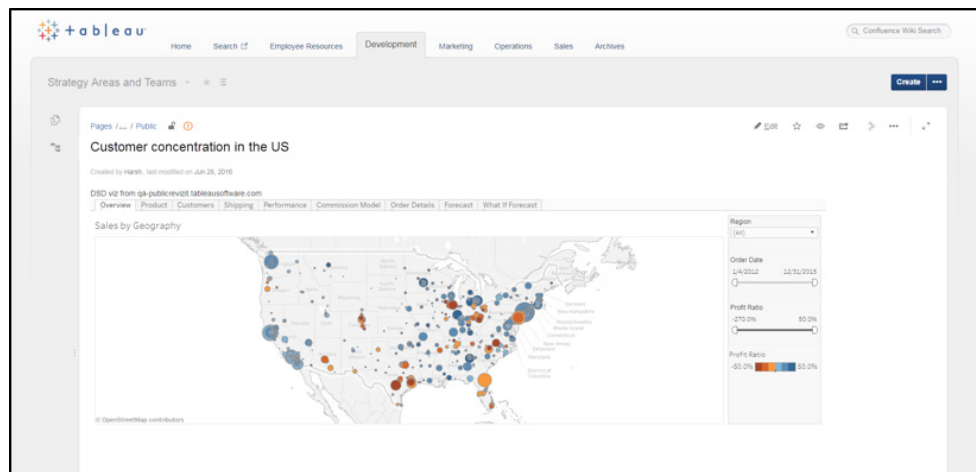
Embedding visual analytics in the applications your business already uses, like Salesforce or Sharepoint, ensures people have the data they need to make informed decisions without needing to learn new software or alter their workflow.

Integrating Tableau dashboards into 3rd party applications is both simple and fast:

Embed dashboard views in a wiki.

Wikis are critical knowledge hubs for a business. Easily add data-driven insights to the mix with Tableau dashboards using the HTML embed code outlined in the *Analytics Embedded in Simple Web Pages* section above. Tableau's Javascript API, as described in the *Analytics Embedded in Custom Web Portals* section, can also be used for more advanced integrations.

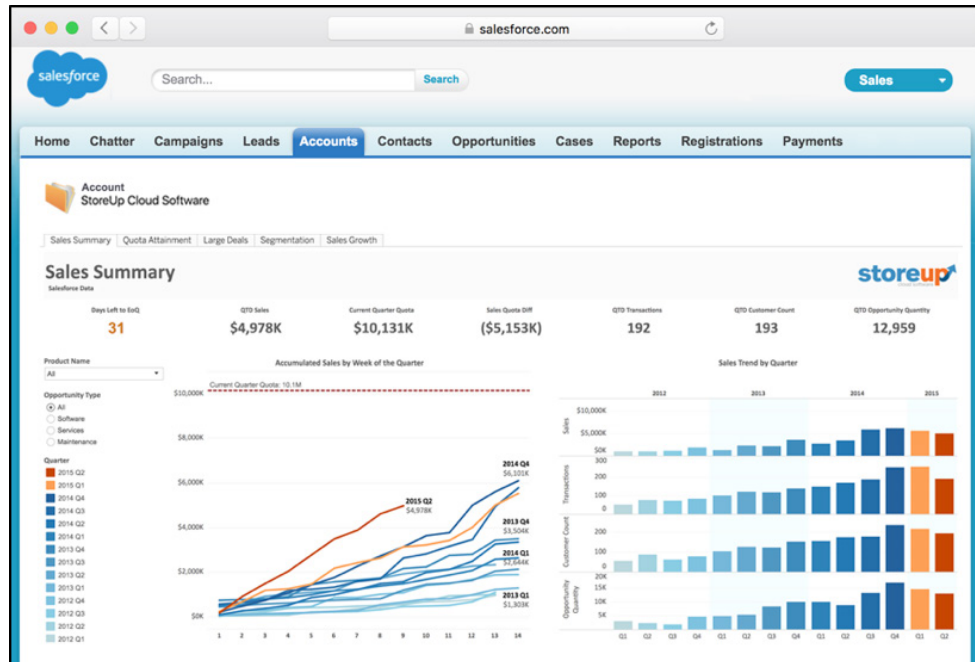
A Tableau dashboard embedded in an internal Confluence wiki page.



Embed dashboard views in Salesforce.

Salespeople often live in Salesforce when deciding which leads to pursue. Give them a competitive advantage by embedding sales analytics within account pages using Tableau's Salesforce Canvas Adapter. Any dashboard published to Tableau Server or Tableau Online can be embedded and will update as your data does. Learn more and get the Canvas Adapter for free [here](#).

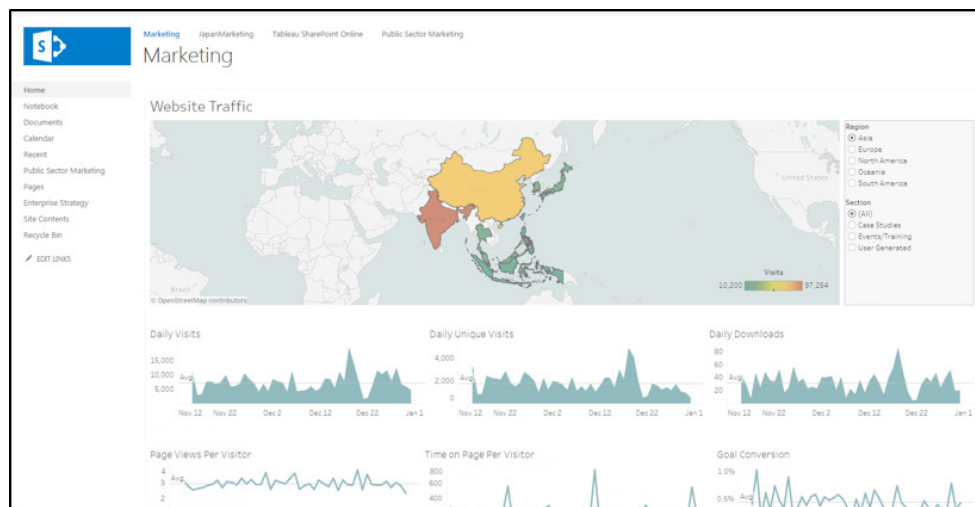
A Tableau dashboard embedded in a Salesforce account page.



Embed dashboard views in Sharepoint.

If your organization uses Sharepoint, then your teams likely know it's the place to go for important documents. Embedding Tableau within Sharepoint helps people find the data they need.

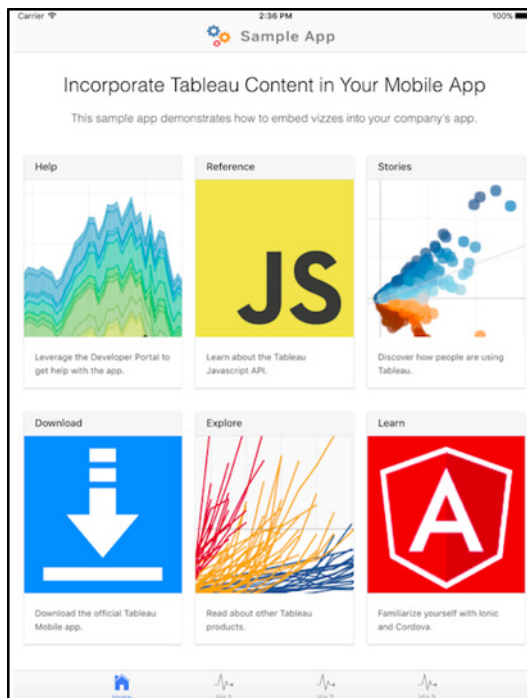
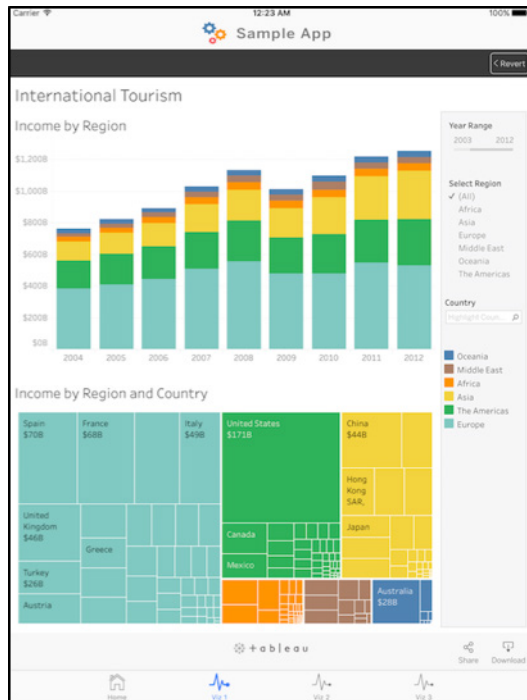
A Tableau dashboard embedded in a Sharepoint site.



Embed dashboard views in your mobile app.

Just as web portals do on your desktop, custom mobile apps provide a one-stop shop for data and analytics on the go. Tableau's free [mobile app bootstrap](#), available in both Objective-C and Cordova, facilitates easy dashboard embedding in your organization's proprietary app. Tableau also provides a mobile connected client plugin to handle.

Tableau's free mobile app bootstrap helps you quickly embed dashboards in a custom mobile app.



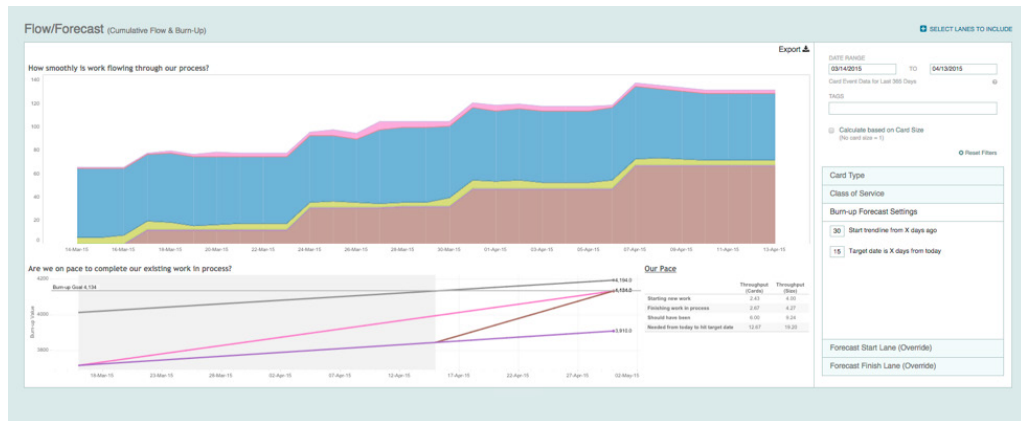


## Analytics Embedded in Customer-facing Products

When taking your product to market, standout reporting features are competitive differentiators. Yet building a ground-up solution can be cost prohibitive. In these cases, embedding Tableau frees your development team to focus on critical features of your product while ensuring you go to market with the [gold standard for intuitive visual analytics](#).

For deep integration, Tableau's [REST API](#) gives you full programmatic control of backend functionality over HTTP including data source, project, workbook, and user functions. The Javascript API, covered in the *Analytics Embedded in Custom Web Portals* section above, also allows for deep front-end integration.

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LeanKit, a provider of visual workflow management tools, embeds Tableau in their SaaS offering to provide users with custom reporting features. After exploring an in-house option, LeanKit [chose to embed Tableau in their product](#) because it freed precious development resources and allowed them to more rapidly iterate. "One of the things we love about Tableau," says Stephen Franklin, LeanKit's CIO, "is that so much is already built into the tool that we can leverage with zero development effort."

Hundreds of organizations also choose to partner with Tableau via our [OEM program](#). Learn more at our [partner portal](#).

## Secure Embedded Analytics

Effectively managing data security and user access is critical when deploying embedded analytics. In all of the examples above, Tableau's platform gives you the flexibility to leverage current security protocols and minimize development costs by providing solutions for:

**Authentication** - Tableau supports a wide variety of authentication methods to verify a user's identity. Local authentication is available out of the box, as is support for external processes like Active Directory. When creating a single sign-on (SSO) experience, Tableau gives you the flexibility to use SAML, OpenID, Kerberos, or Windows Authentication when configured with Active Directory. You can also use Tableau's Trusted Authentication feature to integrate with any external authentication system. Learn more in [Online Help](#).

**Data Access Management** - Tableau provides row-level security to restrict users from viewing data not allowed by their security permissions. Row-level security frees you from the demands of numerous custom reports. Instead, a small number of global dashboards can serve all your users while row-level security ensures people see only what's applicable to them. Tableau also supports multi-tenancy out of the box to ensure that regardless of where you embed your dashboard, end users can only access the data and visualizations allowed by their account permissions.

Give People the Data They Need. Get the Flexibility You Require.

We know access to data is critical to your organization's success. We also understand that success looks different at every company. That's why flexibility is at the core of Tableau's platform. Whether you're designing a dashboard portal for employees or embedding analytics in your product, Tableau's solution is easy to learn, quick to deploy, and painless to manage.

To learn more,  
visit our  
**Embedded  
Analytics page.**

## About Tableau

Tableau helps people transform data into actionable insights that make an impact. Easily connect to data stored anywhere, in any format. Quickly perform ad hoc analyses that reveal hidden opportunities. Drag and drop to create interactive dashboards with advanced visual analytics. Then share across your organization and empower teammates to explore their perspective on data. From global enterprises to early-stage startups and small businesses, people everywhere use Tableau's analytics platform to see and understand their data.

## Additional Resources

[Download Free Trial](#)

[Embedded Analytics](#)

[Webinar Series](#)

## Related Whitepapers

[7 Criteria to Consider When Embedding BI](#)

[Embedding Business Intelligence: OEM with Tableau](#)

[See all whitepapers](#)

