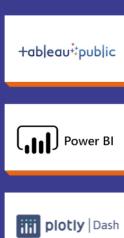
DATAcated **Tools Guide**







































































By Kate Strachnyi **DATAcated**

2022

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Introduction

Overview: There are several data visualization tools available for data analysts, data scientists, and business users. This guide that outlines some of the features for each tool to provide a method of comparison for those looking for a good data visualization tool to explore.

Background: My name is Kate Strachnyi and I absolutely love visualizing data and telling impactful data stories (I am 'DATAcated'). Though I strongly believe that the tool (technology) itself doesn't matter as much as the ability to convey information to your audience, it still plays an important role in helping those that work with data, to form visuals.

Personal Experience: The first tool I ever used to visualize data was Excel (some basic charts and graphs), and quickly moved into using Tableau when I was starting out with data visualization. The tool was easy to learn (mostly because it's like an Excel pivot table with drag and drop capabilities); though it does have some complex operation capabilities as well. After using Tableau for a few years, I moved on to learning Power BI and Qlik, and later R and Python to visualize data. In addition to those tools, I wanted to explore and learn about all the others that were available in the market; therefore, this document was formed.





Feel free to share the document with your data friends!

Contents: What follows is a one-page summary of each of the data visualization tools, including - cost & trial information, data connections, chart types, formatting options, ease of use, mobile access, and more! This document was first published in August 2020 (with a dozen tools) and was since updated to include additional tools.

Other Tools: This list does not include every data visualization tool out there, if you want to suggest a tool for us to include in the next iteration of the document, please send a message to: kate@datacated.com



Tableau Public

Founded in 2003

"Our mission is to help people see and understand data. It represents one of the great opportunities for human advancement this century: profoundly impacting health care, energy efficiency, political outcomes, industrial performance, international cooperation and scientific advancement."



Description: Software that can allow anyone to connect to a spreadsheet or file and create interactive data visualizations for the web.



Cost & Trial: Tableau Public is free to use. Tableau Desktop provides a 14-day trial; after which it's \$70 a month – for the Creator license



Data Connections: Tableau Public allows you to connect to Excel, CSV, JSON, PDF, OData, Google Sheets, etc. The paid version includes many additional connection options. You can connect multiple data sets with unions, joins, and blends. Use Tableau Public to visualize only public (not private) data.



Data Prep: The data interpreter can be used to clean a messy data set. You can strip out titles, footnotes, and empty cells, as well as fix column headers that run across several rows and reshape the data.

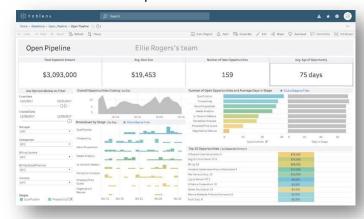


Chart Types: Several chart types are included in the Show Me tool (bar chart, line graph, pie chart, tree map, table, map view, bullet graph, etc.).



Visual Aesthetics & Customization: Default views are aesthetically pleasing with extensive ability to customize and format the visuals.

Sample Dashboard





Ease of Use: Drag & drop functionality allows even the ultra-beginners to visualize data and create complex formulas, as needed.



Mobile Friendly: Device designer gives you the ability to design, preview, and customize dashboard appearance on phones, tablets, etc.



Sharing & Publishing: You can publish a workbook to Tableau Public. Anyone with a link to the workbook can see its contents. Workbooks and the underlying data saved to Tableau Public are accessible to the public.



Customer Support & Community: Extensive support includes guides, manuals, and training videos. There are several user groups and forums of active and engaged community members to connect with.



Power BI

Founded in 2013

"Our mission is to empower every person and every organization on the planet to achieve more."



Description: Software with an interface simple enough for end users to create their own reports and dashboards.



Cost & Trial: Power BI is free to use. Power BI Pro is \$10 a month per user



Data Connections: Connects to most types of on-premise databases and they have a large and growing list of cloud-based connection options as well. Not great for dealing with huge sets of data to analyze; users will experience a lot of time-outs and slow performance.



Data Prep: Offers Query Editor; a powerful tool with several data prep and wrangling features. Power BI Pro provides access to dataflows; used to ingest, cleanse, transform, integrate, enrich, and schematize data from a large array of transactional and observational sources, encompassing all data preparation logic.



Chart Types: Microsoft Power BI has around 16 different chart types, which is a reasonable amount if you want to represent your data in a variety of formats and visualizations.



Visual Aesthetics & Customization: Several customization options to format the visualizations. Default views are acceptable.

Sample Dashboard





Ease of Use: Simple and easy to use drag & drop interface. Can become complex depending on the task.



Mobile Friendly: Power BI Mobile apps give you a 360-degree view of your data—on the go.



Sharing & Publishing: Publish to web option, allows you to embed interactive Power BI content in blog posts, websites, emails, or social media. You can also easily edit, update, refresh, or stop sharing your published visuals.



Customer Support & Community: An online database that contains guides, FAQs and a search bar to find the specific information and support. Support staff can be directly contacted at any time through a live chat feature on its website. Companies are also welcome to ask questions on the Power BI Community.



Python (Plotly | Dash)

Founded in 2012

"The mission of the Python Software Foundation is to promote, protect, and advance the Python programming language, and to support and facilitate the growth of a diverse and international community of Python programmers."



Description: Dash is a Python framework for building web applications. It enables you to build dashboards using pure Python.



Cost & Trial: Plotly's open-source graphing libraries are free to use, and don't require account registration. Plotly also has commercial offerings, (Dash Enterprise and Chart Studio Enterprise).



Data Connections: Dash can connect to any data sources that Python can connect to; this includes CSV files, databases, etc.



Data Prep: Clean and prepare your data for plotting using Pandas - a data manipulation and analysis library; capabilities include dealing with missing values, inconsistent formatting, malformed records, or nonsensical outliers.

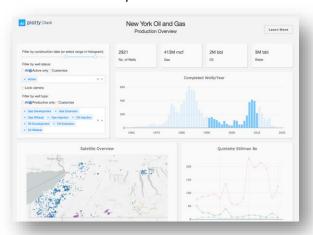


Chart Types: Dash comes with a graph component that renders charts with plotly.js. Plotly.js is a great fit for Dash: it's declarative, open source, fast, and supports a complete range of charts.



Visual Aesthetics & Customization: Every aesthetic element of the app is customizable: The sizing, the positioning, the colors, the fonts. Dash apps are built and published in the Web, so the full power of CSS is available.

Sample Dashboard





Ease of Use: Using Plotly Dash requires the user to know how to code (Python). This is not a simple drag-and drop tool.



Mobile Friendly: Since Dash apps are viewed in the web browser, Dash is inherently cross-platform and mobile ready.



Sharing & Publishing: Dash apps are rendered in the web browser. You can deploy your apps to servers and then share them through URLs.



Customer Support & Community: Has a community forum at with a topic dedicated on Dash. This forum is great for showing off projects, feature requests, and general questions. If you have found a bug, you can open an issue on GitHub at plotly/dash.



R (Shiny)

Founded in 2012

"Create free and open-source software for data science, scientific research, and technical communication."



Description: Shiny is an open source R package that provides an elegant and powerful web framework for building web applications using R.



Cost & Trial: R Shiny is free, open source, and available from GitHub.



Data Connections: Shiny can connect to any data sources that R can connect to; this includes CSV files, databases, etc. .



Data Prep: Clean and prep your data with packages from the Tidyverse. The core packages are ggplot2, dplyr, tidyr, readr, purrr, tibble, stringr, and forcats, which provide functionality to model, transform, and visualize data.



Chart Types: R allows you to design several chart types including, bar charts, line graphs, pie charts, geographic views, etc.



Visual Aesthetics & Customization: You can give your Shiny app a special look with Cascading Style Sheets (CSS). There are several color themes, or skins available.

Sample Dashboard





Ease of Use: Using R Shiny requires the user to know how to code (R). This is not a simple drag-and drop tool.



Mobile Friendly: R Shiny Dashboards are flexible and easy to specify row and column-based layouts with intelligent re-sizing to fill the browser and adapted for display on mobile devices.



Sharing & Publishing: You can share your Shiny app as R scripts or as a web page. R scripts only work if your users have R on their own computer (and know how to use it). Sharing as a web page is the most user-friendly way to share a Shiny app. Your users can navigate to your app through the internet with a web browser.



Customer Support & Community: Includes several articles and tutorials, as well as an RStudio Community. You can also check the "shiny" tag on Stack Overflow for existing answers, or post your own question.



Google Data Studio

Founded in 2018

"To empower people to identify and share insights from their data—whether it's a marketer surfacing information about which of their advertising channels is most effective, or a business analyst tracking performance metrics."



Description: A data visualization tool that lets you build interactive dashboards and custom reporting.



Cost & Trial: Google Data Studio is free of charge.



Data Connections: Connect to Google Marketing Platform products, databases, flat files, and social media platforms. It supports only a single data source. When creating tables, graphs, and charts, you can extract data from a single source instead of multiple channels.



Data Prep: There are capabilities for formatting and cleaning integrated datasets to prepare them for analysis. A developer resource will most likely be needed to automate the prep of the data.



Chart Types: It comes with several charts, including line, bar, pie, geo maps, area and bubble graphs, paginated data tables, pivot tables, and more.



Visual Aesthetics & Customization: Create reports which can be easily customized; there are enough options available here to experiment with colors, fonts, size, labels, and borders. Also, all the charts and graphs created are visually appealing.

Sample Dashboard





Ease of Use: The tool offers a highly interactive drag & drop interface where users can freely resize and align charts.



Mobile Friendly: Visualizations you create for desktop view will not scale down to mobile screens. There's a workaround to Data Studio's mobile limitations, assuming you're willing to do some work.



Sharing & Publishing: It allows the users to view the reports only online. The report created through it cannot be exported as a CSV, PDF or any other file type. The only way of sharing the reports created in Google Data Studio is by sharing the URL.



Customer Support & Community: There are videos, tutorials, quick start guides, community, as well as other support.



Qlik Sense

Founded in 1993

"Our vision is for a data-literate world. Where people, businesses, organizations, and governments tackle their most complex challenges with data. That's what excites us here at Qlik."



Description: A complete data analytics platform, from self-service visualization and exploration to guided analytics apps and dashboards.



Cost & Trial: Qlik provides a 1-month trial; after which it's \$30 a month per user.



Data Connections: Unify disparate data sources on a single platform. When manipulating views and dimensions, irrelevant data is "grayed out", so you're still able to discover hidden trends.



Data Prep: You can edit all the data tables and can rename the table and fields in the data table and update the fields from the data source. You can also add a calculated fields and adjust date and time formats.



Chart Types: There's a wide range of visualizations to use with your data. Chart suggestions enable you to select data fields and let Qlik Sense choose the dimensions, measures, and visualization types. As you add or remove fields, the suggested visualization adjusts itself based on your changes.



Visual Aesthetics & Customization: You create visualizations from pre-defined charts, fields, or custom objects. You can edit and refine your visualizations to improve design and enhance presentation.

Sample Dashboard





Ease of Use: Provides drag-and-drop capabilities offer easy dashboard and report creation without the need for scripting, complex queries or joins.



Mobile Friendly: Whether on desktop, tablet or smartphone (or if you're simply changing the size of your browser window), Qlik Sense automatically adjusts to give you the best view of its apps.



Sharing & Publishing: You publish an app to a stream. Those who have access rights to a stream can analyze data by interacting with the visualizations in the app. You can also publish an app to a collection, making it available to users outside of your Qlik Sense Enterprise deployment.



Customer Support & Community: Includes telephone support, self-help resources, product updates, and training / tutorials.



"Bringing better insights and data-driven decisions to every business."

Looker

Founded in 2012



Description: A business intelligence software and big data analytics platform that helps you explore, analyze and share real-time business analytics easily.



Cost & Trial: Looker doesn't publicly release pricing information. Pricing specialists work to create an ideal pricing structure for businesses.



Data Connections: Connect with Redshift, Snowflake, BigQuery, as well as 50+ supported SQL dialects, so you can connect to multiple databases, avoid database lock-in, and maintain multi-cloud data environments.



Data Prep: LookML helps users develop custom models within the platform. Persistent Derived Table (PDT) can be used for certain data preparation use cases.



Chart Types: It supports about 15 different types of charts with standard customization such as color palette, series types (line, area, scatter, etc.) and other typical charts.



Visual Aesthetics & Customization: You can customize a visualization to make the data more readable and to add visual styling. You can also modify the Looker theme.

Sample Dashboard





Ease of Use: Includes drag-and-drop functionality with no coding required.



Mobile Friendly: When viewing a dashboard tile visualization on a mobile device, Looker has touch options to make it easier to view information about your data.



Sharing & Publishing: You can send a Look or dashboard immediately in an email to yourself or other people or send the results to another data destination. Publish a Look with a public URL to an audience.



Customer Support & Community: Looker offers a public help center that contains a wealth of information, in published documents and videos. It also offers email support and provides training on its platform.



Sisense

Founded in 2004

"To simplify business analytics for complex data. We are pushing this concept across the entire BI value chain and embedding analytics in the physical world."



Description: A business analytics platform that enables users to join and analyze large data sets from multiple sources and a create visualizations.



Cost & Trial: Sisense doesn't publicly release pricing information; need to contact them for price quote. They offer a 240-day trial.



Data Connections: Sisense has native connectors to many SQL databases, NoSQL sources, and popular web applications. There are two ways you can connect to your data sources: live or using ElastiCube.



Data Prep: Powerful features including query revision history, autocomplete, formatting, snippets, and exploration mode enable you to go from query to answer in seconds.

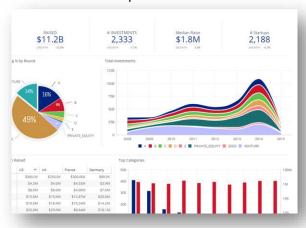


Chart Types: Sisense provides users with easy-to-understand dashboards that are well designed with good widgets, varied chart types, and informative KPI and metrics views.



Visual Aesthetics & Customization: Creates visually rich graphics that can be exported into various formats and having easy access to various sources, such as Google AdWords, to gather their data.

Sample Dashboard





Mobile Friendly: Has a mobile app for quick access. You can explore your dashboards with simple gestures optimized to let you dive deep into your data or apply filters to view the data

Ease of Use: Though Sisense's Elasticube™ allows the software to quickly pull large data sets, it's difficult

to create for the average user.



Sharing & Publishing: Owners can share dashboards that they have created with other Sisense users. The Sisense web application is not configured to be publicly accessible by default. There are steps you can take to make your Sisense instance accessible to anyone on the internet.



you want.

Customer Support & Community: Customers have a designated Engagement Manager, and access to tech support, professional services and more. Portal includes resources, videos, etc.

"To let everyone create better and more charts"

Datawrapper

Founded in 2012



Description: A tool that makes it easy for journalists and other communicators to create simple charts and maps for web articles.



Cost & Trial: Free plan to publish graphics professionally. There are professional and enterprise solutions offered for monthly / annual fee.



Data Connections: Five options to upload your data: 1) Copy & paste the data 2) Import from a CSV 3) Import from an Excel file 4) Link to a Google Sheet or 5) Create and connect a data source for updates.



Data Prep: You need to clean up the data first in spreadsheet software like Excel or Google Sheets; prior to bringing it into Datawrapper.

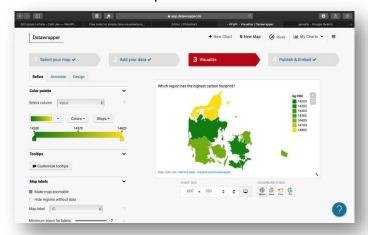


Chart Types: Datawrapper River features hundreds of charts that other Datawrapper users built and which you can reuse. Includes expected charts (bar chart, line graph, pie chart, etc.)



Visual Aesthetics & Customization: Design defaults are based on years of experience in data visualization, which keeps your charts easy to understand. No design skills required. Change colors, margins, fonts, and add elements like logos. Includes color-blind check.

Sample Dashboard





Sharing & Publishing: To publish, you can either share a URL or copy the embed code. Datawrapper has an option to update charts automatically without republishing.



Ease of Use: Datawrapper empowers everyone to create digitally optimized charts, maps, and tables. It's as easy as following four steps; no code required.



Mobile Friendly: Charts, maps & tables you create with Datawrapper are readable on all devices. Labels adjust, fewer grid lines appear, and the font size stays the same.



Customer Support & Community: Datawrapper Academy includes several tutorials and training materials. Support can be reached via email or set up a call.



Domo

Founded in 2010

"Domo optimizes your business by connecting you to the data, people, and expertise you need to improve business results. Domo helps every employee – from the CEO to the front-line worker – optimize business performance by connecting them to the right data and people they need to improve business results"



Description: A cloud-based platform designed to provide direct access to business data for decision makers across the company with minimal IT involvement.



Cost & Trial: Domo doesn't publicly release pricing information; need to contact them for price quote. They offer a trial (not clear on duration).



Data Connections: Tap into, connect or combine thousands of datasets from any on-premises or cloud source, with dynamic data transformations done on-the-fly (with over a thousand pre-built connectors).



Data Prep: Domo's drag-and-drop ETL solutions make it simple for anyone to pull data from multiple sources, process and transform it, and load it into Domo. Domo's Magic ETL platform allows you to visualize your data flows and define operations, previewing as you go.



Chart Types: There are dozens of chart types available in Domo, from basic bar and pie charts to more advanced chart types, tables, and maps.



Visual Aesthetics & Customization: Use the Analyzer tool to change how data on a card is presented and make changes with just a few clicks. Customize your page layout to emphasize certain points.

Sample Dashboard





Ease of Use: Drag & drop functionality allows even the ultra-beginners to visualize data. Able to create complex formulas, as needed.



Mobile Friendly: Domo is 'mobile-first' focused. The Domo mobile app delivers information you need, wherever you happen to be.



Sharing & Publishing: Quickly export visualizations into common software applications (PowerPoint, CSV, Excel, Print, Email). Publication groups let you share a pre-filtered view of a dashboard with someone outside your organization. Personalized Data Permissions, or PDP for internal sharing.

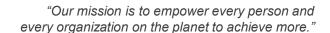


Customer Support & Community: Committed to answering data and business questions; support resources are available 24/7. Includes training and tutorials and access to dojo – the Domo community.



Excel

Founded in 1985





Description: Microsoft Excel is an electronic spreadsheet program that is used for storing, organizing, and manipulating data.



Cost & Trial: Microsoft provides a 1-month trial; after which it's \$10 a month – which includes several other programs (Word, PowerPoint, etc)



Data Connections: The data may be stored directly in the workbook, or it may be stored in an external data source, such as a text file, a database, or an Online Analytical Processing (OLAP) cube.



Data Prep: Perform basic data analysis functions – including trim, split, standardize, replace data, check for outliers, etc. If you are dealing with large data sets, it will cause Excel to become slow when performing certain operations, simply try the operation with a small sample before applying it to the whole data set.



Chart Types: Several chart options are available and pre-packaged in Excel's Chart Tools, including bar chart, pie chart, line graph, donut chart, etc.



Visual Aesthetics & Customization: Excel includes several formatting and customization options that you can use to design visually appealing data visualizations.

Sample Dashboard





Ease of Use: Most people are familiar with Excel (it's typically the first data analysis tool we are exposed to.) There's no requirement to code in order to visualize your data.



Mobile Friendly: Microsoft Excel Mobile is used for reviewing, updating, and creating spreadsheets on Windows phones and tablets.



Sharing & Publishing: You can share your dashboard with people by creating a Microsoft Group. You can also publish your Excel workbooks directly to your Power BI workspace.



Customer Support & Community: Microsoft provides training and tutorials, community forums, as well as other support.



Tellius

Founded in 2015

"Tellius' mission is to provide automatic data analysis to users through machine learning and a search-enabled engine to help them get better business insights. It aims to do that through an easy-to-use interface so all users, regardless of their technical skills, can work with big data and find faster insights."



Description: A business intelligence and analytics platform powered by machine learning so anyone can ask questions in plain language and discover hidden insights with a single click.



Cost & Trial: Tellius doesn't publicly display its pricing information. Please contact the vendor directly for a quote.



Data Connections: Connect to a wide variety of relational databases, applications, big data sources, and files. With the Spark in-memory compute engine, Tellius can use your existing Hadoop infrastructure without moving data. Data can come from applications, data lakes, data warehouse, spreadsheets, and more.



Data Prep: Data transformation – automated data profiling and custom calculations and data transformation prepares data for query and analysis. Data fusion – combines data from multiple sources and joins datasets for ease of end user query. Data pipelines – create automated data workflows to automatically connect, transform, join, and even train machine learning models on a scheduled basis

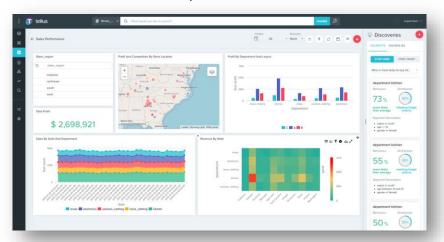


Chart Types: Tellius supports variety chart types so that you can use them to illustrate your data as per your requirement: line, bar, pie, area, scatter charts, etc.



Visual Aesthetics & Customization: Customize the analytics experience by tuning machine learning models and teaching the AI engine your business vocabulary

Sample Dashboard





Ease of Use: Automated discovery of insights saves days and weeks from manual data exploration with embedded machine learning algorithms that uncover relationships, trends, and anomalies in your data.



Mobile Friendly: Tellius is mobile friendly.



Sharing & Publishing: After adding all required dataset, joining them appropriately, and selecting the required columns from the resulting dataset, you can publish your business view. When you share the Insight, Tellius also shares the business view, datasets, and data sources associated with the Insight in the same sharing mode.



Customer Support & Community: Users can contact Tellius by email or phone during regular business hours. They can also access Tellius' help guides to troubleshoot issues.



Pyramid Analytics

Founded in 2008

"Pyramid adapts to users' needs. It provides different capabilities and experiences based on individual needs and skills, all while managing content as a shared resource. It is designed to support your organization's entire decision workflow."



Description: Pyramid Analytics provides insights for every employee across the organization with enterprise-level business analytics software.



Cost & Trial: Pyramid Analytics doesn't publicly release pricing information; need to contact them for price quote. They offer a 30-day trial.



Data Connections: The Data Sources page allows admins to manage all the various data sources and servers for querying and / or data modeling. Use the machine learning marketplace to find and use existing data science algorithms. Inject machine learning algorithms into datasets before modeling.



Data Prep: In the Model module, users can prepare data and build data models. There is also the Business User ETL, a drag-and-drop interface for cleaning and preparing raw data for analysis.

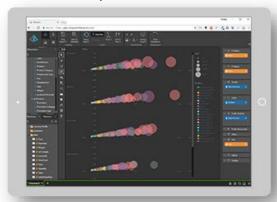


Chart Types: There are dozens of chart types available in Pyramid Analytics, from basic bar and pie charts to more advanced chart types, tables, and maps.



Visual Aesthetics & Customization: The Illustrate module allows users to add text, infographics or illustrations of their data: Dynamic infographics and data-driven dynamic text, Reusable, sharable content across presentations and publications, Composite visualizations (layered SVG and raster images), Custom visual workflows to illustrate processes.

Sample Dashboard

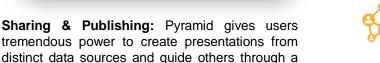




Ease of Use: In the model module, there is the Business User ETL, a drag-and-drop interface for cleaning and preparing raw data for analysis.



Mobile Friendly: The app gives you the freedom to travel with advanced analytics, dynamic dashboards, and scheduled reports, all while connecting directly to your organization's enterprise data warehouse.



rich and highly interactive data-driven environment. In the Publish module, users can create narratives of their data.



Customer Support & Community: The Free plan includes online help, online tutorials and a community forum. Silver, Gold, Platinum plans provide additional support.





Flourish

Founded in 2016

"Flourish can be used to scale and manage any kind of interactive content. Developers can easily add bespoke private templates to your account. Think of it as your CMS for interactive content."



Description: A cloud platform data visualization platform to create powerful and interactive data stories. It is a perfect medium to create different types of map data visualizations with minimum effort.



Cost & Trial: The free account gives you access to the full range of Flourish templates – with no limits to how many visualizations you can create and publish.



Data Connections: You can upload your data on the existing geographical map templates or upload your own geographic boundary file.



Data Prep: Once you upload your data in the required format, you can click the 'Preview' data tab and change the visualization settings available on the right side of the page.

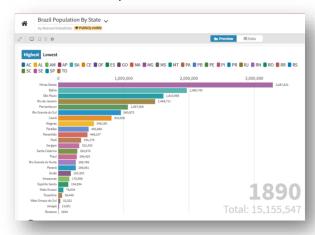


Chart Types: Easily turn your data into stunning charts, maps and interactive stories. Includes bar charts, pie charts, scatter plots, etc.



Visual Aesthetics & Customization: Flourish has this Connections globe template that lets you visualize mobility seamlessly. Having the geographical coordinates of the source and destination is sufficient to create the connections globe map. This visualization is highly interactive, and you can rotate and zoom in the globe as required.

Sample Dashboard





Ease of Use: Flourish comes with six preloaded templates for making interactive map visualizations. You have lots of design and display options available to customize the map.



Mobile Friendly: Flourish graphics work on all screen sizes.



Sharing & Publishing: Once you create your story you can publish it in Flourish server and embed the story in any online resource.



Customer Support & Community: Contact experts@flourish.studio and let us know what kind of project you have in mind. We'll help you find the right people.



Databox

Founded in 2011

"Databox pulls all your data into one place, so you can track performance and discover insights in real-time. It helps users predictably improve performance over time and take control of their career. These marketers, sale reps, execs, etc. often have data stored in multiple platforms."



Description: Databox is a business analytics platform that pulls data into one place so you can track performance and discover insights in real-time.



Cost & Trial: Databox offers a free edition, Basic (\$49), Plus (\$99), and Business (\$248). They also offer a custom plan and a free trial.



Data Connections: With our simple REST API and SDKs, just pick your favorite language (Java, PHP, Ruby, Node.js, GO, or Python) and you'll be able to connect any data source in minutes. Connect via any of our 70+ integrations, connect to data stored in Google Sheets or a SQL database, send via API or Zapier.



Data Prep: With Query Builder, you can use dimensions and filters to build custom metrics that allow you to pull more granular performance insights.



Chart Types: Use Databox to build line graphs, pie charts, tables and more.



Visual Aesthetics & Customization: Select different visualization types – tables, line graphs, bar graphs, number blocks, gauges, and 13 more – for any metric; pick from available time intervals including today, yesterday, this week, week-to-date, month-to-date, this year, and many more; compare current performance to the previous time period or a year ago; add goals, trend lines and averages – all without writing any code.







Ease of Use: Using the Datablock Library, you can easily drag-and-drop the most popular visualizations for any metric from any data source right into your dashboard.



Mobile Friendly: The Databox Mobile app allows you and your team to view all of your Databoards, track your progress toward company goals, receive important alerts on performance, and more, all from your pocket.



Sharing & Publishing: Databoards can easily be shared and accessed through the Shareable Link. The Shareable Link is a unique page outside of the Databox app where your Databoards are accessible.



Customer Support & Community: Offers online support during business hours.



"Our mission is to make every enterprise a more intelligent enterprise."

MicroStrategy

Founded in 1989



Description: Provide powerful software solutions and expert services that empower every individual with actionable intelligence.



Cost & Trial: MicroStrategy provides a 30-day trial; after which it offers various packages per user.



Data Connections: Offers native connectors and drivers to hundreds of data sources that include personal spreadsheets, relational databases, cloud applications like Salesforce, MDX sources, and many more.



Data Prep: Their native data wrangling feature empowers business users to reformat and modify their data with an extensive set of parsing and data preparation capabilities.



Chart Types: Comes with a large, flexible, and easily extensible library of interactive graphs, advanced visualizations, and maps that make it easy to understand and interpret information.



Visual Aesthetics & Customization: Create personalized dashboards and reports for every employee and deploy them via web, desktop, tablet, or smartphone. MicroStrategy offers real-time analytics, custom branding, automated distribution and delivery, and enables companies to embed dashboards into custom portals or other business applications.

Sample Dashboard





Ease of Use: Designed to enable business users who are unfamiliar with SQL to perform complex analyses of multiple data sources. Connect Chartio to a database and begin analyzing their data within minutes.



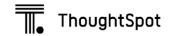
Mobile Friendly: Chartio is fully functional and scales well on any modern browser, including browsers on the majority of mobile devices.



Sharing & Publishing: Copy a customizable code snippet to embed a real-time, interactive version of your dashboard on your own site. Export your charts and dashboards in popular formats like PDF, PNG or SVG with just a click.



Customer Support & Community: Access to expert advisors, free training sessions, in-depth guides and more, Includes a live chat, working sessions, Slack communication and office hours.



ThoughtSpot

Founded in 2012

"We believe the world would be a better place if everyone had easier access to facts. ThoughtSpot exists to create a more fact-driven world through simple, yet easy to use technology."



Description: A cloud-based Search and Al-driven analytics platform that empowers non-technical business users to answer their own questions.



Cost & Trial: ThoughtSpot offers consumption or capacity-based pricing, with unlimited users. They have a 30-day free trial.



Data Connections: Connect and run live search queries in your data warehouse. Full value indexing lets you search down to the most granular data value, not just data columns or metadata. Connect to any data source on-premises or in the cloud, including data repositories, enterprise applications, or flat files. Also supports industry standard ODBC/JDBC interfaces.



Data Prep: Automated data prep for Search and Al-Driven insight across billions of row data. Modeling for search capabilities include inferred relationships between data sets, automated data model creation, combining data sets, creating custom calculations, defining synonyms, and renaming and mapping columns.

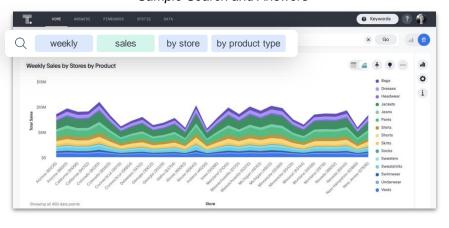


Chart Types: Al-driven best fit visualization creation based on search query. Charts automatically generated include column, pie, line, geo, scatter, and more. Automatically generated charts can be easily customized



Visual Aesthetics & Customization: Consumer-grade search experience that gives every business user the ability to answer their own data questions, no matter how complex. ThoughtSpot understands your question using NLP, calculates an answer and chooses the best fit visualization. Create shared metadata models complete with business logic on combined datasets to ensure consistent answers. Specific onboarding flows by role tailor the experience for users, accelerating adoption and their time to value.

Sample Search and Answers





Ease of Use: Minimum setup and configuration, simply connect to your data and start asking questions on billions of rows of data in a consumergrade search experience in minutes. Consumer-grade UX, leads to rapid business user adoption.



Mobile Friendly: Explore all your company's data with a tap, whether you're online or not. Includes automated alerting against changes in key KPIs.



Sharing & Publishing: Whenever you are working in ThoughtSpot, you are in your own private environment until you share your work with others. Sharing applies to Searches, Pinboards, and any Search data models that are all indexed and made searchable. You can follow pinboards and metrics, and request access to content you don't have permissions to.



Customer Support & Community: ThoughtSpot offers a variety of free resources for customers, such as videos, webinars, and whitepapers, as well as training. Support staff can be reached through an online support portal, email, and phone.



Infogram

Founded in 2012

"Infogram enables faster publishing of data-driven content, helping your team publish beautiful charts, infographics, maps and reports."



Description: Infogram is a data visualization company that helps people create infographics, reports, dashboards, maps, charts and social media assets.



Cost & Trial: Infogram pricing starts at \$25.00 per month. There is a free version. Infogram offers a free trial.



Data Connections: Each chart comes pre-populated with placeholder data to show how your indicators should be formatted when inserted into the chart. You can enter your data manually, copy-paste them, upload spreadsheets, as well as add the indicators from external sources.



Data Prep: The intuitive and lightweight editor allows you to structure data, customize styles and colors easily, set the display options, and add icons.



Chart Types: Infogram is a great tool to build detailed and beautiful looking infographics, graphs and more than 35 chart types or diagrams.



Visual Aesthetics & Customization: It enables you to share your visualization on social media or embed them using an interactive HTML option.

Sample Dashboard





Ease of Use: Infogram also lets you pull together various elements into a well-defined output by simply dragging and dropping your chosen tools. With it, you can achieve a professional-looking presentation without all the complicated processes.



Sharing & Publishing: By default, all Infogram projects display a Share button that allows viewers to share your content on social platforms, as well as embed it on other webpages by using our embed codes.



Mobile Friendly: Infogram uses stateof-the-art technologies to offer the best possible experience for the web and mobile devices.



Customer Support & Community: On the phone or online support available.



Amazon QuickSight

Founded in 2010

"QuickSight lets you easily create and publish interactive BI dashboards that include Machine Learning-powered insights. QuickSight dashboards can be accessed from any device, and seamlessly embedded into your applications, portals, and websites."



Description: A cloud-based scalable, serverless, embeddable service that lets you easily create and publish interactive BI dashboards that include Machine Learning-powered insights.



Cost & Trial: Offers a pay-per-session model for dashboard readers. Instead of paying a fixed license cost per month, readers are billed **\$0.30** for a 30-minute session up to a maximum charge of **\$5**/reader/month for unlimited use.



Data Connections: The platform integrates with data sources like Amazon Redshift, Amazon Athena, Amazon S3, Amazon Aurora, Apache Spark, Presto, SQL servers, local Excel files, and more. It also supports information from services like Salesforce and Tableau.



Data Prep: You can improve the performance of database data sets by importing the data into SPICE instead of using a direct query to the database. SPICE stores your data in a system created for high availability, where it is saved until you choose to delete it.



Chart Types: There are dozens of chart types available, from basic bar and pie charts to more advanced chart types, tables, and maps.



Visual Aesthetics & Customization: AutoGraph uses an algorithm to automatically choose visual presentations for the data you select. You can then select your own visualizations from selections like heat maps, treemaps, combination charts, pivot tables, and more. You can also change the colors, apply filters, and reorganize their positions.

Sample Dashboard





Ease of Use: Allows users without coding knowledge to explore data and extract different insights.



Mobile Friendly: The mobile app enables you to securely get insights from your data from anywhere.



Sharing & Publishing: After you publish a dashboard, you can share it with other users or groups, and choose the level of access to grant them. You can also choose to share with all users in your Amazon QuickSight subscription.



Customer Support & Community: With QuickSight, you can ask business questions of your data in plain language and receive answers in seconds. Visit the Amazon QuickSight community forum to get your questions answered and provide your feedback.



TIBCO Spotfire

Founded in 1996





Description: Spotfire is a scalable enterprise-grade analytics platform offering one single immersive environment with everything from data exploration and ad-hoc discovery to advanced analytics applications.



Cost & Trial: TIBCO Spotfire doesn't publicly release pricing information; need to contact them for price quote. They offer a 30-day trial.



Data Connections: Easily connect to and blend data from relational and NoSQL databases; OLAP; Apache Drill, Hadoop, and Spark SQL; Impala; SAP HANA; and many others. Over 60 native "Out-of-The-Box" connectors including those for cloud applications like Amazon Redshift, Databricks, RDS, Microsoft Azure SQL Database, Google Analytics, and Salesforce.



Data Prep: Use Spotfire's visual Data Canvas to combine, clean, enrich, and transform data from a variety of sources, including big data sources—all directly within the same analysis environment. Manage with an autorecorded, editable, sharable data preparation lineage that supports audit needs.

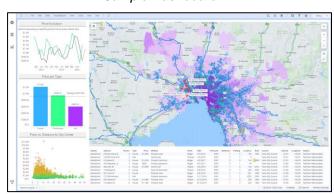


Chart Types: There are dozens of native chart types available in Spotfire, from bar and pie charts to more advanced KPI charts, tables, and multi-layer map visualizations. An infinite number of custom charts can also be created with the Spotfire Mods JavaScript Framework.



Visual Aesthetics & Customization: Instant dynamic drilldown calculations on fully brush-linked analysis blending both historical analysis with real-time streaming data. Also offers an extensible framework for low-code analytics application development if desired, including integration of native Python and R engines.

Sample Dashboard





Ease of Use: Point-and-click insight discovery along with drag & drop functionality allows even the ultrabeginners to visualize data. Able to create advanced formulas, as needed.



Mobile Friendly: Represents the state of the art in visual data discovery, analytic applications and self-service dashboard creation; with mobile apps for iPhone and Android.



Sharing & Publishing: Share analyses publicly with one-click web deployment to a select individuals or within a TIBCO Cloud™ Spotfire® team. Any analysis can be published to the Library and opened in a browser with Spotfire Web Player.



Customer Support & Community: Provides support management, enterprise-wide knowledge search, documentation, downloads, case filing/support management, and the TIBCO Community.



Yellowfin BI

Founded in 2003

"Build beautiful dashboards that drive action, tell compelling stories with data and monitor your business in real time automatically."



Description: Yellowfin simplifies the entire analytics workflow. From connecting to and preparing your data, to building dashboards and preparing management reports, the Yellowfin BI platform has you covered.



Cost & Trial: Yellowfin doesn't publicly release pricing information; need to contact them for price quote. They offer a 30-day trial.



Data Connections: Connect to all your data, whether in databases, spreadsheets or via a web API, and prepare it for analysis. Yellowfin enables you to create data sets that are governed and secure. Enabling reuse for self-service reporting.



Data Prep: Prepare your data for analysis. Yellowfin has everything you need to connect and extract data from all your business sources, including spreadsheets, Web APIs, and databases.

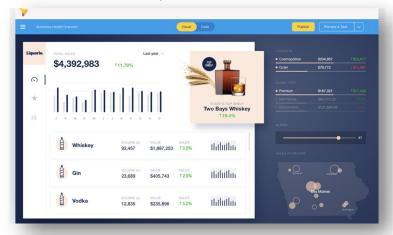


Chart Types: Yellowfin has a very powerful and easy-to-use charting feature which enables you to produce sophisticated and visually appealing charts to display a simple summary of your data or to represent complex relationships within it.



Visual Aesthetics & Customization: With Yellowfin, once you have selected the data to be used in the report, you can visualize this data in many ways simply by altering the attributes that you use in the chart. Yellowfin Dashboards look great out of the box, but with our user-friendly design and developer tools, you can easily create highly customized dashboards to suit your specific needs.

Sample Dashboard





Ease of Use: A free-form dashboard canvas that enables designers to easily assemble creative, on brand infographics & actionable dashboards.



Mobile Friendly: Yellowfin mobile app, a part of the Yellowfin analytics suite, extend the ability to discover, collaborate and act on insights and create an inclusive and effective data culture with an experience reimagined for a mobile world.



Sharing & Publishing: Users can share reports with others on an ad hoc basis. There are three types of report sharing available: distribution, email, and embedding.



Customer Support & Community: Yellowfin University and Community provide support and educational content. Go to Yellowfin Support Center to review the latest release notes and downloads.



Oracle Analytics

Founded in 1977

"Empower leaders, analysts, and IT to access data from wherever they are, including mobile devices. Oracle Analytics Cloud is embedded with machine learning, which helps organizations to discover unique insights faster with automation and intelligence."



Description: Use augmented analytics to instantly visualize your data, jump-starting your analytics process.



Cost & Trial: Oracle Analytics doesn't publicly release pricing information; need to contact them for price quote. They offer a 30-day trial.



Data Connections: A project enables you to dynamically explore multiple data sets in graphical way, all within a single interface. You can upload data from many commonly used data sources to create robust sets of information within project visualizations.



Data Prep: Enrich your datasets with automated machine learning recommendations to include time variations, population, geography, and more. The longer you use Oracle Analytics Cloud, the more it understands the way you interact with data, allowing machine learning to augment your data and suggest smart enrichment options before you even start.



Chart Types: The layout editor supports a variety of chart types and styles to graphically present data in the layout, including area, bar, bubble, pie, funnel, etc.



Visual Aesthetics & Customization: It visualizes, interacts, and shares the data to find out the risk and opportunities in the analysis. Deploys visualization through graphs, 3D charts, and other interactive forms.







Ease of Use: With automated chart and graph recommendations using machine learning, anyone can quickly build compelling, visual stories that best represent the data.



Sharing & Publishing: Easily produce and schedule reports for your teams, staff, and customers. With reports and presentations automatically generated from visualizations, users save time and effort to publish reports in a timely and easily shareable manner.



Mobile Friendly: Stay connected with automated insights and ongoing monitoring of business activities from anywhere at any time. Receive intelligent recommendations as it learns each person's own patterns & data interests.



Customer Support & Community: Search their Knowledge base and engage Communities to learn about products, services, and to find help resolving issues.



IBM Cognos Analytics

Founded in 1969

"Analyze, Visualize, & Derive Insights in a Singular Unified & Secure Environment with IBM. Uncover Hidden Trends and Drivers in Your Data and Deliver Insights in Real Time with Al."



Description: One BI solution can do it all: clean and connect your data, create stunning data visualizations, and show you where your business is today while helping predict what will happen tomorrow.



Cost & Trial: IBM Cognos provides flexible pricing \$15-\$40 per user, depending on needs. They offer a 30-day trial.



Data Connections: Import data from CSV files and spreadsheets. Connect to cloud or on-premises data sources, including SQL databases, Google BigQuery, Amazon, Redshift, and more.



Data Prep: Save time cleaning your data with Al-assisted data preparation. Clean and prep data from multiple sources, add calculated fields, join data, and create new tables.



Chart Types: IBM® Cognos® Workspace Advanced includes a number of chart types, such as column, bar, area, and line charts.



Visual Aesthetics & Customization: You can create custom visualizations to meet your specific business needs. IBM® Cognos Analytics allows developers to create and test custom visualizations locally before they make them available to other users.

Sample Dashboard



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Ease of Use: Quickly create compelling, interactive dashboards. Drag and drop data to create auto-generated visualizations, drill down for more detail, and share using email or Slack.



Mobile Friendly: Stay connected on the go with the new mobile app. Access data and get alerts right from your phone, 24/7.



Sharing & Publishing: Keep your stakeholders up-to-date, automatically. Create and share dynamic personalized, multi-page reports in the formats your stakeholders want..



Customer Support & Community: IBM has a comprehensive customer support system that includes training and certification courses, and customer service available for users of their business intelligence programs



SAS Visual Analytics

Founded in 1966

"We envision a world where everyone can make better decisions, grounded in trusted data and assisted by the power and scale of SAS® Analytics. When decisions happen at just the right moment, advancements are set in motion and the world moves forward."



Description: SAS Visual Analytics provides a single application for reporting, data exploration and analytics.



Cost & Trial: SAS doesn't publicly release pricing information; need to contact them for price quote. They offer a 14-day trial.



Data Connections: Data connectors contain connection information and data-source specifics to connect with data sources, such as Oracle or SAS data sets.



Data Prep: Access, profile, cleanse and transform data using an intuitive interface that provides self-service data preparation capabilities with embedded AI.

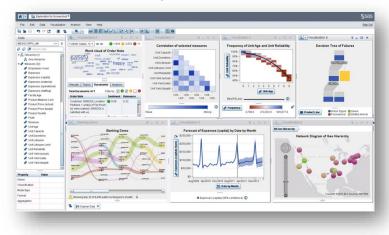


Chart Types: Visually explore data and create charts including, line, bar, scatter, pie, donut, bubble, etc. You can also create and deploy custom, natural language chatbots via an intuitive, low-code visual interface for chatbot-enabled insights and conversational user experiences.



Visual Aesthetics & Customization: Create stunning interactive reports and dashboards. Executives and front-line staff can quickly interact with and collaborate on insights, slice and dice them to find their own answers, and better understand business performance.

Sample Dashboard





Ease of Use: Self-service data preparation gives business users the ability to import their own data, join tables, apply data quality functions, create calculated columns and more – all with drag-and-drop ease.



Mobile Friendly: Use native mobile apps for iOS, Windows 10 and Android to view and interact with others through dynamic reports and dashboards on tablets and smartphones.



Sharing & Publishing: Go directly from reporting and exploration, to analysis, to sharing information through different channels, including Microsoft Office applications, with a single interface.



Customer Support & Community: Connect with other SAS users by joining a users group or attending an upcoming event. You can also contact technical support and review several training materials.



SAP Lumira

Founded in 2012

"Accelerate decisions by creating impactful interactive maps, charts, infographics, dashboards, and business intelligence (BI) applications with ease."



Description: SAP BusinessObjects Lumira also known as Lumira is a business intelligence software developed and marketed by SAP BusinessObjects.



Cost & Trial: SAP Lumira doesn't publicly release pricing information; need to contact them for price quote. They offer a 30-day trial.



Data Connections: Lumira connects directly to SAP HANA (OLAP connection) using a JDBC connection and SQL as the communication language. It can access data from Excel, SAP HANA and many more data sources.



Data Prep: Using SAP Lumira you can change basic parameters such as the addition and removal of rows, columns, dimensions and measures. As well as more complex functions such as defining time and geographical hierarchies.



Chart Types: There are different types of charts available in Lumira, including options for comparison, percentage, correlation, trend, and geographic.



Visual Aesthetics & Customization: Single, simple design canvas that fosters collaboration between the business and IT and speeds adoption

Sample Dashboard





Ease of Use: Explore and analyze data online with a simplified solution. Create stories with BI visualizations from all types of data that others can leverage, build on, and share.



Mobile Friendly: Develop interactive, mobile-ready dashboards and analytics applications to collaborate with users and their data stories. Provide fingertip access to actionable insights.



Sharing & Publishing: In SAP Lumira you can create stories that provide a graphical narrative to describe your data by grouping charts together on boards in order to create simple presentation style dashboards. Publish your offline-data-based story board to Lumira Cloud and easily share it with others. In this blog I'll introduce the new publishing workflow..



Customer Support & Community: Provides product support, knowledge base access, expert chat, and training.



Narrative Science: Lexio

Founded in 2010

"We live at the intersection of technology and humanity. We believe in the power of data and the power of stories. When the two come together, they empower everyone to understand and use data in a way that has never been possible before."



Description: Lexio is a simplified, businessuser-first revamp of data analytics. Put insights from your business data in the hands of everyone at your company.



Cost & Trial: Lexio doesn't publicly release pricing information; need to contact them for demo / price quote.



Data Connections: Business data can live in a lot of different places. With Lexio, it's easy to connect to your data no matter where it lives.



Data Prep: Once you are connected, work with their team to map your data to their knowledge base. After initial connection, Lexio pulls the data as often as you'd like.

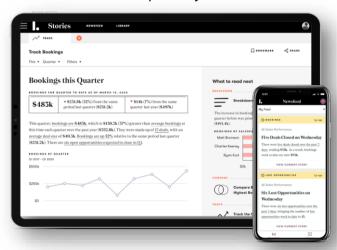


Chart Types: Data visualizations are great, but not everyone can understand them. Lexio gives your users data insights as easy-to-understand stories.



Visual Aesthetics & Customization: Instead of static dashboards, Lexio gives every business user a personalized data digest - right where they already work.







Ease of Use: Lexio brings insights to your business users, and even anticipates what they need to know next.



Mobile Friendly: A business analytics mobile app like you've never seen before. Dashboards are not meant for mobile. Lexio brings insights about your business delivered just like your favorite apps.



Sharing & Publishing: Lexio users can push parts of their Lexio stories into Slack so that everyone can see the success of the team. Lexio takes your business data and automatically turns it into stories. Lexio Sales Application connects directly to Salesforce and writes stories about your sales data.



Customer Support & Community: You can contact support, or browse through several resources, including blogs, webinars, whitepapers, etc.

PLECTC

Plecto

Founded in 2012

"We believe that you can reach your full potential. With the right tools, there's no mountain high enough! Our goal is to help companies achieve their goals by boosting individual and team's performance."



Description: Plecto is a business performance platform that integrates all company data into live, adaptable dashboards on TV's, mobile devices or desktops.



Cost & Trial: Pricing ranges from \$200-\$350 a month (up to 10 users), as well as custom pricing options. Plecto offers a 14-day trial.



Data Connections: Connect with one of our 50+ pre-built integrations or public API to gain a complete overview of your KPI data. We also make it possible to add data through Excel, SQL, Zapier or our own REST-based API.



Data Prep: Set up a complete dashboard in just a few clicks with 200+ pre-built widgets. Simply connect a data source and choose from a list of popular widgets and you're good to go.



Chart Types: If the pre-built widgets are not enough for your business, you can also create your own custom formulas and metrics to visualize any KPI you want to track on your dashboard.



Visual Aesthetics & Customization: You can decide the color, logo and styling of your Plecto dashboards to make it match with your company's brand identity. Be as creative as you want or choose from their prebuilt templates and themes.

Sample Dashboard





Ease of Use: In just a few clicks you're able to pull and visualize data on a dashboard on any screen from the software systems you use today.



Mobile Friendly: Bring your Plecto dashboards wherever you go with the mobile app. Show it on your TV or access your dashboards on the go with our app for android, iPhone and Apple Watch.



Sharing & Publishing: Import data from your different systems across-departments onto a single dashboard and make the overview accessible to the whole organization to follow the business performance. Whitelist as many IP-addresses as you would like, allowing those users to view dashboards and slideshows without having to log in.



Customer Support & Community: Provides support via phone calls or live chat. Includes additional resources, such as a blog and customer success stories.

ARRIA

Arria NLG

Founded in 2009

"Through data analysis, knowledge automation, language generation and tailored information delivery, Arria software replicates the human process of expertly analyzing and communicating data insights. Arria dynamically turns data into written or spoken narrative at machine speed and on a massive scale by giving data the power of language."



Description: Arria NLG is a form of artificial intelligence that transforms structured data into natural language.



Cost & Trial: Arria doesn't publicly release pricing information; need to contact them for price quote / demo.



Data Connections: Gain access to data insights faster and easier than ever before. Simply type a question and get the answer, without having to analyze or interpret visuals.



Data Prep: Arria for BI is available for all major Business Intelligence platforms. Select your preferred application below to begin adding intelligently generated narratives to your dashboard and augment your visuals with instant insights and unmatched data communication.

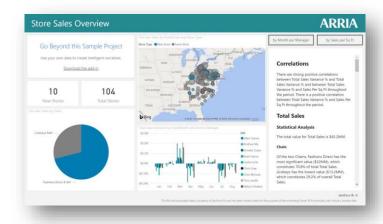


Chart Types: Quickly identify, communicate, and action key insights with configurable, out-of-the-box NLG narratives — based on visuals, or all underlying data.



Visual Aesthetics & Customization: Arria dynamically turns data into written or spoken narrative at machine speed and on a massive scale by giving data the power of language.

Sample Dashboard





Ease of Use: Arria Answers is a conversational-Al platform that integrates with business intelligence dashboards and Amazon Alexa— giving businesses real-time access to key insights from data – using natural, spoken language.



Mobile Friendly: The ability to access key information in near real-time, communicated as if written by your company's top analysts—at an NLG writing-speed—is truly astonishing.



Customer Support & Community: Arria provides business development and product support from its network of offices, it also has a growing network of regional and global development partners.



Sharing & Publishing: Reports that previously took expert analysts thousands of man hours to produce can now be done in seconds thanks to Arria's natural-language technologies.



Juicebox

Founded in 2004

"In a world weighed-down with complex analytics and cumbersome visualizations, we're here to make data delicious."



Description: Juicebox is a data visualization platform for consultants and information workers who want to impress with their next data-rich presentation.



Cost & Trial: Free for individuals. Monthly subscription (\$49) to share across your team. Affordable to add users across your organization with custom pricing.



Data Connections: You can upload your data in comma delimited format (CSV). Pro pricing tier supports direct database connections.



Data Prep: Several options are available for preparing your data, including unmerging, removing rows / columns, revise columns, restructure data, and more.

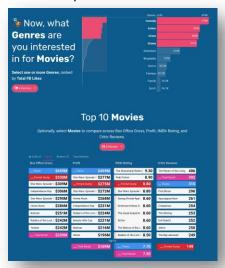


Chart Types: You can add several chart types, including data cards, bar charts, tables, scatterplots, leaderboards, maps and trends.



Visual Aesthetics & Customization: Juicebox makes it easy to create your data presentation in minutes. Automagically add your data and bring it to life in Story Designer. You don't need to be a designer to give your data a premium look-and-feel.

Sample Dashboard





Ease of Use: The best infographics seamlessly combine data visualization with graphics and text to underscore your message. Create presentations in minutes.



Mobile Friendly: Juicebox apps are mobile-responsive to support visibility and designed to support touch-based exploration.



Sharing & Publishing: Your data presentation can be set to public (no sign-in required) or private (users need to sign-in). You decide who you want to share with, and whether those people have viewer or editor access.



Customer Support & Community: Provides a help center with tutorials on how to get started with Juicebox, a contact us page, and additional resources – e.g., design principles, blogs, etc.



MachEye

Founded in 2018

"At MachEye, we create engaging data experiences for everyone in your organization. Through MachEye, we aim to shatter the barrier which restricts people from conversing with their data naturally."



Description: Discover AI-powered insights and accelerate better business decisions with intelligent search, actionable recommendations, and interactive stories.



Cost & Trial: MachEye Basic is and will always be free. You can also try the Essentials plan for 15-days without an obligation (\$18 per user / month).



Data Connections: Connect to a variety of data stores instantly and get curated data enriched with entity relationships and metadata ready for use.



Data Prep: MachEye automatically discovers data models and enables you to manage metadata models complete with business logic to ensure consistent answers. No data duplication or transformation is required.



Chart Types: Easily consumable and engaging data experiences powered by storytelling: Interactive charts and automatic natural language narration make analytics an audio-visual experience.



Visual Aesthetics & Customization: MachEye reimagines business intelligence to deliver Click-less analytics that answers natural language questions instantly, leverages contextual AI models to generate advanced insights, and presents insights as interactive audio-visual stories.

Sample Dashboard





Ease of Use: Enjoy the only YouTube-like experience for business data, where insights come alive through engaging and interactive audio-visual stories.



Mobile Friendly: With MachEye, business users can ask questions, watch interactive stories and headlines, review recommendations, and create dashboards on their mobile devices on the go.



Customer Support & Community:

Provides several resources – blogs & videos, as well as an option to set up a demo.



Sharing & Publishing: Get personalized insights automatically delivered as Business Headlines. Always be aware of what's happening in your data, even before you search.



Incorta

Founded in 2013

"Our mission has, and always will be, to build products that expand enterprise data capabilities, and cut project time and cost by more than 80% with speed, simplicity, and accuracy. We're proud to be recognized as a leader in achieving this goal."



Description: Incorta's in-memory analytics and Direct Data PlatformTM is a modern approach to data management, analytics and BI that sets them apart..



Cost & Trial: Incorta doesn't publicly release pricing information; need to contact them for price quote / demo. You can try it for free!



Data Connections: Directly connect to any data source, schedule high-performance extraction, and build a modern, durable data hub that is versatile, compact and that feeds multiple workloads.



Data Prep: Unlike a data warehouse, Incorta maintains all of your data in its original form, providing you with a single source-of-truth for strategic and operational decision-making, data science and machine learning, and other computational workloads.



Chart Types: Incorta supports various visualization types including tables and charts with different dimensions that you can use to plot your data. Including bar charts, line charts, pie charts, map charts, scatter plots, and more.



Visual Aesthetics & Customization: After choosing the suitable visualization in the Analyzer, Incorta enables you to configure the pill properties, filter properties, as well as the settings to create an insight.

Sample Dashboard



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Sharing & Publishing: The Incorta Analyzer is a visual tool for exploring your data, discovering insights, and sharing with others.



Ease of Use: A powerfully simple selfservice analytics visualization and dashboarding tool can be used by everyone in the organization looking to leverage better data for decision making.



Mobile Friendly: Incorta Mobile empowers business teams to quickly access data and make decisions on the go.



Customer Support & Community: There's a community, help center, resources/ documentation, and customer support.



GoodData

Founded in 2007

"To empower all users, no matter their technical proficiency, to make decisions with accuracy and confidence."



Description: The analytics platform for every need. Scalable, cost-efficient, and composable. Easy to embed, easy to customize.



Cost & Trial: They offer a free, growth, and enterprise plan; annual billing plans. priced by features and data volume — not per user or query.



Data Connections: Connect to data warehouses and databases (e.g., AWS Redshift, BigQuery, Snowflake, PostgreSQL, Vertica), storage services (e.g., Amazon S3, Azure Blob Storage), data source managers (e.g., Dremio, Apache Drill), CSV files manually uploaded, and many others.



Data Prep: With analytics separated from visualization, you have the freedom to use multiple visualization tools (many heads) along with a single analytics engine..



Chart Types: Analytical Designer let's you visualize your data in many types of insights. Each insight type has slightly different options and may enable you to display different types of data.



Visual Aesthetics & Customization: Analytical Designer allows you to change the default properties of your insights. You can show or hide axes, disable gridlines, rotate labels, change colors, and so on.

Sample Dashboard





Ease of Use: With drag-and-drop self-service and minimal training, business teams can (1) create their own new reports, visualizations, and dashboards, or (2) modify those built by your data teams.



Mobile Friendly: Embed and customize for any web or mobile app



Customer Support & Community: Access to support, Slack, forums, issue tickets, community, and university.



Sharing & Publishing: Reports and dashboards are optimized for desktop, tablet, and mobile, and can be easily shared via access rights, scheduled emails, and file exports.



Count

Founded in 2016

"We're not another data tool. We've rebuilt the way teams collaborate from the ground up so you can go from data requests to answers in no time without the need for more tools, meetings, or reports."



Description: Collaborative data platform that connects analysts to stakeholders.



Cost & Trial: Currently offering beta version; free to request access. They also have starter plans & team plans.



Data Connections: Bring your SQL workflow out of the 90s with version control, real-time collaboration and everything else you need to work closer with your team. Unlike other notebooks, Count is built to work seamlessly with your database. It keeps your data in your database, making it perfect for bigger datasets and keeping everything secure.



Data Prep: Count makes SQL analysis a breeze. Structure your code, iterate quickly and stay in flow with a notebook built for SQL...

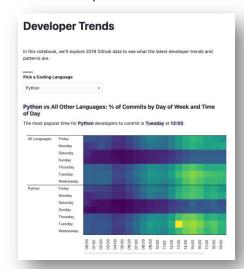


Chart Types: Visualize your results instantly or customize them to build beautifully detailed charts in just a few clicks.



Visual Aesthetics & Customization: Use text and images to add context and tell a story everyone can understand. Keep your narrative in-sync with dynamic text that automatically updates as the data changes.

Sample Dashboard





Ease of Use: Build queries in cells and structure your analysis down the page with annotation in a way that simply makes sense.



Mobile Friendly: Share your reports with anyone, anytime on either mobile or desktop. For free.



Customer Support & Community: Offers helpful documentation, blogs, and an email address for support.



Sharing & Publishing: Share your work instantly and securely. Create beautiful visuals, hide your code, and share insights quickly so your team can make decisions faster.



Astrato Analytics

Founded in 2016

"Our vision is to be everyone's favorite data analytics and visualization solution for data in the cloud. Our mission is to make our customers' data talk and move data to the heart of every business conversation."



Description: Next generation cloud BI for modern data teams, with live data insights and dashboards on top of Snowflake.



Cost & Trial: Experience all the possibilities of live data insights with Astrato, FREE for up to five users. Also offers Professional & Enterprise plans.



Data Connections: Direct access to Snowflake's Data Cloud. No handover of data means greater agility, performance, and security. Explore Big Data instantly and make live data decisions.



Data Prep: Astrato Workbooks provide a creator-centric canvas for all data users to bring complex data to life – no coding skills needed..

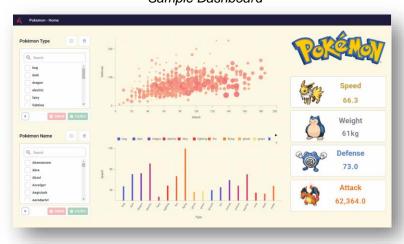


Chart Types: A flexible creator-centric tool for developing engaging, interactive dashboards. Can build tables, bar chars, line charts, pie charts, progress charts, scatter charts, heatmaps, and more.



Visual Aesthetics & Customization: Enjoy the freedom to customize dashboards to suit your data exploration and branding needs.

Sample Dashboard





Ease of Use: Analyze and visualize your data with Astrato's intuitive Workbooks. Simple drag and drop functionality to get started quickly.



Mobile Friendly: Empower your employees to make smart decisions - right within the business apps they use



Customer Support & Community: Offers a help center, documentation, resources, and a chat box.



Sharing & Publishing: Live data alerting to notify you immediately when your data changes. Comment and collaborate on dashboards to harness your team's collective intelligence. Edit, submit and update data at the source to streamline your workflows



Sigma Computing

Founded in 2019

"Our mission is to empower everyone to make the best possible decisions at every turn by removing the barriers that prevent people from analyzing data across sources and delivering the full spectrum of self-service cloud analytics and business intelligence."



Description: Sigma was designed to enable cross-functional teams to make data-driven decisions by harnessing the full power of the cloud. .



Cost & Trial: Offers a 14-day free trial. Sigma doesn't publicly release pricing information; need to contact them for price quote / demo.



Data Connections: Connect to Snowflake, BigQuery, Redshift, and Databricks (coming soon). Join data sets and analyze hundreds of billions of rows of data in seconds without having to summarize, aggregate, extract, or cube data for performance



Data Prep: Curate data sets, iteratively analyze data, and make calculations against billions of rows of live data using spreadsheet skills, pivot tables, and formulas to find answers in seconds.

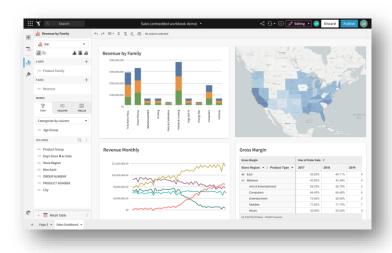


Chart Types: Sigma supports the following visualization types, bar charts, line charts, area charts, scatter charts, donut charts, pie charts, single value visualizations, funnel charts, and more.



Visual Aesthetics & Customization: Every visualization type supports some level of formatting. However, the complexity of available formatting options varies greatly between visualization types.

Sample Dashboard





Ease of Use: Create your first dashboard in minutes. Freely – and securely – drill down, pivot, and calculate data.



Mobile Friendly: Dashboards are mobile friendly.



Customer Support & Community: Access to learning library, documentation, blog, and chat box.



Sharing & Publishing: Share, comment, and communicate your data story.

Conclusion

Purpose: Each of the tools discussed serves a unique purpose and audience. Some tools are better for specific data visualization needs than others. In the end, the tool truly doesn't matter – it's all about addressing the business need and making sure your audience receives the message you want to impart.

Gratitude: I'm so excited that you read the *DATAcated Tools Guide* and hope you were able to find all the information you were searching for. I'm grateful to the amazing data community for your continued support.

Updates: The document will continue to evolve and will be updated with additional data visualization tools. Let me know if you see something in the <u>document that needs to be corrected</u>.

Data Visualization Courses: If you're interested in courses on data visualization – go ahead and check out the DATAcated Circle. Some of our popular courses include: *DATAcated Storytelling*, and a series of 'Data to Dashboard' courses including several of the tools discussed in this document. Courses include downloadable resources, such as the Visual Best Practices Checklist and DATAcated Chart Selector Guide.

Author: Kate Strachnyi is the Founder of DATAcated, providing brand amplification for companies focused on artificial intelligence (AI), machine learning (ML), and data science. She's also the founder of the <u>DATAcated Circle</u> – a community for ALL data professionals, where you can also find educational resources on data visualization best practices. Kate has delivered several courses on data storytelling, dashboard techniques and visual best practices.

Additionally, Kate is the host of the DATAcated Conference and the DATAcated On Air Podcast. Kate was appointed a LinkedIn Top Voice of Data Science & Analytics in 2018 & 2019. She's the mother of two girls and enjoys running ultra-marathons and obstacle course races.



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