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Product Review
Google Data Studio

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Launched in May 2016 as part of Google’s paid Analytics360 suite, Google Data Studio is a new data visualization program designed as a user-friendly tool for representing complex data sets in an attractive and clear fashion. In August 2016, Google made the program free to the public. Data Studio is still in beta release; the features and third-party integrations reviewed here are subject to change, but were current as of August 2017.

Data Studio’s core function is a dashboard-style visual interpretation of social media and web analytics such as Google’s AdWords and YouTube analytics; however, its support of tools like MySQL and Google Sheets indicates the program could be used by researchers to interpret their own data in an equally attractive and user-friendly format.

Data Studio’s ability to interpret and visually represent web metrics could be useful to business and communications researchers or anyone working with Google Analytics data. In addition, researchers looking for dynamic ways to present their own research or interpret data from repositories such as those at the Inter-University Consortium for Political and Social Research (ICPSR), the United Nations, or the U.S. Census Bureau should find Data Studio useful.

Available for free to anyone with a Google account, Data Studio is a potential solution for researchers for whom full-featured data visualizations programs are either unaffordable or overpowered.

Data Studio’s purpose is to help users “create dynamic, visually compelling reports and dashboards” by channeling external data sources into an easily navigated platform, facilitat-
ing the creation and sharing of data-based reports (Google, n.d.-a). Data Studio performs admirably in producing attractive and understandable data visualizations (See Figure 1); whether the creation process is intuitive is debatable. Working with data from Google’s analytics tools was smooth; however, using third-party data connected via Google Sheets was less simple, suggesting that although Google advertises this feature, it may not be a priority for Google developers.

**Figure 1.** Example Data Studio Visualization - Marketing Website Summary Report

The Data Studio user interface is recognizable to anyone who works with the Google office suite. Color and labeling schemes are consistent across platforms, making it easy to navigate Data Studio’s menus. Like Google’s Slides tool, Data Studio uses sidebar menus to facilitate the creation and formatting of its interpretive elements. Data Studio relies on the usual mix of chart and graph types found in many data tools but enhances them with features, including the ability to integrate multiple sources into a single report, enable dynamic updating
of reports, and create new metrics for analysis within the platform rather than requiring modification of original data. One of the tool's most impressive features lets viewers interact with findings in real time by allowing them to adjust date ranges of the data displayed; filter reports to specific variables like gender, income, or countries; and perform other functions that enhance the visualization's relevance to the viewer. Another of Data Studio's strong points is its sharing and collaboration features. Creators can share their reports publicly or privately and set permissions to enable collaborators to view and to edit their work at will. Note that Data Studio reports exist independent of their underlying data, so when a report owner gives editing or viewing access to a third party, that individual would not be able to view or modify the original data without being given separate access.

Like all Google products, Data Studio is capable of handling data in 37 global languages and 59 international currencies. Data Studio also provides a rich library of help documentation addressing many of the platform's features and quirks (https://support.google.com/datastudio). Unfortunately, the depth of information available is hampered by the help menu's dependence on search-based navigation and its lack of a linear table of contents allowing users to browse documentation. Access to Data Studio requires an active Google account and access to Google Drive, both of which are available in most countries; however, in certain countries like Russia and the People's Republic of China, users are limited to read-only access to others' reports. Data Studio's support of user accessibility is not apparent. While Google provides extensive documentation about the ADA compliance of its most popular tools via its accessibility page, the Analytics360 suite is not listed on that page, leaving the topic unaddressed (Google, n.d.-b).

When considering whether to use Data Studio, researchers should also consider the type of data they will be using. For aggregate or anonymized data, Data Studio is fine; however, many cloud-based services, including Google, consider data stored on their servers to be theirs, meaning they usually cannot comply with IRB requirements for protecting personally identifiable data.

Although researchers have long understood how to draw meaning from complex data, the ability to share this meaning with general audiences has become increasingly important. While the development of user-friendly tools to facilitate dynamic presentation has lagged behind demand, a growing number of software solutions seek to fill that void. Programs similar to Data Studio include Microsoft's PowerBI and Tableau, both of which offer powerful analysis and visualization features. Although Data Studio is less powerful than some of its competitors in that it lacks the ability to modify underlying data and offers fewer calculation and visualization options, it compensates with a sharp focus on simple user experience and basic reporting that appeals to a broad audience. Data Studio succeeds in its broad
appeal by offering more functionality for free than its competitors; Tableau’s freemium version publishes all reports to the open web, while PowerBI limits collaboration and sharing.

Although Data Studio’s clearest strength is working with Google-produced data, it has potential use for researchers in presenting their own data. The easily understood interface and collaboration innate to Google products make it an inviting gateway to integrating visual storytelling into the research process. For librarians working with faculty and students, Data Studio can be a good way to demonstrate the contents and applicability of data collections in the classroom. It also offers the opportunity to begin integrating data reporting into personal research and routine duties without needing to obtain new software or invest significant time in the reporting process. At the same time, mastering Data Studio is complicated by the byzantine structure of its support documentation, which may slow the learning process. Further, because Data Studio is a beta product, users risk Google discontinuing or changing its capabilities; however, it remains a promising tool for data researchers.

REFERENCES


BIOGRAPHY

Genifer Snipes is the Business and Economics Librarian at the University of Oregon. She is interested in applied business research and teaching—specifically, her work focuses on marketing and entrepreneurial research and the growth of data-driven business research.