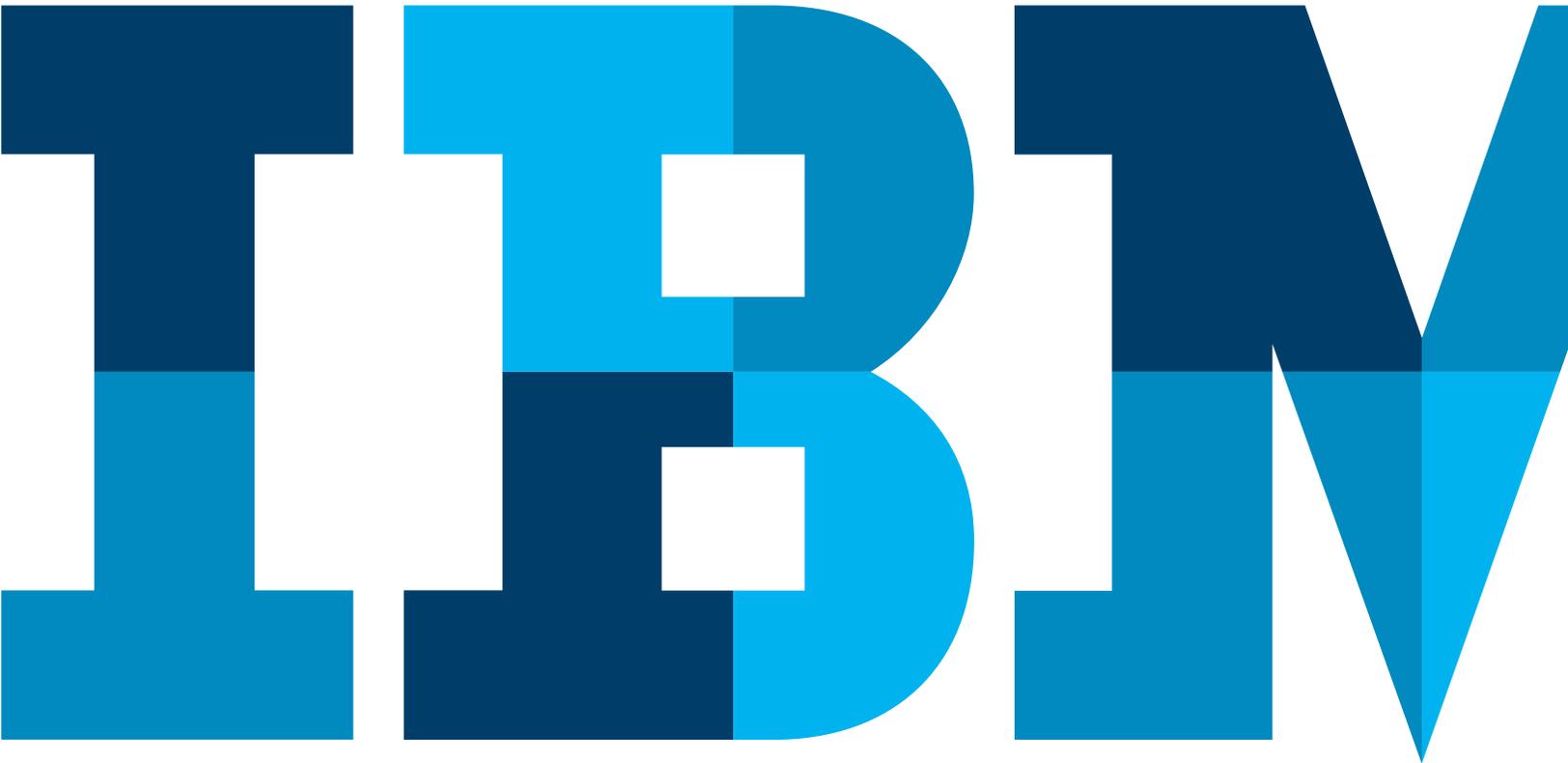


Business Analytics 2019: Move Beyond Pretty Pictures into a World of Trusted Data and AI-Powered Insights



It's a new era for business analysts, data scientists and other decision-makers who rely on analytics tools to derive meaningful insights from data. Whether you work within a large global enterprise or are responsible for business analysis in a single department or line of business, the tools you use for business intelligence (BI) must move beyond visualizations that are merely attractive in order to empower analysis that helps you make better decisions, faster.



In today's world, data is more and more the defining factor in achieving competitive advantage. A report from McKinsey Global Institute published in *Forbes* in 2016 stated that data-driven organizations are 23 times more likely to acquire new customers, six times more likely to retain customers and 19 times more likely to be profitable.¹ In the intervening years, these trends have only become more pronounced.

In this environment, business analytics are only as good as the quality and trustworthiness of the underlying

data. This has become more of an issue during the past few years, with the shift to self-service analytics tools, which put the power of data analysis in the hands of business users and give them the ability to create visually stunning charts, graphs and dashboards. While this can be a good thing, it can also be dangerous; often the data used to create these visuals is not accurate, current or consistent, and the end user doesn't even notice as bias creeps into their analysis.

However, with the right BI reporting tools, any user can still create beautiful visuals, but with the assurance of using trusted data via the BI system of record. What's more, a modern solution enables users to leverage augmented intelligence (AI), natural language and other cognitive approaches to uncover insights and patterns that would otherwise have remained hidden or siloed.

What does it take to move beyond pretty pictures and into the world of deeper insight? This white paper describes how users of modern BI analytics tools—whether experienced data analysts or everyday users—can leverage today's technology to make faster, smarter, simpler and better-informed decisions that are always based on a solid foundation of trusted data.

The changing scope of BI

Business users of all types are more empowered than ever to use analytics strategically. Self-service has been an important trend in business intelligence for a number of years, and as of 2017, approximately 55% of organizations were using self-service BI tools.² Heading into 2019, BI decision-makers rated self-service as a top priority, right behind master data/quality management and data discovery/visualization.³

1 "Becoming a Data-Driven Organization," *Forbes*, Oct. 28, 2016

2 "Self-Service BI: An Overview," BI-Survey.com, 2017

3 "BI Trend Monitor 2019," BARC, 2018

If you're a line-of-business manager or a business analyst in a smaller department, self-service can be a tremendous boost to productivity and effectiveness. You can get analytics much faster than having to go through the IT department. Plus, you can tailor reports and dashboards and create visual presentations to meet your specific needs.

Anybody can do visually appealing and seemingly compelling visualizations—that's a given. But what about deep insights?

Self-service can also be a big benefit for IT, reducing the workload for routine tasks and freeing up resources for more strategic initiatives. Self-service BI tools fit in with the growing IT trend of giving users the tools to be more independent and self-sufficient.

However, there is a caveat to the democratization of business intelligence: Analytics, dashboards and presentations built on any BI tools are only as good as the quality, accuracy and currency of the underlying data. It is no surprise that the primary concern for BI decision-makers in 2019 is master data quality management.⁴

That means that the first criteria in looking at BI tools, self-service or otherwise, is to ensure that they are using trusted data, which means:

- No data is missing
- All information is correct
- No information is biased

Moving beyond pretty pictures

Once you've established that your BI tools are built on a platform of trusted data, focus on what you can do with that data to achieve true insight into the critical factors that are driving your business decisions and, hopefully, providing you and your teams with a competitive edge.

Anybody can do visually appealing and seemingly compelling visualizations—that's a given. But what about deep insights? What about going beyond reporting what happened and understanding why it happened?

In today's world, it is imperative to move to a model of smarter self-service capabilities powered by AI, machine learning and other cognitive tools such as natural language dialogue. With the right solution, you can dramatically enhance your data exploration and leverage AI to go down paths and uncover insights that you might never have considered before.

This AI-infused model for self-service offers many benefits. It can:

- Empower searches across all data sources to quickly find relevant content using natural language queries.
- Maintain data quality by using the system to automatically identify any discrepancies in the data.
- Streamline and accelerate modeling by using the technology to automatically suggest ways to join different data sources.
- Create visualizations that are not only visually compelling but also have the highest impact for discovering and communicating new insights.
- Support the IT department by freeing it from handling requests that business users can now handle on their own.

Choosing the right BI tools

Many modern BI vendors are adding or working to add AI to their offerings; however, we've found that IBM Cognos Analytics has succeeded in infusing AI throughout the tool. It includes:

- Trusted data from the BI system of record.
- Augmented intelligence, machine learning, pattern detection and other cognitive technologies to enable much deeper insights.
- The ability to quickly and intuitively create compelling dashboards, infographics and animated presentations.
- Natural language dialogue and augmented analytics to enhance collaboration and improve enterprise-wide agility.
- A next-generation solution that is self-service, simple to use and cloud-based.
- A unified, integrated platform for all data exploration tools.

Conclusion

You may have heard the expression, “Data is the new oil.”

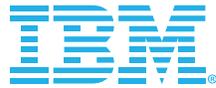
In reality, it's not about merely having data—every organization is bursting at the seams with data. It's about what you can do with that data, how you can use it to drive insights and innovation so that your organization can become truly data driven.

The exploration tools are available, and with self-service, they can be deployed pervasively across the organization—from the IT department to data analysts to line-of-business managers to anyone in the organization who has the desire and need to make critical decisions based on real-time insight, intelligence and analytics.

When it comes to delivering modern BI tools that meet the self-service needs of users and the control required by IT, Cognos Analytics is a true market leader. With Cognos Analytics, users can take advantage of a smarter approach to self-service, using trusted BI data, artificial intelligence and other modern tools to make better and faster decisions using meaningful, accurate insights—and you don't even have to give up your pretty pictures.

For more information on how Cognos Analytics can empower you and your organization, please visit **IBM** at <https://www.ibm.com/products/cognos-analytics>.





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Global Business Services
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Produced in the United States of America
March 2019

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