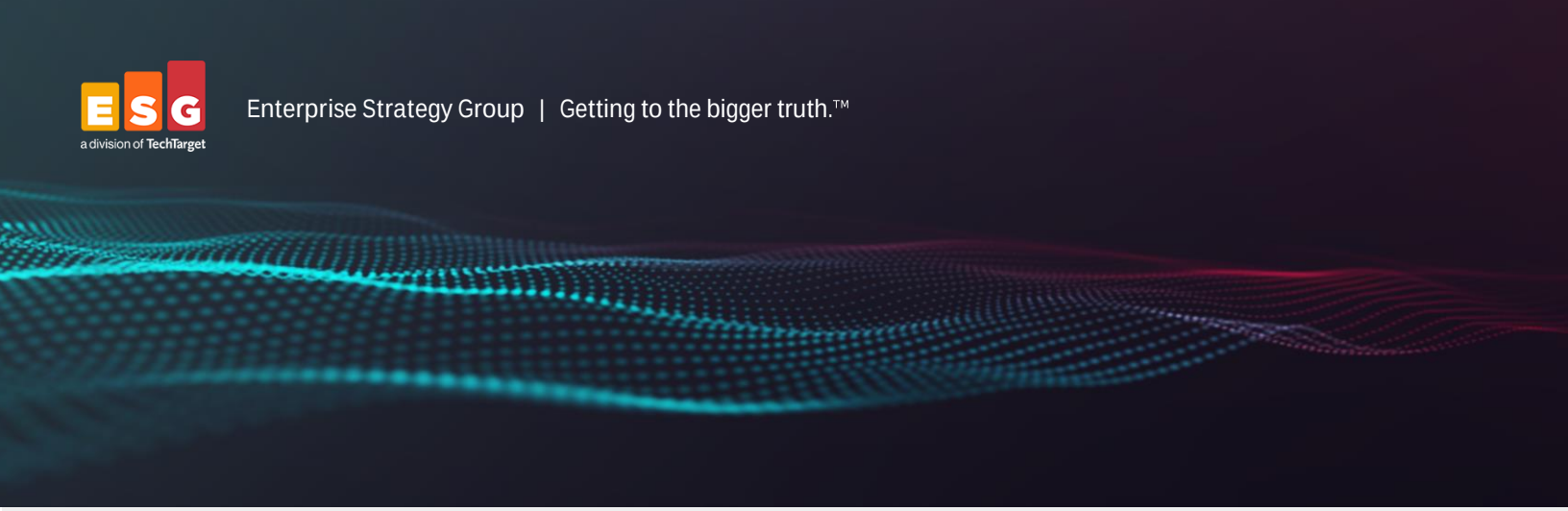

ESG WHITE PAPER

Transforming the Business with Modern Business Intelligence

Reliably Analyze, Visualize, and Act on Insights Faster

By Mike Leone, ESG Senior Analyst

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This ESG White Paper was commissioned by Google Cloud and is distributed under license from TechTarget, Inc.

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Introduction

Amid all the promise—and occasional hype—around digital transformation, there is an undeniable fact: There can be no transformation without data. But transformation isn't just about having a lot of data, although that's undeniably important. What's even more important is having the right data at the right time in the right context. That's where business intelligence (BI) and data warehouses come in.

Business intelligence has been utilized for years by enterprises with great success, but many factors are forcing organizations to think about when, why, and how they should embrace a more modern, future-ready BI mindset. Massive growth in data volumes; the skyrocketing importance of analytics; and the need for automation, artificial intelligence, and machine learning are just some of the new requirements to make BI a truly sustainable source of competitive advantage. Legacy solutions are no longer sufficient—especially when nearly all enterprises are stepping up their game when it comes to using data in new and unprecedented ways to help them get and stay ahead. Business intelligence needs to be re-imagined from a long-term perspective—not just future-proofed, but immediately designed and deployed as future-ready.

Fueling the Business with Data

To drive true digital and business transformation, BI platforms must enable innovative ways to enable organizations to make better decisions more quickly and with less human intervention. BI platforms must support both application development and data utilization that is more agile, more collaborative, and more flexible than has been the case with earlier BI platforms. New BI platforms also must support enhanced analytics in a cloud-based data warehouse to facilitate multi-variable analysis of higher-volume data and more diverse data types.

ESG research highlights the glaring need for BI platforms to better enable data transformation. In particular, respondents most often cited improved operational efficiency, enhanced decision making, and more accurate forecasting when asked which business objectives drive their BI strategy.[1]

Operational efficiency is a must because organizations are fully committed to the "do more with less" mentality. Adding expenses, especially head count, is something all organizations strive to avoid, in good economic times and during stagnating growth. Of course, making better business decisions and improving corporate strategy are always important, but they have become even more essential as competition increases in all industries and as customers become more precise—and more exacting—in their needs. Finally, improving forecasting accuracy not only ties into the first two requirements, but it's part of the new mantra in enterprises of "a bias for action." Speed and flexibility are essential, and BI strategies must play into that.

78% of organizations plan to increase their year-over-year spending on business intelligence.

With a goal of achieving these key business objectives, enterprise decision-makers are ramping up their commitment to a more modern, feature-rich, and context-driven BI platform. ESG research notes that 57% of data stakeholders consider BI to be critical to their organization—and of those considered to be "data leaders" based on their commitment to the

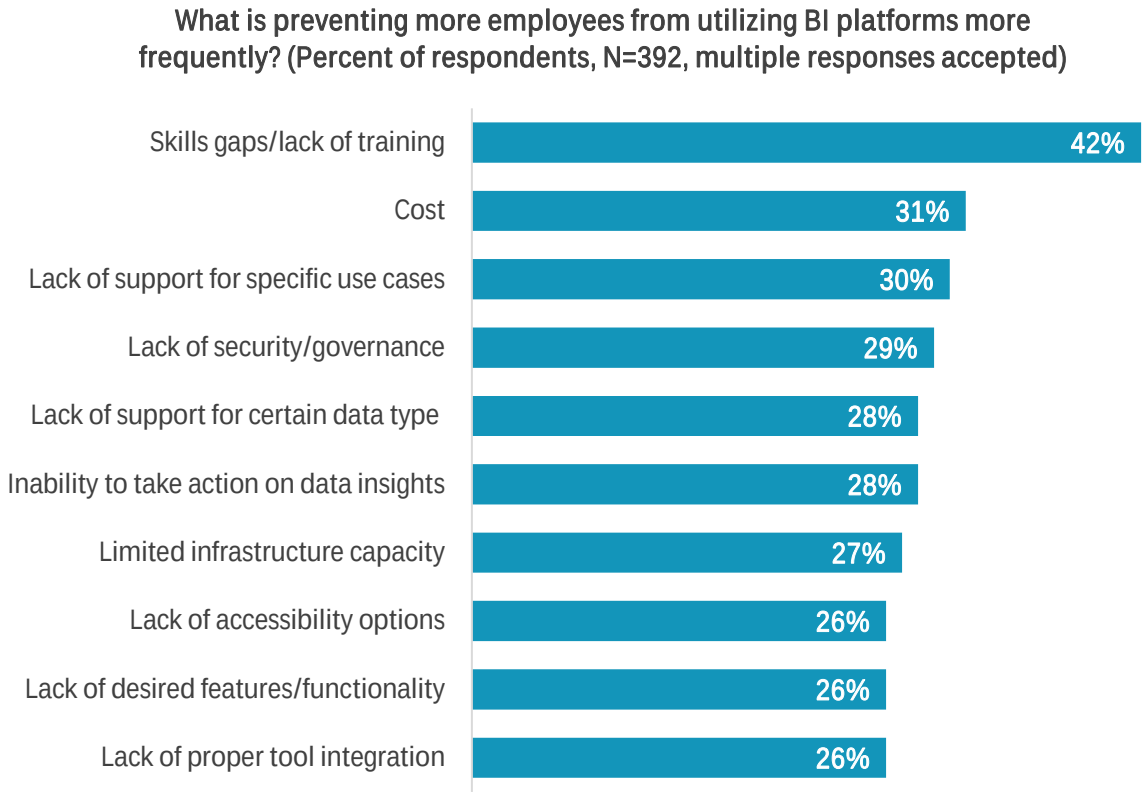
[1] Source: ESG Research Report, *The Path to Data Leadership: Embracing Business Intelligence to Achieve Data-driven Success.* July 2021. All ESG research references and charts in this white paper have been taken from this research report, unless otherwise noted.

strategic use of data, 75% say BI is critical to their success. As a result, 78% of organizations plan to increase their year-over-year spending on business intelligence.

Challenges Impacting BI Modernization

To properly plan, deploy, and optimize a BI modernization initiative, organizations must recognize the potential hurdles. They must be able to overcome and plan corresponding strategies to avoid getting tripped up. As shown in Figure 1, ESG research indicates that a BI proficiency/skills gap is far and away the biggest challenge decision-makers say their organizations face, with 42% of respondents saying that a skills gap prevents their organizations from leveraging their BI analytics platform more frequently. Making that platform easier for non-technical teams to use is essential to achieve the key goals cited earlier: improving operational efficiency, enhance business decision-making and strategy, and enable forecasting accuracy.

Figure 1. What Is Preventing More Pervasive Use of BI Platforms?



Source: ESG, a division of TechTarget, Inc.

There are also significant challenges that must be recognized and addressed regarding the BI platform itself. Some of the issues that top the list of concerns may be self-evident—data quality and security, for instance—yet they remain fundamental to any successful BI modernization platform. There are other platform-related issues that also stand out as potential roadblocks, such as reducing technical complexity; improving platform performance; and reducing costs of acquiring, deploying, and running a new BI platform.

The extent to which organizations recognize these and other challenges—and take proactive measures to get out in front of them during the modernization process—goes a long way toward helping them achieve their business objectives. While thinking proactively may be difficult, one thing is certain: Organizations that do not properly and immediately address all of those challenges put themselves at great risk of falling behind.

Evaluating a Modern BI Platform

If legacy BI platforms no longer meet the needs of today's data-driven organizations (especially those with a cloud-native mentality), then the first step is to create a new wish list of functionalities, capabilities, and attributes for their modern BI platform. Organizations should think about BI modernization in four ways:

- Evolving the platform in a more modern, cloud-centric manner.
- Empowering end-users/business stakeholders.
- Scoping the ideal set of platform capabilities.
- Determining the business impact of that functionality.

Evolving the Platform

ESG research notes that half of organizations (50%) surveyed demand greater functionality and new features for their modernized BI platform, followed by the ability to involve more stakeholders in order to help broaden adoption rates of the new BI platform (48%). To accomplish this, organizations also want the ability to integrate more data sets (48%) (both in the number of data sets and in the diversity of those data sets), as well as integrate more tools (46%) and ensure greater agility (46%). Additionally, it almost goes without saying that ensuring a BI platform's ability to operate full throttle in a public cloud, hybrid cloud, and multi-cloud setting is essential.

Empowering Stakeholders

The previously mentioned skills gap also highlights a delta between where organizations feel they are today and where they need to be—and soon. Specifically, 49% of organizations say they are pushing hard to provide more education, training, and guidance to take full advantage of a modern BI platform, while another 44% say they are leveraging automation to reduce workflow/process delays.

Platform Capabilities

In an era where customized, cloud-native applications are a must-have for forward-thinking organization, added pressure from modern business requirements is being applied to induce BI platforms to evolve in sync with the rise in use of cloud-native applications. According to ESG research, augmented analytics is the top BI capability expected to have the greatest growth in adoption over the next year (47%), as organizations seek to use intelligent automation, artificial intelligence, and machine learning to assist in digging deeper into data for faster and more meaningful analysis. Other key functional improvements in which organizations plan to invest include simpler and more reliable data integration (42%), data governance (41%), embedded analytics (39%), self-service enablement (35%), and low-code/no-code capabilities (22%).

#1 Augmented analytics is the top BI capability expected to have the greatest growth in adoption over the next year.

Delivering Improved Business Impact

Of course, new features and functionality must deliver improved business impact, such as improved financial performance, enhanced customer satisfaction, more efficient supply chains, and more strategic decision-making on competitive issues.

In most, if not all, cases, faster availability of relevant, actionable data is vitally important to all businesses. Without a modern BI platform, organizations will struggle to get real-time or near-real-time access to essential data to help them automate decision-making, in turn reducing their spending on low-value legacy BI maintenance and becoming even more agile.

Modernize BI with Google Cloud

Google offers several market-tested tools to help organizations modernize their approach to BI using a more intelligent, self-service-driven business intelligence methodology and platform. Looker serves as the enterprise platform for business intelligence, data applications, and embedded analytics, helping businesses explore, share, and visualize company data for better and faster decision making across data environments. Data Studio enables customers to create fully customizable informative reports and dashboards that are easy to read and share. And BigQuery serves as the BI analytics engine supporting a variety of data types—nested, flattened, or giant.

While independently Looker, Data Studio, and BigQuery offer customers robust features and capabilities to advance their data initiatives, the level of extensibility and interoperability of these solutions through data connectors and Google APIs sets customers up for success as they look to integrate several application services in multi-cloud and hybrid cloud environments. For example, customers can leverage a Looker data connector to Data Studio to gain access to Looker data from the Data Studio interface. Google also makes it easy to connect a BigQuery Project to Looker, which includes automatically generating a new data model based on table schemas and creating custom calculations that leverage key BigQuery functions. And for external applications like Twilio and Slack, data from Looker data can easily be integrated, shared, or embedded using APIs.

The Bigger Truth

Legacy business intelligence and data warehouse platforms no longer are sufficient to enable organizations to use data in the most strategic, flexible, and secure manner possible. Organizations looking to turn data into an even more strategic asset—and that want to empower their business stakeholders to make smart, fast decisions without having to run to the IT organization for help—should rethink and rearchitect their business intelligence framework. This is especially true for any organization moving toward a cloud-first or cloud-native environment.

Going forward, organizations that demand greater scalability, cost efficiency, flexibility, and resiliency should move aggressively toward a modernized BI platform that supports self-service, cutting-edge analytics, automation, artificial intelligence, and powerful performance and visualization.

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www.esg-global.com contact@esg-global.com 508.482.0188