+ableau

Driving Enterprise Transformation with Modern Data & Analytics

Table of Contents

Closing the modern analytics gap to transform the enterprise

Your employees are smart, curious, hard-working, and know the questions they need to ask and answer to drive the business forward. With the right insights and a data-centric mindset, you can witness an immensely valuable transformation.

In our era of digital transformation, everyone seems to recognize the value of data—especially as its volume and variety have increased. While many organizations have upgraded or deployed new technology solutions in hopes of addressing their data challenges, they lack that propensity to pull data into their everyday business, weaving data-driven decision-making into the behavioral fabric of the organization's operations.

To close this gap, leaders need to consider not only how to scale the technology, but the adequate support, training, and management structure to effectively navigate change management alongside adoption, overcoming the cultural roadblocks to a data-driven enterprise. Maximizing analytics investments and capitalizing on the transformative potential of data means that everyone encountering it—regardless of skill levels and data fluency—must be able to turn insights into opportunities or innovations.

> This paper will address key considerations and hurdles in the areas of people, process, and technology to support an enterprise-wide deployment of modern business intelligence and usher in its transformational potential through data-driven decision-making.

Aligning the roles and responsibilities that empower a data-driven organization

Ensure the right executive sponsorship and leaders are in place

In recent years, organizations have introduced a new role: the chief data/analytics officer (CDAO). Defining and executing on a BI strategy, historically often a part-time job for the CIO, is evolving into a full-time responsibility for the CDAO, who is held accountable at the executive level and often reports directly to the CEO.

Regardless of the actual or dotted lines, the CDAO's responsibility is to bring IT and business together and to break down barriers and silos that have hindered the organization's ability to deliver impactful insights through data-driven decision-making. The CDAO is in a unique position to drive a mindset change and evolve an organization's thinking about what BI is, how it should be delivered, and who should be delivering it.

To start, CDAOs should enable broader access to data and data-related resources within the organization, and redefine the measurements of success for BI and analytics, moving from IT-centric and deployment-related metrics to tangible results related to business outcomes. With the growth of analytics programs across the organization, the CDAO can facilitate the delegation of appropriate data literacy and governance responsibilities from IT to business users who are invested, properly trained, and can successfully participate in efforts to scale analytics programs.

> **"** When IT organizations lead the transformation to self-service analytics, they can ensure governance and security at scale. And by empowering the business to be data-driven and agile, IT becomes a trusted partner to the business.
>
> —COLIN REES, CIO, DOMINO'S PIZZA GROUP LIMITED

Other senior leaders must play a key role in moving the company beyond a need-to-know mentality by truly practicing a data-driven approach themselves, or else risk undermining the entire transition. Executive sponsorship of self-service can outwardly support data-driven decision-making and help develop the right partnerships between IT and business users.

Hire and train data workers across all skill levels

If you only hire dedicated analysts and data scientists, and they are solely tasked with answering the organization's questions, you'll create a bottleneck that leaves others employees with unanswered questions. If you just hire business users who are trying to answer their own questions with no model for analytical best practices, they stop asking those questions, too.

> It's important to note that both role-specific analysts and departmental workers with data skills are required in the modern organization. And always remember: these two groups are supportive of one another, not in opposition to each other.

Lowering barriers and making data easy and intuitive to consume is critical for employee adoption. Deeply focus trainings by using department-specific data—not an obscure or unrelated data set. This drives a higher level of interest during the learning process, and the additional business context will make the leap smaller for newer users or those struggling with the process.

Foster a passionate, internal community

Many enterprises will establish a center of excellence (COE) to act as a resource for users to look to for guidance and trainings. This typically includes a self-service enablement intranet, support structure for users, and engagement events led by a governing body with cross-functional representation. Successful organizations take it a step further by building and nurturing a highly active internal community around the COE.

> " Somewhere there has to be a driver for the strategy and there has to be a home for your data scientists. You could say that this center of excellence was a block in our pyramid that always needed to be there.

—TIM NALL, CIO, BROWN-FORMAN

Read the full story

Internal forums and help desks with regular office hours will centralize a knowledge base for people to get their answers quickly answered by their peers, and internal user groups and meetups will offer more opportunities for people to gather, present, test, learn, collaborate, and motivate. Company-wide, executive-sponsored competitions with data that align to strategic initiatives can also serve as a great way to engage employees, spread analytical skills and knowledge, and inspire new users and use cases with data.

When you implement the right technologies and tools, and teach everyone in the company how to use them, you make data the baseline of all conversations. The inherent support and camaraderie that comes with an internal data community can be a monumental force for engaging users, promoting participation in data-related events, and increasing adoption. All of this can substantially reduce the time to a full transition for modern analytics in the enterprise.

Related reading

CDAOs drive change by blurring lines, not drawing them

Fostering the data generation begins at the top

Close the modern analytics gap before your next transformative initiative

Key steps to building a data-driven company of the future

Overcoming the challenges of adoption and governance at scale

Deploy and scale with an agile mindset and approach

To be successful, data–driven transformation with modern analytics can't be considered a destination with new capabilities and processes as checkpoints to success. Instead, it must be seen as an ongoing journey, centered around people and a shared vision for how analytics can inform the business. When deployed with agile methodologies, modern business intelligence grants as little or as much change as the organization decides it's ready for.

Don't be afraid to start small
Successful deployments often start with a few departments or a use case within multiple departments. Key data sources can help you estimate the relevant audience size for your deployment because user engagement will drive server scalability and sizing decisions. Server scalability and sizing, in turn, inform hardware and licensing requirements, which align with budget planning and procurement requests.

Plan for rapid growth
Proactive planning and monitoring helps you better prepare, support, and scale. Given that analytics are often mission-critical and modern BI solutions often see fast growth, consider reassessing server utilization and user needs more frequently than with other technology solutions. A "set it and forget it" deployment will likely have inadequate resources that fail to support highly-engaged users' workloads.

> **"**
> We started off with a very narrow business use-case and then it just quickly spread. Tableau makes it simple and simplicity, everyone wants talk about big data analytics but Tableau simplifies it.

—ASHISH BRAGANZA, DIRECTOR OF GLOBAL BUSINESS INTELLIGENCE, LENOVO

Read the full story

Increase data access and participation in governance

Changing who has access to what data within the organization can be a massive paradigm shift, met with uncertainty and resistance. Although data governance is often driven by IT, it is the responsibility of both business leaders and IT leaders—led by a steering committee—to define these tools and rules, so that governance functions benefit the entire enterprise—and ensure that the rules are followed.

While the business may lead in defining analytical goals and desired outcomes (the "what"), IT is critical in establishing the processes that enable those outcomes (the "how"), including ensuring data integrity and security as analytics scale across the organization. Analysts and business users—for whom modern BI environments are implemented and scaled to benefit the most—can become the first line of defense in identifying data issues or irregularities within a governance model that IT and the business agree upon together.

With increased cross-functional participation—"crowdsourcing" governance—IT should plan for and delegate appropriate responsibilities to the business, such as training and triage, creating new data sources and dashboards, lifecycle management of analytical content, and other administrative duties as more groups in the organization adopt the platform.

> **We need to enable the business to create things we can never even imagine as an IT department. We just can't create those things in an ivory tower.**

—STEVEN JOHN, CIO, AMERIPRIDE

Read the full story

Look out for common pitfalls that stall BI growth

While today's analytics software favors easy-to-use, self-service-based platforms accessible to everyone, there are several primary reasons organizations' BI adoption becomes stagnant, even within organizations with the best technologies on hand:

Skills haven't evolved with the change in roles and responsibilities

People vehemently fear change. As organizations implement business intelligence solutions, certain teams begin to feel that change almost immediately. IT must evolve into a true business partner, which means they move from producing data models and analytic content to more strategic enablement. They may need help in understanding how their role as an enabler has shifted, rather than disappeared. At the same time, business users must put away the unsupported tools (often spreadsheets) used for ad-hoc analysis and embrace new, streamlined processes. Investing in data literacy through training and education helps with this transition.

The data-minded example hasn't been set by leadership

Leaders who default to instinct-based decision-making and rely solely on experience, rather than analytic insight, directly contribute to the poor adoption of BI in their organizations. BI teams are better served engaging leaders who understand the value of analytics and are willing and able to influence business process change. Top-down support from organizational leaders to challenge the status quo, and push for business process transformation, is mandatory for success. Which leaders are making data and discussions of data a mandatory focus of regular meetings? It will quickly become evident which key decision-makers are furthering—or hindering—the organization's BI and analytic adoption goals.

ROI is perceived as unfulfilled after the analytics implementation

If you see your BI deployment strategy as a "check-box type" project with a well-defined start and end date, you risk leaving learnings, growth, and the possibility of more success on the table. Instead of focusing on milestones like consolidating data from disparate sources or automating certain reports with more engaging dashboards, try to adopt more of an "art of the possible" mentality. Look at examples of what your competitors are doing with analytics. Recognize the importance that data and analytics play in the digital future. When new use cases are explored, or modern analytics are rolled out to new departments, look for incremental growth and impact and hold these groups accountable to communicate their results as they compound across the enterprise.

It's important to remember that technology—while a critical component of transformation—is neither the barrier to BI adoption, nor the solution. Simply buying and installing a modern BI platform won't independently solve the underlying issues linked to low adoption, nor will it automatically instill data-driven decision-making in the organization. Specific processes must be built for the users to foster adoption.

That said, the right analytics platform can offer many benefits to aid in the journey: the breadth and depth of analytical capabilities to empower a complete spectrum of knowledge workers; the modern security and governance features to safely scale data across your organization; the flexibility to align to your evolving data strategy and business needs; and the technology provider's ongoing support to help protect and further your analytics investment.

Related reading

How and why to crowdsource governance for modern BI

Three reasons your business intelligence adoption has stalled

What does modern analytics with agile deployment look like?

Embracing modern BI to deliver on the promise of self-service analytics

Bring visual analysis and data exploration to the forefront of BI

Traditional BI has primarily served to illuminate the known unknowns; users ask specific questions and IT-led reporting provides them answers, repeating the cycle with new questions to get additional insights. Modern BI has opened new doors for users across all skill levels to explore unknown unknowns with iterative, visual analysis. Users can not only ask and answer their own questions, but arrive at impactful insights that they weren't initially seeking.

True visual analysis makes data easy to explore by using the visual as an interface for the data, not simply as a way to display a result. Many traditional tools retain antiquated processes that require a set of predetermined criteria to create visualizations, only to limit the insight end users can glean as a viewer. What happens when they have follow-up questions or need to pivot their analysis? Do they go back to IT and wait?

The transformative value to the business is not in an end result, but in the availability of new insights that users discover along the way as they visually explore the data. With a modern BI solution, immediate visual response allows limitless, self-service data exploration. Reaching additional insights aren't constrained by initial requirements, nor is deep technical expertise required to ask new questions and pivot the analysis.

> **"** It's like giving you a flashlight, and you're able to look at the corner of that dark room that you've never been able to see before.
>
> —TOM LANEY, BUSINESS CONSULTANT, DATA SCIENCE CENTER, SOUTHWEST AIRLINES
>
> Read the full story

Evaluate modern BI platforms with confidence

Just as critical as your workforce's journey to insight is the journey to selecting your modern analytics platform. When so much transformational potential lies in the experience of visually exploring data (and not just the final results it can produce), it doesn't make sense to evaluate a modern solution with the same criteria once used to select traditional BI and reporting tools.

In order to select a modern BI and analytics platform that can address the diverse needs of users across the organization and deploy for large-scale adoption, organizations should consider the following set of foundational core attributes:

Platform integration and accessibility

Can users access, interact with, analyze, discover, share, promote, and govern analytical content all seamlessly within the platform, without moving between disconnected modules or products? Can these activities be executed without IT involvement or specialized skills?

Ease of use

Is the platform straightforward for administrators to install, configure and manage? Can content creators easily prepare and curate data sources and author new analytical content without upfront or ongoing assistance from IT? Can non-technical users find and interact with content, including autonomously asking deeper questions or customizing existing published content to suit their needs?

User enablement

Are role-specific trainings, self-paced tutorials, online help resources, and professional services available for users? Is there a robust and active user community accessible to share best practices? How is the platform vendor's reputation for ensuring customer success and ongoing engagement?

Deployment flexibility

Does the platform offer flexible deployment options (e.g. SaaS, public/private cloud, on-premises, etc.)? Does the platform offer flexible data storage options and support hybrid connectivity of on-premises and cloud data sources? Can the platform easily scale up and out to accommodate increasing data volumes, additional users, and changing needs of the organization?

Pricing and packaging

Are the product packaging, licensing options, and product model transparent and easy to understand? Do the pricing and licensing options offer the right features and value for the price?

Mind the Total Cost of Ownership

The true price of rolling out a technology often involves hidden costs. Consider the multi-year spend on infrastructure, deployment, maintenance, and full-time IT employees to deploy, support, and scale the system. Be wary if you have to license and connect a stack of products or disconnected tools to get the full value of your modern analytics solution—that'll only add costs and complexity to the deployment, maintenance, and administration.

Migrate from traditional to modern BI strategically

In spite of the promises of modern BI, some organizations are hesitant to invest, clouded by misunderstandings or afraid to navigate the challenges in migrating and adopting a modern solution. In other instances, organizations have purchased a modern platform only to recreate their existing reporting workflows in a new container. In both cases, organizations are held back from unlocking the creative potential and enhancing the data-driven decision-making of their employees.

Migrate from traditional to modern BI strategically

In spite of the promises of modern BI, some organizations are hesitant to invest, clouded by misunderstandings or afraid to navigate the challenges in migrating and adopting a modern solution. In other instances, organizations have purchased a modern platform only to recreate their existing reporting workflows in a new container. In both cases, organizations are held back from unlocking the creative potential and enhancing the data–driven decision-making of their employees.

Modernize BI workloads for value
Sometimes, modernizing certain reports may be as simple as copying and pasting the SQL behind them and curating the data source—from there, users get the benefits of further analysis in a self-service tool. In other cases, there may be more work to realize analytics value or cost savings. Identifying the right use cases to modernize is critical to secure wins that demonstrate a return on investment—whether it's reducing spend on BI technology, time savings, or driving new insights that impact the bottom line.

Escape the maintenance spend dilemma
One way organizations have reduced costs when moving to modern BI is to time the migration with their traditional BI platform's maintenance renewal. The perfect window of time will vary by organization, based on which traditional platform is being used and the complexity of the data pipeline and environment. Be sure to scope the work and establish a timeline that accounts for the proper training and testing to validate your new solution and optimize this period of overlap to minimize spend. A consulting partner can also be very helpful.

> I would rather create a platform that allows the business to solve their own problems, because we (IT) will never know them all. That's how I've approached our Tableau usage, simply because it allows them to connect to and analyze their own data, which they were already doing.

—S TEVEN HITTLE, VP AND BI INNOVATION LEADER, JPMORGAN CHASE

Read the full story

Ride the next wave of modern BI with smart analytics

Organizations are turning to emerging "smart" technologies—like artificial intelligence, machine learning, natural language interactions, and complex algorithms—to find an edge and further augment analytical abilities, drive organizational change, and catalyze digital transformation in their businesses.

Combining powerful automation with easy-to-use experiences can minimize the manual work required to get to insights from data, reduce the burden when analyzing large and complex data sets, and lower the barrier of entry to more sophisticated analysis.

Partner with an analytics provider invested in smart technologies; consider the impact these capabilities will have on creating better customer experiences, more efficient operations, and even new revenue streams.

Related reading

Evaluation guide: How to choose the right modern BI & analytics platform

6 myths of moving from traditional to modern BI

Escape the BI maintenance dilemma and modernize

Smart analytics capabilities will empower everyone working with data

About Tableau

Tableau is the secure, governed, self-service analytics platform that drives enterprise transformation. Empower your users to make mission-critical business decisions with trusted data, while leveraging existing technology investments. From security to extensibility, to compliance and governance, Tableau delivers an end-to-end, enterprise-grade analytics platform that scales and adapts to your business needs as your enterprise architecture continues to evolve and expand over time. Tableau empowers IT to partner with the business and enables your entire organization to get the most value of its data and people.

Why IT professionals choose Tableau

Mission-critical platform
Tableau provides the right security, compliance, integration and governance capabilities you need to scale analytics, without putting your data or your organization at risk, or limiting the flexibility and agility your people need to do their jobs well.

Fits your environment
Work with data your way. Deploy on-premises or in the cloud. Choose Windows, Linux, or Mac OS. Connect to any data anywhere—whether it's stored in databases, files, or applications. Conduct live queries or use Hyper-powered extracts.

Fast adoption at scale
We designed Tableau for people of all skill levels and expertise—it's intuitive and easy to use, which makes it possible to integrate data into everyone's decision-making, regardless of technical or analytical capabilities.

Powerful analytics
With our patented VizQL technology and built-in smart features, Tableau gives everyone powerful, interactive, visual analytics to ask deeper questions and get to the insights that propel your business forward.

> Our Tableau deployment went viral. In less than two years, we have 20,000 users. And the reason for this success is because we've been able to strike the right balance between empowering the business, enabling better visibility, and instilling trust and governance in the data.

—SHERRI BENZELOCK, VP OF BUSINESS ANALYTICS TRANSFORMATION, HONEYWELL

Read the full story

Additional resources

Redefining the role of IT in a modern BI world

Governed self-service analytics at scale

Tableau for the enterprise: an IT overview

Tableau free trial

+ableau