How to Build a Culture of Self-Service Analytics— And Why You Should

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Contents

Introduction

Technology has seen a big leap in the past decade. We are all connected, day and night, via our smartphones. We can talk to anyone, make purchases, and find answers to our questions whenever we want, wherever we want.

We've quickly grown accustomed to having answers at our fingertips, and we're increasingly expecting the same at our workplace. Part of our expectation comes from our innate curiosity. When we encounter something new, we want—and need—to know more. Knowledge is rewarding because it "dispels undesirable states of ignorance and uncertainty," says researcher Jonathan Litman. It freaks us out when we can't figure something out. We want to know why something happened so that we can avoid— or repeat—the same outcome in the future.

This doesn't mean we simply want the final answer or outcome; we want to be a part of the discovery process. The driver of our curiosity is a need for understanding— the what, the why, the how, the what-for. And answers alone don't help us understand as much as the discovery process leading up to the answers. Together, they provide a complete understanding with which we can avoid the bad, replicate the good, and find new opportunities.

As we try to gain understanding and find those answers, we have data to help. More and more data is being captured—in our personal lives and also within our organizations. This data gives us the facts, the truth, the objective view of what has happened. Data is knowledge, and when people are empowered to explore and ask questions using their data to make everyday decisions, they can find the understanding, insights, and opportunities they seek.

That's where a culture of analytics comes in. In this culture, organizations provide an environment in which employees can explore and find answers with their data, satisfying their curiosity and driving the business forward.

And yet our workplace tools don't always provide us with access to the data we want and need to find those answers. Nor do those tools allow for discovery, exploration, or a way to understand.

To fully create a culture of analytics, an organization must bring together its two greatest assets, its people and its data. By allowing employees to explore data within an environment that is trusted, secure, and managed by IT, organizations empower the person who knows the business, has the context, and can realize the full potential of the insights. The person can investigate the data, collaborate on the data, and make the right decisions as a result of that analysis. This ability to see and understand data isn't tied to your job title or your place in the pecking order. In a culture of analytics, everyone has access to the right data and is encouraged to explore.

Seattle Children's Hospital embraces this data-driven culture that empowers everyone across the organization. Analysts, managers, clinicians, doctors, and researchers are all using data analytics to "help us define what the standard is, how are we measuring against it, and how are we growing into the future," says Ted Corbett, the hospital's director of knowledge management.

This culture doesn't mean a free-for-all access to data. At its foundation is a reliable analytics platform managed and governed centrally by IT; an analytics platform that provides security without stifling self-service. IT can empower people to explore trusted data in a secure environment.

Collaboration is another crucial piece. People are empowered to quickly and easily share their data and their analysis. They can learn from each other and build on each other's findings to perform their own analysis and ask follow-up questions.

Deloitte calls this a "culture of enablement." At the professional-services firm, staff-level team members drive data analytics, finding and sharing insights with the rest of the team. The leadership empowers them with the right tools to reach their aha moments quickly and easily. And IT supports the entire program by providing governance and security.

"People can more quickly get to the 'so what' or the 'aha.' They're more willing and ready to share analysis faster than what's typically been expected," says Ryan Renner, strategy and operations principal at Deloitte. "And when they have that excitement and that enthusiasm, it actually goes up through our organization and we hear very positive feedback from our leaders."

> *"This is not command and control. We are going to give our practitioners the tools to succeed, and then we are going to enable them to continue to up the game with Tableau."*
>
> - RYAN RENNER, STRATEGY AND OPERATIONS PRINCIPAL, DELOITTE
>
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5 Steps to Building a Culture of Analytics

Building a culture of analytics isn't something that happens overnight or can be adopted out of the box. It requires continued focus and purposeful decision-making over time.

Follow these five steps to start building this culture at your organization:

1. Embrace the new role of IT

2. Seek executive sponsorship

3. Set the foundation

4. Scale with people and processes

5. Value both empirical data and intuition

1. Embrace the New Role of IT

With the modern approach to enterprise analytics, organizations no longer have to sacrifice governance for self-service, or vice versa. Instead, a new type of relationship forms between IT and the business with the focus on achieving a common end goal through people, processes, and technology.

With traditional BI, it used to be that IT would analyze the data and report findings to the business. In this report-factory approach, the business received answers but didn't always understand why things were. And people couldn't dig deeper into the data to understand the why behind the what. Many questions were left unanswered, and analysis was drawn out over long periods of time.
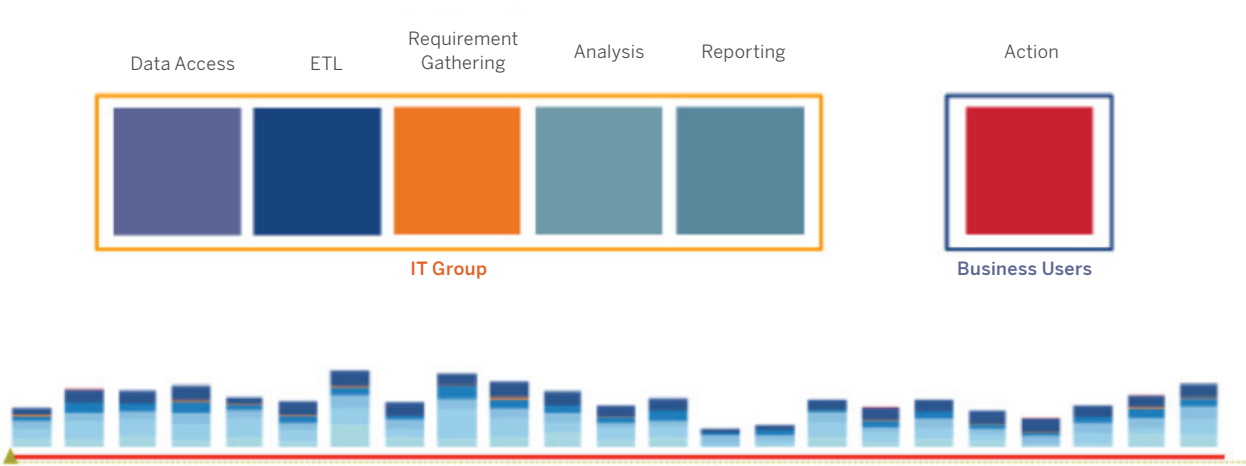

Figure 1: Traditional BI

With the first iterations of self–service analytics, IT provided vetted data sources to the business, empowering business users to analyze and report the data themselves. In this scenario, IT enabled the business, but the two teams worked in silos. This led to unstructured chaos, leading to issues with data security and integrity. There were also inconsistencies in decision–making due to a lack of alignment and collaboration between areas of business.

Figure 2: Self-service analytics

With the modern approach to enterprise analytics, IT and the business work together. IT creates a centralized environment of trusted data and content, and enables the business to access this data, ask their questions, and find the answers they need. Security and data integrity don't come at the expense of business agility and innovation.
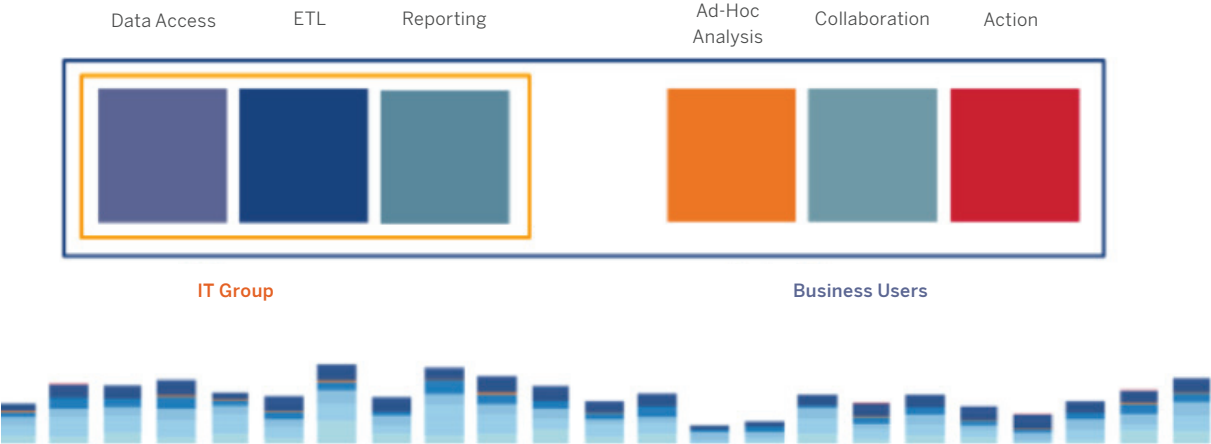

Figure 3: Modern approach to BI

This approach signals a paradigm shift in the role of IT, says Rory Abbazio, director of IT at National Grid, which powers 3.5 million customers in New York, Rhode Island, and Massachusetts.

It used to be that people were stuck in what Rory describes as "Excel hell." IT was using Excel to analyze data and prepare 100-slide PowerPoint decks to report findings. The effort was painful, time-consuming, and offered little value to the business leaders.

"Analysts were spending hours and hours creating these decks to help people make decisions. But the deck wasn't really driving decisions because they didn't allow people to look at the data from different angles or perform additional analysis," Rory says.

This was a clear signal that the utility needed to close the gap between the business and IT.

"We're not just supposed to come up with grandiose systems that no one is going to use. We are here to support the business. We are, in a lot of ways, the back office, enabling the front office," says Rory.

Rory defines IT success as more than just finishing projects on time and on budget. Is IT working with the business to give them the tools they need—and will use—to drive the business? Is IT setting up a trusted environment in which the business can perform analytics that protects the company's data?

The modern approach not only empowers the business to be self-reliant but also positions IT to take on a more strategic role at the center of the analytics effort. IT can provide governed data sources and trusted content that move the organization toward a centralized data environment that drives business-wide decisions. IT can also serve as the data stewards, governing the flow of trusted data and providing a secure environment for exploration. And IT can monitor and audit usage to ensure adoption and make improvements based on what the business is learning.

In this new role, IT becomes a partner to the business.

> *"It's not an overnight endeavor; rather, it's effort that needs to occur in a series of smaller successes in an agile fashion."*
>
> – RORY ABBAZIO, DIRECTOR OF IT, NATIONAL GRID
>
> Learn more about National Grid's enterprise analytics strategy

2. Seek Executive Sponsorship

When building a new culture, it's important to identify leaders who can drive this change. Why? Success depends on it. Organizations that use data to drive decisions can better understand its customers, seize opportunities, and gain a competitive edge. And organizations that have successfully adopted self-service analytics have done so with executive sponsorship.

A McKinsey Global Survey found that organizations with high-performing analytics programs are nearly three times more likely than their low-performing peers to have CEO sponsorship for their analytics initiative.

An executive sponsor can also help set the right organizational structure to support a culture of analytics.

"High-performer executives most often rank senior-management involvement as the factor that has contributed the most to their analytics success; the low-performer executives say their biggest challenge is designing the right organizational structure to support analytics," the McKinsey survey found.

By sponsoring the analytics initiative, leaders can help guide change with their enterprise perspective. They can ask themselves: How can we empower anyone to ask questions? Do they have the right tools for the job? Are people heard when they share their discoveries, and are they encouraged to do so?

Leaders can incentivize participation with prizes and recognition. They can also set examples by sharing their own findings. They can elevate conversations by asking which data compelled a certain conclusion. These examples signal to others that they, too, should leverage the value of their data.

Executive meetings, traditionally home to static reports, offer a great opportunity for this type of tone-setting. Introducing interactive reports to these meetings enables people to explore the data on the spot. It also engages people's curiosity and feeds their need for understanding.

At Intuit, the senior leaders have set the tone for the company's data-driven approach. In the competitive tax-prep industry, every minute counts. And data is crucial in enabling Intuit's more than 600 associates to answer critical business questions at the speed of thought. To elevate the value of data, senior leaders constantly turn to data in their discussions. They wholly subscribed to this data-informed approach and expect others will follow.

And at iProperty Group, which operates market-leading property portals in Asia, CIO Harmit Singh has led the analytics initiative. Harmit and his analytics team introduced dozens of dashboards to harvest insights from iProperty's daily intake of 1.5 million data points. Harmit says the dashboards, which were initially intended for customers, are now also informing the entire organization.

"Now people within the company expect more from their data. People see what others have done and realize, 'Hey, I can use that in my area as well,'" says Harmit.

With executives leading the charge, both Intuit and iProperty are turning to data to help shape decisions.

"It's about driving decisions based on data."

– HARMIT SINGH, CIO, IPROPERTY GROUP

Learn more about iProperty's CIO-led approach

3. Set the Foundation

At the center of this culture of analytics is a self-service analytics platform that empowers the entire organization. It is intuitive and easy to use, and also enables powerful, deep analysis. It requires no scripting or coding. There are no complicated pivot tables to fight with, no limiting templates to hinder exploration and discovery.

Gartner analyst Rita Sallam puts it this way: "A modern BI platform supports IT-enabled analytic content development. It is defined by a self-contained architecture that enables nontechnical users to autonomously execute full-spectrum analytic workflows from data access, ingestion, and preparation to interactive analysis, and the collaborative sharing of insights."

Once you have the right tool in place, help people see its value by sharing the vision, the goal: an organization in which anyone can explore their data, find actionable insights, and share their findings to maximize business impact.

To build momentum, show people how data, when leveraged as part of their workflow, can elevate both their work and the overall business. Highlight people who are using data to save time and money, or spot opportunities. And help people discover their own insights so they can experience, first-hand, the power of data.

At ExxonMobil, IT makes data available for its engineers and geoscientists through what's called a Gallery of Dashboards. IT then helps business users access and edit these dashboards to perform their own analysis.

"We're putting the power back into the users' hands. They're able to go in. They can customize. They can do whatever they need to do to meet the requirements of their business," says ExxonMobil data analyst Ebony Weddington.

When IT showed these basic dashboards to a team in Buenos Aires, that team took the data, dug deeper, and found a way to save a significant amount of analysis time. By having a dashboard to ask and answer questions at the speed of thought, the team members estimated they could save a lot of time—95% of their time, to be precise.

"I thought about that for a minute," says John Ossege, data quality advisor. "I used to basically do what they're doing now, and I believe that's really an accurate number."

With the right tools and the right training, the IT department at ExxonMobil is not only helping set the foundation for a sustained culture but also delivering big ROI wins.

> *"The time saving is just huge."*
>
> – EBONY WEDDINGTON, DATA ANALYST, EXXONMOBIL
>
> Learn more

4. Scale with People and Processes

A culture of analytics relies on a powerful analytics platform that people love. This platform should be easy to deploy, manage, and scale across the organization. It should also have the security and governance IT requires. Once you have the right platform in place, it's time to shift your focus to people and processes.

Implement processes to maintain the balance of governance and self-service as your analytics usage grows. Adopt a scalable system for managing data sources, workbooks, and user permissions. Articulate processes for auditing usage data and optimizing metadata. Systematically address any gaps or kinks that might hamper the growth of your analytics program.

With your processes in place, it's time to grow your user base. Educate people on the process and the technology. Train IT on how to best support the business in its new role. And train the business on how to access, explore, and even request the data, then share and collaborate their findings. Consider forming a cross-functional team of IT and business users to track progress, understand needs, share learnings, and simply continue the conversation (remember, culture change doesn't happen overnight).

And continue to provide encouragement through enablement programs. Establishing programs like show-and-tells and brown-bag sessions can help identify gaps in adoption and help people embrace this new way of thinking and working. Ongoing support is the key to success.

Caterpillar, a Fortune 50 company, saw a 250% growth in business users of data analytics in 2015. To manage that fast growth, the company created an onboarding team to handle training and user requests. This team offers several different enablement programs including an internal bootcamp that outlines best practices for data visualization.

"It's pretty amazing what we see the new users build and start thinking analytically in just four short hours," says Kevin Hayes, emerging technology lead at Caterpillar.

To help scale usage, the team refers colleagues to Tableau's on-demand training to "fill in those gaps while we work out building intermediate and advanced training," says Brian.

And the approach is working. Earlier this year, the team held a visualization competition that drew 500 participants across the organization.

> *"Unlike legacy BI tools, we no longer had to push the technology to the business. Users were instantly seeing the value."*
>
> – KEVIN HAYES, EMERGING TECHNOLOGY LEAD, CATERPILLAR
>
> Learn more about Caterpillar's approach to self-service analytics at scale

5. Value Both Intuition and Empirical Data

Adopting a culture of analytics means leveraging data to make decisions, but it doesn't mean leaving intuition behind. In this culture, people value both empirical data and intuition instead of just one or the other. Striking the right balance is critical.

Any good analytic exercise starts with a hypothesis, a hunch, that we can prove or disprove using data. For example, you might design your go-to-market strategy based on a hunch and supporting market analysis. But you don't know whether you had the right idea until you execute your plan and measure success with data.

The Texas Rangers' marketing team started with a hunch: that promotions and giveaways would draw fans to weekday games. The team knew that fireworks, T-shirts, and bobbleheads were all crowd-pleasers. But the team never expected what it now calls "the bobblehead effect."

"We were looking at the bobbleheads schedules, and all of our all-fan giveaways were placed on Tuesdays. And Tuesday was the only day of the week to actually increase in attendance. It wasn't a Friday or a Saturday; it wasn't the weekend," says Sarah Stone, marketing and advertising manager. "We said, 'Oh, my gosh, these things are really moving this day of the week that people don't normally buy.'"

Sarah and her team were so surprised that they decided to add another bobblehead night to the season.

"We added another Yu Darvish bobblehead at the end of September, and we also saw an incremental increase of ticket sales for that specific game," she says.

By measuring intuition with empirical data, the Texas Rangers were able to seize an opportunity and better serve their fans.

> *"We're really excited to be looking at our data holistically."*
>
> – SARAH STONE, MARKETING AND ADVERTISING MANAGER, TEXAS RANGERS BASEBALL CLUB
>
> Learn more about the role of data at the Texas Rangers' front office.

Conclusion

A culture of analytics enables organizations to better leverage their two biggest assets, their people and their data. It empowers people to use data to make decisions at the speed of business, and it enables the organization to seize opportunities and gain a competitive edge.

Empowering individuals to explore data also helps them connect to a purpose larger than themselves. Being able to provide great customer service or effecting positive change in the world are examples of purpose-aligned work. It's extremely rewarding to know how the organization is tracking toward its purpose and be able to impact that progress.

Seeing a premade chart during the last mile of a project doesn't produce the same emotional engagement. Intrinsic reward comes from using data throughout the process to make educated decisions and measure progress along the way. This satisfies our curiosity and our need to understand.

And that's good news for the organization as well. Engagement not only helps make for happier teams but also makes for more productive people and, ultimately, a better bottom line.

About Tableau

Tableau Software helps people see and understand data. Offering a revolutionary new approach to business intelligence, Tableau allows you to quickly connect, visualize, and share data with a seamless experience from the PC to the iPad. Create and publish dashboards and share them with colleagues, partners, or customers—no programming skills required. See how Tableau can help your organization by starting your free trial at tableau.com/trial.
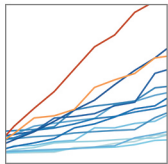
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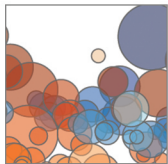
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