

SERVICE FEATURE

An Organizational Approach to Analytics

Organizations rely on data analytics to make timely decisions with confidence. However, for data to be used to achieve desired results, it must evolve from a technology led approach to a human-centric process focused on clients' needs, desires, feedback and responses.



Organizations rely on data to make decisions, change minds, promote services, and identify gaps — and to direct action to close those gaps. The key is to identify and prioritize the value of analytics and develop an organizational structure to support the analytics journey.

Organizations generally approach analytics in two ways: from the top-down or the bottom-up.

A Top-Down Approach

Leadership understands the benefits that analytics can bring to the organization and often appoints someone to lead an effort as part of a digital transformation or analytics initiative. Leadership, however, can fail to create and share a vision with the rest of the organization. If members throughout the organization do not understand how analytics can create a positive impact in their business area, they may start what is described as “use-case hunting.” Instead, organizations should create awareness of the types of value that can be created and target areas within their organizations that can

benefit from new capabilities created by analytics or process improvement/simplification or some type of “improvement.”

A Bottom-Up Approach

The departmental or functional needs of an organization, along with an understanding of analytics, can create a positive outcome. This approach may solve an immediate point solution but does not help with a larger enterprise solution. A bottom-up approach can only go so far without a larger enterprise/leadership vision or support. Datasets by themselves often yield outputs, but a data set paired with additional data sets is often more powerful. Enterprises should consider data infrastructure, which breaks down the “data silos,” simplifying access to as many data sets as possible.

Organizational Analytics

Analytics can be used to help solve organizational problems with people in mind, such as the need for new capabilities. Data analytics is often a technology led process that looks at the data that is being collected — traditional, popular or easy.

A Human-Centric Approach Starts With a Conversation

Utilities want to improve operations, for example, and having the ability to make informed decisions is critical to achieving that goal. A vision will inform leadership and the organization overall as to the need and desired outcomes of the analytics. By empowering the people of utilities to recognize failing assets before they fail, and focusing on work to limit unexpected outages, utilities can optimize the planning, design, maintenance and upgrade of its critical infrastructure.

Data Analytics Is a Process

Utilities are generating billions of data points per second, and many collect the information in a dependable and robust format. This data is rapidly changing the way we make decisions. The ability to make informed decisions is one of the most apparent benefits of data analytics, but data analytics is a process, and not a technology led process. It is crucial that we understand the people and the problems clients are trying to solve, so that we don't overload them with data.

According to a 2019 NewVantage Partners Big Data and AI Executive Survey, 77% of businesses report that the adoption of big data and artificial intelligence (AI) initiatives is often a challenge because they are designed in silos, tackle the wrong use cases, and leaders don't think they'll deliver value. As a result, 85% of data projects end up failing and do not move past the preliminary stages let alone transform business processes, functions or end experiences.

Human-centric data analytics goes beyond what outcomes are needed for the organization. While there are common advised use cases/outcomes, this varies by organization.

It starts with a conversation in which we:

- ✓ Share a vision.
- ✓ Educate on analytics and kinds of outcomes.
- ✓ Identify organization areas and benefits.
- ✓ Prioritize needs.
- ✓ Select projects first that are likely to succeed and have clear sponsors.
- ✓ Make the organization aware of activities.
- ✓ Encourage engagement.
- ✓ Identify people and skills needed within a data driven organization

Asking Questions to Achieve Results

How can we help clients derive actionable insights from their data? We begin by listening and asking good questions. Before we start any significant analysis or touch a single piece of data, we sit down with the stakeholders. The goal is to truly understand the needs, pain points and struggles of our clients by making people a part of the analytics equation.

Starting with a conversation and assessment allows everyone to understand and set clear objectives for data to achieve results. When conversations start, understanding begins. 1898 & Co. works with clients to understand the organization and processes. This results in a strategy that eliminates data and information silos. Having early conversations also streamlines data collection and establishes data governance and data management practices.

Data as an Asset

1898 & Co. works with our clients to understand their current state. What is the mission? Vision? Values? By assessing the current state, we can define the gaps and together build better and best practices to support their mission and vision. These conversations will lead into defining future options and developing a road map for how to get there.



Data Analytics to Improve Decision-Making

Assessment – Where are you on your journey?

Understanding the data strategy and data needs for our clients allows us to walk with them throughout their analytics journey. People saturated in data cannot find and use the data in time for quick action.

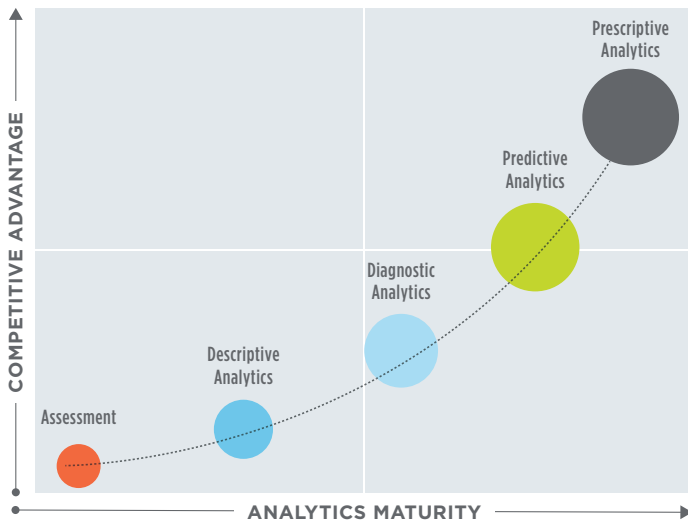


Figure 1: Four types of data analytics to improve decision-making.

Descriptive Analytics — What happened? We have clients that struggle to manage the volume, velocity and variety of their data. Data science helps clients begin generating a return on their data investment by processing large volumes of data and then feeding the dashboards and reports that enable real-time monitoring and decision-making.

Diagnostic Analytics — Why did it happen? Dashboards and reports help clients understand their systems and environment but diagnosing hidden relationships, unexpected correlations and abnormal behaviors requires advanced algorithms and methods. How might we help a client understand the impacts that electric-vehicle charging has on grid performance, or the true costs of unmetered loads?

Predictive Analytics — What will happen? When we understand what results our clients need from the data, we work with them to understand the relationships between their systems and the environment and help them anticipate future events, be aware of risks and make financially sound decisions. How might we help a client predict power plant performance based on time and weather, or anticipate electric loading in time to make preemptive adjustments?

Prescriptive Analytics — What is the best-case scenario? The full power of data analytics comes from using data, understanding and predictions to make the most appropriate possible decisions. How might we help a client build the most-resilient fiber network or design the most strategic asset-replacement schedule?

Finding and using the data you have to make organizational decisions can drive smarter actions. This begins by focusing on the people-side of the analytics equation: developing the strategy, people, and culture to become a truly data-driven organization.

About 1898 & Co.



1898 & Co. is a business, technology and cybersecurity consulting firm serving the industries that keep our world in motion. As part of Burns & McDonnell, our consultants

leverage global experience in critical infrastructure assets to innovate practical solutions grounded in your operational realities. For more information, visit 1898andCo.com.