



ESG WHITE PAPER

Empowering Everyone to Bring the Right Data to Every Decision

Achieving Data Nirvana with a Data Empowerment Platform

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Introduction

As organizations try to progress down the digital transformation path, they are overwhelmed with constant changes. New workflows relying on new technologies must meet new and everchanging business, application, and end-user requirements. Infrastructure is being modernized. The cloud is becoming increasingly essential. Scalability, elasticity, and agility are being prioritized. Security, privacy, and protection are at the forefront of initiatives. But one aspect of the enterprise continues to prove its relevance and importance: data. For many organizations, data is the heart of the business, and data intelligence is the key differentiator because it serves as the central brain for ongoing and often radical transformation—and not just within the digital realm.

While data is a priority, several ongoing challenges prevent organizations from achieving their data-centric goals. There is too much data and it is too distributed, making it difficult to manage. Skills gaps, increasing costs, and the slow time to value from data are becoming insurmountable burdens. How can organizations reliably expose more people to more data without having control of their data ecosystem? How can businesses ensure uptime and reduce risk as more people access a mix of diverse and distributed data with dynamic integration points across real-time data pipelines? Simply put, they cannot—not unless they figure out a way to free the experts from the data burdens and empower more people to access and analyze data with confidence. Data empowerment, when done right, is a glimmer of hope in controlling the data chaos so the enterprise and its leaders can be more successful in their day-to-day tasks.

Putting a Spotlight on Data

Organizations are turning to data to help them evolve and modernize the business. ESG research shows that improving operational efficiency and reducing costs are the top two drivers of data strategy (see Figure 1).¹ Organizations recognize the power of data to improve agility to better respond to the dynamic needs of the business. Organizations also want improved business decisions and strategy, improved quality of products/services delivered, and improved forecasting accuracy. Data strategy impacts everyone from C-level executives and line-of-business leaders to IT, operations, security, and data teams. It is truly an all-hands-on-deck scenario when it comes to empowering the business to become fully data driven.

Figure 1. Business Objectives Driving Data Strategy

What ongoing business objectives drive your organization’s data strategy? (Percent of respondents, N=310, multiple responses accepted)



Source: Enterprise Strategy Group

¹ Source: ESG Master Survey Results, [The State of Data Analytics](#), August 2019.

Challenges Preventing a Data Nirvana

As businesses learn of their data-centric marching orders, they are quickly met with roadblocks, challenges, and burdens. When ESG asked about the areas that have had an adverse impact to their data analytics strategies and investments during the last 24 months, respondents cited cost as the number one challenge.² It topped selecting the right infrastructure components to satisfy data workload requirements, licensing for more end-user access, staff to effectively deliver an optimal data pipeline, and support for all the above.

Data's dynamic nature is another challenge. Too many disparate data sources, data diversity (structured vs. unstructured), the rate at which data changes, and the speed at which data grows all prevent organizations from achieving optimal results with their data assets. Other roadblocks and burdens to data success include the increasing involvement of more personas; lack of skills to properly manage data sets and derive value from them; limited collaboration between IT, analysts, and/or line-of-business leaders; and difficulty scaling to meet the growing demand for data access. When looking at the business holistically, it is abundantly clear that all these challenges are intertwined, creating a data ecosystem riddled with complexity, delays, and risk.

Operational Challenges

ESG research shows that three-quarters (75%) of senior IT decision-makers believe IT complexity has increased during the past two years.³ Work-from-home mandates, larger and more distributed data volumes, the increase in the number and type of

applications used by employees, and the need to use both on-premises data center and public cloud providers are all contributing factors to the rise of IT complexity. Operations teams are therefore pressured to ensure the accessibility, performance, and reliability of data-centric applications in mixed environments.

Organizations want to embrace the cloud to increase agility but continue to overlook the impact of embracing new operating models. By not accurately understanding the anatomy of a workload moved to the cloud, organizations experience performance challenges and migration bottlenecks that cause much larger-than-expected cloud costs. As certain applications and workloads move to the cloud, the impact to existing data pipelines is inevitable. Trying to get to the cloud too quickly causes disruptions in data flow, leading to delays in technology, application, and data availability. Then there is the problematic issue of skills gaps. When it comes to shortages of existing skills within IT organizations, ESG research shows that 36% have glaring gaps in cloud architecture/planning, 34% in IT architecture/planning, and 32% in IT orchestration and automation.⁴

Data Protection and Security Challenges

The operational challenges described above quickly become data protection and security challenges. While IT is viewed as more complex, new data security and privacy regulations and an expanding cybersecurity landscape add to this pressure. With new environments, tools, processes, and workflows comes increased risk. Different tools and technologies likely rely on different infrastructures, all of which must be monitored and protected. And with the distributed and expansive nature of these growing environments comes nightmare scenarios of potential disruption.



75% of senior IT decision-makers believe IT complexity has increased during the past two years.

² Ibid.

³ Source: ESG Master Survey Results, [2021 Technology Spending Intentions Survey](#), December 2020.

⁴ Ibid.

Data is generated in many locations, and organizations continue to struggle to provide the right level of business continuity and disaster recovery based on what data belongs where and for how long. And do not forget about the employees using that technology and subsequent data. They are more remote or mobile, using whatever device they can to access, move, or share data. How are their devices protected? How is the data protected? The surface area for a data breach, data loss, and/or cyber-attack has never been greater than it is today. Organizations must scrutinize data privacy and security to avoid the detrimental impacts of being in the headlines.



32% of organizations cite data governance as a top area having an adverse impact on data strategy and investments during the last 24 months.

Data Governance Challenges

According to ESG research, nearly 1 in 3 organizations (32%) cite data governance as a top area having an adverse impact on data strategy and investments during

the last 24 months.⁵ While organizations look to make more data available to more people with the hope of gaining more insights, the strain to ensure trust in the data and outcomes is growing.

Limited data visibility casts dark clouds over data, putting into question how it can be accessed, analyzed, and used to help the business. Poor data quality leads to more questions than actionable insights. And data sprawl creates conflicts in data history, lineage, and the ability to rapidly gain the right intelligence. Sprawl also creates risk not only in ensuring the right people have access to the right data, but that they do not have access to the wrong data. Organizations need to mitigate risk and ensure compliance when it comes to accessing and managing sensitive data, plus give the right end-users unfettered access to the right data so they are free to analyze it on their terms.

The Pillars of a Data Empowerment Platform

Data empowerment is about giving everyone within the organization control of their individual data destiny. People want easy, secure, and seamless access to the relevant information they need to do their jobs, so they can be more engaged, efficient, and successful. Organizations that embark on a data empowerment journey will be able to transform their businesses for the better.

“Data empowerment is about giving everyone within the organization control of their individual data destiny.”

What can organizations that embrace data empowerment do to prove its value? They can provide the right tools, technology, and training for all employees via self-service, regardless of skill level or line of business. One benefit of self-service is productivity. For example, line-of-business users at organizations with self-service data capabilities report their time to data access is approximately one day faster than those without self-service data capabilities.⁶ Experts and generalists alike benefit from self-service technology and data-centric guardrails to ensure faster ramp-up, fewer interruptions, and ongoing productivity improvements.

By focusing on data empowerment, organizations will be able to improve the use of analytics across the entire business. And while some of the onus is on employees to *want* to get better at effectively leveraging data, it often starts with having the right technology and processes in place to set them up for success. The emergence of data empowerment platforms looks to do just that by incorporating the technology and workflows that matters most to a data-centric business. For data

⁵ Source: ESG Master Survey Results, [The State of Data Analytics](#), August 2019.

⁶ Source: ESG Custom Research Survey commissioned by erwin by Quest, *2021 State of Data Governance and Empowerment*, March 2021.

empowerment platforms to be effective, three clearly defined technology pillars should be front and center to enable organizations to achieve operational excellence through advanced intelligence, reduce risk through effective data protection and security, and promote data access and availability to the right people at the right time.

Value Created Through Operational Excellence

Achieving operational excellence is a constantly moving target. Modern businesses must continue to evolve based on their dynamic natures. By applying technologies that incorporate intelligence and automation, organizations can create and maximize value across their entire data estate. This includes all aspects of the data lifecycle, from integration to insight, as well as the supporting infrastructure components on premises and in the cloud. Organizations can design relevant and right-sized data structures optimized for a particular business or specific use case. That means leveraging the right databases in the right environment to best meet application requirements. Ongoing management, monitoring, and optimization must be seamless to ensure the continuous availability of an application and its underlying data, including multi-region access and easy recoverability in the case of a problem. Agility is proving critical, especially when it comes the application lifecycle. Application development to deployment should be streamlined to enable the business to adapt in real time based on rapidly gained insights. And tools for reporting and analysis of the operational data ecosystem should be rooted in self-service, enabling more people to understand requirements, optimize the hardware and software stack, and identify and remediate problems.

Ensuring Business Continuity by Reducing Risk

Reducing risk, especially in a time when so many more people want access to data, is crucial. The right data protection solutions ensure the availability of data without comprising risk by continuing to meet security and privacy requirements of data, devices, and people. Securing infrastructure and assets, from the edge to the core to the cloud, helps ensure uptime and mitigate threats. Gaining visibility into all data locations and endpoints sets organizations up for success in preventing unauthorized access or intrusions. And if data loss does occur, having effective backup and recovery policies enables organizations to deliver business continuity in a way that exceeds end-user expectations.

Uncompromised Data Democratization and Socialization

At the root of data democratization is data governance. Effective data governance implementations empower both producers and consumers of all data to establish and utilize a powerful data governance framework that promotes data accessibility without compromise. While that framework will incorporate traditional data governance constructs, like who has access to what data and when, the incorporation of modern data governance practices should be given heavy consideration. Aspects of data governance like usage guidance and self-service will prove valuable for organizations embracing data empowerment. Guardrails will be utilized in a way that sets organizations up for success in exposing more people to more data for faster ramp-up and less interruptions. Metadata-driven automation will help the business discover and monitor all data assets, including end-to-end data lineage and impact analysis. Understanding how existing and new data relates to the business with traceability and business context will better set end-users up for success. Easily associating data assets with business rules and policies will give all personas peace of mind. And enterprise-wide collaboration will be enabled in a way that ensures trust in the data, the insights, and the outcomes.

Achieving Data Intelligence

By implementing a data empowerment platform, enterprises will be the most effective in achieving a new level of data intelligence. An organization will have more visibility, transparency, and control of the entire data estate, and the business will be able to progress down the digital transformation path more effectively. Enterprises will improve operational efficiency and reduce operational cost. They will improve business decision-making and future strategy. They will improve the quality of products and services delivered to their customers. They will minimize cost and risk when it comes to

“By gaining next-level intelligence from the data, the systems, and the people, reaching data nirvana can be a reality for every organization.”

maintaining compliance. They will be able to respond more tactically to shifting customer demands. And they will uncover new market opportunities with the greatest upside. By gaining next-level intelligence from the data, the systems, and the people, reaching data nirvana can be a reality for every organization.

The Bigger Truth

Data has the power to transform everything and in radical ways, from new ways to work and stay in touch with family and friends to the development of life-saving vaccines at an unprecedented pace. But simply exposing more employees to more data is not enough. They need to be effective in how they create, consume, and manage the right data—the data that matters and the data the business relies on to make the best possible decision at the right time. Prescriptive guidance is required to best leverage the right data with reduced risk. Employees need customized guardrails depending on their level of expertise or the problem they are trying to solve. And those guardrails should not become deterrents that stagnate either the future growth of the business, or the employees, but rather promote personal and professional growth. Those with a continuous thirst to bring the right data to every decision will deliver the game-changing results that matter the most.

Enterprises must find ways to use data as a differentiator. They need to prioritize data intelligence as the foundation for data empowerment. And it starts with improving the underlying data infrastructure that includes the convergence of data governance, data operations, and data protection to ensure the availability of high-quality data to empower everyone. The organizations that do data empowerment right will prioritize all stakeholders and enable them to expand their knowledge, learn, and grow with data as a foundation for their everyday lives. Whether it is an operations team enabling the business to embrace the cloud and become more agile, the security team hoping to reduce exposure and minimize risk, or the data team ensuring the availability of trusted data, everyone should welcome opportunities to become more effective and efficient in how they use data to make their jobs easier and the business better. This is the true essence of a data empowerment platform—to prepare, harvest, structure, govern, analyze, visualize, monitor, and protect data in a way that enables the business to take the right action at the right time as efficiently, effectively, and collaboratively as possible.

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