



Using Automation to Knock Down Barriers to Becoming Data-Driven

The 451 Take

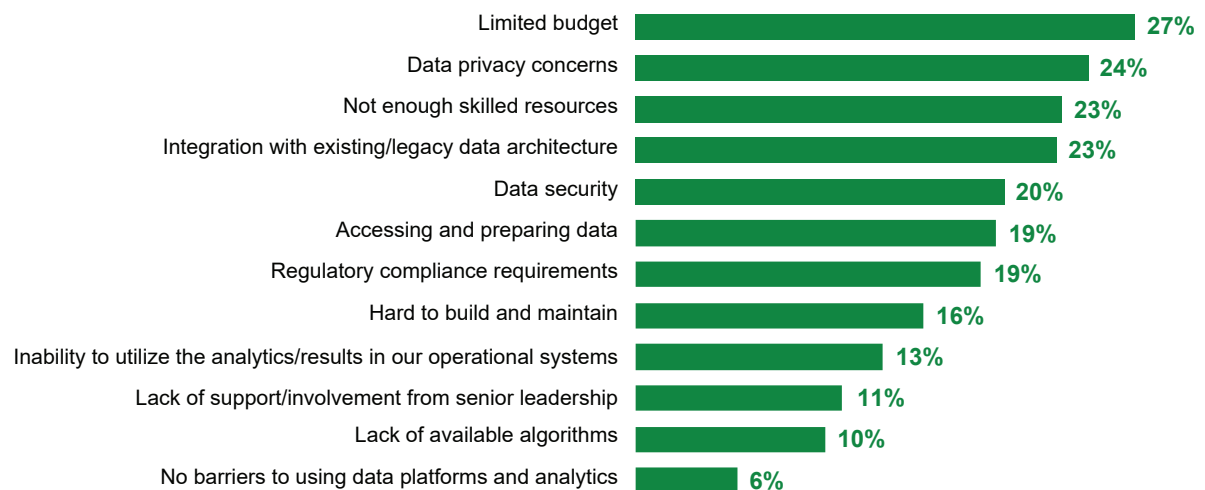
Data is increasing in importance to most organizations. In 451 Research's Voice of the Enterprise: Data & Analytics, Data Platforms survey, 82% of participants indicated that data will be more important to the decision-making process at their organization over the next 12 months. Leveraging this data comes with challenges that surface via points of friction within existing data workflows and pipelines.

Many of these barriers to leveraging data more effectively are structural or organizational in nature. While it is indeed simple to focus on technology as the cause – and solution – to all of life's problems, reality tends to be more nuanced.

Barriers to Being More Data-Driven Are Both Technical and Organizational

Source: 451 Research's Voice of the Enterprise: Data & Analytics, 2H 2019

Q. What are the most significant barriers your organization faces in attempting to be more data-driven? Please select up to three. (n=361)



Some of the most frequently cited barriers to becoming more data-driven as an organization are, indeed, rooted in organizational culture rather than purely technical functionality. However, a unifying theme to many of these barriers is that human capacity is constrained.

For example, limited budget is reported as a significant barrier by 27% of survey participants – the top overall response. Under the surface, though, this can indicate challenges in terms of human process bottlenecks. Increasing human capacity for work is one of the most expensive challenges an organization can face, and adding just more workers is not efficient or scalable. Relatedly, ‘not enough skilled resources’ ranks high as a pain point in this survey, indicating a hunger for more automation.

Data privacy concerns, as a barrier, are unique. These concerns may be easy to conceptualize as a data security workflow problem, the broader reality is that privacy concerns – specifically – are often fueled by lack of certainty in data-driven processes. Reliance on highly manual processes to identify and classify data as sensitive, for instance, reduce confidence in the use of data. Individuals only have so much capacity to curate and manage data, and lack of confidence that data is ‘safe’ or appropriate to use can create hesitation – not to mention potentially cumbersome chains of human communication around appropriate data use.

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The 451 Take (continued)

For many data-dependent roles, finding and preparing data continues to be a pressing pain point. In 451 Research's Voice of the Enterprise: Data and Analytics 2H 2019 survey, enterprise practitioners reported that data analysts within their organizations spend a mean of 48% of their time 'finding and preparing' data. For data scientists, that number is 45%. So while individual pain points in data-driven workflows may manifest as difficulty in working with individual tools or people-centric processes, the higher-level challenge is often one of automation. As the number of data-dependent roles within an organization grows, there needs to be increased efficiency in delivering relevant data at scale. All elements of the data workflow are candidates for automation, but getting trusted data to a location where it can be accessed and consumed, in a timely manner, should be a priority.

Business Impact

ORGANIZATIONS SEEK TO ADDRESS PAIN POINTS IN DATA WORKFLOWS, AND THESE ISSUES OFTEN ORIGINATE FROM HIGHLY MANUAL PROCESSES. Not all 'technology' problems stem from technology. Dependency on manual communication chains, permissions and workflows around using data can all hamper the ultimate leveraging of that data.

GETTING DATA INTO A USABLE STATE, IN A LOCATION THAT IS CONTROLLED BUT EASILY ACCESSIBLE, SHOULD BE A CORE OBJECTIVE IN A DATA-DRIVEN CULTURE. As the number of data consumers continues to expand, these consumers need easy-to-access and highly trusted sources of information. Leaving less technical or line-of-business users to find curated data on their own rarely works well.

KEY DATA PRACTITIONERS WITHIN ORGANIZATIONS STRUGGLE WITH DATA ACCESS AND PREPARATION. Addressing this can be a major productivity accelerator. Existing roles that are dependent on data within organizations – data analysts and data scientists – already spend a disproportionate amount of time just finding and preparing data. Fixing this problem unlocks the untapped value of these roles.

Looking Ahead

More individuals within the typical organization are becoming consumers of data. We tend to think of this in the construct of self-service data access for BI or visualization tools. But in reality, nearly all individuals are becoming data beneficiaries. Pain points in the data workflow are often organizational in nature, but can potentially be alleviated by strategic use of automation.

Moving forward, organizations need to streamline the access and consumption of data within the organization. In short, trusted and curated data is the lifeblood of the business. Human bottlenecks are unsustainable in the delivery of data; however, this does not diminish the legitimacy of human skill sets. Automation ultimately exists to augment human cognitive capabilities. An optimized organization will automate processes that are inefficient uses of human skills, and allocate more human bandwidth to higher-order strategic tasks.

TIMEXTENDER

TimeXtender provides automation to build a modern data estate 10x faster. TimeXtender provides a no-code environment for automating data integration, extraction, cleansing and loading that enables rapid deployment and maintenance of a data estate for analytics and AI – saving our customers time and money. TimeXtender's unique metadata-based approach supports security and compliance, simplifying maintenance of security settings and providing end-to-end documentation and data lineage.