Data-Driven Decision-Making: Trends, Challenges and Solutions
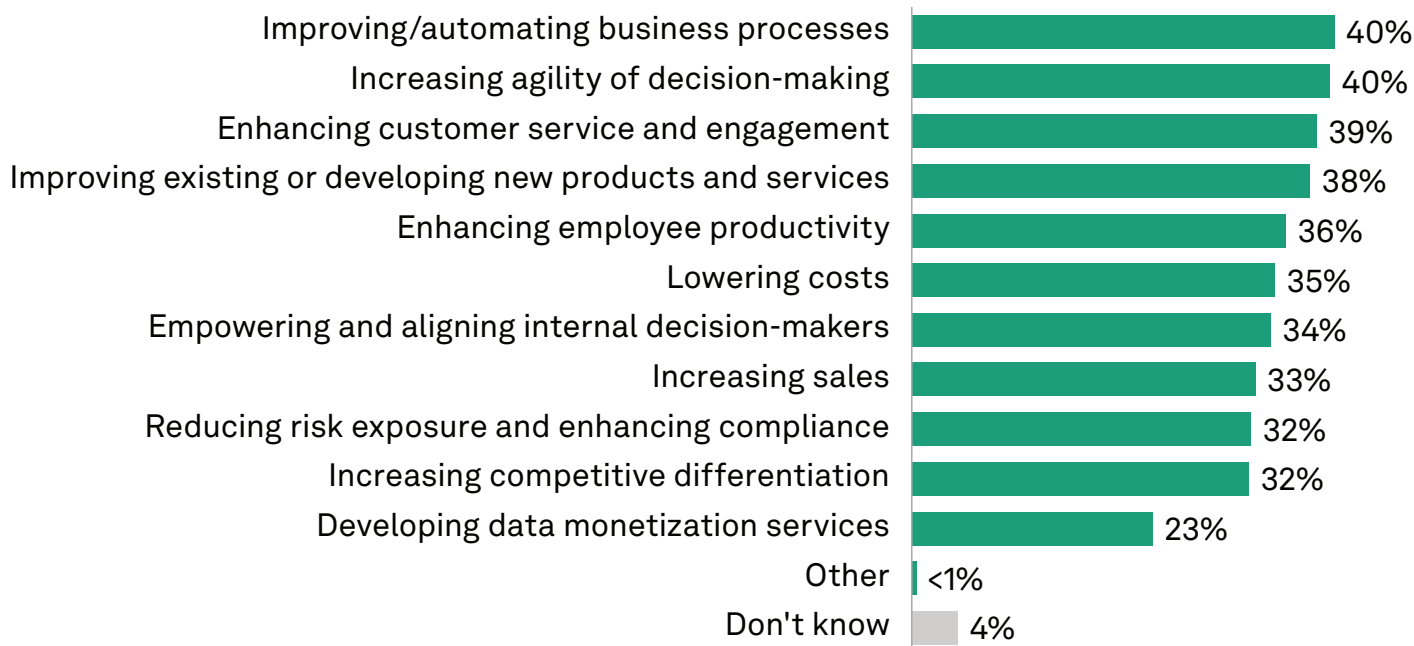
The 451 Take

Data-driven strategic decisions are the norm today for many organizations, yet there is still ample room for additional progress to be made. Based on 451 Research's Voice of the Enterprise: Data & Analytics, Data-Driven Practices 2022 survey, less than one-quarter (21%) of respondents report that their organization makes "nearly all" strategic decisions based on data. A full third (33%) of respondents say their organization only makes "some" or "few" strategic decisions based on data: indicating a clear maturity curve, with many lagging behind.

Pressure, meanwhile, is increasing to leverage data effectively. Organizations overwhelmingly indicate that data is becoming more important in their decision-making over time. Based on the same survey, nearly 79% of participants say that data will be more important to their organization's decision-making over the next 12 months. Yet organizational motivation for becoming more data-driven isn't as straightforward as one might believe. The business motivation for being data-driven has largely shifted toward long-term survival.

Most significant benefits expected from being more data-driven

Benefit	Percentage
Improving/automating business processes	40%
Increasing agility of decision-making	40%
Enhancing customer service and engagement	39%
Improving existing or developing new products and services	38%
Enhancing employee productivity	36%
Lowering costs	35%
Empowering and aligning internal decision-makers	34%
Increasing sales	33%
Reducing risk exposure and enhancing compliance	32%
Increasing competitive differentiation	32%
Developing data monetization services	23%
Other	<1%
Don't know	4%

Q. What are the most significant benefits your organization would expect from being more data-driven? Please select all that apply.
Base: All respondents (n=477).
Source: 451 Research's Voice of the Enterprise: Data & Analytics, Data-Driven Practices 2022.

These responses are in contrast to pre-pandemic survey data, in late 2019, when the top responses were tied closely to quarterly metrics: "increasing sales" and "reducing costs." While these objectives are still broadly acknowledged, the top responses today are more abstract and aligned with enduring resiliency. The ability to automate business processes, make more agile decisions and enhance customer engagement/service all support the business when unexpected conditions arise.

Furthermore, businesses are more diverse in what they want to achieve today with their data-driven practices. When organizations are asked what they want to do with data today, they tend to respond "everything." In the above chart, there is no overwhelming statistical winner. Businesses want to support all their business objectives with data. However, organizational challenges remain in the effort to become more data-driven that can be either technical or cultural in nature. Some of the top technical challenges speak to a lack of ongoing data governance strategy.

Based on the same survey, top technical challenges in becoming more data-driven include "data quality and consistency" (35%), "data security" (30%) and "data privacy" (28%). These data governance-related challenges also manifest in the organization's critical attempt to get a more unified view of enterprise data. Top challenges in getting a more unified view of data include data privacy requirements, data security requirements, variety of data sources, number of data silos and legacy data architecture.

Business Impact

Most organizations strive to become more data-driven in their decision-making, but many lag in their abilities to make data-driven decisions. The desire to become more data-driven is nearly unanimous, yet relatively few organizations base "nearly all" strategic decisions on data. This suggests ample room for cultural and technological improvements, particularly around the availability and integrity of enterprise data.

The motivation for becoming more data-driven has shifted over time, with today's businesses focused on outcomes that ensure long-term organizational resiliency. Gone are the days when all that mattered were quarterly performance metrics, such as sales. Businesses are looking to use data in ways that will help weather the next unexpected storm, via improved overall process efficiency and increased decision agility.

Challenges in becoming more data-driven can be either technical or cultural, but top technical challenges are often deeply intertwined with data governance efforts. Data governance should be a driver of business value rather than just a vestige of compliance efforts. Yet many organizations are still stuck in a "checkbox" mentality. Good data governance should yield high-quality data, to a broad audience, for a wide array of appropriate use cases.

Getting a more unified view of enterprise data is a common business goal, but complexity of IT architecture and lack of governance often pose barriers. The effort to get a more unified view of data is still often plagued by the IT architectural reality of silos. It is nearly impossible to meet security and privacy requirements, let alone overcome silos and legacy architecture, if the organization does not have consistent data governance practices.

Looking Ahead

As organizations realign their objectives toward data use and leverage, data integrity is becoming more important. Most businesses do not suffer from a lack of data. What they often lack is an ability to trust that data and consistently make actionable decisions from it. As such, data governance — rather than just being a historical vestige of compliance efforts — is coming to the forefront as a way to ensure the reliability and flow of data as an asset throughout an organization.

Businesses need to align their objectives around the usage of data. Use cases such as privacy and security are not in opposition to use cases such as data quality assurance and self-service availability. Rather, the firm and consistent control of data within an organization is foundational to achieving all desirable outcomes with enterprise data. An organization cannot effectively leverage data that it does not understand or manage.

While business culture is foundational in an organization's success with data, technology also plays a critical supporting role. An organization should select technology that augments and enhances existing successful work processes, rather than try to force technology that creates friction with end users. Important supporting technologies to consider include those that help enable enterprise-wide data culture, with attention paid to the worker experience with data.