

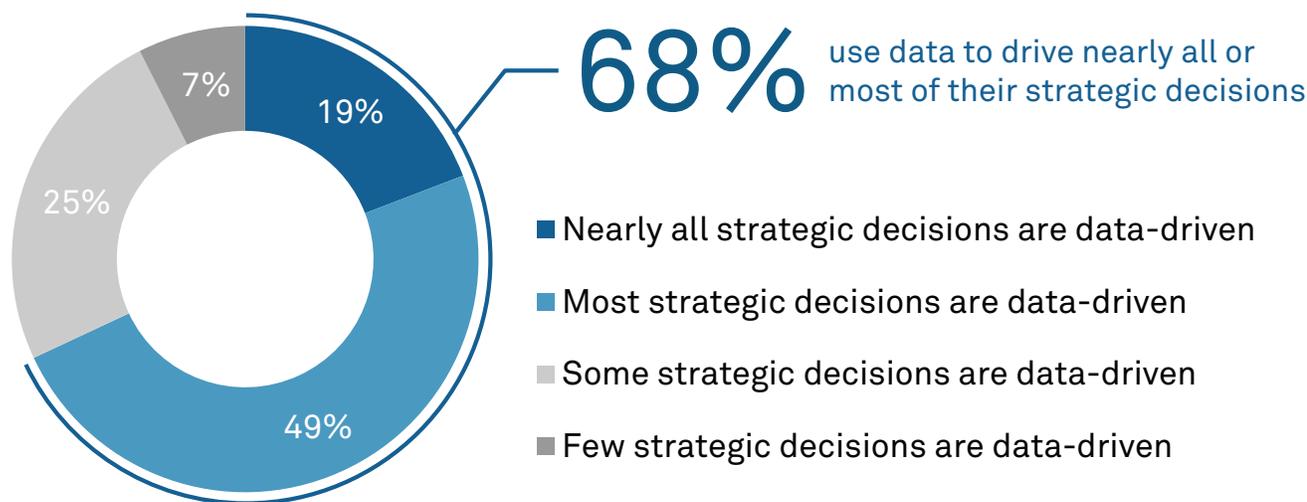
Decision Intelligence: A New Enabler for Data-Driven Decisions

The 451 Take

There are myriad benefits to be had from using data to underpin strategic decisions – yet data-driven decision-making is by no means pervasive. Almost one-third (32%) of companies have yet to fully embrace a data-driven approach to strategic decision-making, according to 451 Research's Voice of the Enterprise: Data & Analytics, Data Platforms 2021 survey. That means a sizable number of organizations are missing out on the benefits of utilizing data as a decision-making tool, and are instead relying on experience, knowledge and business instincts alone. While these factors are undoubtedly important, the use of data as well leads to more effective business decisions.

Leveraging data enables organizations to make more confident decisions by using hard facts to support intuition and hunches. And increased confidence can lead to more proactive decisions. Data also enables conclusions rooted in objective information rather than subjective ideas, which can drive flawed decisions. As illustrated in the figure below, 25% of organizations use data to drive only some strategic decisions, while 7% make very few strategic decisions using a data-driven approach. The emerging discipline of decision intelligence could help drive adoption levels higher by placing data-driven decision-making within the reach of more personnel within an organization, so decisions can be made by individuals beyond those who are proficient or skilled in interpreting information and crunching it for insights.

Importance of Data-Driven Decision-Making



Q. Looking ahead 12 months, do you think data will be more important to your organization's decision-making, less important, or will there be no change 12 months from now? Base: All respondents (n=658) Q. To what extent would you say strategic decisions are currently 'data-driven' at your organization? Note: by 'data-driven' we mean determined by or dependent on the collection or analysis of data.

Base: All respondents (n=657)

Source: 451 Research's Voice of the Enterprise: Data & Analytics, Data Platforms 2021

It is the AI – in the form of machine learning – that puts the 'intelligence' into decision intelligence to democratize the data-driven decision-making process. Indeed, machine learning is a fundamental aspect of decision intelligence, due to its ability to automate steps in a data-driven decision-making process – thereby lowering the skills barrier, among other benefits. Decision intelligence also requires a new type of software stack, since this is what differentiates it from classic business intelligence.

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Business Impact

Make data-driven decision-making a critical aspect of digital transformation initiatives by investing in decision intelligence to enable wider use of data to support effective decisions. This approach will help organizations reap the benefits of driving new opportunities, disrupting existing markets and creating competitive advantage.

Recognize that there are challenges associated with successful use of data to make improved decisions, including the rising overall volume of data, and the increasing variety of data sources. These factors should be considered when choosing a decision intelligence platform by ensuring that it is scalable and also able to handle data in a variety of formats and states.

Ensure that machine learning is infused within the entire decision intelligence workflow. This will help support the automation of data management and analysis processes – not merely one or the other, since they are complementary.

Choose a decision intelligence platform that houses rigorous data management in order to ensure that it generates high-quality insights. Effective data management will also accelerate the collection, processing and analysis of available data to support a better return on investment.

Select a decision intelligence platform with a gamut of analytical functionality to assist the organization in making more informed decisions of various types – including forward-looking, proactive and actionable ones, since they are fundamental to effective decision intelligence.

Looking Ahead

Decision intelligence is still in its infancy. But its potential to support digital transformation by increasing the levels of data-driven decision-making in an organization is significant. Increased sales, improved business agility, enhanced customer service and engagement, and more empowered and aligned internal decision-makers can all be achieved when data-driven decision-making is effectively implemented. Decision intelligence platforms are likely to play a key role in enabling organizations to realize these benefits.

Decision intelligence software platforms are evolving – and they are by no means all equal. Some still lack deep data management functionality. Comprehensive data access is critical to ensure that every data source requiring analysis is embraced. Furthermore, the data management layer in a decision intelligence platform needs to support the integration and blending of data in a self-service manner using machine-learning-driven data preparation to automate certain steps for nontechnical individuals. That said, the provision of sophisticated data manipulation, transformation and cleansing capabilities using a code-based approach is equally important to meet the needs of code devotees that have more complex requirements. Both approaches help prevent a ‘garbage in, garbage out’ scenario, which results in poor insights and unsound decisions. Additionally, data and model lineage, as well as the ability to track all steps in a data pipeline, are vital for adherence to corporate governance and compliance mandates.

Some decision intelligence platforms suffer from a paucity of analysis capabilities, which is another issue to consider because it limits the ability to generate a diverse array of analytical insights to inform actionable decisions. Support for multiple query types, as well options in handling how queries are processed – in-database, in-memory or locally – are a foundation for insight diversity, so these are critical requirements, too. Nonetheless, many of these data management and analytical deficiencies are likely to be remedied over time. Decision intelligence will mature, and so will the definition of what constitutes a bone fide decision intelligence platform. And there will undoubtedly be more investment from both the vendor and buyer perspectives going forward as decision intelligence, with its liberal use of machine learning for automation to foster ease of use, as well as speed and productivity gains, is more widely adopted.



The Pyramid Decision Intelligence Platform is next-generation analytics and business intelligence (ABI) that was purpose-built to deliver a streamlined, unified and inclusive decision-making experience. With a powerful direct query engine at its core, the Pyramid platform uniquely combines Data Prep, Business Analytics and Data Science in a single environment and scales for any data, any person, and any analytics needs with built in reliability, data governance and security. This eliminates the need to use multiple disparate tools and the associated license cost and management complexity.

Learn more at: www.pyramidanalytics.com/decision-intelligence-platform/.