



I D C A N A L Y S T C O N N E C T I O N



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Implementing an Analytics Strategy to Accelerate Insight

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Organizations are investing in new analytics technologies to improve agility and performance. IDC discusses key findings in the analytics market to help companies and other organizations learn how to deliver analytics capabilities suitable for a wide range of use cases. The technology and data must come together to serve the business users under the guidance and management of IT. It is only through communication and collaboration that organizations can deliver the right analytics at the right time to the right people.

The following questions were posed by SAP to Brian McDonough, research manager for IDC's Analytics and Data Warehousing Software program, on behalf of SAP's customers.

Q. Why do organizations invest in new analytics technologies?

- A. There's increased demand for analytics from business users because of the tremendous value it offers. 82% of organizations see quantifiable benefits for new analytics initiatives within 12 months, and 45% see quantifiable benefits within 6 months. New insights result in direct business benefits. For example, we have seen ROI increases for capital expenditure projects. In other cases, organizations have reduced the cost of field service deployments or improved promotion effectiveness for consumer products. In addition, organizations have experienced qualitative benefits such as faster time to insight, increased confidence in decision making, and greater productivity.

While investment in analytics is nothing new, organizations are more effectively delivering targeted, relevant user experience to suit the use case. Analytics needs can vary by role with front-line employees and managers needing secure access through mobile devices. These users need to perform ad hoc queries as business conditions warrant using granular and trusted data. They don't have the time to learn complex new tools. Organizations that meet the self-service needs of business users, including mobile and ad hoc analysis, are three times more likely than their peers to generate quantifiable benefits beyond their initial expectations. This correlation between satisfying user needs for specific analytics and the generation of business benefits is telling of the need to fully understand analytics requirements and then address them appropriately.

Organizations need to enable employees to access information quickly with intuitive tools that employ visualization. Users need rapid analysis so they can provide answers to questions that arise. This capability wasn't addressed in earlier generations of analytics tools focused only on reporting. Production reporting will still serve its purpose. The office of finance, for example, will still need trusted, formatted, and regularly produced reports that remain consistent over time. But now finance also needs ad hoc query and predictive analysis capabilities to aid in planning, forecasting, and root-cause analysis functions. The same is true of other departments that have a mix of users with various technical and analytical maturity levels.

Q. How do organizations successfully address these new analytic needs?

- A. IT plays a critical role by working with business users to identify analytic needs and provide tools appropriate for business use cases. This requires an open line of communication to buy, build, and grow an analytics solution. IT will have different priorities for choosing the analytics offering they want to deploy, including scalability, ease of management, strong security, and good data integration. In contrast, business users prefer ease of use, mobile access, ad hoc query support, and visualization. The key is to find a balance of managed self-service to address the needs of both groups. Enterprise reporting, multidimensional analysis, and predictive analysis have established de facto standards for the way that IT, finance, or advanced analytics teams take responsibility for the management and use of those tools.

In the case of new analytics technology, it's challenging to balance the need for control and quality of analysis with the self-service requirements of business users. In extreme situations, security, performance, and control can be sacrificed for the immediate gratification that results from bypassing IT policies altogether. This is happening because only 8% of organizations feel their IT department can meet business user change requests in a timely manner. Putting the business user in more control of ad hoc analysis and the creation of dashboards can remove much of this burden on IT. Simply reinforcing IT policies is not enough. Collaboration between business and IT will lead to better outcomes.

Q. In what specific areas are organizations uncovering new insights?

- A. Online consumer behavioral data from social media, sensor data, geolocation data, and third-party weather data are examples of the variety of data sources that can provide new insights. With successful big data and analytics solutions, granular data provides a sandbox for creative knowledge workers to explore new opportunities. IDC's research confirms organizations are adding new data sources to supplement internal transactional data. They are doing so to gain new insights.

When organizations enrich transactional data, it opens the door to new insights. Data mining, text analytics, spatial analytics, graph processing, and data visualization are being applied to the data sources for deeper understanding of performance, opportunities, and risks. For example, marketing departments can gather email campaign conversion rates along with Web channel sales rates and compare that data with social media feedback to tailor future marketing campaigns that better anticipate customer behavior. With the emergence of the Internet of Things, feedback from machines will continue to grow as a data source for improving decision making. We see examples of organizations combining financial data with maintenance events to prioritize which machines on a manufacturing line get serviced and how. Decisions about where to acquire a part or how to assign a skilled employee need to be made quickly and efficiently. New insights from the combination of different data types and sources lead to opportunities and revenue streams in the marketing example and cost and risk reduction in the manufacturing example.

Q. Aside from new data sources, are there other factors that should be considered when addressing the need to drive faster time to insight?

A. Some organizations are better than their peers at deriving value from data. These organizations have taken purposeful steps to introduce new data types and sources, implement new analytics and metrics, and deliver analytics capabilities to more users. Analyzing data from new data sources is just the first step. The next step is to enable new types of analysis, such as data visualization and predictive analytics. It's also important to provide access to analytics through mobile devices, to foster an analytically oriented culture, and to embed analytics into applications that provide context to the analysis.

Developing an analytically oriented culture is the biggest key to making analytics more accessible, more widely used, and highly targeted to a business user's needs. This is best accomplished by managers who extol the benefits of using analytics in decision making and communicate its benefits in policy and practice. As users become more reliant on analytics, they will begin to look at data from different perspectives, question legacy KPIs and metrics, and make predictions from descriptive analysis. Organizations that foster these practices stand to gain an advantage over those that maintain the status quo. IDC also finds that having a business intelligence competency center can lead to better results than a decentralized approach to analytics procurement and support.

Q. How are companies extending their business analytics solutions from descriptive to predictive analytics?

A. This transformation is highly dependent on the use case and the user's predictive needs. There are organizations that employ data scientists to develop sophisticated predictive models and provide output to marketing, sales, finance, and operations. There are analysts who conduct predictive analysis and collaborate with the line of business and data scientists to incorporate discoveries into business processes. And there are predictive analytics capabilities that are being increasingly embedded into self-service analytics that hide complex functionality from business users.

All three approaches require different functionality, and there are more options available to meet these needs today than there were just a few years ago. With 60% of organizations claiming a skills shortage involving advanced analytics, expertise is an inhibitor to a successful analytics initiative. In response, some organizations are increasingly distributing predictive capabilities with easier-to-use tools that are better suited for the business analyst and business user. When looking at user needs, consider that users may not need a deep understanding of predictive techniques to apply to a data set. More automation of the process of performing advanced analysis can give business users a powerful tool for making predictions. Guiding users to the variables that most impact a prediction is also helpful in narrowing the scope of effort required to understand what drives future performance.

ABOUT THIS ANALYST

Brian McDonough is a research manager in IDC's Analytics and Data Warehousing Software program. Mr. McDonough is responsible for providing coverage of supply-side trends within the business analytics market as well as user demand for technologies related to the implementation of business analytics. Primary areas of coverage include workforce and business analytics and decision process automation software, including data visualization and contextual business intelligence delivery.

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