KEY LEARNING SUMMARY

Prepare Your Organization to Capitalize on Predictive Analytics

A HARVARD BUSINESS REVIEW WEBINAR FEATURING

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OVERVIEW

Predictive analytics has the power to change what organizations do and how they do it. Yet many companies are equipped with the right technology, but most lack the organizational capacity to take full advantage of predictive analytics. In addition, many organizational processes aren't built to make use of analytics and make it a competitive advantage.

High-performing organizations leverage the power of analytics by channeling their efforts in four areas: focus, adopt, adapt, and activate. These companies have embraced a new paradigm that promotes agility, fast execution, and lasting organizational change.

CONTEXT

Brian McCarthy discussed how organizations can capitalize on analytics to solve key business problems and propel their business forward.

KEY TAKEAWAYS

The promise of analytics is alluring, but many organizations fail to capture the full value.

While organizations in all industries are investing in analytics, executives are often disappointed by the return on those investments. Barriers to ROI are commonly associated with constraints related to the following areas:

1. **Technology trends.** It is difficult for organizations to keep up with the pace of technology innovation, as well as the data explosion associated with today's highly connected world.

2. **Business trends.** Companies often struggle with the hypercompetitive business environment. Business volatility is on the rise, as are competitive pressures and customer expectations.

3. **Organizational issues.** The ability to keep up with the pace of change is limited by organizations' infrastructure and capacity to adopt. Key factors include organizational constraints and culture.

Research reinforces the idea that many organizations are unable to capture the full value of analytics. Accenture research found that analytics adoption has increased in recent years, but the average ROI still lags behind expectations. Findings include:

• Analytics adoption has increased threefold in the last three years.

• One third of companies now use predictive analytics to run their business.

• Two thirds of organizations have appointed chief data officers.

CONTRIBUTORS

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- However, only one out of five organizations is "very satisfied" with its ability to derive value from analytics.

Obstacles to capitalizing on analytics include siloed organizational structures and shortages of analytical talent.

When high-performing organizations focus, adopt, adapt, and activate, it unleashes the power of analytics.

By channeling their efforts in four areas, high performers leverage the power of analytics:

1. **Focus.** It is essential to focus on the right metrics. Given the current information explosion, there are more things that can be counted than ever before. However, relatively few will move the needle in terms of performance. A retailer, for example, measured 52 KPIs at the store level. Yet, few of these measures were clearly linked to positive business results. High-performing organizations select a small number of critical metrics that affect the business.

2. **Adopt.** Analytics technologies and expertise are most productive when deployed horizontally across the enterprise. McCarthy recommended three best practices for improving cross-functional adoption of analytics:

   — *Establish a center of gravity for analytics.* It is helpful to establish pods of employees who have a portfolio of skills related to analytics, such as a technology architect, data scientist, business analyst, visualization artist, and data ninja. This cross-pollination of skills drives high-performance teams and is a key enabler.

   — *Develop a strong root-cause analysis capability.* An analytics center of excellence (COE) is a great resource to answer questions about key metrics, generate and validate insights, and identify the best actions to drive value.

   — *Make collaborative decisions.* In high-performing organizations, business leaders meet with members of the analytics COE to interpret insights and determine appropriate actions. In collaborative decision-making meetings, it's a good idea to ask an impartial facilitator to manage the discussions.

3. **Adapt.** In the past, technology was the constraint to change. Today, however, organizational ability to change has become the bottleneck. To embrace analytics opportunities, organizations must transform themselves into change agents. Adapting decision-making processes is the key to successful adoption. Three techniques organizations can use to streamline adaptation are:

   — *Go slower to go faster.* With so much information available, it can be difficult to glean insights. By focusing effort, however, it is possible to accelerate impact. One organization had 300,000 locations and 20 machines in each location that were generating data. It used its big data discovery platform to analyze a subset of that information, resulting in $70 million in savings.

> "Pods of excellence think big, start small, scale fast, and create organizational momentum around analytics."
>
> **– BRIAN MCCARTHY**

— *Keep complexity behind the curtain.* In the world of aviation, airplane cockpits used to be highly complicated. Although that complexity still exists, the user interface has been streamlined to shield pilots from distractions. In the world of analytics, machine learning serves a similar role. Machine learning is a set of data discovery and analysis tools that uncover hidden features and patterns in the data. Machine learning algorithms can be used to create risk models, customer lifetime value models, and crowd simulation models.

— *Make faster decisions for faster rewards.* Agile decisions are a characteristic of high-performing organizations. The military's OODA Loop (Observe, Orient, Decide, Act), for example, enables commanders to compress the time between observing a situation and taking an action. Similarly, analytics can help organizations make more rapid decisions. A large North American bank saw a decrease in its Net Promoter scores and thought it was due to banking fees. Further analysis, however, revealed that the primary issue was that the bank's affluent customers were dissatisfied with its online and mobile banking capabilities. In response, the company stopped refunding service fees to its less desirable customer segments, took personal advisers out of the branches (since affluent customers were doing more business online), and repurposed those resources to improve its online banking experience.

4. **Activate.** High performers activate virtuous cycles via double-loop learning. The first learning loop focuses on learning from output. For example, if an organization doesn't meet its KPI targets, it makes adjustments and course corrects. The second learning loop focuses on learning from doing. The result of the second learning loop is process improvements over time.

A successful analytics journey requires organizations to embrace a new paradigm.

Based on his experience with numerous companies, McCarthy has found that organizations derive the greatest benefit from analytics when they do these three things well. They are:

1. **Agile in discovery.** High-performing organizations use a value-led approach to analytics. They identify key metrics that narrow their focus and enable more efficient access to data discovery. For example, a life insurance company realized that most data about older policies was in pdfs and written notes. The team used technology to scan the information into an unstructured database. They then structured the data, analyzed key signals, and developed a model that helps them better underwrite risk. An iterative approach to projects, which enables teams to fail early, also improves agility. Another best practice is to build relationships between the business and the analysts.

2. **Industrialized in execution.** Organizations that are "industrialized" in execution understand how to drive value quickly and get returns from their efforts. They often partner for innovation and use crowdsourcing. Relationships may be cultivated with third-party companies and academia. By looking for proof points, it is possible for organizations to quickly scale the insights gathered from analytics.

3. **Sustaining the change.** Organizations that sustain the new paradigm needed for successful analytics answer the "what" and "why," before the "who" and "how." Focusing on the value proposition is much more important than the organizational constructs. Change is also sustained through closed loop communication and building bridges between the business and the analytics teams. It is essential to celebrate success and learn by doing.

OTHER IMPORTANT POINTS

- **Best practices for COEs.** In some organizations, the CEO sponsors the Analytics COE. However, this top-down approach is less common than the "middle-up" approach. When COEs are developed from the middle up, pods of excellence conduct multiple analytics pilots that generate learning and organizational momentum. They think big, start small, and scale fast. Pods typically include four to six employees.

- **Front-line data literacy.** There are two aspects to employee data literacy. Business teams must strengthen their analytics competencies, but analytics teams must also strengthen their business acumen.

- **Analytics and small businesses.** When smaller organizations implement analytics programs, they are often more successful changing processes than larger companies.

"When it comes to sustaining the change related to analytics, answer the 'what' and 'why' before the 'who' and 'how.' Focus on the value proposition, rather than the organizational constructs."

– BRIAN MCCARTHY

Learn More

Predictive Analytics
Anticipate future demand, identify unseen trends or evaluate unknown outcomes for better decisions.
sas.com/en_us/insights/analytics/predictive-analytics.html

Need more insight from your data? Advanced **analytics** software from SAS can show you how.
sas.com/en_us/software/analytics.html

SAS Visual Statistics
Why it is predictive analytics redefined.
sas.com/en_us/software/analytics/visual-statistics.html

Biographies

Brian McCarthy

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Brian McCarthy leads Accenture's Financial Services Analytics business in North America and is a member of Accenture Analytics global leadership team. Brian has extensive experience in value-based Performance Management, Finance Transformation, and Analytics engagements with clients across multiple industries. Brian has led the shaping of Accenture's strategy in the fast growing business of Analytics over the past two years. He also leads the Enterprise Management Analytics offering and has overall responsibility for the Accenture Analytics innovation agenda. Previously Brian held the role of the global strategy lead for the Enterprise Performance Management (EPM) market offering for five years.

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Walter Frick is an associate editor at *Harvard Business Review*. He writes and edits on a wide range of topics, with a particular focus on data and technology, as well as on new business research. Before HBR, he covered startups and venture capital in Boston. He has written about technology and business for *The Atlantic*, *BBC*, and *MIT Technology Review*, among other publications.