Advanced Analytics:
The key to becoming a data-driven enterprise

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Table of Contents

03  Introduction

05  Key findings

05  Methodology

06  Advanced analytics:
The modern business imperative

08  A game plan for advanced analytics

13  Now’s the time to seize the future

16  Acknowledgements
Introduction

To succeed today, executives must be hyper-aware—of their organizations, the ever-changing demands of their customers, and the rapid pace of market disruptions and opportunities.

Analytics is the only way to capture those insights at the speed of digital business. And that trend will only increase as emerging technologies like artificial intelligence, machine learning and predictive modeling add a new dimension to analytics—and redefine business success.

This was highlighted in new research, sponsored by Cisco and conducted by Forbes Insights, that surveyed C-suite leaders at 207 large enterprises in North America and Europe. More than half of those surveyed believe analytics will be a critical resource for maintaining and growing market share in the months ahead.

Melia Hotels International is a large enterprise that understands the importance of analytics. A global chain based in Spain, it uses digital dashboards to show business executives the latest sales figures, along with near-term projections for hotels, restaurants and other revenue streams. “This gives businesspeople time to maneuver to improve performance, with special promotions or a revision to the sales strategy for an upcoming season,” says Carlos Lopez, Melia Hotels’ vice president of business intelligence, management control and investor relations.

Ready access to this information has helped the company significantly boost online sales, which surpassed €500 million in 2017 and now account for a third of Melia’s total sales, up from about 20% two years ago. “Our analytics environment is fueling our e-commerce strategy,” Lopez says.

But the Forbes Insights/Cisco research shows there’s a gap between mature analytics practitioners and companies that are struggling to catch up. The research identified a select group of analytics leaders by aggregating the responses of executives who consider their

“[Access to near real-time data] gives business people time to maneuver to improve performance, with special promotions or a revision to the sales strategy for an upcoming season.”

Carlos Lopez
Vice President of Business Intelligence, Management Control and Investor Relations, Melia Hotels International
organizations to be analytics pacesetters in their markets. With mature, enterprise-wide analytics strategies in place, these outliers represented only 16% of the total sample. But they are reaping impressive rewards from their efforts (see Figure 1). Over the past year, they’ve seen significant competitive gains that they attribute in part to their more advanced data strategies.

The contrast between the analytics haves and have-nots provides a cautionary tale for all organizations looking to compete in the future. For example, when asked to rate their organization’s current analytics capabilities, only 8% of C-suite executives overall ranked their companies as leading their competitors, while 39% rated their analytics effort as on-par at best. While the latter group of executives likely hoped for a bigger payoff from their investments, these respondents fared better than others. Most telling is the 42% of companies overall that haven’t seen any impact on their competitive position in their respective industries over the last year.

Although the research data shows only correlation, analytics success suggests higher growth. An impressive 60% of analytics leaders reported revenue growth greater than 7%, while more than a quarter of the analytics elite saw revenues rise more than 15%. By contrast, only 18% and 5% of followers logged similar revenue numbers (see Figure 2).

In fact, those that will spend 10% or more of their annual budget in this area will rise from 18% to 32% through 2018. But analytics leaders and followers prioritize spending differently. Followers will focus much of their spending on traditional technologies, such as business intelligence applications and executive dashboards. These are the basic building blocks of an effective analytics capability.

Analytics leaders, meanwhile, will earmark significantly more money than followers for expanded commitments to AI, machine learning and predictive analytics. It’s important to note, however, that analytics leaders understand that investing more in the analytics tools themselves isn’t enough. Success also comes down to comprehensive, timely and accurate data. As a result, analytics leaders will spend significantly more for modern foundational infrastructure technologies, including intelligent networks that use internet of things sensors for collecting real-time data about customers, production facilities, supply chains and other core operations.

In addition, analytics leaders are achieving the tricky balance between both corporate analytics and departmental data strategies by adopting what some executives call a “hub and spoke” model. This capitalizes on enterprise-wide information collection—think online e-commerce transactions—as well as insights that are most impactful for individual departments and locations, such as foot traffic in brick-and-mortar stores.

The lessons from analytics leaders are clear: As analytics becomes a core function within successful enterprises, the C-suite must plan and invest to achieve near-term rewards from a comprehensive data strategy, with the ultimate goal of achieving real-time and predictive analytics. “Staying competitive in the future will
“Staying competitive in the future will come down to what data you have and how you filter out the noise. From there, success will be determined by how well you’re using the information to drive value in the market.”

Scott Penberthy  
Director of Applied Artificial Intelligence, Google Inc.
Advanced Analytics: The modern business imperative

The Forbes Insights/Cisco survey found that executives have clear ideas about what analytics can do for their organizations. “The name of the game for marketing is to understand how to best engage with customers across multi-touch, multi-channel situations. And analytics provides us insight for doing that,” says Tobias Lee, chief marketing officer for the legal business at Thomson Reuters. “We have tons of information that gives us a rearview-mirror look at where we’ve been successful or not. Now we are also applying some predictive algorithms to understand how to become more successful in the future.”

When thinking about analytics investments, executives seek a range of tactical and strategic outcomes from improving product and service quality to enhanced satisfaction and retention rates for customers and employees alike (see Figure 3). This shows that analytics has widespread appeal across both customer-facing and internal operations.

It’s no surprise that data insights have so far had the greatest positive impact on finance and IT. Both are departments that have long collected and analyzed data as part of their core functions. But the Forbes Insights/Cisco survey also found a growing list of other high-impact areas, including operations, sales, HR and marketing. Other business units remain in catch-up mode, with the greatest room for improvements in engineering, distribution, manufacturing and R&D.

“Analytics is becoming both a method to help us transform to keep up with social, economic and competitive changes, as well as one of the things that’s causing us to transform our business,” says Jim Korcykoski, senior vice president and chief technology and information security officer at Nationwide, an insurance and financial services company.

The company is using advanced analytics, such as machine learning, in a variety of ways. This includes scouring large volumes of insurance claims for patterns that indicate potential fraud; this ultimately allows human investigators to focus their efforts more effectively.

Nationwide also relies on analytics to spot current customers who are ready to move to a competitor. “We want to identify those people before they act and perhaps send them offers designed to retain them,” Korcykoski says.

Another large insurance company, London-based Aviva, capitalizes on analytics to micro-segment...

“We have tons of information that gives us a rearview-mirror look at where we’ve been successful or not. Now we are also applying some predictive algorithms to understand how to become more successful in the future.”

Tobias Lee
Chief Marketing Officer for the Legal Business, Thomson Reuters
customers for highly targeted sales and marketing campaigns. “We have millions—in some cases, hundreds of millions—of data points, which we use to uncover clusters of customers in the marketplace,” says Orlando Machado, global director of customer analytics and data science.

This analysis has identified seven broad customer segments and more than 400 microsegments, which Aviva’s propositions development, brand strategy and creative teams use to personalize customer experience (CX) and marketing campaigns. In the process, the company is “busting the millennials myth,” Machado says. “People like to think of millennials as being a well-defined segment of consumers, but we have identified 87 different millennial subgroups, all with different needs.”

Besides age, other factors include affluence, different levels of price sensitivity, affinities to different brands, and those who actively plan for the future versus people who primarily live for today. “All of these factors add much more richness to our understanding of customers as opposed to just saying they are a millennial because they were born within these certain years,” Machado says. In addition to underpinning marketing and CX campaigns, insights about millennials and other customer segments are guiding product development strategies, he adds.

Large manufacturing companies are also becoming more data-savvy to improve performance. “By becoming smarter about what’s the right inventory level to carry, we can improve our cash flow,” says Vince Campisi, chief information officer at United Technologies, a provider of technology and services for the building and aerospace industries.

To do that, the company is using machine learning to identify thorny parts, suppliers or buyers in the organization.

For example, algorithms identify buyers who struggle to optimize their inventory levels, leading to expensive expedited deliveries. In addition, these insights look out about 24 weeks to see which parts suppliers are likely to be short of, and then send an alert to the appropriate buyer. “They can override or adjust that advice, but it becomes a starting point for taking action,” Campisi says. “Help like this puts us in a better position to balance our demand curve with what’s realistic to expect from our suppliers. We’re still early in this journey, but we are seeing results that give us a firm belief that these insights can unlock inventory working capital and put us in a position to fulfill customer orders faster.”

Figure 3. Top Reasons for Analytics Investments

![Figure 3. Top Reasons for Analytics Investments](chart)

- Improve product/service quality or performance: 55%
- Improve employee satisfaction and retention rates: 47%
- Increase customer satisfaction and retention rates: 45%
- Create new revenue streams from existing products or services: 43%
- Increase insight into customer behaviors: 40%
- Expand the customer base in current markets: 37%
- Improve profitability/margins: 35%

“[We’re] busting the millennials myth. People like to think of millennials as being a well-defined segment of consumers, but we have identified 87 different millennial subgroups, all with different needs.”

Orlando Machado
Global Director of Customer Analytics and Data Science, Aviva

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A game plan for advanced analytics

How can all enterprises benefit from analytics and create a foundation for successfully incorporating advanced tools? The survey and interviews with C-level executives at large enterprises highlight five critical areas that separate analytics leaders from followers.

1. Develop a “hub and spoke” analytics strategy

The Forbes Insights/Cisco research found that maturity is defined in large part by investments and senior-level commitment to making analytics pervasive across the enterprise as well as in departmental areas of excellence—a “hub and spoke” model that balances these two areas. Respondents overall understand this requirement and are pushing ahead to develop enterprise-wide analytics strategies. This often follows early analytics efforts in specific departments, such as finance, IT and marketing. More than a third of companies are moving toward a centralized analytics architecture, while 30% already have implemented centralized analytics that are used by all departments.

But digging deep into the numbers reveals red flags. More than a third of respondents say an integrated approach for data sourcing, model building and organizational transformation occurs only in departments. In addition, 41% acknowledge that data collection and analysis happen only in departments (see Figure 4). These activities are essential, but they’re only half of the equation.

Why is the right degree of centralized control so critical? “It’s important to have one version of the truth,” Lee says. “This reduces the risk of data fragmentation and inconsistent results that can lead to misunderstandings, and friction. That’s why having a strong data foundation and a common vernacular are key for us.”

However, while enterprise-wide approaches are vital for making analytics pervasive across the entire organization, they can’t be so broad that they lose power for individual lines of business. In short, centralization can’t impede departments from being able to apply different data slices for their unique needs. “The data people need to do their jobs will be different from finance to marketing to sales to customer service,” Lee adds.

This balancing act is leading to “hub and spoke analytics” strategies, which work best. “We brought together senior analytics leaders from various departments to develop a strategy and an operating model to determine how to balance a federated and centralized structure,” Korcykoski says. “We’re in the process of determining what the overarching vision should be for the company, while we also create individual visions for business units and how they can apply analytics to their business strategies.”

Figure 4. The Work to Balance Centralized and Department Analytics Continues

- Centralized for all departments
- Centralized and departmental
- Departments only
- No actions

<table>
<thead>
<tr>
<th>How we collect data and link it to data analysis</th>
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<tbody>
<tr>
<td>Centralized for all departments</td>
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<tr>
<td>Centralized and departmental</td>
</tr>
<tr>
<td>Departments only</td>
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<td>No actions</td>
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<th>Have an integrated approach of data sourcing, model building and organizational transformation</th>
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<td>Centralized for all departments</td>
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<td>Centralized and departmental</td>
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<tr>
<th>Interconnecting different data sets from functions across the organization</th>
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<tbody>
<tr>
<td>Centralized for all departments</td>
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<tr>
<td>Centralized and departmental</td>
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<td>Departments only</td>
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<td>No actions</td>
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<tr>
<th>Linking analytics to the decision-making processes</th>
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<tr>
<td>Centralized for all departments</td>
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<tr>
<td>Centralized and departmental</td>
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<td>Departments only</td>
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2. Prioritize data collection and quality, and give decision makers ready access to new levels of analytics insights

Foundational technology can support future analytics efforts. But perhaps the most fundamental component of a successful analytics strategy is data—extensive, high-quality information sets. Only the right infrastructure investments make this kind of data collection possible.

“The best way to develop greater trust in the data is to expose it to more people within the company,” Campisi says. “We use visualization tools to create reports about our current state of affairs and inventory levels that everybody can see, and potentially challenge. Many times, organizations communicate through spreadsheets and PowerPoint created with raw data that’s been massaged. Our approach is to give people the underlying data, so everyone has the same view, and in that way, we as a company can correct any data-quality issues.”

Analytics leaders understand the importance of a strong infrastructure far better than followers. This dichotomy surfaces when executives are asked about how they’ll be furthering analytics in 2018. The top response from analytics leaders was IT infrastructure modernization (see Figure 5).

But while three-quarters of analytics leaders are focused on this, less than a third of followers prioritize these IT support systems to the same degree. This may haunt followers as they play catch-up with analytics maturity. The latest BI or advanced tools can’t deliver their full potential unless they’re working from timely and accurate data delivered by the support infrastructure. Even worse, businesspeople will avoid using analytics for important projects if they don’t trust the quality of the underlying data.

A prime focus for analytics leaders when they invest in infrastructure modernization will be intelligent networks, which use sensors and other tools for real-time data collection and have the ability to constantly learn and adapt to changing conditions. Eighty-eight percent of analytics leaders will earmark new spending for these next-gen communications pipelines in the next 12 months, versus 72% of followers. This shows followers are in catch-up mode: Going into 2018, only 51% had already implemented these advanced networks, while nearly three-quarters (73%) of analytics leaders had already done so.

What’s driving analytics leaders to this technology? An overwhelming majority (74%) said that intelligent networks improve their organization’s ability to collect and aggregate important data. This vital step ensures that the subsequent results of analytics efforts can be trusted. In addition, 61% of analytics leaders said these networks give them greater access to more accurate and timely data.

Other top targets among analytics leaders for future infrastructure spending include the cloud and mobile applications. Nearly half will also target software-defined networking to complement their infrastructure modernization efforts.

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Figure 5. Activities My Organization Will Undertake This Year to Promote Analytics Initiatives

<table>
<thead>
<tr>
<th>Analytics Leaders</th>
<th>Followers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand and/or modernize the underlying IT infrastructure to better support analytics</td>
<td>76%</td>
</tr>
<tr>
<td>Develop governance policies to promote and enforce analytics use through all departments</td>
<td>55%</td>
</tr>
<tr>
<td>Capture quick wins, and then build on success for larger advanced analytics solutions</td>
<td>55%</td>
</tr>
<tr>
<td>Hire people with analytics expertise</td>
<td>42%</td>
</tr>
<tr>
<td>Create a chief data officer or other position responsible for data and analytics</td>
<td>30%</td>
</tr>
</tbody>
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spending for intelligent networks (see Figure 6).

Unfortunately, IT modernization is a flashpoint for followers. This group identified this area as an “extremely difficult” challenge for their analytics strategies and by far the biggest stumbling block. In fact, at 39%, this was more than three times the number of analytics leaders who struggle with infrastructure.

3. Optimize investments in new analytics capabilities

With a solid foundation in place, the C-suite can forge ahead with new analytics investments. To do this, executives should balance spending in traditional tools and next-generation resources like AI and machine learning.

Not everyone understands this message. Nearly half (47%) of overall survey respondents plan to focus future spending on business intelligence systems, even though more than half of respondents report having already invested heavily in BI. Similarly, more than a third of all organizations will invest in other tried-and-true tools: data warehouses and executive dashboards. Together, these technologies contribute to a strong foundation, especially for corporate-level analytics activities, but in today’s data-driven world, traditional platforms alone are not enough for an organization to gain an advantage over competitors.

![Figure 6. Areas of IT Infrastructure That My Company Plans to Invest in This Year](image)

<table>
<thead>
<tr>
<th>Technology</th>
<th>Analytics Leaders</th>
<th>Followers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public/private cloud services for computing and storage</td>
<td>61%</td>
<td>11%</td>
</tr>
<tr>
<td>Mobile applications</td>
<td>61%</td>
<td>16%</td>
</tr>
<tr>
<td>High-performance servers</td>
<td>58%</td>
<td>17%</td>
</tr>
<tr>
<td>Internet of things sensors and software</td>
<td>58%</td>
<td>16%</td>
</tr>
<tr>
<td>Software-defined networks</td>
<td>48%</td>
<td>12%</td>
</tr>
</tbody>
</table>

![Figure 7. Analytics Technologies My Company Plans to Implement in the Next 12-24 Months](image)

<table>
<thead>
<tr>
<th>Technology</th>
<th>Advanced Analytics</th>
<th>Traditional Analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business intelligence applications</td>
<td>47%</td>
<td>93%</td>
</tr>
<tr>
<td>Data warehouse</td>
<td>38%</td>
<td>62%</td>
</tr>
<tr>
<td>Executive dashboards</td>
<td>35%</td>
<td>65%</td>
</tr>
<tr>
<td>Artificial intelligence</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Machine learning</td>
<td>26%</td>
<td>74%</td>
</tr>
<tr>
<td>IT analytics (applications analytics, data center or network analytics)</td>
<td>19%</td>
<td>81%</td>
</tr>
<tr>
<td>Predictive analytics</td>
<td>19%</td>
<td>81%</td>
</tr>
<tr>
<td>A common platform for managing structured and unstructured data (e.g., Hadoop)</td>
<td>8%</td>
<td>92%</td>
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</table>
Where else should followers look to invest? While AI garners the most interest among advanced analytics technologies, most organizations are paying too little attention to other emerging areas—machine learning, predictive analytics, IT analytics, and platforms for structured and unstructured data. In fact, only 36% of respondents overall consider advanced capabilities—predictive and prescriptive analytics—to be important investment areas in the next 24 months (see Figure 7).

Analytics leaders have different ideas about how to best spend their analytics budgets. In addition to BI applications, data warehouses and decision-support systems, analytics leaders are investing more extensively than followers in advanced tools. For analytics leaders, predictive analytics and machine learning—at 73% and 64%, respectively—are currently their primary focus areas (see Figure 8).

But AI is on the rise. In 2018, 39% of analytics leaders plan to invest in it, outstripping the other two areas. But to be successful, enterprises can’t implement “AI for AI’s sake,” Penberthy warns. “Companies must think through the factors that are driving their businesses, and identify areas where they can apply more intelligence to improve their businesses, whether that’s becoming more productive, saving money or developing better products. That’s where the real value of AI surfaces. Executives realize very quickly that much of the data they have and will continue to get is just noise until they start to apply techniques like AI to understand what that noise means.”

Increasing emphasis on advanced technologies are part of a larger trend among analytics leaders for an increased commitment to analytics in the coming year. This group plans to significantly outspend their peers: 81% of analytics leaders will earmark more than 10% of their 2018 budget for analytics initiatives, compared with only 23% of followers (see Figure 9).

4. Build the collaboration that underpins successful analytics

Analytics maturity demands more than making wise investments in underlying infrastructure and tools for slicing and dicing information. Teamwork among stakeholders from throughout the enterprise is also essential, and one critical area is close collaboration between the IT staff and business managers. Unfortunately, many enterprises
are struggling with these relationships—only 15% of all the executives surveyed rate their analytics collaboration between IT and business as “excellent,” a far smaller group than those who assign it a “fair” rating.

The consequences can be significant: 57% say poor collaboration can result in analytics investments that don’t effectively give businesspeople the information they need. More than a third consider this shortfall a deterrent to capitalizing on technology innovation.

By contrast, 70% of analytics leaders say a successful analytics strategy hinges on close collaboration between IT and business units. And this is reflected in the strength of these relationships. A solid majority of analytics leaders—58%—describe collaboration as “excellent” compared with only 7% of followers.

Analytics success also hinges on other cultural and organizational factors. Strong C-suite commitment to using analytics across business activities is a telling sign of maturity and another distinguishing characteristic of analytics leaders. Nearly three-quarters of this group report that executives are acutely aware of the need for an organization-wide analytics strategy; that’s three times the percentage of followers (see Figure 10).

“Our CEO is very passionate about putting data and analytics at the heart of our business and our efforts to disrupt an industry that has been analytically driven for years,” says Aviva’s Machado. “And that passion is driving the cultural change that we’re seeing within Aviva.”

5. Develop policies for promoting and encouraging analytics use throughout all business units

While C-suite commitment is vital, a top-down mandate alone won’t ensure that analytics becomes widely used for decision making throughout the business. Top-down imperatives must be combined with bottom-up, grassroots projects designed to embed analytics into the way the organization works.

To do this, first identify analytics-savvy influencers within the organization—people who may not have the most senior positions, but because of their expertise and interpersonal relationships, can sway peers to adopt new ways of working. Secondly, uncover talent gaps that will need to be filled by new hires or outside partners; these individuals should have a solid track record for using data effectively.

“We’re working with some third-party, big data companies to help us, but we also have a decent-sized, in-house BI team, and we think this is the right model,” Thomson Reuters’ Lee says. “Predictive modeling requires domain expertise in the legal profession, which outside parties just don’t tend to have.”

Analytics teams should also identify business initiatives where data-driven decision making can deliver quick, clearly documented benefits. Organizations can then use these positive results to promote the wider adoption of analytics techniques in the enterprise and to justify investments in advanced tools, such as AI.

“We’re trying to expose people to what’s happening in our pockets of excellence,” Nationwide’s Korcykoski says. “When people see the cool things that are happening and the value that results, it creates

Figure 10. Executives’ Understanding of an Organization-Wide Analytics Program

<table>
<thead>
<tr>
<th>Analytics Leaders</th>
<th>Followers</th>
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<tbody>
<tr>
<td>They’re acutely aware of the benefits and see it as being critical</td>
<td>73%</td>
</tr>
<tr>
<td>They’re mostly aware of the benefits and see it as important</td>
<td>24%</td>
</tr>
<tr>
<td>They’re somewhat aware of the benefits, but don’t see it as being vital to business success</td>
<td>3%</td>
</tr>
<tr>
<td>They’re completely unaware of the benefits</td>
<td>0%</td>
</tr>
</tbody>
</table>
a pull. They start to say, ‘I didn’t know that was even possible, but we could do something like that.’”

Thomson Reuters is doing something similar. “Based on our analytics activities in marketing, we’re able to show the before-and-after results of using data effectively,” Lee explains. “We can say, ‘Team A delivered results that were 35% above others in the quarter because they’re leveraging this resource. If you want to also achieve that 35% incremental, join the party.’”

When successful, these efforts to promote analytics use will go a long way to further cultural change. But encouragement alone may not be enough to achieve a fully data-driven enterprise. A cross-functional analytics team, including stakeholders in technology, business, operations, legal and HR, should develop governance policies for promoting C-level mandates for analytics use throughout the enterprise.

Now’s the time to seize the future

It’s clear that global enterprises understand the power that analytics can bring to business decision making today, and why data-driven organizations will be tomorrow’s market analytics leaders. The Forbes Insights/Cisco research shows this in the high percentages of executives who have turned to analytics to increase sales and profits, improve product quality and cultivate better customer experiences.

A steady stream of technology innovation is coming both to traditional tools, such as BI and decision-support systems, and to advanced capabilities. AI, machine learning and predictive analytics are rapidly maturing for mainstream business use. Unfortunately, the latest and greatest tools alone won’t help.

In fact, the Forbes Insights/Cisco data shows a significant gap between today’s most effective analytics practitioners and less mature organizations. But these analytics leaders offer a valuable model for others, one that combines smart investments in data-analysis technology with four other critical components:

- A balanced “hub and spoke” analytics strategy
- Targeted spending for IT infrastructure modernization
- Cultural and change-management best practices
- Policies for promoting and encouraging widespread analytics adoption

Analytics leaders see compelling results, ranging from impressive increases in sales and profits to their ability to outmaneuver competitors. “Technologies like AI may seem fanciful, but in a couple of years they’re going to be no less mysterious than something as commonplace as an SQL database,” Penberthy says. “So it behooves people to punch through the hype, understand what’s real, and then think about where they can start using data to better drive their businesses. That’s something that everyone can and should be doing today.”
However, European executives may need to reevaluate their views in some key areas of analytics maturity. For example, nearly two-thirds of U.S. officials believe it’s vital for stakeholders in analytics initiatives to understand business goals and technology capabilities. Only 35% of European executives rate this level of understanding so highly (see Figure 11). Who’s right? U.S. officials appear to be on to something: 64% of the survey’s highest performers for analytics also rated business and technology expertise as crucial.

However, this continental split may signal more than simply an attitudinal difference about business strategies. European Union executives are also contending with the looming deadline for General Data Protection Regulation (GDPR). The sweeping scope of the privacy and security regulations and the punitive measures enterprises face for non-compliance are impacting decisions about broader data and analytics strategies.

“We have always been absolutely committed to protecting our customers’ data,” says Orlando Machado, global director of customer analytics and data science of London-based Aviva. “Transparency in this area, as required by legislation such as GDPR, is a good thing because we consider it an open contract that we have with our customers to use their information appropriately.”

Whether it’s for regulatory compliance or to promote business goals, European firms have edged ahead of U.S. counterparts in a key category: advanced analytics technologies. Higher percentages of European companies have adopted artificial intelligence, and throughout 2018, they’re planning double-digit increases in other rapidly maturing analytics tools, including machine learning and predictive analytics.
It’s not surprising that line-of-business managers and senior IT staff don’t always agree on analytics policies. After all, each discipline has unique sets of priorities. These differences clearly surface in response to questions about tools and organizational considerations. For example, IT managers understand that accurate analyses need a strong foundation, with nearly half seeing a modern IT infrastructure as a necessity (see Figure 12).

But LOB managers are better able to look beyond technology to see that analytics won’t flourish without close attention to people and processes (see Figure 13).

However, there’s one area where the LOB and technology teams are in close alignment—the realization that analytics are a necessary resource for maintaining and growing market share (see Figure 14).

Going forward, close collaboration between these two groups will help define how quickly and effectively their enterprise will achieve analytics maturity. Understanding where these analytics leaders see eye to eye and where their attitudes diverge is a first step in cultivating successful working relationships.
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**Tobias Lee**, Chief Marketing Officer for the Legal Business, Thomson Reuters

**Carlos Lopez**, Business Intelligence Consultant and Former Vice President of Business Intelligence, Management Control and Investor Relations, Melia Hotels International

**Orlando Machado**, Global Director of Customer Analytics and Data Science, Aviva

**Scott Penberthy**, Director of Applied Artificial Intelligence, Google Inc.

Team Cisco involved in this initiative: **Kevin Delaney**, **Nicole France**, **Jessica Hill**, **Ari Kapur** and **Eran Levy**
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