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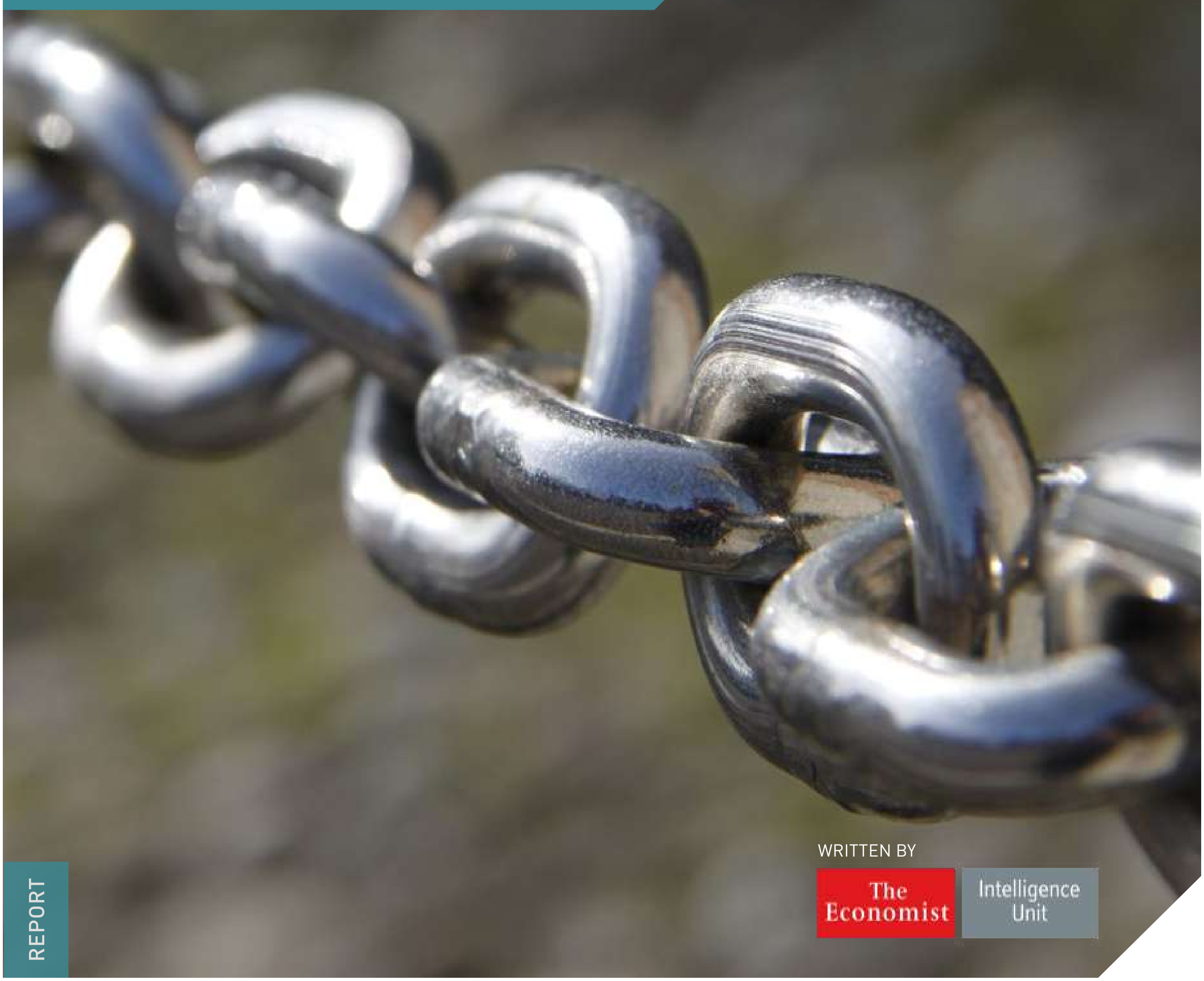
Broken links

Why analytics investments have yet to pay off



WRITTEN BY

The Economist Intelligence Unit

REPORT

Dan Wetherill is an associate principal on ZS's analytics process optimization team and leader of this study

Foreword

By Dan Wetherill

With ever greater volumes of data being collected, companies have overwhelmingly recognized the importance of sales and marketing analytics as a means to understand their customers, engage them more intelligently, and identify new markets and growth opportunities. Yet despite the attention placed on Big Data analytics, there is a dearth of information about what companies' data and analytics investments are yielding for their organizations and their customers. In this survey, we set out to assess companies' goals and strategies, executive and organizational buy-in, and platform and process effectiveness for data and analytics. Ultimately, we wanted to determine where the marketplace stands on the data and analytics maturity curve, and where companies need to focus their efforts if they are to progress.

Our survey and follow-up interviews with nearly 450 U.S.-based senior executives from industries including pharmaceuticals, medical devices, IT and telecoms, financial services, and travel and hospitality confirmed one thing that we already knew: While seemingly everyone is investing in analytics, few organizations have been able to get it right and to generate the kind of business impact that they hoped for. However, we were surprised by just how few respondents reported that their analytics investments are having the "broad, positive impact" on their organizations that they're seeking.

Overall, and across industries, companies are buying low-cost solutions and getting lacklustre results, or solving for parts of what should be an integrated and holistic solution. The survey findings clearly delineate where the problems lie and, on the bright side, where companies that "work smart"—rather than simply investing more—can generate transformational, game-changing impact. The approach has to be integrative and multidisciplinary, and must look beyond cost to the total value created by the analytics, recognizing the importance of a cohesive analytics system connecting from the data to technology platforms, business processes, analytic decision making and, ultimately, the impact on the customer.

Effective analytics functions consider the whole value chain, from inputs to outputs to organizational and end-customer impact. Building these analytics capabilities is ultimately about building a long-term value strategy connected with the customer. That is the end goal, and it's achievable. We just need to hone in on the broken links in the analytics value chain and start investing in the right solutions to mend them.

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About the survey

In November and December 2015, the EIU surveyed 448 senior executives and professionals based in the U.S. on the current state of marketing and sales analytics. Half of the respondents manage or conduct data analytics; the other half are responsible for the business performance of a brand, franchise or business unit. The survey sample covers a wide range of seniority, with half of those surveyed director level or above and the other half managers. Participants come from a variety of industries, including pharmaceuticals (25%), medical devices (25%), IT and telecoms (17%), financial services (17%), and travel and hospitality (17%). Surveyed executives work at organizations with annual revenue greater than US$500 million, and half for firms with US$1 billion in revenue.

Executive summary

Sales and marketing analytics is integral to the ability of companies to thrive in today's markets. In an Economist Intelligence Unit (EIU) survey of 448 senior U.S. executives conducted for this study, 70% of respondents say sales and marketing analytics is already "very" or "extremely important" to their own business's competitive advantage. In just two years, 89% of respondents expect this to be the case.

The impact of these efforts, though, remains modest. Only 12% of respondents say those involved in their business's general analytics efforts can stay abreast of emerging industry innovations. More telling, just 2% believe transformations in capabilities at their companies have had a "broad, positive impact." Clearly, this transformation remains a work in progress.

Broken links: Why analytics investments have yet to pay off, a report written by the EIU and sponsored by ZS, draws on the survey findings, interviews with senior corporate executives and desk research to explore the current state of sales and marketing analytics. Its key findings include the following:

+ **Many companies are putting significant resources into sales and marketing analytics, but their analytics capability for the most part is immature.** Eighty-six percent of survey respondents say their company has recently put in place—or plans to implement—improvements to sales and marketing analytics; 52% report that their organizations are spending heavily on such technology or are undertaking targeted investments to make key functional improvements.

+ **Companies have progressed on the technology side of analytics, but processes should be embedded more deeply into the fabric of the business.** The biggest challenges in the analytics value chain are those at the front and back ends—areas where senior analytics executives interact most with the rest of the business. Solution design and change management are particularly widespread challenges (cited as top issues by 47% of respondents).

This reflects a growing strength of analytics practitioners in the steps of the value chain dominated by technology-driven processes. However, it may also indicate a lack of understanding between—or even a common vocabulary with—the rest of the business. "Leading Companies" (see sidebar—"Two Definitions") are working to improve partnerships across their businesses, which might also help address the long-standing problem of poor data integration (cited by 39% of respondents).

+ **Companies that benchmark themselves highest on profitability and customer engagement also show extensive collaboration between executives and analytics professionals.** Only 41% of survey respondents say such collaboration exists at their companies. Among respondents who assess themselves highest on profitability and customer engagement, this figure rises to 55%. Senior executive engagement can help embed analytics processes in a company and support associated change management. More important, such engagement can bring the insight of corporate leaders to bear in understanding and responding to the challenges and opportunities that analytics brings to light.

+ **Decisions on analytics platforms should be strategic rather than focused on cost over value.** More than 90% of respondents have implemented cloud-based Big Data infrastructure or are in the planning stages of doing so. However, only 8% have fully integrated such infrastructure into their analytics capability. This disconnect is partly attributable to the relative newness of the technology.

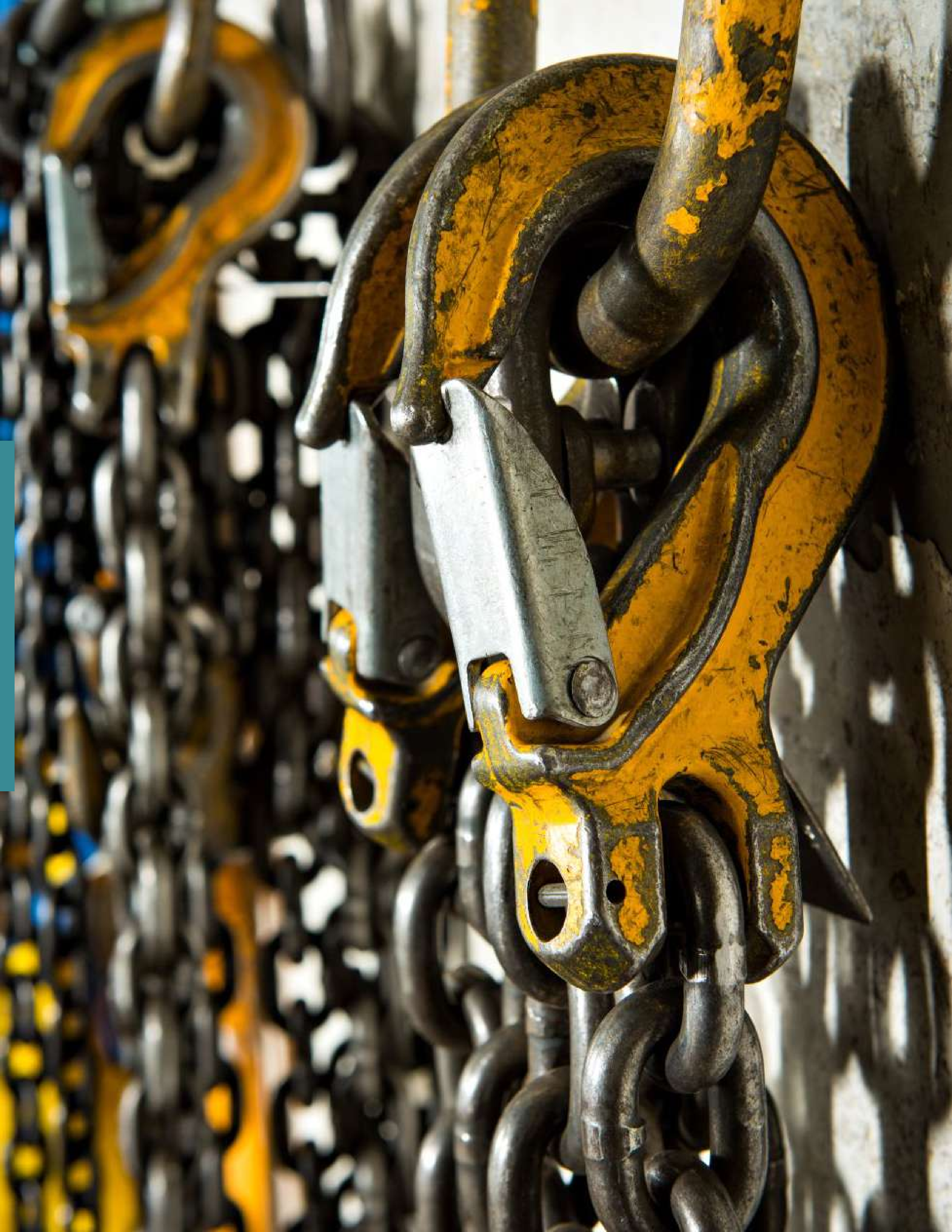
In addition, nearly all companies outsource at least some of their marketing and sales analytics tasks. Those who outsource most of them, however, may be sacrificing quality for low cost.

Two Definitions: "Leading Companies" and "High Outsourcers"

The EIU research examined numerous subsets of respondents to uncover the underlying trends in the survey data. We refer to two of these groups throughout the report.

Leading Companies: The 21% of companies (out of 448 surveyed) where respondents benchmark their companies as above average in revenue, profitability and customer engagement.

High Outsourcers: The 20% of companies surveyed that do the most outsourcing of marketing and sales analytics measured by the extent to which they reported fully or partly outsourcing individual analytics tasks.



Introduction: Effective sales and marketing analytics is already indispensable

The **primary objective** of sales and marketing analytics is **customer engagement,** which was cited as "very" or "extremely important" **by 73%** of respondents.

Achieving a deep understanding of customers is an aspiration almost as old as commerce. Today's information explosion holds out the promise of a quantum leap forward in this area.

But making the jump is not simple. Sales and marketing analytics is at the heart of the effort. Indeed in 2015, 27% of advanced data analytics and Big Data solutions deployed at U.S. companies were used by marketing or sales, with an additional 11% employed by the closely related customer service function. No other company function comes close.[1]

Drivers of sales and marketing analytics include improving resource allocation (65% of respondents) and managing risk more effectively (62%). The primary objective of sales and marketing analytics, though, is customer engagement, which was cited as "very" or "extremely important" by 73% of respondents. This comes as no surprise to Sandra Nudelman, Head of Marketing Analytics at JPMorgan Chase: "Companies are looking for organic growth, so sales and marketing themselves are important. A big part of this is to become more customer-centric and looking at your own customers to get deeper relationships."

Two key changes demand deeper customer relationships for successful marketing. According to Carlos Fonseca, SVP Marketing Science at MetLife, "One of the powerful forces we need to react to and leverage is the demand for personalization. You can only personalize products and services if you understand the consumer better than anybody else." This is possible at scale only with effective analytics.

1. "2015 Big Data Market Update," Forbes Tech, 11 October 2015, http://www.forbes.com/sites/louiscolumbus/2015/10/11/2015-big-data-market-update/#e0c920251704. "Lack of big data talent hampers corporate analytics," CIO, 9 December 2015, http://www.cio.com/article/3013566/analytics/lack-of-big-data-talent-hampers-corporate-analytics.html

Second, he adds, customers have seen how analytics can provide personalized service in several industries and have come to expect it everywhere. Matt Valenti, VP of Guest Experience Intelligence at Starwood Hotels, agrees. In service terms, he explains, "We are not being compared against other hotels, but against different companies in other industries."

The possibilities are enticing. As Fonseca puts it, "We're talking about Big Data analytics influencing the way that we interact with consumers in real time and the probability of providing better service by immediately understanding who the person is that you're interacting with." The experience of Starwood Hotels shows just how powerful the impact can be [see sidebar].

As companies have been grappling with implementation, the issues of key barriers to success along with best practices on how to address them have emerged. This study looks at how analytics-related developments in the areas of processes, people and technology platforms can help companies move from the current reality to the promised benefits of sales and marketing analytics.

Starwood Hotels: Using analytics to redefine the customer relationship

Starwood Hotels, one of the world's largest hotel companies, has more than 1,200 properties operating under 11 major brands. Analytics has allowed it to recreate the customer relationship.

This began with reshaping the processes around data collection and integration to ensure that the company was using the most valuable information. Matt Valenti, VP of Guest Experience Intelligence at Starwood, explains that before the company began to deploy analytics, "measurement of the guest experience was very transactional," measuring aggregate satisfaction by specific business interactions. However helpful, such data did not address deeper, sometimes even emotional, elements of the customer relationship.

Valenti says that in his industry today customer loyalty frequently revolves around "how well we know our guests and understand—and meet—their expectations." Getting the fulfillment of such expectations wrong can carry a high price, he adds. Starwood's data indicate that "disappointment is two times more powerful than delight" in its effects on loyalty.

To better capture this element of the customer relationship, in 2012 Starwood redesigned its customer surveys around guest expectations and how well individual customers felt these had been met. These more nuanced data now feed into the company's Guest Experience Index, which lets every Starwood property know where it is meeting expectations or falling short. On its own, this would have represented only a shift in survey questions.

Equally important has been the integration of these data with other sources of information on guest reactions, which the company calls "holistic listening." For example, Starwood automatically associates any social media comments or online reviews that guests make relating to a given stay with any survey responses arising from the same visit—and flags any disconnects as areas potentially requiring attention.

Analytics has also been essential in allowing Starwood to create individual relationships—and therefore personalized experiences—with customers in a way not previously possible. Brad Olson, VP of the Starwood Preferred Guest Program, explains that "expectations are different for each individual. Simply knowing that somebody wants sparkling water and somebody else doesn't want to be disturbed" can greatly affect their reaction to their stay.

Once data processes create the potential for effective personalization, it's critical to be ready to use the insights. In Starwood's case, in-depth knowledge of customer preferences must be linked with real-time interaction, allowing employees to know—and react to—how guests' views on their current experiences are evolving. Valenti explains that end-of-stay surveys involve taking information after the fact. Accordingly, Starwood has "changed how we structured our feedback, using multiple points of measurement" within the property and through multiple digital channels to create a dialogue, as the company is now able to respond to comments and address underlying issues quickly. This can sometimes occur while the guest is still at the hotel but can still be helpful if collected soon afterward. Starwood has focused on responding as rapidly as possible to customer reviews. Valenti believes that "particularly the response to negative reviews adds to the credibility of the dialogue. It helps people see that this is a company and brand that take engagement seriously."

Such personalization has been a marked success with Preferred Guest Members, Olson says, adding that in just one year of adopting the widespread use of analytics, the company doubled incremental revenue from targeted guests.

Valenti recalls that when doing the background research that led to the Guest Experience Index, he asked customers why they even filled out surveys. Their reply: "We want you to do well, but show me you use it and then we will give you feedback." Customers not only insist on the more personalized service that analytics can give, they are also ready to enter into deeper relationships with those businesses that treat them like individuals—a task for which analytics is uniquely suited.

Q&A

Glenn **Hollister**

What's Keeping the Travel Industry Grounded? Fragmented Data and Real-World Logistics

For many organizations across the marketplace, the promise of analytics has yet to be fully realized. And in an industry still trying to evolve from mainframe computers and legacy systems, transitioning to an analytics-led business is all the more complicated.

Glenn Hollister, a principal at ZS and leader of the firm's travel and transportation practice, addresses one common barrier to successful analytics implementation in the travel industry and explains why it's so difficult to ensure that even successful analytics programs will help improve the customer experience.

Q: The study's results show that companies across the marketplace have some work to do when it comes to successfully leveraging analytics. Where do travel companies struggle?

A: One barrier is that the IT systems in the industry tend to be quite old and very fragmented. A lot of the core systems in the travel industry still run on mainframe computers that were first programmed 20 to 30 years ago, so in a lot of cases, you have data fragmented across multiple systems. That requires a huge effort just to pull the data out of these legacy systems and get it cleaned up and aligned to the point where you can even start to make sense of it.

This is especially true for master data, a comprehensive database that includes all customers and all assets. If I want to know, say, what percentage of passengers on a specific flight met precise criteria, it's very hard for travel companies to answer those questions now. They lack good, clean master data and a reliable system. Companies are replacing some of the old, core IT systems, but until they build really reliable master data systems, they're always going to struggle with analytics.

Q: The study also found that even when companies get the analytics right, they sometimes struggle to translate those insights in ways that directly improve the customer experience. Does that happen among travel companies?

A: Definitely. Think about the rental car industry: They can improve satisfaction by making sure that they get each customer the car that he or she wants, based on their past rental history and preferences. Maybe they prefer a certain size or make, or they really need Bluetooth in the car. It's actually not that hard to track that information, but getting that car to that customer is another matter.

At a big airport operation, they'll have dozens of cars, but they're all parked nose to tail, so only a small number of those are readily accessible. The guy who runs back and forth to pull cars out might have a sheet of paper—or maybe a tablet—showing that day's rentals and their ideal cars, but all he can do is make the best match based on which cars he can get to. And sometimes it's more like which cars he's standing closest to.

You can do great analytics, mapping out the entire fleet and customer base, but putting that into practice to change the customer experience is extremely hard. But people recognize the potential. There are a number of senior executives in the industry who understand the power of analytics, and the industry overall is used to operating with data and making fact-based decisions. The challenge is understanding what's required to actually execute on that promise and put it into practice operationally.

Connecting processes to company needs

73% of respondents say that **domain expertise**—or an understanding of the environment in which the **business operates** and what it needs to succeed—is **"very" or "extremely important" to sales and marketing analytics'** ability to meet user needs.

A century ago, when novelist E.M. Forster wrote, "Live in fragments no longer. Only connect ..." he could have been referring to how companies today conduct sales and marketing analytics.

The existence of corporate information silos is old news—use of the term dates back nearly three decades. The problem is even older. The issue, however, remains painfully current and is a particular impediment to analytics. In our survey, only a minority (44%) of respondents ranked their firms as "good" or "very good" at data aggregation and integration. "Leading Companies" were more likely to be better (51% versus 43%) but not significantly.

This affects analytics delivery: 39% of respondents listed data integration and preparation as one of the biggest challenges within the analytics value chain for achieving strong business outcomes. Similarly, 47% listed it as one of the areas within that chain where improvement would yield the most benefit. These were the fourth and second most common choices, respectively.

"The crux of the issue" of sometimes inadequate data, says Fonseca, "is that across industries we're still dealing with a lot of siloed information and legacy systems created 10, 20 years ago—not only financial systems but also customer service ones." He adds that companies need to address this foundational challenge to make scalable progress in the analytics area. This is a process that requires investment, organizational change management and time.

It is simple to say that silos should be broken down, but difficult to do, as no specific business function sees the benefit of doing so or understands how such data should even be structured. Gaining a coherent information picture requires a greater role for actors with a direct interest in data integration, i.e., analytics professionals. Fonseca believes that those responsible for analytics must first acquire a good understanding of the core business of their company, its value chain and strategy. From there, they can truly become more involved in data-related issues, ensuring that the right data management, structures and capabilities are in place to enable proper data capture and experimentation. He explains that to make analytics an effective source of strategic advice, it has to be "part of the corporate DNA as opposed to one area of expertise that tries to influence the rest."

Embedding analytics within the company

Seventy-three percent of respondents say that domain expertise—or an understanding of the environment in which the business operates and what it needs to succeed—is "very" or "extremely important" to sales and marketing analytics' ability to meet user needs. In two years' time, 79% expect that domain expertise will have reached this level of importance.

Q&A

Ganesh **Vedarajan**

Why Analytics Should Be a Core Business Capability in Medtech

Data-driven decision making is fast becoming the norm for most industries in an effort to drive efficiencies, reduce costs, assess and predict customer behavior, improve customer service, increase personalization and more accurately plan for the future. For medical device manufacturers, that analytics-led evolution now has yet another impetus, thanks to the Affordable Care Act's charge to accelerate hospitals' focus on improving patient outcomes. Medtech firms need data-driven insights to better position themselves as hospitals' partners in that effort—and to sell and cross-sell more effectively via compellingly bundled product and service offerings.

Ganesh Vedarajan, a managing principal at ZS and leader of the firm's global medical products and services practice, talks about three barriers that companies in medtech and other industries often face, and why it's worth their effort to start working to overcome them now.

Q: What are the barriers that medtech companies need to overcome?

A: There are three main barriers. The first is that the value of analytics has to become clear in the organization, and ROI to senior management is unproven. There's still resistance and skepticism among some executives that analytics can create value. They're still trying to operate in a world where sales reps have a lot of power, and they think that they can still win through one-on-one selling.

The second barrier is related to change management and embedding analytics systematically into the existing business model, in areas like customer profiling and targeting, sales force design and marketing effectiveness. Once leadership buys in, the rest of the company has to. There is still a lot of inertia to continue with the status quo. We must be clever in how we embed analytics into the business model and force analytics into the existing processes, involving stakeholders as early in the process as possible to garner their buy-in.

And the third barrier is to build a world-class analytics capability, one that achieves scale efficiencies and allows companies to use the latest data sources available. The good news is that many medtech companies have already made some good investments in technology, so they're in a better place to add on to the IT stack than they were five years ago. Back then, they didn't have a good understanding of many customer-facing activities because they didn't have a solid CRM system. Now they do. Some companies have been frustrated that those investments haven't paid off, but using analytics to improve customer intelligence is one way to increase the ROI.

Q: Given that companies are struggling and analytics practices are evolving rapidly, is it understandable that some executives may want to hold off until they have a clear sense of the value that it can generate?

A: I don't think so. Provided that companies can overcome a bit of organizational inertia, they will start making investments that pay for themselves over time. The value is there, and it's only going to grow for companies that start building the foundation. In the future, it will be impossible to survive as a medtech company without a strong analytics capability.

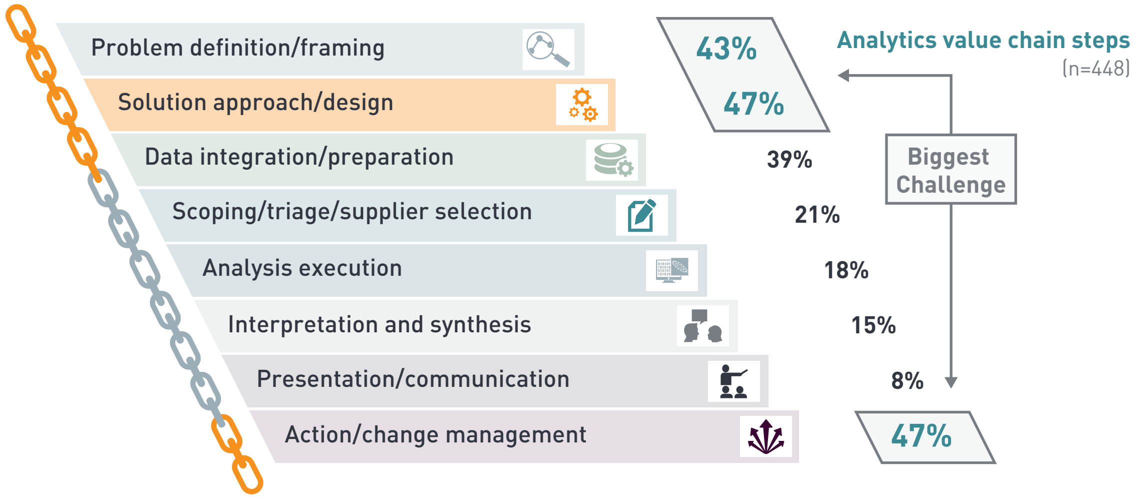
> "You can't take the middle pieces, the technical aspects, for granted. It is a full chain and any weak link could hurt the ability to deliver value."
>
> **Nate Crisel,** Astellas Pharma

Such knowledge can be integrated into analytics by practitioners developing deeper insight into the business, by those from other functions working closely with practitioners or some combination of the two. The survey data indicate, however, that difficulties in harnessing such knowledge is a key challenge.

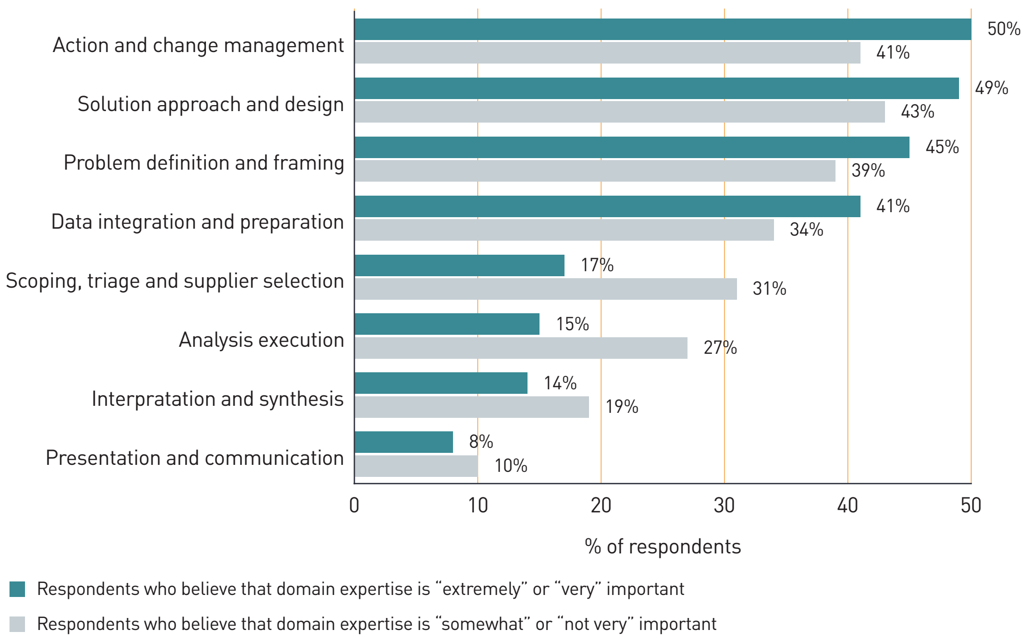
As the chart shows, the areas most likely to be cited as a challenge to achieving strong business outcomes from analytics are at the front and back ends of the analytics value chain, i.e., problem definition, solution approach and design, and action/change management. These are precisely the areas where the technology and business need to interact most. Similarly, these same parts of the value chain—along with data integration—are the top four areas where respondents see the most opportunity for improvement.

This result reflects the weaknesses, as well as the strengths, of how analytics has been implemented to date. For example, Nate Crisel, Head of Real World Informatics and Analytics at Astellas Pharma, says, "You can't take the middle pieces, the technical aspects, for granted. It is a full chain and any weak link could hurt the ability to deliver value." In the

SOME OF THE BIGGEST CHALLENGES ARE AT THE FRONT AND BACK ENDS OF THE ANALYTICS VALUE CHAIN



WHICH OF THE FOLLOWING STEPS IN THE ANALYTICS VALUE CHAIN PRESENT THE GREATEST CHALLENGES TO ACHIEVING STRONG BUSINESS OUTCOMES?



past, however, he adds that analytics' "problems have been seen as more of a computer science or statistics issue with a focus on the technological capabilities. As we have overcome some of these technology hurdles, the bigger issue has become how you best apply this capability to provide insights into the right business issues." Vineet Mehra, President of Global Marketing for the J&J Consumer Group of Companies, sees a similar dynamic at J&J: "Now we have a strong infrastructure, but we're still in the process of reconciling analytics with business strategy."

Indeed, the survey suggests that awareness of the need for domain expertise arises with resolving preliminary technological challenges. As indicated in the bar graph, those who believe such expertise is only somewhat or not very important are more likely to report challenges in the middle of the analytics value chain.

Working on the front and back ends of the value chain is a particular challenge for most analytics functions because the nature of these tasks differs significantly from the technological jobs for which individuals have largely been trained. As Nudelman explains, for change management in particular, using insights from analytics can lead to changes in the roles and responsibilities of those outside the analytics process. "Getting everyone up to speed in a new operating model is very difficult. It means a whole new set of skills for analysts, because it's not like they grew up learning to be great change managers. It takes time."

Torsten **Bernewitz**

Great Analysis Often Isn't Enough

Most pharmaceutical sales and marketing executives will subscribe to the idea that their decisions should be based on facts and the robust analysis of all available information. As analytic professionals, it's our job to supply this analysis—and we pride ourselves on the rigor that we apply.

To live up to the high expectations, we leverage an increasing breadth and depth of data sources, employ ever more sophisticated analysis methodologies and push the boundaries of our models, but sometimes we fail in our mission.

To be clear, we don't fail because we get the analysis wrong, we don't fail because the analysis isn't precise enough and we don't fail because the insights that we present are weak. But we do fail when the decisions makers ignore our conclusions or, perhaps worse, misunderstand or twist them. If this happens, we have failed our audience and our mission.

Analysis that gets ignored or misrepresented is a job not completed. It's not the job of our audience to "get what we say." It's our job to say it in a way that they get it. The onus is on us.

We need to ensure that we maintain the chain of data to analysis to insight to decision. We must not stop at the "insight" stage—and we certainly mustn't stop at "analysis."

Unfortunately, we frequently aren't well equipped to manage the last "insight to decision" stage because we often don't fully understand how decisions are being made. We may believe that if we get the analysis right and come up with a compelling recommendation showing all of the facts and figures, the right management decision will logically follow. This perspective ignores at least 50% of the decision-making process, which is all about *emotions*.

Sales and marketing executives are human beings, and as human beings, they process information rationally and emotionally. In other words, to them, the recommendation and decision must "feel right." It's a judgment call based, to a significant extent, on intuition. It would be a mistake to bemoan this emotional side of decision making as weak or irrational. In fact, it's management's explicit role to apply judgment and intuition. Otherwise, we could leave the decisions up to a machine—and there are many movie scenarios showing what might happen then.

For us so-called "left-brain-dominant" analysts, paying a lot of attention to the emotional dimension may appear "fluffy" and immature, but this line of thought is a fallacy. In fact, we can approach the emotional dimension with the same scientific rigor as the analytic tasks. A wealth of research in the field of cognitive science is available, so we don't need to leave the emotional aspects of decision making up to chance.

Torsten Bernewitz is a principal in ZS's Princeton, N.J., office who specializes in managing organizational change.

> "The challenge is to keep the reports and visualizations as simple as possible so they speak directly to the business. Business leaders don't need to know how the analytics are done—in fact, we try to protect them from the back end so they can focus on outcomes rather than process."
>
> **Vineet Mehra,**
> Johnson & Johnson Consumer Group of Companies

Many companies are trying to expand the business understanding of their analytics professionals to move them toward what several interviewees call a "consultancy" model. Crisel, for example, says that Astellas has "put significant resources into being able to have interfaces with business partners who need insights, say, or have a brand issue, so that there is someone who can speak both languages—those of the business and of data science—to shepherd an analytics project through the insight-generation process."

Such bilingualism is just as important in ensuring that insights are used at the end of the process, adds Becky Malia, Head of the Advanced Analytics Center of Excellence at GlaxoSmithKline. Analytics experts "live with the data. You have to be careful you don't overwhelm others. If you can break it down and make it simple, without taking away the depth of insight, the willingness to use the findings will come." Mehra agrees: "There is a huge store of information that can be used creatively. The challenge is to keep the reports and visualizations as simple as possible so they speak directly to the business. Business leaders don't need to know how the analytics are done—in fact, we try to protect them from the back end so they can focus on outcomes rather than process."

Skill at communication also adds credibility. At GlaxoSmithKline, Malia adds, training programs now seek to give analysts "a deep understanding and knowledge of the company in terms business stakeholders can recognize."

Ultimately, though, this cannot be a one-sided effort, says Nudelman. While it is essential that analytics professionals be able to communicate, "those in the rest of the business need to be able to take insights and turn them into action. It requires extreme partnership on both sides of the table."

Creating a culture of analytics

A key part of creating the "extreme partnership" needed to integrate analytics into the fabric of company activity is the relationship between senior executives and analytics producers. The survey reveals two key areas that require attention.

The end of pure gut instinct?

The ability of analytics findings to engender positive actions within companies depends in no small part on the willingness of senior executives to use them. "It's a question of culture," Mehra says. "There is a learning curve involved in embracing analytics for the business leaders. They have to learn to trust the data and that can be a serious challenge."

Here, the survey has encouraging news. Overall, 76% of respondents say, "Our senior leaders always make decisions based on data (rather than 'gut instinct')." Just 4% disagree. Again, respondents from "Leading Companies" report an even greater tendency to use data. At these companies, 85% no longer overrule information with gut instinct, but the proportion at other companies (73%) is still a dominant majority.

76% of respondents say, "Our senior leaders always **make decisions based on data (rather than 'gut instinct').**" Just 4% disagree.

This is a major shift but leaves a key question unanswered: Are analytics data the information executives are willing to use to make decisions? Among survey respondents, the utility of analytics data does not always match the need. Brad Olson of Starwood Hotels notes that the utility of analytics "comes down to actionable data and timely data. Where I have seen companies lag is when it is coming too late." While 62% of respondents rate the quality of the outcomes from recent analytics projects as "good" or "very good," just 42% say the same of their speed. If fewer than half of executives are receiving analytics insights reasonably quickly, this may leave a vacuum where gut instinct is the only guide left.

The need for wider collaboration between senior executives and analytics leaders

The survey data indicate that at "Leading Companies" the relationship between analytics leaders and senior executives goes beyond the creation and willing use of insights. It involves effective collaboration between these two groups. Only 41% of respondents overall report such a relationship at their business. Among the "Leading Companies" group, this figure rises to 55%, while for the rest of the survey it is just 37%—making it one of the biggest distinctions between the two types of companies. In Crisel's words, "Having bridges in place is what separates leaders from laggards."

Engendering collaboration is far less expensive than new technology platforms, but it can involve substantial cultural change. Malia notes that even in pharma, a knowledge-intensive sector where the norm is to act on data, "some senior leaders are not as familiar as others with analytics."

The benefits are varied. Any number of studies on change management show the importance of senior leadership support to the process. This suggests that a lack of collaboration will make it difficult for analytics functions ever to fully address the issue.

The gains also include enriched analytics processes, especially where weaknesses now exist. Valenti explains that at Starwood the process of collaborative discussion of issues arising from analytics findings often bears important fruit. A conversation around a data point might start with assertions that there is little the company can do in response. The discussion then frequently shifts to a more useful exchange about what the company might actually be able to do. The very process, he says, "engages people to think of what are different ways that I can influence the result." Thus when effective collaboration exists, executives can bring their insights to the action plan itself. This goes beyond making data-based decisions to using data to create options on which to decide.

Platforms: Finding a more strategic approach to investment

"It's easy to say that data can impact business," says Mehra, "but you must first have the infrastructure and the data in the same place." The survey suggests that companies, though willing to invest large sums, are still grappling with putting platform infrastructure in place.

40% of surveyed companies have implemented a **cloud-based Big Data** infrastructure for structured and unstructured data, while at 54% of respondents' **companies one is being put in place.**

What will platforms look like?—reaching for the cloud

Substantial investment in analytics technology is certainly occurring. Overall, 52% of respondents say their organizations are spending heavily on sales and marketing analytics or undertaking targeted investments to make key functional improvements. Cloud-related analytics opportunities are also gaining attention: 40% of surveyed companies have implemented a cloud-based Big Data infrastructure for structured and unstructured data, while at 54% of respondents' companies one is being put in place.

The surprise from the survey data, and the problem for companies, is how little these are being used. Just 8% of respondents say they have fully integrated new, cloud-based Big Data infrastructure with their analytics capability.

This helps explain the limited impact of such technology to date. Although many report incremental improvements to processes, only 20% say it has helped them identify transformational ideas. Here, "Leading Companies" are ahead—18% of them have fully integrated cloud-based infrastructure into analytics and 27% are seeing potential transformational insights—but even this group has far to go.

Part of the problem, for all the talk of the cloud in recent years, is that the technology is relatively new. Crisel says, "Some of the challenges [of cloud-based Big Data infrastructure] are underestimated. This stems from the cloud environment—having the right controls and processes in place, finding the right architecture and links to other systems for your organization—these are part of a rapidly evolving discipline."

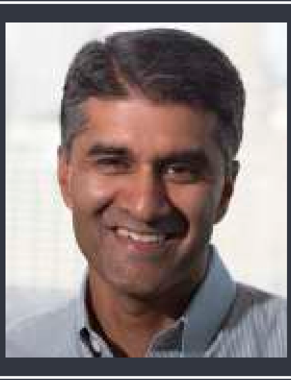
Who will run the technology?—the evolution of outsourcing

The survey findings also reveal substantial changes in how companies obtain their sales and marketing analytics. Outsourcing, for example, holds substantial attractions. Talent is in short supply: A recent study found that two-thirds of companies with the most advanced technology in this area cannot hire enough people to run these capabilities.[2] Fonseca explains, "The ultimate

2. "Lack of big data talent hampers corporate analytics," CIO, 9 December 2015, http://www.cio.com/article/3013566/analytics/lack-of-big-data-talent-hampers-corporate-analytics.html

Q&A

Ashish **Vazirani**



A Recipe for Analytics Success: High-Quality Data Plus Equal Parts Time, Talent and Treasure

One might think that high-tech companies would be further along in their use of sales and marketing analytics than firms in other industries. After all, these companies live and breathe technology, and they have an institutional understanding of data. Yet that isn't necessarily the case.

Ashish Vazirani, a principal at ZS and leader of the firm's high-tech practice, explains how an abundance of data doesn't make things any easier, and offers some advice on what companies across the marketplace can do to get a better analytics outcome.

Q: What are the biggest stumbling blocks when it comes to data and analytics integration?

A: Companies face a lot of pressure to meet short-term requirements. If someone's boss is screaming for something in the next quarter or two, even in the current fiscal year, that's a pretty short window of time to build a very robust analytics capability, particularly if the company still has issues with its data. They might not have clean data, they might not have integrated their data or they may not even have identified the right data streams. That data effort, itself, could take a year before they can even start applying some of the analytics.

The sheer availability of data is another issue. Storage is cheap. Whether it's marketing interactions, sales interactions or customer behavior, there's no shortage of it. And because it's easy to capture data, everyone captures it, but no one has taken on the responsibility of holding all of it together and stewarding it, using the same data structure and definitions, and with consistent metrics to measure.

Q: The study also identified problems at the front end of the analytics value chain in how people frame the problem, and the back end in how they translate insights into meaningful actions that affect customers. Why do you think that respondents pointed to those issues as their companies' biggest challenges?

A: In both cases, it comes down to context. On the front end, I think that has more to do with the analytics team really not understanding the context of the problem. Most analytics teams have been built as a reporting function. They don't really have the ability to engage the marketing and sales teams to understand the context of the business issue and, based on that, identify the data they'd need to address the question through analytics.

And similarly, on the back end, the analytics team may consider it a success if they get a good, precise answer, but maybe the high degree of precision isn't as important as putting it back in the context of specific actions to prescribe for the sales or marketing team.

Success requires time, talent and treasure. It takes time just to build an understanding of the business and aggregate the data. It takes talent: finding those people who are really good at the analytics, people who really understand the business, and that rare intersection of people who understand both. And it takes treasure: Building an analytics capability is not cheap.

Executives need to manage expectations. Pick some proof-of-concept project in one area and work on it until you have some success. That way, you can start to build momentum based on wins.

objective is to create a set of core analytics capabilities inside your company. However, as some of these capabilities and projects are fairly sophisticated and costly, companies may want to test them out with an outside vendor or in a small-scale capacity to see if there's a strong enough return."

Even where internal talent is available, analytics can be resource-intensive. Nudelman notes that advanced capabilities are expensive even for larger firms and that "smaller companies don't have the luxury of building a lot of these things internally." Finally, in a fast-changing field, outsourcing is a useful way to keep up with developments.

The net result of these factors: Nearly all companies outsource to a certain degree. Only 4% of respondents say they do not outsource any portion of their sales and marketing analytics, a figure that is expected to drop to just 1% in two years' time.

Although outsourcing helps address talent and cost issues, it should be used strategically. The survey suggests that of those who use external providers for sales and marketing analytics, some may be feeling short-changed. "High Outsourcers" are much more likely than others to rank the cost efficiency of their analytics services as "good" or "very good" (60%; 47%); they are much less likely to give a high score to the quality of their analytics (47%; 63%).

One possible reason is that "High Outsourcers" may be cutting costs by using the cheapest suppliers of every separate capability: 51% use multiple external analytics suppliers rather than a single lead, compared with 35% of other companies. This presents an obvious risk of process fragmentation.

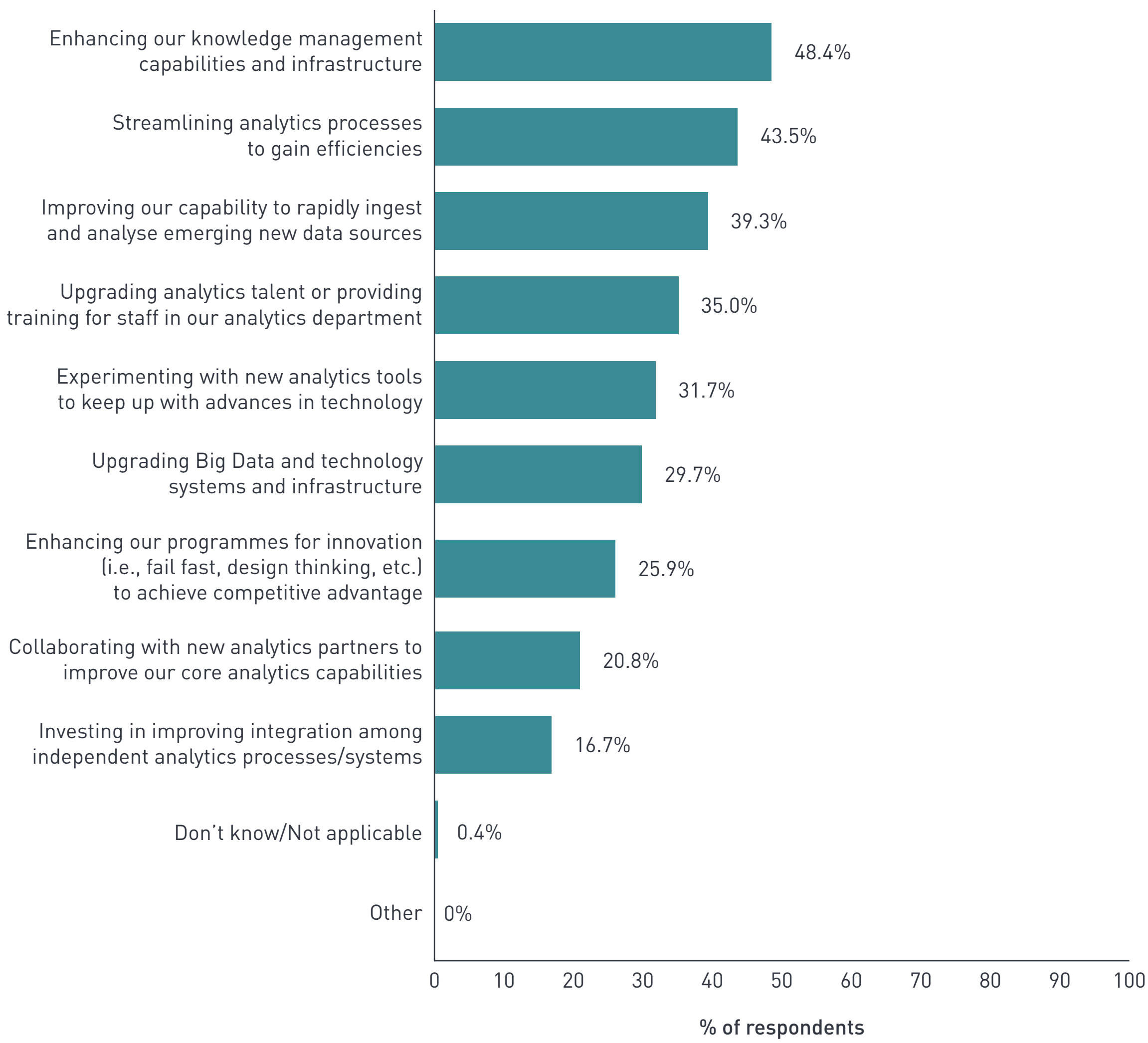
"When using outside vendors, the goal is to build trusting and strategic partnerships with a handful of partners, as opposed to spreading yourself too thin across dozens of external partners," Fonseca explains. "Companies should equip partners with the tools and resources they need, helping them to learn the business inside out and become a true partner. In return, strategic vendors must share their learnings with the client, ensuring that the internal teams are consistently apprised of outcomes and best practices."

Survey data indicate that companies are moving more toward using lead suppliers, a possible sign that they want better integration and more strategic relationships. Already, 57% of respondents report conducting their outsourcing through one lead with multiple other suppliers (50%) or through a one-stop shop (7%). In two years, they expect this figure to rise to 67% (58% and 9%, respectively).

Greater use of lead suppliers still leaves unanswered another key strategic outsourcing-related question: Which specific analytics capabilities can safely be done by others and which are an essential part of how the company creates value? The latter will not include every analytics-related process but will include some. Malia explains that getting outsourcing right depends on "understanding and being clear where there will be a competitive advantage to build in-house and what is maybe not your core capability."

The key to getting more out of analytics platforms and external suppliers, then, is not willingness to spend—that is pervasive among survey respondents—but to make focused investments in a strategic context.

WHICH OF THE FOLLOWING SALES AND MARKETING ANALYTICS ACTIVITIES IS YOUR ORGANISATION MOST LIKELY TO PURSUE IN THE NEXT 18 MONTHS? PLEASE SELECT UP TO THREE.



Conclusion

Companies are not yet fully reaping the promised benefits of sales and marketing analytics. As their experience of the technology matures, the benefits will grow. But time and effort alone will not bring the analytics outcomes that companies are seeking. Implementation must include greater attention to overarching strategy and objectives than many companies have so far shown. The EIU survey and this study point to three areas that require attention:

1. **Processes:** For most companies, technology alone is no longer the problem. The issue is embedding sales and marketing analytics into how the company thinks and works. This begins by making sure analytics leaders are central to—and included in—conversations related to data across the company.

   It goes much further, though. Analytics professionals need to develop the detailed understanding of the business and communication skills necessary to strengthen the front and back ends of the analytics value chain.

2. **Organizational enablement:** Corporate leaders are now largely willing to listen to data rather than simply trusting their gut. On the practical side, this requires analytics producers to provide data quickly enough for executives to use. More important, analytics producers must develop a collaborative, mutually beneficial relationship with executives rather than remaining a sometimes-isolated source of information, however detailed. "Leading Companies" are already benefiting from this low-cost insight.

3. **Platforms:** Outsourcing of certain analytics tasks is already the norm and cloud-based infrastructure looks to be so soon. Both can deliver value, but only when platform choices are made with a view to the bigger picture and connect to a business's broader analytics system. Companies should consider building a strategic partnership with key external suppliers rather than pursuing a "least-cost" strategy. Companies must also determine which analytics elements are too important to competitive advantage not to keep in-house. When it comes to investments in cloud-based Big Data solutions, they need to remember to fully integrate their Big Data infrastructure with their analytics capability, rather than building a disconnected "castle in the air."

Organizations agree on the importance of sales and marketing analytics as a tool to better understand and engage their customers and drive organic growth. While many are investing in improving these capabilities, many are struggling to make progress in linking the underlying technology with the business. Those who get this right in the near future will gain an important competitive advantage.

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