The demand analytics premium

Getting the most out of your data
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**About the authors**

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Executive summary

This research project, a collaboration between Strategy& and the INSEAD eLab, researched the link between demand analytics and commercial performance. Demand analytics is defined as gleaning critical information by examining and assessing data to inform demand-side decisions about business processes, such as pricing, marketing, and customer preferences. The authors interviewed almost 500 INSEAD alumni in commercial roles, in many industries, in businesses of all sizes, from around the globe.

Our findings show that companies with leading demand analytics capabilities demonstrated higher commercial performance levels. This correlation was widely recognized by the executives who responded to the survey. About 70 percent of the firms with leading demand analytics capabilities have invested considerably and consistently to develop them.

In any company, raising the demand analytics capability above par typically requires investments in people, processes, and data availability — and, to a lesser extent, technology. There must be a clear link between the development of demand analytics capabilities and the company’s strategy. Those with significant investments in demand analytics see measurable impact; 26 percent of respondents say it helped turn around a business and improve profitability. The relevance of demand analytics is particularly evident in industries such as consumer packaged goods, retail, and financial services; it is demonstrable in all geographies.

However, a capability gap remains. Even current demand analytics leaders do not necessarily believe they have the right enablers in place or that they apply analytics in the optimal way. The most critical factors for improvement are data, expertise, and governance.
When Netflix invested in producing its own television miniseries, *House of Cards*, it did not consider the decision risky. Mining data in real time about the preferences of more than 25 million subscribers (for example, tracking which parts of shows customers choose to replay and the viewing statistics for films featuring the program’s star, Kevin Spacey), Netflix predicted the political drama would be a hit. It was right: The series created a buzz that attracted new subscribers to the Internet video channel. An estimated 4 million people, its peak viewing, tuned in to the second episode of the second series during its opening weekend.

According to Netflix chief communications officer Jonathan Friedland, who spoke to the *New York Times*, “Because we have a direct relationship with consumers, we know what people like to watch. . . . It gave us some confidence that we could find an audience for a show like ‘House of Cards.’”

The digitization of business has provided Netflix — along with many other companies from all sectors of the economy — the ability to collect and analyze billions of data points about customer behavior and product performance, and to translate that understanding into operational improvement and superior strategic decisions. The generally accepted name for this capability is data analytics. But data analytics alone does not guarantee success. The way a company interprets and deploys the data can make the difference between success and failure.

During the past few years, a body of experience has emerged in a variety of industries pointing to a data analytics premium: a link between mastery of demand-side data analytics (“demand analytics”) and overall business performance. Companies that invest in big data and deploy the resulting knowledge strategically appear to gain a consistent competitive advantage, resulting in financial performance that is better than that of competitors. To test our hypothesis more rigorously and determine what kind of analysis brings success, we collected and analyzed data points of our own from a global survey of close to 500 businesses.
This is the first survey to investigate the link between demand-side data analytics and commercial results in a cross-industry, comprehensive way, rather than simply looking at the use of big data in business. This survey, conducted in summer 2014 at INSEAD’s eLabs (a research center devoted to data analytics), captured responses from 479 senior executives and managers directly involved in analytics in 12 industry sectors. About half (54 percent) were based in Europe, and another 18 percent came from the United States, with the rest spread across Asia-Pacific, Africa, the Middle East, and South America. Of the 12 sectors covered, 40 percent of the companies came from the industrial and consumer and retail sector. Overall the companies ranged in size from less than US$50 million in annual sales to more than $20 billion.

We designed the study to test the correlation between demand analytics capabilities and commercial performance in different regions and industries. We also looked at the types of demand analytics capability that led to higher performance. And we sought to gain a sense of the levels of proficiency with tackling big data at companies today.

The results of the study dramatically supported our hypothesis. Companies that use demand analytics to understand and deploy their data outperform their competitors in all industry sectors and across the world. About 80 percent of the respondents from top-performing companies recognize that the use of this deep-dive data analysis for decision making had led to improved performance. And 26 percent of respondents who report investing in developing the necessary analytic know-how say it turned around business and increased profits. For example, a senior vice president of a consumer products retail firm in the Asia-Pacific region made this comment about demand analytics: “[It] is critical to our market allocation processes to ensure we maximize margin and profitability” (see Exhibit 1, next page).
Exhibit 1
The clear impact of investment in demand analytics (DA)

<table>
<thead>
<tr>
<th>Rationale for investing in DA</th>
<th>Impact of DA investments made in recent three years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n = 445</strong></td>
<td><strong>n = 317</strong></td>
</tr>
</tbody>
</table>

**Level of DA capability (vs. competition)**
- **Lagging behind** 
  - (n = 97)
  - Defined as an investment area: 4%
  - Need to keep up with market: 24%
  - Because we could: 9%
  - No investments made / don’t know: 63%

- **Average** 
  - (n = 159)
  - Defined as an investment area: 13%
  - Need to keep up with market: 43%
  - Because we could: 32%
  - No investments made / don’t know: 12%

- **Above average** 
  - (n = 119)
  - Defined as an investment area: 31%
  - Need to keep up with market: 52%
  - Because we could: 8%
  - No investments made / don’t know: 9%

- **Leading** 
  - (n = 45)
  - Defined as an investment area: 51%
  - Need to keep up with market: 44%
  - Because we could: 3%
  - No investments made / don’t know: 2%

**Investments made in recent three years**
- **Minimal (only time/resources)** 
  - (n = 77)
  - Considerable and yearly: 3%
  - Small/ad hoc: 40%
  - Beyond: 57%
  - Don’t know: 58%

- **Small/ad hoc** 
  - (n = 159)
  - Considerable and yearly: 13%
  - Small/ad hoc: 24%
  - Beyond: 14%
  - Don’t know: 11%

- **Considerable and yearly** 
  - (n = 81)
  - Considerable and yearly: 31%
  - Small/ad hoc: 32%
  - Beyond: 33%
  - Don’t know: 5%

**Source:** Strategy & INSEAD
Demand Analytics survey
(August 2014)
**Tracking demand analytics mastery**

The term *demand analytics* refers to the way data is cut, spliced, and interpreted to optimize the demand-side drivers of business, including the pricing of goods and services. It applies to both business-to-business sectors and consumer retail enterprises. The practice of demand analytics synthesizes three major trends: big data (the accumulation of information from tracking human and machine behavior, online and in the real world), digitization (the adoption of information technology by business and the resulting transformation of business practices), and customer-centricity (the commitment and ability to pay close attention to customer wants, needs, and actions).

Some people think of demand analytics as primarily a technological practice, with a suite of cutting-edge software tools as the primary enabler of success. But the practice requires a great deal more: changes in processes, the creation of a pool of dedicated analytics experts, and the increased availability of data. These human factors were highlighted by survey respondents as critically important.

But as the survey results demonstrate, demand analytics is something businesses in all sectors must do now to remain competitive. Many top performers have already grasped this and are well beyond the early adopter stage. More than 70 percent of businesspeople who reported their companies as leading their sector in financial performance also reported using demand analytics in a concerted way. Two-thirds of the respondents from these leading companies also said they support demand-related decisions with analytics more than 50 percent of the time. Most of the sector leaders not only had made significant investments in demand analytics during the previous three years but also had embedded it into their strategic planning and used it regularly for decision making. Of the early adopters, 84 percent reported improved profitability, along with a better understanding of the demand-side drivers of their businesses.

Typical of the responses was this quote from a senior vice president of a United Kingdom media business: “Demand analytics allows for better
decisions, more modular actions, superior products, better targeting, greater customer value, and superior TSR [total shareholder return].”

Those who described their companies as proficient in demand analytics estimated that they outperform their industry peers in sales growth, margin growth, and profit growth by more than two times, and show an eight times better total shareholder return on capital (see Exhibit 2, next page). This was a global finding, coming from both emerging and mature economies. Businesses in developing countries from Africa to Asia that are using demand analytics also report a significant competitive edge.

At the other end of the spectrum, 93 percent of the respondents who said their companies’ business performance lagged their competitors’ also admitted to a lack of investment in and use of demand analytics. For example, they said they rely on analytics to come to a decision less than half the time. Close to two-thirds of the self-described performance laggards said they had made no investments in demand analytics at all.

Even allowing for the fact that self-reporting may tint this rosy picture, the size of the survey and the consistency of the responses underscore the advantage that senior managers believe advanced demand analytics capabilities bring.
Exhibit 2
Above-average performers outpace peers by 2–3 times on sales, margin, profit, and TSR

Average company performance (vs. competitors) in past three years

<table>
<thead>
<tr>
<th>Category</th>
<th>Above average</th>
<th>Average</th>
<th>Below average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales growth</td>
<td>23%</td>
<td>9%</td>
<td>1%</td>
</tr>
<tr>
<td>Margin growth</td>
<td>7%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Profit growth</td>
<td>10%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>Total shareholder return</td>
<td>10%</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Note: Company performance is self-reported by respondent.

Source: Strategy&/INSEAD Demand Analytics survey (August 2014)
Drivers of analytic success

What are the leading companies doing that makes them more successful than the competition? Respondents reported several key factors that helped them implement demand analytics successfully. The survey also found that top-tier financial performers are using these capabilities consistently in business plans and decision making. The five most important are:

• A clearly defined demand analytics process
• Accessible, high-quality data
• People with skill sets that bring together technical ability and creative analysis
• Enough resources dedicated to the operation
• Committed leadership

Developing a defined process means making digital analytics an obligatory part of decision making. Any major action, from a product launch to an operational change, should require a data-driven justification before it can be approved. For example, advertising campaign materials should be tested against consumer responses to similar content in different platforms — social media, YouTube videos, and traditional print and video media — to predict the likely appeal. Campaigns should also be cross-referenced with data sources weighted for age, demographic segmentation, and regional differences. Close to 90 percent of the survey respondents from top tier businesses said they already conduct this kind of analysis.

Respondents also use demand analytics to augment the effectiveness of a range of classic business functions, such as demand forecasting, customer surveys, and product bundling. This is done by adding nuance and sophistication to the way the relevant information is assessed and cross-referenced. At no time in the past did managers have access to as much information about their customers as they do now. The survey
showed that leading companies use a combination of analytical tools to inform a wide cross-section of decision making. Melding a demand analytics team with the requisite combination of skill, expertise, and vision is both important and challenging (see Exhibits 3, next page, and 4, page 14).

The value of the demand analytics premium is particularly clear for consumer packaged-goods and retail companies. In either of these industries, the more demand analytics prowess a company has, the better it performs. The leading consumer and retail companies were particularly strong in demand analytics processes and the accessibility and quality of their data. Of the 89 respondents from this sector, the top tier performers said they used demand analytics across the board for pricing, marketing, customer segmentation, and product and service applications. The same is true in telecommunications: Leading companies use demand-side analysis systematically for determining products and services, customer segmentation, how to mix their products for marketing, and pricing.
Exhibit 3
Demand analytics capabilities by category

What category of demand-related analysis are performed?

A. Digital analytics
B. Customer analytics
C. Marketing analytics
D. Sales analytics
E. Consumer analytics

Level of DA capability:
- Leading
- Above average
- Average
- Lagging

Source: Strategy&/INSEAD Demand Analytics survey (August 2014)
## Exhibit 4
Two to three types of analysis, on average, are performed in five categories

### What type of demand-related analysis are performed (by leading DA companies)?

<table>
<thead>
<tr>
<th>A. Digital analytics</th>
<th>B. Customer analytics</th>
<th>C. Marketing analytics</th>
<th>D. Sales analytics</th>
<th>E. Consumer analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average of 2 analyses</strong></td>
<td><strong>Average of 3 analyses</strong></td>
<td><strong>Average of 2 analyses</strong></td>
<td><strong>Average of 2 analyses</strong></td>
<td><strong>Average of 3 analyses</strong></td>
</tr>
<tr>
<td>Product and service bundling and offer optimization</td>
<td>Customer profitability and lifetime value modeling</td>
<td>Demand forecasting</td>
<td>Pricing elasticity modeling and discounting optimization</td>
<td>Survey and questionnaire design</td>
</tr>
<tr>
<td>Digital pathway analysis and website optimization</td>
<td>Cross-sell, upsell, and next-best-offer modeling</td>
<td>Market mix modeling and media budget optimization</td>
<td>Price laddering and category management</td>
<td>Customer experience research and modeling</td>
</tr>
<tr>
<td>Email campaign optimization</td>
<td>Customer acquisition and activation optimization</td>
<td>Market structure, brand portfolio, and architecture optimization</td>
<td>Sales agent and commission analytics</td>
<td>Customer satisfaction and customer advocacy modeling</td>
</tr>
<tr>
<td>Social media, mobile, and text analytics</td>
<td>Behavioral segmentation and profiling</td>
<td>Customer loyalty analytics and optimization</td>
<td>Contact center analytics and cost optimization</td>
<td>Needs-based segment. And development of value propositions</td>
</tr>
<tr>
<td>Content testing and user experience optimization</td>
<td>Response and purchase propensity modeling</td>
<td>Marketing attribution models</td>
<td>Assortment planning and analytics</td>
<td>Qualitative research, ethnography, and social listening</td>
</tr>
<tr>
<td>E-commerce optimization</td>
<td>Churn modeling and attrition prevention optimization</td>
<td>MROI of paid, owned, and earned media channels</td>
<td>Assortment planning and analytics</td>
<td>Price-product architecture models</td>
</tr>
<tr>
<td>Design of recommendation engines</td>
<td>Advanced micro segmentation and profiling</td>
<td>Contact agent analytics</td>
<td>SKU rationalization and product delisting</td>
<td>Identification of unmet needs/white space</td>
</tr>
<tr>
<td></td>
<td>Win-back modeling and offer optimization</td>
<td></td>
<td>Retail site selection</td>
<td>Conjoint and discrete choice modeling</td>
</tr>
</tbody>
</table>
Taking the next step

Demand analytics is a dynamic business discipline. It is reinventing itself constantly, as technology and critical thinking push the boundaries and resources of the digitized business world. Even those that count themselves proficient in this area are looking to enhance their skills. Respondents at 58 percent of companies that described themselves above average compared to the competition and 36 percent of leading companies report a desire to improve their capabilities. With the top performers striving for even better results, companies that delay investing and committing to develop demand analytics capabilities will find themselves at an ever increasing disadvantage. Data, expertise, and commitment are the three key levers for creating success. The good news is that we know which specific processes and investments lead to performance improvements, and now we have the data to back that up.
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