

Big data analytics' growing pains

Six years ago, the terms “big data” and “analytics” were ubiquitous—a key part of every conference, webinar, and trade publication. One book even proclaimed that it would “transform how we live, work, and think.”¹ But that has yet to happen. While some companies have made great strides toward harnessing the power of big data, many others are still struggling.

A new study by DC VELOCITY's sister publication, CSCMP's *Supply Chain Quarterly*, offers some insights into why that might be and what the future may hold. Here's a look at some of the findings.



Implementations are up

The “Second Annual Big Data Analytics Study” found that the number of companies conducting big data analytics projects increased significantly in 2018 over the previous year.

“Have you implemented big data analytics or are you conducting a proof-of-concept test?”

In 2017,
77%
said “YES”



In 2018,
90%
said “YES”



Implementations
up 13%

Satisfaction is down

Although implementations were up, respondents were less satisfied with their big data analytics efforts in 2018 than in 2017.

Survey respondents were asked to rank on a scale of 1 to 7 how much of a beneficial impact they had already received from big data analytics in the following areas.



Are unsophisticated tools to blame?

That lack of satisfaction may reflect the fact that many companies are still using relatively unsophisticated analytics tools.

Survey respondents were asked to rank on a scale of 1 to 7 the extent to which they are using the following analytics to support supply chain decision-making, where 1 equals no use, 7 equals heavy use, and 3 equals occasional use.

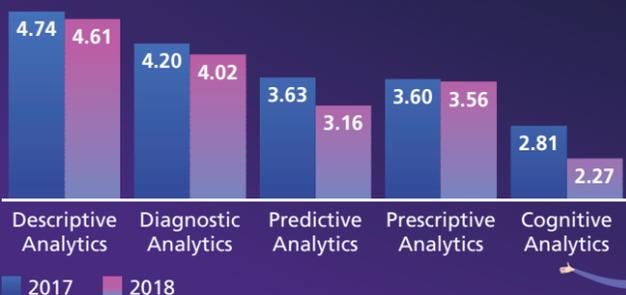
Definitions of data analytics types from least to most sophisticated:

- **Descriptive:** Analytics that describe what is happening/has happened.
- **Diagnostic:** Analytics that describe why something happened.
- **Predictive:** Analytics that predict what will happen.
- **Prescriptive:** Analytics that tell users what they should be doing.
- **Cognitive:** Analytics that use machine learning to tell users what should or could be done.



The study found the following correlations between the types of analytics and the benefits.

Analytics Type	Customer Service	Demand Planning	Risk Management	Supply Chain Visibility	End-to-End Collaboration	Productivity
Descriptive Analytics	yes	no	no	no	no	no
Diagnostic Analytics	no	slightly positive	no	no	yes	no
Predictive Analytics	no	yes	yes	no	slightly positive	no
Prescriptive Analytics	no	slightly negative	no	no	no	no
Cognitive Analytics	slightly positive	no	yes	slightly positive	slightly positive	yes



The bottom line

Although the survey respondents seem underwhelmed by the results of their big data projects to date, that shouldn't be seen as a sign of failure. Technology experts say it's normal for companies to experience growing pains with the implementation of any new technology. Fixing the problems will take time and work. But as they begin to address issues like the limitations of their existing analytics tools, there's a good chance they can get their projects back on track.

SOURCE: “SECOND ANNUAL BIG DATA ANALYTICS STUDY” BY CSCMP'S SUPPLY CHAIN QUARTERLY IN CONJUNCTION WITH ARIZONA STATE UNIVERSITY, COLORADO STATE UNIVERSITY, COMPETITIVE INSIGHTS LLC, AND THE LHARRINGTONGROUP. THE STUDY WAS BASED ON THE RESPONSES OF 125 SUPPLY CHAIN PROFESSIONALS FROM NORTH AND SOUTH AMERICA.

1. Viktor Mayer-Schonberger and Kenneth Cukier, *Big Data: A revolution that will transform how we live, work, and think*, Houghton Mifflin Harcourt, 2013.