



EXECUTIVE OVERVIEW

MARKET  
MAP

# Data Management and Analytics Market Map 2017

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As enterprises large and small look to data and analytics as drivers for digital transformation, the sector's potential value has never been greater. The 2017 Data Management and Analytics Market Map illustrates the evolving market landscape.



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Matt Aslett is a Research Director for the Data Platforms and Analytics Channel at 451 Research. Matt has overall responsibility for the data platforms and analytics research coverage, which includes operational and analytic databases, Hadoop, grid/cache, stream processing, search-based data platforms, data integration, data quality, data management, analytics, machine learning and advanced analytics. Matt's own primary area of focus includes data management, reporting and analytics, and exploring how the various data platforms and analytics technology sectors are converging in the form of next-generation data platforms.

# Key Findings

The combined data platforms and analytics market generated \$80.4bn in 2016, according to 451 Research's Total Data Market Monitor, with revenue expected to grow at a CAGR of 11.5% between 2016 and 2021.

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The fastest rate of growth between now and 2021 is expected to come from the machine learning/deep learning sub-segment of advanced analytics (19% CAGR), followed by self-service BI and visualization (16% CAGR). As a whole, data management is expected to grow at 14.5% CAGR in the same timeframe.

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The next phase in the evolution of data management and analytics will likely be driven by the mainstream adoption of artificial intelligence and machine learning, which will affect both the functionality offered by analytics vendors and the requirements for data management products and services.

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The market continues to shift toward self-service at both the data preparation and analytics layers, presenting opportunities and challenges in terms of data governance and management, which are further heightened by the ongoing adoption of cloud computing for data storage, processing and analytics.

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# Executive Summary

## MANAGING CHANGE

The 'data management and analytics' sector includes data management and integration technologies used to prepare data for analysis, as well as analytics tools and technologies, such as advanced analytics and machine learning, used to generate insight and value from data. Data management and analytics is also a subset of the Data Platforms and Analytics market, which also incorporates the core data platforms – predominantly operational and analytic databases, but also distributed data processing frameworks such as Hadoop and Spark, log management, data grid/cache technologies and event/stream processing – which are the subject of 451 Research's recent complementary report.

Adoption of data processing and analytics technologies has traditionally been driven by IT-led projects and specialist data management professionals. Recent years have seen an increasing role for end users – data analysts, data scientists, developers and even business analysts – in driving adoption of new technologies that provide self-service data management and analytics functionality, often delivered and consumed as a service.

Self-service enables greater business agility, ensuring that analytics teams are able to quickly get up and running with new projects without having to wait for IT professionals to acquire, configure and deploy the necessary software and hardware. However, self-service is not without its challenges. Clearly there are ongoing data governance, data privacy and data security requirements, particularly in relation to regulations, that need to be adhered to, while data quality remains an important prerequisite to generating meaningful value from data.

As such, we are seeing an ongoing trend towards what might be considered 'managed self-service' environments, where data governance, data privacy and data security capabilities are seen as enablers to self-service: providing the right data to the right people for the right purpose, and from the right location, and then allowing them to enjoy the agility benefits of self-service access and collaboration.

Data management and analytics is already a large market (with revenue of \$80.4bn in 2016, according to 451 Research's Total Data Market Monitor), and it continues growing, due in part to the current focus on 'pervasive intelligence', the combination of traditional and IoT data with big-data storage and processing, as well as artificial intelligence and other advanced analytics approaches. The market continues to evolve, with new data management and analytics products and services able to more efficiently analyze data and gain business insight.

## METHODOLOGY

451 Research Market Maps™ are designed to provide a view of the vendor landscape by major segment. The map highlights companies competing in multiple segments by connecting them through a circuit line. Identification and placement of companies into these segments is based on analysis, both published and unpublished, performed by 451 Research. This analysis includes interviews, reports and advisory work with several thousand enterprises, vendors, service providers and investors annually. 451 Research Market Maps™ are not intended to represent a comprehensive list of every vendor operating in this market. Inclusion on 51 Research Market Maps™ does not imply that a given vendor will be specifically featured in one or more 451 Research reports.

# Table of Contents

<b>1. THE 451 TAKE</b>	<b>1</b>
<b>2. THE DATA MANAGEMENT AND ANALYTICS LANDSCAPE</b>	<b>2</b>
<b>3. THE DATA MANAGEMENT LANDSCAPE</b>	<b>3</b>
<i>Figure 1: 451 Research Data Management Market Map™</i> . . . . .	4
DATA INTEGRATION . . . . .	5
DATA GOVERNANCE . . . . .	6
DATA QUALITY . . . . .	6
MASTER DATA MANAGEMENT . . . . .	7
<i>Figure 2: Summary Chart: Data Management Market Challenges and Innovations</i> . . . . .	8
<b>4. SELF-SERVICE AND BEYOND</b>	<b>9</b>
<i>Figure 3: Major Data Management Market Players: Key Attributes</i> . . . . .	9
<b>5. THE ANALYTICS LANDSCAPE</b>	<b>12</b>
<i>Figure 4: 451 Research Analytics Market Map™</i> . . . . .	13
BI AND REPORTING . . . . .	14
ADVANCED ANALYTICS: PREDICTIVE ANALYTICS/OTHER . . . . .	15
ADVANCED ANALYTICS: MACHINE LEARNING/DEEP LEARNING . . . . .	15
PERFORMANCE MANAGEMENT . . . . .	16
<i>Figure 5: Summary Chart: Analytics Market Challenges and Innovations</i> . . . . .	17
<b>6. MANAGING THE MACHINE LEARNING HYPE, NAVIGATING THE ANALYTICS CROWD</b>	<b>18</b>
<i>Figure 6: Analytics Major Market Players: Key Attributes.</i> . . . . .	18

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<b>7. CONCLUSIONS</b>	<b>20</b>
<hr/>	
<b>8. FURTHER READING</b>	<b>21</b>
<hr/>	
<b>9. INDEX OF COMPANIES</b>	<b>22</b>