Research Report

Abstract:

Big Data Trends

A Midmarket Perspective

By Nik Rouda, ESG Senior Analyst and Bill Lundell, Director of Research
With Jennifer Gahm, Senior Project Manager

March 2016
Introduction

Research Objectives

There is still confusion in the market about the current state of data initiatives, especially when it comes to the potential impact of big data on traditional business intelligence and analytics practices. Customers and vendors alike are working to build robust solutions even as new approaches, technologies, and best practices continue to evolve rapidly. Still few can accurately assess the motivations, impacts, and implications of the shifts. ESG undertook a broad study to establish a baseline on various data initiatives and their relative maturity.

While many big data vendors focus on global enterprises, the benefits of big data are relevant to businesses of all sizes. In many ways, it appears that the midmarket has been somewhat neglected and underpenetrated for newer big data solutions. This portion of the addressable market may have unique needs, concerns, and opportunities facing them. What is important is to understand how these groups are different from larger businesses. Understanding these differences will help vendors to be more successful in providing appropriate offerings.

In order to assess the overall status of data initiatives in public and private organizations, ESG surveyed 275 IT and business professionals representing midmarket (100 to 999 employees) organizations in North America. All respondents were personally responsible for or are familiar with their organizations’ current database, business intelligence (BI), and/or analytics solutions.

The survey was designed to answer the following questions:

- Relative to all of your organization’s business and IT priorities over the next 12-18 months, how would you rate the importance of its big data analytics projects and initiatives?
- For new initiatives in the area of big data and analytics, how long do you think it will take for your organization to start seeing significant business value?
- What groups are initiating new projects in the area of big data and analytics?
- What groups provide the skills and manpower to implement and manage the technologies supporting initiatives in the area of big data and analytics?
- What IT disciplines need to be involved for new initiatives and projects in the area of big data and analytics to be successful?
- What attributes are most important to organizations when considering technology solutions in the area of big data and analytics?
- What is the midmarket sentiment for Spark, and what is driving interest in the technology?
- What level of interest exists for Hadoop? What is the anticipated impact of Hadoop on the traditional data warehouse approach?
- What type of Hadoop distribution(s) are organizations currently evaluating?
- How important is open source or Open Data Platform support/participation to an organization’s choice of Hadoop distribution(s)?
- What will likely be the primary deployment strategy for net-new big data and analytics deployments going forward?

Survey participants represented a wide range of industries including manufacturing, financial services, health care, communications and media, retail, government, and business services. For more details, please see the Research Methodology and Respondent Demographics sections of this report.
Research Methodology

To gather data for this report, ESG conducted a comprehensive online survey of IT and business professionals from private- and public-sector organizations in North America (United States and Canada) between October 22, 2015 and November 2, 2015. To qualify for this survey, respondents were required to be IT or business professionals familiar with their organization’s current big data, database, data warehouse, business intelligence (BI), and/or analytics solutions, as well as forward-looking strategies. All respondents were provided an incentive to complete the survey in the form of cash awards and/or cash equivalents.

After filtering out unqualified respondents, removing duplicate responses, and screening the remaining completed responses (on a number of criteria) for data integrity, we were left with a final total sample of 275 IT and business professionals.

Please see the Respondent Demographics section of this report for more information on these respondents.

Note: Totals in figures and tables throughout this report may not add up to 100% due to rounding.
Respondent Demographics

The data presented in this report is based on a survey of 275 qualified respondents. Figures 1-6 detail the demographics of the respondent base, including individual respondents’ primary area of responsibility, and age, as well as respondent organizations’ total number of employees, primary industry, and annual revenue, among others.

Respondents by Primary Area of Responsibility

Respondents’ primary area of responsibility is shown in Figure 1.

**Figure 1. Respondents’ Primary Area of Technology Responsibility**

![Pie chart showing the distribution of respondents by primary area of responsibility]

Source: Enterprise Strategy Group, 2016

Respondents by Age

Figure 2 shows the age of respondents.

**Figure 2. Respondents by Age**

![Pie chart showing the distribution of respondents by age]

Source: Enterprise Strategy Group, 2016
Respondents by Age of Organization

Figure 3 shows the age of respondent organizations (i.e., length of time an organization has been in existence).

**Figure 3. Respondents by Age of Organization**

For approximately how long has your current employer been in existence? (Percent of respondents, N=275)

- More than 50 years, 6%
- Less than 1 year, 1%
- 21 to 50 years, 14%
- 1 to 5 years, 11%
- 6 to 10 years, 42%
- 11 to 20 years, 26%

Source: Enterprise Strategy Group, 2016

Respondents by Number of Employees

The number of employees in respondents’ organizations is shown in Figure 4.

**Figure 4. Respondents by Number of Employees**

How many total employees does your organization have worldwide? (Percent of respondents, N=275)

- 500 to 999, 46%
- 250 to 499, 32%
- 100 to 249, 22%

Source: Enterprise Strategy Group, 2016
Respondents by Industry

Respondents were asked to identify their organization’s primary industry. In total, ESG received completed, qualified respondents from individuals in 20 distinct vertical industries, plus an “Other” category. Respondents were then grouped into the broader categories shown in Figure 5.

**Figure 5. Respondents by Number of Employees**

What is your organization’s primary industry? (Percent of respondents, N=275)

- Other, 25%
- Business Services (accounting, consulting, legal, etc.), 14%
- Manufacturing, 14%
- Financial (banking, financial, insurance), 12%
- Retail/Wholesale, 10%
- Communications & Media, 7%
- Information Technology, 7%
- Health Care, 8%
- Government (Federal/National, State/Province/Local), 4%
- What is your organization’s primary industry? (Percent of respondents, N=275)

Respondents by Annual Revenue

Respondent organizations’ annual revenue is shown in Figure 6.

**Figure 6. Respondents by Annual Revenue**

What is your organization’s total annual revenue ($US)? (Percent of respondents, N=268)

- Less than $50 million, 20%
- $50 million to $99.999 million, 23%
- $100 million to $499.999 million, 24%
- $500 million to $999.999 million, 21%
- $1 billion to $4.999 billion, 8%
- $5 billion to $9.999 billion, 1%
- $10 billion to $19.999 billion, 1%
- $20 billion or more, 0%
- Not applicable (e.g., public sector, non-profit), 2%

**Source:** Enterprise Strategy Group, 2016
List of Figures

Figure 1. Importance of Big Data Analytics Projects and Initiatives Relative to Business and IT Priorities .............................................. 6
Figure 2. Expected Length of Payback Period for New Big Data and Analytics Initiatives ........................................................................ 7
Figure 3. Groups *Initiating* New Big Data and Analytics Projects ........................................................................................................... 8
Figure 4. Groups Providing Skills and Manpower to Implement and Manage Technologies Supporting Big Data and Analytics ........................................................................................................ 9
Figure 5. Importance of IT Disciplines’ Involvement in New Big Data and Analytics Initiatives and Projects ...................................... 10
Figure 6. Most Important Attributes When Considering Big Data and Analytics Technology Solutions .............................................. 10
Figure 7. Hadoop Implementation Plans ...................................................................................................................................................... 11
Figure 8. Spark Implementation Plans ......................................................................................................................................................... 12
Figure 9. Factors Driving Interest in Spark ............................................................................................................................................... 13
Figure 10. How Hadoop Will Fit Against Traditional Data Warehouse Approach .................................................................................................................. 13
Figure 11. Type of Hadoop Distribution Planned Adopters Are Evaluating ........................................................................................ 14
Figure 12. Importance of Open Source Support/Participation in Choice of Hadoop Distribution ............................................................. 15
Figure 13. Type of Hadoop Distribution Planned Adopters Are Evaluating ........................................................................................ 15
Figure 14. *Primary* Deployment Strategy for Net-new Big Data and Analytics Deployments .............................................................................. 17
Figure 15. *Preferred* Model of Cloud-based Services .................................................................................................................................. 17
Figure 16. Advantages for Cloud-based Big Data and Analytics Solutions ............................................................................................. 18
Figure 17. Disadvantages for Cloud-based Big Data and Analytics Solutions .......................................................................................... 19
Figure 18. Most Important Role of a Systems Integrator or Value-added Reseller in Supplying Big Data and Analytics Technology ........................................................................................................... 20
Figure 19. Value-added Reseller Purchasing Considerations for Big Data Analytics Technology Solutions .............................................. 21
Figure 20. Respondents’ Primary Area of Technology Responsibility ........................................................................................................ 24
Figure 21. Respondents by Age ................................................................................................................................................................. 24
Figure 22. Respondents by Age of Organization ........................................................................................................................................... 25
Figure 23. Respondents by Number of Employees .................................................................................................................................. 25
Figure 24. Respondents by Number of Employees ...................................................................................................................................... 26
Figure 25. Respondents by Annual Revenue ................................................................................................................................................. 26