

# Eight pitfalls to avoid when starting your Big Data analytics journey



## A world striving to harness Big Data

Organizations around the globe are drowning in pools of data and volumes are growing each year. The benefits are significant.

10% boost in data accessibility → \$65M in additional net income<sup>1</sup>

But harnessing Big Data isn't easy. The chances are high that your Big Data analytics journey will encounter bumps and barriers along the way.



## The eight pitfalls and how to avoid them

### 1 Taking an IT-centric approach

#### Obtain views from line of business and external sources

Big Data analytics requires the coordinated efforts between IT, operations, management, and other lines of business, such as marketing. Continue to collaborate and communicate with your line-of-business owners as business use cases will change over time.

Only 31%

of companies have significantly restructured their operations to put data at the heart of their organization<sup>2</sup>

"...in many companies...organizational designs are still immature and executives don't always appreciate how analytics will fundamentally change business processes and human behavior."<sup>2</sup>

—DataInformed

### 2 Moving forward without the right skills and experience

#### Fill gaps with hiring additional staff or partnering with vendors and contractors

Members of your Big Data analytics team must possess the right skills to meet goals. A trusted provider can perform a gap analysis to help elevate skills across the entire team.



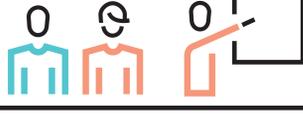
"Forrester...warns that immature data science teams will improperly exploit algorithm markets, and spend precious time either developing an algorithm they could have bought or trying to apply an algorithm incorrectly."<sup>3</sup>

—Forbes

### 3 Planning in a vacuum

#### Find consultants and attend workshops to assess your systems and define needs

Strategic-level advisors can broaden Big Data analytics program design and propose reputable solutions. Big Data is not only about technology, but building solutions that fuel business growth.



### 4 Forgetting about security

#### Ask potential providers how they handle data security and integrity throughout all phases

A breach with Big Data can be big trouble, especially where sensitive customer information is involved. Know where data resides, and how it is to be protected. Security should be a core component of your solution.



Malicious attacks on IT systems are becoming more complex and new malware is constantly being developed. Unfortunately, companies that work with Big Data face these issues on a daily basis.<sup>4</sup>

### 5 Underestimating the complexity of Big Data

#### Select the right platform for specific data types to avoid delays and disruptions

Today, data comes from everywhere: business systems like CRM and ERP, sensors gathering machine-generated data, social media, web logs and data streams, gas and electrical grids, and mobile networks. Performing complex analysis with large data clusters can be a challenging process.

\$42B

of improper payments to doctors and other medical providers prevented<sup>5</sup>

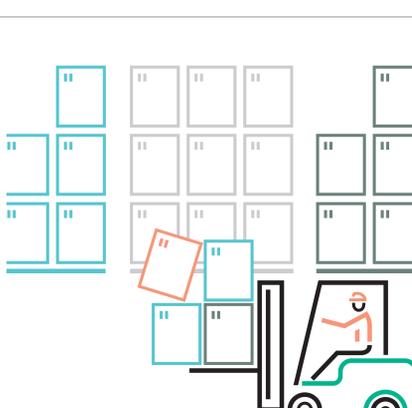
"After years of haphazard auditing and enforcement practices that frequently missed multi-million dollar scams, federal authorities...are now ferreting out corruption through the use of 'Big Data' and predictive analytics."<sup>6</sup>

—The Fiscal Times

### 6 Overlooking existing infrastructure and investments

#### Seek solutions that integrate with current environment

You've invested heavily in a data infrastructure that includes business intelligence and data warehousing. Integrative solutions can meet Big Data analytics requirements while maximizing investments in current infrastructure.



Most vital best practice is to keep business leaders and users engaged in all important decisions (such as identifying the proof-of-concept scope) and involved in validating data used at each stage.<sup>7</sup>

### 7 Believing the hype

#### Steer clear of exaggerated claims and find trusted partners

With the Big Data market expected to reach \$102B by 2019,<sup>8</sup> expect hype. Seek out reliable providers offering high-value, low-risk solutions that can meet business requirements, not complicate them.

#### By 2019:

The Big Data market is expected to reach

\$102B<sup>8</sup>

#### By 2020:

The quantity of high-value data worth analyzing will be

2X<sup>9</sup>

the current amount<sup>9</sup>

60%

of information delivered to decision makers will be actionable<sup>10</sup>



### 8 Losing sight of best practices

#### Continue with the strategies and collaboration that made analytics a success

Business requirements evolve rapidly, and so will your analytics strategies. An analytically mature company will continue to consume insights and develop it to resolve new business questions and continually gain insights into its customers.



## HPE helps organizations to use Big Data to improve operations, gain competitive advantage, and find new revenue opportunities.

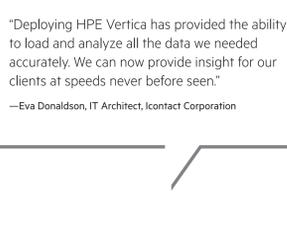
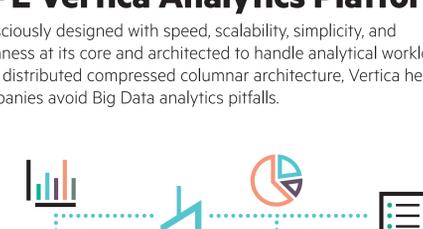
HPE Vertica Analytics Platform paired with HPE Big Data Software Services is providing technology, innovation, and experts to help meet your Big Data analytics requirements.

## HPE Vertica Analytics Platform

Consciously designed with speed, scalability, simplicity, and openness at its core and architected to handle analytical workloads via a distributed compressed columnar architecture, Vertica helps companies avoid Big Data analytics pitfalls.

"Deploying HPE Vertica has provided the ability to load and analyze all the data we need accurately. We can now provide insight for our clients at speeds never before seen."

—Eva Donaldson, IT Architect, Icontact Corporation

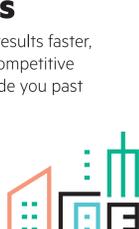
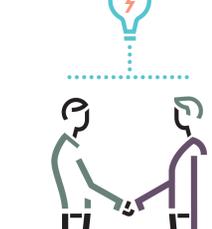


## HPE Big Data Software Services

Committed to helping customers succeed by achieving business results faster, lowering IT development and maintenance costs, and gaining a competitive edge in the marketplace, HPE Big Data Software Services can guide you past pitfalls and help you master Big Data analytics.

"By far, HPE was the best end-to-end solution that we had out there. And HPE's consulting services were better than anyone's."

—Steve Phelps, executive vice president and chief marketing officer, NASCAR



## Learn more

Learn to avoid these pitfalls by reading the TDWI Guide and Checklists.

Read the full HPE white paper, "Eight pitfalls to avoid when starting your Big Data analytics journey."

Download the guide

Download the white paper



Hewlett Packard Enterprise partners with you to help with your transformation to a data-driven, agile organization. We help accelerate time to value through Big Data analytics and informatics without disrupting legacy investments and processes.

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<sup>1</sup> 10 percent boost in data accessibility can add more than US\$65 million in additional net income." Bernard Marr, Forbes, "Big Data: 20 Mind-Boggling Facts Everyone Must Read," September 20, 2015.

<sup>2</sup> "In many companies we find that organizational designs are still immature and executives don't always appreciate how analytics will fundamentally change business processes and human behavior. Our survey found that only 31 percent of companies have significantly restructured their operations to put data at the heart of their organization." Chris Mazzeo and Gaurav Gupta, DataInformed, "Analytics Success Depends on People, Organizational Change," July 16, 2016.

<sup>3</sup> "Forrester also warns that immature data science teams will improperly exploit algorithm markets, and spend precious time either developing an algorithm they could have bought or trying to apply an algorithm incorrectly." Gil Press, Forbes, "5 Predictions For Big Data Analytics And Cognitive Computing In 2016," December 15, 2015.

<sup>4</sup> Aleksandr Panchenko, Data Center Knowledge, "Nine Main Challenges in Big Data Security," January 15, 2016.

<sup>5</sup> "54.2 billion of improper payments to doctors and other medical providers." Eric Platen, The Fiscal Times, "54.2 Billion of Medicare and Medicaid Fraud Threatened by 'Big Data' Analytics," July 26, 2016.

<sup>6</sup> "After years of haphazard auditing and enforcement practices that frequently missed multi-million-dollar scams, federal authorities under prodding from Congress are now ferreting out corruption through the use of 'big data' and predictive analytics." Eric Platen, The Fiscal Times, "54.2 Billion of Medicare and Medicaid Fraud Threatened by 'Big Data' Analytics," July 26, 2016.

<sup>7</sup> "High-level Summary Report, TDWI: Top 5 Best Practices for Implementing Big Data Projects," October 27, 2015.

<sup>8</sup> Ben Ross, Information Age, "What are the numbers, facts and figures behind big data?," March 4, 2016.

<sup>9</sup> "By 2020, the amount of high-value data worth analyzing will double and 60% of information delivered to decision makers will be actionable." IDC, "Big Data and Analytics Is Increasingly a Game of Inches," 2016.