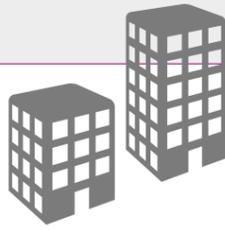# The Path to Big Data Success

Results from a 2015 Big Data Survey

Conducted by Forrester Consulting on Behalf of Xerox

xerox ®

Businesses Know Big Data is Important…

Big data is ranked as the top ICT priority for businesses in 2015.

The level of confidence correlates with their big data maturity. We identify three stages of maturity:

The most confident are the **Datarati**, who show a strong competence in their big data approach:

Data-explorers show some competence in their big data approach:

Data-laggards, whose approaches are lagging behind, are least confident:

81%
agree that big data improves their competitive advantage.

74%
agree that big data improves their competitive advantage.

62%
agree that big data improves their competitive advantage.

Top two drivers of big data are:
- Better decision-making and improved business planning
- Improved data quality and consistency

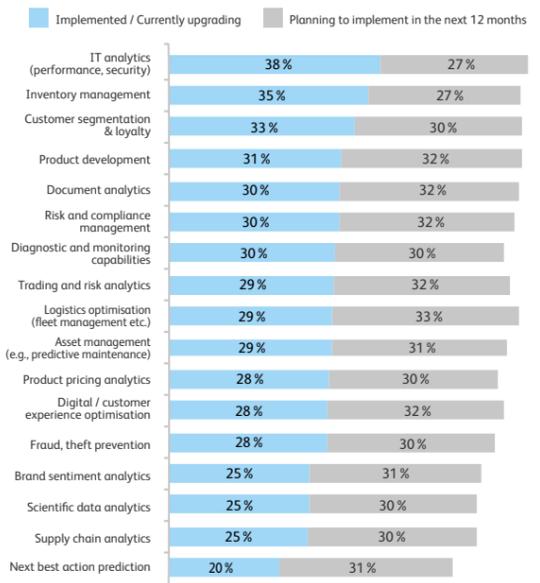**72%** of respondents say 'big data insights improve our competitive advantage'.

…and are Harnessing its Potential

56% of respondents are already seeing business benefits from big data.

They are putting big data to use in a wide variety of use cases:

Use case	Implemented / Currently upgrading	Planning to implement in the next 12 months
IT analytics (performance, security)	38%	27%
Inventory management	35%	27%
Customer segmentation & loyalty	33%	30%
Product development	31%	32%
Document analytics	30%	32%
Risk and compliance management	30%	32%
Diagnostic and monitoring capabilities	30%	30%
Trading and risk analytics	29%	32%
Logistics optimisation (fleet management etc.)	29%	33%
Asset management (e.g., predictive maintenance)	29%	31%
Product pricing analytics	28%	30%
Digital / customer experience optimisation	28%	32%
Fraud, theft prevention	28%	30%
Brand sentiment analytics	25%	31%
Scientific data analytics	25%	30%
Supply chain analytics	25%	30%
Next best action prediction	20%	31%

On average:

Datarati are implementing 8 of these use cases.

Data-explorers are implementing 6 of them.

Data-laggards are implementing 5 of them.

## Businesses Face Many Challenges in Achieving Big Data Success

Businesses recognise a wide range of challenges in implementing their big data strategies, with the top two being 'data security & privacy' and 'data quality'. Importantly, challenges relating to skill and cultural requirements — i.e., human and business elements — are recognised as being as significant as issues of data and technology, as the examples here show. This is a positive sign, indicating a growing understanding of the organisational changes required to drive big data success in large enterprises.

For example:

Lack of adequate user training is regarded as only slightly less challenging than data quality.

An insufficient culture to embrace data-based decision-making support is as much of a challenge as legal and regulatory compliance.

Change management is as much of a challenge as lack of data standards.

- **34%** Data quality
- **32%** Lack of user training
- **24%** Insufficient culture
- **24%** Legal and regulatory compliance
- **26%** Inadequate change management
- **27%** Lack of data standards
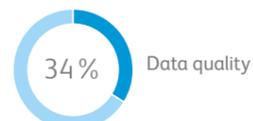
Data Security & Privacy

37% of respondents rate data security & privacy as one of their biggest challenges when implementing big data strategies — the top challenge in the survey.

EU regulations and growing consumer concerns over data privacy mean that businesses need to decide how to implement data privacy in order to build trust among consumers and remain compliant.

Data Quality

55% of respondents lack strong enough processes to ensure data quality.
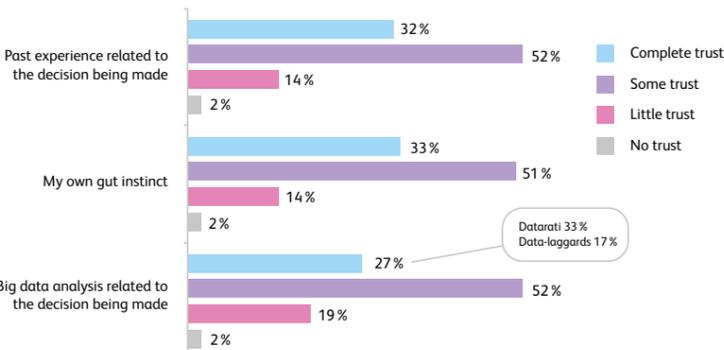
Even for the Datarati, quality is still an issue:

45% of Datarati respondents lack strong enough processes to ensure data quality.

Poor data quality leads, among other things, to a lack of trust in big data when making executive decisions. Businesses currently trust past experience or their gut instinct as much as big data.

To what extent do you trust these approaches when making executive decisions?

	Complete trust	Some trust	Little trust	No trust
Past experience related to the decision being made	32%	52%	14%	2%
My own gut instinct	33%	51%	14%	2%
Big data analysis related to the decision being made	27%	52%	19%	2%

Datarati 33%
Data-laggards 17%

33% of Datarati have complete trust in big data analysis when making executive decisions.

Only **17%** of Data-laggards do.

But Businesses Feel Confident of Overcoming Challenges

Over the next 12 months, respondents expect their companies to make a greater proportion of their business decisions based on quantitative information and analysis rather than experience, gut feeling or opinion:

Today	48%
12 months from now	61%

74% of respondents expect to see a positive return on big data investments within 12 months of implementation.

They look to big data initiatives to empower closer engagement with customers, enable them to gather better business information, and support overall employee productivity.
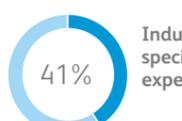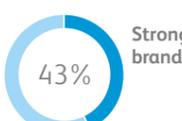
Help is Welcomed

When choosing a supplier the top four things looked for by decision-makers are:

- **47%** Proven results
- **43%** Strong brand
- **41%** Industry-specific experience
- **36%** Technical expertise

53% of respondents are either already using third-party support, or will be in the next 12 months.

Get more insight into how businesses are acting on the promise of big data in our report:

Big Data in Western Europe Today