

Thinking Autonomous

Longitude
A Financial Times Company

What's your business's
data worth?

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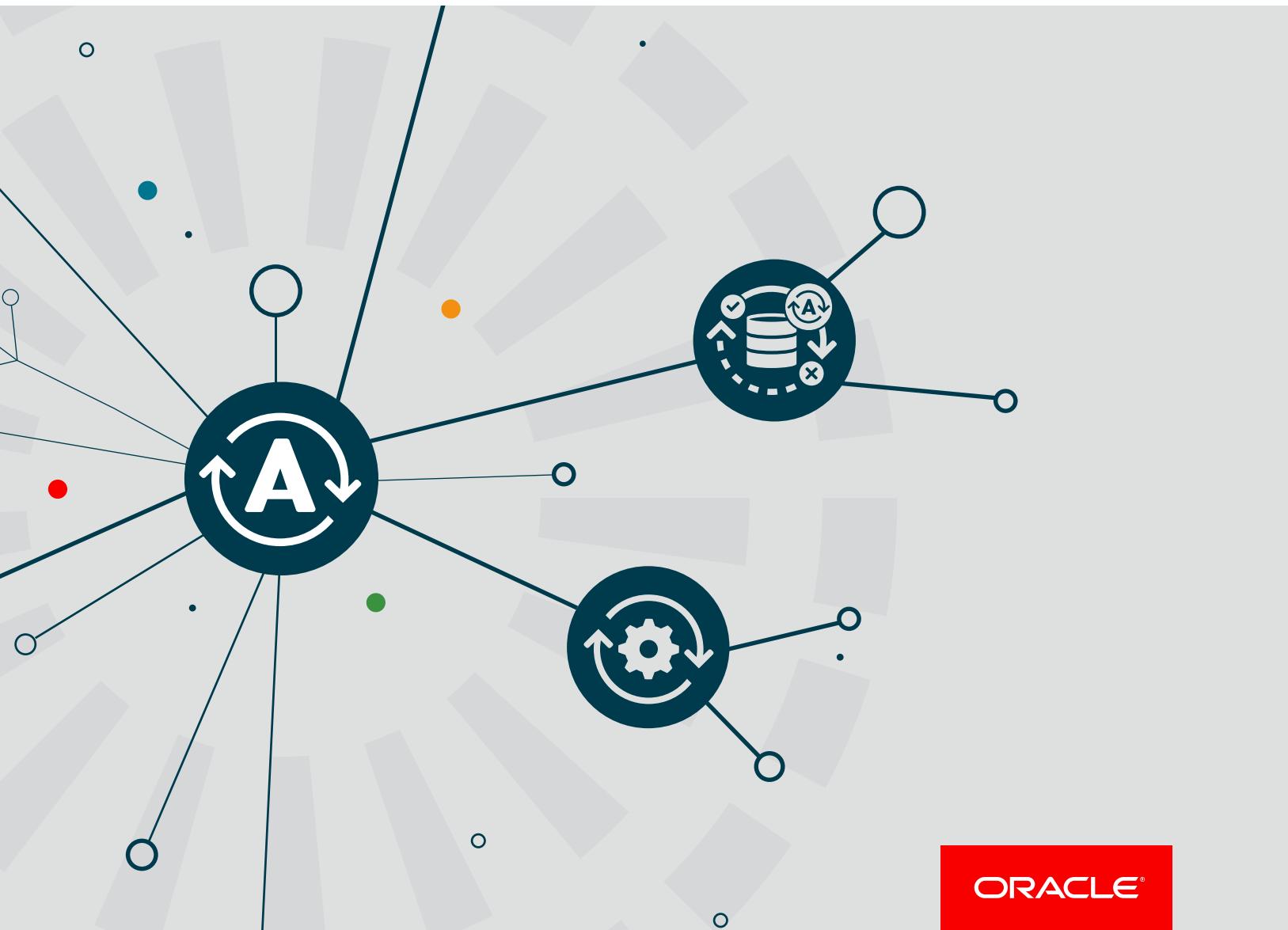
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Introduction

Free up resources with autonomous data management and drive business growth.

In today's data-centric business landscape, companies need to ask two questions:

- What is my data worth?
- How can I get the most value from it?

There is no way to assign a precise value to data across industries, but companies have to recognize that it is a crucial business asset. In 2016, when Microsoft bought LinkedIn, its valuation of the company was equal to about US\$260 per monthly user—and a significant part of it was because of their data.¹

It is therefore critical that businesses find a way to protect that asset by managing it effectively. One way to do this is with intelligent automation technologies such as artificial intelligence (AI) and machine learning (ML), which enable organizations to replace manual—often tedious—data management. Gartner predicts that ML and AI will reduce manual tasks by 45 percent through the end of 2022.²



¹ James E. Short and Steve Todd, "What's Your Data Worth?" MIT Sloan Management Review, March 03, 2017, sloanreview.mit.edu/article/whats-your-data-worth/.

² "Gartner Identifies Top 10 Data and Analytics Technology Trends for 2019," press release, February 18, 2019, on Gartner website, gartner.com/en/newsroom/press-releases/2019-02-18-gartner-identifies-top-10-data-and-analytics-technolo.

Make the Most of Your Data

Organizations that use these tools can manage their data more efficiently. They can process more data, faster, and will be freed up to identify and extract its value.

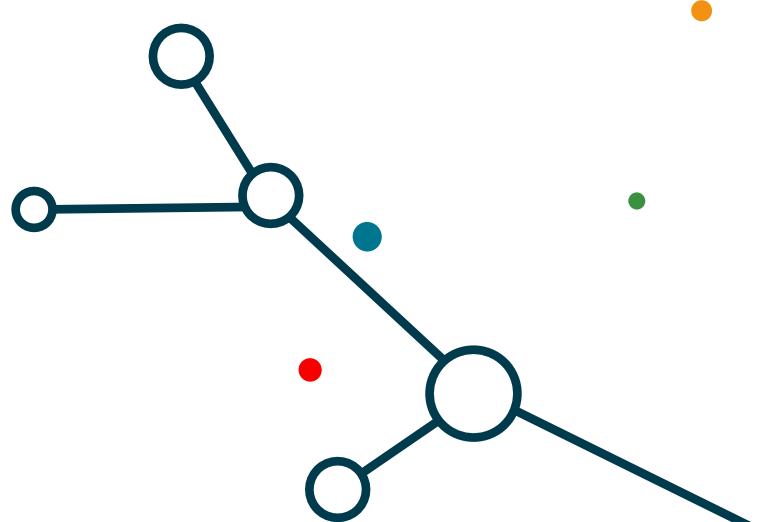
The best way for businesses to exploit these economies of scale is to understand what data they have, and which decisions they need that data to drive. "When you know that the content is relevant to your business, you know that searching through that data will give you important insights," says Carl Olofson, Research Vice President of Data Management Software at IDC.

But how do businesses work out which data is relevant? "Not all data is created equal," says Olofson. "If it's transactional data, you may want to coordinate with techniques such as master data management to be sure the data is all aligned—so you get the same facts whichever system you delve into. You need to know if the data is internally or externally generated, be aware of privacy issues, and protect the data and guard access."

Then the data has to be in a form that is ready to examine. Often, it is in a document store or a key-value store, which are not good environments in which to conduct analysis. Instead, organizations will need to harvest the appropriate data and move it to a structured space for analysis.

"Not all data is created equal."

Carl Olofson, Research Vice President of Data Management Software, IDC



Data Governance Is a Joint Effort

To ensure the data is available, usable, and secure, businesses will need a robust data governance program. Some of this process will always be manual: Often, only humans can identify what the data means for the organization. But the parts that can be automated with intelligent systems should be automated; not only does the technology make the process easier, it can also make it more effective, because people make mistakes. In fact, about half of the organizations in Experian's 2018 Global Data Management Benchmarking report say that human error is the biggest cause of inaccuracies in data.³

"Because of machine learning, the system can identify and correct patterns that look suspicious, and make sure the data is consistent in terms of values," says Olofson. "[For example] this table and this database correspond to this table and that table. The system should be able to identify places where they're inconsistent."

But Olofson also acknowledges the importance of the human touch. "You need a human involved," he says, "Because the next question is going to be: 'Which value is right?' Someone has to make that judgment call."

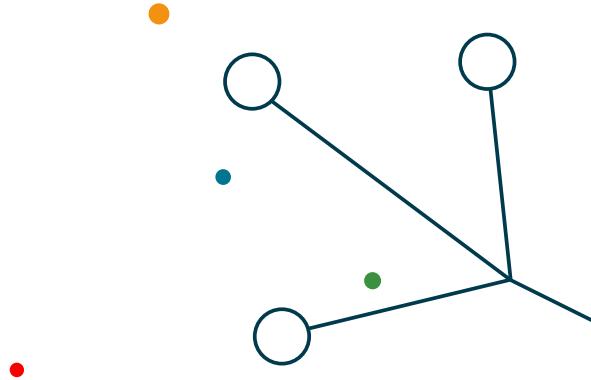
"Because of machine learning, the system can identify and correct patterns that look suspicious, and make sure the data is consistent in terms of values."

Carl Olofson, Research Vice President of Data Management Software, IDC



³ Experian, "Top 10 Data Management Stats for 2018," infographic, edq.com/resources/data-quality-infographics/top-10-data-management-stats-for-2018/.

Reducing Costs, Raising Value



There are two factors that affect what it costs organizations to manage their data: the efficiency of the system and the labor that is needed to use it effectively.

Intelligent automation improves efficiency, which has an effect on costs. "Autonomous database offerings allow companies to reduce costs while also improving security and reducing risk," says Dain Hansen, VP Product Marketing, Oracle Cloud. "And it enables companies to change the productivity equation to move their workforce from manual tasks to building and creating new innovative services."

Algorithms are good at determining how to allocate resources to meet current needs—something that humans struggle with. "When human beings make decisions about how much storage to allocate, how much memory, how many processors, etc., they give themselves latitude because they don't really know," says Olofson.

"The system is likely to make better choices because it's mathematical. That math is complicated, and we don't expect people to go through that kind of process."

Carl Olofson, Research Vice President of Data Management Software, IDC

Database administrators (DBAs) are usually responsible for positioning the data for analysis. But their primary job is to keep the databases running—helping the rest of the organization to use the data and conduct analysis is not a priority when they are busy. Answering users' questions comes second to optimizing databases, studying statistics, mapping data to storage, and making minor adjustments to an index or portioning scheme.

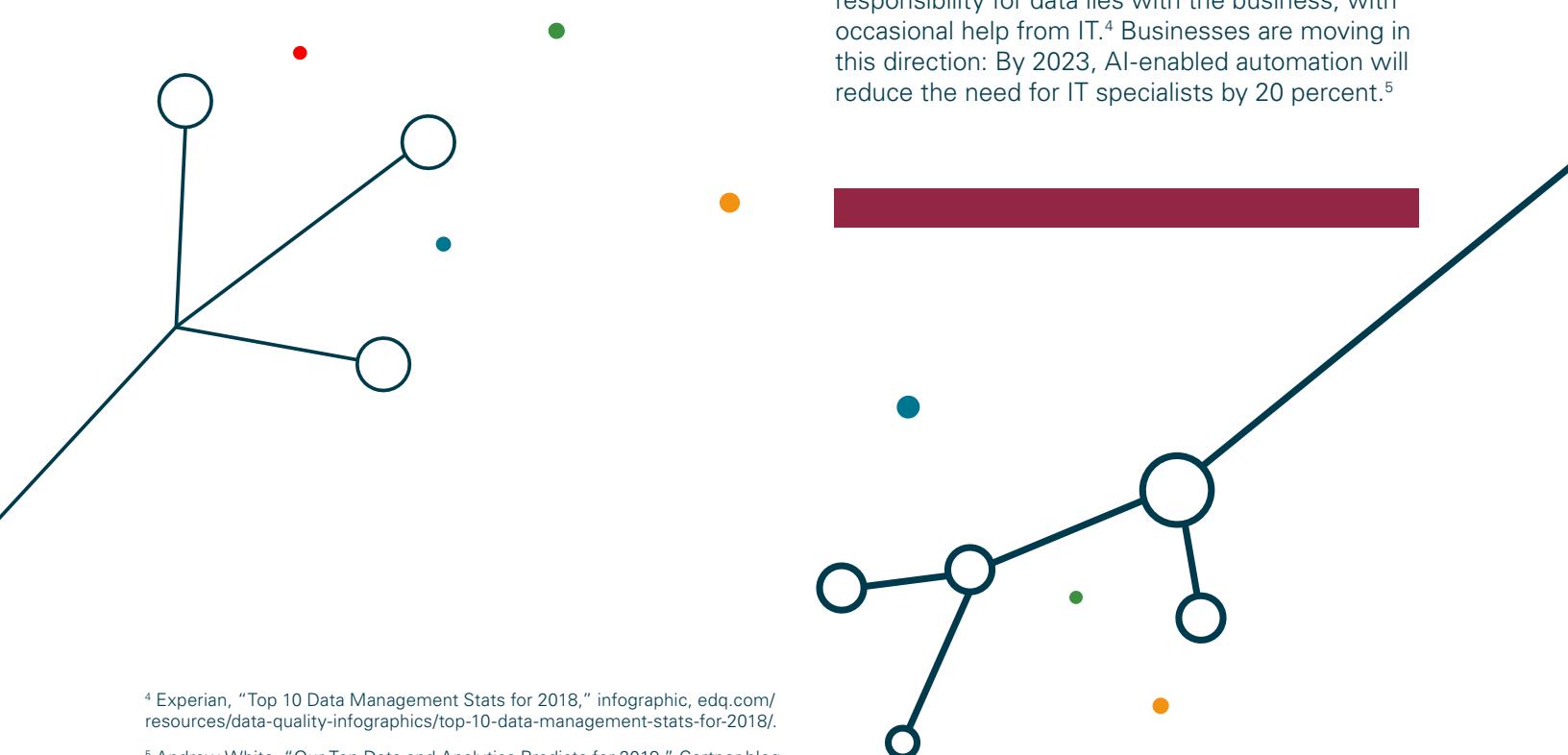
"I've never heard a DBA say, 'You know, there are just some days when I don't have enough to do,'" says Olofson. "They always have stacks of requests from users—changes to the database, help writing a query, or questions about how to find the right data."

This is where intelligent automation comes in. Because the database adjusts itself as needed, DBAs and other IT staff are freed to spend their time on higher-value tasks—such as helping users to make sense of the data. The value of their labor increases, and their role becomes more worthwhile.

"DBAs would rather help colleagues be better at their jobs than just make sure the database runs fast enough and you don't get into trouble."

Carl Olofson, Research Vice President of Data Management Software, IDC

Intelligent automation also shifts responsibility for extracting data value away from the IT team and toward the lines of business. Which is where the C-suite would like it to be: 91 percent of respondents in the Experian study believe that responsibility for data lies with the business, with occasional help from IT.⁴ Businesses are moving in this direction: By 2023, AI-enabled automation will reduce the need for IT specialists by 20 percent.⁵



⁴ Experian, "Top 10 Data Management Stats for 2018," infographic, edq.com/resources/data-quality-infographics/top-10-data-management-stats-for-2018/.

⁵ Andrew White, "Our Top Data and Analytics Predicts for 2019," Gartner blog, January 3, 2019, blogs.gartner.com/andrew_white/2019/01/03/our-top-data-and-analytics-predicts-for-2019/.

The Data-Management Framework of the Future

Building a data-management framework is critical to the success of any data-led organization, and intelligent automation enables companies to establish and deploy that framework quickly and effectively.

“Autonomous technologies are completely reshaping our approach to IT.

“They allow us to free our budgets, our resources, and our imaginations for customers to focus on innovation and business growth.”

Dain Hansen, VP Product Marketing, Oracle Cloud.

Interviewees

Carl Olofson, Research Vice President of Data Management Software, IDC

Dain Hansen, VP Product Marketing, Oracle Cloud

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