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# Enterprise Science Cracking the code on complex problems

In the age of big data, extracting value from large data sets remains a daunting challenge—and top priority—for organizations in virtually every industry. Growing volumes of data streaming into and across the enterprise are ripe with possibilities, but human intellect isn't enough to parse, interpret, and discern hidden value.

Leveraging these ever-expanding data streams to deliver meaningful insights into real-time workflows takes more than experience and good instinct. It takes techniques pioneered in the field of science. These include scientific approaches like bio-informatics and DNA sequencing, combined with capabilities like machine learning, natural language processing, and text analytics.

# Delivering on science

Using Deloitte's innovative, end-to-end science-driven analytics capabilities, global organizations have substantially improved customer retention and acquisition, transformed service and logistics practices, reduced operating costs, improved asset utilization, and reduced risk. Our four-step approach to Enterprise Science leverages multiple competencies:

### 1. Problem Identification

formulates the exact business challenge, prompting data discovery using structured and unstructured client and external data

# 2. Ingestion and Transformation

aggregates, scrubs, and interprets the data, which enables signal discovery

### 4. Solution Integration

puts analytical outcomes into action by providing insights for smarter decisions



#### 3. Science Automation

deploys the algorithms required to help solve recurring, high-value business questions

# How we can help

Deloitte Enterprise Science uses a repeatable, science-led methodology to help organizations solve their most persistent and complex business challenges. Signals, science, and system are at the heart of our Enterprise Scienc capabilities. We blend data science, cognitive technologies, scientific techniques, business and industry learnings, and advanced algorithms to

# Science at work

# **Sales insights**

A leading services company needed better business forecasts to inform planning, staffing and investments. Enterprise Science capabilities helped the company generate stable, ongoing predictions of near-term sales with an error rate of less than 10% and helped executives better understand the ongoing drivers of demand.

# **Operational insights**

An energy company needed to accelerate oil extraction to meet growing demand. Using Enterprise Science to optimize drilling activities based on predictive signals from geological and other data, the company was able to change drilling sequences and achieve faster extraction.

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## The business of science

Deloitte's science-led approach draws on our large, interdisciplinary scientific community of academics and researchers. Additionally, our experience in data visualization helps us deliver the recommended action to the right decision-makers in a workflow that best captures value whenever the opportunity arises.



#### Rapid results

Market-tested scientific approaches generate insights quickly. Replicable methods targeted to specific business questions deliver fast, iterative value.



#### Flexible and transparent

An assortment of algorithms are aligned to the specific challenges and data environment of the organization.



#### End-to-end

Guided approach lets us work with clients at every step to deploy technology, science, and workflow integration that evolves with the business.



## **Backed by Deloitte**

Consulting services help businesses manage change and reduce risk and complexity across technology, strategy and operations, and human capital.

# Let's talk

Learn how your business can leverage signals, science, and systems to unlock hidden value.

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