# Cognizant

**Offering Overview**

# Cognizant Data Modernization Platform

Data is everywhere. You know AI is the future. But to realize the value of AI and stay competitive, your organization must turn data into meaningful insights.

The Data Modernization Platform accelerates the journey to implementing a robust data foundation, enabling businesses to source, structure and analyze the data that matters and deliver enterprise-wide intelligence in **75% less time and 50% less cost** than traditional methods.[1]

# Solve the data dilemma

## Data isn't the problem. It's the solution.

**What if you could:**

- **Transform data into insights faster?**
- **Mainstream analytics, giving operating units the means to analyze data themselves?**
- **Promote collaboration across your organization?**

Now you can — with the Data Modernization Platform, a scalable, end-to-end solution for data management and analytics.

Powered by our pioneering Cognizant BigDecisions® platform for ingesting, structuring and analyzing big datasets, our Data Modernization Platform is the fastest way to implement an analytics-driven architecture. It helps organizations fully operationalize AI, sourcing all the data that matters to the business and delivering enterprise-wide intelligence. The resulting insights enable effective and efficient use of data across the organization.

The Data Modernization Platform eliminates the need for businesses to continually stitch together technologies as they seek to implement functional analytics, and frees budget and resources previously locked into managing multiple tools.

That means they can focus on modernizing data to accelerate impact, generate insights much faster, and capitalize on new business opportunities — and do it all while taking advantage of existing technology partnerships — accelerating the journey to AI.
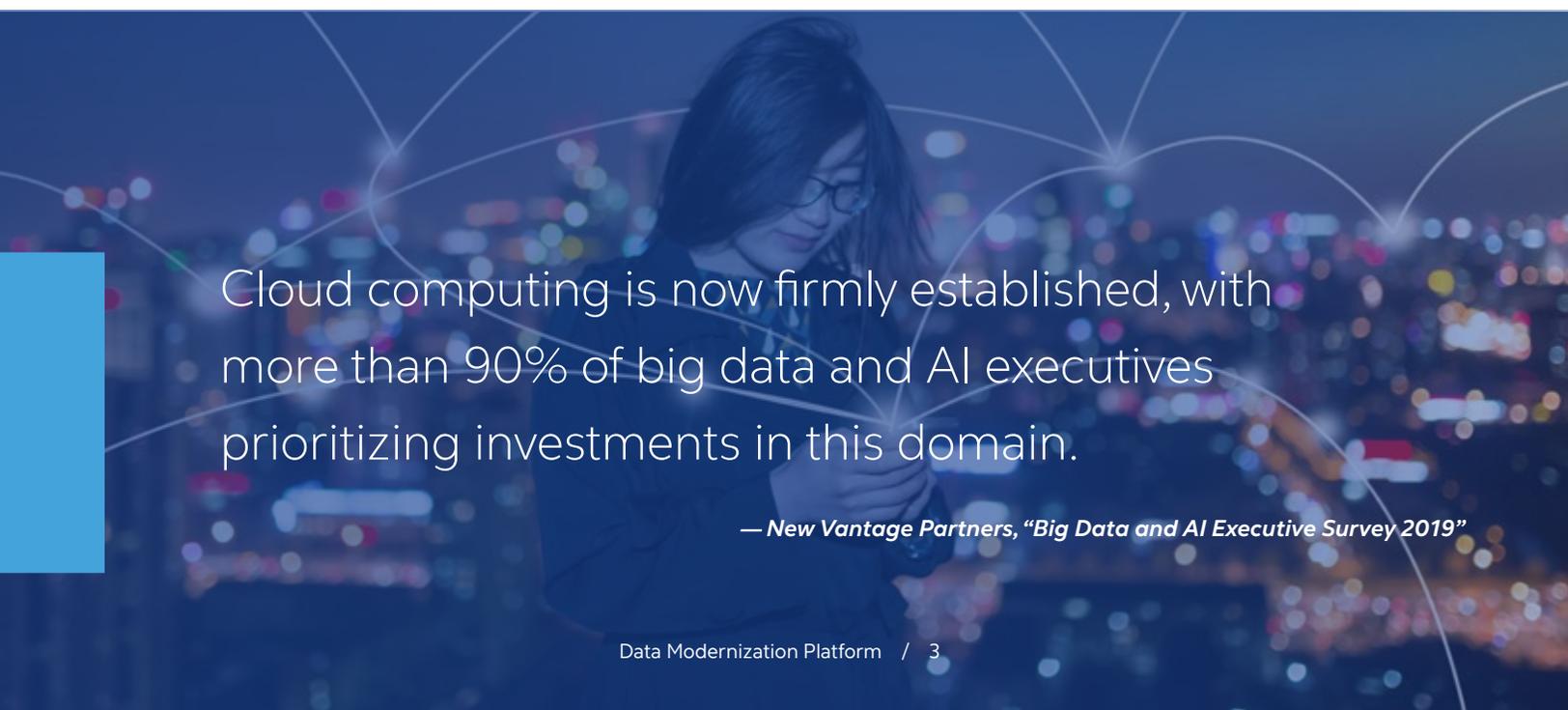
# Make data more valuable

Data has the potential to be the most important asset for today's businesses. Delivering maximum value from these assets requires more than thinking digitally.

However, for artificial intelligence to be fully operable across the business, data analytics must deliver meaningful insights in virtually real time. The challenge is determining how to move legacy data to the cloud while ensuring data remains available to the business. Businesses must streamline how data is structured and managed enterprise-wide without risking security and privacy. The massive volume and growth of data from all types of sources — from social media to IoT devices, from weather networks to automated drones — presents a daunting challenge. Organizations are increasingly confident that cloud computing is the best path to operationalizing data enterprise-wide.

How to move data efficiently? How structure and control it? How analyze it — and leverage it enterprise-wide? Legacy systems age quickly and updating software is increasingly costly. Many companies don't want to be locked into vendors that saddle them with recurring technology costs but that are not fast or versatile enough to adapt to their organization's needs. Managing a range of open-source tools adds complexity, even as organizations must addressing identify talent and manage changes to internal business processes.

All this presents a complex equation for today's IT executives, chief data officers, and data scientists, as they seek to meet the demands of the C-suite and line-of-business owners to make data-driven decisions. It's hard enough to provide access to meaningful data and build insights across business silos. It's even tougher to operationalize analytics projects and sustain momentum toward robust AI.

Cloud computing is now firmly established, with more than 90% of big data and AI executives prioritizing investments in this domain.

*— New Vantage Partners, "Big Data and AI Executive Survey 2019"*

# Cognizant Data Modernization Platform

## Making data work for you

The Data Modernization Platform provides a proven pathway to optimizing how organizations store, structure, secure and perform analytics on their data. It enables businesses to build and sustain a world-class analytics infrastructure — migrating huge volumes of data, streamlining and structuring it, and providing a set of versatile, pre-built applications that give a range of users the ability to analyze data for their unique needs.
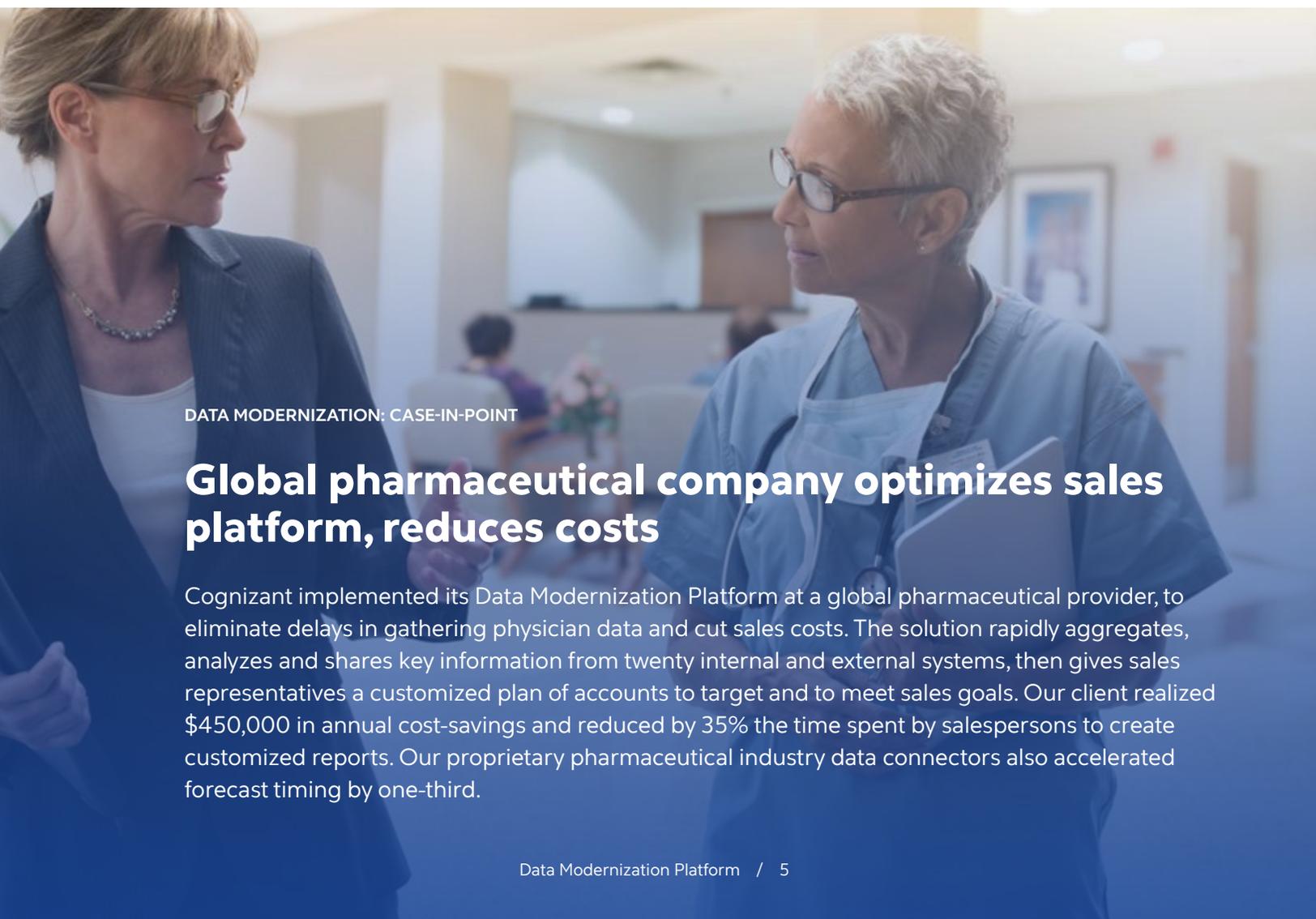
Our Data Modernization Platform provides vital capabilities to chief information officers and data scientists, empowering their organizations to:

▌ Rapidly ingest, migrate and amalgamate enormous volumes of structured and unstructured data from any legacy systems **up to 4-times faster at an up to 60% savings.**[2]

▌ Manage the universe of enterprise data similarly across multiple operating units **at over 75% savings.**[3]

▌ Create a robust data dictionary while "in-flight" during migration.

▌ Provide self-service data discovery and exploration toolsets, including hundreds of connectors.

▌ Capture and index context-sensitive metadata.

▌ Implement principles for ethical data governance, including enabling sandboxes for development, experimentation and security.

▌ Benefit from an industry-best pre-built compliance framework that promotes security, data privacy, and audit trails.

Benchmarking comparisons consistently show that our Data Modernization Platform can be configured and ready to use in 75% less time than it takes to build a data platform from scratch.

Our solution embeds these capabilities in a scalable, robust platform to drive value across an organization, enabling the business to:

I **Migrate Data Efficiently:** Without an automated, integrated platform, migrating data repositories to a cloud or hybrid-based ecosystem can be laborious and expensive. But the cost to store and maintain legacy systems and appliances is still more expensive. Moving to the cloud using the Data Modernization Platform eliminates this "technical debt," freeing both capital and human resources. That means competitive advantage.

I **Improve Data Accuracy and Flexibility:** The Data Modernization Platform simplifies how data is structured and accessed — without risking security or privacy. It also promotes flexibility in implementing proprietary and third-party analytics tools and eliminates unneeded legacy systems and software.

I **Deploy AI and Analytics at Scale:** Our Data Modernization Platform allows you to experiment with Analytics, Machine Learning and other algorithms using pre-built models. This allows for the accumulation of accurate data sets for training and moving rapidly from testing to production.

**DATA MODERNIZATION: CASE-IN-POINT**

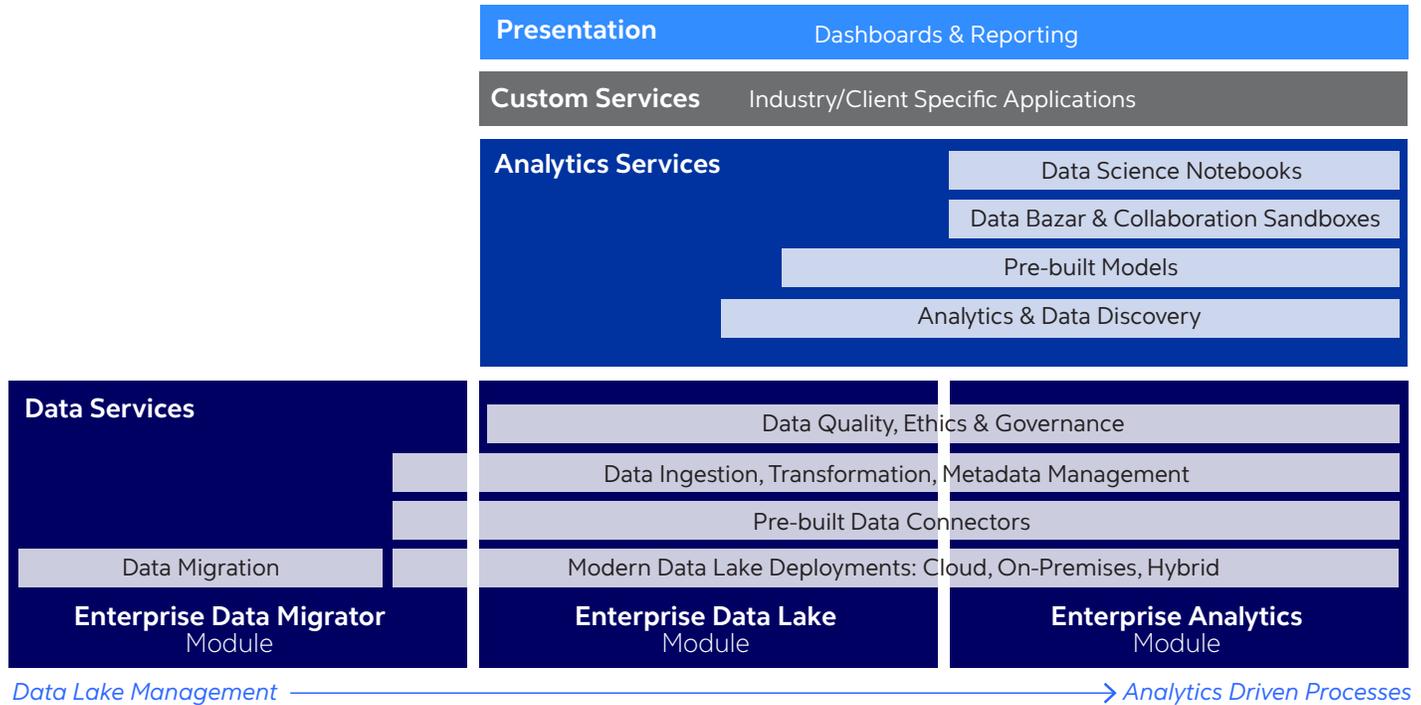# Global pharmaceutical company optimizes sales platform, reduces costs

Cognizant implemented its Data Modernization Platform at a global pharmaceutical provider, to eliminate delays in gathering physician data and cut sales costs. The solution rapidly aggregates, analyzes and shares key information from twenty internal and external systems, then gives sales representatives a customized plan of accounts to target and to meet sales goals. Our client realized $450,000 in annual cost-savings and reduced by 35% the time spent by salespersons to create customized reports. Our proprietary pharmaceutical industry data connectors also accelerated forecast timing by one-third.

# What is BigDecisions?

The Cognizant Data Modernization Platform incorporates BigDecisions, our award-winning end-to-end "System of Intelligence" platform. Debuted in 2012, BigDecisions incorporates data management, analytics, and decision sciences on a single cloud-based platform, and is built on the following foundational principles:

- Universal data management and rapid data ingestion
- Self-service data discovery and exploration
- End-to-end interactive analytics
- Context-sensitive metadata
- Environment and data governance
- Ethical governance

## Data Modernization Platform

| Presentation | Dashboards & Reporting |
|---|---|
| Custom Services | Industry/Client Specific Applications |

**Analytics Services**
- Data Science Notebooks
- Data Bazar & Collaboration Sandboxes
- Pre-built Models
- Analytics & Data Discovery

**Data Services**
- Data Quality, Ethics & Governance
- Data Ingestion, Transformation, Metadata Management
- Pre-built Data Connectors
- Data Migration
- Modern Data Lake Deployments: Cloud, On-Premises, Hybrid

| Enterprise Data Migrator Module | Enterprise Data Lake Module | Enterprise Analytics Module |
|---|---|---|

*Data Lake Management* ──────────────────────────→ *Analytics Driven Processes*

A scalable, end-to-end solution comprised of self-service tools and functionality for data ingestion, data management, analytics, and the resulting insights that enable an effective and efficient use of AI across the organization.

# Addressing the need to accelerate

The Data Modernization Platform increases the scope and applicability of business insights by integrating structured and unstructured data and making data models easily shareable across departments and divisions, thus breaking down internal silos. It renders all data — structured and unstructured — into a simplified ecosystem with unified accessibility and governance, enabling analytics to be performed more quickly and cost-effectively.

The platform increases opportunities for internal teams to collaborate and achieve economies of scale. It empowers stakeholders by using role and security-based permissions for data scientists, business users, data stewards, developers and administrators to let them parse data, manage its use, and experiment with a full spectrum of analytics use-cases.

The advantages of a single platform can accelerate efficiencies in performing technical due diligence, promoting user adoption and collaboration, and managing infrastructure.

## The power of the platform: a scalable path to enterprise intelligence

The Data Modernization Platform provides a scalable, end-to-end solution from ingesting data to to supporting the operationalization of AI enterprise-wide.

| Platform Module | Enterprise Data Migrator | Enterprise Data Lake | Enterprise Analytics |
|---|---|---|---|
| Key Features & Tools | ▮ Metadata workbench<br>▮ Data discovery and visualization workbench | ▮ Complete coverage from data to analytics<br>▮ Smart Connectors<br>▮ Data Bazar | ▮ Enables sophisticated business intelligence<br>▮ Comprehensive analytics and insights |
| Highlights | ▮ Automates migration of data from legacy and mainframe systems<br>▮ Simplifies modernization of data appliances and data warehouses<br>▮ Maximizes performance while reducing migration/optimization costs | ▮ Creates a common cloud-based data platform<br>▮ Allows secure and optimized access to operational and business-unit teams<br>▮ Strengthens data privacy management to protect users and customers<br>▮ Promotes an ethical data framework | ▮ Provides full life cycle support from sandbox to deployment<br>▮ Allows for publishing of data sets for online collaboration<br>▮ Expedites model management, calibration and deployment |
| Outcomes | **Migrate data from legacy systems as much as 4X faster while cutting costs by 60%.** | **Operationalize large and complex data volumes — for up to 75% savings over doing it yourself.** | **Deliver and adapt insights in real time, with +50% time-to-market advantage compared to doing it yourself.** |

The Cognizant Data Modernization Platform

## Data Quality Workbench ensures data hygiene

**Astonishingly, according to a recent study cited in Harvard Business Review, only 3% of companies' data meets basic quality standards (HBR 11 Sep 2017).** Our Data Quality Workbench provides a competitive advantage by ensuring the results of your analytics initiatives are based on accurate information. It profiles incoming data based on the principles of Continuous Data Quality Management, identifying data quality issues while defining, updating, and maintaining data quality rules to ensure that only cleansed data is sourced by downstream applications.

The Data Modernization Platform delivers functionality through a series of workbenches based on users' roles. These workbenches support a more streamlined approach to data preparation, data management, data analysis, and more advanced analytics in a user-friendly graphical interface. Accordingly, this increases the chances that analytics projects will reach production and deliver tangible value. With our Data Modernization Platform, organizations can:

**I Quickly translate data into meaningful business insights to better compete**

Analytics projects must produce quick wins. Relying on manual coding and/or open-source tools to produce insights extends the time to realizing value. Getting the right data into a usable format and location is the critical first step.

When companies utilize the Data Modernization Platform, they can quickly transform data into useful insights at an average of half the cost of manual methods. The pre-built modules accelerate development, automate migration, tag metadata, and provide for much faster discovery and visualization of data.

Our platform is technology and vendor agnostic, operating seamlessly in conjunction with various cloud software offerings, such as Cloudera and Hadoop, and with cloud providers including AWS and Microsoft Azure. This ensures maximum return on any past data management investment. That accelerates the entire analytics project — speeding time to value by empowering all users to interact with data from a single, easy-to-use interface. It also promotes improved governance by protecting sensitive data and maintaining audit logs.

**I Activate a culture of collaborative analytics — and remove the obstacles that cost time and money**

People need data to develop insights and people need insights to determine actions. Why should they have to navigate silos, manage multiple tools, and duplicate data acquisition efforts?

The Data Modernization Platform removes these barriers and allows clients to achieve a culture of collaborative analytics, promoting a simpler and faster use of data across organizational lines. Using built in connectors and the ability to connect to variety of data sources, our platform can bring in external data rapidly, utilize it for immediate analysis, and share valuable data models across siloes for easy searching and use. Role-based permissions and controls drive ethical governance and protection of private information while enabling increased collaboration across your enterprise.

The Cognizant Data Modernization Platform provides the most comprehensive capabilities on the market today.  Its value-oriented IT investment delivers improvements across data and analytics on one powerful platform, reducing the total cost of ownership and maximizing data experts' skills. It streamlines the process of delivering insights, simplifies user engagement, and increases adoption, which in turn encourages experimentation and accelerates value.

**❙ Enable AI within your organization**

The path to realizing advanced AI is often bumpy, with an organization's progress hampered by convoluted steps and complex tools. These factors inhibit projects and impede realizing meaningful value from the full power of their data.

Our Data Modernization Platform accelerates the end-to-end data management — from data consolidation to insights. This empowers organizations to have the data they require to build upon and operationalize their AI.

## Accelerate your data insights

The Data Modernization Platform helps today's top companies better compete by maximizing the impact of previous investments in data architecture, while optimizing how data is stored, structured, protected, and analyzed.

Will you use the insights to create new products or business models? Improve customer service? Reengineer business operations and processes?

The choice is yours. With the Data Modernization Platform, scalable analytics generate insights faster while freeing up budget and resources previously locked into managing multiple other tools — so you have more resources available to capitalize on opportunities and generate competitive advantage.

## Endnotes

[1]    Based on Cognizant's internal studies and client engagements.

[2]    Ibid.

[3]    Ibid.

# Learn more

## You've got the data. And you need the platform.

The Cognizant Data Modernization Platform can be configured and deployed in 75% less time than it takes to build a data platform from scratch. It supports ethical data governance natively. And it provides flexibility for hosting in the cloud, on your premises, or in multi-cloud environments.

To learn more about how we can partner to realize your objectives, contact DataModernization@cognizant.com or visit cognizant.com/ai.

## About Cognizant Artificial Intelligence Practice

As part of Cognizant Digital Business, Cognizant's Artificial Intelligence Practice provides advanced data collection and management expertise, as well as artificial intelligence and analytics capabilities that help clients create highly-personalized digital experiences, products and services at every touchpoint of the customer journey. Our AI solutions glean insights from data to inform decision-making, improve operations efficiencies and reduce costs. We apply Evolutionary AI, Conversational AI and decision support solutions built on machine learning, deep learning and advanced analytics techniques to help our clients optimize their business/IT strategy, identify new growth areas and outperform the competition. To learn more, visit us at cognizant.com/ai.

## About Cognizant

Cognizant (Nasdaq-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient business-es. Headquartered in the U.S., Cognizant is ranked 193 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.

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