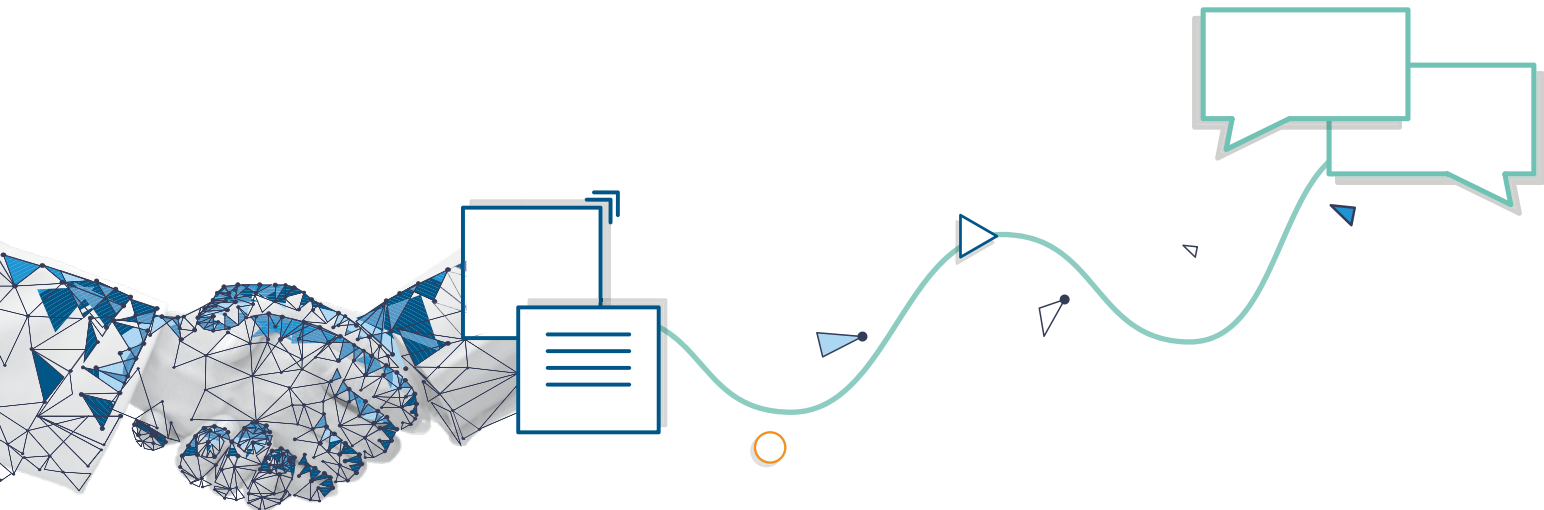


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\*(source) <https://www2.deloitte.com/insights/us/en/focus/cognitive-technologies/state-of-ai-and-intelligent-automation-in-business-survey.html>

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## CDO-Smart Services – Seizing the Cognitive Advantage

By Juan Tello, Principal, Deloitte Consulting LLP

To effectively inform executive decision-making and drive organizational efficiency and innovation, Chief Data Officers (CDOs) require the strategies, talent, and technologies that can unlock deep value in advanced data management. Increasingly, delivering on the data management strategy means integrating cognitive technologies, like artificial intelligence (AI) and machine learning. These technologies complement the human workforce and enhance the CDO's ability to manage and use data to help unleash improved accuracy, decision-making, and productivity across the organization.

# Creating Value with a Cognitive Approach

Data management strategies, technology, and talent drive new business models, and competitive advantages and cognitive technologies can make these possibilities exponential. Combining the power of people, processes, strategy, and cognitive technology enables the CDO to realize vast benefits and possibilities for an organization's advanced data management. With cognitive technologies, CDOs can achieve:



## Cognitive-Enabled Data Management

- AI and machine learning help CDOs address foundational data quality and data governance issues, helping accelerate the time to value by more rapidly achieving what is typically a human labor-intensive process.
- The value in cognitive technologies stems from pristine data, and AI and machine learning drive effective data management to help ensure CDOs possess the right data with the necessary quality.
- When a strong data foundation is achieved, CDOs can capture the many cascading benefits and applications of cognitive technologies.



## Faster, Better Performance

- Automating repeatable tasks improves efficiency and accuracy while also delivering time and cost savings.
- Cognitive tools permit data strategies at scale, enabling unchained profits and increased enterprise flexibility.
- With these technologies, human talent can be rededicated to higher-value tasks.



## Improved Decision-Making

- Cognitive technologies allow the CDO to discover unseen patterns and correlations in data.
- This drives evidence-based decision-making, deeply informed by insights only cognitive tools can reveal.
- The CDO can make more informed decisions using the nuanced, real-time knowledge cognitive technologies deliver.
- They are also better positioned to help inform the strategies, goals, and decision-making of other executives.



## Better Insights and Outcomes

- Cognitive technologies allow a CDO and the enterprise to achieve personalization at scale, engaging far more consumers with automated intelligence than could be possible with an organization's human workforce.
- Personalized digital assistants can interact with customers to enhance the consumer experience, allowing them to directly experience the value of data unleashed through cognitive technologies.
- Multifaceted consumer insights allow cognitive technology to deliver personalized and contextual recommendations to customers, driving consumer behavior.



## Richer, Broader Talent

- CDOs are challenged to expand the workforce fast enough to deal with the volume and complexity of data, but AI enables the CDO to develop a digital workforce for the future, where human talent is expanded with cognitive tools.
- Cognitive technologies embody a human role in the data organization, with digitized personas like a Cognitive Data Steward and a Digital Data Analyst; however, these personas can deliver far greater capacity, speed, and accuracy, powered through AI and machine learning.
- Cognitive technologies can perform chat box functionality, document reading and scanning, e-mail interaction, and many other tasks, so CDOs can orient their human talent toward more valuable efforts.

# The Cognitive Impact

The potential value CDOs can realize from deploying cognitive strategies and capabilities across an enterprise is always growing. Deloitte's 2018 State of Cognitive Survey\* revealed that respondent companies using AI and other technologies found the economic benefits increase with deployment experience. Consider some of the outcomes we helped organizations achieve through cognitive strategies:

A national beverage manufacturer improved ROI by

15%

freeing up capital for additional cognitive initiatives.

A pharmaceutical company enjoyed

10%

revenue growth by improving their customer strategies with a cognitive approach.

A major airline expects to see

\$660M

in additional revenue by 2020.

## Deloitte's Cognitive Consultancy

Cognitive technologies enhance performance, decision-making, insights and talent, but effectively integrating and employing these tools requires planning, design thinking, and experience. CDOs should take a cognitive approach in preparing and cataloging data for AI and automation. There are also new considerations for operating models and skillsets as a CDO's responsibilities expand to include generating and using cognitive insights for other aspects of the enterprise's strategy and operations.

No matter how far a CDO has come in his or her data management maturity, we can help accelerate the cognitive-powered transformations that promote enterprise intelligence, autonomous processes, and precision stakeholder engagement. With a focus on applying intelligence across the entire data, analytics, automation, and AI value chain, we can help your CDO achieve:



### Data & Analytics Modernization:

Design and implement large-scale data programs and analytics platforms that promote organizational intelligence.



### Cognitive Insights and Engagement:

Generate insights to catalyze growth and engage stakeholders using science-based capabilities, machine learning, and AI platforms.



### Robotics and Cognitive Automation:

Leverage automation technologies to transform business processes, augmenting human labor to drive better outcomes with enhanced productivity.



### Managed Analytics:

Operate data and analytics infrastructure and systems, providing capacity by embedding talent in your organization, and Build-as-a-Service-based subscription models at scale.

