Cognitive Analytics
Augmenting and amplifying human intelligence

Big data, small data, structured, unstructured data—there is no shortage of data flowing within, outside, and among today’s enterprise. But data is only part of the story. Where conventional technology has fallen short in helping businesses address seemingly intractable problems, recent technical advances are creating new possibilities.

Sample industry applications

**Healthcare**
Cancer centers are leveraging cognitive systems to assist oncologists in diagnosing and treating patients. Information is continually updated based on the most current available data, from both scientific research as well as patient data, for a richer clinical picture that drives improved outcomes.

**Retail**
Cognitive systems augment customer service agents, serving as digital store clerks. They collect and synthesize millions of data points from both structured and unstructured data, using cognitive analytics to provide answers to customers’ questions around products, trends, and recommendations via mobile phones.

**Financial Services**
Cognitive technologies arm investment managers and financial advisors with customized portfolio advice and can provide clients with mobile-friendly account performance summaries, imbalance alerts, changes in risk and other information that can be revised instantly based on market conditions.

Informed by humans, powered by science

Using innovations from many different disciplines, we help businesses answer multi-faceted questions and prioritize outcomes within real-time workflows.

**Cognitive Automation**
Uses natural language processing, and other methods to automate knowledge-intensive processes.

**Cognitive Engagement**
Applies machine learning and advanced analytics to make customer interactions dramatically more personalized, relevant, and profitable.

**Cognitive Insights**
Employs data science, text analytics, and machine learning to detect critical patterns, make high-quality predictions, and support business performance.

Why does Cognitive Analytics matter?

- Drive insights with rich contextual and unstructured data
- Form hypotheses and predictions based on machine learning to aid real time decision making
- Use self-correcting and evolving algorithms that emulate human cognition for continuous learning

Cognitive Automation

Cognitive Engagement

Cognitive Insights

Cognitive Analytics

Augmenting and amplifying human intelligence

Big data, small data, structured, unstructured data—there is no shortage of data flowing within, outside, and among today’s enterprise. But data is only part of the story. Where conventional technology has fallen short in helping businesses address seemingly intractable problems, recent technical advances are creating new possibilities.
Learning and understanding
Cognitive computing brings together a host of emerging capabilities to emulate and augment the strength of the human brain. Combined with advances in the world of data, it holds the potential to reshape businesses and even entire industries.

- Natural Language Processing
- Probabilistic Inference
- Deterministic Rules
- Natural Language Generation
- Image Recognition
- Text Analytics Engine
- Machine Learning
- Semantic Computing
- Hand Writing Recognition
- Voice Recognition
- Visual Decision Advisor
- Information Retrieval

The Deloitte Difference
We focus on solving problems that are too hard to unravel with conventional technologies—which requires an approach that goes well beyond technology alone.

- Comprehensive consulting and advisory services
- Development expertise to design consumer engagement tools
- Customer analytics capabilities to enable predictive analysis engines
- Priority access to leading-edge technologies and capabilities, in partnership with technology companies and academic institutions

Let’s talk
Learn how we can help you apply cognitive analytics to deliver insights at the speed of business.

Rajeev Ronanki
Principal
Deloitte Consulting LLP
rronanki@deloitte.com