Cognitive Computing Offerings
Communications, Media & Technology
Artificial intelligence (AI) has blurred the lines between cyber and physical worlds, with virtual assistants, advisory bots, and intuitive mobile applications enabling decision-making of fairly complex proportions. Enterprises have started using cognitive computing to address complex business problems, intelligently harnessing vast amounts of enterprise data to automate prescriptive services. New age solutions that leverage text analytics, data mining, machine learning, and AI are opening up avenues for offerings that build upon these capabilities.

Tata Consultancy Services’ (TCS’) Cognitive Computing Offerings help high tech companies implement intelligent automation of mundane, data-intensive business processes, driving down costs and cycle times across a wide array of activities. With enhanced agility and productivity, companies can focus on delivering greater business value and superior customer experience.

Overview

High tech companies across the board from software and professional services providers to contract manufacturers of computer peripherals are looking to reign in business complexity fueled by extensive data inputs from customers, business processes, and transactions. Companies are unable to effectively utilize this data to drive insight-backed transformations. For example, inadequate data analysis constrains law, audit, and other professional services firms during research and due diligence. Enterprise services and support, conflict resolution, risk management, fraud detection, warranty and claims management, and personalized contract and promotions management are some of the other areas where high tech companies are looking for innovations backed by insights and continuous learning.

TCS’ Cognitive Computing Offerings are a set of turnkey tools provisioning AI-driven business insights to high tech companies. The solutions use cognitive computing and Big Data analytics to shorten business process lifecycles, by automating and simplifying a host of activities that currently involve complex decision-making. Conversational software robots embedded in the solutions process data from diverse sources, delivering actionable insights to enterprise users. These self-learning bots evolve continuously by assimilating precedents, thus making troubleshooting and automation more targeted and accurate over time.

Our Solution

Using technologies such as IBM Watson, Microsoft Cortana, Google TensorFlow, and SyntaxNext, the solutions streamline high tech enterprises’ business processes with an application programming interface (API)-based neural automation platform.

TCS’ Cognitive Computing Offerings include the following key solutions:

- **Contact center modernization**: Provisions chat and voice-based bots that use natural language processing and sentiment analysis to interact with customers, mimicking contact center agents
- **Cognitive financial auditing**: Improves the efficiency of financial audits with the help of a cognitive analytics engine
- **Smarter warehouse operations**: An Industry 4.0 offering that helps firms better manage inventory levels and warehouse workflows with data-driven insights
- **Interactive online shopping**: Offers an intuitive, dialog-based recommendation engine that converses with online shoppers, helping them select products that best meet their needs

Benefits

With TCS’ Cognitive Computing Offerings, high tech organizations can reap the following benefits:

- **Superior customer experience**: Transform customer experience through innovative and prescriptive services. Provide uninterrupted and consistent services by enabling highly responsive, human-machine interactions; use customer data intelligently to devise tailored promotions.
- **Improved decision making**: Tackle complex problems effectively by making informed decisions based on reliable data and strong business rationale; facilitate efficient, fact-based conflict resolution, fraud detection as well as risk mitigation.
The TCS Advantage

By partnering with us, you can leverage the following differentiators:

- **Integrated cognitive platform:** TCS’ solution frameworks for Big Data and analytics, sensor data analytics for Internet of Things (IoT), mobile platforms, and TCS Connected Universe Platform can all be integrated with our Cognitive Computing Offerings. Our solutions build in the latest capabilities, allowing you to explore new use cases to achieve business transformation.

- **Innovation labs:** Prior to large-scale deployments of cognitive technologies, we develop quick proofs of concept at our Business Solutions Lab in Cincinnati, Watson Competency Center, and Global Innovation Labs. The labs can also be leveraged to drive cognitive innovations with technology interoperability across cloud, mobile, social, and IoT.

- **Enhanced business agility:** Respond swiftly to changing industry requirements—including new regulatory norms, economic headwinds, or dynamic consumer preferences—by modeling various scenarios with the prescriptive analytics engine.

- **Alliance network:** TCS’ strategic partnerships with the leading providers of cognitive platforms help us implement the latest technologies for our clients.

- **Technology expertise:** Over the years, we have invested aggressively in expertise on machine learning and cognitive platforms like Ignio™, IBM Watson, Microsoft Cortana and Spark MLlib to address growing client demand for predictive data analytics solutions. The TCS Watson Competency Center, business solutions unit for advanced technology skills, and overall competency management infrastructure is geared to ensure delivery of cognitive computing projects with the right skills.

- **Reduced cost of operations:** Slash operational costs by applying intelligence to automation, making it more effective; boost organizational productivity by streamlining business process lifecycles.
Awards & Recognition

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About Tata Consultancy Services Ltd (TCS)
Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India’s largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

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