TCS Connected Intelligence Platform provides data foundation as strategic component to its product portfolio

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The empowered consumer is increasingly demanding greater power over the interactions they have with enterprises, putting pressure on businesses to rethink their consumer engagement models. Tata Consultancy Services’ platform provides an analytic architecture that blends disparate data sources to deliver contextually relevant experiences.
Introduction
With the empowered consumer increasingly demanding greater volition over the interactions and relationships they have with enterprises, experiences – not products – remain the battleground of the future. This has put pressure on businesses to rethink their consumer engagement models. Tata Consultancy Services’ platform provides an analytic architecture that blends disparate data sources using privacy by design and advanced machine learning to deliver contextually relevant experiences.

451 TAKE
Improving the customer experience has remained the top driver for digital transformation. This has made it critical to understand where businesses are making investments in new digital technologies and improved processes, in order to more effectively engage customers, partners or employees across sales, marketing, support and commerce functions. Data remains a core battleground for winning the unified customer experience. Businesses need to not only capture and unify disparate sources of consumer data, but effectively contextualize and operationalize information to push critical insights across channels and the differing organizational stakeholder groups that have a hand in shaping the consumer journey.

Sixty-five percent of digital leaders are also prioritizing the tracking and managing of the customer journey as a key strategy. It’s virtually impossible to plan for all potential customer journeys, because each is a nonlinear, self-directed interaction – or micro-moment – across that customer’s experience. However, facets of the physical journey, when tracked, can be used as influencing factors in digital interaction. The data improves algorithms, which factor in overall intent, resulting in greater relevancy and effectiveness. The company’s Connected Intelligence Platform seeks to achieve this, aggregating and synthesizing multiple streams of customer data, gleaning insights with the help of machine learning to deliver a relevant, personalized experience across channels.

Context
Digital Software & Solutions (DS&S) is a pure-play software group considered a Strategic Growth Business within Tata Consultancy Services (TCS), with TCS Customer Intelligence & Insights (CI&I) comprising a subset of the wider DS&S Group’s portfolio of products. It is designed to help enterprises identify and create differentiated customer experiences using its platform, and is specifically focused on small and midsized retailers, banks and communication service providers. The firm is one of the world’s largest global IT services firms based in India.

Businesses grapple with using disruptive technology as a differentiator. CI&I capitalizes on using assets across business units including cognitive intelligence, digital transformation maturity blueprints, and IT services to help its customers with customer insights. The TCS Connected Intelligence Platform is at the heart of the strategy. It enables businesses to harness the value of customer and business data from internal and external sources through analytics and a modern big-data platform and data lake.

Tata Group reports 2019 FY revenue of $110.7bn across all of its business units, $20.9bn of which stems from the TCS segment. TCS employs nearly 400,000 individuals worldwide. Its locations span Europe, North America, Latin America and Asia-Pacific, with North America being its largest market, generating 51% of its total annual revenue.
Platform and strategy
With modular components that securely ingest, analyze and gain insight from machine, sensor, device and transactional system data, the Connected Intelligence Platform is a scalable insights platform that is pre-integrated with unified big-data management, real-time stream processing, a predictive scoring engine, AI/ML engines, and data visualization capabilities. It can fulfill multiple customer needs from data lakes, data warehouse, data wrangling and advanced analytic modeling. The capabilities are packaged in a low-code development platform for businesses to build insight use cases, with a minimal skillset needed on the underlying technologies.

The data lake platform provides broad data management capabilities to ingest, govern, integrate and activate. It ingests both operational and behavioral consumer data from physical and digital touch points with capabilities to build a holistic view of consumers using its custom data lake. Its information exchange gateway adds a layer of ingestion depth so that the insights component can provide context from raw data for insights discovery and contextual recommendations, employing machine-learning models, high-performance data stores, and data services to drive multiple versions of the truth for different use cases.

The platform provides the foundation for its analytics, which generates its consumer insights. It contains a data science workbench for leveraging open source machine-learning functionality along with an analytic model scoring engine. The data insights, based on machine-learning models and business rules, automate and scale in the moment across the customer journey. Key functionality also includes capabilities for streaming analytics, which are essential for real-time decisioning.

451 Research notes that as an intelligence platform ingests and synthesizes more data into the customer 360 view, the Connected Insights Platform must also identify important trends and information for each customer, and better summarize the important intelligence for specific business users. Synthesis and reasoning must work in balance to ensure the platform is usable. Automated reasoning, using streaming and edge data complemented by operational data, helps to make inferences and enrichments on each customer profile – a key element for businesses looking to embrace hyper-personalization.

TCS is striving to make the Connected Intelligence Platform the foundation for businesses that want deeper insights to be competitive, improve growth and reduce operational cost, but are struggling with the complexity of storing, managing and governing the increasing volume of data. It also applies modern data analytics to deliver the insights. Enterprises spend lengthy evaluation cycles integrating and deploying best-of-breed tools, and the growing open source technologies for multiple use cases.

Although the Connected Intelligence Platform can be used for all industries, the company has also layered on pre-built insights for retail, banking, and communication service providers. All three industries require capabilities that ensure line-of-business users’ ability to predict the customer’s future actions such as churn, propensity to buy, proximity and location. They require a deeper understanding of individual customer journeys and unique interactions, combined with transactions, to accurately understand and improve the customer experience, all while safeguarding data privacy and consent-driven personalization.

However, TCS – more widely known as a services company – will face a complicated go-to-market approach with its platform that forces a discussion across both IT and lines of business to differentiate between customer MDM platforms, customer data warehouses, and marketing data management platforms.
Competition
Scores of firms have latched onto the customer insights and data platform, because it is one of the top use cases for data management in marketing and service contexts. TCS competes with Accenture, Capgemini, Deloitte and IBM, as well as Infosys, Wipro and HCL. Its main competition for the Connected Intelligence Platform is a complicated mix of providers that offer customer data platforms (CDPs), data infrastructure and even customer relationship management (CRM).

For example, there are a range of CDP vendors worth noting including AgilOne, Amplero, Amperity, BlueConic, BlueVenn, Evergage, Lytics, NGDATA, Quaero, RedPoint, SessionM and Zaius. There are also vendors that have their DNA in master data management, including Informatica, ARM and Reltio, along with data infrastructure providers such as Segment, mParticle and Tealium. Major CRM vendors have also jumped into the fray with product improvements and/or new offerings. These include Salesforce360, Microsoft Consumer Insights, Oracle CX Unity, and Adobe CDP with its Experience Platform.

SWOT Analysis

**STRENGTHS**
The company’s expertise in IT services and information management adds credibility to solving the difficult problem of connecting data for actionable intelligence. The platform could accelerate TCS’s data lake initiative along with domain expertise in critical verticals such as retail, banking and CSPs.

**WEAKNESSES**
TCS, more widely known as a services company, will face a complicated go-to-market approach that forces a discussion across both IT and lines of business to differentiate between customer MDM platforms, customer data warehouses and marketing data management platforms.

**OPPORTUNITIES**
DS&S can increase its addressable market by not only having its products available through TCS services, but also selling through channel partners and regional ISVs.

**THREATS**
The market is crowded with a variety of pure play niche players. In addition, there is increasing pressure from large, incumbent CRM players making moves to incorporate more connected intelligence features into their product suites.