

REPORT REPRINT

Through the Looking Glass: Wipro's IoT platform strategy leverages IT and OT capabilities

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The integrator has assembled a comprehensive portfolio of IoT offerings built on top of decades of industry consulting, software and hardware development.

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Wipro has combined products and services from throughout the broad organization and added purpose-built products such as its IoT platform (Looking Glass) and AI suite (Holmes). The integrator is combining these in-house developments with a broad array of technology partners. Enterprises embarking on new IoT projects are finding a shortage of skilled IoT professionals in the market, and Wipro is poised to meet that demand.

THE 451 TAKE

Wipro's deep experience in its target vertical markets for IoT (with technology development from the sensor to the cloud), paired with its C-suite access, positions the company well for the coming wave of organizational transformations of its enterprise customer base. Investments in Looking Glass and Holmes have borne fruit that the company can leverage as part of its full-service engagement strategy. The company's extensive network of technology partners augments in-house skills and overcomes potential sales obstacles for vendor-loyal customers - a common occurrence in factory environments.

CONTEXT

Wipro is a 72-year-old comprehensive IT services firm headquartered in Bangalore. The 170,000-plus-employee company is aligned by function units that act as service lines to the multiple business services that Wipro provides to its customers worldwide. IoT is a strategic theme at Wipro, and is anchored by the Wipro Digital organization. The company leverages traditional and new-age capabilities from across its multiple units, such as the Chief Technology Officer organization, the Product Engineering service line and the Global Infrastructure service line, in addition to the niche IoT and broader digital capabilities built within the digital organization. The Digital organization delivers digital transformation to its customers, leveraging expertise and products from around the company, and develops technology such as Looking Glass (below) for the company's target markets of manufacturing, healthcare OEM, oil & gas, utilities (primarily metering) and smart cities, the last of which draws on technologies utilized in manufacturing and utility verticals.

The end-to-end product engineering service line, which consists of over 12,000 employees, has engaged in the target IoT verticals for over 30 years, and can bring domain-specific expertise to digital transformation. Closely related to product engineering is the company's analytics service line of 15,000 staffers with an equally long tenure in designing and implementing operational analytics systems. These analytics systems are increasingly evolving into a conjoining of operational technology (OT) and information technology.

Wipro has grown as a trusted full-service partner since its early role in labor arbitrage, and routinely engages with the C-suite executives at an enterprise, as well as operational line-of-business staff. This, paired with the company's robust IT consulting practice, maps well to the key decision-makers for IoT projects. In the 451 Research Voice of the Enterprise, Internet of Things Vendor Evaluations 2016 survey, the key organizational drivers of IoT projects were identified as the IT department (27.7%), executive management (24.9%) and the business operations department (17.7%).

TECHNOLOGY

In sync with the Bangalore giant's successful outsourcing and consulting model, the Wipro IoT stack weaves together a powerful network of global and regional partners with foundational internal competencies. In concert, the two forces mesh into a thorough top-to-bottom offering with flexibility to interchange partner products with proprietary resources. The company's core strengths are located up the stack in artificial intelligence, machine learning and IoT platform software.

Two centerpieces of Wipro's internal IoT technology are the Looking Glass Industrial Internet Platform and the Holmes Artificial Intelligence Offering. Targeting customers across verticals, Looking Glass provides asset management and installed base management services to the complex IoT 'things' ecosystem. This complements Wipro's capabilities on (Wipro partner) platforms such as GE Predix, Altizon and PTC ThingWorx, and real-time analysis of condition monitoring and usage data provides manufacturers with remote asset prognostics. Users have the ability to track internal and customer-level asset data through a mashup dashboard enabling potential cost reductions and helping to shape product decision-making.

Holmes, Wipro's artificial intelligence platform launched in early 2015, is geared to complement the company's network of IoT infrastructure across a range of verticals. The software's pattern recognition capabilities enable enhanced analytics in areas such as predictive systems, drone navigation and industrial robotics. Moving forward, the platform should act as a key piece of Wipro's IoT-enabled augmented reality offerings, analytics and systems automation.

TARGET MARKETS

In the Internet of Things space, Wipro is targeting vertical markets and geographies that play to its strengths in heavy industry and energy. While the company sells worldwide, it is focused initially on manufacturing, healthcare OEM, oil & gas, utilities and smart cities. The company notes that different verticals are progressing at different rates, depending on the geography, with oil & gas progressing fastest in North America, while the Middle East and Asia-Pacific regions have the most momentum for smart cities. The company also notes that the US market is past its initial infatuation with IoT projects, and has moved into a more pragmatic posture (slower growth), while interest from the European market is growing at a faster rate.

PARTNERS

As a systems integrator, Wipro is uniquely positioned within the IoT market. With a wide-angle view into the needs of clients, SIs (through partner networks) are capable of drawing up and implementing highly individualized projects to ensure value add. This model is highly attractive within the budding IoT industry as products, large and small, vie for traction. Since the development of its IoT program, Wipro has used this mutually beneficial relationship to build out a wide network of systems partners.

With over 30 primary partnerships spanning the entirety of the IoT stack, Wipro offers its clients a diverse suite of IoT functionality. This orchestrator role, which enables customized need-based IoT prescriptions, allows SIs and outsourcers to drive increased value for clients in comparison with direct IoT platform subscriptions. Wipro's comprehensive web of cloud providers includes the likes of Salesforce, SAP, AWS, Google and Microsoft. For platforms, in addition to linking with popular North American and European offerings, such as IBM Bluemix, PTC ThingWorx, GE Predix and Cumulocity, the Wipro IoT team has worked closely with Pune, India-based Altizon Systems. The company's Datonis Platform targets manufacturing, energy and supply-chain customers – three of Wipro's core verticals. Wipro led a \$4m series A investment in the company in February 2016.

COMPETITION

Wipro's SI capabilities place it in competition with traditional systems integrators, such as Infosys, HCL and Tech Mahindra, as well as channel-centric organizations such as Dimension Data. The company's Looking Glass IoT platform is comprehensive in capability, which actually pits it against 'do it all' IoT platform companies – generally from smaller organizations – in contrast to larger focused platforms such as Ayla, Nokia IMPACT and Cisco Jasper. There is also Looking Glass overlap with partner platforms such as GE Predix and PTC ThingWorx.

Wipro's artificial intelligence capabilities, both with Holmes and generally across its broader analytics portfolio, open up the competitive landscape further. IBM's Watson carries the flag for cognitive computing via a combination of different AI technologies, including machine learning and generative models. Google, Microsoft and Amazon have all released general AI toolsets, particularly relevant for analysis of large volumes of IoT time-series data.

SWOT ANALYSIS

STRENGTHS

Wipro has considerable human assets and expertise in key vertical markets, paired with hardware, software and services capabilities. Wipro has strong relationships at the C-suite - the primary decision-maker for IoT projects.

WEAKNESSES

Wipro is entering a crowded IoT platform marketplace, and one that it will find it difficult to be heard within.

OPPORTUNITIES

The IoT sector is transitioning from an early, over-hyped market to one with demonstrable returns and deployments. Wipro has extensive capabilities and domain expertise to build upon these early influential deployments.

THREATS

The global macroeconomic climate has a high degree of uncertainty in the wake of Brexit and the new US administration's proposed policies, which will potentially impact large multinational firms like Wipro more than smaller, US-centric technology firms.