Innovative Technology for Insightful Impact

The pessimist complains about the wind; the optimist expects it to change; the realist adjusts the sails

- William Arthur Ward

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Rolta Vision

To continuously INNOVATE and provide knowledge-based IT solutions that deliver remarkable INSIGHTS and lasting IMPACT in the way our world operates.







Chairman's Statement

Business resilience is the ability an organization has, to quickly adapt to disruptions while maintaining continuous business operations and safeguarding people, assets and overall brand equity. Rolta is an example of such resilience. Our ability to constantly transform our self, to remain relevant in the face of relentlessly changing digital technologies and market needs, yet remain focused on our core competencies, is the fundamental reason for the organisation's endurance. We have always looked beyond immediate opportunities to build businesses with a long term perspective. In line with this philosophy, we have transformed our business - from being services-centric, to one that is Rolta IP-centric. Rolta brings together a rare combination of rich industry specific domain expertise, deep IT skills, Geospatial and Engineering knowhow, and accelerated delivery through repeatable IP led solutions. As a result, we are able to deliver exceptional value to our customers empowering them to traverse through their Digital Transformation.

This differentiated and holistic approach has given us a significant competitive edge and has permitted Rolta to establish itself as a mature global IT provider.

The power of a business now depends on its ability to manage the transition from process maturity to data maturity. The Internet of Things (IoT) is about capturing data from machines and sensors; cloud is helping make the data available at scale as and when needed; automation and artificial intelligence are helping sift through enormous quantities of data; and analytics is helping derive insights and make useful predictions from that data. Businesses have to change and understand the impact and influence of these technologies. Such organisations remain resilient in the face of adversity and actually begin to champion change in the marketplace, to become leaders.

Rolta recognizes that every business is unique, and the customer management teams need specialized information for specific roles. Rolta has the expertise to analyze the needs and formulate a digital strategy that meet mission-critical business goals. Creating digital repositories enriched with contextualised Geospatial or Engineering data and delivering actionable information is what business leaders want to help them transform themselves from a reactive to proactive organization. To achieve this, Rolta continues to build and expand its domain rich business applications while also enhancing its reusable technology framework with the latest technology innovations

Governments and their agencies require the right geographically referenced locational information and tools to respond to the national agenda for achieving sustainable development. With close to 80% of the data having a locational context, a rich digital geospatial repository forms the foundation for a variety of programs such as Defence, National Security, Smart and Safe city including emergency response planning, disaster management, natural resource and utilities infrastructure management to name just a few. Rolta has a track record of being entrusted to create seamless digital repositories comprising of up-to-date mapping and geospatial information covering entire nations. Rolta's rich heritage of creating geospatial repositories together with world class Geospatial

Fusion IP in combination with analytics has enabled the Company to establish a track record of 400+ Smart City and e-Governance projects globally and is now winning similar large projects in India.

The modernisation and digital transformation of the Indian Defence has been accorded highest priority for all future procurements. As an Indian organization, with our own indigenously developed IP, the Company is ideally positioned to address the large opportunities based on the recent 'Make India' vision and introduction of new categorization, "Buy Indian IDDM" (indigenously designed, developed & manufactured) categorisation for procurement, promulgated by the Ministry of Defence (MoD).

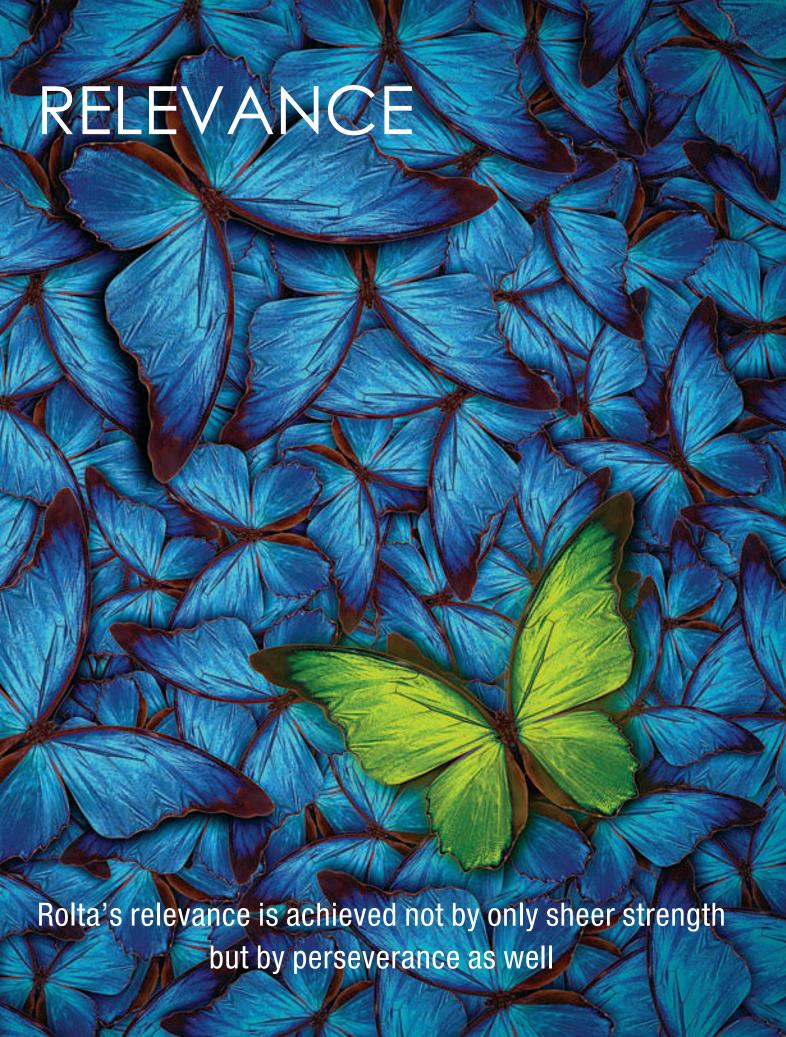
Realtime decision making systems for Command, Control, Intelligence, Surveillance and Reconnaissance is an essential force multiplier for any modern army to leverage network centric warfare while achieving synchronisation of intra and inter services military operations. Rolta is proud to have been deeply associated with the Indian Armed forces for 25+ years, to develop such solutions including the prestigious Battlefield Management System. We are poised to reap the benefits due to our established track record and relentless investments made to create indigenous products and solutions for Indian defence.

The Internet of Things (IoT) and Big Data are two emerging technologies that are changing the way business is done and is gaining remarkable momentum world over. Organisations now recognize the fundamental value of data and want to harness its intrinsic value to reap huge benefits. Rolta's rich heritage of creating and designing digital repositories enriched with IT, geospatial and engineering data has uniquely positioned the Company to analyse complex data patterns and thereby extract deep insights from the digital data. This is enabling the Company to address the Industry 4.0 Digital enterprise programs that asset and data intensive organisations are embarking on.

The flagship Rolta OneViewTM Enterprise Suite is a unique, Big Data Analytics solution that addresses the needs of enterprises to exploit the business value of Big Data. Rolta OneViewTM leverages the company's patented technologies for real-time IoT integration of sensor data from disparate operations and business systems to offer cross functional visibility of all the critical business functions with innovations incorporating Artificial Intelligence, Machine Learning, Data Lake, Diagnostic, Predictive and Prescriptive Analytics to achieve Business Excellence.

The Company is helping various organisations and government bodies across the world to accelerate the digital transformation by abstracting the complexities of the nexus of technologies such as Geospatial, Engineering, Big Data, IoT, Cloud, Cyber Security, Mobility and Social Media through its vast library of IPs having many International Patents and 650+ copyrights registrations.

K. K. Singh Chairman & Managing Director August 11, 2018





Relevance at Rolta means continuous **Transformation**

Digital Transformation continues to be the #1 priority for organizations globally to remain relevant in the hyperconnected world and reap the benefits of multi-fold value of the data and to stay ahead of competition. This digital revolution is being fueled by technologies such as the Social Media, Mobility, Big Data and Analytics, Cloud, Internet of Things (IoT) amongst others. Rolta's rich heritage of creating and designing digital repositories enriched with Geospatial and engineering data has uniquely positioned the Company to analyse complex data patterns and thereby extract deep insights from the digital data enabling to address the Industry 4.0 Digital enterprise programs.

Rolta has always ensured that it moves with time and remains at the cutting-edge of technology. The Company combines the domains of IT, Business Intelligence & Big Data, Geospatial & Engineering and Defence & Security to provide unique and highly differentiated solutions to its customers. Rolta has developed some very powerful software suites capable of seamlessly integrating IT, OT, geospatial and engineering data from disparate sources in an enterprise and present unified Business Analytics in real-time. Built around the Company's own IP and patented technologies.

Rolta continues to build and expand its IP through the Rolta OneViewTM Enterprise Suite for diverse asset intensive vertical segments. This BI and Big Data analytics solution provides integrated actionable insights across the enterprise for Diagnostic, Predictive & Prescriptive Analytics. The latest Rolta OneViewTM 9.0 release also introduced new features and functionality including embedded process integration and rules platform, enhanced Enterprise Knowledge Hub, 3D/4D Spatial visualizations, Enterprise Search, NLP and collaboration. As a result, the Company has built tremendous traction with more than a 100 BI and Big Data Analytics marquee customers worldwide. Rolta's BI & Big Data portfolio now comprises of close to 500 software applications cutting across upstream Oil & Gas, Refineries, Petrochemicals, Chemicals, Power Generation, Utilities and Transportation for which the company has registered copyrights.

Rolta OneViewTM Solution has received excellent reviews in the industry from customers, partners and leading analysts like Gartner, Frost & Sullivan, and ARC. In a Gartner report, "Take Advantage of the Disruptive Convergence of Analytic Services and Software, the analyst cited "These converged offerings typically have a strong "domain" focus — targeting a specific business problem or process or a vertical market segment. Examples include SAS' Retail Analytics, Accenture's Fraud Analytics Platform (with industry-specific business rules and algorithms), and Rolta's OneView, an analytics platform that

can be tuned for specific verticals such as oil and gas, petrochemicals and power."

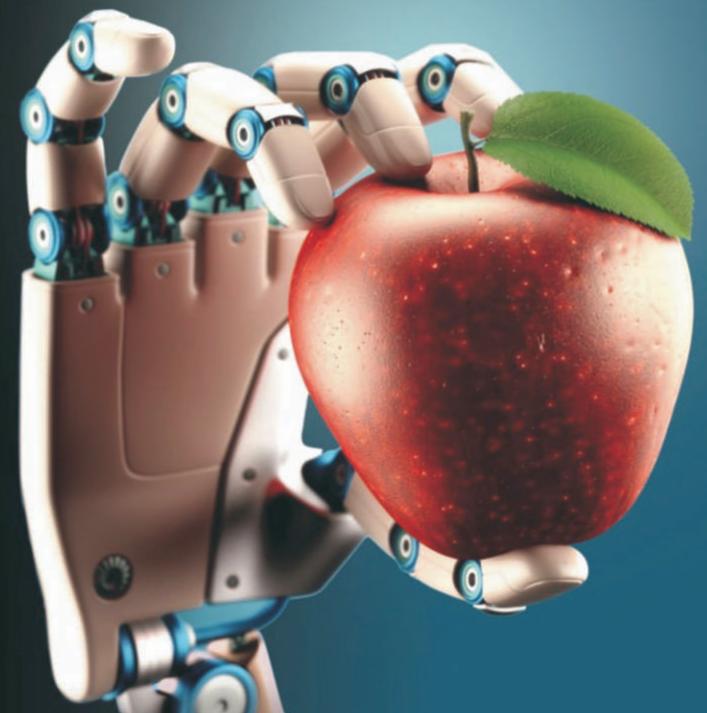
It is believed that close to 80% of the digital data being continuously generated has a locational context. Businesses around the world, including the emerging markets, are realizing that adding this geospatial dimension to data provides insights far deeper than is otherwise possible. Therefore, digital map data is rapidly becoming an integral and essential part of decision support systems, especially for Smart Cities. Rolta has built a holistic approach capable of creating seamless digital repositories comprising of up-to-date mapping and geospatial information covering entire nations. Rolta through its Rolta Geospatial FusionTM Suite is able to seamlessly integrate these geospatial repositories with IT data for better visualization of contextualized information for decision making portals. Combining these portals with Rolta's Big Data Analytics suite can truly unlock the value by building richer Smart and Safe City solutions providing deeper insights. With decades of expertise and leadership in Geospatial technologies, Rolta has built a formidable track record and IP for replicable Smart City Solutions which include creation of rich digital geospatial repositories, Cloud based multi-agency data integration and collaboration as well as building citizen facing Geoportals supporting mobility.

To ensure strategic planning from and tactical maintenance of engineering information assets, enterprises must have reliable data and robust Engineering Information Management systems as the basis for decision support to achieve operational excellence. Engineering handover by the EPCs or other agencies is a critical asset and the integrity of its content is of paramount importance. It is estimated that approximately 20% of costs for revamps or modifications could be attributed to correction of data as received from EPCs. Rolta's unique ability to integrate its portfolio of enterprise-level IT applications, together with its engineering heritage is enabling the Company to build rich AIM solutions. Rolta is able to raise the value proposition even further when it combines these rich engineering repositories with its Engineering Fusion and Big Data Analytics Suites. As a result, Rolta not only continues to address multi-million dollar contracts to implement comprehensive Engineering Information System during the initial construction phases, but now extends throughout the plant lifecycle to build enduring relationships with its customers.

The Indian Ministry of Defence is encouraging the Indian private sector by inviting highly qualified local bidders to participate in large procurements, under the 'Make India' classification. The combination of Rolta's indigenously developed IP, which has been extensively field-proven in operational deployments, at forward locations, its track record of 25 years in this vertical, partnerships with world leaders in this domain has led to Rolta being qualified under the 'Make India' program.

Having made significant investments in the recent years, the Company today, is well positioned to address the huge Digital Transformation opportunities in the markets it serves.

INNOVATION



Rolta envisions a better future and designs innovative technology for this future



Shaping future through innovative **Technology**

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Enterprises today are going digital, with over \$30 trillion in market capitalization across 8 key verticals including Energy and Utilities. Businesses need to be hyper connected in the ecosystem and generate real-time insights to remain relevant and succeed in the digital economy. Rolta brings together a rare combination of rich industry specific domain expertise, deep IT skills, Geospatial and Engineering knowhow, and accelerated delivery by differentiating its solutions and uniquely combining its strengths in these areas of expertise with its growing portfolio of exceptional Rolta IP based solutions.

Rolta has been the leading provider of C4ISR solutions to the Indian Army having addressed all echelons of command and continues to enhance its suite of products by incorporating next generation cutting edge technologies. The Company is uniquely poised to migrate to the next generation, 64-bit Rolta IP based Intelligence and Situation awareness solutions (C4ISR) that integrate Photogrammetry and Imaging with GIS to facilitate decision making at operational and tactical levels of the armed forces. Rolta's indigenous field proven Defence security solutions, like Rolta Command and ControlTM have been recognized for the significant value they bring to security programs across the nation. In addition to the existing suit of C2 and ISR, Rolta is focusing on cutting edge technologies to develop a number of solutions like Rolta Operational Planning (ROP) Software Suite, War gaming for CI/CT and Conventional Ops.

Rolta has deployed more than 400 Geospatial enabled Smart City projects in, both in India and across the globe. Rolta has built end-to-end Geospatial capabilities enabling the Company to create secure geospatial enabled digital repositories, build rich and interactive web based portals for smart insightful decision making. Rolta's IP led Geospatial FusionTM forms the core for the 100+ pre-built, rapidly deployable smart & safe city solutions covering a wide gamut of areas and available on both cloud and on-premises deployment. The Company released its next generation Rolta OnPointTM Enterprise Suite which is at the heart of Rolta SmartCityTM Solutions cutting across Utilities, Transportation, Smart Governance, Economic and Urban Development, Land Management. Rolta's Safe City solution on the other hand facilitate securing urban environments with innovative crime prevention, emergency response management etc. The portfolio includes an innovative combination of Rolta 3D GIS mapping for data creation, Rolta GeoCADTM for multi-agency emergency response management, Rolta Command & ControlTM for centralised monitoring and Smart City Operations Centre for realtime situational awareness. Each of these Smart and Safe City Solutions provide comprehensive planning, monitoring and management requirements as standalone applications.

However, by uniquely combining these with Rolta's Analytics solution platform their value is significantly enhanced to provide intuitive Predictive and Prescriptive Analytics for deeper insights.

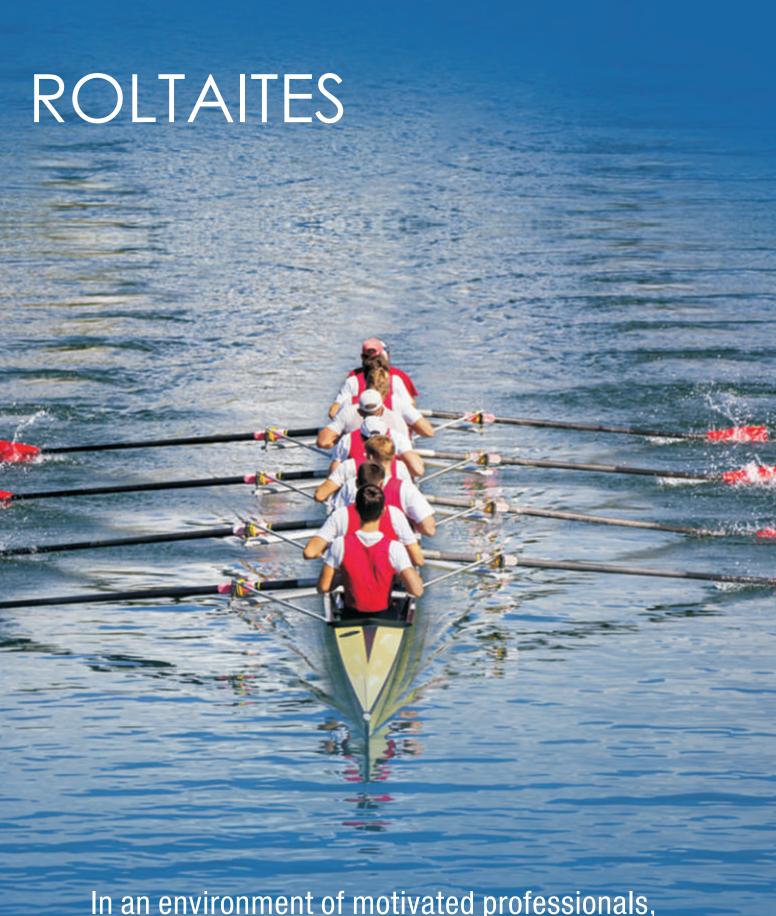
Asset intensive industries have realized the intrinsic value of their digital asset information and are demanding robust Engineering Information Management systems for effective plant management. Rolta's unique ability to integrate its portfolio of engineering solutions with enterprise-level IT has positioned the Company to address this growing demand. Rolta uniquely combines deep industry domain knowledge and cross functional technical expertise to build robust Asset Information Management systems. Rolta addresses the full spectrum of Engineering journey from initial advisory, data discovery, enablement of the data landscape and establishing an effective Asset Information Model (AIM).

Rolta has the ability to extend far beyond just the creation of Geospatial and Engineering repositories to unlock its full potential through contextual integration of IT data and streaming IoT to create Big Data Analytics Solutions capable of deeper and more meaningful insights. The Company's flagship Rolta OneViewTM enterprise suite continues to remain at the leading edge incorporating innovations such as AI, Deep Machine Learning, Data Lake and Predictive Analytics. The latest Rolta OneViewTM 9.0 release has new features and functionality including embedded process integration and rules platform, enhanced Enterprise Knowledge Hub, 3D/4D Spatial visualizations, Enterprise Search, NLP and collaboration.

Organisations are increasingly embracing mobility and ubiquitous Cloud Computing with Cyber Security to achieve greater accessibility and flexibility in this digital era. Rolta has developed innovative IP and services to provide end-to-end solutions starting from advisory, consulting and application development together with ongoing management. Rolta Cloud AdvizerTM and Rolta Security AdvizerTM ensures a comprehensive strategy to manage an organisation's entire IT life-cycle – from roadmap planning, and evaluation of Cloud and data-center strategies, through design and implementation of complete infrastructure solutions, including security. While Rolta ManageXTM platform greatly automates and improves service delivery.

The Company's persistent efforts at innovation, R&D and product development has further enriched its growing portfolio of software products across segments. Rolta has been granted a series of patents (No. US 20150331584 A1, No. US 9,594,955 B2, No. US 9,378,417 B2 and No. US 8,725,857) by the US Patent & Trademark Office in the current year. These new patents are a part of a series of patents filed by Rolta in the past. The company has been evaluating certain unique patents that will differentiate Rolta's products giving them a competitive edge and is in the process of filing them in the current year. Investments in the Company's IP led strategy has led to Rolta having successfully obtained copyrights registrations for 650+ software packages.

In today's world of exponential change, as organisations move forward in their business journey, Rolta is helping them to leverage and adopt the latest and emerging digital transformation technologies.



In an environment of motivated professionals, excellence is not an act, but a habit