


NAVIGATING DECISIONS. ACCELERATING RESULTS.

Optimizing Enterprise Data for Better Business Insights

 Engineering a *better world*.



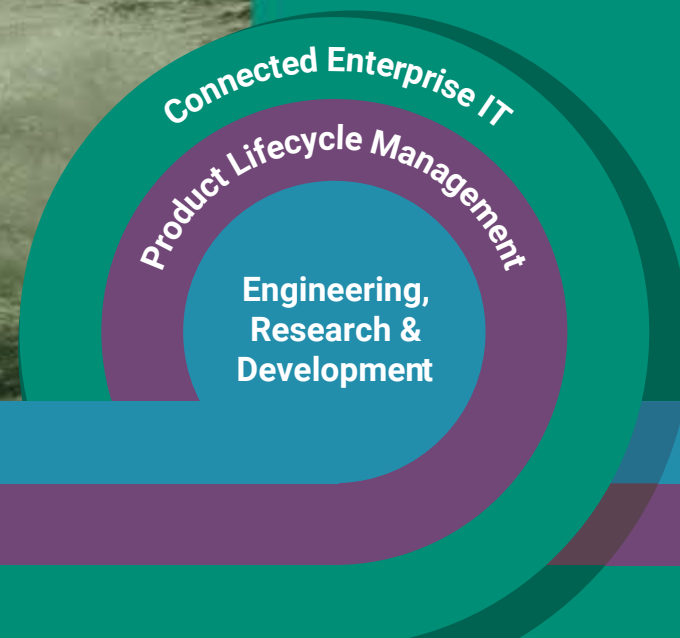
BUSINESS
ANALYTICS AND
INTELLIGENCE

PRODUCT DEVELOPMENT IS AT THE CORE OF EVERYTHING WE DO

We empower our clients to make their product dreams a reality by designing, engineering, validating and industrializing better products.

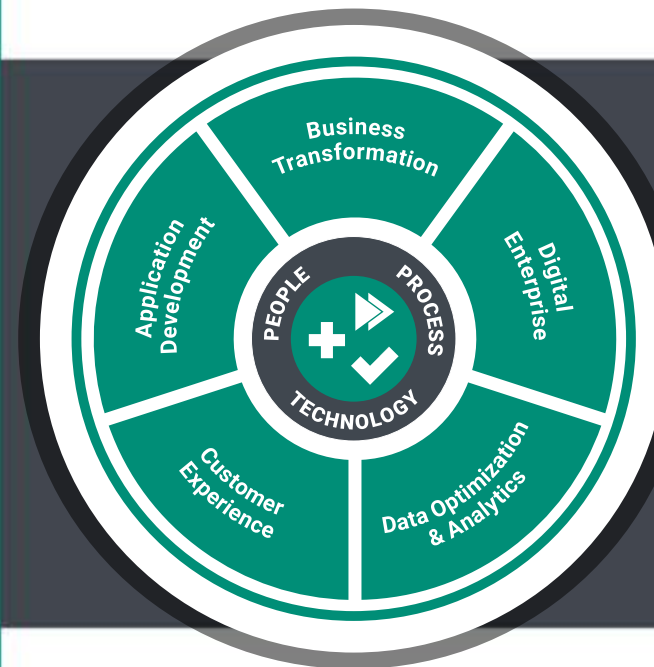
Unlike any other organization in our sector, beyond engineering and product development, we've had the curiosity to pursue the optimization of end-to-end manufacturing. The result is a complete understanding of the benefits associated with the digitalization of modern manufacturing.

Architected well, the complete product realization lifecycle is a virtuous feedback loop designed to embrace the data that supports the continuous improvement of better products.



WHY TATA TECHNOLOGIES?

Tata Technologies leverages more than 25 years of cumulative knowledge and experience to help the world's leading manufacturers create great products and select, deploy and adopt the technologies that underpin the entire product realization lifecycle. Drawing on a combination of people, process and technology, we drive efficiencies and innovation to help our clients meet their design, engineering and production challenges.



CONNECTING THE MANUFACTURING ENTERPRISE

Tata Technologies' connected enterprise IT solutions enable businesses to optimize the application of technology for the manufacturing sector, removing critical data discontinuities and enabling a platform for the complete digitalization of modern manufacturing. Our vast experience with product development and manufacturing engineering helps provide enterprise-wide visibility of the key performance indicators for seamless manufacturing execution.

CONNECTED ENTERPRISE IT (CEIT) SOLUTIONS

- Enabling smart connected factories
- Delivering global solutions for digital manufacturing
- Extending the digital lifecycle into effective manufacturing with enterprise resource planning (ERP), manufacturing execution systems (MES), supply chain management (SCM), customer experience management (CXM), business analytics and intelligence (BA/BI), complemented by world-class application maintenance services (AMS)
- Other legacy IT systems

Capacity to Create

Process to Create

Manufacturing Enterprise IT

REFER TODAY.
DEFINE TOMORROW.



LEADING EDGE

Our highly experienced practitioners enable organizations to realize the power of the integrated enterprise by providing superior BA/BI consulting and implementation services. Our ability to implement solutions four times faster than our competitors, at half the cost and with twice the value delivered, earns us our best-in-class reputation.

BETTER BUSINESS OUTCOMES THROUGH INTELLIGENT DATA-DRIVEN DECISIONS

Companies are struggling to achieve a sustainable competitive advantage in today's rapidly changing business environment. One way organizations can differentiate is by harnessing the vast amount of data they produce, and taking fast and effective action on that information. Over the course of the last decade, manufacturers have produced so much data that they require a structured application of analytics to infer effective business intelligence in real-time.

Tata Technologies' business analytics (BA) and business intelligence (BI) solutions help drive results to achieve financial and operational excellence through a robust

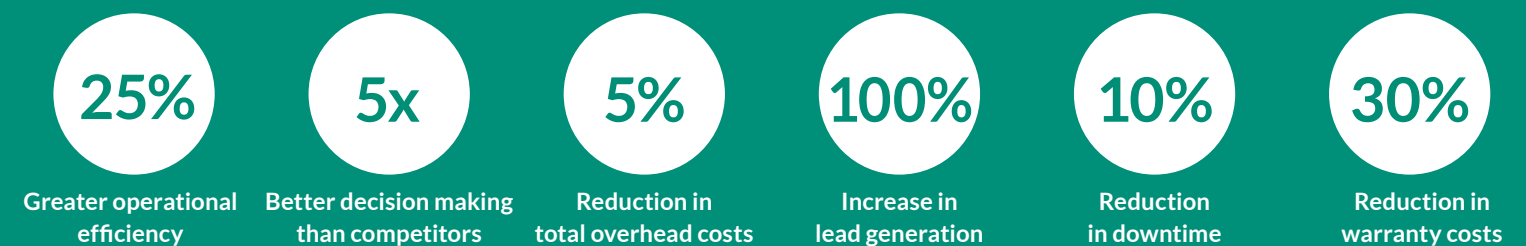
framework of people, process and technology to transform enterprises into aligned, adaptable, accountable, and agile organizations that drive high performance.

Tata Technologies approach to BA/BI solutions has evolved over the years in line with the global movement from descriptive to prescriptive analytics. We leverage our integrated, structured, holistic approach, coupled with subject-matter expertise, to ensure manufacturers are prepared for the age of advanced digital and analytical technology.

MEASURING SUCCESS THROUGH METRICS

Business metrics play an essential role to organize and distribute the performance of any business. A business analytics platform not only provides valuable insights to decision makers, successful implementation and deployment can result in greater profitability. BA platforms produce metrics that are tied to business outcomes, which assist in measuring the effectiveness of the solution. While quantifying BA/BI initiatives to display the value of the information produced is an onerous task, these metrics assist in reaching a qualitative understanding of subsequent decisions the organization makes.

Business analytics and intelligence solutions can deliver:



BETTER SOLUTIONS.
BETTER OUTCOMES.



Information Management

Big Data/Cloud Services

- Advisory**
 - Business Consulting
 - IT Framework Solution
 - Big Data/Cloud Platform as a Service (PaaS)
 - Information Strategy
- Business Solutions**
 - Big Data/Cloud Strategy
 - Proof of Concept (POC) and Business Case Set-up
 - Modeling/Framework Set-up
 - Machine Learning
- Support**
 - Big Data/Cloud Expert Services
 - Enhancement/Transformation of Existing System(s)
 - Staffing



Information Integration

- Information Alignment**
 - Data Acquisition
 - Data Workflow Management Strategy
 - Roadmap
- Information Enrichment**
 - Storage Optimization
 - Data Processing Extract-Transform-Load (ETL)
- Logic Building**
 - Information Security and Governance



Business Intelligence (BI)

Consulting

- BI and Data Warehousing (DWH) Strategy and Roadmap
- BI Scan and Maturity Assessment
- BI and DWH Architecting and Consulting
- Data Quality/Master Data Management (MDM)/Product Data Management

Implementation

- DWH Implementation
- Data Quality and MDM Implementation
- DWH Reporting, Dashboard Implementation
- Data Migration and Upgrades



Advanced Analytics

Sales and Marketing

- Demand Forecasting
- Lead Propensity and Campaign Analytics
- Network Optimization
- Micro Micromarket Analysis

Customer Service

- Customer Loyalty Management
- Churn Management
- Services Sales Propensity

Warranty

- Early Warning Systems
- Recall Management
- Spare Parts Forecasting and Management
- Warranty Reserve Optimization

Manufacturing

- Quality Management
- Process Control Analytics
- Predictive Alerts Analytics

Supply Chain

- Procurement and Spend Analytics
- Inventory Analytics
- Supplier Performance Management

Finance

- Cost Analytics
- Claim Analytics
- Risk Analytics
- Benchmarking and Pricing Analytics

Human Resources

- Employee Engagement and Retention Analytics
- Headcount Analytics
- Employee Compensation Analytics



Data Visualization

Consulting

- Develop Visualization Strategy
- Data Discovery and Storytelling

Implementation

- Report Rationalization
- Data Visualization Implementation
- Self-service and Collaborative BI
- Geospatial Visualization
- Mobile BI
- Big Data Visualization

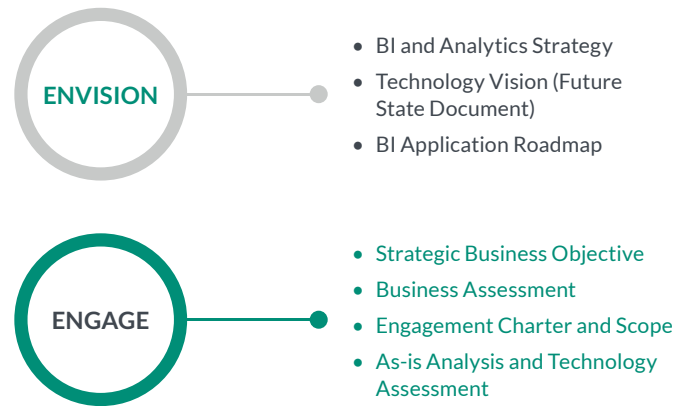
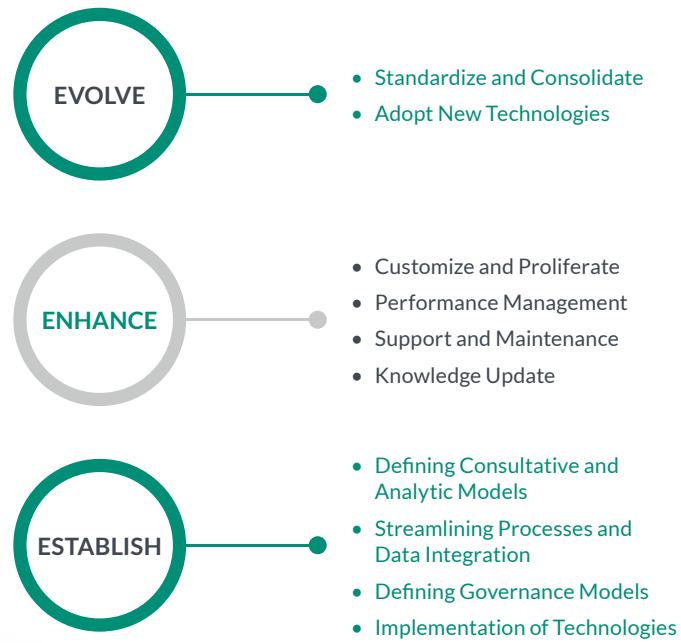


Customer Support

- 24x7 Support Models
- Maintenance and Support
- Production Support
- Release and Change Management
- Resource Management

SERVICE OFFERINGS

BUILDING EXCELLENCE



KEY DRIVERS TO SUCCESS



First to democratize information to all stakeholders in the Indian manufacturing sector



2012 Computer Society of India (CSI) award winner for the best analytics solution



30,000+ man-hours of analytics training for the manufacturing industry



2013 runner up at NASSCOM for the best analytics solution



World's largest analytics implementer in the automotive sector



14,160+ man-years of BI and advanced analytics implementation experience



Executed 100+ BI and advanced analytics projects



Trusted SAP® and Oracle® partner

ORGANIZED APPROACH.
SUSTAINED BENEFITS.

VALUE DELIVERED

Tata Technologies was instrumental in supporting the automaker in increasing sales of its new product line and populating the sales pipeline. Customized predictive and consultative models enhanced lead generation activities.

THE COMPANY

An Indian multinational automotive manufacturing company and a subsidiary of one of the largest Indian conglomerates with manufacturing plants around the world. The company has also made investments in research and development centers worldwide, and has joint ventures with original equipment manufacturers (OEMs) in South Korea, Italy and Japan.



“Tata Technologies services have had a major impact in guiding our work in the year ahead. The sales and customer service data quality has seen significant improvement starting right from the initial phase, and the adoption for the analytics program has been excellent. I sincerely appreciate the contribution of Tata Technologies in providing quality insights into our processes which led to high level decision-making being more effective. With such a significant contribution, we have streamlined marketing, sales and customer service and the business has witnessed profound growth.”

– Sales Head, An Indian Multinational Automotive Manufacturing Company



THE CHALLENGE

The client launched a new product line in the market and the sales generated were well below their projected figures. The client was looking at:

- ▶ Improving the sluggish response the brand was receiving in terms of opportunities to attract customers
- ▶ Leveraging its existing presence and small customer base to propel sales of the new product line
- ▶ Generating hype for the new product line by identifying a healthy sales pipeline

THE SOLUTION

- ▶ Analyzed the current market through an initial assessment to understand market drivers and set up secondary data boundaries
- ▶ Standardized the definition of a ‘micro market’ based on market drivers and mapped each micro market based upon an identified sales network grid
- ▶ Geospatial dashboards were created to map and display performance parameters
- ▶ Developed an in-house analytics decision framework, customized predictive models and/or consultative models were executed, along with program management activities
- ▶ Actionable recommendations and implementation roadmap were shared with the client

THE RESULTS

The proper execution and selection of analytics/consulting models governed the performance of the micro market.



Exchange propensity generated a 4 percent increase in sales



Lead generation activities increased by a factor of two



4x more return on investment (ROI) for the organization on this initiative



Increased acquisition of new clients

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