



Let's Solve



Snowcase

# Data-Driven Manufacturing Transformation



A Larsen & Toubro  
Group Company

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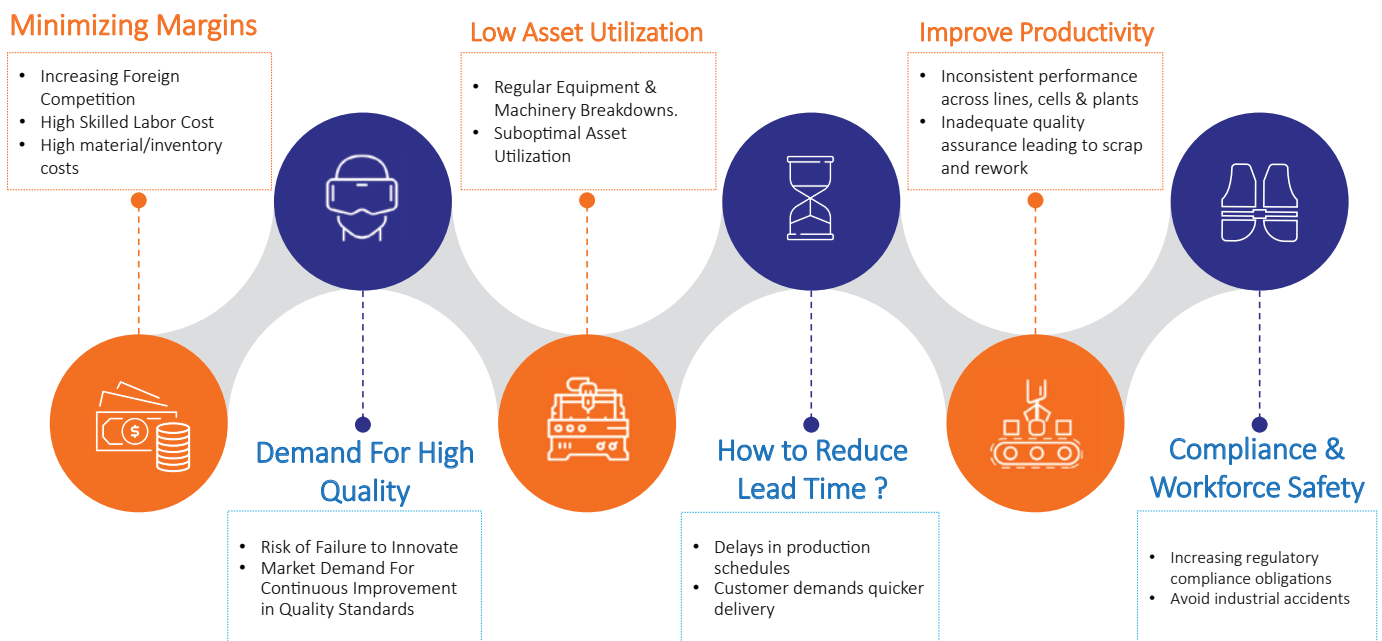
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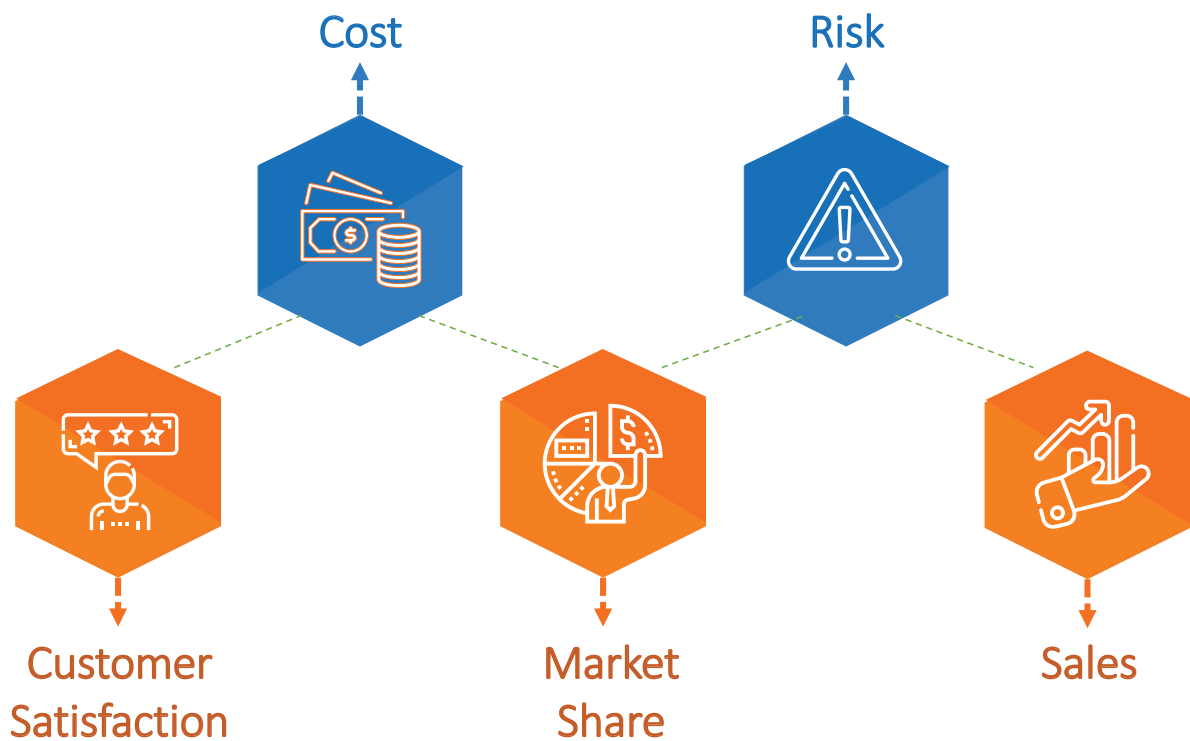
# Manufacturing Industry Outlook

Manufacturing industry is undergoing a disruptive shift in its value chain. There is an increasing demand for product customization with constant innovation and increased quality standards. Growing consumer economy has increased the revenues, but the rise in material cost, skilled labor cost and increasing foreign competition have been suppressing margins. In addition to this, increasing environment hazards and escalating workforce safety has forced the regulatory bodies to enforce new and strict regulations, in-turn increasing the compliance risk. In this new industrial era, it becomes very important for enterprises to optimize their asset utilization, production and supply chain, minimize re-work and reduce nominal lead time for the products to reach the end consumers.



## Manufacturing Industry Challenges

These industrial pressures have direct business implications and if unchecked, can have devastating impact on organization's future. As organizations are making a move from Product-centric to customer-centric, customer satisfaction becomes very vital. This has forced the organizations to get their balancing act right, i.e. companies are forced to keep their price optimal, while meeting the customer needs with mindful innovation and new product launches.



## Business Implications

In such market conditions, there is no scope for error and a small mistake can break the chain and drive the sales and market share down, in some cases - even leading to negative margins. Ultimately to stay in business, organizations have to explore transformation strategies that will help them overcome these challenges.

In this digital transformation era, data-driven manufacturing promises to tackle these industry challenges and provide competitive edge over competition. Data-driven manufacturing leverages the facts derived from large amount of data collected from machineries, shop floor, IoT devices, supply chain, inventory, sales, etc. and enable people as well as machines to make better decisions, resulting in enhanced operational and equipment efficiencies.

Key to data-driven manufacturing is to use data as an asset to take insights-driven decisions. This needs unified trusted data foundation that can store data at scale, elastic data processing, multi-structured data handling, delivering insights in real-time with zero or minimum downtime.



## Data-Driven Transformation Journey

# Solution

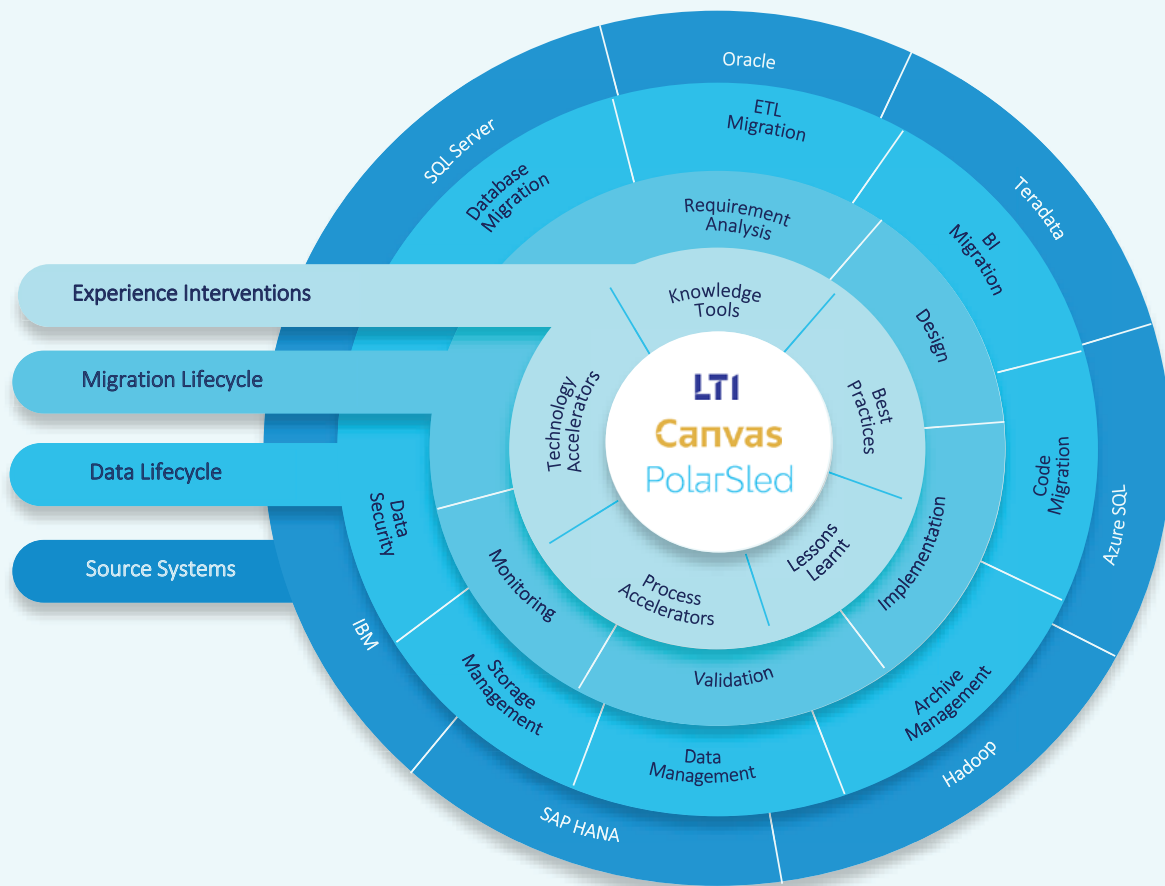
LTI inherits a strong manufacturing, engineering & construction DNA from its parent group Larsen & Toubro, which has decades of state-of-art experience in manufacturing domain with its manufacturing footprint extending across the globe. LTI's manufacturing clients have been consistently outperforming the industry by adopting digital native thinking and embarking on a journey to transform themselves into a data-driven organization.



How our Manufacturing customers are using data?

Cloud transformation plays a key role in setting up the data foundation that is elastic, scalable, versatile, durable and reliable with low operational burden and cost. LTI offers a cloud transformation framework that addresses the core challenges of designing, accelerating and governing a data transformation journey. LTI Canvas PolarSled makes journey predictable, cost-effective and agile. This approach of mindful automation to Snowflake data cloud delivers a complexity-free transition to cloud.

The Canvas PolarSled suite consists of number of tools, which help in Analyzing existing data landscape, automatically migrate the current landscape to Snowflake and comprehensive governance of Snowflake's platform post migration. The framework has been successfully deployed across multiple customers for variety of database platforms cutting time and effort of migration significantly.



## LTI Canvas PolarSled

# Snowflake, Qlik & LTI collaboration to deliver amplified outcomes



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Snowflake provides an industry-leading Cloud Data Platform that delivers the performance, scalability and high concurrency.

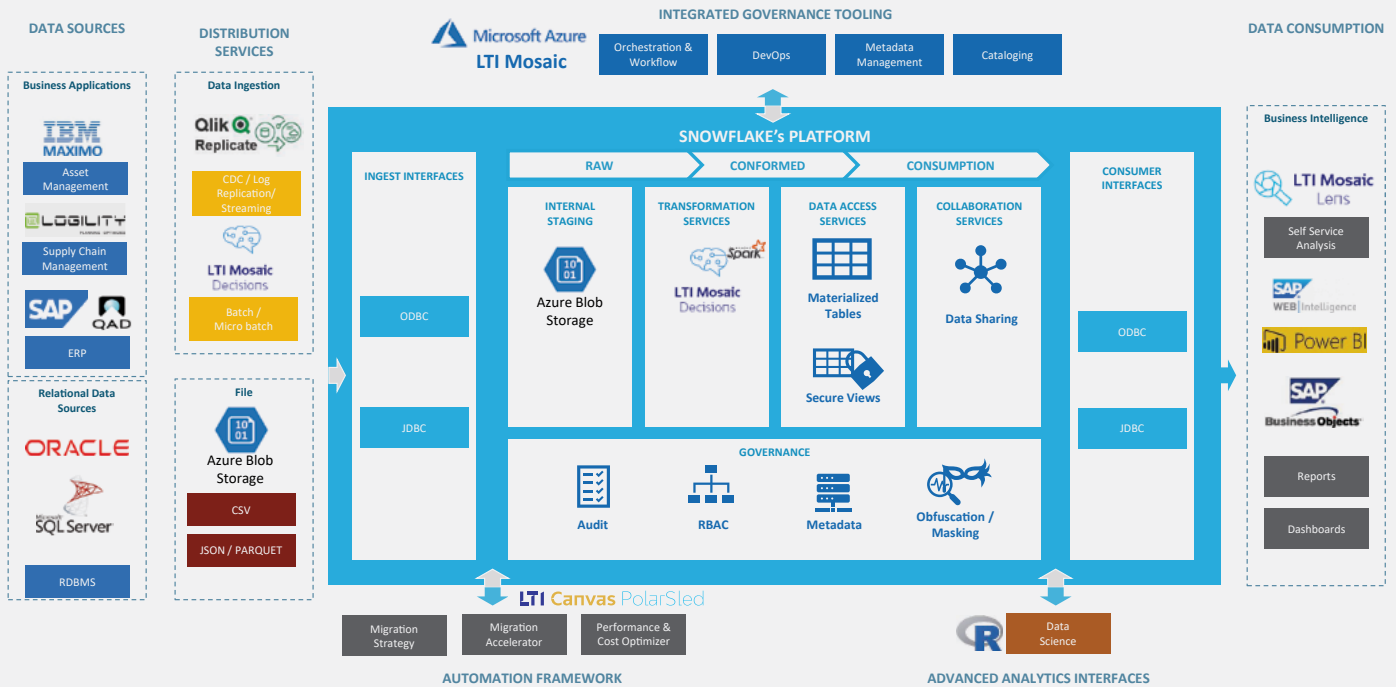
Qlik provides an end-to-end, real-time data integration and analytics cloud platform to close the gaps between data, insights and action.

LTI's strong Cloud Data Analytics expertise, with a dedicated COE for Snowflake, provide accelerated migration framework with mindful automation and governance.

## Case Study

A leading US Battery Manufacturing company, curving out from the parent, needed to adhere TSA timelines while embarking on a journey towards becoming a data-driven organization with reduced operational cost. Battery manufacturer considered this as an opportunity to simplify its technology landscape, lower technology TCO and modernize data platform that eases implementation of new and advanced use cases that potentially will have positive implication on business.





## Solution Architecture

Leveraging Snowflake, Qlik and LTI’s ability and experience in delivering solutions in diverse and complex landscape, the US Battery Manufacturer was able to migrate to a unified, next-generation global analytical platform, with cloud elasticity and scale. Qlik Replicate, through its seamless integration with Snowflake, continuously ingested data from SAP and other business applications into the Snowflake data warehouse with zero downtime, eliminating the heavy lifting of manual data ingestion processes. Qlik’s Change Data Capture (CDC) technology ensured that the customer was always working with real-time data while streamlining operations and minimizing the impact on production systems.

LTI’s Mosaic is a converged platform, which offers data engineering, advanced analytics, knowledge-led automation, IoT connectivity and improved solution experience to its users. Mosaic-enabled US Battery Manufacturer to undertake quantum leaps in business transformation and bring an insights-driven approach to decision-making. The solution also leveraged LTI’s Canvas PolarSled for accelerated migration to Snowflake data cloud in 11 calendar months. The new platform was able to eliminate data silos, reduce data redundancy, reduced operational and administrative burden, reduce TCO and deliver near real-time insights for faster data-driven business decisions.

# Outcomes Delivered



## Lower TCO

- Significant reduction in overall TCO
- 50% reduction in administrative efforts
- Mindful automation for accelerated migration using LTI's Canvas PolarSled Framework.



## Modernization

- Introduced Self-service analytics for user adoption, accelerated by LTI's Mosaic ecosystem
- Ingested and processed semi-structured data stored in JSON & Parquet
- Implemented new advanced analytical uses cases such as predictive analytics



## Technology Simplification

- Eliminated Data Silos by building a common data model
- Reimagined fit for purpose architecture for current & future needs
- Reduced Redundancy by 50%
- Eliminated multiple DR solution.



## Cloud Scale & Performance

- Near real-time data insight using Qlik Replicate & Mosaic Dataflow
- Resource contention eliminated by isolating workload for each application
- Elastic scale to handle peak workloads

# Want to Know More?

Interested in learning more about how **Snowflake, Qlik and LTI** can help you accelerate your data-driven cloud transformation? Looking for a playbook encompassing migration strategy, automated migration and governance?

**Reach out** to us at [info@lntinfotech.com](mailto:info@lntinfotech.com) for a detailed discussion and a quick 30 mins demo of LTI Canvas PolarSled.

## Read more about:

LTI Snowflake capabilities

<https://www.lntinfotech.com/enterprise-solutions/snowflake/>

LTI Canvas PolarSled

<https://canvas.lntinfotech.com/lti-canvas-polarsled.html>

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**LTI (NSE: LTI)** is a global technology consulting and digital solutions Company helping more than 400 clients succeed in a converging world. With operations in 31 countries, we go the extra mile for our clients and accelerate their digital transformation with LTI's Mosaic platform enabling their mobile, social, analytics, IoT and cloud journeys. Founded in 1997 as a subsidiary of Larsen & Toubro Limited, our unique heritage gives us unrivalled real-world expertise to solve the most complex challenges of enterprises across all industries. Each day, our team of more than 32,000 LTItes enable our clients to improve the effectiveness of their business and technology operations and deliver value to their customers, employees and shareholders. Find more at <http://www.lntinfotech.com> or follow us at [@LTI Global](https://twitter.com/LTI_Global).