

Optimizing IT Costs in Manufacturing

An Automation-led Sustainable Approach

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Key Ideas



Balancing focus on growth and short-term stability can be challenging



Manufacturers can realize immediate cost savings by restructuring inefficient spend areas



There are powerful tools that can help IT achieve quick wins along with larger transformation-led savings



We have all been impacted by the COVID-19 pandemic. Historically, every such world-disruptive event has brought about sweeping and lasting changes in how manufacturers operate, and sustain, for years to come.

Companies are seeking ways to cut costs to maintain profitability. However, reducing the workforce or scaling down operations are reactive symptomatic approaches and are not sustainable in the long-term.

Sustainable growth, whether by transforming customer experience or by modernizing production processes requires investment capital, often sourced through cost savings. Companies need to shift their thinking from operations or workforce reduction to sustainable cost elimination. However, this need not be driven only by long-term transformation.

Companies can realize immediate cost savings by managing existing spend more efficiently -via tail spend elimination, vendor consolidation and right shoring. Parallel investments in focused technologies and automation can establish necessary foundations for long-term growth.

IT leaders can harness numerous cost optimization opportunities by systematically analyzing each area of the manufacturing enterprise for ways to run processes or manage spend more efficiently. This paper outlines the tools manufacturers can leverage to achieve cost elimination, and the value they can realize in the process. We leave you with a note on how to get started on this journey and develop a strategic roadmap towards achieving your business objectives.



IT is in a strong position today to help manufacturers manage costs



Manufacturers are pursuing cost reduction to sustain profitability

Manufacturing has not recovered fully from the COVID-19 slump

The manufacturing sector is recovering gradually with economies opening up and containment measures lifting worldwide. However, manufacturers continue to struggle with absenteeism, short-term shutdowns to sanitize facilities and difficulties in bringing workers back to work. Advanced manufacturing companies (electronics, aerospace and defense, and automotive sectors) have been impacted the worst by the pandemic. While demand has picked up, supply is lagging behind. This has led to a sharp rise in raw material prices as well as transportation and shipping costs. Upstream supply delays are pushing up lead times, especially in internationally spread-out supply chains.

Manufacturers are seeking investment capital to sustain operations

The industry is expected to recover to pre-COVID-19 levels only by 2024 and manufacturers are finding it difficult to maintain workforce and cost centers with limited revenue sources. Many organizations are relying on back orders to keep operations running. Lack of new orders has resulted in a permanent loss of revenue leaving little possibility of chalking it down as a timing difference. Logistics constraints have led to a shortage of critical components, increasing levels of inventory and holding costs. All of these have led to a scarcity in working capital and delayed payments to suppliers. An urgent cost focus has become essential to ease liquidity pressures.

ILLUSTRATIVE CASE (PART 1/3)

An electrical manufacturer producing components and sub-assemblies had established itself as a leader in its space across NA, APAC, and Europe. Its strategy for growth had been two-fold- through a regular intake of new products and markets via acquisitions of smaller companies; and expansion of its product portfolio to cater to multiple industry segments worldwide.

As the company reached its second decade of rapid growth, profitability began decreasing, gradually at first. It seemed to occur in pockets, specific to certain plants and products. Many of its sites started to show lower inventory turnover and slow down in performance. Operational reports indicated surplus purchases of raw materials and inflated employee numbers in relation to goods produced. There also began to appear occasional misses in the supply of goods to customers, mainly due to production delays.

Sustainable cost optimization does not imply only long-term IT transformation

Conventional short-term measures are not sufficient

Many organizations approach cost reduction in a reactive manner, focusing on immediate pain reduction and stability. Such short-term initiatives are directed towards organizational flexing and cash generation, which often do not augur well for the long-term.

For instance, employee spend, a leading cost header is usually addressed through discretionary spend cuts, temporary or permanent workforce reductions, placing staff on furlough or delayed hiring. However, sub-optimally staffed operations often have a negative impact on production effectiveness and customer service, leading to customer attrition.

Raw material-related cost issues are typically addressed by seeking discounts from suppliers, deferring supplier payments, or instituting operational shutdowns. However, consequent delays in maintenance or replacement of enterprise assets often lead to larger data quality issues and possible product recalls. Targeting immediate symptoms reactively do not address enterprise challenges at a deeper level and often impair the organization's growth potential.



Automation-led cost optimization can help enterprises realize immediate value alongside transformation-driven growth

Cost elimination by targeting structural issues in the enterprise cost structure can help manufacturers achieve quick wins by leveraging automation to do things more efficiently. Technology and automation-led transformation helps smoothen enterprise functioning and realize mid- to long-term benefits in terms of savings and opportunity costs.

Quick Wins- Doing the same things more efficiently:



Many manufacturing enterprises comprise near-duplicate systems managed by multiple suppliers. This may be the result of inorganic growth (acquisitions) or risk mitigation strategies. However, in certain cases application, infrastructural or data categories may become too diversified with 80% of suppliers catering to just 20% of systems. The resulting 'tail spend' often comprises multiple redundancies, incurs high vendor management costs with very poor vendor yield. Manufacturers can realize up to 30% immediate cost savings by consolidating this tail spend and transferring it to a single vendor who has the ability to manage all the systems involved.

Enterprises with varied licenses for the same application or service can realize savings by carefully evaluating their user needs and unifying their license portfolio as part of a software asset management exercise. In a similar vein, cloud services can be optimized by monitoring usage and spend to identify a best-fit configuration for the enterprise. Infrastructure and application management services provided across multiple units and locations can be converted into a shared service system with little effort.

From a more mid-term perspective, manufacturers with a retail presence, or those having existing B2B contact center services, can take advantage of the differential labor rates across regions and shift their contact centers offshore. By right shoring their back-office operations to low-cost regions, manufacturers can realize up to 30-40% savings in labor costs. This leaves the workforce free to focus more on strategic initiatives.

ILLUSTRATIVE CASE (PART 2/3)

Initial analyses of data at the HQ indicated the need to urgently bring down costs, possibly through workforce reduction.

There also seemed to be issues of inventory shrinkage due to loss or theft, especially for commoditized raw materials. However, the organization decided to conduct a detailed plant level audit of workforce and assets before deciding its next move.

An exhaustive analysis of financial and production data made it clear that inflated workforce or storage inefficiencies were just symptoms; deeper issues existed around vendor redundancies, poorly managed inventory applications and lack of data synchronization across the supply chain. While there were gaps in worker productivity, they were not untypical of the geography or industry. Approaching the problem from a conventional 'fat reduction' standpoint would only result in short term gains leaving deeper issues unchecked.

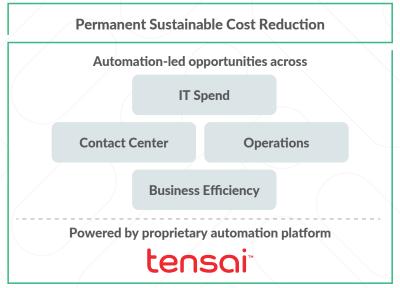
With 40+ sites globally, many of which had been stitched into the organization via acquisitions, every site was accounting its inventory independently and sometimes differently. To add to these data inconsistencies, several 'pockets' of the organization had continued to run with legacy home-grown applications, while the central procurement team was relying on the main ERP system to track shopfloor and warehouse flows. These home-grown applications were being managed by a mix of onshore and offshore vendors with varying levels of service performance. Adding to the challenge was the fact that existing systems were a mix of on-premise and cloud, resulting in a lack of real-time visibility and bloated enterprise IT costs.

Resolving these challenges was not going to be easy. The organization had to act across multiple areas. It had to ramp up its IT infrastructure across the enterprise to support its current scale and future growth. It also needed to inject automation into its data architecture and process flows to ensure tighter tracking of inventory. But more urgently, it had to align the management of its home-grown applications before planning any larger initiatives.



Key Levers - Automation-led Sustainable Cost Optimization







Automation-led cost optimization can help manufacturing enterprises realize up to 30-60% savings in IT and back-office (labor and non-labor) costs.

Transforming to ease long-term performance

As immediate value opportunities outlined above are being harnessed, manufacturers can focus on freeing liquidity through mid-term structural transformation initiatives. Processes with significant manual transactions can be candidates for automation and subsequent manufacturing cost reduction. The efficiency of the enterprise can be significantly enhanced by implementing DevOps. Significant costs can be saved by moving on-premise ERP-based and custom applications to the cloud. Application management processes can be automated via RPA and chatbots to significantly bring down workforce requirements and overall costs. Redundant applications connected to duplication of processes can be decommissioned, eliminating maintenance costs.



Automation of customer contact centers and facilities management support processes such as order related queries, ease of cancellation, enabling refunds, payment channel support, handling loyalty related queries for retail channels can help bring down costs by nearly 50%. This can be achieved through self-service mobile applications, voice/chat/ virtual agents, and email automation. Moving contact centers to the cloud can help realize additional cost savings.

ILLUSTRATIVE CASE (PART 3/3)

The organization began by consolidating its vendor base that handled inventory applications across the enterprise. Applications performing the same functionalities, whether home-grown or ERP-based were placed under a single vendor with the ability to cater to the diverse technologies involved. This succeeded in bringing down managed service and vendor managed costs by around 30% within a quarter.

It then began implementing a mid-term optimization of its inventory processes: standardized activities were automated via RPA (Robotic Process Automation) and relatively simple decision-making was shifted to an Al-driven engine. From a long-term standpoint, the organization instituted a cloudification program to ensure all its plants and departments worked with data synchronized in real-time.

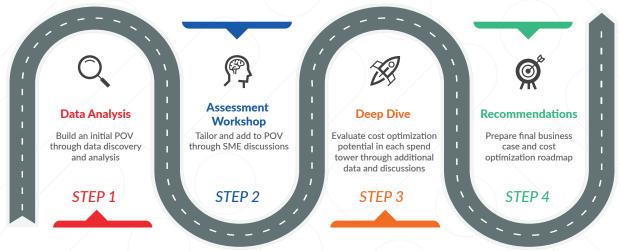
This multi-pronged approach helped the manufacturer navigate the immediate crisis through a rapid release of liquidity, while setting up a more streamlined organization that could support its next decade of growth.



Developing an automation-led optimization roadmap for your enterprise



Discovery of the current status and gaps in the enterprise IT landscape is most effective via a four-step data analysis and assessment-led discovery as illustrated below- starting with data analysis, followed by SME-led collaborative workshops and deep dive evaluation by spend tower.



Preliminary considerations

The initial steps in evaluating the enterprise landscape involve building a 360-degree current state view of the organization's application spend, landscape, team structure and operating methods. The key aspects to be considered in this exercise include:

- How does the organization compare with industry peers in terms of performance and cost metrics?
- Are operating methods standardized and aligned to industry standards?
- Is work being delivered out of optimal locations using effective delivery models?
- Is the vendor landscape consolidated and risk mitigated?
- Is automation being leveraged in application management and development workflows?
- Is there room to optimize license spend across on-premise, SaaS and cloud?
- Is the application portfolio optimized with appropriate balance between global and local?
- Is there an application modernization strategy in place? Can it be further enhanced?

Developing a cost optimization roadmap

Organizations should undertake a detailed data analysis and assessment-led discovery process across IT BAU, capital, non-labor, contact center and business process areas. Details of revenue, IT FTEs and operational spending across data centers, end user device and print management, service desk, network, application development and support should be incorporated to understand the overall positioning of the enterprise. Additional inputs such as number of tickets handled, First Contact Resolution (FCR) percentages and MTTR (Mean Time to Resolve) should be factored in where needed as part of this process.

Inputs such as the proportion of insourced, outsourced and captive spend should be analyzed to identify potential opportunities to move labor costs offshore or nearshore, based on criticality of tasks and projects handled. Vendor spend distribution data should be dissected to bring to light any issues related to tail spend or an over-diversified vendor portfolio. Compiling data related to process efficiency gaps can reveal opportunities for process simplification and automation- this can extend to the use of AI-ML to automate decision making in inventory and field service processes.

Interactions of the application and infrastructural landscape across processes, departments, business units and locations should be studied to understand any potential to improve efficiencies by moving to the cloud. For enterprises already on cloud, inputs should be collected on end user requirements, storage utilized, and future IT strategy to understand if there is a need for better cloud management.

Insights gained from the above should be used to draft a roadmap covering both immediate value realization and transformation-driven initiatives. This should be taken forward to build initial business cases and POCs (Proofs of Concept). Once proven, these POCs should be consolidated and scaled up into a larger program that can be executed across appropriate business units and locations.

Need help taking the first steps?



Reach out to us for an assessment

Hexaware's comprehensive assessment will help you gain insights into your enterprise landscape through detailed process-driven lenses. Our assessment provides a clear picture of your current state by baselining your spend while reviewing your enterprise and staffing structure. It helps review your operating model by analyzing data on company sites, end user count, staffing numbers across contractors and service providers- in turn segregated by spend tower. It puts together a picture of your operating performance by benchmarking ticket data alongside monitoring and automation tool inventory to the SLAs and KPIs that are relevant to your enterprise.

The assessment lets you know if your landscape might need a transformation-led approach by reviewing your inventory of applications, servers, database, and network devices. It highlights any possibilities of improving your current BAU systems by analyzing cloud spend and subscription data.

This assessment will leave you with a comprehensive understanding of your ITSM (IT Service Management) and ALM (Application Lifecycle Management) processes and extent of agility in your approach. The insights gained will provide the necessary foundation for an SME-driven workshop that can delve into specific gaps identified and prioritize opportunities to help achieve rapid cost savings.



Learn more about our portfolio of cost optimization tools and services,

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Hrishikesh is a domain consultant associated with Hexaware's Manufacturing and Consumer Practice. He brings to the table more than 12 years of experience spanning manufacturing and industrial construction across product development, project management and consulting roles. He leverages his diverse experience to help Fortune 500 clients employ technology solutions to resolve key business challenges in the manufacturing, construction, energy and utilities space.

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