



Imagine. Innovate. Integrate.

Customer Analysis Overview

Automotive Parts
Manufacturer

SERIGRAPH
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Business Impact

- ✓ Revenue
- ✓ Cost Savings
- ✓ Productivity

Business Description

This niche manufacturer designs, manufactures, and supplies mechanical and mechatronic control systems that are used in automotive, heavy truck and other industries. For some 90 years, the company has focused on shift systems for passenger vehicles. Its move to mechatronic systems, a marriage of mechanical elements, electronics, and software, expands its lineup to smart actuators and electronic controls. Products include actuator pumps for hybrid motor generator cooling as well as electronic shift and adjustable pedal controls.

The company is skilled in the art of integrating mechanical, electronic, and decorative elements in products that combine sensing, controlling, computing, communicating and actuating dimensions. This is where the company's "x-factor" comes into play. It is a delicate dance to anticipate trends and technologies that will shape demand and then develop innovative solutions that will meet customer expectations.

With manufacturing plants across the globe, and a vast vendor network that collaborates on every product offering, the company has an extremely complex supply chain. If it is to thrive, the company needs to constantly deliver high quality products *and* tightly control its supply chain.

This manufacturer has a strong need for engineering assistance to assure parts are manufacturable.

Critical Business Issues

- ✓ Reduce expensive loss due to inventory obsolescence in the supply chain
- ✓ Manage numerous SKUs and configurations
- ✓ Costly supply chain disruptions
- ✓ Complex supply chain, high number of vendors
- ✓ Simplify the manufacturability of critical parts

Results

For over fifteen years, Serigraph has provided more than fifty different parts (SKUs) to this world-renowned, demanding automotive customer – all the while, working to ensure that it provides an ever-increasing level of service. Proactive communications and a keen sense of urgency have helped satisfy a client who consistently delivers on its quality promise to automotive customers including Ford Motor, Chrysler and heavy equipment manufacturers like Caterpillar, to name a few.

Some of the parts provided by Serigraph are “A” surface parts which are visible, touched and often abused by customers. These products require specialized engineering and multiple iterations to perfect.



Serigraph brings a lot of engineering design expertise to solve a problem. They help make parts more manufacturable.

- Serigraph Customer

Automotive tier 1 supply chains are notoriously global and complex. This is due in part to the vast number of suppliers and just-in-time (JIT) manufacturing techniques designed to keep manufacturing costs low. The (JIT) approach lowers costs because parts arrive only when needed, minimizing inventory storage and costs, but it also introduces risk if parts don't meet quality standards and supply runs low. The cost of one minute of downtime for an automotive assembler or tier 1 supplier is estimated to be \$22,000 to \$50,000 per minute. Obviously this is a serious issue.

Further, like most players in the industry, the company is under constant pressure to reduce cost. Serigraph supports the company's cost-reduction initiative by delivering solutions that reduce risk and cost, improve quality and sometimes reduce the number of suppliers needed.

For example, recently a change in a product and assembly created a problem. The product change called for the assembly to be back-lit with LED light tubes delivering light through a translucent material. The design change meant that the “current PO holder [supplier] couldn’t handle the new requirements.”

Because Serigraph is the supplier of the applique associated with the lighting piece, it took over that product, creating and managing it as a package.

This is possible because of Serigraph’s niche manufacturing expertise and capabilities. “LED lighting has changed the way everything is manufactured. It’s been a mess they [Serigraph] solved.” This type of supplier consolidation and supply chain solution is where Serigraph has shown its true value.



Their IML is the key. They are ink experts. I have purchased IML solutions for 20 years—they have unique capabilities.

- *Serigraph Customer*

Serigraph has provided the company with feedback on new designs and helped it design for manufacturability. This has enabled crucial deadlines to be met and supported the sourcing of new products. Creativity and ingenuity are key strengths that Serigraph has brought to this relationship.



Serigraph fulfills unique and tough niche items delivering “A” surface parts [parts you see and touch when you get in an automobile].

- *Serigraph Customer*

Recently, Serigraph began shipping direct to the manufacturer's new facility in China. Previously, Serigraph had shipped to its U.S. location where all shipments were consolidated, then shipped to China.

This created a 9-10 week order-to-delivery supply chain cycle time. This was problematic because the automotive assembler customer [Ford] would only authorize 3-5 week production releases. This meant that if a product changed, there could be up to ten weeks of inventory, in the supply chain, which immediately became obsolete. And Ford was only responsible for the 3-5 weeks of production they had authorized. Five weeks of inventory suddenly made obsolete could result in millions of dollars of losses.

To solve this problem, Serigraph implemented additional quality checks to guarantee delivery of superior quality parts. This change removed the requirement to ship to a staging location before shipping to China, cutting three weeks from the order-to-delivery supply chain cycle. This 30% reduction in cycle time eliminates the need to manage and insure the excess inventory and saves millions of dollars when products change by eliminating the supplier portion of obsolete inventory.

Metrics

- ✓ 30% reduction in order-to-delivery supply chain, eliminating inventory obsolescence and saving millions
- ✓ Reduced cost and complexity by consolidating supplier base
- ✓ Engineered new supply chain solutions
- ✓ Reduced risk and insurance costs associated with transporting goods
- ✓ Partner to deliver difficult-to-supply solutions



[Serigraph] jumps through a lot of hoops in a creativity sense with their customers.

- Serigraph Customer