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Customer Analysis Overview

Automotive
Parts
Manufacturer

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Business Impact

- ✓ Revenue
- ✓ Cost Savings
- ✓ Productivity

Business Description

This automotive manufacturer is one of the largest in the world. The automotive parts group manufactures hundreds of parts and accessories including dashboard display and dashboard display lighting systems, brake and traction control systems, passive safety products, sensors, and chassis and powertrain products. The group operates in 90 locations across 20 countries serving every major global automotive assembler.

The company's growth strategy is focused on the fastest growing automotive groups, including LED-based dashboard displays, navigation systems, turbochargers, and systems used to reduce emissions.

Due to extremely stringent global quality standards, wherever possible, this manufacturer builds its own parts, supplying its global assembly plants around the world. This ensures that its exacting quality standards are consistently met. Finding reliable suppliers who are able to perform without causing manufacturing disruptions has been a real challenge. As the company continues to diversify its product portfolio, it faces many new challenges including complex make-versus-buy decisions. To win business, an outside supplier must bring expertise that is not available internally. At the same time, the supplier must execute with quality and precision.

Critical Business Issues

- ✓ New offerings create sourcing challenges
- ✓ Cost pressure to move North American sourcing overseas
- ✓ Complex supply chain
- ✓ Difficult-to-manufacture parts require outside expertise
- ✓ Automotive customer base requires peak quality

Results

Serigraph works with the company to tackle its more difficult and complex projects. Key products that Serigraph supplies are 3D and 2D dials. These dials are a manufacturing challenge because shrinkage affects where the image will stabilize. As a result, significant testing, engineering tweaking and re-testing is necessary to get them right. In addition, there are many stages in the manufacture of these items, so the risk of producing unusable items (scrap) is high. This introduces yield issues which can directly affect production. Frequently, scrap is the difference between profit and loss. And if scrap is the reason for a manufacturing line shut-down, the costs are very high.

Serigraph ships to twelve manufacturing facilities across the globe, and end users will only tolerate four or fewer parts per million (PPM) defects. So control of quality and scrap throughout the process is critical. Serigraph manufactures over 500 SKUs for the company with volumes that reach tens of millions. Even though overall volume is this high, Serigraph manages to keep scrap to single digits. Because of this operating excellence, Serigraph is not only a tier 1 supplier it has one of the highest quality ratings ever awarded.

In this particular supply chain, Serigraph is one of the larger suppliers, doing around 5 million euros in business globally. Using Serigraph is a make-vs-buy decision, as it is with all suppliers. The manufacturer makes the 3D and 2D dials internally in some of its global operations. But when it comes to the most difficult, highly engineered solutions, this global automotive parts supplier turns to Serigraph. The reason is the cost of scrap is high with these parts that are difficult to design and manufacture. But the *real* cost is the cost of assembly line disruption if an insufficient number of quality parts are available during manufacturing.



With Serigraph, I can get a good price,
eliminating the need to source
internally or internationally

- Serigraph Customer

If a line has to be shut down, it costs approximately €25,000 for short duration incidents, considerably more for longer duration shutdowns, in addition to the cost of excess inbound and outbound freight.

When a shipment is late to the facility, the shipments to the customers are in jeopardy, and this usually means the company has to resort to air freight. This gets expensive at €3,000 per pallet shipped. These costs pale in comparison to the cost of delayed shipments to this companies end customers. If end customer, the automotive assemblers like Chrysler, Ford, etc. do not get their required parts on time, the costs could be millions including reputational risk to the brand. The company has had issues with line disruptions, and it still does with some suppliers within the vendor base.

To address the issue of differences in quality the company rates suppliers on a scale from -10 to +10 based on form, fit and function quality as well as delivery. The rating system provides a financial reward for suppliers with better a rating. This manufacturer has turned a supplier rating system into a science. The higher the rating, the better the chance a supplier has of winning additional business. Serigraph's score is a +4.1, which is extremely high, placing within the top 10% of the supplier base. Form, fit and function quality combined with delivery either saves or costs the company money, so the rating system rewards or punishes each supplier accordingly.

The number that makes up the rating translates into an estimate of the company's additional savings or additional cost as a percentage of the price paid to a supplier. For example: If Serigraph were awarded a \$1,000,000 dollar project, this manufacturer surmises the real cost to the company is \$959,000 because working with Serigraph on this project lowers the company's cost to complete the project by 4.1%. Hence, Serigraph's quality rating is +4.1.

Here's the math: If supplier A has a rating of -10, it means that this manufacturer's quality is poor. Company B (Serigraph) has superior quality and has a highest supplier ratings of +4.1. Both companies supply the same part. Company A prices their proposal at \$975,000. Serigraph prices their proposal at \$1,000,000. Each quote is then adjusted based on the quality rating.

For company A, costs are added to the proposal due to the poor quality [$\$975,000 + (\$975,000 \times 10\%) = \$1,072,500$]. So the true cost of buying from company A is assessed to be \$1,072,500 because poor quality causes line shut downs, extra inspections, etc. Now contrast this with Serigraph. Serigraph's cost is computed as [$\$1,000,000 - (\$1,000,000 \times 4.1\%) = \$959,000$]. Serigraph is given credit for great quality equivalent to a price reduction of \$41,000 (\$41,000 is 4.1% of \$1,000,000 - same as their quality rating). The price comparison when quality is taken into account is:

- ✓ Company A - \$1,072,500
- ✓ Serigraph \$959,000

Due to high quality and trust, the relationship between the manufacturer and Serigraph has grown. Serigraph is a trusted, innovative, tier 1 supplier able to meet difficult new product quality standards who has gained a reputation for producing innovative parts at competitive prices.



Serigraph will continuously tune parts till they get it right. They will help us WIN this new Chrysler business.

- Serigraph Customer

This company's growth is tied to innovation. Complex parts produced in partnership with Serigraph is one key to its growth strategy. Currently the organization is working on closing new business with Chrysler who is requesting a new version of a dashboard dial with a modern, "high-tech" brushed aluminum appearance. What makes this dial particularly challenging is the requirement that it be translucent. LED lighting behind the dial illuminates the dial. Day or night, the new product has to look right. And the back-lit LED lights can't be allowed to escape to other parts of the dashboard as this would ruin the desired effect. If this part's application sounds like it requires a highly engineered, difficult to design and manufacture solution, that's because it does! Designing complex and manufacturable parts at high PPM standards is the Serigraph difference.

Serigraph has the ability to create the innovative new dial and still meet the near zero defects per million standards set by this globally recognized automotive parts manufacturer. When the company wins this business it will represent \$300m over 5 years (\$60m per year, a 2% annual increase to divisional revenue. Serigraph will have played a key role in winning this sizable contract.

Metrics

- ✓ Helping the customer win new business with lifetime value of hundreds of millions
- ✓ Played a key role in closing a new deal with Chrysler worth \$300 million over 5 years, representing a 2% increase to revenue

- ✓ Quality is best in class, earning a +4.1 supplier rating – the equivalent of lowering cost by 4.1%
- ✓ Reduces supply chain complexity, lowering cost
- ✓ Reduces cost and risk associated with production-line disruptions (saving millions per year)
- ✓ Is a reliable source superior to internal supply options, saving time and money
- ✓ Enables the manufacture of highly engineered complex parts to be outsourced, savings millions in equipment expense while avoiding equipment obsolescence



Serigraph helps us by handling our toughest projects.

- Serigraph Customer