Freightliner, LLC

Just-in-time documentation significantly cuts costs and reduces time to market.

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Kelly Brown, Computer Operations Manager, Freightliner, LLC
Client Profile

Freightliner LLC is the leading heavy-duty truck manufacturer in North America. Founded in 1940, Freightliner produces and markets Class 3–8 vehicles under the Freightliner, Sterling, Western Star, American LaFrance, and Thomas Built Buses nameplates. Freightliner is a subsidiary of DaimlerChrysler, the world’s leading commercial vehicle manufacturer.

The company also owns and operates a vast dealer/service network in North America. It is a partial owner in TravelCenters of America, the largest network of full-service truck stops in the U.S.

The Challenge

How do you cut costs of technical publication production processes, maintain the effectiveness of content, and not jeopardize development schedules?

This was a challenge facing Freightliner, which was looking for ways to reduce costs across the company.

Offset quality good, but process lacked flexibility

Like many manufacturers, Freightliner was using offset print for virtually all of their technical publications and product manuals. Setup costs for this type of production are high, so large quantities had to be printed to achieve cost efficiencies.

To avoid waste, stocks of printed materials would have to be depleted before updates were printed. And if large print quantities weren’t needed, the cost-per-manual was high.

“The way we manufacture trucks is more conducive to short-run printing than offset,” said Kelly Brown, Computer Operations Manager for Freightliner LLC. “While cars are made in the thousands every day, we make trucks in the hundreds, often with different nameplates requiring their own glove box documents.”

Spend on established process was skyrocketing

Freightliner’s process was very traditional. The technical publications group would create documents and then send them to the buying organization responsible for
managing different outsource print vendors. Sales and marketing would forecast a quantity, which was sent to procurement with files for production. For small quantities, this process could result in a unit cost of $300 to $400 per manual.

Overall, Freightliner’s spending on this time- and labor-intensive process was $1.6 million a year and climbing. The company needed to try something very different to achieve its overall goals of reducing cost while gaining effectiveness and better asset utilization.

Xerox scrutinizes document production processes
Freightliner consulted with Xerox on how they could save by producing documentation more effectively. To start, Xerox conducted an assessment of Freightliner’s processes for producing product manuals.

The Xerox assessment process included an analysis of policies and procedures, consulting with key people throughout the organization and identifying opportunities for Freightliner to cut costs, improve productivity, and gain speed and flexibility in document updates.

The assessment showed a big opportunity to reduce cost and increase flexibility in printing glove box documentation for most of the specialty trucks Freightliner manufactures for sale in North America.

The Solution
Xerox had the experience to provide a totally integrated solution—one that would allow Freightliner to deliver documentation faster to keep pace with product documentation updates in multiple languages, while significantly reducing document production cycle times and costs.

Following its analysis, Xerox recommended an innovative Just-in-Time solution designed to speed time to market and to allow changes to be made with more flexibility.

Solution expands short-run publishing capabilities
The Xerox solution creates professional-quality bound documents that are printed, collated, and finished in a seamless production process—emerging from the system ready to be packed and shipped.

The solution maximizes Freightliner’s investment by leveraging existing printing assets while adding production and binding equipment. The new applications provide the capability to produce manuals and color covers on demand.

“The covers on our manuals were very plain,” said Sally Fawver, Freightliner’s Document Service Supervisor. “The Xerox solution allowed us to switch a number of them to full color with photos of the trucks, which wasn’t possible with offset because of the cost.”

According to Fawver, the company’s copy center evolved to become a full production print center.

The value of Just-in-Time
Just-in-Time (JIT) Product Documentation refers to the process of producing and delivering technical publications in the required quantity on demand, rather than mass-producing documents and depleting inventory before reprinting updated versions. The value of a JIT product document strategy includes:

- Lower realized unit manufacturing costs for product documentation and kits
- Reduced inventory holding costs for technical publications and kits and elimination of inventory obsolescence costs
- Integrity of documentation
- Ability to easily personalize, configure, or localize documents for specific customers, markets, or product configurations
- Publishing in multiple media, in a variety of formats, in many languages, within minutes
The Results

Xerox Global Services’ use of Lean Six Sigma methodologies helped make the technical publications process measurable and manageable.

Freightliner achieved unique business value by expanding the capabilities of assets already in place.

“The solution gives us the flexibility to hard stop on a manual and shift to another, more critical, job,” Fawver explained. “That way, if revisions, updates, or a change in quantities are needed, we’re able to get them done very quickly.”

Lead time shrinks while productivity soars

Along with the advantages of low-volume short-run printing, Freightliner was able to maximize its investment in printing equipment.

According to Brown, monthly production at the company has risen from about three million images to between seven and eight million images, which includes about 40,000 books.

“Lead time and productivity have dramatically improved,” said Brown. “Specifically, the average lead time for documentation production and delivery has gone from about four weeks to five days.”

Savings goals greatly exceeded

Xerox and Freightliner not only met their savings goal for the first year, they exceeded it.

“Our first-year savings goal was $500,000,” Brown explained. “We actually achieved savings of $800,000—well ahead of our target.”

Additionally, after an initial savings target of $1.2 million over three years, Freightliner is now projecting $1.5 million in savings in just two years.

Citing one example of the benefits of print on demand, Brown noted that Freightliner previously was paying between $300 and $400 apiece to produce certain documents externally. Today, the company is able to print them internally for $25 each.

The Challenges:

• Concerned about the need to cut costs across the company
• Pressured to improve time to market
• Needed to reduce dependence on costly offset printing

The Solution:

• Assessed document production processes
• Introduced end-to-end print-on-demand technology
• Leveraged current assets for short-run print capabilities

The Results:

• Saved nearly $800,000 a year
• Lowered per-unit costs for product documentation
• Shortened lead time from four weeks to five days
• Increased flexibility and control of print jobs