



STAHL'S Fulfill Engine

STAHL'S Fulfill Engine Case Study: Shirt Co.

CASE STUDY SUMMARY

The Challenge: Shirt Co., a high-output decorated-garment producer, faced a challenge with its print-on-demand online stores. Despite its capacity to produce up to 3,000 decorated garments a month, the company struggled to meet the demand for faster printing and order processing aggregated from many different store platforms.

The Solution: Shirt Co. implemented Fulfill Engine in December 2023. This platform now manages 90% of Shirt Co.'s online stores, providing a streamlined approach to handling orders and significantly reducing turnaround times for custom orders.

The Result: Since adopting Fulfill Engine, Shirt Co. has experienced notable improvements in its operations. The platform's direct-to-film printing and embroidery capabilities allow Shirt Co. to efficiently manage a wide variety of garments and logos. Additionally, the automated ordering feature has greatly increased efficiency, saving the team a substantial amount of time previously spent on manually searching and ordering blank garments.

Shirt Co., which can turn out upwards of 3,000 decorated garments a month from online stores, wanted a more streamlined solution. "We had been setting up most of them as open-and-close stores," says owner Connor McDonnell. "After a few weeks of collecting orders, we'd process everything in bulk with screen printing or embroidery. But we noticed that the demand for faster printing kept growing, but we didn't have a good system to make it happen."

INSTANT ON-DEMAND ONLINE STORES

When McDonnell first learned about Fulfill Engine, its automated capabilities for on-demand online stores immediately caught his attention. "Automation is huge for me, since we're always trying to eliminate manual tasks," he says.

After switching to Fulfill Engine in December 2023, the platform now manages 90% of Shirt Co.'s online stores, significantly speeding up turnaround times for custom orders. Previously, the team had to wait for stores to close to produce orders in bulk, but now their stores are always open, making it easy to handle one-piece orders with different designs for companies, schools, and first responders.

"Fulfill Engine allows us to run thousands of different garments and logos seamlessly," McDonnell says. "With direct-to-film (DTF)

printing and embroidery, it's very easy to print a unique logo every single time. We've opened more stores this year vs. last year because people like the always open, quick-turn aspect of them with lots more design choices."

When customers or end-users place orders via Shirt Co.'s online stores, Fulfill Engine batches the day's orders and then automatically orders all the blanks without staff needing to do anything. "We used to spend way too much time ordering goods," McDonnell says. "Our former platform allowed us to order blanks, but it was never on auto, so it became very time-consuming. The automated ordering feature is one of Fulfill Engine's biggest advantages for our workflow."



When blanks arrive at Shirt Co., a staff member prints and affixes a unique QR barcode assigned by Fulfill Engine to each item. This helps move the items swiftly through production and out to the customer, often on the same day. "Having a barcode assigned to each shirt and automating the entire process makes everything so easy," McDonnell says. "Our staff quickly acclimated to the new check-in and routing workflow as blanks arrive."

SHIRT CO. BOOSTS PRODUCTIVITY AND SALES WITH FULFILL ENGINE

Learn how Shirt Co. optimized its online store management, reduced manual work, and increased its on-demand production capacity using Fulfill Engine's automated solutions.

SHIRT CO. ACHIEVES RAPID GROWTH WITH FULFILL ENGINE'S AUTOMATION

By leveraging Fulfill Engine, Shirt Co. boosted sales and operational efficiency, delighting customers with fast, reliable service and always-available on-demand online stores.

SHIRT CO. SCALES ON-DEMAND ONLINE STORES WITH FULFILL ENGINE

Learn how Shirt Co. transitioned its online store portfolio to Fulfill Engine, enabling more rapid store openings and efficient order processing to meet customers' requirements for on-demand fulfillment.

SIMPLIFYING PRODUCTION WITH SMART SOLUTIONS

A significant portion of Shirt Co.'s orders through Fulfill Engine are for DTF transfers and embroidery. This streamlined production process provides a substantial advantage. "Orders come in, get assigned a barcode, are routed to a heat press or embroidery machine, and then shipped out," McDonnell says. "It's incredibly easy and fast for our team."



Besides automatically ordering apparel blanks, the Fulfill Engine system can also order custom DTF transfers from STAHL'S to arrive at a decorator's location around the same time. "This is an easy option for a lot of printers," McDonnell says. "The transfers are great quality and they show up within a few days. They're separated by batch, so it's easy to match them up to the blank goods."

Recently, Shirt Co. added in-house DTF transfers, after using the supplied transfers during its Fulfill Engine startup. "Our company is hyper-focused on speed, so we wanted to get items out within a day of an order being placed," McDonnell says. "If our printer is down or we have a higher order volume, we can route those transfers back to STAHL'S for extra support."

Fulfill Engine also offers a vetted decorator network to handle overflow orders on an outsourcing basis. "While we haven't used the network, I know shops who have and they think it's great and easy to use," McDonnell says. "It's a good service for shops that want to take on higher volumes even when they might not always have the decorating capacity."

For embroidery orders, Fulfill Engine links each item to a specific DST file, ensuring every design at Shirt Co. is preloaded and ready for stitching. "When an operator scans the QR code on a shirt for an embroidery machine, the design automatically loads and is ready to sew out on the item," McDonnell says. "It's very simple and easy to do. It's scanning and pressing start without the operator needing to do a lot of setup."

THE REAL NEED FOR POD SPEED

McDonnell is thrilled with the time his team has gotten back from not having to search for and order garments. "We have 100% of that time now for other tasks," he says. "One of the biggest perks we offer is the ability to provide anything from our catalog. If we had a store with 700 SKUs, it would take our purchaser all day to process each item. Now, we can offer a wide variety of SKUs without the hassle. The system auto-orders, saving us an incredible amount of time and we make certain profit margins. We set the store up, and it runs smoothly without any further effort."

Now, the Shirt Co. staff focuses their time on setting up at least 10 new stores a week. "Once they're up live, they're always open and running by themselves," McDonnell says. "We're getting in 2,000 to 3,000 shirt orders a month, and in August through December that amount easily doubles."



Most of Shirt Co.'s customers are high schools and elementary schools. "They put a person in charge of spiritwear who's trying to make sure their crew has branded gear," McDonnell says. "We're in the driver's seat where we say, 'Hey,



Shop Stats: Shirt Co.

Location: St. Charles, MO

Website: Shirt.co

Founded: 2011

About: Shirt Co. is a custom apparel company that specializes in fast turn times and impeccable customer service.

Annual Revenue: \$6 million

Managed Online Shops: 180+

Garments Produced Yearly: 50,000 (via online stores)

Employees: 30 (1 shift)

Facility size: 15,000 square feet

Primary Industries Served: Schools, Unions, Fire Departments, Businesses

Products and Services Offered: Apparel, Promo Products, Signage

Decoration Options/Machines:

- 4 Automatic Screen-Printing Presses
- 1 Manual Screen-Printing Press
- 1 Direct-to-Film Printer
- 40 Embroidery Heads
- 5 Heat Presses
- 1 Wide-Format Printer

How the Shop's Using Fulfill Engine:

Shirt Co. uses Fulfill Engine for 90% of its online stores. With customers demanding faster custom orders, Fulfill Engine helps speed up the turn time dramatically on individual orders. Previously, the shop team produced orders when they closed an online store, but now its stores are open all the time, and one-piece orders with different designs are a breeze.

let's get our best selling t-shirts, long-sleeve shirts and hoodies in your store.' If they want to add a few special items, we'll let them cruise through the vendors connected to Fulfill Engine. But we build most of the stores and stock six to ten of the same best-selling items in each one."

Prior to using Fulfill Engine, Shirt Co. advertised that buyers would receive the decorated apparel they ordered two weeks after the store closed. "From when a person placed an order, it ranged from four or five weeks to get them the item," McDonnell says. "Now, we advertise a three-to-five-day turn from when a customer places an order, so it's significantly less time."



As well, after a store closed, McDonnell's team could screen print a two- or three-color logo to the tune of 300 or 400 shirts an hour. "But we were also spending time making screens and doing all the setup," he says. "Now, we're offering multiple designs in various colors in each store, far more than we ever could with screen printing. This allows us to get individual orders out significantly faster than before."

HAPPY CUSTOMERS AND HAPPY STAFFERS

Fulfill Engine is making customers incredibly happy by significantly speeding up order processing and expanding design options. "Everyone has said, 'Hey, it's much faster now and we prefer it,'" McDonnell says. "Customers like the variety of designs we can produce with DTF. Even our die-hard screen-printing customers understand how DTF lets us print multi-color designs with speed and convenience."

McDonnell's team can also go after different types of accounts, like corporate accounts that always have new employees who need uniform

PICK A SHOP OWNER'S BRAIN

Q: What advice would you give to printers who are either not looking at automation or tech, or they're trying to decide which platform to use?

Connor McDonnell: Switch over now, because it just makes your life so much easier. The sheer automation of Fulfill Engine amazes me. With the platform, we can have hundreds of stores open and producing at the same time, each with different items, logos, and decorating methods. We don't worry about sourcing the blank goods since the system automatically does it. If you use direct-to-film transfers, you can offer customers a lot more design options, and you just need the transfers and a heat press. At this point, I want to open as many stores as we can!

Q: As things get more automated, the playing field levels. If many screen printers are using Fulfill Engine, what differentiates one shop from another? How do you stay competitive?

CM: Speed and customer service will set you apart. For example, we do free returns. If customers are unhappy with anything, we'll replace the item, no questions asked. Speed is also crucial. The faster you can do it, the better. We're trying to get stuff printed and shipped the same day, if not within an hour of it showing up. It's incredible, and we're doing it with Fulfill Engine's help!

gear. "We're picking up a lot of new business because our stores are on-demand he says. "Customers like that we don't open and close their stores every quarter. The store stays open all year and people get their orders lightning fast. That's the most impactful aspect."



Shirt Co. has gotten new business from referrals who like the concept of always-open, on-demand stores with a fast turnaround for production – along with 3PL fulfillment. For example, the shop works with a lot of fire departments. "One new department was unhappy with their previous vendor who wasn't getting their existing inventory of gear out quickly enough," McDonnell says. "We took in all their stock and built a Fulfill Engine store around it, allowing us to adjust pricing for flash sales. They're very pleased that we ship within a few hours of receiving an order. This system helps us deplete their excess inventory while

also offering on-demand pieces to new team members."

This push to inventory hard goods products for customers was new to the shop. With a Fulfill Engine integration, the Shirt Co. team can fulfill on-demand orders with existing inventory components. "Now, we have a couple of stores where we stock water bottles and tumblers, which we didn't do before," McDonnell says.

LOOKING AHEAD

Even though Shirt Co. has been using Fulfill Engine for less than 12 months, McDonnell says that his shop is already up an impressive 20% for 2024. The Shirt Co. team actively promotes the new on-demand store service, especially to schools. "We've done more store business this year than we have last year, and most of our stores have been switched to fulfill," McDonnell says. "Yes, our business has definitely grown."



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