WORDS BY **CRYSTAL HAMMON**

The stitch ation

THE VOID STITCHWORKS PLANS TO FILL

It's common knowledge that the U.S. makes only a small percentage of the apparel and accessories Americans consume. For assorted reasons, some of which were intentional decisions about the direction of the U.S. economy, domestic apparel manufacturing began to decline in the 1990s. This sector hasn't shown any signs of a significant rebound, despite a lively nationwide makers movement.

With that as background, a keen business mind may wonder what's on the other side of the industrial sewing education StitchWorks intends to offer. Where are the job opportunities for graduates of the program? What types of businesses need these skills?

The quick answer: the market for sewn goods is bigger—much bigger—than just apparel and accessories, according to Deborah Vandermar, a skills development consultant who is helping StitchWorks establish a standards-based education and apprenticeship program in Indianapolis. Vandermar had a long and diverse career in the sewn goods industry and taught industrial sewing and product development for manufacturers, colleges, and vocational schools. She also co-authored Beyond Design: The Synergy of Apparel Product Development, a textbook that's been used globally to train people in the apparel industry.

Four years ago, she came out of retirement to help design a new apprenticeship program for Detroit's Industrial Sewing and Innovation Center. She recently moved from Seattle to Detroit to be an integral part of that program, which partners with Henry Ford College to deliver prerequisite training. In replicating a similar program here, possibly in partnership with Ivy Tech Community College, StitchWorks joins a fleet of organizations and manufacturers around the country with comparable goals.

SHORING UP AMERICA'S MANUFACTURING CAPACITY WITH TRAINING

Vandermar's approach employs vocational training methods founded in the 1980s, before the U.S. began its shift from manufacturing toward a service economy. Decades later, American manufacturers are depending on experts like Vandemar to help reclaim discarded knowledge about vocational training. "Without being too mystical, I feel like this is my purpose," she says. "All the things I learned in my life, being at the machine, being in factories all over the world, teaching people all over the world academically and vocationally—all those steps brought me to this moment."

The moment Vandermar references is one in which technology has blurred lines between industries that were once distinct from each other in terms of the materials used to make them. "There are so many ways to fabricate things now," she says. "In the future, we'll be talking more about flexible product fabrication."

Vandermar cites several B2B industries that use sewn products made in America. For safety reasons, some protective clothing is still domestically made. Industries where customization, intellectual property, and national security are factors—maritime, aerospace, and military products, for example—use American-made sewn goods, as do consumer goods manufacturers of products like furniture and recreational outdoor gear. "We [Industrial Sewing and Innovation Center] will be doing consumer goods, but there's a lot of opportunity in the B2B sector," she says.

FILLING IN SMALL-BATCH MANUFACTURING GAPS

Trade rules that protected the textile product industry started to disappear in the 1970s. Independent apparel designers and entrepreneurs with ideas for sewn products started to feel the loss of a robust industry that could help launch and expand business by the early 1990s.

Four years ago, Travis Neal invented a special vest for law enforcement officers. "I just didn't like the ones that were on the market," says Neal, who works for the Purdue University Police Department. "They didn't do the things I wanted them to do." Convinced that other law enforcement officers shared his dissatisfaction, Neal completed LaunchBox, a six-week entrepreneurship program at Purdue University, and launched Focus Tactical Design.

With the help of Catherine Fritsch, owner of Mercurious Designs, an Arcadia, Indiana company that offers design, pattern making, and custom sewing services, Neal worked on several prototypes before settling on a design. The final product is a vest that slides over bulletproof panels and has pouches that allow officers to spread gear comfortably on their torsos rather than carrying everything on a belt.

Neal was passionate about making his products in the U.S., preferably in central Indiana, but the manufacturers he approached either had their own work or required such large minimum orders that it wasn't financially viable for Neal's start-up. "It was very tough to get any kind of manufacturing done in small batches here in Indiana," he says. "It took a lot of leg work for me to find people who can do the quantities I need and have the right industrial equipment for the work." His vests are made on demand by Fritsch and two other central Indiana stitchers.

Fritsch helps designers make samples to show their products to prospective buyers. When clients reach the point that they need to start manufacturing, they're sent to other cities in search of small batch manufacturers. "Every cut and sew manufacturer I know of is immediately overwhelmed with orders when they start," Fritsch says. "It's hard to say how many people are out there who need to have their products made—I think it's more than we imagine."

THE VOCATIONAL TRAINING MODEL

THE VOCATIONAL TRAINING VANDERMAR DESIGNS FOR ORGANIZATIONS LIKE STITCHWORKS USES A SIMPLE, THREE-STEP PROCESS TO TEACH ADULTS STANDARD SKILLS.

01

Gather a consortium of stakeholders in an industry that has an interest in people working well. Get those stakeholders to specify their industry's top 10 skills.

02

Agree on the best methods for teaching those 10 skills and design a corresponding curriculum that mixes a variety of experiential and classroom teaching.

03

Design a testing method to verify students have mastered the knowledge.

A well-timed stitch

WORDS BY **CRYSTAL HAMMON**

Everyone remembers what they were doing the day the coronavirus pandemic shut down the world as we knew it. At PATTERN, the public health crisis coincided with the formal launch of a two-pronged enterprise known as StitchWorks. The charter: small-batch production sewing services and vocational education for minorities and underserved people who want a related job or advanced sewing skills.

The idea of StitchWorks was hatched in 2010 when PATTERN was just a fledgling. In the decade that followed, the team did their homework. They wrote grants, did feasibility studies, and substantiated the need in the regional economy for production sewing capacity.

After securing space in the Circle City Industrial Complex and assembling a team of experts to teach classes in 2019, StitchWorks was set to start phase one of a staged plan in March. The first phase was only meant to launch a structured training program. Once industrial sewing talent and operating space were ready, StitchWorks theorized it could move to the next phase, satisfying small-batch production requirements for designers of apparel and other sewn products.

A few days before the March grand opening, StitchWorks Director Polina Osherov got a call that changed everything. Could StitchWorks make and deliver 2500 surgical gowns for Eskenazi Health within two weeks? Not exactly the launch they had planned, but the bonafide order for production sewing was a win for health care workers in need of personal protective equipment (PPE). It also gave StitchWorks a chance to prove how scrappy it could be.

"We didn't really have the people in place yet," Osherov says. She could have demurred on that account, but PATTERN is a well-oiled crowdsourcing machine, and when Osherov's team put out a call for help, over 80 hobbiests and professional stitchers offered to make the needed gowns and masks at home.

StitchWorks' nimble response impressed Tedd Grain, executive director at Local Initiatives Support Corporation (LISC), a community development finance institution. LISC partners with organizations like PATTERN to build communities that are welcoming places to live, work, play and learn. One of their investments is the Circle City Industrial Complex, where StitchWorks is one of 160 tenants.

When Grain learned that Eskenazi Health needed a surgical gown supplier, he paired them with StitchWorks. Then came a flurry of activity, including making patterns, writing assembly instructions for stitchers, and partnering with the Dallara IndyCar Factory, which offered to cut fabric for the gowns at no charge. "It was a crash course in production sewing," says Catherine Fritsch, owner of Mercurious Designs and advisor to StitchWorks.

StitchWorks' ability to pivot under duress bodes well for the organization's future, in Grain's opinion. "As a city, we should not be caught in the situation where there are no local suppliers of lifesaving equipment and PPE," he says. "Even if local production is slightly more expensive, it makes sense that hospitals and health care systems invest in making sure that there's local capacity so we don't get caught in the situation again where we're dependent on a foreign country. We have really capable people here, doing amazing things."