Premier Custom-Built embraces digital transformation while preserving old-school craftsmanship

Success at a glance

- Premier saves 50 - 75% in design time by eliminating repetitive tasks with Onshape's industry-specific custom features.

- With a SaaS-based product development platform, Premier eliminates the version control issues of paper manufacturing drawings.

- Onshape's Configurations enable Premier to quickly modify cabinet designs based on customer preferences.

An office museum of technological progress

At Premier Custom-Built, a custom cabinet and furniture manufacturer for the luxury market, the IT department has a dedicated shrine to obsolete technology. Their makeshift museum is small but symbolic, including a sample of nearly every generation of computer used to run the business since its founding in 1991. The most talked-about artifact is the boxy Apple Macintosh Classic, which was the first computer used by company founder Marlin Horst, father of current CEO Sheldon Horst.

"The display serves as a reminder that technology is always changing, and we should not assume we've reached the finish line," says software engineer Chad Stoltzfus. "It encourages us to keep trying to jump over the current hurdles and push on."

Premier Custom-Built is based in Lancaster County, Pennsylvania—also known as Pennsylvania Dutch Country or Amish Country—which has a centuries-old tradition of woodworking originally fostered by the region's Swiss-German immigrants.

"Craftsmanship is the center of what we do," notes Premier CEO Sheldon Horst. "And I believe that as the generations continue, that preserving the craft will require technology to operate effectively."

At the center of the luxury cabinetry company's digital transformation strategy is PTC's Onshape Software-as-a-Service (SaaS) product development platform that unites powerful cloud CAD tools with built-in data management, real-time collaboration, and business analytics.

"Onshape has become a central part of our IT department," says Horst, "and in so doing we've brought engineering and IT together to design and develop the product in a collaborative sense."

IT has become a critical part of Premier's product development process due to FeatureScript, Onshape's open-source programming language that lets teams create custom CAD features specific to their industry or even only to their company. The Premier team has already created more than 50 custom cabinet features so far, automating repetitive tasks and giving engineers more time to focus on innovation.
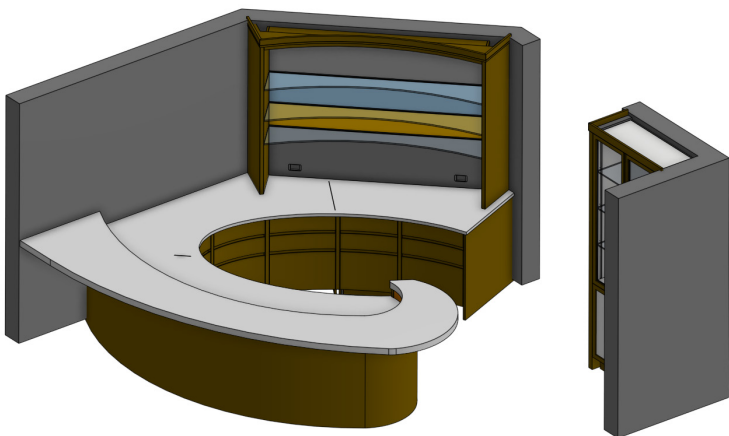
"FeatureScript saves us 50 – 75% of the time to make multiple cabinets, as opposed to having to model them one cabinet at a time," says IT Manager Kevin Hertzog.

"We sit in our meetings and we talk about, 'Oh, it can do this,' or, 'Oh, it can do that.' I don't even know that we've touched the surface of what Onshape will be able to do for us in the future," he adds.

Pursuing a paperless factory floor

As emphasized in the company name, no two Premier cabinet designs are alike. Everything is made to order and built twice—first in digital form and then in the physical form that gets installed in kitchens, living rooms, and even yachts.

Because of the many available choices in materials, styles, sizes, colors, finishes, and hardware, there are thousands of design combinations for customers to choose from. Premier uses Onshape Configurations to easily and quickly modify designs based on customer preferences.

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>
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> *IT Manager*

One of Premier's long-term goals is eliminating the amount of paper documents used on the manufacturing floor. Although the company designs and builds its own specialized machinery and uses the latest technology across its multiple facilities, there is still a dependency on old-fashioned three-ring binders (known as "the book") to reference product information.

Eventually, all the product specs in those binders will live inside the Onshape CAD models, says Stoltzfus.

"What we are aiming to do is make our product models the single source of truth."

Chad Stoltzfus,
Software Engineer

"With Onshape, we can take data from the CAD model and turn that into data for the shop," he says. "Essentially, the definition of our product can exist not in paperwork and the model, but solely in the model."

"One of the things we frequently talk about at Premier is this idea of having a single source of truth," Stoltzfus adds. "And that's the logic behind using a cloud-based platform. What we are aiming to do is make our product models the single source of truth."

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