

Razorleaf Helps AMF Bowling Score a Strike with SmarTeam

Generations of children have stood in wonder on their first trip to a bowling alley, mesmerized by the smooth motion of the automatic pinsetters and the sight of brightly colored balls spinning up the ball return. The technology that makes a bowling alley operate isn't magic – it just seems that way.

Behind the scenes AMF Bowling, a division of QubicaAMF, engineers a complex and carefully timed dance of moving parts to be both rugged and precise. AMF designs and fabricates most of the parts it uses and assembles everything from the ball returns to the laminates for the flooring. The pinspotter, for example, includes more than 3,800 different parts, all of which must be engineered to work smoothly without clashing.

Managing such complexity isn't easy, as Brian Williamson, CAD-PDM Administrator and design engineer with QubicaAMF Worldwide, will be the first to admit. "When I got here four years ago, I think I spent more time trying to locate the designs for the parts in our machines than I did designing new ones," he says. "CAD files were scattered all over the network and on local drives with very little chance of being found again so they could be reused."

ORGANIZATION ELIMINATES WASTED TIME, REDESIGN

Lack of organization was costing the company valuable time that could have been better spent on designing new and more sophisticated machinery for AMF's clients and corporate-owned bowling centers. To bring order to the chaos, AMF turned to Razorleaf Corporation, an independent professional services provider with special expertise in Product Data Management (PDM), for help in implementing ENOVIA SmarTeam, a PDM tool.

"We had the software for about a year, but we had no idea how to implement it," Williamson says. "Razorleaf did a great job of explaining the benefits and functionality of the software, and their involvement was critical when it came to setting up the installation. They had experience and an established procedure, and they customized that process for AMF."

Razorleaf also trained AMF's designers to use SmarTeam, getting the company off to a good start, and it provides ongoing support that Williamson describes as "accurate and timely."

With SmarTeam, AMF can find every part in seconds, saving valuable time and allowing new products to be innovated on

top of existing ones. "We have a very simple installation, but it does exactly what we need it to do," Williamson says. "The search function is very powerful, and we can search on the part description, the part number, or the engineering change order (ECO). We've eliminated all the time we used to waste searching for parts or designing new parts from scratch because we couldn't find the designs for the old ones."

SmarTeam integrates seamlessly with AMF's SolidWorks CAD software, allowing users to access PDM functions without leaving their SolidWorks environment. Check-in and check-out functions allow multiple users to work on the same design in tandem. SmarTeam also helps AMF automatically compile bills of materials (BOMs) directly from the 3D assemblies in SolidWorks.

"Before we implemented SmarTeam, we typed all of the part numbers and descriptions for each assembly into a spreadsheet, but that's such a manual process it created a lot of errors," Williamson said. "Now with SmarTeam, our BOMs are 100 percent accurate."

RAZORLEAF HELPS AMF LEVERAGE MORE BENEFITS FROM EXISTING TOOL

In time, Williamson hopes to expand AMF's implementation to take advantage of other SmarTeam capabilities, such as workflow to automatically manage change order signoffs, which could cut days out of the design cycle. He also would like to give Manufacturing access to the tool, allowing workers to see complex assemblies in 3D rather than working from a printout that may be out of date.

"Razorleaf has really listened to where I think the software should take QubicaAMF and has offered their advice on how to get there," Williamson says. As project scopes have changed, he said, Razorleaf's representatives have been responsive, revising their quotes to help the company meet its new objectives.

With the help of Razorleaf and SmarTeam, AMF was able to cut significant time out of its product development process by being able to locate the right parts faster and getting new products out faster. "The more lag time we can cut, the easier it will be to hit our target dates," Williamson said. "We help our bottom line when we get new products out on time, and with Razorleaf's assistance SmarTeam now helps us do that." ■



Case Study

ABOUT RAZORLEAF

Razorleaf is a services provider that helps companies become market leaders through the measured application of technology and best practices to existing business processes.

Razorleaf specializes in process analysis, implementation, training and support of enterprise technologies including Design Automation (DA), Enterprise Portal (SharePoint), Product Data Management/Technical Data Management (PDM/TDM), and Product Lifecycle Management (PLM) solutions.

With over 100 active customers and more than 200 implementations, our experienced team offers expertise in leading software from Oracle, Autodesk, Conisio, Dassault Systemes, DriveWorks, Microsoft, PTC, RuleStream and ShareVis. The company is headquartered in Ohio with satellite offices in Arizona, Florida, Georgia, Maryland, Michigan, Minnesota, New York, North Carolina, Pennsylvania, Texas, Virginia, and Wisconsin.

For more information about working with Razorleaf, [contact us here](#) or call us at 330-676-0022.