



# OES Decreased Time to Market with Autodesk Product Design & Manufacturing Collection

## About the Organization

Headquartered in London, Ontario, Canada, [OES Inc.](#) is an electronic engineering and manufacturing services company that has earned the role of trusted advisor with customers across multiple markets and industries worldwide over the past 40+ years. OES employees are creative thinkers and problem solvers who embrace four Fs—Fast, Focused, Flexible, and Finish—to deliver outstanding customer service every day.



## The Challenge

OES Scoreboards, one of the three divisions of OES, develops LED video displays and scoring and timing solutions for amateur and professional leagues; their technology is in 40 percent of the venues used by NFL, NBA, NHL, and NCAA teams.

“As a company that constantly raises the bar on creative solutions for customers, we have always stayed on top of technology advancements that could help us transform new ideas into innovative, quality-tested products,” said Chris Milne, Mechanical Engineering Technologist, OES. “We were successfully using Autodesk AutoCAD and Inventor for years and heard that the Autodesk Product Design & Manufacturing (PD&M) collection, an integrated set of professional-grade applications, offered extended capabilities that might interest us. We decided to investigate if the collection was right for our company.”

## The Solution

Having trusted IMAGINiT Technologies with their Autodesk software, training, and support needs for years, OES connected with their account manager. They discussed the capabilities of the tools in the PD&M collection and how they could help OES achieve current and future goals of driving innovation and improving productivity.

Because the PD&M collection provides access to several valuable Inventor add-ins such as Inventor Nesting, Inventor Tolerance Analysis, and Inventor Nastran (a stress analysis software originally developed by NASA under US government funding for the aerospace industry) that could greatly benefit OES’s product design process, IMAGINiT highly recommended the move to the PD&M collection.

PD&M collection benefits to OES:

- Enhanced productivity through additional manufacturing-focused software that improves the design process, automates busywork, and supports collaboration
- Decreased time to market with the included Inventor add-ins that help with tolerance analysis, simulation, and product layout
- Reduced manual processes with automation that utilizes custom script building with Autodesk iLogic
- Time savings by simplifying the license management process
- Cost savings by bundling the software they use daily

OES decided to move forward with the PD&M collection and partnered with IMAGINIT for implementation services, training on the new Inventor tools, and ongoing support.

## The Results

With the move to the Autodesk PD&M collection, OES is leveraging the new tools to help streamline processes, improve accuracy, and deliver products that meet and exceed customer expectations. They have also reduced the time spent on software procurement and licensing management.

Here are some ways OES has benefited from using the tools:

- **Decreased Time-to-Market by Automating Repetitive Tasks**  
OES has automated 80 percent of repetitive day-to-day tasks by creating custom scripts using iLogic, dramatically increasing productivity.
- **Reduced Rework by Validating Designs Before Manufacturing**  
To test the manufacturability and stability of the large structures that hold the LED video screens, OES engineers and technicians use Inventor Nastran. "With Nastran, we test the materials to ensure that horizontal beams don't sag under the weight of the video screens and that they can handle heavy winds without bowing," said Chris. "A stable screen not only improves safety, it also delivers a better visual experience."
- **Improved Productivity by Bringing Work Back in House**  
Before using Autodesk Inventor Nesting, which optimizes yield from flat materials, OES outsourced the work to a third-party fabrication shop. "We wanted to bring the work back to our engineering department, so we could have more control, see quantities more easily, and make updates as needed," said Chris.  
  
Now, with Inventor Nesting, the OES team creates the cutting paths and sends them to the fab shop. "It's not a problem that the shop uses a different program, because the two programs talk to each other," said Chris. "This process increased our productivity as well as the productivity of the fab shop; their employees who used to work on nesting are now free to focus on other activities."

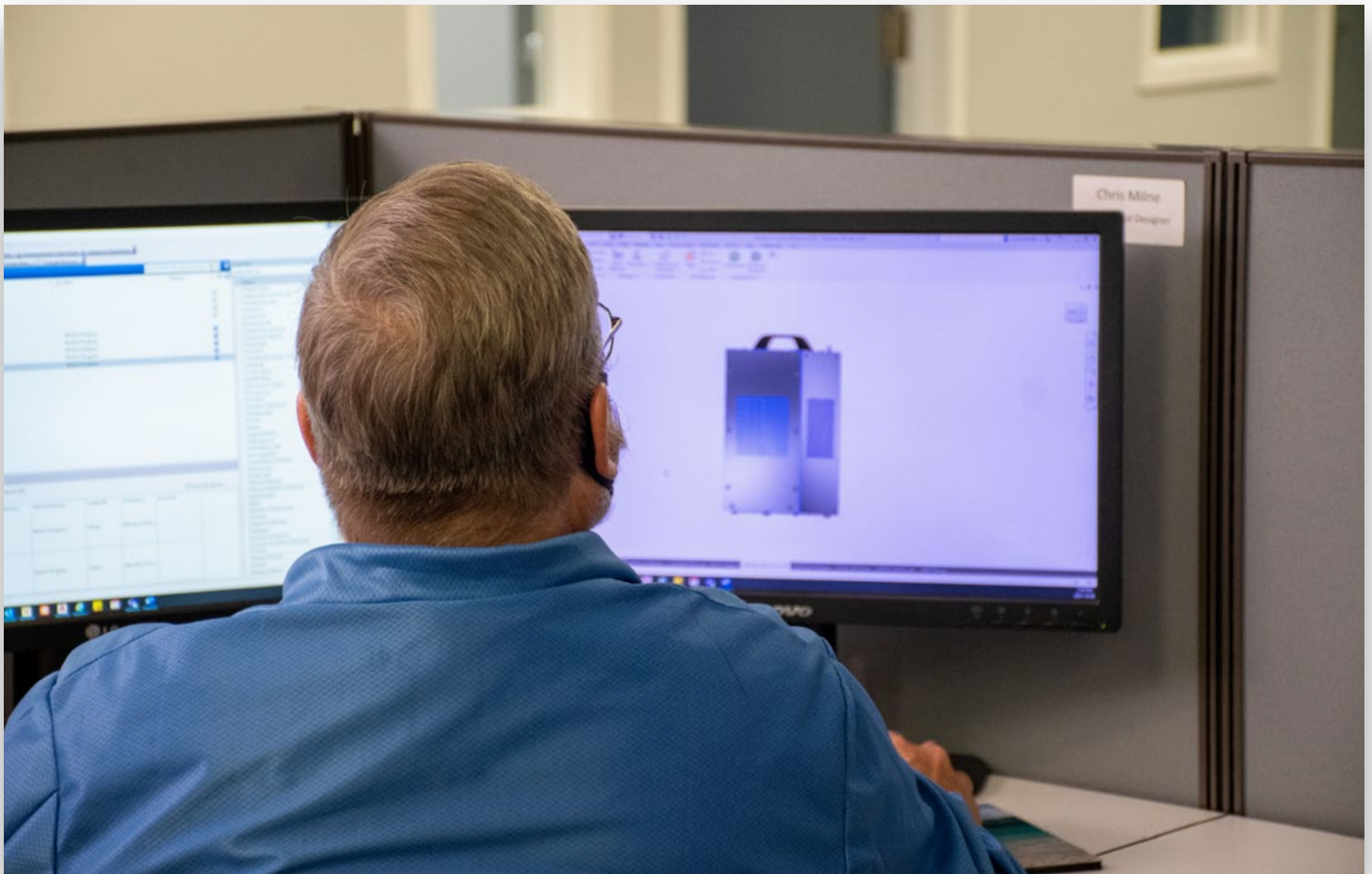
## Additional Benefits Anticipated

"One of the remarkable things about the PD&M collection is that we have popular manufacturing tools right at our fingertips," said Chris. "As we continue to develop innovative solutions for our clients, we will not need to search for the best technology. We have it. And we can count on IMAGINiT to provide the training and support we need to use it effectively."

"In addition, in alignment with our goal of staying aware of emerging technologies, OES recently engaged IMAGINiT in a Strategic Process Review to evaluate next-generation automation and online customer-facing design and order tools," said Chris.

## Contact Us

To start a discussion about how technology can help you reach your current and long-term goals, [contact us](#).



## Solutions Beyond Software

IMAGINiT Technologies, a division of Rand Worldwide, helps architects and engineers become more proficient in the use of 3D technologies to design, develop and manage complex engineering projects faster and more cost-effectively.