

WHITEPOINT OPTICS ADVANCING CINEMATIC DIGITAL CAMERA LENS DEVELOPMENT WITH 3DEXPERIENCE WORKS SOLUTIONS

Case Study



Whitepoint Optics added **3DEXPERIENCE** Works data management and collaboration solutions to its SOLIDWORKS design installation to accelerate development of its advanced, full-frame, full-format lenses for 4K digital movie production and contend with lockdowns associated with the COVID-19 pandemic.

Challenge:

Accelerate and streamline cine lens design cycles by improving collaboration, data management, and the ability to quickly scale up development resources.

Solution:

Add data management and collaboration solutions from the **3DEXPERIENCE Works** portfolio—including Collaborative Designer for SOLIDWORKS, Collaborative Industry Innovator, and Collaborative Business Innovator—to its existing SOLIDWORKS installation.

Results:

- Doubled annual revenue in 2022
- Cut development cycles by three to six months
- Reduced delivery times by four months
- Eliminated revision errors and failed orders

Whitepoint Optics—one of the first lens manufacturers to produce a full-frame, full-format lens and sensor to support 4K digital production—is a company that fuses technological innovation with a strong artistic background. The company was founded in 2017 in Helsinki, Finland, and shortly thereafter, award-winning cinematographer Peter Flinckenberg joined the team. The founders have over 50 years of experience in optical solutions and postproduction, and Whitepoint Optics has supplied high-quality cinema (cine) lenses and lens re housings to the motion picture industry since its inception.

The company's unique combination of experience provides Whitepoint Optics with the insights needed to innovate in the rapidly emerging professional cinema tool market, with the goal of remaining at the forefront of modern cine lens development, from both artistic and technological perspectives. While the company was initially founded to support the lens needs of its affiliated cinema production company, it has grown quickly over the years, partly because of the Netflix requirement that all production will stream in 4K, requiring new digital cameras, lenses, and sensors, according to Chief Technology Officer Timo Alatalkkari.

"When Whitepoint Optics was founded, Netflix and other streaming companies instituted a standard requiring that all productions stream at 4K resolution," Alatalkkari recalls. "However, the biggest camera company at the time only offered cameras/lenses that supported 3K, which created a right-time, right-place opportunity for us to develop our first product. Our TS70/HS series of lenses was one of the first lenses with full-frame, full-format sensors to support this standard. Since then, we've added the TS80, a faster lens,

and additional high-quality lenses to support high-resolution digital cinema. Although we were one of the first lens manufacturers to offer products that meet the 4K resolution requirement, others soon followed, challenging us to ramp up our product development effort to maintain our position in a rapidly evolving market."

Even though Whitepoint Optics used AutoCAD® 2D design software to develop its first lens product, management realized in 2018 that the company would need to accelerate and streamline product development by moving to 3D design in order to expand the company's product line and continue to grow. After evaluating available 3D solutions, Whitepoint Optics implemented SOLIDWORKS® 3D CAD software because it is easy to use and makes product development faster and more accurate. "It really opened my eyes when I saw how easy and fast it is to use SOLIDWORKS," Alatalkkari recounts. "I immediately realized that SOLIDWORKS is design software instead of drawing software, and also provides the opportunity to scale up capabilities by tapping the power of the cloud-based **3DEXPERIENCE®** platform with **3DEXPERIENCE Works**."



"Connecting SOLIDWORKS to the cloud with the 3DEXPERIENCE Works portfolio allows us to scale up while the company grows at an extremely rapid rate ... 3DEXPERIENCE Works solutions are helping us grow because SOLIDWORKS is easy to use and the cloud-based 3DEXPERIENCE platform improves our organization's access to vital product information."

— Timo Alatalkkari, Chief Technology Officer

That opportunity came in 2021, when the need to share and manage data more effectively amidst lockdowns associated with the COVID-19 pandemic prompted Whitepoint Optics to add data management and collaboration solutions in the **3DEXPERIENCE Works** portfolio—including Collaborative Designer for SOLIDWORKS, Collaborative Industry Innovator, and Collaborative Business Innovator—to its existing SOLIDWORKS installation. "During the COVID time when we were shut down, it was super easy to design, share models, and collaborate using the data management and collaboration solutions in the **3DEXPERIENCE Works** portfolio," Alatalkkari notes. "In a word, **3DEXPERIENCE** is just marvelous."

CLOUD-BASED COLLABORATION SAVES TIME

Connecting SOLIDWORKS design tools to the cloud for collaboration and data management with **3DEXPERIENCE** Works solutions, Whitepoint Optics has accelerated and streamlined its product development process, cutting its product design cycles by three to six months. And while **3DEXPERIENCE** Works data management tools have been critically important for maintaining revision control, Alatakkari says collaboration via the cloud has been the key to the company's success.

"Collaboration is the most important aspect of our development process—where we can tap the creativity and innovation of our entire team—and the **3DEXPERIENCE** Works portfolio makes collaboration very easy," Alatakkari stresses. "Whether our team members want to work in the office or at home, or are forced to work from home due to COVID lockdowns, they now have the tools to continue working regardless of their location, allowing us to continue to meet our product development goals."

ELIMINATING REVISION ERRORS, SHORTENING LEAD TIMES

With the shorter design cycles and tighter revision controls afforded by **3DEXPERIENCE** Works collaboration and data management solutions, Whitepoint Optics has completely eliminated revision errors and the resulting failed orders while simultaneously cutting delivery lead times by four months. "Before we implemented the collaboration and data management solutions in the **3DEXPERIENCE** Works portfolio, we would at times have revision errors that produced failed orders, leading to unnecessary costs and customer dissatisfaction," Alatakkari explains.

"We also had longer delivery lead times than competitors before tightening our revision controls with **3DEXPERIENCE** Works solutions," Alatakkari continues. "Normal lead times in our industry are one year, and our lead times prior to connecting SOLIDWORKS to the cloud with **3DEXPERIENCE** Works solutions were about 14 to 18 months. We now deliver product in 10 to 11 months, giving us a competitive edge."

Focus on Whitepoint Optics
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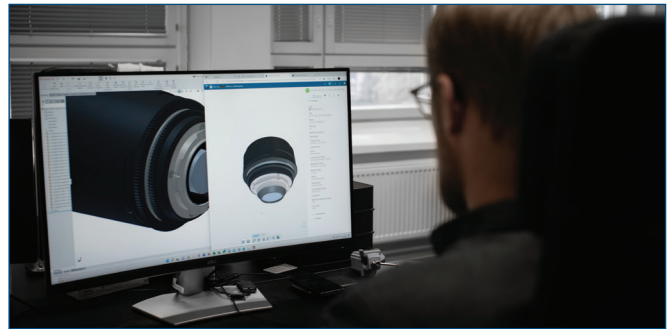
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SCALABILITY IN CLOUD SUPPORTS GROWTH

In addition to accelerating and streamlining product development, the addition of **3DEXPERIENCE** Works solutions is helping Whitepoint Optics scale up its design resources and capabilities while the company experiences explosive growth. "Connecting SOLIDWORKS to the cloud with the **3DEXPERIENCE** Works portfolio allows us to scale up while the company grows at an extremely rapid rate," Alatakkari points out.

"Our revenue in 2022 has doubled over 2021 because we design quickly to meet the strong demand for our products in the marketplace," Alatakkari adds. "**3DEXPERIENCE** Works solutions are helping us grow because SOLIDWORKS is easy to use and the cloud-based **3DEXPERIENCE** platform improves our organization's access to vital product information. Because of this, we can bring people on and add capabilities very quickly, and can even invite clients to access the platform to improve communication with customers."



Using **3DEXPERIENCE** Works collaboration and data management solutions, Whitepoint Optics has shortened its design cycles and delivery lead times by months, helping the lens manufacturer double its revenue in 2022.

Our **3DEXPERIENCE**® platform powers our brand applications, serving 11 industries, and provides a rich portfolio of industry solution experiences.

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