

PTC Acquires Frustum

CIMdata Highlight

On November 20, 2018, PTC announced it had acquired Frustum, Inc., an advanced generative design software company for approximately US\$70 million. Frustum develops and markets Generate, a generative design product that employs artificial intelligence (AI) to guide design solutions. PTC President and CEO, Jim Hepplemann, publicized the acquisition to an audience of industry and financial analysts in a hastily called press conference, to say that the Frustum solution would be embedded within Creo, PTC's flagship CAD solution, in the coming year. This announcement was a bit of a surprise, since Siemens PLM Software has worked with Frustum as part of their Frontier partner program since 2016.¹ and in 2017 announced the integration of Frustum into Siemens' NX 3D mechanical CAD solution.²

Frustum is based in Boulder, Colorado, and offers their Generate product as a desktop and cloud-based solution. It relies on their patented generative engine, TrueSOLID, that can blend complex structures like lattices with traditional CAD geometry. The company was already catching the eye of CIMdata analysts with their strong AI capabilities that help guide and assist designers in creating innovative product solutions. CIMdata sees this acquisition as a win-win move by PTC that will add to Creo's competitive advantages and empower their users with advanced technology approaches to product design. In the Q&A session Mr. Hepplemann was asked about existing Frustum relationships and could only say the future was a subject of negotiation.

Mr. Hepplemann noted that in the future Creo will be able to provide its users with a Generate→Iterate→Validate approach to product design, where the Generate portion of the process leverages the Frustum AI-driven technology to offer users varied design solution directions. Once the user selects an approach, the previously announced ANSYS Discovery Live solution embedded within Creo can provide real-time simulation feedback to designers as they iterate on the product model. Then finally, the full range of ANSYS Discovery AIM simulation tools can Validate the final design. CIMdata applauds the PTC strategy that takes Creo's impressive geometric modeling software and combines it with industry leading AI and simulation software to deliver an impressive toolkit for product designers. The first commercial products will emerge in Creo 7 in CY 2019, with PTC not expecting a bump in revenues until CY 2020. Before then current users and prospects will certainly be enticed by this interesting combination of Creo, Frustum, and ANSYS that Mr. Hepplemann believes is the "first disruption in CAD in 30 years." CIMdata looks forward to seeing what the market decides.

About CIMdata

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¹ <https://www.businesswire.com/news/home/20160623005840/en/Siemens-Expands-Frontier-Partner-Program>

² <https://globenewswire.com/news-release/2017/03/27/1060448/0/en/Functional-Generative-Design-Innovator-Frustum-Inc-Partners-with-Siemens-to-Increase-Design-Innovation-for-Additive-Manufacturing.html>

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