Morphosis Architects needed to manage the complexity of its designs and reinforce collaboration with clients and contractors.

Solution
The company adopted Dassault Systèmes’ 3DEXPERIENCE Platform and used the CATIA Digital Project Application for architecture, engineering and construction design and project management.

Benefits
Designers have a flexible and powerful solution that encourages artistic freedom, preserves intellectual property and improves collaboration.

Morphosis Architects uses Dassault Systèmes 3DEXPERIENCE Platform for design and project management, in particular, Digital Project, a powerful suite of 3D Building Information Modeling (BIM) applications based on CATIA as its core modeling engine. “We won our bid to design the Phare Tower in Paris’ La Defense region in 2006. 3DEXPERIENCE technology was instrumental in helping us model the structure’s complex geometry and to rapidly implement design changes, thanks to its parametric capabilities,” Harris explained. “It avoided having to remodel every time changes needed to be made. We were also impressed with its flexibility since we can use it in a variety of ways, depending on the situation and project requirements. Another key value of the Platform is that it is an enabler for collaboration and coordination. We are able to better communicate our ideas with consultants and contractors and to coordinate our projects with more accuracy,” Harris said.

An architectural project is a journey and throughout this journey, we are able to tie everything together using the 3DEXPERIENCE technology to show our customers the future. It inspires trust.

Kerenza Harris, Architect, Morphosis Architects
For the Dallas Museum of Nature and Science, Morphosis designed the complex façade as well as its optimized fabrication logic. The precast contractor had doubts as to whether they could successfully see this through to completion. “So I took the Digital Project model that I had and I walked them through it, showing them how the model, complete with the precasting method logics, was organized in detail,” Harris said. “In that one hour session, their doubts were literally swept away and they walked away confident. That demonstration turned it around for everybody,” she said.

From the earliest phases of design
Kerenza sees unique opportunities for the 3DS applications and a way to differentiate Morphosis Architects from its competitors. “As a young architect working in another company, I was astonished to see how limited that firm’s use of Digital Project was,” she said. “It was essentially used in the construction documentation phases of a project. When I joined Morphosis Architects, I advocated using this application in the earliest phases of design, which was not habitually done. I strongly believe that its parametric capabilities can be used in the schematic phases of a design. It enhances creativity and enables us to capitalize all project information from the very beginning,” she said. “The advantage is that we create a history, a workflow. We can document the artistic process from the very beginning—starting from the initially sketched curves and lines of a building. Our intellectual property is capitalized. With 3DEXPERIENCE, we can be free as artists and rigorous as architects as well,” Harris said.

The technology instills a sense of trust in Morphosis’ customers, which is an essential component of any architect-client relationship.

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How do Morphosis Architects describe their experience working with the 3DEXPERIENCE Platform? “We work long hours at Morphosis. We are a very dynamic company. When our designers realize that what used to take them dozens of hours to create now only takes a few hours thanks to embedded intelligence and design history, they wish they had used the Platform from the start. But that was another time,” she concluded.

Focus on Morphosis Architects
Founded in 1972, Morphosis Architects is an interdisciplinary practice involved in rigorous design and research that yields innovative, iconic buildings and urban environments.

Products: Residential, institutional, civic buildings, and large urban planning projects
Employees: 50
Headquarters: Los Angeles, CA
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