3DEXPERIENCE® Works

INNOVATE WITHOUT LIMITS: THE NEXT GENERATION OF PRODUCT DEVELOPMENT

Delivering continuous innovation with a cloud-based platform

DASSAULT SYSTEMES

INTRODUCTION

In many successful product development organizations, the top priority is innovation. However, a single innovative success is not enough. Organizations must continuously deliver to maintain a competitive advantage and drive business growth. Leading companies put innovation first, with the agility to react to changing customer demands. That's what makes them competitive in the long term.

Enabling teams to deliver higher levels of creativity and innovate without limits necessitates reimagining the product development process around a single product definition. This approach requires every contributor and stakeholder from design, engineering, simulation, and manufacturing disciplines to have access to real-time information with efficient and effective collaboration processes throughout all stages of the product development process.

CHAPTER 1:
INNOVATE CONTINUOUSLY

Achieving continuous innovation is no small task. Successful product development organizations are looking for solutions that enable the extended enterprise to participate through greater agility and collaboration. One way to achieve this is to adopt a cloud-based innovation platform that enables product development organizations to innovate continuously—faster, smarter, better—as one.

Such a platform unites all the people, data, and applications needed to take products from idea to delivery in a single, unified, collaborative environment. It provides product development teams access to the up-to-date product information they need to contribute to the product development process and ensure feasibility at every stage.

CHAPTER 2:
ELIMINATE SILOS AND "OVER THE WALL" BEHAVIOR

Companywide collaboration is often limited by corporate structures that create functional unit silos. Leadership plays an important role in changing this structure and mindset by championing coordinated technology solutions across the business. A collaborative platform approach breaks down physical and digital silos, enabling more effective cross-team collaboration. Collaboration happens in real time, with one closed-loop continuous innovation process to move product development efficiently from concept to reality. All stakeholders can access design information in real time, online with no need to download files that become unsecure or outdated.

An innovation platform eliminates silos between the disparate departments involved in moving a product from design to manufacturing by providing a secure, common infrastructure with advanced 3D modeling, simulation, data science and collaboration capabilities. A platform approach supports the continuous exchange of information among all product development stakeholders, providing them immediate access to the latest data whenever and wherever they need it.

When product design is centralized around a single, consolidated view of the product definition, teams are able to seamlessly exchange ideas and achieve better results. Real-time design collaboration supports the ability for everyone in the organization to participate in the product development process from any location and any device. The platform also provides access to a comprehensive collection of role-specific applications supporting both social and structured collaboration.

CHAPTER 3:
REDUCE NON-VALUE-ADDED TASKS AND IMPROVE EFFICIENCIES

Reducing non-value-added tasks and inefficiencies is a critical step required for removing barriers to innovation. Much of the inefficiency at the heart of product development comes from file-based systems and poor collaboration. Lost and duplicated files are an enormous drain on time and resources. Moreover, a file-based approach allows only one user to work on the file at a time, leading to time-consuming and inefficient design iteration. A Tech-Clarity study (Clarity, 2020) found that the major cause of delayed time to market is poor team collaboration. The research shows poor collaboration also leads to higher costs, quality problems, and missing market requirements.

With a platform approach, data is secure and current. All stakeholders can collaborate on projects simultaneously, working on the same entity from day one. Teams no longer need to swap files, documents, or emails, since all materials are available in a central location. As a result, each individual and the team as a whole benefit from an efficient exchange of knowledge, continuous capitalization of know-how, constant learning, and agile execution, driven by the desired outcome and the expected customer experience. The entire product development process can be executed on the platform without any handoffs.

5

LEVERAGE YOUR EXISTING INVESTMENTS

A platform approach modernizes your existing product development process, making it easier and less costly to experiment and innovate. Project leaders have clear visibility of real-time project changes, tasks, relevant documents, and data, to gain a clearer view of project statuses, resources, and timelines, allowing resources to be allocated more effectively.

Sophisticated cloud-based project management capabilities support effective collaboration to build, orchestrate, and execute successful plans, even for cross-discipline and dispersed teams. Continuous optimization, real-time progress tracking, and compliance with standards and regulations guide the discovery, analysis, and problem-solving required to achieve operational excellence.

With an innovation platform, companies can also leverage simulation-based virtual twin experiences to extend and improve the real world, imagining and delivering great customer experiences and sustainable innovation.

Conventionally, when people leave, knowledge is lost. With a cloud-based innovation platform, your experts' know-how is captured on the platform, making it easy for new and existing employees to share best practices. Being able to have all project and product data connected on the same platform enables the buildup of successful methodologies, allowing knowledge and know-how to grow and be reused in the future. It fosters teamwork, sharpens the focus of individual employees, and makes it easier for everyone to move towards collective goals as one. In this environment, creativity

thrives, and employees' satisfaction and retention can reach optimal levels. This also reduces ramp-up and training time. Each and every team member contributes efficiently and in context to this continuous innovation process.

CHAPTER 5:
MAKE BETTER DECISIONS BASED ON REAL-TIME INFORMATION

Organizations and product development departments have so much data—countless CAD/CAE/CAM files, emails, PDFs, spreadsheets, customer feedback—but it is often unorganized and not actionable. A platform approach adds transparency to the development process, turning data into business insights.

When project scenarios change—moving deadlines, supply chain adjustments, cost increases—everyone has the visibility to work together to effectively navigate these challenges. Individual development tasks are linked to a bigger picture that is accurate from both product engineering and business operations standpoints, enabling the organization to become more agile and focused. This applies to products, services, and underlying processes.

Full end-to-end visibility of product development information and insights makes it easier for product development leaders to accelerate and enhance business decision-making based on actual, real-time information. It helps move strategic project analytics off spreadsheets and onto a shared platform that is deeply integrated with ongoing project data to deliver compelling products and experiences more efficiently.
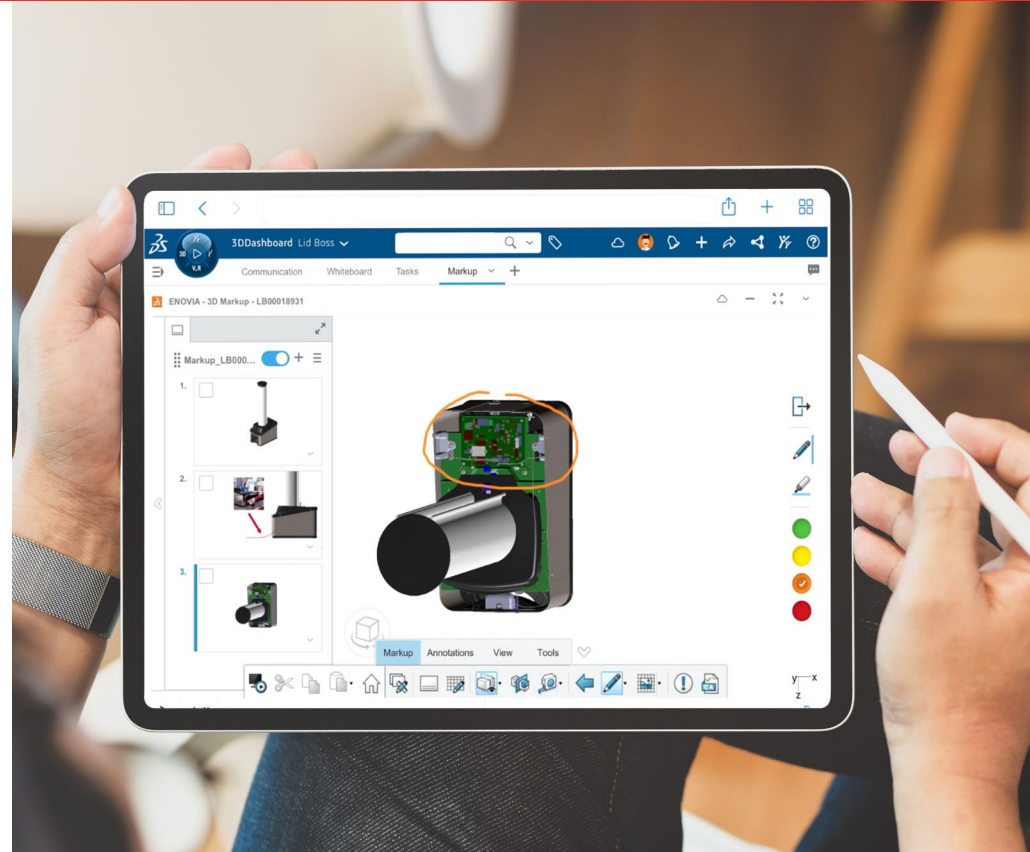
CHAPTER 6:
EXPERIENCE THE PLATFORM PURPOSE-BUILT FOR PRODUCT DEVELOPMENT

3DEXPERIENCE® Works is the only product innovation portfolio purpose-built for product development. It leverages the cloud-based **3D**EXPERIENCE platform to provide a single, unified, collaborative environment, enabling everyone involved in product development to contribute to the innovation process. This translates to radically more effective teams.

The **3D**EXPERIENCE platform eliminates the need for manual data collection and coordination across various systems. The platform can reduce spending on non-value-added time by up to 25 to 30 percent, allowing engineering teams additional capacity to focus on value-added tasks. That often results in faster time to market. For example, after adopting **3D**EXPERIENCE Works tools, Konica Minolta cut its product development cycles by 25 percent by automating data management, eliminating rework, and using **3D**EXPERIENCE platform as their communications channel.

The **3D**EXPERIENCE platform singularly provides in one place what other technologies offer in a disconnected way, moving product development teams to an integrated experience, connecting people, ideas, and data in a single environment with a real-time view of the business activity and ecosystem to efficiently drive successful results. Why is the **3D**EXPERIENCE platform unique? No other platform integrates industry-leading 3D modeling and simulation technologies with embedded data science services, enabling an enterprise to understand, decide, learn, capitalize, and normalize its knowledge and know-how, using business experiences and methods.

3DEXPERIENCE Works provides additional value for SOLIDWORKS® customers that are interested in augmenting their current SOLIDWORKS investment with additional capabilities to increase efficiencies, facilitate collaboration, foster innovation, and cut time to market.

SUMMARY

3DEXPERIENCE Works helps product development leaders modernize product development and expand future-ready capabilities. The **3D**EXPERIENCE platform connects every participant in the value network, creating an agile network to design and optimize multidisciplinary, complex products and systems. It enables higher levels of creativity, increasing the number of fruitful interactions, and improving the speed and volume of value flowing to innovate in entirely new ways. Delivering innovation sustainably ensures new opportunities, profitability, and long-term company outlook.
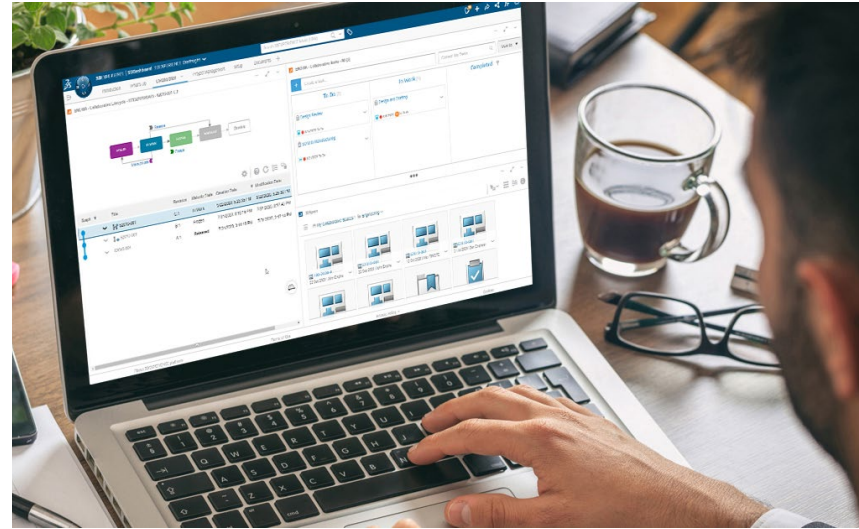
Leverage the power of **3D**EXPERIENCE Works to lead the next generation of product development.
To learn more, visit www.3dexperienceworks.com or
contact your local SOLIDWORKS reseller.

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

Dassault Systèmes, the **3D**EXPERIENCE Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating 'virtual experience twins' of the real world with our **3D**EXPERIENCE platform and applications, our customers push the boundaries of innovation, learning and production.

Dassault Systèmes' 20,000 employees are bringing value to more than 270,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit **www.3ds.com**.

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