HOW COLLABORATION CAN BOOST
ROI FOR SUPPLIERS

3DEXPERIENCE®on the cloud

vias**3D**

35 DASSAULT SYSTEMES

The world is emerging from one of the most chaotic and unpredictable years in recent history. If anything, the past year has shown how fragile and easily disrupted global supply chains really are. The pandemic has demonstrated that demand doesn't just ebb and flow during a prolonged crisis, but that it adapts.

Industry suppliers face a unique challenge in this new era. Digital collaboration has become the focal point of the product development lifecycle. But collaboration can be a double-edged sword. On the one hand, suppliers need to collaborate with their clients and partners in order to meet deliverables; on the other hand, they have to protect their intellectual property (IP) and business interests. While suppliers want to control their services and deliverables, today's world demands a deeper level of collaboration than what some suppliers may be accustomed to.

Fortunately, this is not a trade-off suppliers need to consider. Thanks to an efficient cloud-based solution, suppliers can achieve a high level of collaboration without jeopardizing any part of their services or IP. Moreover, deploying such a cloud-based technology, suppliers can accelerate deliveries, improve the quality of their work, and ultimately realize higher return on investment on their relationships with OEMs.

The **3DEXPERIENCE** platform on the cloud provides a single global environment that centralizes the entire product development process, ensuring suppliers' supply chains have the agility and resilience they need to handle unpredictability.

3DEXPERIENCE on the cloud helps suppliers collaborate with OEMs in a centralized cloud-based environment that delivers optimized resources management.

Managing product development on **3D**EXPERIENCE guarantees:

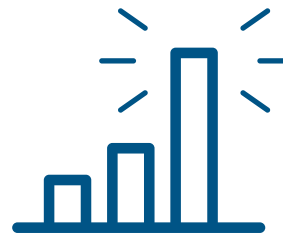|	
WHO	Suppliers and OEMs anywhere in the world.
WHAT	An industry-leading solution accessible from the cloud that **provides a comprehensive suite of tools to transform the product development and product processes**, including design & engineering, manufacturing & production, simulation, governance & collaboration.
HOW	Using centralized data and communication, workflow management, and real-time development processes, **3D**EXPERIENCE **increases collaboration, improves execution efficiency, and accelerates innovation.**

Higher quality products and production rates

Better teamwork and collaboration with suppliers

On-time deliveries

Cost reductions

SUPPLY CHAIN CHALLENGES

Working collaboratively is not only essential to the product development process, it's key to achieving better businesses outcomes. Deeper integration with supply chain partners and working together to optimize workflows can deliver critical competitive advantages for both OEMs and suppliers.[1]

However, suppliers frequently face a number of challenges when working with OEM partners. Communication roadblocks, data security and IP issues, and problems with task assignment and management are just a few of the obstacles that inhibit successful collaboration.

When true collaboration isn't built into product development processes, suppliers will likely experience:

- **LOST TIME**: Difficulties finding the right data for a given task, constantly alternating between platforms, missing deadlines, production delays etc.
- **TEAM FRUSTRATION**: Stakeholders don't receive information or feedback in a timely manner, ineffective communication results in misunderstandings and late changes.
- **DEVELOPMENT PROCESS ISSUES**: Without transparent processes and change tracking, downstream errors are often discovered too late, causing costly delays.
- **INSECURE USE OF DATA**: Both OEMs and suppliers need to communicate and exchange data securely, while also controlling access to designs and deliverables.

To overcome these challenges, suppliers need to achieve more efficient engagement with their OEMs.

Following are several strategies designed to facilitate collaboration throughout the product development lifecycle that will ultimately help suppliers deliver higher quality work and achieve higher ROI from their relationships.

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HOW TO OPTIMIZE OEM-SUPPLIER COLLABORATION

If the objective for suppliers is to deliver the highest quality work without exposing themselves to risk, suppliers need to find ways to productively collaborate with OEMs. Yet, a key roadblock here is using different product development technologies.

A key roadblock to efficient collaboration occurs when OEMs and suppliers use different development platforms, frequently resulting in:

- Lack of real-time collaboration
- Incompatible file types
- Missing or difficulty finding project-relevant data
- Weak IP protection and potential data breaches
- Inefficient issue management
- Deficient communication

Instead of relying on a multitude of digital tools to address each of these, suppliers should select a single digital platform that seamlessly facilitates collaboration at every product development lifecycle phase. Obstacles preventing collaboration are far easier to overcome when all parties use a centralized digital platform to work in a concerted manner and share knowledge throughout the design and engineering process.

For Suppliers, using the 3DEXPERIENCE platform is a cost-effective way to work with their largest clients.

Simple: A unified view of each project optimizes manufacturing processes. Teams can work together and follow product development at any stage, with no additional costs for accessing an OEM 's project.needed.

Efficient: Cross-team collaboration allows suppliers to replace high-cost physical mock-ups with virtual prototyping.

Secure: Suppliers have full control over their data and can assign partners granular access to restricted parts of the project as needed.

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IMPROVE DATA PROTECTION AND ACCESS

The cornerstone to productive collaboration is information sharing. However, sharing information can be complicated throughout the product development lifecycle, particularly when there are multiple stakeholders working on the same design.

Suppliers are often highly protective of their IP. After all, they spend significant resources to meet OEM partners' expectations and deliver high-quality work. They need to ensure that OEM partners and other suppliers are not able to poach their work. Protecting their IP is central to a supplier's business model, enabling them to control the flow of deliverables as well as apply designs to projects across their client base.

At the same time, suppliers require product and contextual information and data in order to accurately produce deliverables.
To that end, it's essential for a cloud-based solution to meet strict security standards while also promoting collaboration. The solution must provide:

- End-to-end encryption across the entire platform
- 24-hour monitoring for intrusions
- Granular file permissions for collaborators across different organizations

This last point is particularly important for protecting IP. Granular file permissions enable suppliers to more deeply integrate with their OEM partners without exposing them to unnecessary risks inherent in collaboration.

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SIMPLIFY DESIGN REVIEW

Design review processes can easily become convoluted, particularly when suppliers and OEMs are working on different platforms. Suppliers need feedback and comments from OEM partners who must vet and approve designs, but this can quickly become a bottleneck, preventing forward progress. It's essential for suppliers and OEMs to fluidly communicate about projects, particularly during reviews so that suppliers can respond to feedback in a timely and accurate manner.

When suppliers and OEMs work in different production environments, integrating feedback and maintaining version control is key to reducing design time, increasing product quality, and delivering throughout the design lifecycle.

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To facilitate collaboration and make the design review process smoother, the collaboration platform should include:

- A full suite of design tools for every need, including 3D sketching, subdivision surface, direct and parametric modeling to generative design, sheet metal and reverse engineering and more.
- A built-in, intuitive review process. Suppliers need to be able to invite OEMs and other stakeholders directly into their cloud-based environment in order to review and comment.
- A secured environment where suppliers and OEMs can safely share and exchange data.

Consolidating the design review process into a workflow that's native to a shared platform can dramatically reduce miscommunication while also speeding up the entire review process. Ultimately, this approach will empower suppliers to produce high-quality deliverables in less time.

IMPROVE TASK ASSIGNMENTS & CONTENT SHARING CONTROL

Product development projects often encounter delays due to disorganized content, data, and task assignments that prolong the entire development cycle. Indeed, delays are extremely costly, with approximately 43 percent of all projects failing to deliver on budget.[1]

To address this, suppliers need a robust project management platform which features:

- Clear task creation and assignments
- Date and milestone tracking
- Granular content sharing
- Simultaneous management of workflows, changes, and issues
- Automatic capture of product changes
- Real-time reviews, updates, and approvals

Ultimately, a project management platform will improve communication between all stakeholders, helping project directors gain a comprehensive view of planning and execution in order to make better decisions. Additionally, by integrating native project management and product design features, suppliers using the platform can ensure cost-effective product customization, configuration, and delivery processes.

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1   https://www.pmi.org/about/press-media/press-releases/2018-pulse-of-the-profession-survey

COMMUNICATE BETTER WITH VISUALIZATION

A picture is a worth a thousand words, and nowhere is that truer than in product design processes. Not only is it easier to demonstrate change requests, but clear communication is essential to ensure digital continuity across all value streams.

A high level of communication is required to translate needs into useful feedback for designers, and visual communication tools can illustrate change requests faster, significantly speeding up the entire design process and providing greater agility to help suppliers and OEMs get products to market faster.

Key features of a comprehensive product design solution include:
- Centralized documents, comments, design files, and annotations all help avoid extraneous back and forth communication
- Universally accessible access to design files
- Transparency on modifications and trackable changes
- Ability to work directly on the platform, eliminating the need for separate applications or to transfer the design files
- Drag and drop features to facilitate sharing files, designs, comments, and more
- Design and review notifications to alert team members of issues
- Simultaneous notification for all teams to ensure everyone involved is always aware of any issues

These features create a more transparent development process, saving time and frustration while ensuring issues are addressed in a timely manner before they have larger consequences.

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MANAGE CHANGE ACTION WORKFLOWS

One difficulty suppliers and OEMs often face is clearly defining, communicating, and assigning change actions. Detected issues need to be validated, but that process can take a considerably longer amount of time when suppliers and OEMs are working on separate platforms. In the worst case, this can lead to lower quality designs and products, putting both the supplier's and OEM's businesses at risk.

Centralizing all communications allows suppliers to quickly and easily receive change request notifications. With no need to search for change requests, suppliers can work in the right context with the right level of data at all times, avoiding costly mistakes and slow turnarounds. Additionally, suppliers and OEMs can create ad-hoc workflows that avoid duplication and accelerate innovation and problem solving.

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WORK TOWARDS TRANSPARENCY

Even though suppliers require IP protection throughout the product design process, they also require a certain level of transparency with the OEM. Transparency is essential to safeguard the supplier-OEM relationship, ensuring that each party's input is heard—and valued. It's important for OEMs to have visibility into their suppliers' activities. On the other hand, it's important for suppliers to understand the context they're working in.

A shared cloud platform can integrate transparency directly into workflows, ensuring that:

- Every action taken on the platform is documented
- Stakeholders gain a concise picture of the design process through change tracking
- The right design content is delivered with the right level of data to the right person

3DEXPERIENCE on the cloud creates a **seamless connection between platform and tools** to ensure **digital continuity and total traceability** during the entire product development process.

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CENTRALIZE APPROVALS

Any type of information or action bottleneck can threaten a timely and cost-effective product design process, particularly when change approvals are needed. Too often, requests sit in busy managers' inboxes, holding up the entire design process.

Centralizing approvals directly in a single platform allows for more efficient change request management, accelerating the entire design lifecycle. Approval simplification features that both suppliers and OEMs appreciate include:

- 1-click access to designs pending review
- Personalized approval chains with as many reviewers and approvers as needed
- Instant change identification eliminates the need to search for changes
- Version comparison makes markup clear and detailed

Once approved, users can tag the task as done in the project planner and move on to their next task while the project is advanced automatically.

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CASE STUDY: CONTECHS & THE 3DEXPERIENCE

CONTEXT

Contechs is an automotive design and engineering services provider that helps automotive companies quickly develop new, innovative products and services with advanced technologies like autonomous driving or connectivity.

CHALLENGES

Contechs wanted to bridge the gap with its OEMs and suppliers as they diversify production lines and develop new technologies for the cars of the future.

However, they struggled to manage budgets on expensive projects, which has strained their resources. Additionally, they had to manage a host of complex systems and platforms, which reduced the amount of time they actually spent performing important tasks. They were also concerned about the security of sensitive data. Ultimately, their goal was to strengthen long-term relationships with their OEMs and suppliers.

SOLUTIONS

Contechs deployed the **3DEXPERIENCE** platform to improve their agility and responsiveness throughout the product development processes. This empowered them to:

- Improve collaboration and visibility by eliminating workflow and informational silos
- Save time by adapting existing designs to other purposes, standardizing data, and modularizing concepts
- Bring all digital design tools together into a single platform
- Protect their IP and data, safeguarding client confidentiality in the process

RESULTS

3DEXPERIENCE has become central to Contechs' product development process. Contechs can now work faster, more accurately, and more transparently, with all stakeholders gaining greater visibility into the design process through modular thinking and concepts.

With the **3D**EXPERIENCE platform, Contechs:

- Safely exchanges data with both OEMs and suppliers
- Quickly and easily accesses all the tools needed to complete a project
- Collaborates seamlessly with automotive OEM and suppliers, helping them stay competitive
- Delivers designs faster
- Drives down costs while still producing high-quality products

" The **3D**EXPERIENCE platform allows us to organize ourselves with modular thinking and concepts delivering time compression in the design engineering phase.

Peter Jarvis, Managing Director, Contechs

GROW YOUR ROI WITH 3DEXPERIENCE

3DEXPERIENCE on the cloud is an all-in-one solution that revolutionizes how suppliers collaborate with OEMs throughout the product development lifecycle.

Seamless collaboration in product development ensures suppliers deliver effective solutions, and innovation in an ever-changing networked economy. By using a platform that centralizes the entire process, suppliers can be more collaborative with OEMs, work faster, and ultimately improve the ROI for their work.

3DEXPERIENCE on the cloud is the only digital solution that delivers:

- Easy product development through centralization of people, processes and data
- Productive collaboration through simple and secure communication
- Increased competitiveness through agility and lower costs of platform usage and ownership

By digitizing the product development lifecycle in a cloud-based environment, suppliers can dramatically increase their efficiency, reduce costs, and ultimately deliver higher quality products. Instead of dealing with problems in the process, **3D**EXPERIENCE® on the cloud empowers companies to focus on their core business, ensuring resilience and agility.

Deliver more value and boost your ROI with the **3D**EXPERIENCE cloud platform.

Our objective in VIAS3D is to prevent repetitive design-related business interruption and provide cost effective, quick and safer designs. We can achieve your objective with proven software, data analytics, and virtual hardware technology, which can be implemented for each business requirement with the help of an experienced engineering team.

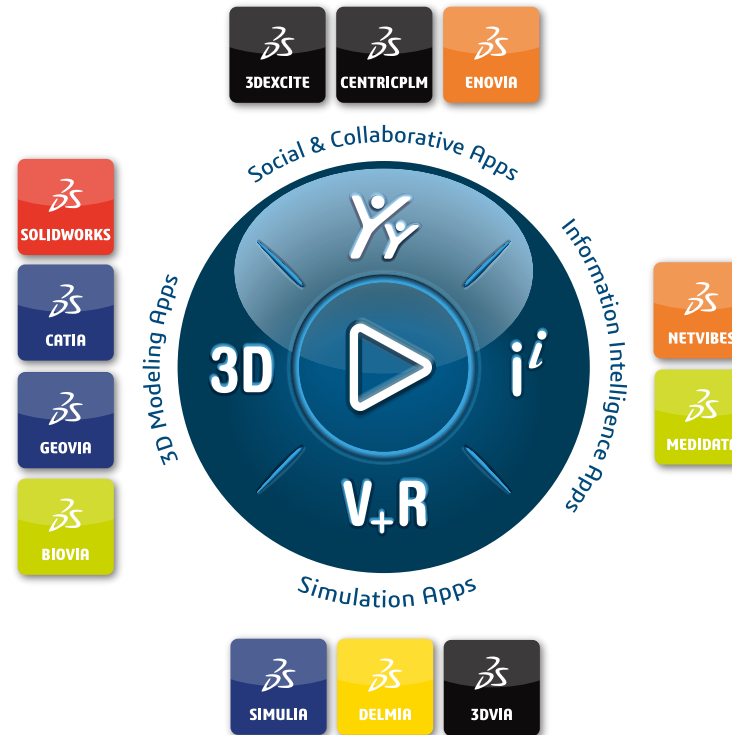Visit www.vias3d.com for more information about our capabilities.

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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