



ENHANCING GLOBAL COLLABORATION BETWEEN OEMS AND SUPPLIERS

with the **3DEXPERIENCE** Platform

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INTRODUCTION

Successful collaboration between Original Equipment Manufacturers (OEMs) and their suppliers is the backbone of modern manufacturing. It is crucial in driving innovation, ensuring operational efficiency and building resilience in an increasingly competitive and volatile global landscape. Approximately 75% of the components in vehicles, industrial machinery and aerospace systems are developed or provided by suppliers, making their cooperation indispensable for OEMs.

At the heart of this ecosystem lies an intricate relationship between OEMs and their suppliers. When done effectively, partnership doesn't simply sustain the flow of goods and services; it catalyzes innovation, operational efficiency and long-term resilience.

Effective collaboration unlocks unprecedented opportunities for both parties to drive faster, more innovative, and more adaptive processes in a rapidly changing global market. Yet, achieving such seamless cooperation is not without its challenges. Lengthy development cycles, inconsistent data exchanges and persistent concerns around data security are just a few hurdles that can hinder progress. Additionally, changes in technology and pressure from economic and regulatory headwinds demand greater agility and trust among partners to ensure success.

This e-book examines the vital role of collaboration between OEMs and suppliers as the cornerstone of a resilient and future-ready supply chain. It offers practical strategies for enhancing these relationships, highlighting the impact of innovative technologies such as ENOVIA and the **3DEXPERIENCE** platform in fostering greater alignment and efficiency. With these insights, companies can gain the actionable knowledge to lead their industries forward.

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CHALLENGES IN OEM-SUPPLIER COLLABORATION

Despite its importance, the relationship between OEMs and suppliers frequently encounters several persistent challenges. These roadblocks slow development progress, increase costs and hinder innovation. Key challenges include misaligned goals, communication barriers, and growing supply chain complexities.

One major hurdle is the misalignment of goals and priorities between OEMs and suppliers. While OEMs often prioritize innovation and speed-to-market, suppliers may focus on cost efficiency and maintaining stable production processes. This divergence can lead to delays, as both parties struggle to synchronize strategies that meet their respective objectives. Without clear alignment, projects risk falling behind schedule or exceeding budget projections, jeopardizing product launches and market competitiveness.

Communication barriers also present a recurring challenge. Many OEM-supplier relationships lack structured avenues for transparent, real-time communication. Misunderstandings over specifications, timelines, or quality expectations can evolve into larger disputes, wasting valuable time and resources. Poorly managed communication channels not only create inefficiencies during the development phase but can also lead to a breakdown in trust over the long term.

Finally, the increasing complexity of global supply chains compounds these issues. Suppliers today are managing larger networks of subcontractors and dealing with fluctuating material costs, geopolitical risks, and logistical constraints. For OEMs relying on these partners, any disruption within the supply chain can cause ripple effects, severely impacting production schedules and financial outcomes. This interdependence demands stronger collaboration, yet existing inefficiencies often prevent a proactive approach to addressing these shared risks.

These challenges highlight the critical need for OEMs and suppliers to establish more integrated, collaborative frameworks that can sustain innovation while mitigating operational risks.

The bar for product innovation is higher than ever and traditional innovation processes are no longer enough.

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A WORLD OF UNCERTAINTY

Global partnerships face mounting pressures as geopolitical complexities add layers of uncertainty to supply chain dynamics. Factors such as tariffs and trade restrictions increasingly disrupt traditional cost structures and limit supplier sourcing strategies, compelling organizations to rethink and adapt their global operations. The challenges heighten the need for precise collaboration, as poor collaboration can lead to delays in product development, affecting competitiveness and market relevance. Miscommunication within the network amplifies risks, resulting in costly errors and inefficiencies that undermine overall goals. Data inconsistency and lack of proper security protocols also pose significant vulnerabilities, threatening the integrity of operations and intellectual assets. Addressing these emerging challenges is essential to mitigate risks and address an array of pressing challenges, including:

Political and regulatory pressures: Political instability can create uncertainty for businesses, making it difficult to plan for the future. Regulations, such as those related to Environmental, Social and Governance (ESG) standards, are becoming increasingly stringent, requiring companies to adapt quickly. Additionally, tariffs on imports and exports can disrupt supply chains and increase costs.

Economic factors: Inflation along with raw material and labor shortages strain operations, reducing buying power and profitability. At the same time, the risk of cybersecurity breaches continues to grow, threatening financial security and business continuity.

Climate-related risks: Climate change is no longer a distant concern. Increasingly severe weather patterns and natural disasters disrupt daily business operations and pose lasting threats to infrastructure and supply chain resilience.

These factors highlight the urgent need for more efficient, resilient and collaborative strategies to maintain a competitive edge in a rapidly evolving global landscape.

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MOVING BEYOND TRADITIONAL MODELS

Traditional OEM-supplier collaboration models typically rely on fragmented and inherently slow systems. Data is shared through basic file transfers or email, leaving room for miscommunication, errors and tedious manual reintegration processes. Teams struggle with version control, inconsistent updates and siloed tools that functioned in isolation rather than as a cohesive framework. This disjointed ecosystem hindered operational efficiency and innovation cycles, as resources are consumed by resolving logistical and communication bottlenecks.

Shifting to modern, unified platforms like **3DEXPERIENCE** marks a decisive step forward. This offers a centralized environment where real-time data sharing, secure collaboration and automated workflows take center stage. Teams no longer need to contend with mismatched tools or piecemeal updates, as these platforms unify processes across disciplines and locations. By enabling role-based access, they also ensure the security of intellectual property while fostering transparency and accountability across projects.

This transition redefines the OEM-supplier partnership, creating the foundation for an agile, innovation-driven value network that can adapt seamlessly to both challenges and opportunities. The platform's Virtual Twin Experiences are particularly impactful. By mirroring real-world assets and processes in a dynamic digital environment, stakeholders can simulate, analyze and optimize projects without disrupting workflows. This reduces costs, prevents errors and accelerates innovation cycles.

OEMs and suppliers that adopt this innovation-first approach position themselves ahead of competitors and future-proof their operations.

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KEY BENEFITS OF THE 3DEXPERIENCE PLATFORM



Improved Collaboration Efficiency

Streamlined collaboration across the value network accelerates product development. By reducing cycle times and enabling smoother transitions from concept to delivery, teams boost productivity and stay competitive in fast-paced markets.



Secure and Consistent Data Exchange

The platform ensures data integrity with advanced safeguards and role-based access. Teams share accurate, real-time information in a protected environment, reducing errors and fostering trust among stakeholders.



Cost Time and Savings

By eliminating redundant tasks and reusing data across projects, organizations minimize rework and improve resource allocation. These efficiencies lower costs and shorten development timelines without compromising quality.



Strategic Agility

With greater flexibility, companies can adapt quickly to trade shifts, sourcing changes, or unexpected disruptions. This agility ensures business continuity and supports resilient, diversified supply chains.



Virtual Twin Experiences

Digital replicas of physical assets and processes allow teams to simulate and optimize in a risk-free environment. These insights drive better decision-making, reduce costly mistakes and accelerate innovation.



Enhanced Decision-Making:

The **3DEXPERIENCE** platform empowers teams with advanced analytics and real-time insights, enabling data-driven decisions that optimize project outcomes and drive innovation.

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MAXIMIZE END-TO-END EFFICIENCY WITH THE 3DEXPERIENCE PLATFORM

Unlocking Value for OEMs

Standardize Workflows:

Create clear, consistent workflows for internal teams and suppliers to align on roles and responsibilities.

Centralize Collaboration:

Use the 3DEXPERIENCE platform to connect all stakeholders in a shared, real-time workspace.

Share Data Seamlessly:

Eliminate version issues by sharing updates and designs in real-time through the platform.

Align Teams:

Keep internal and external teams focused on shared goals using platform tools for clarity and decision-making.

Optimize Continuously:

Monitor workflows with platform analytics to spot bottlenecks and improve efficiency.

Encourage Innovation:

Use collaborative tools to bring diverse ideas into the project and foster cross-functional creativity.

Driving Supplier Efficiency

Unify Internal Teams:

Bring teams onto the platform to streamline communication and eliminate information silos.

Meet OEM Standards:

Align processes with OEM expectations using shared workflows and tools

Manage Tasks Efficiently:

Track progress and deliverables through platform workflow tools to stay on schedule.

Improve Communication:

Use built-in feedback and approval tools to avoid delays and missteps.

Streamline Data Exchange:

Share data securely and instantly to ensure smooth integration with OEM systems.

Stay Agile and Innovative:

Leverage platform updates to drive continuous improvement and maintain a competitive edge.

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By following these steps, OEMs and suppliers can unlock the full potential of the 3DEXPERIENCE platform, driving greater efficiency, collaboration, and innovation across the product lifecycle.

CASE STUDIES AND REAL-WORLD SCENARIOS



Sabelt (Supplier)

Sabelt cut production times by nearly 30%, from initial specifications to product delivery. This dramatic improvement was attributed to better governance and real-time data sharing.



CAMC (OEM)

The platform enabled CAMC to increase part reuse by 20% and reduce the duration of product R&D by 30%.



RTTE (OEM)

The **3DEXPERIENCE** platform helped improve design efficiency by 20% while providing high-quality products.



3CON (Supplier)

3CON reduced design time by 30% while achieving higher quality in their projects. Enhanced standardization and seamless collaboration fueled these gains.



Equal (Supplier)

Equal improved productivity by 20%. The platform's single-interface design allowed for easy access to engineering tools, streamlining workflows across teams.



NIO (OEM)

NIO unified global R&D using the **3DEXPERIENCE** platform, enabling real-time collaboration across teams. This accelerated development and improved engineering efficiency.

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These stories demonstrate the transformative power of innovation-driven platforms in reshaping OEM-supplier dynamics.

WHY THE 3DEXPERIENCE PLATFORM IS THE BEST SOLUTION

The **3DEXPERIENCE** platform is the benchmark for success for organizations aiming to stay competitive in a rapidly evolving landscape. With increasing geopolitical pressures and the complexities of global trade, businesses face unprecedented challenges, from navigating supply chain disruptions to meeting diverse regulatory demands. Those who fail to adapt risk missing critical opportunities to innovate and collaborate effectively, potentially falling behind industry leaders in an already competitive market.

The platform offers the solutions needed to address these challenges head-on. By enabling streamlined operations, secure data sharing, and more agile decision-making, the platform empowers organizations to respond confidently to the shifting market landscape. Exploring this solution isn't just about keeping up; it's about building resilience and positioning your organization to thrive in a dynamic environment.



Our **3DEXPERIENCE**® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating virtual twin experiences of the real world with our **3DEXPERIENCE** platform and applications, our customers can redefine the creation, production and life-cycle-management processes of their offer and thus have a meaningful impact to make the world more sustainable. The beauty of the Experience Economy is that it is a human-centered economy for the benefit of all – consumers, patients and citizens.

Dassault Systèmes brings value to more than 300,000 customers of all sizes, in all industries, in more than 150 countries. For more information, visit www.3ds.com.



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