

CHOOSING THE RIGHT CAD TOOL FOR SMALL TEAMS

Small design teams thrive by using powerful and intuitive product development tools with built-in collaboration and data management.

INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION



INTRODUCTION

In today’s dynamic engineering environment, small teams face an uphill battle. The pressure to deliver high-quality products on tight schedules, adapt to evolving design and manufacturing requirements, and maintain seamless collaboration — whether team members are on-site or remote — is more intense than ever. Unlike large enterprises with extensive budgets, small teams must remain nimble, innovative, and efficient. To be competitive, designs must consistently meet the highest standards of quality and performance.

Scalability is a crucial aspect of modern CAD solutions, allowing businesses to seamlessly adapt their tools to changing project demands, team sizes, and complexity levels without disrupting workflows. Whether a company is a startup or an established enterprise, the ability to scale design capabilities efficiently enables sustained growth. The challenge is not just choosing the right tools but understanding how the right tools can directly address the most pressing pain points in engineering.

Skilled labor challenges can also significantly impact small teams by delaying product development, reducing collaboration, limiting innovation, and increasing costs. These challenges can also overburden existing staff, hinder scaling efforts, and force reliance on outsourcing, which may introduce quality and communication issues. Overall, shortages in skilled labor make it harder for small teams to compete and grow effectively.

Technology advancements in computer-aided design (CAD), computer-aided engineering (CAE), and computer-aided manufacturing (CAM), along with powerful productivity tools, are impacting companies of all sizes by driving unprecedented efficiency and accelerating innovation. These technologies, especially when connected via the cloud, can streamline collaboration, accelerate design, validate concepts, integrate with manufacturing workflows, and manage product development data.

INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION

OVERCOMING CHALLENGES

This e-book explores six critical challenges that small engineering teams may encounter:

1. Collaboration

Even when everyone on a product development team is in the same physical office location, communication miscues can be common. How can teams work together effectively, regardless of physical location?

2. Efficient Innovation

Innovation thrives when engineers can freely explore design ideas, iterate quickly, and experiment with new concepts. But time constraints and limitations of tools can stifle creativity. How can small teams foster innovation while staying productive?

3. Design Validation

Any design is only as good as its real-world performance. Before sending designs to production, engineers must validate performance with simulation and analysis. How can small teams validate their designs without adding unnecessary complexity?

4. Testing and Prototypes

Physical prototyping remains an essential step in product development, but it can be expensive and time-consuming. How can small teams leverage technology to minimize the need for physical prototypes?

5. Manufacturing and Workflow

Many small organizations encounter inefficiencies in the transition from design to production. What strategies will move manufacturing expertise up the chain into the initial phases of design to prevent downstream problems?

6. Data Management

Managing design files, revisions, and access permissions can quickly become overwhelming. Losing track of the latest version can cause costly errors and substantial project delays. How can small teams organize, control, and secure their data effectively?

This e-book explores practical solutions to these challenges and reveals how top product development tools empower small teams to succeed.

Whether you are an experienced mechanical engineer or a manager looking to optimize your workflow, this guide will help you make informed decisions about the tools that can enhance your productivity without disrupting how you work.

By the end of this e-book, you will have a clearer understanding of how modern technology solutions can help your business overcome common challenges and unlock new opportunities for innovation and efficiency. Let's dive in.



INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION

COLLABORATION – THE KEY TO SUCCESS

Seamless collaboration is not a luxury for small teams, it is the foundation of efficiency. Every individual's contribution matters on a lean crew, and the ability to communicate, iterate, and refine designs quickly can mean the difference between delivering on time or getting bogged down by misalignment. That is where cloud-based collaboration and real-time communication are major game changers.

With cloud-connected solutions like SOLIDWORKS® Design, teams can work on the same design from anywhere, avoiding version-control nightmares or endless email chains. Cloud-connected tools enable engineers and designers to review, edit, and approve models in real time, which streamlines feedback loops and eliminates delays. Instead of working in silos, every stakeholder — whether in design, engineering, or manufacturing — can stay aligned and up to speed on the latest iterations.

Integrated CAD tools further enhance collaboration with automatic version control. Gone are the days of accidentally working on outdated files or overwriting a colleague's changes. With a connected ecosystem, updates synchronize instantly, and team members can pick up where their colleagues left off. The result? Fewer errors, reduced rework, and faster product development.

For small teams, these advantages are not just beneficial, they are essential for securing a competitive edge. When every resource counts, tools that foster efficiency, agility, and precision make all the difference in bringing high-quality designs to life.



INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION



COLLABORATION WITH SOLIDWORKS DESIGN

How do you work with teams and share information with SOLIDWORKS? Answer: The **3DEXPERIENCE** platform, a secure, cloud-based environment for product development across internal and external teams. It prevents departmental disconnects by giving all stakeholders access to the same tools and data—regardless of geographical location. Role-based dashboards allow users to focus on relevant information for their specific tasks. Design reviews are streamlined because all participants work within a common environment. Even users without engineering expertise can view, interrogate, and comment directly on 3D models, supporting faster and more informed decision-making.

Built-in data management on the platform supports the entire product lifecycle—from initial development through release and obsolescence. Version control tools automatically identify out-of-date components and simplify updates. Change actions can be created, assigned, and tracked across all contributors, including remote employees, suppliers, and contractors. The **3DEXPERIENCE** platform centralizes the management of people, product data, and documentation to support consistent, efficient execution of product development activities.

INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION

CASE IN POINT:

BOWHEAD CORPORATION – DEFYING LIMITATIONS

Christian Bagg, co-founder of Bowhead Corporation, was determined to return to his active lifestyle after a snowboarding accident left him paralyzed. His passion led him to invent a mountain bike that accommodated his condition, but a bigger purpose soon emerged.

After loaning one of his modified mountain bikes to a camp for disabled children, he saw a 14-year-old girl with cerebral palsy experience pure freedom for the first time. Her joyful exclamation — *Best day of my life!* — solidified his mission: Bowhead Corporation would open the outdoors to people with disabilities worldwide by making his invention available to the market.

With Dassault Systèmes SOLIDWORKS Design solutions, Bowhead introduced its innovative hybrid ATV/mountain bike a year ahead of schedule. Along with streamlining design efficiency, virtual testing enabled the Bowhead team to reduce its need for prototypes, which helped the company produce the bike at dramatically lower costs.

However, the price of success is growing pains. The company needed a data management and collaboration solution to continue working as an efficient and unified team. “Now we have three bikes. We also have customer service, operations, engineering, and inventory management,” says Bagg. And with over 800 parts, Bowhead bikes are complex.

The company uses SOLIDWORKS Design’s cloud data management and collaboration capabilities to enable everyone, from engineering to operations, to work together in real time. “By connecting to the cloud, we all started speaking the same language, and we finally had one way to bring everybody together,” recounts Bagg.

Modifications during product development can originate from the shop floor, designers, managers, and even customers. “When you are working with a complex product like ours, it is very important that you stay on top of the changes,” says Mechanical Engineer Sanket Patil. “A simple change affects everything, be it in your assembly or processes.” Managing all that product data with SOLIDWORKS Design is critical for Bowhead’s operational efficiency.

VP of Engineering Roger McPherson adds, “We must make sure that our changes — and they come from everywhere — are managed, whether from builders, customers, quality, or suppliers. We must manage that data in an automated way.”

INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION

DESIGN VALIDATION – ERROR-FREE INNOVATION

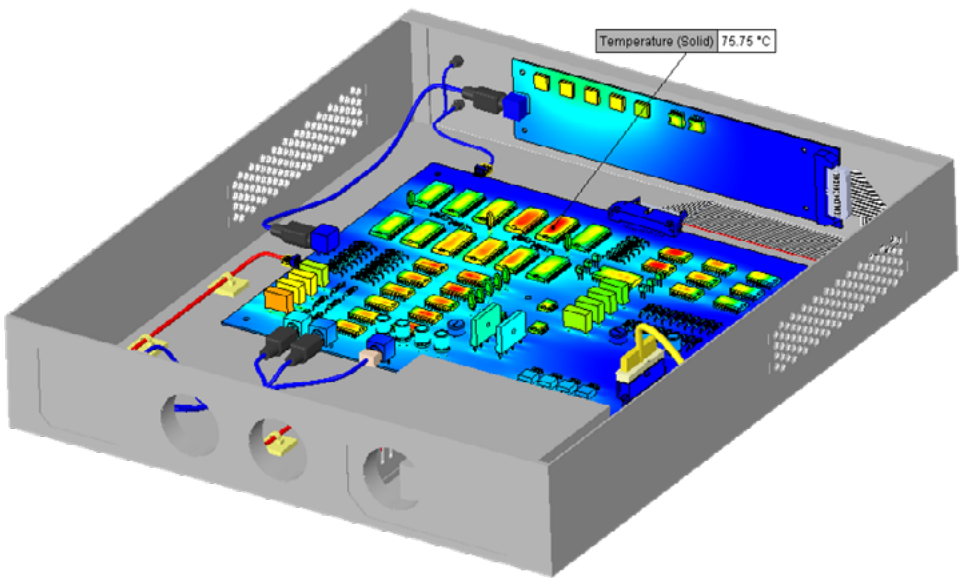
Mechanical and electrical engineers traditionally follow separate product development paths. However, the growing demand for smart and connected products across consumer and industrial sectors, ranging from industrial machines and robots to medical devices and electronics, is driving a fundamental shift in the product development process.

As integrating electronics into mechanical designs becomes increasingly pervasive, developing successful products requires considering a whole new set of physical interactions. Such interactions may include combinations of mechanical, thermal, electrical, fluid, and electromagnetic effects, among others.

One of the most effective ways for small teams to avoid expensive redesigns is to leverage integrated simulation tools, such as those offered by SOLIDWORKS, early in the development cycle. It is critical that a design team understand how a product will behave in real-world scenarios. Unlike large corporations with considerable resources, small teams must ensure that every design is precise, efficient, and ready for production. Errors caught late in the process can lead to expensive rework, increased material waste, and missed project delivery dates.

Simulation tools enable engineers to detect weak points, optimize material usage, and verify performance, reducing the need for physical prototypes and last-minute modifications before manufacturing begins, which helps to avoid derailed budgets and timelines.

By prioritizing an integrated approach for validation and optimization with tools like SOLIDWORKS Simulation, small teams can accelerate development cycles, enhance product quality, and prevent costly redesigns. In today’s competitive landscape, leveraging digital testing solutions is not just an advantage, it’s a requirement for competing successfully at a higher level.



INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION

EFFICIENT INNOVATION – STAYING AHEAD OF THE CURVE

Efficient innovation is a cornerstone of success for small engineering teams striving to make a significant impact. By focusing on efficiency, small engineering teams can punch above their weight. They are able to deliver breakthrough products that are both innovative and of top-tier quality, fully prepared to meet the industry’s most stringent standards. Efficiency involves optimizing workflows, reducing errors, and maximizing valuable engineering time.

To achieve efficiency, focusing on three critical areas is imperative: flexible CAD capabilities; faster, smart design processes; and leveraging of the latest technologies.

Robust Yet Flexible CAD Capabilities

In the fast-paced world of product development, small teams require powerful, easy-to-use CAD tools that offer comprehensive modeling capabilities that cater to complex designs while maintaining an intuitive user interface. This combination ensures that engineers can swiftly translate innovative ideas into precise 3D models without becoming encumbered by CAD software complexity. Moreover, the integration of cloud-based collaboration tools allows team members to work in unison, regardless of their geographic location.

Faster and Smarter Design Processes

To stay ahead in a competitive market, small engineering teams must leverage CAD features that streamline the design process. Integrated simulation tools enable engineers to perform stress analysis and motion studies within the same environment. This shrinks the incidence of errors and increases quality while reducing

the need for multiple software packages. In addition, a comprehensive library of standard components and materials is critical in expediting the design phase, enabling teams to focus on innovation rather than on reinventing the wheel.

Leveraging Software Automation

Products like SOLIDWORKS Design leverage automation to add capabilities that enhance design efficiency and reduce the need to perform repetitive tasks, including these:

- **Command Predictor** – Uses automation to suggest your most likely next steps, showing a small toolbar with relevant commands like Fillet or Chamfer after each action. This saves time, reduces menu searching, and helps you learn the workflow more quickly.
- **Drawing Generator** – Automatically creates 2D drawings for your parts and assemblies with a single click, including views, title blocks, tables, and dimensions. Eliminate the need to start from scratch while reviewing and adjusting drawings as needed.
- **Smart Mates and Quick Mates** – Speed up the assembly process by automatically suggesting the right mates based on geometry. Just use ALT+drag for Smart Mates or CTRL+select for Quick Mates to instantly position parts without opening the full Mate Property Manager.

These capabilities enable you to work more efficiently in SOLIDWORKS Design by providing relevant suggestions at your fingertips, which helps both new and experienced users. You can expedite your design process, minimizing tedious repetition or a long slog through menu stacks.

INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with SOLIDWORKS Design

Case in Point: Bowhead Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION



CASE IN POINT:

COLDSNAP TRANSFORMS AN ICE CREAM DREAM INTO REALITY

Most children hear bedtime stories, but Matt Fonte, an entrepreneur and engineer, encouraged his daughters, Sierra and Fiona, to brainstorm new product ideas before sleep. One night, they envisioned a countertop ice cream machine that worked like a KEURIG® coffee maker to deliver single-serve ice cream without the mess. Inspired by their idea, Fonte founded ColdSnap in 2018 with a small team of engineers to revolutionize the frozen dessert industry.

By 2020 ColdSnap had expanded into a 25,000-square-foot manufacturing facility near Boston. “We now have a company with over a hundred people,” says Fonte. “It’s exciting to see how far we’ve come.”

ColdSnap’s countertop appliance rapidly freezes and dispenses single-serving frozen treats in under two minutes using shelf-stable liquid ingredient pods. Engineering this compact, high-performance refrigeration system demanded a highly efficient design that maximized every inch of space.

Using SOLIDWORKS Design, the engineering team iterated quickly to refine cooling components, optimize heat transfer, and ensure the appliance’s footprint remained small, all while maintaining high performance. The ability to test and validate digital designs enabled the team to make rapid advancements without costly physical prototypes.

With multiple disciplines working together (design, manufacturing, electrical, and software engineering), efficient collaboration was essential. Cloud-connected SOLIDWORKS Design provided for seamless communication, reducing design cycle time and accelerating product development. “People want their frozen treats faster,” Fonte says.

“We needed a system that could pull heat from the pod as efficiently as possible. SOLIDWORKS helped us refine every detail, from thermal performance to mechanical movements, so we could freeze products in record time.”

INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with SOLIDWORKS Design

Case in Point: Bowhead Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

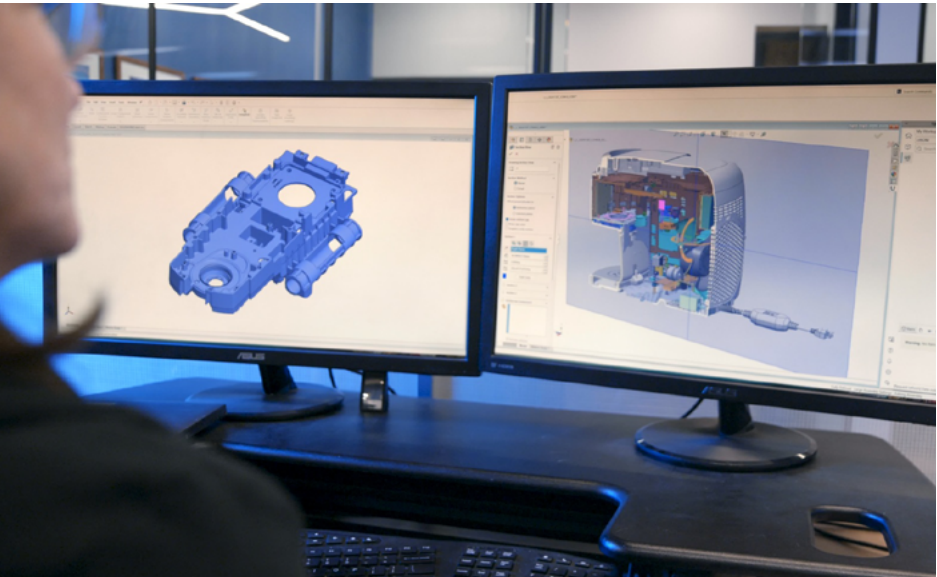
Case in Point: SCT Ceramics

CONCLUSION

ColdSnap's design also eliminates reliance on the traditional cold chain for ice cream distribution. Because the pods are shelf-stable and can be shipped at ambient temperature, they reduce energy consumption and waste. In addition, the pods are made from recycled aluminum and are designed to be infinitely recyclable, which aligns with ColdSnap's sustainability goals.

From the impeller spinning at 3,000 RPM to the precise dasher system dispensing frozen treats, every component of ColdSnap's appliance was fine-tuned using SOLIDWORKS Design. The software streamlined digital prototyping, enabling rapid iteration and optimization of complex mechanical systems.

By leveraging the powerful tools in SOLIDWORKS Design, ColdSnap successfully brought a groundbreaking product to market, transforming the frozen dessert industry by mixing efficiency, sustainability, and consumer convenience.



INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

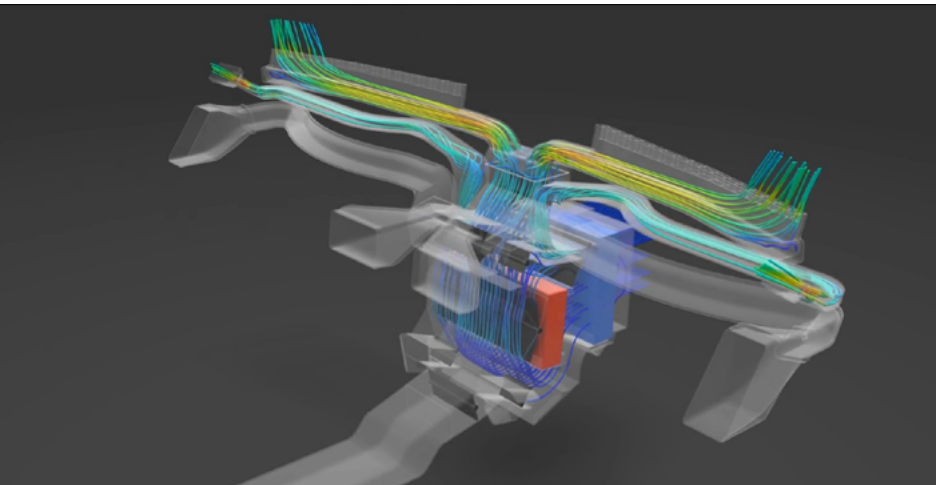
Case in Point: SCT Ceramics

CONCLUSION

TESTING AND PROTOTYPES – DIGITAL COMPLEMENTS PHYSICAL

Prototyping is a critical phase in product development that enables small teams to validate designs and identify issues before production begins. Unfortunately, traditional prototyping methods are often costly and time-consuming. However, integrating design and simulation tools within a unified cloud platform enables teams to create virtual twin prototypes that simulate real-world performance, reducing reliance on physical prototypes. This approach accelerates development and reduces costs related to materials and manufacturing.

When you are operating with limited resources, streamlining the product development process is crucial. Rapid iteration enables teams to quickly refine designs, promptly address issues, and significantly reduce time to market. Leveraging the collaborative power of a cloud platform accelerates product development from concept to prototype and drives greater innovation while enabling proactive problem-solving long before manufacturing begins.



Virtual and physical testing approaches are most effective when leveraged simultaneously. Consider the benefits of each approach:

Digital Testing

- Helps identify and prevent costly rework early in the design process
- Enables engineers to quickly refine critical design elements before production
- Provides rapid iterations and adjustments without material waste

Physical Testing

- Offers engineers and designers hands-on experience to evaluate assembly, tolerances, and material feasibility
- Ensures real-world validation of digital concepts
- Helps communicate design ideas effectively to teams, clients, and investors

Because decisions made during the concept phase impact each subsequent step, locking in a critical design element too early can result in problematic, costly, and time-consuming rework later. Digital prototypes prevent many of these issues. Physical prototypes are not going away anytime soon, because they deliver tangible experience with the product, which provides key stakeholders with the confidence and clarity needed before final production.

By leveraging virtual simulation alongside physical prototyping, companies can enhance product quality and innovation, rely less on expensive and time-consuming physical prototypes, and deliver direct demonstrations that significantly improve decision-making.

INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION



CASE IN POINT:

CALOI SLASHES PRODUCT DEVELOPMENT COSTS BY FIFTY PERCENT

In 2023 CALOI, a leading South American bicycle manufacturer, sought a simulation solution to maintain its commitment to excellence and its leadership position by reducing lengthy and costly prototyping cycles to shorten its design and manufacturing operations, thereby accelerating time to market.

CALOI sought a simulation solution to replace its long reliance on physical prototyping alone. “In the past, we spent a lot of time and money on physical tests that were carried out by a specialized company in Portugal as well as in our internal laboratories,” explains CALOI Product Engineer Leandro Timótio da Silva. Upon learning that SOLIDWORKS cloud-enabled simulation was fully compatible with their favorite 3D CAD software, SOLIDWORKS, the decision to purchase it was a no-brainer.

Since implementing simulation, CALOI has drastically cut its development cycles for new bike frames and shortened the time to market by 25 percent. The company has turbocharged development with the MODSIM approach, which unifies modeling and simulation into a seamless process. “We reduced our design cycles from two months to two weeks, which frees up our team to design more in the same amount of time, enabling us to optimize our workforce,” notes Timótio da Silva. “By adopting the

SOLIDWORKS simulation solutions, we have reduced the cost and time of our prototyping process by at least 50 percent.”

The development team has not stopped conducting physical tests but now performs them only as a final validation — a huge change for a company that in the past conducted 100 percent of its tests physically. “Because we’ve completely integrated the design with simulation, we’ve realized a 50 percent reduction in design errors, resulting in cutting scrap and rework costs in half,” Timótio da Silva enthuses.

Leveraging cloud solutions also enables CALOI to avoid costly hardware investments or other IT infrastructure costs because simulation studies are run in the cloud using high-performance computing, which also frees up local resources. By leveraging SOLIDWORKS with advanced simulation tools in the cloud, CALOI has significantly reduced development costs, accelerated time to market, and enhanced design accuracy.

INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with SOLIDWORKS Design

Case in Point: Bowhead Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION

MANUFACTURING AND WORKFLOW – TAKE THE “/” OUT OF CAD/CAM

Computer-aided design and computer-aided manufacturing originally operated as separate entities — the slash of CAD/CAM. Designers created models using CAD software, then manufacturers used CAM software to figure out how to make that design into a production-ready product. This separation of processes often led to inefficiencies, miscommunication, and errors, not to mention a growing frustration between engineers and shop floor personnel.

The success or failure of the relationship between design and manufacturing greatly influences the efficiency of production workflows, and miscommunications between the groups can adversely impact the final product. A seamless transition from innovative design to practical manufacturing is crucial for small teams focused on maximizing resources.

Integrating design and manufacturing by connecting both groups to an integrated platform enables real-time feedback for adjustments along the way. Potential production problems can be identified and

addressed early in the development process when changes can be made inexpensively and without losing time to market. This proactive approach streamlines production and reduces the likelihood of costly revisions and delays.

A streamlined design-to-manufacturing workflow allows small teams to create designs that are both innovative and ready for production. Because toolpaths are generated directly from live design data, without needing to translate it, errors are minimized. And when the design changes, those updates are instantly reflected in the manufacturing process.

For small teams, CAD/CAM integration maximizes resources while building a stronger working relationship among design and manufacturing departments. A unified CAD/CAM platform can foster real-time collaboration, identify manufacturing issues early, and streamline production. Perhaps it is time to let the traditional separation of CAD/CAM software become a thing of the past.



INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

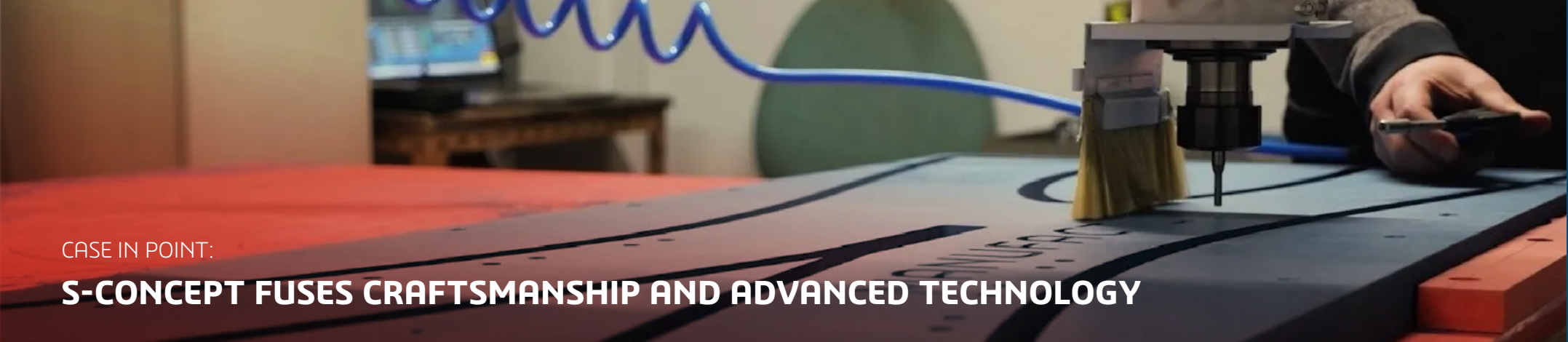
MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION



CASE IN POINT:

S-CONCEPT FUSES CRAFTSMANSHIP AND ADVANCED TECHNOLOGY

Lucan Saden, founder of S-Concept, began with a vision to create custom furniture and prototypes using the finest materials. Often referred to as artisanal manufacturing, the Paris-based company’s technique combines craftsmanship with modern technology, such as digital milling or 3D printing, to enhance precision and efficiency. This ensures efficient production of high-quality products, which can be sold at reasonable prices, enabling a smaller firm to compete with its larger counterparts.

“I wanted to make quality products all in-house right here in my Paris workshop,” affirms Saden. One of his key challenges was combining traditional craftsmanship’s intricacies with the speed and precision offered by digital manufacturing. Saden was already using SOLIDWORKS Design. “It was an obvious choice for me to use their digital milling solution, NC Shop Floor Programmer,” he explains. By integrating these tools, Saden could design complex products in SOLIDWORKS Design and seamlessly transition them to manufacturing using NC Shop Floor Programmer. And, by leveraging digital milling and 3D printing, he was able to reduce production schedules and costs drastically.

“The benefit of digital milling and 3D printing is being able to run the machines automatically while I fabricate something else,” Saden observes. Another key benefit is the ability to meet specific customer

demands for customization without disrupting the overall manufacturing workflow. The seamless and rapid transition from design to production along with the ability to efficiently set up and run programs on machines unattended enabled S-Concept to deliver custom products at affordable prices while maintaining artisanal standards.

“Programming the part, defining it, generating the machine code, defining the tools, is all incredibly fast [with NC Shop Floor Programmer],” notes Saden. “You can make extremely complex products quickly, and that is essential [to remaining competitive].”

By embracing digital manufacturing solutions like NC Shop Floor Programmer and SOLIDWORKS Design, S-Concept successfully bridges the gap between traditional craftsmanship and advanced modern technologies for design and manufacturing. These tools offer the efficiency and flexibility needed for the S-Concept team to consistently deliver high-quality products while staying competitive in the dynamic custom manufacturing market.

INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION

DATA MANAGEMENT – ELIMINATING ERRORS WHILE INCREASING EFFICIENCIES

Managing CAD data without a product data management (PDM) system is a reality for many companies. Smaller companies that consider PDM too complicated and expensive may get by with a centralized server with a defined folder structure for data management. These manual “systems” quickly invite confusion and error if they are not meticulously maintained by strictly enforced naming conventions and version control protocols. To prevent unauthorized changes in a manual system, users must set critical files to read-only and only designated team members should be allowed to edit them. But what if an engineer forgets to update a file name after making critical design changes? Or if a final assembly file is accidentally deleted? What if multiple people need to work on the same CAD project?

Cloud-connected data management systems, like those included on the **3DEXPERIENCE** platform, are CAD-aware storage solutions, not just file repositories. PDM systems intelligently leverage the relationships between CAD files, ensuring that all dependencies are maintained and updated automatically and consistently. They enhance collaboration, reduce errors, and protect critical design data. Better yet, **SOLIDWORKS** Design users have access to the **3DEXPERIENCE** platform included with their software license.

Version control, security, and centralized file access are fundamental components in a cloud-connected system. Robust version control mechanisms understand the evolution of a design and automatically track changes, allowing teams to revert to previous iterations if necessary. Security measures protect intellectual property and sensitive information from unauthorized access, which is



particularly important for companies that guard proprietary designs as a competitive advantage. Centralized file access ensures that all team members, regardless of their location, have access to the most current files, which facilitates seamless collaboration and reduces the likelihood of miscommunication.

Manual methods may work for very small teams, but they’re often inefficient, error-prone, and hard to scale. What’s more, they can complicate the future adoption of a PDM system. By contrast, a PDM tool reduces these risks by automating version control, securing critical data, and streamlining collaboration. Adopting CAD-aware storage early helps teams work smarter, minimize errors, and focus on innovation instead of file management.

INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with **SOLIDWORKS** Design

Case in Point: Bowhead Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION



CASE IN POINT:

SCT CERAMICS STREAMLINES COLLABORATION AND REAL-TIME DATA MANAGEMENT

SCT Ceramics is a leader in advanced technical ceramics and ceramic-to-metal brazing technology. Its employees are dedicated to engineering and manufacturing excellence and acting as a partner in innovation alongside their customers, delivering components that enable groundbreaking advancements across several industries. SCT faced challenges, however, in streamlining its internal processes and ensuring collaboration across departments. Its traditional file storage systems lacked traceability, and inefficiencies in version management often led to setbacks during the development cycle.

“We were looking to improve the efficiency and robustness of our manufacturing processes,” explains General Manager Gilles Arnaud. “SOLIDWORKS connected to the cloud played a key role in achieving this goal.” The Dassault Systèmes solutions provided an end-to-end solution for design, collaboration, and data management of SCT’s components.

“I use the cloud-based platform daily. I do product modeling in SOLIDWORKS, developing new projects and designing mechanical components,” says Engineering Project Manager Tom Demester. “And the platform helps us streamline our daily workflows.”

Being connected to a cloud-based platform also bridges the gap between research, development, and production teams. “The main advantage of the cloud is the traceability of file versions,” details Engineering Project Manager Benjamin Boniface. “Today we work more efficiently, mainly because we are sure to have the latest, most up-to-date files, regardless of which department opens them.” This efficiency reduces errors and accelerates the production cycle while ensuring that every department works with the most current data.

With all data and applications housed in one location, teams can easily access the latest information, reducing the risk of duplication and ensuring all team members work on the most up-to-date files. “Centralization is a really important feature of the cloud-based platform because it lets you find one tool for 3D modeling, another one for storing files, and another for searches, all in the same place, so you can find the right files right away every time.”

SCT exemplifies how adopting innovative tools can improve manufacturing processes. By enhancing collaboration, improving file management, and centralizing resources, SCT has positioned itself to meet the substantial demands of its innovative customers with precision and efficiency.

INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with SOLIDWORKS Design

Case in Point: Bowhead Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION

CONCLUSION – EMBRACING INNOVATION FOR COMPETITIVE ADVANTAGE

Effective teamwork is vital for small engineering teams, and cloud-connected CAD tools, such as SOLIDWORKS Design, enable real-time collaboration. Integrated simulation tools further enhance efficiency by offering digital validation, reducing the need for physical prototypes, and minimizing waste and redesign efforts. Integrating CAD and CAM bridges the gap between design and manufacturing, thereby reducing errors and streamlining workflows. In addition, cloud-based PDM automates version control, secures file access, and centralizes collaboration, which eliminates inefficiencies and ensures a smoother development process.

The landscape of CAD technology is evolving, with new advancements poised to further enhance small teams’ capabilities. AI-driven design assistance will continue to automate repetitive tasks, provide intelligent design recommendations, and streamline the iteration process. AI-powered generative design tools will enable engineers to explore innovative, optimized solutions that meet strict performance criteria while minimizing material use. CAD solutions will also continue to enable sustainability via features that make it easier to reduce environmental impact.

By enhancing flexibility, collaboration, and scalability, cloud-connected product development platforms are transforming how small teams operate. With the ability to work from anywhere, teams remain agile and responsive to changing demands. Real-time collaboration breaks down geographical barriers, ensuring seamless teamwork regardless of team member locations. By eliminating the need for costly IT infrastructure, cloud platforms provide scalable solutions that grow with a team’s needs. Additionally, these ecosystems integrate CAD, CAM, PDM, and simulation tools, creating a streamlined workflow that enhances efficiency throughout the entire product development process.

By adopting these advanced solutions, small teams can compete with larger enterprises and drive innovation to bring high-quality products to market faster and more cost-effectively. The future of product development lies in connected, intelligent, and cloud-driven solutions that empower small teams to achieve big results.

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INTRODUCTION

OVERCOMING CHALLENGES

COLLABORATION

Collaboration with
SOLIDWORKS Design

Case in Point: Bowhead
Corporation

DESIGN VALIDATION

EFFICIENT INNOVATION

Case in Point: ColdSnap

TESTING AND PROTOTYPES

Case in Point: CALOI

MANUFACTURING AND WORKFLOW

Case in Point: S-Concept

DATA MANAGEMENT

Case in Point: SCT Ceramics

CONCLUSION