

Democratizing Data: Driving Innovation with Better Data Management

How leaders are turning to cloud-native CAD to bring products to market faster

Today, as product development leaders seek to improve innovation and accelerate time to market, they are facing a fundamental challenge: their inability to manage their design data. These organizations are realizing that outdated file-based CAD and PDM software unnecessarily restricts data access, slowing down every step in the design and development process. These outdated software systems, decades old, simply weren't designed to provide the data access, speed and flexibility required by users today. Instead file-based CAD and PDM limits access to end-users, inhibits collaboration, and slows down development. In response, leaders today are turning to cloud-native solutions such as the Onshape product development platform to streamline processes, improve collaboration and increase speed to market.

◆ Data Access

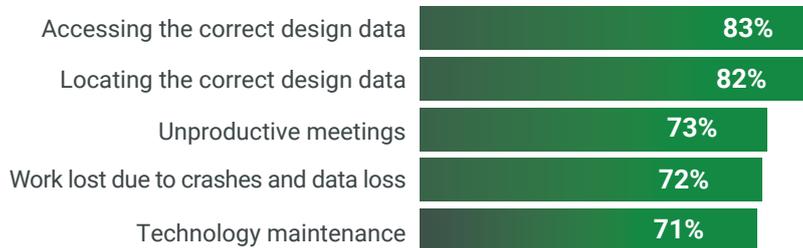
In the development process, access to design data is absolutely critical to the productivity and performance of front-line engineers. Additionally, as firms seek to grow their business and hire talent globally access to mission-critical data regardless of user location becomes critical.

Unfortunately, rather than empower users, file-based CAD silos data on expensive, office-centric workstations and servers, limiting access and productivity. Critical data needed to keep projects on track is unavailable and productivity suffers as design and engineering employees are unable to access needed design data from their homes. In addition, organizations seeking to engage specialized contract employees globally simply do not have the technological flexibility to do so. The data access challenge was effectively captured in a recent global survey that found that designers and engineers struggle to simply locate and access critical design data.

REducing Wasted Time

Q: How important is it to reduce time related to each of the following activities?

Percentage who said "somewhat important" or "very important"



Base: 980 respondents.

Source: *The State of Product Development and Hardware Design 2021*

1 of 2



PDM/PLM users say the systems slow down their overall design process.

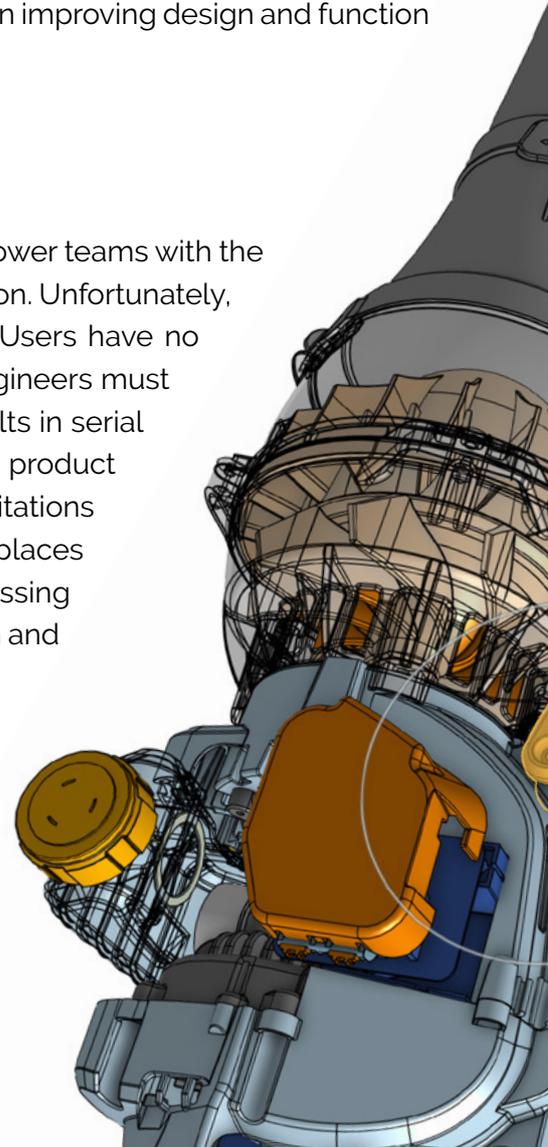
[The State of Product Development and Hardware Design 2021](#) survey revealed that 80% of engineers waste time trying to find and access design files.

In contrast to data restrictions limiting users with file-based CAD, cloud-native solutions like the Onshape platform democratize data, enabling front-line employees to access the design documents they need from any location, and on any web-connected device. Through the single source of truth that the cloud provides, data is always accessible to users regardless of location. With the data they need, designers and engineers can stay productive, focusing efforts on improving design and function rather than searching for data.

Sharing Data: Improved Collaboration

In addition to ensuring access, firms today know they must also empower teams with the ability to share data easily to improve collaboration and communication. Unfortunately, file-based CAD, designed pre-internet, siloes data in workstations. Users have no way of sharing data quickly and easily. As a result, designers and engineers must resort to ad-hoc emails and creating copies of design files. This results in serial emails, version control issues and misunderstandings that delay the product development process. While some firms seek to address the limitations of file-based CAD with expensive, add-on PDM software this replaces one challenge - version control issues, with another, delays in accessing design files. With PDM users are saddled with cumbersome "check-in and check-out" processes, wasting time and hurting productivity.

In contrast to the data silos of file-based CAD, cloud-native Onshape is designed with collaboration in mind. With Onshape, all team members have real-time access to the design document and can work together effectively. By empowering users with shared access to the same single source of truth, users can streamline workflows - eliminating version control issues and accelerating time to market.



◆ Providing Secure Access to Data with Extended Stakeholders

Another area where limited access to design data slows down product development is with extended internal teams. This circle of users outside of the design teams may include operations, manufacturing, or sales. When it comes to sharing design data these extended stakeholders simply do not have access to the expensive dedicated workstations that file-based CAD requires. The result is often significant delays in sharing and receiving feedback - slowing down review and approvals.

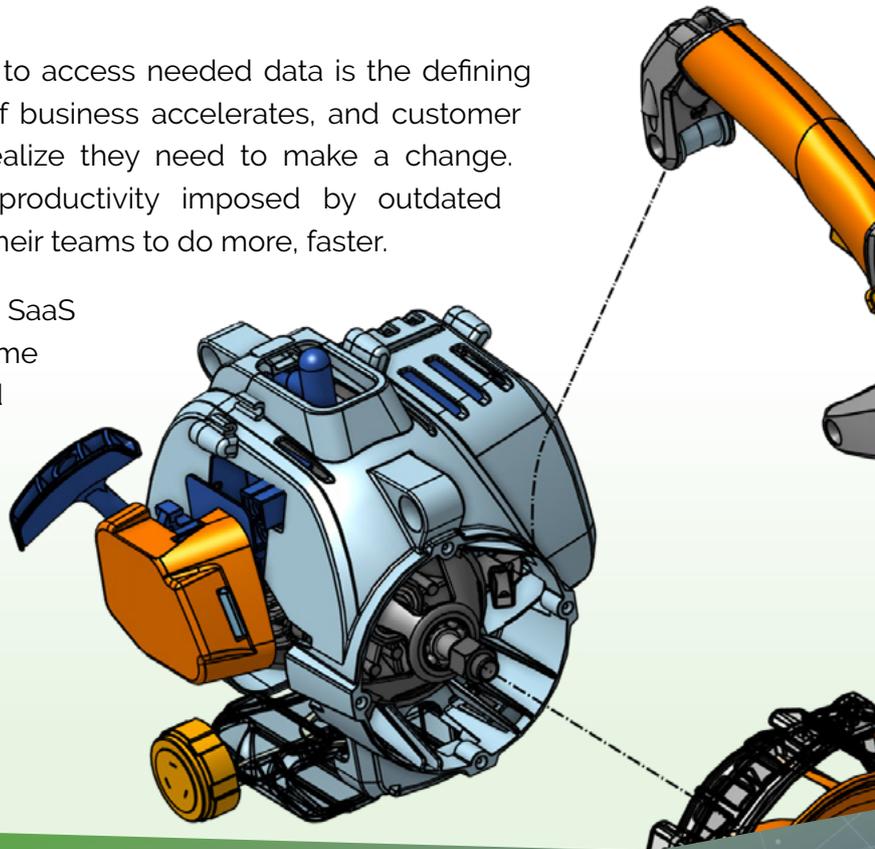
A final data challenge for file-based CAD users is when they seek to share designs with outside manufacturing partners. Again, to share with these outside partners, users must resort to insecure email or thumb drive workarounds, putting their design data IP at risk. Because data management isn't integrated into file-based CAD, design data received by these 3rd party manufacturing partners can easily be forwarded to others without the document owner ever knowing.

Unlike the delays and security challenges of file-based CAD, the cloud-native Onshape platform provides integrated data management, enabling users to efficiently and securely share design documents. With permission-based access settings, users can send a convenient and secure web link to reviewers or 3rd parties. Extended team members can view documents on any web-based device, no dedicated hardware required. In sharing data with manufacturing partners, owners can limit access to a final design document, protecting design details. Document owners maintain accountability and security with the unalterable document history that Onshape provides, enabling them to see exactly when and where a design document has been accessed.

◆ Better Data, Better Agility

Today, the ability for individuals and teams to access needed data is the defining issue for many companies. As the speed of business accelerates, and customer expectations increase, business leaders realize they need to make a change. They must remove the restrictions on productivity imposed by outdated data-management software and empower their teams to do more, faster.

As a result they are turning to cloud-native SaaS solutions like the Onshape platform to become more agile and efficient. With integrated data management, Onshape effectively accelerates every phase of the design and development process letting teams put their full attention where it matters: designing and innovating great products.



Interested in learning more about how Onshape drives business agility with the cloud?

Visit us at [Onshape.com](https://www.onshape.com)

