



# ACCELERATE DIGITAL TRANSFORMATION WITH BIOVIA SCIENTIFIC NOTEBOOK AND THE 3DEXPERIENCE PLATFORM

Use Case



### **Challenge:**

Collaborate more effectively for improved patient outcomes; create a centralized data repository to improve innovation; streamline regulatory processes and accelerate product certifications

### **Solution:**

BIOVIA Scientific Notebook and the **3DEXPERIENCE**® platform

### **Results:**

- 25% cost savings by eliminating unnecessary repeated experiments
- 50% less time spent searching for existing knowledge
- 35% faster compliance reporting
- Improved collaboration in a reliable, secure, scalable cloud environment
- Full visibility and traceability in product development

## **CHALLENGE: BOOST COLLABORATIVE INNOVATION AND ACCELERATE CERTIFICATIONS**

Life Science companies face major challenges to continued operations and profitability from patent expirations, low R&D productivity, increased competition, decreased margins, inefficient processes, and mounting compliance constraints. To meet these challenges, life sciences companies are focusing on digital transformation with a view to improving collaboration across their business, particularly in R&D activities. Scientists run hundreds of experiments, but they often lack a clearly defined way of sharing information and knowledge between individuals and teams. They document information either in paper notebooks or disparate electronic systems, and often lack a centralized database to capture, store and share critical experimental results and other product information.

Companies also have to meet strict industry certifications and regulations before anything goes to market. They want to centralize their product development data and achieve a more structured way of working to boost innovation, embed quality throughout the supply chain and accelerate product certifications. As they look to the future, companies also want to explore how they can provide customized medical services in a patient-centric business model. For example, leveraging simulation and virtualization technologies to determine the best new therapeutics and materials for medical devices.

## **SOLUTION: BIOVIA SCIENTIFIC NOTEBOOK AND THE 3DEXPERIENCE PLATFORM**

To accelerate digital transformation, companies are opting for a cloud-based implementation of the Dassault Systèmes **3DEXPERIENCE** platform. This suits the current life science industry on many levels. Companies are able to get up and running quickly with no need to install servers and software.

They do not need to invest in additional hardware to run the new technology. Scientists can access the platform at any time and from any place. All data and intellectual property are protected from data loss and unauthorized access. Finally, companies have ongoing access to the latest software features and upgrades, as well as the ability to roll out new applications and functionality as required.

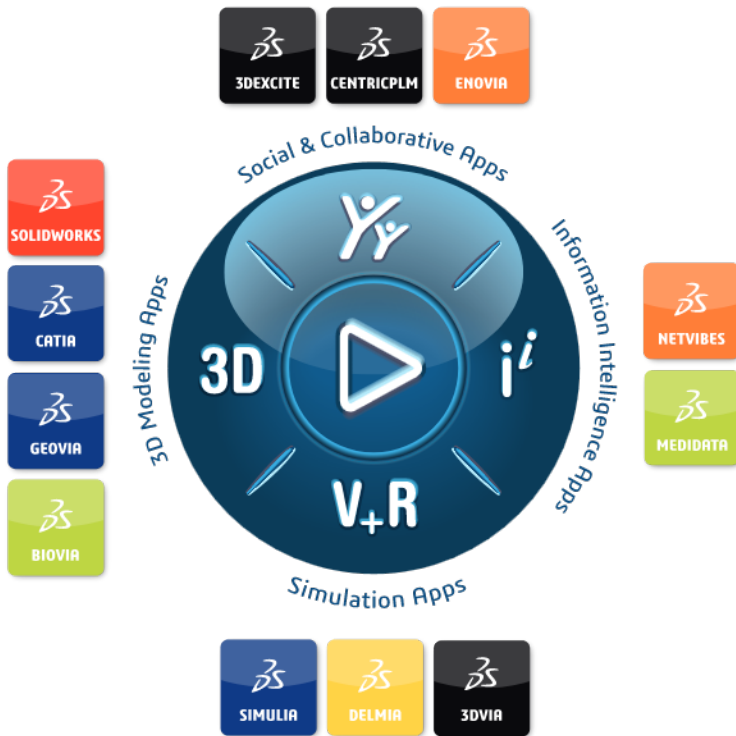
The first stage of this transformation is deploying an instance of BIOVIA Scientific Notebook on the **3DEXPERIENCE** platform. Experimental data from legacy electronic lab notebooks (ELNs) can be indexed and accessed with Scientific Notebook, making it into a single, centralized database on the platform for all researchers and scientists. This allows them to collaborate more effectively on projects, analyze product development and effectively eliminate time-consuming, error-prone manual searching and documentation processes in a more collaborative and productive work environment.

## **RESULTS: DIGITALIZED R&D AND QUALITY FIRST IN A PATIENT-CENTRIC ENVIRONMENT**

With all product development data stored in a single, centralized database, a company's approach to recording experiments is transformed. With disjointed data storage solutions, organizations cannot effectively record and store all of its research outcomes—often only the data pertaining to successful projects is retained. Now, companies can document everything, even projects that fail or products that never make it to market, allowing researchers to reuse knowledge and learn from past mistakes.

Along with improved data transparency, management also gains a clearer view of the company's activities, gaining full visibility and traceability in product development, while scientists can focus on improving product quality, meeting deadlines and reducing costs.

The **3DEXPERIENCE** platform provides the foundation for product development engineers to accelerate the innovation process. By capturing data and collaborating on a common platform, scientists have improved IP protection and improved visibility and traceability in product development. They can predict outcomes, reuse knowledge and learn from past mistakes. They also streamline regulatory compliance, accelerate certifications and enhanced technology readiness. Additionally, companies can leverage the platform in the future to deliver new business value by transforming its development processes and establishing a manufacturing environment that delivers the best yields.



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

Dassault Systèmes, the 3DEXPERIENCE 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 3DEXPERIENCE 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](http://www.3ds.com).

**Europe/Middle East/Africa**  
 Dassault Systèmes  
 10, rue Marcel Dassault  
 CS 40501  
 78946 Vélizy-Villacoublay Cedex  
 France

**Asia-Pacific**  
 Dassault Systèmes K.K.  
 ThinkPark Tower  
 2-1-1 Osaki, Shinagawa-ku,  
 Tokyo 141-6020  
 Japan

**Americas**  
 Dassault Systèmes  
 175 Wyman Street  
 Waltham, Massachusetts  
 02451-1223  
 USA



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