

# STEPPING INTO THE CLOUD

with the 3DEXPERIENCE® platform



# INTRODUCTION

This E-book is the first in a series of E-books about implementing the **3DEXPERIENCE** Cloud alongside your existing solutions. Then, you can begin your journey to the cloud in steps, on your own terms at your own pace without worrying about disrupting your production.

At the onset of the pandemic, Gartner assessed that

“Businesses that can shift technology capacity and investments to digital platforms will mitigate the impact of the outbreak and keep their companies running smoothly now, and over the long term.”

large, enterprise companies, long before COVID-19, recognized the need for a more flexible approach to maintain competitiveness and creativity. In 2018, Forbes reported that “enterprises predict they’ll invest on average \$3.5M on cloud apps, platforms and services” in the coming year.



## INTRODUCTION

### STEP 1: THE PROOF OF CONCEPT

### STEP 2 : TEST REAL-TIME SCENARIOS

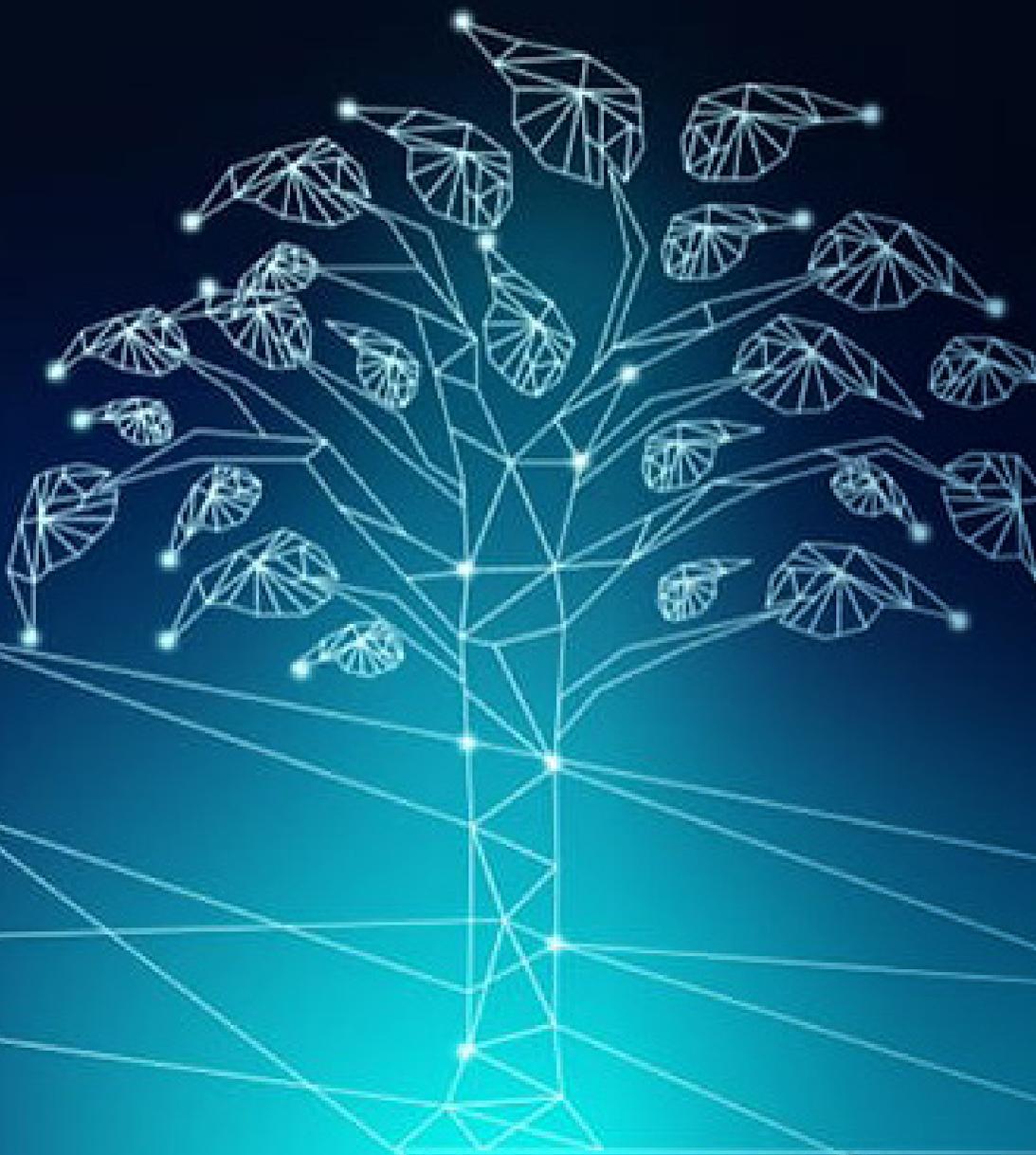
### STEP 3: VALIDATE YOUR GOALS

### STEP 4: ACCELERATE YOUR TIME TO MARKET

### CASE IN POINT: RENAULT'S POC

### WHY GO CLOUD NATIVE?

## CONCLUSION



However, making the change to cloud is overwhelming for any enterprise. Transformations can be incredibly costly if not managed properly. For example, imagine facing a complete transformation to the cloud all at once. You would have to understand how your processes might be optimized to take advantage of the cloud's flexibility while you were making the transformation. You would need to learn how the cloud is different and how it is the same on the fly. You would need to anticipate how not to disrupt production without fully understanding what you were doing ahead of time. These concerns are especially obstructive if your existing solutions are doing exactly what you need them to do: Producing!

We all know that the cloud is the future. We already use it for so many things like HR, CRM, hiring, purchasing, ... the list goes on. So why not take it step by step, and start with a cloud that is alongside your On-Premise solutions where it is independent but complementary.

Dassault Systèmes' SaaS on the cloud solution gives you complete access to the newest technologies to construct and validate your designs and products. It is the **3DEXPERIENCE** platform, but now turbocharged by being on the cloud.

The **3DEXPERIENCE** Cloud features the highest regulatory standards in cloud security and a built in a state-of-the-art secure environment, assuring complete protection and access control for your team, information and assets.

---

## INTRODUCTION

---

### STEP 1: THE PROOF OF CONCEPT

---

### STEP 2 : TEST REAL-TIME SCENARIOS

---

### STEP 3: VALIDATE YOUR GOALS

---

### STEP 4: ACCELERATE YOUR TIME TO MARKET

---

### CASE IN POINT: RENAULT'S POC

---

### WHY GO CLOUD NATIVE?

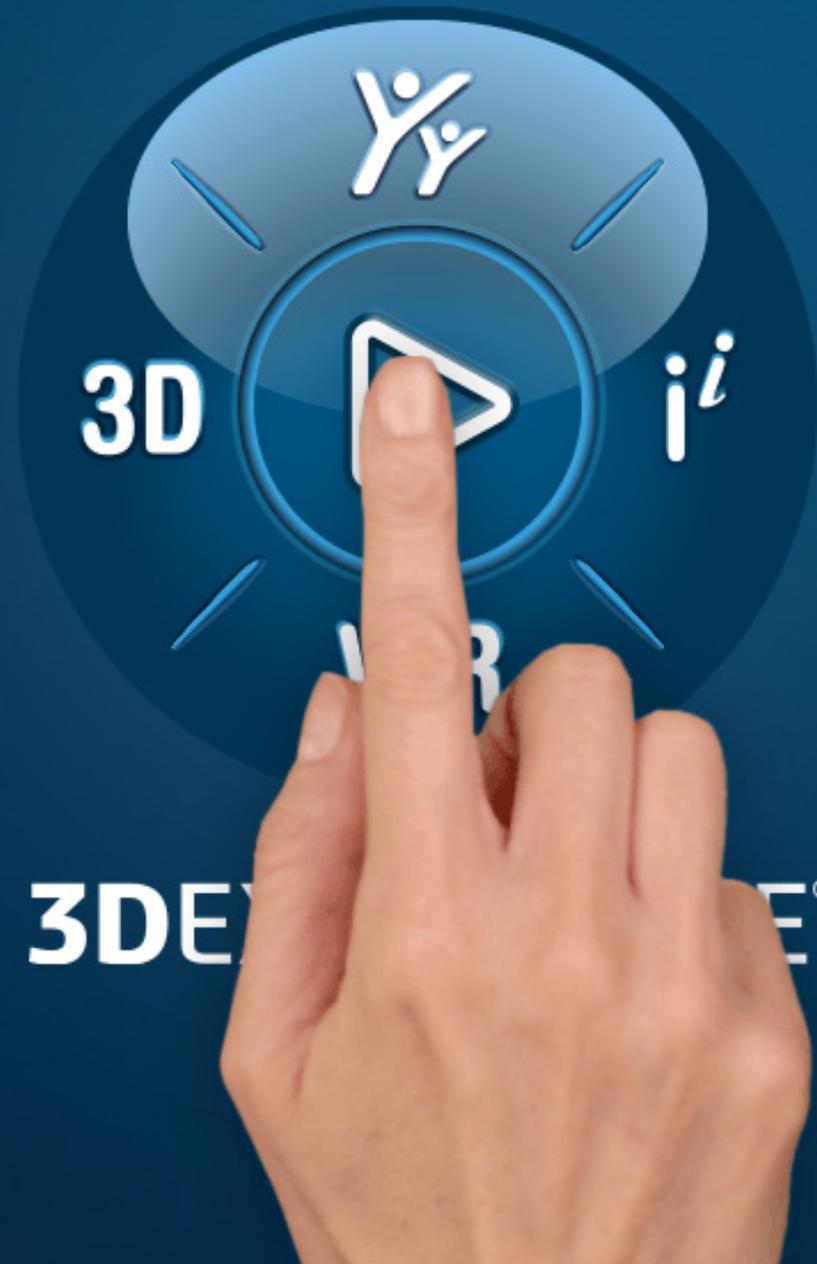
---

### CONCLUSION

---

## STEP 1: THE PROOF OF CONCEPT

Let's take an example; the Proof of Concept. Let us say you want to understand how a new application could be used to advance your business. Traditionally, validating that software would require time and resources, a lot of effort from IT and others to implement, and a requirement to be in the office behind the firewall to analyze the new app and the data you collect. But now imagine using the **3DEXPERIENCE** Cloud to run this proof of concept. There would be no set up as the cloud is maintained and administered completely by Dassault Systèmes. There would be no delays as the cloud is ready to go in minutes on Day 1, and there would be no need to be in the office during a pandemic as the cloud is available to any machine with an internet connection through a secure encrypted data stream.



## INTRODUCTION

---

### STEP 1: THE PROOF OF CONCEPT

---

### STEP 2 : TEST REAL-TIME SCENARIOS

---

### STEP 3: VALIDATE YOUR GOALS

---

### STEP 4: ACCELERATE YOUR TIME TO MARKET

---

### CASE IN POINT: RENAULT'S POC

---

### WHY GO CLOUD NATIVE?

---

## CONCLUSION

---

## STEP 2 : TEST REAL-TIME SCENARIOS

A comprehensive suite of industry-leading solutions, including CATIA, SIMULIA, ENOVIA and DELMIA is available via a single interface to help you scale now. You will have everything you need to bring your ideas to reality, including design & engineering, manufacturing & production, simulation, governance & collaboration.

### INTRODUCTION

---

### STEP 1: THE PROOF OF CONCEPT

---

### STEP 2 : TEST REAL-TIME SCENARIOS

---

### STEP 3: VALIDATE YOUR GOALS

---

### STEP 4: ACCELERATE YOUR TIME TO MARKET

---

### CASE IN POINT: RENAULT'S POC

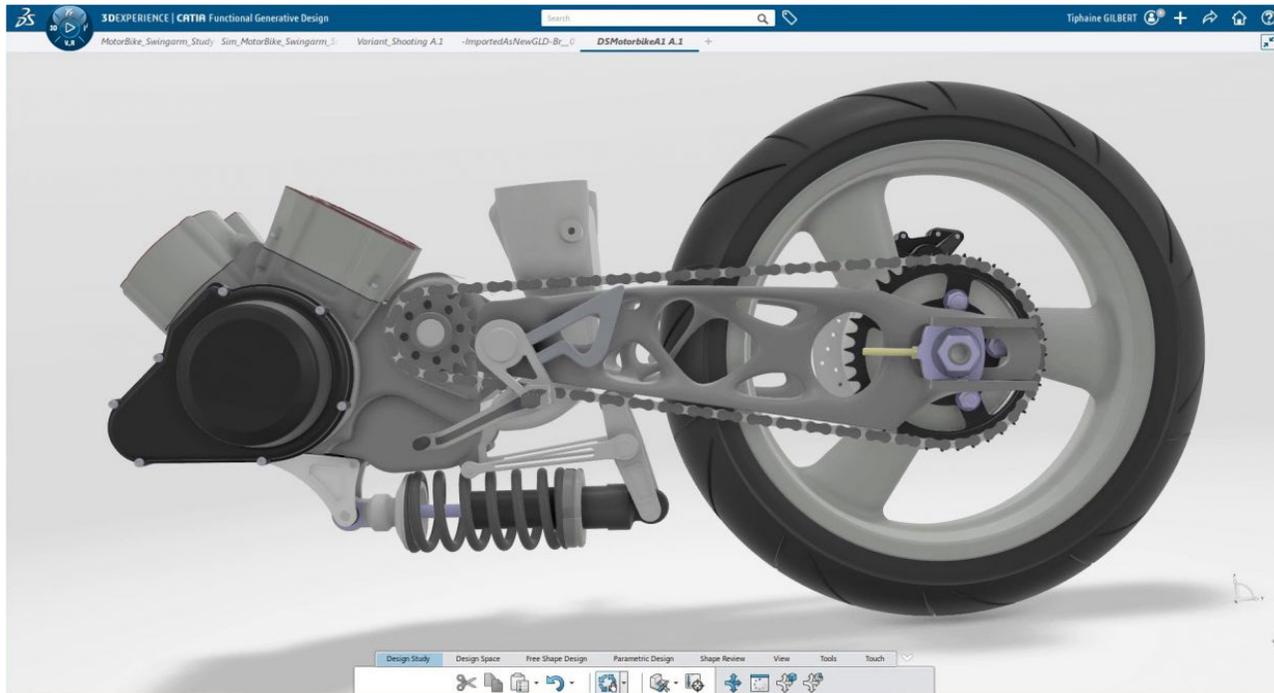
---

### WHY GO CLOUD NATIVE?

---

### CONCLUSION

---



## Design & engineering with CATIA

From 3D sketching, subdivision surface, class-A modeling to 3D printing, mechanical engineering and systems engineering, CATIA provides everything you need for product design and product development.

CATIA's social design environment creates a single source of truth for your project. Accessed through 3D dashboards, CATIA drives business intelligence and enables real-time concurrent design and collaboration across all stakeholders.

[Product Design and Engineering Cloud Solutions](#)

## INTRODUCTION

STEP 1:  
THE PROOF OF CONCEPT

STEP 2 :  
TEST REAL-TIME SCENARIOS

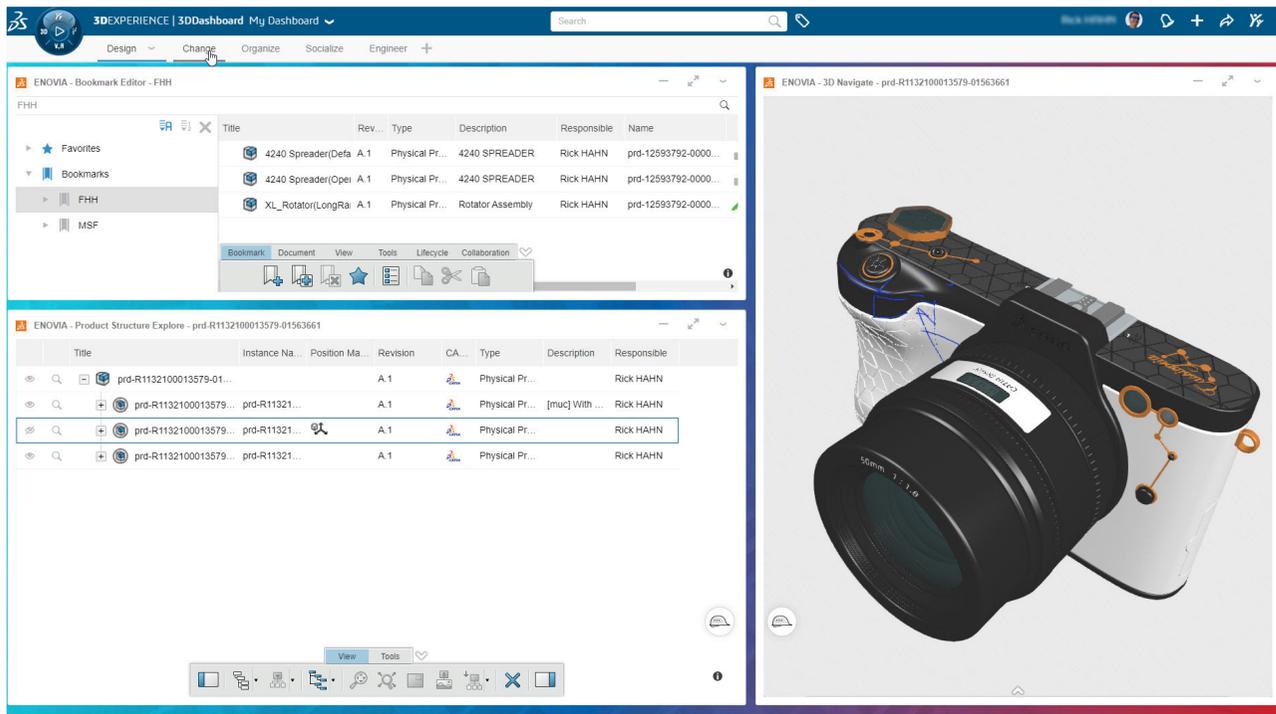
STEP 3:  
VALIDATE YOUR GOALS

STEP 4:  
ACCELERATE YOUR TIME  
TO MARKET

CASE IN POINT:  
RENAULT'S POC

WHY GO CLOUD NATIVE?

CONCLUSION



## Governance and collaboration with ENOVIA

Manage product creation from early planning through development and final release. Accelerate cross-team collaboration and product development in a fully connected on-line environment where a single, shared product definition ensures teams are always seeing and working on up-to-date information.

### [Governance and Collaboration Cloud Solutions](#)

## INTRODUCTION

**STEP 1:  
THE PROOF OF CONCEPT**

**STEP 2 :  
TEST REAL-TIME SCENARIOS**

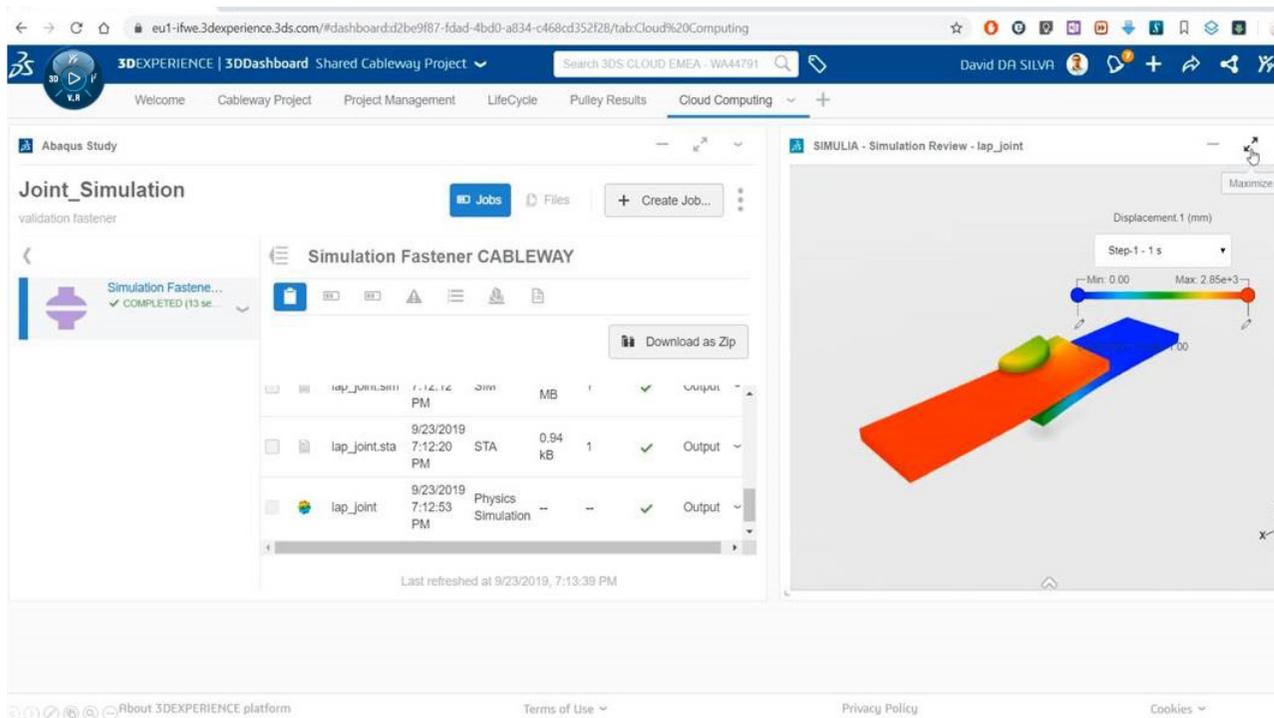
**STEP 3:  
VALIDATE YOUR GOALS**

**STEP 4:  
ACCELERATE YOUR TIME  
TO MARKET**

**CASE IN POINT:  
RENAULT'S POC**

**WHY GO CLOUD NATIVE?**

**CONCLUSION**



## Realistic simulation with SIMULIA

SIMULIA applications accelerate the process of evaluating the performance, reliability and safety of materials and products before committing to physical prototypes.

Today's complex products require a fully featured simulation capability that links to the engineering requirements and uses versioned geometry directly within the design environment.

Simulation for product design improves product reliability and reduces cost and time to market.

[Test and Validate Your Products Faster](#)

## INTRODUCTION

STEP 1:  
THE PROOF OF CONCEPT

STEP 2 :  
TEST REAL-TIME SCENARIOS

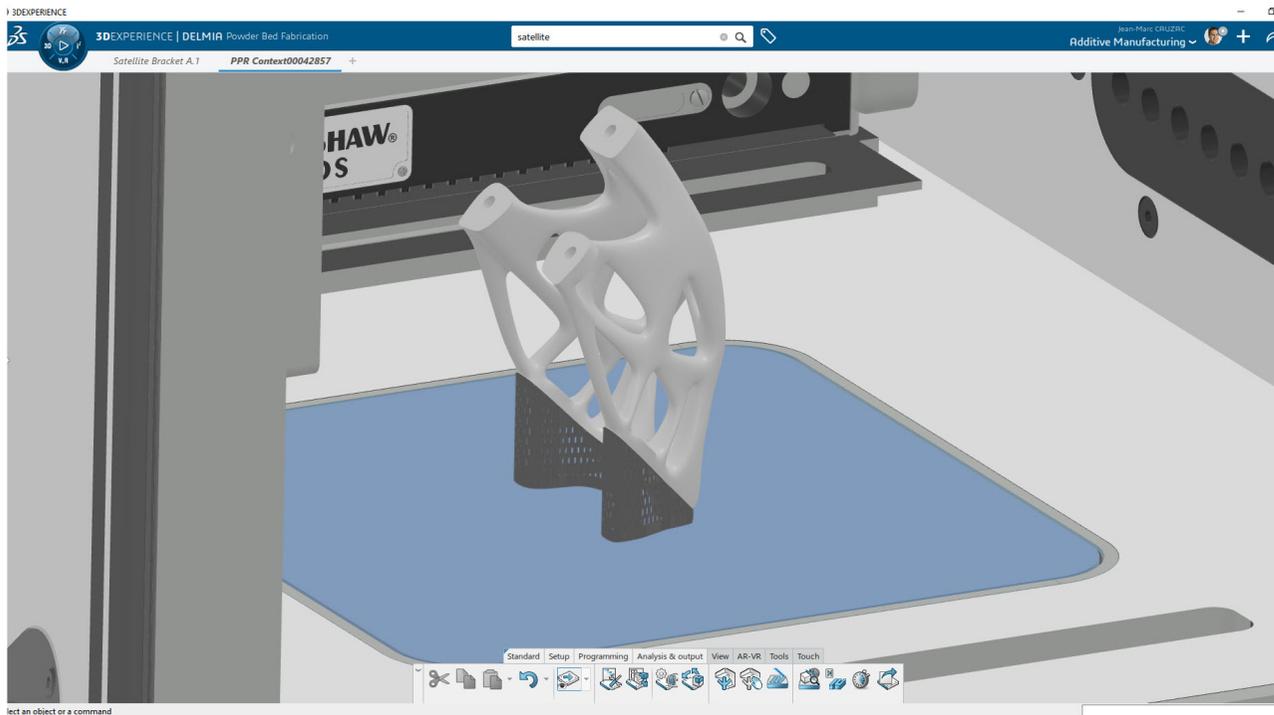
STEP 3:  
VALIDATE YOUR GOALS

STEP 4:  
ACCELERATE YOUR TIME  
TO MARKET

CASE IN POINT:  
RENAULT'S POC

WHY GO CLOUD NATIVE?

CONCLUSION



## Manufacturing Operations on the Cloud with DELMIA

DELMIA, powered by the **3DEXPERIENCE** platform on the cloud, helps manufacturers and service providers connect the virtual and real worlds of value networks to collaborate, model, optimize and perform. Operational excellence requires harmony across the value network.

DELMIA on the cloud provides solutions to leverage the virtual world of modeling and simulation with the real world of operations to provide a complete solution to value network stakeholders: from suppliers, to manufacturers, to logistics and transportation providers, to service operators and workforces.

### [Manufacturing Operations on the Cloud](#)

## INTRODUCTION

STEP 1:  
THE PROOF OF CONCEPT

STEP 2 :  
TEST REAL-TIME SCENARIOS

STEP 3:  
VALIDATE YOUR GOALS

STEP 4:  
ACCELERATE YOUR TIME  
TO MARKET

CASE IN POINT:  
RENAULT'S POC

WHY GO CLOUD NATIVE?

CONCLUSION



## INTRODUCTION

---

### STEP 1: THE PROOF OF CONCEPT

---

### STEP 2 : TEST REAL-TIME SCENARIOS

---

### STEP 3: VALIDATE YOUR GOALS

---

### STEP 4: ACCELERATE YOUR TIME TO MARKET

---

### CASE IN POINT: RENAULT'S POC

---

### WHY GO CLOUD NATIVE?

---

## CONCLUSION

---

### STEP 3: VALIDATE YOUR GOALS

The technology behind the **3DEXPERIENCE** platform will significantly enhance your ability to test your design from a multitude of angles - revealing to you all the tools that Dassault Systèmes offers.

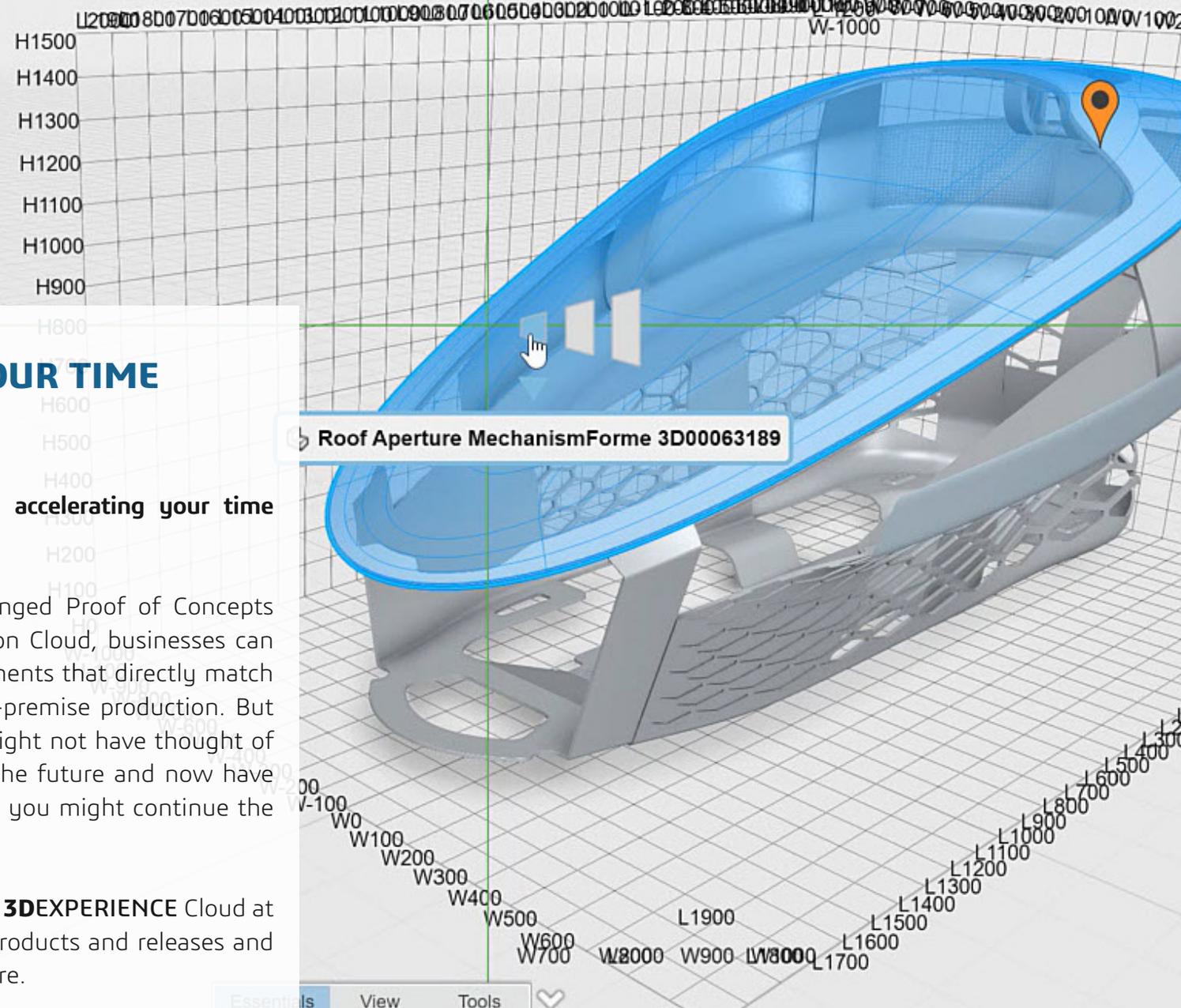
- Unlimited products and concepts can be constructed and replicated with variations
- Build real-world test environments that directly match the customer experience
- Test trials of recently released Roles
- Stakeholders can securely work and collaborate remotely
- Validate your results with analytics
- Ability to test-drive the workplace of the future
- Create marketing content & digital continuity with 3DEXCITE

## STEP 4: ACCELERATE YOUR TIME TO MARKET

Keep your existing processes while accelerating your time to market.

As you can see, the cloud has changed Proof of Concepts entirely. Thanks to **3DEXPERIENCE** on Cloud, businesses can quickly build real-world test environments that directly match the expected experience faced in on-premise production. But there is an added benefit that you might not have thought of – you have gained experience with the future and now have a much better understanding of how you might continue the transformation.

Take the time you need to try out the **3DEXPERIENCE** Cloud at your own pace, test-drive new trial products and releases and explore the possibilities from anywhere.





CASE IN POINT:  
**RENAULT'S POC - COOPERATIVE  
INNOVATION LABORATORY**

In 2019, Renault started its transformation to the cloud focusing on one entity which would benefit from it the most, its in-house Cooperative Innovation Laboratory (LCI), to imagine a disruptive mobility solution for urban areas. LCI used the **3DEXPERIENCE** platform to introduce Renault EZ-FLEX, an electric experimental vehicle aimed to understand the last-mile delivery of goods in future smart cities.

“ The **3DEXPERIENCE** platform opens new avenues for collaborative digital tools applied to the automotive world that go beyond pure engineering design.”

**Laurence Montanari,**  
Senior Innovation Manager  
and Head of the EZ-FLEX Project, Groupe Renault

“ Our Renault EZ-FLEX project tested it to bring together project stakeholders from engineering, design and product marketing – each with their own challenges – around the vehicle’s digital model. Using a cloud version without any customization gave us the autonomy to engage in a new digital ‘test and learn’ experience with dashboard managers, powerful realistic rendering images, urban delivery web monitoring, and virtual visualization with a headset but without data transfer or processing.”

**INTRODUCTION**

**STEP 1:  
THE PROOF OF CONCEPT**

**STEP 2 :  
TEST REAL-TIME SCENARIOS**

**STEP 3:  
VALIDATE YOUR GOALS**

**STEP 4:  
ACCELERATE YOUR TIME  
TO MARKET**

**CASE IN POINT:  
RENAULT'S POC**

**WHY GO CLOUD NATIVE?**

**CONCLUSION**

Indeed, designers, engineers, system architects, cost analysts, marketers and other team members, as well as external partners and suppliers, were connected in a virtual value network that facilitated open innovation, secure collaboration, design and engineering in real time. Team members viewed and validated product aesthetics and technical requirements, analyzed market trends, and easily managed the project using 3D digital assets such as immersive virtual reality, information intelligence and a digital twin of the vehicle.

LCI's transformation enabled the group to test real-time, secure collaboration and connect diverse internal and external project team members to a single virtual value network, giving its team the the agility of a startup.



## INTRODUCTION

---

### STEP 1: THE PROOF OF CONCEPT

---

### STEP 2 : TEST REAL-TIME SCENARIOS

---

### STEP 3: VALIDATE YOUR GOALS

---

### STEP 4: ACCELERATE YOUR TIME TO MARKET

---

### CASE IN POINT: RENAULT'S POC

---

### WHY GO CLOUD NATIVE?

---

## CONCLUSION

---

# WHY GO CLOUD NATIVE?

## EASE OF USE



- Rapid deployment and instant access
- No installation required; no need for an IT administrator and resources
- Automatic upgrades/releases

## CONNECTION & SUPPORT 24/7



- Exclusive, dedicated support Community
- Customized Onboarding & personalized support
- Service access and availability
- Mobile compatible, no interruption

## COST EFFECTIVE



- No investment and maintenance for server storage or backup equipment
- Reduction and optimization of running and operating costs
- Faster time to market

## SECURITY



- State of the art secure environment
- The highest regulatory standards in cloud security
- No data loss
- Encrypted exchanges
- Emphasis on Security in Depth

## INTRODUCTION

---

### STEP 1: THE PROOF OF CONCEPT

---

### STEP 2 : TEST REAL-TIME SCENARIOS

---

### STEP 3: VALIDATE YOUR GOALS

---

### STEP 4: ACCELERATE YOUR TIME TO MARKET

---

### CASE IN POINT: RENAULT'S POC

---

## WHY GO CLOUD NATIVE?

---

## CONCLUSION

---



# CONCLUSION

The **3DEXPERIENCE** Cloud is a collaborative platform that turbocharges the power of the **3DEXPERIENCE** platform by putting it on the cloud. The **3DEXPERIENCE** Cloud gives you flexibility and hyper connectivity between stakeholders to build innovation with a very low cost of ownership. This singular ecosystem enables you to have the tools you need when you need them, as long as you need them, wherever you are. Enjoy core production level results, rapid deployment, and virtually no IT costs, all with the highest level of security.

[Click here to find out more](#)

## INTRODUCTION

---

**STEP 1:**  
**THE PROOF OF CONCEPT**

---

**STEP 2 :**  
**TEST REAL-TIME SCENARIOS**

---

**STEP 3:**  
**VALIDATE YOUR GOALS**

---

**STEP 4:**  
**ACCELERATE YOUR TIME TO MARKET**

---

**CASE IN POINT:**  
**RENAULT'S POC**

---

**WHY GO CLOUD NATIVE?**

---

## CONCLUSION

---



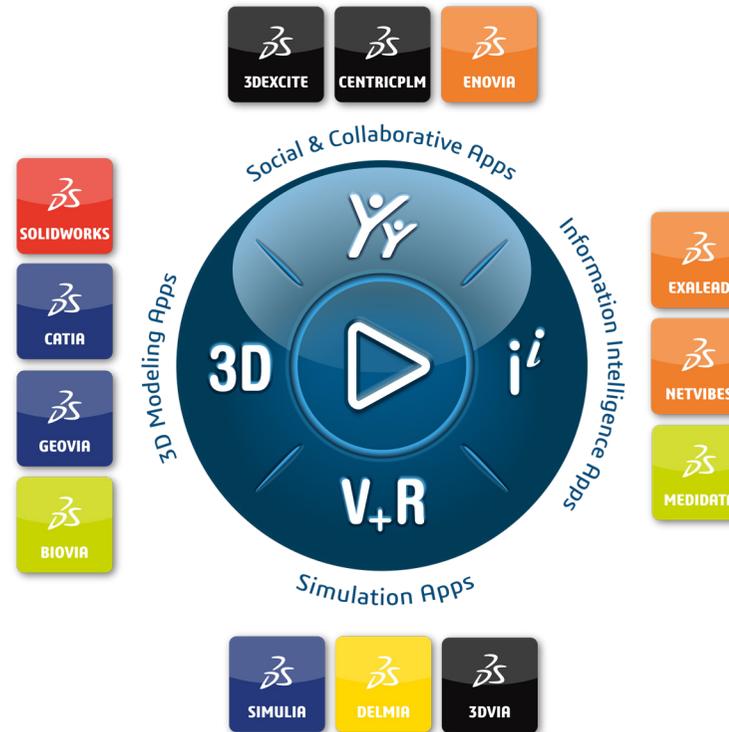
www.inceptra.com

Dassault Systèmes Platinum Partner

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).



© 2020 Dassault Systèmes. All rights reserved. 3DEXPERIENCE, the 3DEXPERIENCE logo, 3DS logo, CATIA, BIOVIA, GEOVIA, SOLIDWORKS, ENOVIA, EXALEAD, NETVIBES, MEDIDATA, CENTRICPLM, 3DEXCITE, SIMULIA, DELMIA, and 3DVIA are commercial trademarks or registered trademarks of Dassault Systèmes. "A French" "société européenne" (Mesalliance Commercial Register # B 322 806 440), or its subsidiaries in the United States and/or other countries. All other trademarks are owned by their respective owners. Use of any Dassault Systèmes or its subsidiaries trademarks is subject to their express written approval.

## INTRODUCTION

STEP 1:  
THE PROOF OF CONCEPT

STEP 2 :  
TEST REAL-TIME SCENARIOS

STEP 3:  
VALIDATE YOUR GOALS

STEP 4:  
ACCELERATE YOUR TIME  
TO MARKET

CASE IN POINT:  
RENAULT'S POC

WHY GO CLOUD NATIVE?

CONCLUSION