THE CLOUD:
A performance Booster for Industry

Designing, simulating and planning industrial production online... The right questions to ask.
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FLYING WHALES,
or how to access the best design tools to reinvent the French airship

DESIGNER OF A HELIUM-POWERED AIRSHIP TO TRANSPORT HEAVY LOADS

Benoît Beaubier,
Vice Chief Technical Officer of Flying Whales, explains why they chose 3DEXPERIENCE® on the Cloud to develop their innovation.

It all began with an encounter... between the French National Forest Office and Sébastien Bougon, CEO of Flying Whales.
There was a need to find a way to retrieve timber from hard-to-access areas without building roads. The genius idea was to reinvent the airship. It would be lighter than air, eco-friendly and able to carry up to 60 tonnes of cargo. For the first "flying whales" to be able to sail through the Clouds transporting timber in a few years' time, the FW teams first had to design them in 3D and simulate the layout of the first factory.

"Why did we choose 3DEXPERIENCE® on the Cloud? This solution was super sexy: zero infrastructure and extremely easy to set up."

ONCE UPON A TIME, THERE WAS A NEED...

The Flying Whales teams needed a CAD (computer-aided design) tool to create an initial design of the airship of the future. This was in 2016, and the CTO conducted a benchmarking process comparing existing solutions before finally opting for 3DEXPERIENCE® on the Cloud. Why this choice? "In concrete terms, Dassault Systèmes software is highly rated in the French aerospace landscape. 3DEXPERIENCE® is a scalable, highly integrated solution which can considerably minimize breakdown problems in the digital chain. In addition, most people arriving on the market have been trained to use CATIA CAD software because Dassault Systèmes has a wonderful policy in respect of schools, so, on the whole, the solution was a source of excitement."

THE CLOUD TRIGGER

Flying Whales opted directly for these Cloud-based solutions. The first reason was the cost. "The pricing was more attractive and, since our company still has several years of development work ahead of us before we start making money, this was a very important point for us." The second argument was its user-friendliness: "Our organization is small with a tiny IT team, so the idea was to minimize our infrastructure costs, maintenance and version upgrade issues, and so on, by adopting a full Cloud solution."

The third selection criterion was the possibility of collaborating with suppliers, partners and employees from all over the world. "3DEXPERIENCE® will be the central solution containing the full definition of our machine. We will be able to split the mockup and define the areas of responsibility for each of our partners. 3DEXPERIENCE® will allow us to work on the project collaboratively." This will be all the more important as Flying Whales expands internationally, with the planned opening of a research and development office in Quebec.

WHAT IF…? (FEARS AND PRECONCEPTIONS)

➡ What if the Cloud-based solution is less workable than a local install?

"Because it's so well done, users barely notice that they are on the Cloud. They work as efficiently there as on a local software install. Because the Cloud system is 'invisible' to end users, we have a solution that works well."

➡ What if an ill-intentioned user tries to hack the mockup?

"The safety of our data was the main question for us before we agreed to make the move to the Cloud. This resulted in lots of discussions with Dassault Systèmes and KEONYS. The system's security is based on the definition of access rights to the mockup."

BENEFITS OF THE CLOUD FOR FLYING WHALES

No investment in servers or IT skills.	Attractive pricing for a startup developing an innovative product.
Regular updates with no compatibility issues.	Easy implementation: maximum of 1-2 months to become operational.
Simplified collaboration with the company's entire ecosystem (suppliers, partners, international subsidiaries and different sites in France).	

FLYING WHALES

Organizational profile: Flying Whales

◗ **Business:** Designing a type of airship that is eco-friendly and lighter than air to transport goods.

◗ **Founded:** 2012.

◗ **Employees:** Around 100.

◗ **Locations:** Two French sites (Suresnes and Bordeaux) with a third coming soon in Montreal, Canada.

◗ **Primary target market:** French National Forest Office (ONF), for the transport of timber.

◗ **Shareholders:** ONF, Nouvelle-Aquitaine Region, Government of Quebec, AVIC (Aviation Industry Corporation of China), ADP, Air Liquide and Bouygues; the project is supported by the BPI.

◗ **Dassault Systèmes/CENIT-KEONYS solution used for design and simulation, data sharing and manufacturing:** 3DEXPERIENCE® on the Cloud.

◗ **Number of users of the solution:** 20.

> ## Because the Cloud system is "invisible" to end users, you end up with a solution that works well.

BONUS TIP

▶ "The best question to ask before implementing 3DEXPERIENCE® on the Cloud is how it aligns with your needs. An accurate needs assessment done with the teams from KEONYS can simplify your adoption of the tool. This means learning about the solution's Cloud-based features to ensure that everything you need is there."

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