

Press release: Going digital for performance and security

Every Thursday in October, Eurolarge Innovation hosts the Bretagne Sailing Valley® around the Vendée Globe Viso Café from 9:30 a.m. to 10:30 a.m. The fourth took place on 22 October and the theme was technological developments in the digital field. Speakers included BSB Marine boss Gaetan Guerou, Jean-François Cuzon, who runs Pixel sur Mer, Olivier Douillard, founder of Aim 45, and Henry de Malet a research engineer at NKE Marine.

Between the Vendée Globe 2016-2017 and this next edition which starts on November 8th, the digital sector of competitive sailing has grown enormously. This growth has led in particular to the creation of companies such as AIM 45, which specializes in analysing data received from boats. *"A few years ago, there must have been about thirty sensors on an Imoca, there are now about 500 that give an enormous range of information,"* explains Olivier Douillard, the founder. *Before, they revolved mainly around speed, today the data includes for example the position of the appendages, rigging loads, energy consumption, measures of the deformation of foils..... All this information, we have to collect, log it and exploit it and diffuse it. All that has been very time consuming and so it pushed us to develop a digital solution which can be quickly made all this information available to all. It's a real area of development for the teams."*

Pixel sur Mer, founded in 2008, has been a leader in the sector for some time, but it has had to evolve and adapt recently to fully exploit this explosion of data, as is confirmed by Jean-François Cuzon, the creator of this company specializing in the installation of electronic and computer equipment on board racing boats: *"Initially, we are systems integrators. But with the very large increase in the number of sensors, we have developed new tools to transfer the data both to the skipper, so that he or she can use it to make his or her boat work better, but also ashore, which then allows performance and load analysis, with solutions like the one proposed by AIM 45."*

Among these millions of pieces of data, there are those transmitted by OSCAR. Developed by the company BSB Marine, thanks to three optical sensors located at the top of the mast and a calculator that will analyze the image, this system allows the detection of unidentified floating objects. Installed on 18 of the 33 boats of the Vendée Globe 2020, it is expected to evolve in step with the rapid progress of artificial intelligence. *"Our objective is to send good information to the autopilot so that it is able, in the long run, to avoid the obstacle. On this Vendée Globe, one of the boats will test this automatic avoidance,"* says one of the co-founders Gaetan Guerou.

These continuous streams of information are used in to feed the automatic pilots which the company NKE Marine must therefore constantly update and adapt, according to the data that the teams want to see integrated by the pilot. *"So far we are*

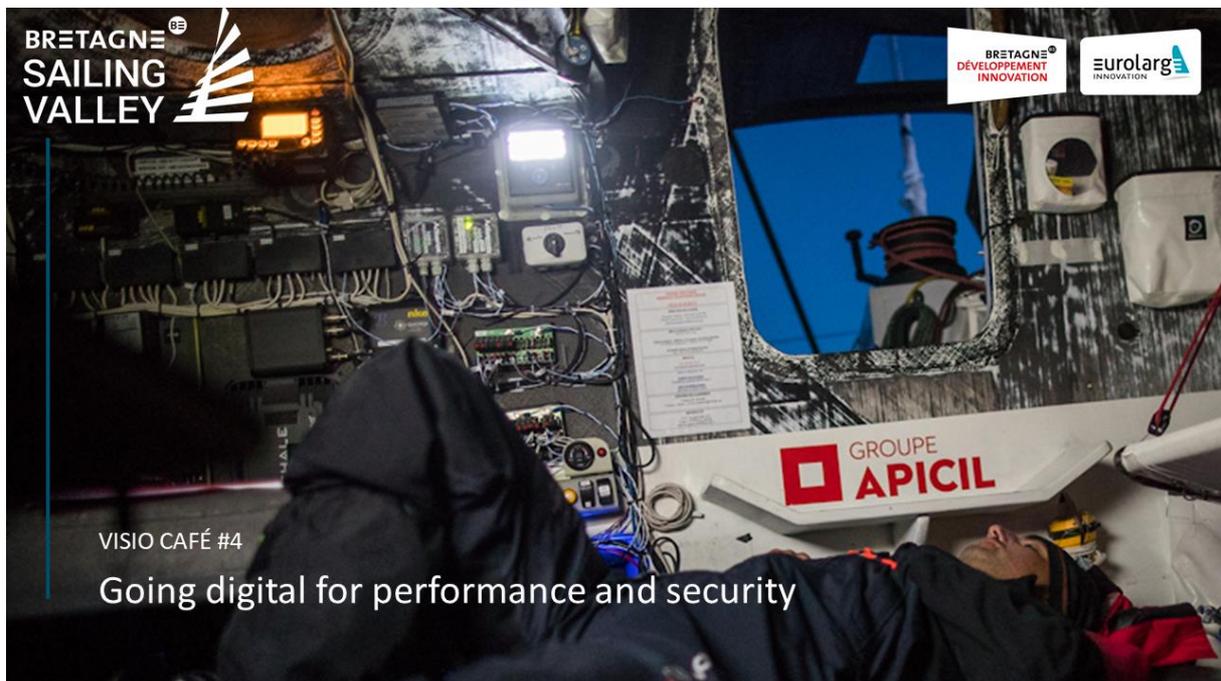
leaving the option of entering external data, but we also can't just open everything up because you risk compromise and not really mastering anything," warns Henry de Malet. "When before the pilot might have given a helm movement that is not needed, it resulted in maybe a torn sail; today, with the foils it creates the risk of violent injuries or sending the skipper overboard, so all our job is to figure out how to incorporate all this new data while preserving safety on board."

For all, the Vendée Globe will in any case be very rich in teachings, as Jean-François Cuzon sums it up: *"Everything we develop in Imoca helps us for other areas. There is a real trickle down infused by the Vendée Globe."*

**Go to the replay of the Bretagne Sailing Valley video coffee,
Subtitled in English (activate the YouTube subtitling function)**



[Going digital for performance and security](#)



[>> All the replays of the Bretagne Sailing Valley](#)

Press Contacts :

Bretagne Développement Innovation

Chrystèle Guy - 07 82 21 81 35 – c.guy@bdi.fr

Espace presse : www.bdi.fr/fr/presse/

Agence Oxygen

Emmanuelle Catheline - 06 79 06 36 11 - emmanuelle.c@oxygen-rp.com

Christelle Roignant - 06 83 81 61 61 - christelle@oxygen-rp.com

**BRETAGNE^{DS}
DÉVELOPPEMENT
INNOVATION**