SEA WHAT YOU CAN'T SEA

PORT INFRASTRUCTURE ASSET INTEGRITY WEB PLATFORM

CONTACT

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SOMMAIRE

GLOBAL MARKET

- 92% of world trade transits through ports
- The world market will represent 243 billion dollars in 2025
- The top 10 shipping companies in the world account for 89% of the global market

THE PORTS
A STRATEGIC ELEMENT OF WORLD TRADE

CLIMATE CHANGE IMPACT

- The IPCC reports predict a rise in water levels of 0.5 meters by 2050 and more than one meter by 2100.
- Most of Port authorities don't know how to provide accurate information on the state of their ports
- They are not able to anticipate the impact of rising sea levels on ports

THE COST OF INACTION IS ESTIMATED AT 100 BILLION DOLLARS PER YEAR

ABIM - ASSET INTEGRITY WEB PLATFORM

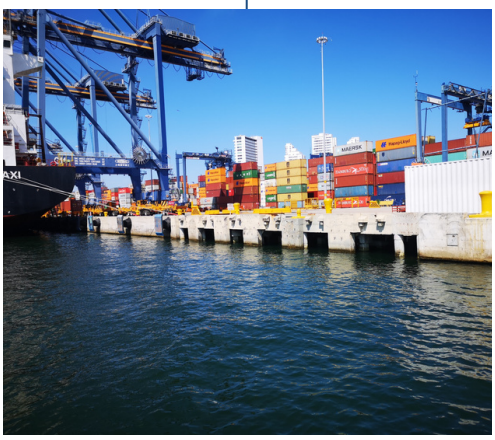
Innovative startup dedicated to monitoring and predictive maintenance of ports by connecting your physical environment to its Digital Twin

You increase the net present value of your assets, make informed maintenance and investment decisions while ensuring the operational availability, quality and safety of your assets

State of the art

Today, port audits are performed by visual and scuba inspections (photos and videos), drones (aerial) - ROV (underwater) giving an aerial view of the area and hours of underwater videos. The information is compiled in PDF documents, paper reports or video supports for which we note a limited understanding and view of the state of the port with a loss of historicization of previous studies.

Totally insufficient means in front of the strategic stakes of the ports.

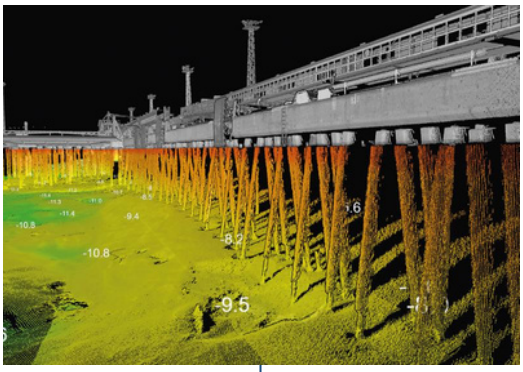


Our Solution :

ASSET INTEGRITY WEB PLATFORM

CLOUD

LIFE CYCLE ASSESMENT



ABIM See What You can't Sea

Our web application dedicated to the elaboration of monitoring and maintenance plans for ports (surface and underwater), provides an interactive digital twin enriched with strategic data and historical information related to the analysis of the Risk / Cost / Investment balance

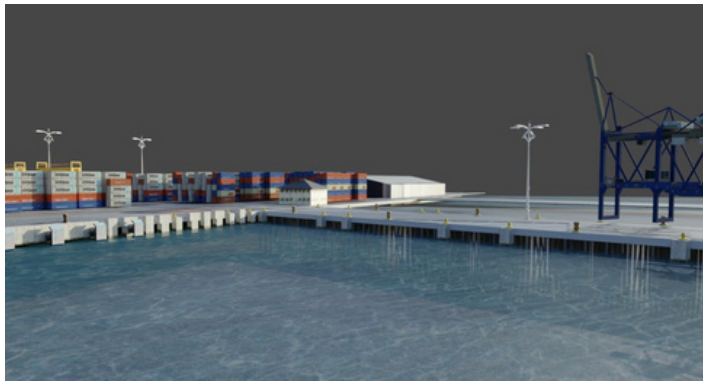
In the face of climate change and the challenges it imposes, we improve collaboration and strategic decision-making by each of the project's stakeholders by supporting the operator in the predictive maintenance of assets

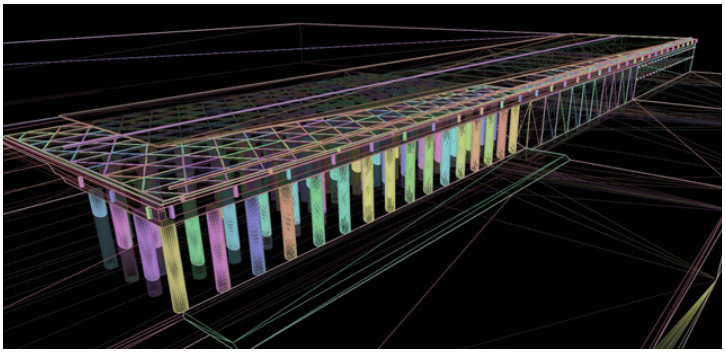
Keywords defining the project:

PORTS - DIGITALISATION DES PORTS -INNOVATION - DIGITAL TWIN - AR/VR - NEW SPACE - SATELLITE DATA - COLLABORATIVE - CLIMAT CHANGE - ASSET INTEGRITY - LIFE CYCLE ASSESMENT - PREDICTIVE MAINTENANCE - SUSTAINABILITY - RESILIENCE

4 Technological innovations at the service of the project :

The Digital Twin, a real 3D detailed representation of the physical infrastructure, facilitates the understanding and the global consideration of the structure under 3 axes : mechanical - usage - strategic
in order to control the balance
Risks / Costs / Investments





BIM to codify, centralize and integrate all relevant data for optimal analysis and promote better collaboration between stakeholders

Augmented and virtual reality AR/RV for immersive visualizations of the infrastructure, scenario simulation and virtual inspections based on the physical environment

The InSAR data from the new space are satellite data that provide information on stability, movements of the infrastructure, with precedence since 2018. As well as environmental data through spectral imagery

Benefits of our solution in the context of the SDGs:

The World Ports Sustainability Program and the International Association of Ports & Harbors will implement the UN SDGs for ports under two themes: Infrastructure and Digitalization

ABIM enables Authorities and Operators to address the key challenges of Digitalization, Sustainability and Resilience of infrastructure and services in ports

- The INFRASTRUCTURE sub-DOs

The objective is to optimize the physical infrastructure of the port

Optimizing the use of existing port capacity

Focus on climate resilience in infrastructure development and elevation and climate adaptation projects

Sustainable port development projects

- Manage the increase in vessel size

The sub-DGOs DIGITALIZATION

The objective is to accelerate digitization in the ports

Innovative digital applications

Smart port initiatives

Data collaboration with stakeholders

Port community systems

Port management systems

THE ABIM TEAM

Pierre-Emmanuel PEYROU

CEO & fondateur - 24 years of experience

- Former combat diver of the French Army
- Inspector of engineering structures and underwater structures
- Commercial diver & commercial diving company manager
- 5300 professional dives and 70 audited sites

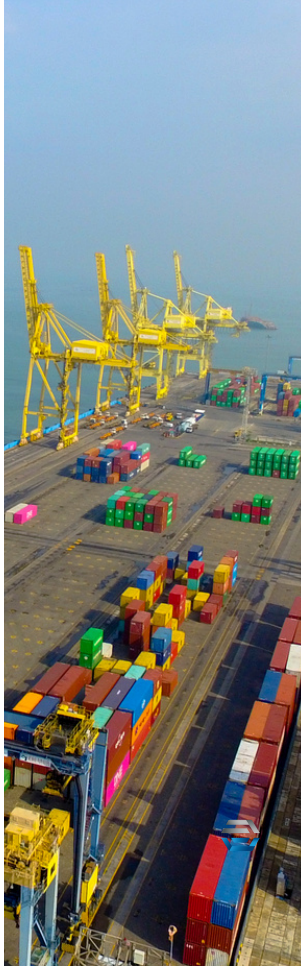
Valère POULAIN

DG - ENG. Civil Engineering & Geotechnics - 30 years of experience
Director of Civil Engineering Division CAMPENON BERNARD (VINCI)
Project Management Committee of Port Fos 2XL - ITER - Marseille Tunnels

Yumil RUEDA FLORES

Ing Mécatronique IOT - Ing FullStack Dev AR/VR - 3 Years of experience

- ABIM Fullstack developper & 3D VR integrator



SPECIALISTS PROVIDERS

Julien GUYOT

- Designer - Teacher
- Developer of digital solutions
- Modeler and 3D rendering
- 15 years of experience

Kristof SEMJEN

- Fullstack & Core Developer
- Lawyer
- 15 years of experience

Chenggang WANG

- Dr in Computer Science E Learning AR/VR
- Fullstack Developer
- 15 years of experience

Mouloud AIT KACI

- PhD in Cyber Security & Mathematics
- SecNumCloud Auditor
- 15 years of experience

Christian SANCHEZ

- Mecatronic & IOT Systems Eng
- IOT Systems Designer
- Logistics Simulation Developer
- 35 years of experience