

**PROJET DESIGNATION: VisaAI**

**DESCRIPTION:** Assuming that the human factor is a KPD (key production driver) within the multiple and complex field operations of Visabeira, the company identified an opportunity to **increase efficiency in term of its operations** by creating patterns of behaviour associated with services delivery, supporting decisions associated with the technical and operational management of KPDs.

The system should be able to integrate different data sources associated with the operation, to carry out data ETL (**extract, transform and load**) as well as to integrate and analyse complex information patterns. The integration of varying types of data and interpretation by XAI (**Explainable Artificial Intelligence**: a set of processes and methods which allows users to understand and trust the results and outputs creates by **machine learning algorithms**), can reach unmanageable levels of complexity, so the system will be able to **model complex interactions** in the workplace, **exploring aspects in terms of non-apparent operational services delivery**.

**GOALS:** Creating **digital twins** of typical operators in each service delivery model by Visabeira operatives, using advanced data sources that allow data to be processed by XAI creating a decision support system compatible with the complexity of operational activity.

**VISABEIRA I&D'S ROLE:** Creating digital twins for the usual operators associated with each service delivery; Creating typical behavioural patterns of standard operators in each service delivery model; Developing predictive forecasting capacity through the application of XAI; Creating selective information distributed to domain experts, enabling timely and efficient decision-making.

**RESULTS:** Dematerialisation of operations and decision support system to deliver operational services.

**START DATE:** 2022

**COMPLETION DATE:** 2025

**SELF-INVESTMENT**

**END-CUSTOMER**