#SEASON 3

CALL FOR PROJECTS

PREDICTIVE MAINTENANCE

TAKE THE CHALLENGE!









CONTENT

- 1. PRESENTATION OF THE PROGRAM
- 2. THE SUBJECT OF THE CALL FOR PROJECTS
- 3. EVALUATION CRITERIA

SOLVE: PRESENTATION

The program:

Mobilize Financial Services has launched **SOLVE**, an open innovation program with the aim of improving the tools used daily by the group's employees.

This collaborative programme calls on **innovative start-ups and SMEs** to propose their technological solutions in response to the needs of employees, in a **co-construction** approach.

For this third edition, Mobilize Financial Service's Information Systems Department of Mobilize Financial Services France, the IT Production Department, in charge of the subsidiary's information systems and applications, is mobilizing to explore and test innovative incident management solutions



<u>The sponsor: Mobilize Financial Service France Information Systems Department, in charge of the subsidiary's information systems and applications.</u>

Predictive Maintenance is a discipline focused on handling and resolving incidents related to information systems before they occur. It involves detecting, analyzing, and rectifying disruptions in IT services to ensure optimal performance and prevent potential damages.

The IT Department of Mobilize Financial Services France uses the Elastic Search software suite, a true logbook for servers and hosted applications, enabling reactive operational management: incident management, bug correction, application performance measurement...

However, the IT Production Department would like to move from a reactive to a proactive approach, with the Group focusing its efforts on detecting incidents on its systems and applications, in particular through the detection of weak signals.

These incidents can lead to a variety of technical or functional failures, such as application interruption or service degradation, resulting in reduced performance...



For the pilot phase of the challenge, the team wants to test the solution on at least one of the applications at the heart of Mobilize Financial Services' business: the Single application, made up of a variety of modules, notably enabling contract and billing management.

The solution must be based on the logs produced by Elastic Search, and its operation must be close to the current technical perimeter, in order to guarantee downstream teams' mastery of the tool.

In order to anticipate a possible industrialization phase, the solution should not be specific to this application alone, but should be adaptable for deployment across the Group's entire IT environment.

The number of users will be defined according to user profiles and the phase of the project (pilot or industrialization).



The aim is to anticipate system and application incidents, even before they occur, thanks to the detection of weak signals, in order to avoid interruptions and service degradation.

To achieve this, the IT department is looking to equip itself with a solution that interfaces with the Elastic Search suite, and which must be able to:

- Draw information from logs (system and application) retrieved by Elastic Search
- Analyze these logs to extract clues (= weak signals) concerning the occurrence of incidents
- Detect in advance these weak signals at the origin of incidents
- Develop a learning system to link a symptom (weak signal) to an incident
- Provide indicators for operational management: status of services and systems, incident status, frequencies, etc.

Ultimately, this type of solution should enable teams to:

- Identify incidents before they occur (proactivity)
- Detect in advance these weak signals at the origin of incidents
- Inform users at the earliest possible stage, and rapidly implement automated corrective actions as soon as possible.
- Reduce the occurrence of incidents, or the downtime of applications and services due to unavoidable incidents.



- Languages supported by the tool for the collection and analysis of information: the solution must make it possible to read all types of scripts (foreign languages).
- The language of the tool: English at least (French optionally) for the restitution of the elements.
- The solution should not require import or interconnection with the current system.
- The solution must be able to be implemented on the various locations of the group and its sectors of activity.



SOLVE: CONTRAINTS

To successfully complete the project, it will be important to propose a solution that respects the constraints listed below:

- The solution must be proposed « On-premise »
- The solution must interface with the Elastic Search software suite
- The solution's code must be based on the python language, and java if necessary
- During deployment, secure access to source data by the solution provider must be ensured
- The solution must be non-intrusive :
 - Not require too many resources, disrupting the operation and performance of the applications it monitors
 - Not require the addition of code that could degrade services
- Once deployed, operational and day-to-day management and maintenance of the solution must be handled internally
- Once deployed, access to the solution must be secure and dependent on different user groups and access typologies
- It must comply with the provisions of the RGPD



SOLVE: EVALUATION CRITERIA

1. Relevance of the proposed project

Relevance of the application submitted

- Ability to show a clear demo of the solution than can be tested
- Quality of the application presented (writing, presentation effort, visual elements ...)

Relevance of the proposed solution, in relation to the needs expressed by the sponsor

- Understanding of the needs, key issues and problems of the sponsor
- Completeness of the offer, proposed technical bricks and functionalities targeted for the needs expressed
- Technical relevance: compatibility with the sponsor's existing infrastructure and possible integrations
- Taking into account the different types of users
- Quality of the user approach / user-friendly approach



SOLVE: EVALUATION CRITERIA

2. Ability to conduct a pilot phase

Sufficient technological maturity of the proposed solution

Accuracy and reliability of the information reported

Solidity of the company

- Economic base: turnover, customer portfolio, number of employees, development prospects
- Similar references in the sector
- Specificities and added value of the company

Quality of the team

Human resources to carry out the project (expertise, profiles...)

Experiences in collaboration

Ability to comply with Mobilize Financial Services' IT standards



SOLVE: EVALUATION CRITERIA

3. Perspectives of collaboration with Mobilize Financial Services

Budget

- Business model
- Affordable implementation and maintenance costs considering the potential industrialization of the solution: anticipation of costs beyond the pilot
- Risk of economic dependence

Operational plan

- Ability to quickly deploy the solution
- Language of the tool
- Adaptability of the solution over time, in order to be able to take into account new needs or their evolutions at the group level

Strategic nature of the project in the company's development plan

 Adequacy of any required developments (functionalities and geographical coverage) with the candidate's strategic development axes

