Paris Session 2022

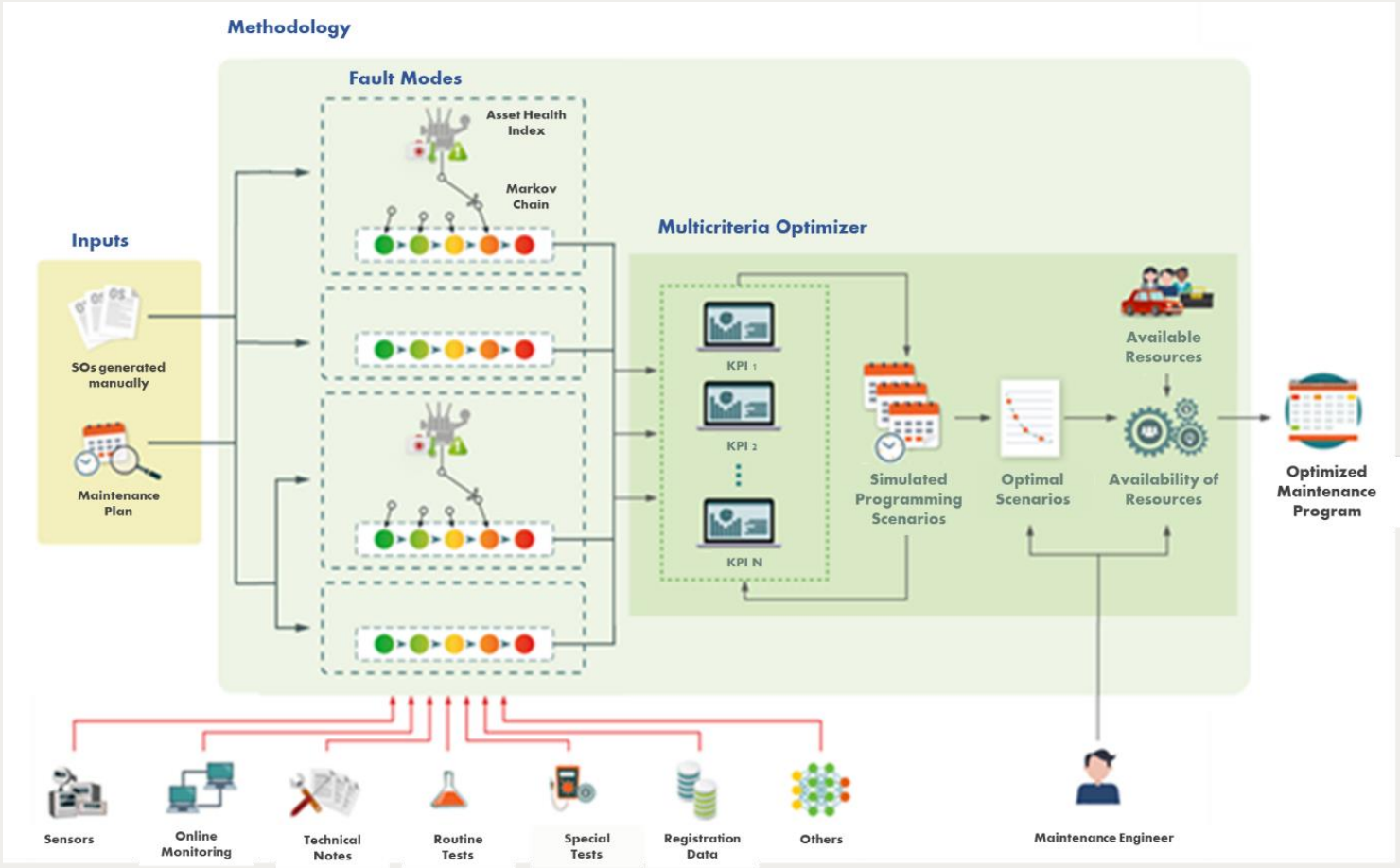
D2 - Information Systems and Telecommunication

PS 1 - Q.1.8 - What are the methods of adaptation and scaling of intelligent decision supporting systems in order to keep the system operable for a long period under the changing operation conditions (technological process, market conditions, regulatory requirements, etc.)? How can we describe the lifecycle of sustainable intelligent decision supporting system in the power industry?

Marcos Alves - Brazil

Application of Artificial Intelligence Tools for Optimized Maintenance Scheduling Based on Asset Management Concepts

- This project aimed to help the maintenance engineering to get better decision making using data from asset condition, failure statistics and costs
- Using asset condition, Markov chains and a smart optimizer the algorithm seeks to optimize key performance indicators
- Multiple KPIs are optimized by means of a Pareto Optimal Curve



Group Discussion Meeting

Application of Artificial Intelligence Tools for Optimized Maintenance Scheduling Based on Asset Management Concepts

- The methodology created in this work is data based so it is necessary to create routines that adapt the parameters according to data drift.
- These routines were created in an asset management platform
- Also, the scenario and cost function of the model are flexible in order to adapt to many scenarios that can happen in practice.
- In this way, the Dashboard developed presents the real condition of the maintenance plan and maintenance indexes

Group Discussion Meeting