

"Predictive Maintenance beyond Prediction of Failures"

Complex, critical assets don't fail too often. Actually, on the contrary, they have very high MTBF and are almost always structurally over-maintained, simply as a reaction to how painful and expensive failures can be. For this reason, the application of traditional data science methods aimed at predicting specific failures seldom produces usable results. When prevalence is low, overfitting and low precision almost unavoidably creep in. Nevertheless, predictive methods can produce amazing results when used to increase relevance and precision of detailed maintenance decisions, helping to allocate resources where they can make a difference, and reducing the amount of activities performed unnecessarily. Establishing proper life and health indicators enables dramatic increase of efficiency and a better management of the risk profiles for the assets. A few concrete examples will be presented, out of experiences in the railways industry.

CV:

Francesco Mari is Vice President for Business Innovation in the Internet of Things development organization of SAP. In this role, he works with customers in identifying and leading highly innovative projects in which IoT technologies are leveraged to unlock untapped opportunities and generate tangible business value. Francesco has a 25+ year record of achievements as management consultant, entrepreneur and business leader, with a special focus on helping companies to create tangible and measurable business value leveraging on IT-driven innovation.