

Company name:

Schneider Electric

Domain:

Energy Management and Sustainability

Problem area:

Electro Intensive – Electrical Distribution – Asset Performance Management System – AI & ML modeling of Electromechanical Switch gears

Problem Definition:

Millions of Switchgears (both low voltage and medium voltage) are working in many electrical infrastructures of large installation like Oil & Gas, Metal, Mining & mineral, transport sector etc., These switch gears have approx. 25 to 30 years design life. With variations in electrical & environmental parameters, they tend to deteriorate earlier than their design life. If only there is a digital twin which could predict the failure, it can save the equipment and very importantly it can save the loss of productivity. These switch gears are full of steel structures, copper or aluminum as conducting mechanism and many type of insulating material. There must be a digital twin hacking the material science of the matter to be more accurate on prediction.