



# Survival analysis for progressive cavity pumps for an oil and gas major on Microsoft Azure

*The customer had a regularly scheduled maintenance being carried out across their pump ecosystem. Despite this, there were sudden unplanned downtimes which were going unaddressed since there was no prior intelligence on what caused*

*the failure and how it could be addressed. A mechanism to simulate the propensity to fail based on changes in control variables would be of greater use and cut down on increased operational expense.*

Text mining, survival model on time series data and what if scenario analysis empowers field personnel in failure prediction and maintenance planning



An app powered by data driven insights feeding off of a survival model analysis on IoT, service history and alert data to predict time left before failure occurs and simulate the failure Probability at single well level based on changes in control variables.