Jurgen Weichenberger
Data Science Senior Principal, Accenture

Video transcript

The power of digital corrosion management.
The current challenges in the major oil and gas downstream industry are around ageing equipment. Ageing equipment causes corrosion problems, it causes an increased failure ratio of the equipment itself.

And there is a change in the operator culture itself: in the old days the guys graduated to the control room - today we hire straight into the control room and analytics then have to help people understand the plant better, because you have never seen the plant before, as it works outside.

When you look at the corrosion challenge, we want to tell people where can they go, how can they find corrosion, how can they deal with corrosion, how severe it is.

It’s the same when you look at ageing equipment and the failure ratios. Where is the failure happening, what is it causing, how can we help better understand the failure? Running analytics can say what causes the failure, how can we fix the failure. That is a challenge we see every day in the major oil and gas downstream plants, and where they want to get better. Getting better means getting more time out of ageing equipment and saving capital investments.

What can refineries do now to get ahead?
The leading practices in the refining industry are mostly formed by the leading players in the downstream oil and gas industry. What they are doing now is building multi-disciplinary teams combining data scientists, advanced business analytics analysts with their engineers.

To advance to the next level of their processes. It’s not only that they establish these teams, they have also realized that they need external help to get things done. External companies can bring in experience they didn’t have before in their company. By using this experience, they can attack their challenges and succeed to reach the next level in a smooth and easy way, and then extends their asset life and their refining lifetime and be at the top of the edge, and be the leading companies in the world.