





30-31 October 2019 Sands Expo & Convention Centre Singapore

EXCLUSIVE INTERVIEW

Chen Linchevski CEO and co-founder Precognize



Please introduce your role at Precognize.

I'm Chen Linchevski, the CEO and co-founder of Precognize, a SAMSON company that specializes in predictive analytics for the process industry.

Please highlight why you think there is a need for a digitalization and transformation roadmap in downstream oil and gas?

Several key drivers, both internal and external, push for the need for digitalization and transformation in downstream oil and gas. To start with, plant assets are becoming more expensive and complex to run, leading to the potential for increased costs and costly mistakes.

Using digital methods, along with AI to improve the overall accuracy of the data that feeds into the OEE calculation goes far towards the goal of achieving operational excellence, and leads to significant savings. It enables plants to understand how well they are meeting production expectations, predict and strategize capabilities for the future, and come closer to achieving zero delays, breakdowns, and other impediments to production.

An external driver is the global decrease in demand for oil and gas, which provides a key impetus to become more competitive. Whether its due to the rise of renewable energy, or simply more players in the market, manufacturers need to become more efficient by reducing costs and increasing productivity.

What's the greatest impact IoT, data analytics and AI will have on the industry? What lies ahead of operators and how will they adapt?

It's hard to define the area of greatest impact, because AI, advanced analytics, and IoT will together affect almost every aspect of the process manufacturing industry and specifically the oil and gas industry.

Introducing AI can enable reliable plant operation and eliminate downtime, contributing to increased OEE. It can also help to halt the brain drain that's affecting the entire industry, reduce the environmental impact of oil and gas plants, increase safety for personnel, deliver advanced customer support, and improve business intelligence and data-driven business decision making.







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Just to give one example, our SAM GUARD AI solution helps the Bazan oil refinery minimize flare events, which improves its reputation with its residential neighbors and reduces its environmental impact.

Are there any tips or guidelines companies should follow to make the transition to automation easier and to avoid mistakes?

Based on our experience introducing our predictive analytics solution to process manufacturing companies, we strongly recommend starting with a test pilot before making the full transition to automation.

The first step in the pilot is to take the time to thoroughly understand the needs of your plant. Companies need to consider their business challenges and the value they hope to generate from their transition, in order to identify the right KPIs to measure if the pilot is a success. At the same time, they have to avoid getting distracted by asking vendors to use historical data to identify previous failures. The same mistakes rarely occur more than once, so correctly spotting previous incidents doesn't reveal anything about how a solution will perform in the future. It's important not to use the standard of the past to measure the technology of the future.

Companies should be sure to allocate the right amount of time and resources to the process. For example, it's astonishing to consider that some companies spend 1 or even 2 years, just on a pilot. From our experience, the "sweet spot" initial pilots is around 3 months.

It's also critical to assign the right personnel to take responsibility for it both in the decision-stage as well as the ongoing maintenance stage. We found that all too often, plants assume that AI and automation are solely IT projects. In actuality, these projects need to be primarily spearheaded by Operations, with the secondary involvement of IT personnel. Both a pilot and the eventual introduction of new predictive technology should be led by whoever has the greatest knowledge of the plant.

To what extent will Artificial Intelligence replace humans working in oil and gas?

In our opinion, AI isn't coming to replace human jobs at all in the near future. Instead, AI comes to enhance and improve the jobs that humans do, making their work safer, less time-







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consuming, and more accurate. While AI algorithms keep on getting better, human beings are still the ones who have to make educated decisions based on the data that AI generates. Humans will continue to provide the thinking, expertise, and knowledge about the plant. AI will certainly have an impact on the makeup of oil and gas' future employees profile. With increased digitalization, the oil and gas industry will become more attractive to a young, digitally-native workforce who are currently turning away from these types of jobs.

What will be the highlight of your presentation at Asian Downstream Summit?

The title of our presentation is "Top 4 reasons the downstream industry needs its own unique digital solution." There are many generic solutions that are not fully tailored to the downstream industry, and we'll discuss how they can fall short in various ways. The importance of adopting a holistic approach to plant monitoring cannot be underestimated. We will also share some case studies from our customers that will demonstrate what is possible to achieve when you are monitoring the entire plant with a solution that is designed for your specific industry.

Join us at the <u>12th Annual Asian Downstream Summit</u> at the Sands Expo & Convention Centre in Singapore to hear from leading technology experts and operator case studies about how technology can help improve your overall operations, reduce costs, and improve margins.

Asian Downstream Summit will be co-located with "Refining & Petrochemicals Asia Conference" focusing on core refining and petrochemical technologies including licensing technologies, IMO 2020, FCC/Catalyst technologies, project trends and updates, equipment, giving our partners a one-stop-shop to meet decision makers under one roof to network, seek partnerships and learn about the latest innovations.

Save the date: $30^{th} - 31^{st}$ October 2019, Singapore

Contact us at <u>infoasia@clarionevents.com</u> to know more about registration, speaking opportunities or group bookings.