

**Society of Petroleum Engineers  
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**Real-Time Data Acquisition & Analysis for Enhanced Production**

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**Abstract:**

In a lower-for-longer environment, demand for higher efficiencies with reduced staff levels has accelerated moves towards real-time monitoring and related production optimization technologies that fall under the umbrella of digital oilfield. While dynamic production management is a must in frontier areas like subsea, HP/HT and unconventional fields, significant benefits can be realized for conventional and mature fields. As our data sensing and acquisition capabilities continue to expand, a related challenge is managing the data streams and converting them into actionable information. Dashboard-tools have been successfully used in operations to simplify data interpretation; however, there is a need for analysis tools that help enhance production by reducing downtime, improving workflows and identifying hidden inefficiencies. These tools need to incorporate intuitive visualization and right-time analysis capabilities. This presentation covers several field-cases on real-time data acquisition and the approaches used to convert data into information. One key takeaway is that although real-time technologies have matured, much more needs to be done to develop and utilize real-time analysis tools. While expectations for marginal fiscal gains are prudent, intangibles such as reduced downtime, improved workflow and improved QHSE are the biggest prizes.

**Biography:**

Dr. Rajan Chokshi works as an artificial lift and production 'Optimizer' for Accutant Solutions. He has over 34 years of experience working with a national oil company, research consortia, consulting and software firms, and a service company in various roles from engineer, software developer, project manager, trainer, consultant, and a senior business leader.

Dr. Chokshi has worked on projects globally in the areas of multi-phase flow, artificial lift, production optimization, and real-time production monitoring. He has co-authored over fifteen SPE papers and has four patents pending. Besides delivering several SPE webinars, Dr. Chokshi continues to conduct workshops for practicing professionals globally in SPE and private forums. He has taught at Texas Tech, Missouri S&T, and continues to teach at the U of Houston, and U of Southern California. He has served on the SPE training and global production award committees. He was co-chair of an SPE artificial lift workshop, and is co-chair of SPE forum on production issues in unconventional. He was an SPE Distinguished Lecturer for the 2015-2016 year. Dr. Chokshi holds a Bachelors and Masters in Chemical Engineering from the Gujarat University and IIT-Kanpur, India; and a Ph.D. in Petroleum Engineering from the University of Tulsa, USA.