

## **Process based auditing and risk-based thinking for improved audit performance**

The 2000 version of ISO 9001 introduced the process-based quality system approach. This change brought greater prominence to the process-based auditing technique and shortly adopted by most practitioners as a preferred audit approach. The present ISO 9001 standard employs both the process approach as well as the Risk-based thinking in design, implementation and improvement of the quality management system. While the process approach enables an organization to plan its processes and their interaction, the Risk-based thinking enables an organization to determine factor characteristics that could prevent processes and system to achieve planned objectives, and to put in place controls to mitigate its effects. Consequently, the process auditing technique need to be supplemented with the Risk-based thinking to meet the management expectation in enhancing the audit process and keeping it aligned with the transformation of the ISO 9001 standard since its' introduction in 1987. An audit tool is needed to blend the process auditing approach with the Risk-based thinking to make the audit process more effective especially for high risk audits in oil & gas, chemical and aerospace industries.

At the 26th Annual ISO 9001 World Conference on April 5, 2018 at the Venetian, Las Vegas, I will be presenting this tool. Using this tool the auditor can carefully examine critical process factors to identify process factor characteristic and risks associated with them. If these process factor characteristics are not controlled they can cause the process to deviate from planned results. The tool can also be used to identify risks associated when processes cross functional boundaries. Armed with this knowledge an auditor can identify preventive controls to minimize negative effect on the process output.