INTEGRATING SIX SIGMA WITH ISO 9001
Prevent nonconformities by integrating Six Sigma into your Quality Management System (QMS)

Quality management is the act of managing all activities and functions needed to maintain a consistent level of excellence in an organization, product or service. Quality is an essential factor that differentiates organizations from its competitors. Undertaking quality initiatives leads to superior products or services which meet and exceed customer expectations, increase revenues and productivity for the organization. There are different systems, methodologies, tools and techniques that help in improving the quality performance, including Six Sigma and ISO 9001. They can be used separately or simultaneously towards achieving the desired level of quality. There is some misunderstanding on whether Six Sigma and ISO 9001 can replace each other, but they do not.

Six Sigma is a methodology for process improvement which aims at eliminating defects at a rate of 3.4 defects per million opportunities. This management philosophy tends to improve the business performance by making organizations effective and efficient, and keeping customers and employees satisfied. Six Sigma is a data-driven approach that uses the process model Define-Measure-Analyze-Improve-Control (DMAIC) as a roadmap to problem solving and process improvement.

ISO 9000 family addresses various aspects of quality management for organizations who want to ensure that their products and services meet customer’s requirements. ISO 9001 is a quality management system that requires a continual improvement process that is based on total control of production operations. The quality management system requires that organizations have a pre-established control system in place, but does not determine how the processes should look like. ISO 9001 is a control regime that requires all processes to be documented, however it does not always help organizations that have set in place ineffective processes. ISO 9001 uses the Plan-Do-Check-Act (PDCA) model to all process, but also to the entire system to implement change leading to process improvement.

The statements above show that ISO 9001 and Six Sigma serve two different purposes. ISO 9001 is a system for managing quality, whereas Six Sigma is a methodology for process improvement. They can...
Complement each other to provide close to perfect results. The true value of ISO 9001 can only be grasped if organizations set in place effective processes that lead to improvements in quality within the organization. In addition, the Six Sigma business improvement processes should be part of a continually improving quality management system. Organizations can use Six Sigma tools to define a problem, measure the processes, analyze the results, improve the processes, and then use ISO 9001 to control and continually improve these processes. The Quality Management System allows the organization to sustain the Six Sigma gains.

Integrating Six Sigma with ISO 9001 helps organizations in assuring that there is no regression to the old processes after Six Sigma implementation. Organizations benefiting from Six Sigma often forget the importance of building a quality system, which is crucial to continually improve the quality while decreasing nonconformities. Maintenance of quality improvements is only possible if organizations use systems approach. Both, ISO 9001 and Six Sigma, lead to performance improvement and increase in customer satisfaction. They complement each other perfectly to achieve even more sustained results as opposed to being implemented separately.

Integrate Six Sigma with your QMS while transitioning to ISO 9001:2015 for a guaranteed success. Research shows that organizations that have integrated Six Sigma with ISO 9001 have a quality culture in place which retains current customers, and brings new customers to the organization. Certified Six Sigma and ISO 9001 professionals have an increased career potential, better job performance, and proof that they are skilled professionals. The need for qualified quality professionals will keep growing as the competition pressure increases.

PECB (Professional Evaluation and Certification Board) is a certification body for persons on wide range of international standards. It offers ISO 9001 and Six Sigma training and certification services for professionals wanting to gain a comprehensive knowledge in quality management, its principles, core subjects and issues.

Quality Management Trainings offered by PECB:
• Certified ISO 9001 and/or ISO 13053 Lead Implementer (5 days)
• Certified ISO 9001 and/or ISO 13053 Lead Auditor (5 days)
• Certified ISO 9001 and/or ISO 13053 Foundation (2 days)
• ISO 9001 and/or ISO 13053 Introduction (1 day)
• Certified Transition Course from ISO 9001:2008 to ISO 9001:2015 (1 day)

ISO Lead Auditor, ISO Lead Implementer and ISO Master are certification schemes accredited by ANSI ISO/IEC 17024.

Lorika Bina is the Transport, Telecommunications and Energy (TTE) Product Manager at PECB. She is in charge of developing and maintaining training courses related to TTE. If you have any questions, please do not hesitate to contact her at: tte@pecb.com.

For further information, please visit http://pecb.com/site/renderPage?param=139