CMMI Case Study

Integrated Assessment Combining ISO 9001, ISO 20000-1, ISO 27001, CMMI-DEV and CMMI-SVC

DQS MANAGEMENT SYSTEMS SOLUTIONS | 1130 WEST LAKE COOK ROAD | SUITE 340 BUFFALO GROVE, IL 60089 | 800-285-4476 | WWW.DQSUS.COM

1.0 Objective

DQS has conducted an integrated assessment combining ISO 9001, ISO 20000-1, ISO 27001, CMMI-DEV and CMMI-SVC. This case study explains the approach used and benefits derived from this method. All data used in this document are indicative. Actual data could not be shared to protect the confidentiality of the customer.

2.0 Background

Capability Maturity Model Integrated (CMMI) was developed by the Software Engineering Institute (SEI). There are three different constellations of CMMI. CMMI-DEV provides process maturity framework for the Software and Systems Engineering organizations, CMMI-SVC provides process maturity framework for IT Services organizations. Process appraisal method for CMMI is known as Standard CMMI Method for Process Improvement (SCAMPI).

ISO 9001 is a standard for general purpose Quality Management Systems. ISO 20000-2 is standard for Service Management Systems, and ISO 27001 is a standard for Information Security Management Systems.

ISO certifications are pre-requisite in most contractual situations. In addition to ISO, organizations often requires showing their process maturity against CMMI-DEV and/or CMMI-SVC.

4.0 Case study

An IT Services Company with 150 employees required for SCAMPI-A appraisal for CMMI-DEV and CMMI-SVC in 2017. Target Maturity Level 3 for both CMMI models. In the same year, the organization was due for their annual surveillance audits for ISO 9001:2015, ISO 20000-1:2011 and ISO 27001:2013 audits. DQS used their integrated assessment method (SCAMPI + ISO) for this assessment. To achieve optimum efficiency, DQS used one certified SCAMPI Lead Assessor and one ISO Lead Auditor qualified in all three ISO standards and qualified to be a CMMI assessment team member. The organization provided six members for the assessment team. Eight members assessment team conducted this integrated assessment for eight days.

Assessment workflow is below. During the interview sessions, it was transparent to the interviewees whether they are being audited against the ISO standards or appraised against the CMMI. It was a pure process assessment.

Summary of benefits:

- 9 days of audit/assessment time saved

- Direct involvement of organization's personnel time reduced by 350 hours

- Indirect time (preparation/logistic) for organization reduced by 50%

- One time intervention to the regular business operations of the organization

If the audits and assessments are done separately, it would take:

- 2 days (on-site) and 30 hours (off-site) to complete ISO 9001

- 2 day (on-site) and 30 hours (off-site) to complete ISO 20000

- 3 day (on-site) and 40 hours (off-site) to complete ISO 27001

- 5 day (on-site) and 400 hours (off-site) to complete CMMI- DEV ML3

- 5 day (on-site) and 400 hours (off-site) to complete CMMI- SVC ML3

This would total 17 days (on-site) and 900 hours (off-site) to complete all of the standards

DQS Inc.