

Independent Reliability Maturity Assessment

DESCRIPTION

In today's competitive global marketplace, profit or return-on-investment often depends heavily on design and manufacturing processes that are effective and efficient. Effective, efficient reliability design processes and reliable manufacturing processes result in better and safer products, lower production costs, lower ownership costs, higher customer satisfaction, and fewer warranty and liability claims.

Any company or organization desiring to make reliability a key product requirement should first determine where they stand in terms of their processes for designing and manufacturing for reliability. An effective way to do this is through an independent reliability maturity assessment. A reliability maturity assessment is an evaluation of the processes used to design and manufacture a product. The objective is to evaluate the processes related to reliability, identify shortcomings, and recommend ways to improve.

Alion's System Reliability Center (SRC) has developed a systematic approach for independently assessing the maturity of an organization's process. Our method is derived from the Capability Maturity Model used by the Software Engineering Institute (SEI). Like the SEI model, our approach defines five levels of maturity: Superficial (ad hoc effort), Repeatable (disciplined effort), Defined (standards and consistency), Managed (predictable effort), and Optimized (constant improvement). Our Reliability Maturity Assessment benefits from lessons learned in a wide range of industries to objectively identify strengths and weaknesses. In addition to providing a numerical rating of an organization's current reliability maturity, SRC's Reliability Maturity Assessment provides an improvement plan for moving the organization forward to higher levels of maturity. SRC's Independent Reliability Maturity Assessment has been optimized and streamlined to typically produce results in less than 30 days.

SRC's Reliability Maturity Assessment systematically and objectively determines:

- If activities and results in a given functional area are in compliance with plans and policy
- Whether the activities are being carried out effectively
- Whether the activities are suitable for achieving their objectives
- Whether other, undocumented, activities being conducted contribute or could contribute to the reliability effort

The following figure illustrates our two-step approach to a Reliability Maturity Assessment.

