

A Perspective of CM — What Versus How



About Requirements

A requirement is a statement of something to be accomplished. It is a statement of the result to be achieved. The result must be measurable. As a general rule, a requirement should not include any how-to information. The

how-to is where each organization strives to maintain a competitive edge.

Design Vs Process — What Vs How

Each document is a requirement to its user. There are many types of documents. Each of the many types are either design or process-oriented.

For a physical item, the design provides the *what* and process plans provide the *how-to*. The resulting physical item must conform to the design.

For administrative practices, operating standards provide the *what* and procedures along with enabling tools provide the *how-to*. The results must conform to the operating standards.

About Standardization & Consensus

For physical items, standardization improves the availability of commonly used components at reduced costs. It also helps ensure compatibility of products produced by different manufacturers.

For processes, standardization is more difficult. ISO 9000 is a great success story for a consensus standard. Consensus was achieved only because it is heavy on the *what* and light on the *how-to*.

Microsoft Word, by comparison, is a great success story that is heavy on the *how-to*. It has a different kind of consensus called *market demand*.

CM Requirements; the What

Configuration management is a process for managing configurations. Per the original definition, the role of CM, or the *what*, was stated in terms of identification, change control, status accounting and audits. With that definition, it was difficult to develop the *how* and also measure the degree that the *what* was being achieved.

To improve the CM process, it was necessary to redefine or clarify the *what*. The new *what* is to accommodate change, keep all requirements clear, concise and valid, and ensure that products conform. The new *what* is certainly measurable.

Further Insight to the New What

Any information that could impact safety, quality, schedule, cost, profit or the environment must be managed.

It is impossible to have a fast and efficient change process if the information being changed is not properly identified, structured, linked and owned.

One measure of CM process improvement the ability to change faster and/or document better. Another is declining corrective action in conjunction with a higher rate of real improvements.

New How to Achieve the New What

Students attending the CMII courses gain an in-depth understanding of the new requirements. Total time spent on the requirements is probably less than 10% of the overall course work.

The other 90% is spent on the how-to. Many ingrained ideas and/or bad habits must be overcome. Many paradigms must be shifted.

Students that attend the six course series gain an in-depth understanding of CMII and how to apply the principles in their respective environments.