Chesapeake Chapter
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Feature Article

The Era of Quality-Based Management Systems

One Man's Irreverent View

By George Anderson

In our industrial and information industries, the management theories relating to increasing business efficiency and their offspring, quality practices, are proliferating at an increased rate in almost every category of commerce. I would suggest that an era of employing quality theories to address management problems began shortly after World War II. During this period, serious attempts were made to create theories that would maximize the efficiency of industrial and business processes. At some point, when an analytic connection was made between customer satisfaction and process development, quality as a service industry was born.

The first imperative in understanding quality programs is to recognize that the profit motive is a prime motivator. Commercial or non-profit entities exist for the business purpose of selling their services and intellectual property to clients who are seeking certification or other recognition. The cash flow of quality has both national and international winners and losers and competition among the systems is intense.

What are the primary quality programs or systems in the US today? Based on market penetration in Government and Industry, I would suggest that five deserve examination. These are:

1. Deming
2. ISO 9000
3. CMMI
4. Six Sigma
5. ITIL – ISO 20000

Deming
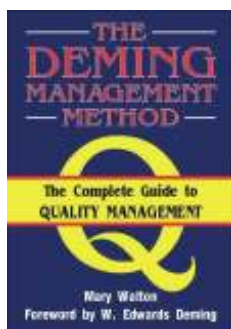
Dr. Deming was a pioneer in the proselytizing of a methodology that he originally taught to the Japanese as they recovered from their WWII defeat. He was not alone, however, in attempting to define and describe methods of increasing industrial and business success. Today there are a number of methods that have been formalized to the point where a variety of companies are making money selling some aspect of quality to almost every type of organization imaginable. Deming's fundamental work develops the statistical control aspects of quality but it would be a mistake to see this as his biggest legacy. His articulation of the shortcomings of management and insight into the systems thinking necessary to properly address problems, makes his contributions a valuable if not indispensable part of the evolving body of quality theory. I believe that Deming's writings will probably endure beyond all the other systems discussed here.

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ISO 9000

ISO 9000 has arguably had the best industry success by enabling the most money to be made issuing certificates to many satisfied entities that are seen flying ISO 9000 flags and proudly displaying related certificates in their corporate lobbies. Even the U.S Navy is on board. ISO 9000 is a certification system wherein, for a fee, a certifying company asserts that adequate processes are in place and are being followed by the client. What is certified is probably not as important to the process as the need for the certifier to make periodic visits to the client to assure that the processes are still being followed. The concept originated in the now popular European model of mandated control of industry by national governments. Germany, for example, has a strong national standards program that mandates quality, safety, and consumer rights as well as many other aspects of their private enterprise base. All these mandates require private companies to validate or test for compliance. Does ISO 9000 work? It's hard to get unbiased data partly because many are reluctant to accept it as compatible with our U.S. system of free enterprise not to mention its effect on the international balance of payments.

CMMI

Capability Maturity Model Integrated or CMMI is an attempt with U.S. Government subsidy to create an American based quality system that would keep U.S. certification dollars at home. Its biggest customer may be U.S. Government agencies who can afford the huge amount of paper required to train its employees. It is definitely decomposition overkill compared to ISO 9000 and perhaps its developer, Carnegie Mellon, will yet get its framework streamlined. The approach appears to be valid and when properly implemented, CMMI does provide the means to improve performance. My money is on CMMI eventually being successful because of its sponsorship by the US Government.

Six Sigma

Six Sigma is a homegrown quality program that focuses on the human side of the process equation. It provides a system of training programs complete with ratings for individuals to demonstrate their ability to create and lead quality teams. Its biggest public image is provided by the titles it gives to its certified participants. The title of Six Sigma Black Belt is perhaps the best known. Don't look for any statistical significance in the term Six Sigma. It is more marketing hype than guidance into the inner workings of the program. Does Six Sigma work? Yes, Jack Welch and GE made a total commitment to it and Welch made it work. How much did it cost? No one is saying. Are they still using it? It's very hard to determine.

ITIL – ISO 20000

Information Technology Information Library or ITIL is another imported system. This time it's from the UK and focuses on the management of Information Technology (IT) systems. Like CMMI, it is a framework designed to allow an organization to create, execute and monitor processes while again relying on an outside source to make money training and certifying your work force. Given the opportunities involved it was not long before the ISO 20000 component was rushed through the standards developing community to generate a rule book for enforcing and certifying compliance to the standard. Does ITIL work? Think of a motorcycle gang joining the Marine Corps. That is the way I see its initial effect on the IT community. Discipline long needed may now be arriving at an ISP or Cable Operator near you.

There are many other quality related standards that do not necessarily have a commercial

base of service providers. Perhaps ISO 15288 or AGILE could in the future be considered important contributions. For now, however, the above choices are where you will likely be spending your quality related dollars.

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