The Quality Manager Body of Knowledge
—Other Key Points

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Introduction and Background

The purpose of this paper is to supplement the Austenfeld (2008, September) article that summarized the body of knowledge (BOK) the American Society for Quality (ASQ) uses to develop its examinations for Manager of Quality/Organizational Excellence (MOQ/OE) certification. The information in the September 2008 paper, summarized from Westcott (2006), is the same as that in two previous papers—Austenfeld (2007, September) and Austenfeld (2008, February) —and was combined into that one paper for convenience of use. Besides summarizing the BOK, those two papers contained "Some other points for further consideration" also gathered and paraphrased from Westcott. To keep the September 2008 paper as unwieldy as possible, the "other points" part was excluded. However, given the potential value of these "pearls of wisdom," it was decided to republish them in this paper as a supplement to the September 2008 paper.

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The information in this paper and Austenfeld (2008, September—the summary)[1] should be helpful
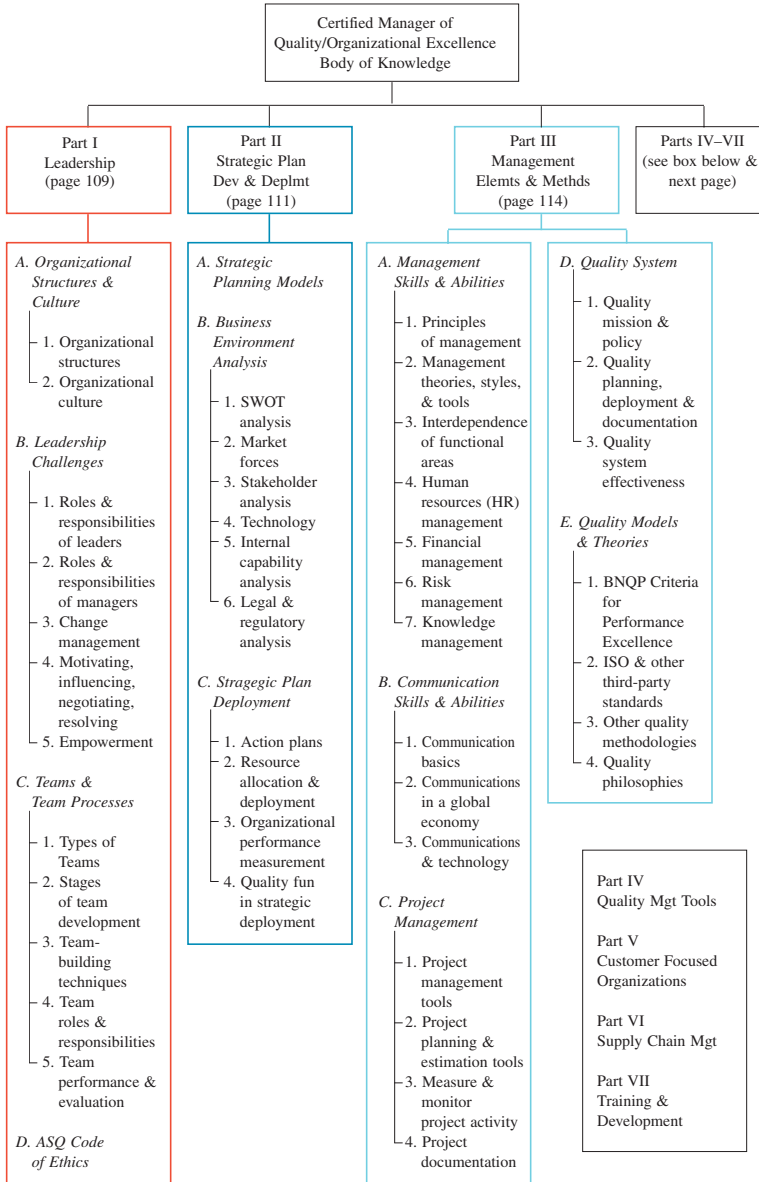
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1) The summary (Austenfeld (2008, September)) is available in PDF form online at the National Institute of Informatics (Scholarly Academic Information Navigator) Web site using this URL: http://ci.nii.ac.jp/naid/110006949507/

for anyone involved with ensuring the quality of its company's products and service or simply as a guide to good management practices. It will also serve as a helpful reference for anyone preparing to take the MOQ/OE certification exam.
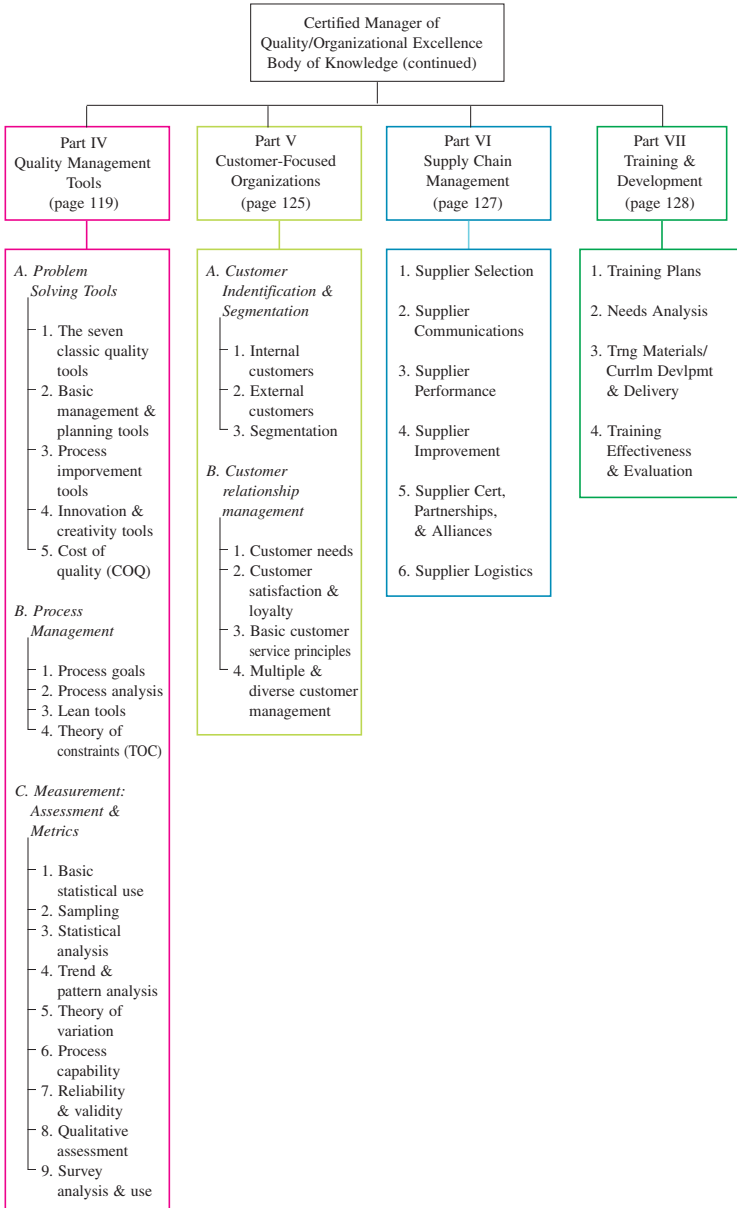
As mentioned Westcott (editor) (2006) is the basic reference for the BOK and the basis for this paper. All page citations refer to Westcott (2006). This book is also the basic reference for ASQ's three-day refresher training course for the certification exam. It should be mentioned that although this paper and the September 2008 paper contain a lot of information, they are highly condensed and should best be used in conjunction with the Westcott book. Also anyone planning to take the certification exam will definitely want to study the Westcott book and probably some of the many references to other material contained therein.

To help the reader better see the BOK as a whole and where each part fits into that whole the next two pages are an outline of the book and this paper. This outline also serves as a table of contents showing where information related to each of the seven major parts of the book (I–VII) begins.

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I Leadership

I–A Organizational Structures and Culture (Chapter 1 in Westcott)

Chapter covers: 1. Organizational Structures and 2. Organizational Culture

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Organizational Structures and Culture):

- When dividing up labor in an organization, consider how to make a job more interesting by expanding its scope and/or its amount of responsibility.
- Push the decision-making authority to the lowest level possible commensurate with the employees' abilities.
- Make the maximum feasible use of technology to allow a broader span of control and a flatter, more customer-responsive organization.

I–B Leadership Challenges (Chapter 2 in Westcott)

Chapter covers: 1. Roles and Responsibilities of Leaders, 2. Roles and Responsibilities of Managers, 3. Change Management, 4. Motivating, Influencing, Negotiating, Resolving, and 5. Empowerment

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Leadership Challenges):

- Good leaders inspire others, encourage collaboration, share power, set the example, and strive for constant self-improvement.
- It is important for an organization to maintain an environment that motivates competent people to stay.
- A manager's first task is to ensure profitability (Drucker).
- To facilitate change it helps to have a relationship with the organization's informal leaders—those others will listen to.
- It is also important to realize significant cultural change usually takes a

considerable amount of time because it is the intangibles such as beliefs and values that are being changed.

- Because he/she is often working with shared resources, a project manager needs good negotiating skills.
- Empowered organizations turn the traditional organizational on its head with the customer on top of the "pyramid," employees in the middle, and a supportive management on the bottom.

I–C Teams and Team Processes (Chapter 3 in Westcott)

Chapter covers: 1. Types of Teams, 2. Stages of Team Development, 3. Team-Building Techniques, 4. Team Roles and Responsibilities, and 5. Team Performance and Evaluation

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Teams and Team Processes):

- To be sure the team knows what it's suppose to do this question can be asked: "What will you measure to determine whether the objective has been accomplished?" (p. 77)
- A good way to set a team's objectives is to use the S.M.A.R.T.W.A.Y. (p. 98):

S	Focus on *specific* needs and opportunities.
M	Establish a *measurement* for each objective.
A	Be sure objectives are *achievable* as well as challenging.
R	Set stretch objectives that are also *realistic*.
T	Indicate a *time* frame for each objective.
W	Ensure that every objective is *worth* doing.
A	*Assign* responsibility for each objective.
Y	Ensure that all objectives stated will *yield* desired returns.

- Although perhaps not always required, a team facilitator can often make an important difference in whether the team will be successful or not.
- Some ways to avoid groupthink are brainstorming ideas/alternatives, getting members to state concerns, and being sure each idea/alternative is adequately examined.

I–D American Society for Quality (ASQ) Code of Ethics (Chapter 4 in Westcott)

Chapter covers: American Society for Quality (ASQ) Code of Ethics

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (ASQ Code of Ethics):

- Although the many legal controls, such as Sarbanes-Oxley, can serve as helpful guides, principled behavior must occur because the organization's members understand and want to do what is right.[2]
- The ASQ Code of Ethics (see Appendix) can serve as a useful guide for developing an organization's own code of conduct.

II　Strategic Plan Development and Deployment

II–A　Strategic Planning Models (Chapter 5 in Westcott)

Chapter covers: Strategic Planning Models

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Strategic Planning Models):

- Because the business environment is continuously changing, strategic planning also must be continuous—recognizing that there will probably also be a schedule for annually carrying out a major review.
- Although difficult, hoshin planning will greatly improve an organization's

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2)　Note, too, that these controls often kick in *after* the damage to the organization has been done—not a desirable situation!

chances for success since it ensures the strategic plan will be carried out and involve everyone in a coordinated way—usually the biggest reason strategic planning fails.

- Fully implementing hoshin planning may well require a major change in the organization's culture and thus usually requires much time and patience to see it through.

II–B Business Environment Analysis (Chapter 6 in Westcott)

Chapter covers: 1. SWOT Analysis, 2. Market Forces, 3. Stakeholder Analysis, 4. Technology, 5. Internal Capability Analysis, and 6. Legal and Regulatory Analysis

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Business Environment Analysis):

- Westcott cites some useful factors by Porter[3] for comparing an organization with one of its competitors: "core capabilities, its ability to grow, its quick response capability, its ability to adapt to change, and its staying power" (p. 112).

- When considering the effect of customer behavior on an organization's strategy a significant issue might well be the Internet and how it makes it much easier now to "shop around."

- How an organization reacts to societal issues is becoming more and more important. Some examples are how the organization deals with such things as layoffs, diversity issues, sexual harassment, environmental issues, cultural issues in other countries,[4] and lapses in its own ethics (e.g., insider

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3) Michael Porter, famous for his work on competitive strategy.

4) For example where common practices might be a variance with the organization's ethics (bribery, human rights, etc.).

training or misleading product information).

- Because of the rapid advance of technology it has the potential to seriously impact an organization's competitive position.

- Introducing a new technology may not always be the best solution to a problem—sometimes just a change in a business process will do the trick.

- To increase an organization's chances for successfully implementing its strategy it must be sure its employees first understand the strategy and second are committed to carrying it out.

II–C Strategic Plan Deployment (Chapter 7 in Westcott)

Chapter covers: 1. Action Plans, 2. Resource Allocation and Deployment, 3. Organizational Performance Measurement, and 4. Quality Function in Strategic Deployment

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Strategic Plan Deployment):

- The key to achieving an organization's strategy is the systematic initiation and carrying out of the action plans supporting the strategic objectives.

- When trying to make the best allocation of scarce resources to action plan projects, organizations should take advantage of the many project planning software programs now available.

- One common problem is the failure of management to establish good closed-loop processes for detecting and controlling variation. Another way to put this is: failure to manage by fact vs. intuition, emotions, etc.

- Too many metrics to measure organizational, project, or process performance can be almost as bad as none.

- An organization's policies and principles need to be deployed, not just framed and hung in the front lobby.

III Management Elements and Methods

III–A Management Skills and Abilities (Chapter 8 in Westcott)

Chapter covers: 1. Principles of Management, 2. Management Theories, Styles, and Tools, 3. Interdependence of Functional Areas, 4. Human Resources (HR) Management, 5. Financial Management, 6. Risk Management, and 7. Knowledge Management

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Management Skills and Abilities):

- The basic functions of management have not changed. However organizations have, with a greater emphasis on the customer necessitating a greater deployment of the management responsibilities throughout the organization.

- As part of the participative style of management, management by walking around (MBWA) keeps the manager in touch with what is really going on.

- The coaching style of management, when done right, will help employees move beyond what they think they are capable of.

- An organization composed of functional "silos" is not only highly dysfunctional in terms of internal cooperation but worse yet tends to focus on maintaining the status quo!

- An organization's information technology should be based on its strategy, not simply the latest technology.

- By taking a systems view of the organization, it often becomes apparent that some suboptimization of the parts will make the whole organization more effective.

- Another advantage of systems thinking is it allows the organization to consider the use of more than one approach to meet its strategic goals. For example, Six Sigma in conjunction with other approaches to quality.

- It is the quality manager's responsibility to be sure information on the organization's quality policies and procedures are part of the new-employee orientation.

- To remain credible, performance evaluation should focus on what is really important, not the trivial.

- Besides many others, an important reason for good, continuous appraisals is to keep the employee aligned with the organization's mission.

- The use of activity based costing (ABC) has often resulted in discontinuance of a product found not to be worth its costs.

- An important part of good knowledge management is to foster an open communications work environment that "encourages the identification of new information and knowledge that can be exploited for individual and organizational learning and development" (p. 205).

- Another important part of knowledge management is converting tacit knowledge—mostly in people's heads—to explicit knowledge; i.e., knowledge recorded and available to others.

- Knowledge management can play an important role in how an organization differentiates itself from its competitors—a key to long-term success.

- With its focus on processing data vs. strategy, the information technology (IT) department may not be the right place for ownership of the knowledge management function. In fact knowledge management needs to be treated as a top-level strategy by management.

III–B Communication Skills and Abilities (Chapter 9 in Westcott)

Chapter covers: 1. Communication Basics, 2. Communications in a Global Economy, and 3. Communications and Technology

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Communications Skills and

Abilities):

- An important thing to remember when communicating is to do so from the other person's perspective of things; e.g., language, education, cultural background, etc.

- Frequent and honest communications with employees will help keep the grapevine from spreading misinformation. This also enhances trust between the manager and the employees.

- Active listening is one way to improve communications. This means to paraphrase back to the sender the message the receiver has received to be sure it is what the sender meant. This is important because, as Westcott succinctly puts it, "hearing and listening are distinctly different" (p. 223).

- The organization's information system should support and be well integrated with its strategy. This is the job of the chief information officer or his/her equivalent.

- Depending on how well the information system truly supports the organization's ability to be responsive to its customers, it can be either a competitive advantage or a competitive disadvantage.

- It is well to keep in mind that the continual rapid advances in IT are bringing about many changes in how people behave and interact with one another. Examples include the cell phone, the Internet/intranet, e-mail, and devices like the Blackberry/iPhone.

III–C Project Management (Chapter 10 in Westcott)

Chapter covers: 1. Project Management Tools, 2. Project Planning and Estimation Tools, 3. Measure and Monitor Project Activity, and 4. Project Documentation

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some key points for further consideration (Project Management):

- A challenge quality managers often face is financially quantifying the benefits and costs of a project; e.g., the benefit of an expected improvement in customer satisfaction.

- For relatively simple projects the Gantt chart is not only a way to graphically lay out what is to be done when but can also be used to show actual accomplishment of each task and where and why delays are occurring.

- Given the uncertainty of things in general—e.g., the sudden unexpected nonavailability of key personnel or material—a good feedback system to tell the project manager as soon as such things occur is essential.

- One very important project planning consideration is "how and from whom the project team is to request help when necessary" (p. 262).

- A well thought out strategy should be developed for dealing with any really serious potential risks that have a relatively high probability of occurrence.

- Good project documentation will add to the organization's knowledge database and, if used, will make each successive project better (the PDCA cycle[5]).

III–D Quality System (Chapter 11 in Westcott)

Chapter covers: 1. Quality Mission and Policy, 2. Quality Planning, Deployment, and Documentation, and 3. Quality System Effectiveness

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Quality System):

- It is usually better for an organization to focus more on their customers instead of what their rivals are doing.

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5)   PDCA stands for plan, do, check, and act. The PDCA cycle is a simple but powerful way to look at quality improvement: *plan* the improvement (whatever it may be), carry it out (*do* it), *check* if the desired results were achieved, and *act* on the information from the "check" step to make further improvements and repeat the cycle.

- According to Crosby (1979) quality is "free." That is resources devoted to quality improvements are more likely to have a greater payoff than another investment option.

- A quality audit is a micro-level evaluation of quality activities to see if they efficiently and effectively produced the intended results.

- Quality audits can be first-, second-, or third-party. A first-party audit is an internal one by the organization. A second-party audit is one by the customer (also called a supplier audit). A third-party audit is one by an independent party (e.g., one to gain ISO 9001 certification).

- The scope of a quality audit can range from the examination of a single product or service to the evaluation of an organization's entire quality management system.

- An important part of a quality audit is the effective follow-up on the recommended corrective measures.

III–E Quality Models and Theories (Chapter 12 in Westcott)

Chapter covers: 1. Baldrige National Quality Program (BNQP) Criteria for Performance Excellence, 2. ISO and Other Third Party Standards, 3. Other Quality Methodologies, and 4. Quality Philosophies

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Quality Models and Theories):

- A key aspect of the 2000 version of ISO 9001[6] is its emphasis on customer satisfaction and continual improvement.

- According to Westcott, ISO 9004[7] "is the key to unlock the real potential

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6) The latest version is ISO 9001:2008 which clarifies certain important issues versus adding any new requirements (West, 2009).

7) ISO 9004 is a comprehensive set of guidelines to help an organization go beyond the minimum requirements of the ISO 9001 standard.

of a QMS [quality management system] to produce a measurable return on investment" (p. 301). Unfortunately, it is largely ignored.

- Just as with winning the Baldrige, being certified to ISO 9001 is no guarantee that an organization will produce high quality products/service. However, it is usually a very positive indication of such.

- What is a process? According to Westcott: "A process is a series of steps that take inputs from suppliers (internal or external) and transforms them into outputs that are delivered to customers (again, either internal or external)" (p. 304).

- The term TQM is not used as much today with its concepts, principles, and methods now usually considered a part of what is called quality management.

- One of Deming's seven deadly diseases especially worth noting is "running a company on visible figures alone" since unknown figures are often the most important; e.g., the multiplier effect of a happy customer.

- Quality is much more than managing defects; it is a philosophy and commitment to excellence (Feigenbaum).

IV Quality Management Tools

IV–A Problem-Solving Tools (Chapter 13 in Westcott)

Chapter covers: 1. The Seven Classic Quality Tools, 2. Basic Management and Planning Tools, 3. Process Improvement Tools, 4. Innovation and Creativity Tools, and 5. Cost of Quality (COQ)

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Problem-Solving Tools):

- No matter how well an organization is performing, there is always room for improvement.

- What is at first thought to be the cause of a problem may turn out to be only a symptom of a deeper cause.

- Problems can often have multiple causes.

- Pareto analysis should also be done according to costs associated with each problem since the financial impact of different problems is not the same.

- A priorities matrix[8] brings objectivity to the decision-making process by establishing agreed upon criteria.

- It is important to always follow up a problem that has been "solved" to be sure the remedial action is working. In fact, whatever changes have been made need to be institutionalized by ensuring such things as updating procedures and training employees occurs.

- The PDCA/PDSA cycle[9] (see above, last item under III-C Project Management) should be considered not only a way to improve some product or process but a means of organizational learning.

- The PDCA/PDSA cycle "captures the core philosophy of continual improvement" (p. 247).

- Six sigma may be used to measure things other than manufacturing defects, for example it "may be used to measure material, forms, a time frame, distance, computer program coding, and so on" (p. 348).

- One of the most valuable inputs to a failure mode and effect analysis (FMEA) is the experience of people that are somehow related to the new product. For example, those employees who have been involved in the development process or who are also customers and have used a similar product.

- Control charts can be used for both controlling a process and to analyze one

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 8)   See Westcott, page 342 for an example of a simple priorities matrix for choosing the "best" of four automobiles. The final choice is based on the relative importance of four criteria and then how each possible choice stacks up against each criteria.

9)   Sometimes the Plan, Do, Check, Act cycle is referred to as the Plan, Do, *Study,* Act cycle.

for improvement purposes.

- When improving a process it is important that decisions about what to change and the implementation of those changes be made by those who will actually carry out the process to take advantage of their knowledge and ensure a feeling of ownership on their part.

- One way to view the team creativity process is: generate, percolate, illuminate, and substantiate:

  ◦ Generate ideas.

  ◦ Percolate by allowing time for the team to think about the ideas for a while, which will often generate new ones.

  ◦ Illuminate the ideas by discussing what has been learned during the "percolate" phase.

  ◦ Substantiate the feasibility of the best ideas.

- The best thing about the cost of quality (COQ) is it measures quality (or the lack of it) in terms of dollars, something management can understand. This also helps to decide which quality improvement projects are likely to have the biggest payoff.

- To increase the accuracy of the quality costs associated with a particular product, it is a good idea to use activity-based costing in conjunction with COQ.

IV–B Process Management (Chapter 14 in Westcott)

Chapter covers: 1. Process Goals, 2. Process Analysis, 3. Lean Tools, and 4. Theory of Constraints (TOC)

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Process Management):

- A good way to think about process goals and objectives is: goals support the organization's strategic plan and objectives support their respective

goals. Therefore if each goal's objectives are met, the organization's strategic plan will be accomplished—at least in theory.

• Due to their critical importance, the effective and timely measurement of objectives is key to strategic plan accomplishment.

• Think of process mapping as usually requiring "a number of PDCA-type cycles."

• When mapping a process start at a relatively high level, gradually filling in more detail as you go along.

• Simply the act of mapping a process will often uncover existing problems and spotlighting areas for possible improvement initiatives.

• Procedures/work instructions may be presented in a variety of ways such as hard copy, a workstation computer screen, a video, etc. (see p. 385 in Westcott for more examples).

• Cycle time reduction can (and should) be applied to all activities, not just manufacturing.

• When trying to improve cycle time, think in terms of the system's/process' critical path, the set of activities which, if any are shortened, will cause the entire system/process time to be shorter.

• The essence of lean production is "only what is needed should be produced, and it should only be produced when it is actually needed" (p. 390).

• One key to achieving a waste-free production process is good design, not only of the production process but also of the product so it is "manufacturing-friendly."

• One of the greatest sources of waste is large inventories due to batch and queue operations.

• A good place to look for waste is unneeded reporting due to either the requirement no longer existing or duplication of reports.

• Since they often add no value, meetings should be kept at a minimum, last

no longer than necessary, and involve only those truly needed.

- Mistake-proofing can (and should) be applied to any process, not just manufacturing.

- Although it is not possible to completely eliminate "mistakes," continual efforts should be made towards that goal.

- Due to the scope of a major business process reengineering effort, the organization must be prepared to deal with a potentially major culture change and all that entails.

- When working a cycle time reduction initiative, it is important to be sure whatever action is taken doesn't create new problems such as a bottleneck somewhere else or the quality of the product/service. Using the theory of constraints (TOC) way of thinking will help avoid such problems.

- Regarding the TOC, Westcott notes: "Physical constraints are the easiest to identify and eliminate. Policy constraints are more difficult, but their elimination usually means a higher degree of system improvement" (p. 413).

IV–C Measurement: Assessment and Metrics (Chapter 15 in Westcott)

Chapter covers: 1. Basic Statistical Use, 2. Sampling, 3. Statistical Analysis, 4. Trend and Pattern Analysis, 5. Theory of Variation, 6. Process Capability, 7. Reliability and Validity, 8. Qualitative Assessment, and 9. Survey Analysis and Use

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Measurement: Assessment and Metrics):

- Monitoring the variation in an organization's products/services is one of the most important uses of statistics for improving quality.

- When designing a measure always involve those doing the work to be measured and be sure they understand the primary reason for the measure is

quality improvement (versus, say, control of people).

- No sampling scheme will ensure detection of all nonconformances; if such is required, 100 percent inspection will be necessary.

- It is important for all parties involved in acceptance sampling to understand (and agree to) the "worst" level of quality that will be acceptable; i.e., the acceptable quality limit (AQL).

- Because many things could account for differences in the central tendency and spread of two sets of data, decisions should not be based on those differences only.

- When doing trend analysis, one needs to be sure the "trend" is not actually only a "cyclic" or "change in variation" pattern.

- If data is to be presented in tabular form, a few simple rules can greatly enhance the presentation (see p. 433).

- One very useful tool for seeing "before/after" trends of some target group (e.g., customers in some particular area) is the geographic information system (GIS).

- An organization's concern over short-term events should not blind it to long-term trends.[10]

- A good understanding of variation and its causes and ways to minimize it is essential to good management.

- Determining the cause of variation should be a joint effort using both worker experience and management expertise.

- To keep the physical measurement devices (gages) in a good state of calibration, a standard traceable back to a standards organization[11] should be used.

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10) Westcott cites Senge's (1990) discussion of the U.S. automobile industry that failed to see how serious the Japanese threat was until the 1980s.

11) For example the National Institute for Standards and Technology (NIST).

- If it is found that an uncalibrated device was used, possible problems caused by this use need to be tracked down and corrected.

V Customer-Focused Organizations

V–A Customer Identification and Segmentation (Chapter 16 in Westcott)

Chapter covers: 1. Internal Customers, 2. External Customers, and 3. Segmentation

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Customer Identification and Segmentation):

- For many organizations contact with the actual consumer/end user is indirect via a distributor or retailer. Accordingly an extra effort may be needed to identify these customers and determine how well their needs/wants are being satisfied.

- In general, having happy (well supported) internal customers results in happy (well served) external customers.

- For service providers word-of-mouth often plays an important part both in increasing the number of customers when the service given is good/exceptional and having just the opposite effect when the service given is poor/disappointing.

- It is a mistake for an organization to think either that the market is homogenous or that it must appeal to the entire market. It is better to think in terms of logical segmentation or even one-to-one marketing if possible.

- Once identified, it may prove mutually beneficial to enter into partnerships with core customer segments.

- It may be cost-effective to establish separate service delivery processes for core and non-core customers.

V–B Customer Relationship Management (Chapter 17 in Westcott)

Chapter covers: 1. Customer Needs, 2. Customer Satisfaction and loyalty, 3. Basic Customer Service Principles, and 4. Multiple and Diverse Customer Management

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Customer Relationship Management):

- If it is truly "customer-focused," *everything* done in an organization is with the customer in mind!

- Although requiring more time and effort, a quality function deployment (QFD) matrix is a very effective way to help an organization concentrate its resources on what is most important to the customer.

- Another advantage of QFD is its ability to reveal product features that will delight the customer.

- It should be easy for the customer to register a complaint.

- When conducting a mail survey of customer satisfaction several things can be done to maximize the response rate including prior notification, a good (and short) cover letter, and a follow-up of some sort to nonrespondents.

- To minimize interviewer bias those conducting telephone surveys must be trained so the interviews are carried out in a uniform way across interviewers.

- The ultimate level of customer satisfaction is the unconditional guarantee that is truly followed; that is: quick replacement or refund, no challenge to the claim, a sincere apology, etc. Such behavior often leads to word-of-mouth spreading of the organization's positive reputation!

- A major problem is an organization thinking it already knows what its customers want and that they are satisfied.

- A key to customer retention/loyalty is understanding and satisfying the

customer's perception of value.

- Good customer service often carries more weight than the product/service provided. In fact customers will often pay a premium for good service.

VI Supply Chain Management (Chapter 18 in Westcott)

Chapter covers: 1. Supplier Selection, 2. Supplier Communications, 3. Supplier Performance, 4. Supplier Improvement, 5. Supplier Certification, Partnerships, and Alliances, and 6. Supplier Logistics

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Supply Chain Management):

- In general it is better for an organization to develop long-term relations with fewer suppliers thus giving it more time to work with those suppliers on improving quality.

- The metrics used to rate a supplier "must be meaningful, fair, objective, and easy to understand with little chance for error in the methodology used" (p. 514).

- The communications plan for a supplier should address not only routine communications but also who to contact in case an emergency or other unusual event occurs. This means specifying contact individuals by name and keeping such information up to date.

- Due to its own performance being dependent on the supplier's performance, the organization must ensure it will be immediately advised of any delays in fulfilling an order.

- When the organization is assessing a supplier's quality management system, those doing the assessment must not only be highly knowledgeable in that area but also able to make the supplier feel they are there to help, not criticize.

- In terms of preventive action taken with the supplier to eliminate causes of

nonconformance, a key area for examination is how good is the process for placing an order so the requirement is clearly transmitted and acknowledged.

VII Training and Development (Chapter 19 in Westcott)

Chapter covers: 1. Training Plans, 2. Needs Analysis 3. Training Materials/Curriculum Development and Delivery, and 4. Training Effectiveness and Evaluation

Brief summary of chapter: (see companion article Austenfeld (2008, September))

Some other key points for further consideration (Training and Development):

- The truly professional manager understands the need to continually increase his/her knowledge and skills and takes appropriate action to do so.

- Quality improvement often means empowering employees to take on more and more responsibility. And, to do this, they must get the requisite training.

- It is important that the manager of each individual work unit is part of the training effort so he or she not only agrees with the need for an employee's training but also makes sure the gains from that training are maintained once the employee returns to the work unit.

- When a skill is to be formally taught, this should occur as close to the time the skill will be used to avoid "fade out." Also, if a skill hasn't been used for some time, refresher training may be needed.

- A training/knowledge needs assessment should not be based on what an employee checks off from a list of available courses but rather on what he or she really needs.

- It is important to determine the present skill level of a training candidate so the training builds on that skill level instead of being redundant.

- For any training program to be truly effective, the trainee must be able to see how the training will personally benefit him or her.

- A carefully prepared "critical incident" can be an effective way to teach

employees how to respond to a specific situation that might well come up in the organization.

- No matter the size or level of the training, it should be explicitly planned and evidence of successful completion documented.

- Although relatively simple and inexpensive, a job aid is often a very effective way to improve performance.[12]

- Even on-the-job training (OJT) requires specific planned objectives to avoid inconsistencies in what is learned by different people receiving that same training.

- Although there are many "bells and whistles" one can add to a training program, it is better to keep it as simple and practical as possible. As Westcott puts it: "a theme-park type of production is seldom needed."

- If the training is by lecture, steps should be taken to make the lecture less boring by providing an outline of what's said (so participants can concentrate more on the lecture) and involving the participants in the training process with pertinent questions, encouraging questions, and inviting them to share their experiences.

- When training is perceived as helping an employee do his/her job better and as a way for personal growth it will usually be very well received.

- A comprehensive training/education program based on strategic goals/objectives is a good way to ensure the organization continually improves and stays abreast of its rapidly changing environment.

References

Austenfeld, R. B., Jr. (2008, September). Summary of Manager of Quality/Organizational Excellence Body of Knowledge. *Papers of the Research Society of Commerce and Economics—Hiroshima Shudo University*, pp. 1–65.

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12)   Westcott lists several types of job aids on p. 559.

Austenfeld, R. B., Jr. (2008, February). The Quality Manager Body of Knowledge (Part 2). *Papers of the Research Society of Commerce and Economics—Hiroshima Shudo University*, pp. 25–94.

Austenfeld, R. B., Jr. (2007, September). The Quality Manager Body of Knowledge (Part 1). *Papers of the Research Society of Commerce and Economics—Hiroshima Shudo University*, pp. 51–105.

Crosby, P. B. (1979). *Quality Is Free: The Art of Making Quality Certain: How to Manage Quality—So That It Becomes A Source of Profit for Your Business*. New York: Mentor Books.

Senge, P. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York: Doubleday.

West, J. E. (2009, April). Small Change, Big Payoff. *Quality Progress*, pp. 46–52.

Westcott, R. T. (Ed.) (2006). *The Certified Manager of Quality/Organizational Excellence Handbook* (3rd ed.). Milwaukee, Wisconsin: ASQ Quality Press.

Appendix

American Society for Quality (ASQ) Code of Ethics

(http://www.asq.org/about-asq/who-we-are/ethics.html)

Fundamental Principles

ASQ requires its members and certification holders to conduct themselves ethically by:

   I. Being honest and impartial in serving the public, their employers, customers, and clients.

  II. Striving to increase the competence and prestige of the quality profession, and

 III. Using their knowledge and skill for the enhancement of human welfare.

Members and certification holders are required to observe the tenets set forth below:

Relations With the Public

Article 1 – Hold paramount the safety, health, and welfare of the public in the performance of their professional duties.

Relations With Employers and Clients

Article 2 – Perform services only in their areas of competence.

Article 3 – Continue their professional development throughout their careers and provide opportunities for the professional and ethical development of others.

Article 4 – Act in a professional manner in dealings with ASQ staff and each employer, customer or client.

Article 5 – Act as faithful agents or trustees and avoid conflict of interest and the appearance of conflicts of interest.

Relations With Peers

Article 6 – Build their professional reputation on the merit of their services and not compete unfairly with others.

Article 7 – Assure that credit for the work of others is given to those to whom it is due.