The 2012 Quality Management Handbook

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Abstract

This paper reviews the content of a handbook presented by IBS software who has over thirty years of experience in business. The intent of the handbook is to provide quality management professional knowledge of quality basics and to improve Quality Management System, (QMS) strategy. The manual propounds on many known quality theories, provides a refresher to their applications and identifies several concepts to improve an organizations quality process.

# Introduction

## Quality Foundations

The manual start with W. Edwards Deming fourteen points explained. A proponent of statistical theory, Deming pointed his dialog directly at management. The manual as cited, the fourteen points for management are (Ibs, 2012):

1) Create constancy of purpose for improvement of product and service. Inspire the workers to stay competitive in the market and remind about the importance of stability in jobs and new opportunities which may come up in later stages, as inducing a sense of purpose in producing quality products will work as the inspiration to work efficiently.

2) Adopt the new philosophy. The customer demands and taste change very fast and the competition in the market grow at a rapid rate today, and we have to accept new philosophies according to the market trends and technology revolutions.

3) Cease dependence on mass inspection. Instead of inspecting the product for quality after production, infuse quality at the beginning itself with production quality control, as this will ensure no raw materials are wasted for the sake of quality.

4) End the practice of awarding business on price tag alone. Instead, minimize total cost - move towards a single supplier for any item, on trust.

5) Constantly and forever improve the system of production and service. Enterprise systems and services must keep growing indefinitely in order to catch up with the competitive market.

6) Institute modern methods of training on the job. A trained worker has more productivity and quality than an untrained one, so giving training sessions will drastically improve the quality of the person and directly it helps in better product quality performance.

7) Institute modern methods of supervision. A company can display stunning growth if potential leaders are identified and encouraged.

8) Drive out fear. Creating a fearful impression in the employees does not give more quality and productivity to work. If a person is not working willingly with satisfaction then he can never do a work perfectly even if he has the intention to be perfect in conscious mind, so driving out fear is essential.

9) Break down barriers between staff areas. The workers in design, sales, and production must work together to face problems and resolve them, which takes the company to better quality assurance management and also other profit with better planning.

10) Eliminate numerical goals for the work force. Slogans or exhortations call for more quantity in production than focusing on quality control in manufacturing, which will severely damage the quality management process. Employees should have a calm and quiet quality atmosphere in the company.

11) Eliminate work standards and numerical quotas. This focuses on quantity rather than quality of product.

12) Remove barriers that hinder the hourly worker. Supervisor responsibility must be focused on quality, not numbers. Abolish annual or merit rating and MBO completely.

13) Institute a vigorous program of education and training. A person must grow after joining a company, and letting them learn new technology and techniques will increase employee longevity.

14) Create a situation in top management that will push every day on the above points. Just like products and services, every employee in a company must work to accomplish the transformation.

The manual further elaborated on Demings concepts by presenting Deming’s seven deadly diseases of management which are (Ibs, 2012)::

1. Lack of constancy of purpose to plan product and service that will have a market and keep the company in business, and provide jobs. As long as the focus is on short term thinking, management will fail to plan adequately. Without good long term planning, worker efforts will be irrelevant: Total Quality Management (TQM) cannot be a fad, as long-term forward progress should always be the ultimate goal for any organization.

2. Emphasis on short-term profits. This disease of management focuses on short-term thinking - the opposite of constancy of purpose - in order to stay in business, fed by fear of the push from bankers and owners for dividends. Boosting short-term profits is easier, as it typically involves the cutting of any expense related to the long term: training, quality assurance management, maintenance, etc.

3. Employing personal review systems, or evaluation of performance, merit rating, annual review, etc. for people in management, the effects of which are devastating. Management by objective, on a go / no-go basis, without a method for accomplishment of the objective, is the same thing as management by fear. The essential problem with merit systems is that they reward results rather than process improvement - results will almost always have a lot of system luck mixed in. Some managers want to reward people who cooperate more or who seem to have better attitudes, and will insist that they can recognize the people who are most cooperative and have the highest work ethic. Instead, managers should understand that the best way to develop cooperation is by focusing on the nature of work environment, not monetary rewards.

4. Mobility of Management: Job-Hopping The simplest and yet one of the most deadly of quality systems management diseases, management mobility (or when top management changes organizations every 3-4 years) means continuous improvement efforts will be broken and disjointed as new leaders come on board. With changes in leadership, there is a change in management philosophy. Managers who have an eye on the next promotion want results - now - to gain the next rung on the ladder

5. Use of visible figures only for management, with little or no consideration of figures that are unknown or unknowable. Some facts are simply unknowable. Knowing this, Deming insisted that leaders must still make decisions and manage a situation. This leads to a basic dilemma - How do you know what would have happened if you had kept on your prior course? How do you put a dollar value on the customer loyalty won through quality improvement efforts? You can't, because these numbers are unknowable - and this must be taken into consideration.

6. Excessive Medical Costs. For the economy as a whole, health care as a percentage of overall expenditures has steadily risen for decades, which gradually pushes numerous businesses into a state of crisis. Potentially the only remedy for this disease would be a political system attempting to reform health care.

7. Excessive costs of liability. W. Edwards Deming blamed America's lawyers in part for the problems of American business. The US has more lawyers per capita than any other country in the world, and they spend much of their professional time finding people to sue. Like health care costs in #6, Deming believed the remedy to this disease will probably have to come from the government.

The manual goes on to describe Joseph J. Juran’s ‘trilogy of Quality Management’ that identifies three necessary elements of Quality Planning, Quality Control, and Quality Improvement. In summary, Juran’s philosophy was to establish quality goals, (basically the voice of the customer), and develop a process to produce those goals. Evaluate and compare the end product to those goals and act on the difference.

Phiolp Crosby’s ‘Zero Defects’ is next on the manuals agenda and by initial inspection may seem the most outlandish. I have restated the concept by saying that; ‘if you do it right the first time, you will not have to do again and you will be done in half the time’. Crosby asserted that you could increase profits by eliminating failures.

## Quality Tools

The manual continues with the lean process and diagram Supplier, Input, Process, Output Customer and Feedback (SIPOC) which is typical in many lean process. SIPOC does provide a visual management tool to identify who is doing what and the flow of a particular process, thus making improvement identification easier.

Team fundamentals are presented next. One could question how this affects quality but the manual points out that team are fundamental to change. Teams are typically the people who make the product line, or process work. It is imperative the team understands the big picture and quality doctrines described above.

This manual continues with a section titled ‘Improvement tools Cheat Sheet’ which contains standard procedures for many quality tools. Flowcharts, histograms, pareto charts are data driven solutions that can be effective, typically these are pretty eyewear for management. Unless you take the data to the floor, your solution driven data is limited. The remaindered of the manual continues with standard quality methods and toward the end recognizes that employee involvement and empowerment are other key elements to quality.

Suggestions as to how to improve quality are given next in a twelve step process that includes most know quality tools. Of interest to me is the next section that describes mistakes made by quality professionals. The mistakes bear repeating and are delineated with my favorites in abbreviated format as follows (Ibs, 2012)::

Frightening people into compliance.

Working in organizations in which top management was not engaged in quality and really valued it.

Emphasis on putting out fires rather than finding competent staff to prevent problems.

Looking for errors, and finding fault with the person who had performed the work.

Trying to "boil the ocean". Start small with focus on a pilot area or project.

## Summary

I think the manual has many of the basic quality concepts presented in a concise manner. Certainly a file to keep handy and refer to when thing do not seem to be going right. Stepping back and looking at the situation and utilizing tools such as The 2012 Quality Management Handbook can lead to insight even when the organization has adopted many of the philosophies contain within the manual. After all, you cannot always see the trees when looking at the forest.

References

IBS. (2012). *THE 2012 QUALITY MANAGEMENT HANDBOOK* [Brochure]. Ibs.comMarch 9, 2013, IBS Web site: http:/​/​info.ibs-us.com/​Portals/​14010/​docs/​The%202012%20Handbook%20for%20Quality.pdf