B10801019 黄湘宜

1.4. Can an understanding of the multidimensional nature of quality lead to improved product design or better service?

Yes, understanding and improving quality are key factors leading to business success, growth, and enhanced competitiveness. Quality improvement is the reduction of variability in processes and products. 品質的定義與種類很多,也掌握著不同面向的品質維護,像是表現方面、耐久方面等等,知道與了解的越多就能讓產品與服務更好、更了解應該要改善哪個方面。

- 1.6. What is the Juran Trilogy?
- 1. Planning 2. Control 3. Improvement
- These three processes are interrelated
- Control versus breakthrough
- Project-by-project improvement
- 1.9. Who was Walter A. Shewhart?

Developed the first control chart (控制圖) 被稱為統計質量控制之父

1.13. What would motivate a business to compete for the Malcolm Baldrige National Quality Award?

They will provide reports to the applicants. Many organizations have found these reports very helpful and use them as the basis of planning for overall improvement of the organization and for driving improvement in business results.

1.18. How can lean and Six Sigma work together to eliminate waste?

Ideally, Six Sigma/DMAIC, DFSS, and lean tools are used simultaneously and harmoniously in an organization to achieve high levels of process performance and significant business improvement.

- Improve cycle time
- Reduce variability

The process improvement triad: DFSS, lean, and Six Sigma/DMAIC Overall Programs Six Sigma/ DFSS Lean DMAIC* Eliminate Design Eliminate predictive waste, defects, quality into improve reduce products cycle time variability Robust Lead-time Capable Variation Reduction Design for Six Sigma Lean · Requirements allocation Flow mapping Predictability Capability assessment Waste elimination Feasibility • Robust design • Predictable product quality • Efficiency · Cycle time · Work-in-process reduction Capability · Operations and design Accuracy

The "I" in DMAIC may become DFSS.

FIGURE 1.15 Six Sigma/DMAIC, lean, and DFSS: how they fit together.