



香港品質機能展開學會

Hong Kong Quality Function Deployment Association

Hong Kong Society for Quality

Seminar on Quality Function Deployment

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- PPT 2 Due to tremendous growth after World War II, competition between corporations in Japan in the 1960s increased. Many manufacturing companies transformed from being a product producer to a product supplier.
- PPT 3 As corporations were professional in product production, therefore it was natural that engineers did the design for products. However, the products came out could not fully satisfy customers' needs.
- PPT 4 The high economic growth after World War II led to changes with customers' needs. Besides frequent model changes were required, suppliers had to offer a wide range of product options for customers to choose.
- PPT 5 Customer dissatisfaction reduced sales whilst wide ranges of product options increased cost. Both reduced profit and weakened competitiveness.
- PPT 6 In the 1960s, the concept of quality management (QM) advanced from (1) statistical quality control (SQC) to quality assurance, and, (2) quality assurance shifted from only

assuring production quality to assuring quality from design to production.

PPT 7 The two founders of QFD are Prof. Shigeru Mizuno and Prof. Yoji Akao.

PPT 10 “Q” in “QFD” refers to quality, which is determined by customer expectations.

PPT 11 “F” in “QFD” refers to function. It is the “HOW” of the product or service for meeting customer expectations.

PPT 12 “D” in “QFD” refers to deployment. It is how the supplier manages the flow of development efforts so as to make certain that customer expectations drive the development of products and services.

PPT 13 QFD adopts the idea of control points, which had been used in QC chart to assure production and design quality.

PPT 14 Substitute characteristics are used as control points for design, and production parameters are used as control points for production.

PPT 15 Three basic steps of QFD:

1. Identify the important customer needs
2. Translate customer needs into quality elements
3. Deploy the important quality elements for achieving quality

PPT 16 QFD = QD + Work Function Deployment

PPT 17 Three main features of QFD are

1. Make use of the basic principles of TQM
2. Provide a deployment system

3. Apply different kinds of tools & techniques

PPT 18 Quality table is operated in the way of: “From customers’ world into engineers’ world”.

PPT 19 Three functions of quality table are:

1. Process customer needs from VOC into demanded qualities
2. Translate customers’ demanded qualities into substitute characteristics of product
3. Display the relationship between demanded qualities and substitute characteristics

PPT 20 The two major types of deployment are: (1) extraction & (2) conversion.

PPT 23 Tools and techniques commonly used in QFD include tree diagram, affinity diagram, 2-way matrix and prioritization.

PPT 24 QFD emphasizes :

1. Extract, organize and group
2. Identify the vital few
3. Innovate to find new solutions

PPT 25 QFD suggests forming product development team to share viewpoints of different departments.

PPT 29 Main uses of QFD include: (1) quality planning, (2) product/service development, and, (3) process improvement.

PPT 30 Benefits of QFD include: (1) increase customer satisfaction, (2) decrease product development cost, and, (3) enhance innovation.

PPT 31 Major advantages of QFD include (1) can be partially or wholly

applied, (2) difficult calculation is not a must, and, (3) it promotes teamwork and innovation.

PPT 32 QFD is complementary to other product development methods such as 6-sigma and lean.

PPT 34 Many QM tools support the operation of QFD. Equally, QFD will also support the operation of other QM techniques, too.

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