



TRANSACTIONS FROM
THE SYMPOSIUM ON
QUALITY FUNCTION DEPLOYMENT

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2006: The 18th Symposium on QFD

(ISBN 1-889477-18-4)

Education 2006

QFD-based Curriculum Planning for Vocational Education. *Catherine Y. P. Chan, QFD Green Belt®, Institute of Textiles & Clothing, The Hong Kong Polytechnic University, Hong Kong, CHINA.* Originally set up by the government in the "Golden Age" of manufacturing, the vocational education institutions in Hong Kong are struggling to adapt to the profound changes brought by today's global market. This paper shows how QFD enables a paradigm shift in vocational education to face a changing world and how Modern QFD tools and methods can be applied to college curriculum design, including the concept, system, tools and the mechanism of incorporating Modern QFD into curriculum planning, as well as a pilot study using Blitz® QFD to identify important industry-specific knowledge, a Customer Voice Table for identifying the job needs of the clothing industry, Affinity Diagram, Customer Needs Hierarchy table, and Maximum Value Table.

Insurance/Financial Products Development 2006

Finding Customer Delights Using QFD. *Carey Hepler, QFD Black Belt®, Integrated Market Intelligence, Blue Cross Blue Shield of Florida, USA; Glenn Mazur, QFD Red Belt®, Japan Business Consultants, Ltd., USA.* Changes in market demographics and the regulatory environment are creating many new opportunities for health-care and related organizations. As the oldest and most respected health insurance organization in the State of Florida, Blue Cross Blue Shield of Florida (BCBSF) strives to stay ahead of the competition by quickly responding to these changes with new and improved insurance and health maintenance products. Recently, we have begun to use QFD to discover the unspoken customer needs for an underserved portion of our population. QFD has allowed us to convert their needs into new products, services, and features to delight and attract new customers as well as retain current customers. This paper describes some of the new opportunities we are facing, and shows step by step how we are addressing them by understanding the Voice of the Customer and innovating and implementing exciting solutions.

Healthcare Services 2006

Challenges in Rapid Deployment of New Services in Healthcare. *Michael Scutero, Six Sigma Master Black Belt, Quest Diagnostics Inc., USA; Sonja Draganic, Six Sigma Black Belt, Quest Diagnostics Inc., USA; Angela Rylsky, Six Sigma Black Belt of Quest Diagnostics Inc., USA.* Through careful application of QFD in the early phases of a DFSS activity, we show solutions to customer queuing problems. The problem occurs in patient outreach, or service centers (PSC) that are responsible for patient blood draws and specimen collection. Patient flow through PSC sites, when disrupted, often results in delays and dissatisfaction. Patients are essentially "pushed" through the sites. The new and improved services generated include personnel redeployments, customer routing, customer flow regulators, supply chain efforts and improved transportation. In addition, we uncover needs & solutions for implementation of these new services to over 40 geographically separated PSC sites in a relatively short time. Included are discussions of: Project Management activity (PM), new product introduction (NPI), Design for Six Sigma (DFSS), QFD deliverables, QFD application, and case study success.

Innovation 2006

Controlling Innovation as a Basis for Continuous Success - An Executive Overview of Systemology. *Greg Yezersky, President, Institute of Professional Innovators, USA.* When we design a product or service, we must follow the laws of physical science. Similarly, if we expect business to be successful, we must follow the laws of system evolution. This practice, often done intuitively by business executives, can help businesses achieve continuous innovation if it is better articulated and strategically applied. This paper introduces the General Theory of Innovation (GTI), an evolutionary development of TRIZ for non-manufacturing organizations and general business management, and how to control the innovation process and outcomes by applying GTI to business processes, just as TRIZ has done to manufacturing and engineering problems.

IT/Database Management 2006

Pair-wise House of Quality (HoQ) Matrices: Turning poor perception to customer satisfaction. *Rituparna Maji, Six Sigma Black Belt, Sr. Quality Consultant, Wipro Technologies, INDIA.* During a review of a project for database production support in a financial services company, the customer expressed unhappiness in terms of 'processes being loose, not being hands-free' and a host of others. Lacking clear direction from the customer, it became difficult for the team to arrive at any tangible actions. In absence of data from customers, a pair of House of Quality (HoQ) matrices was used to self-evaluate the company's service quality and identify improvement areas need to satisfy the customer.

Kano Model 2006

Kano Model: Dr. Kano's Latest Developments. *Richard Zultner, QFD Red Belt®, Director, QFD Institute; and Glenn Mazur, QFD Red Belt®, Executive Director, QFD Institute, USA.* The Kano model is often cited by experts in quality, design, and marketing. And yet, it is one of the topics that are often misunderstood. What is the historical background of this concept? Are there methods that product developers and marketers can apply beyond the visually-interesting diagram? What is the relationship between QFD and Kano's model, and how it can be integrated into QFD? What should QFD practitioners know about applying this in their project? This paper examines the Kano Model, including the latest developments as presented in the October 2006 Kano master class taught by the master himself, and introduces new application methods and models that are currently being developed by the QFD Institute through its on-going international research.

Build-to-spec Design & Manufacturing/OEM 2006

Using a Spec Document, the Customer Voice Table, and a QFD Matrix to Generate a CTQ (Critical to Quality) List. *Bruce White, Staff Statistician, QFD Black Belt®, Imation, USA.* When all you have to work with is a large specification document and you need to identify what specs are truly important to the customer, the techniques outlined in this paper will help you. Imation is a leading memory device manufacturer. This paper reports how they were able to identify from specs, a Critical to Quality List (CTQ), the most important, measurable characteristics of the finished product that are strongly linked to customer requirements by using the Modern QFD and a matrix to structure customer need statements, weigh and access the importance and relationships between the customer need statements and the specs. It can be very useful for any OEM supplier as well as internal customers. The talk at the Symposium will discuss the Modern QFD tools used for this technique, the process, and how successful the outcomes were.

Prioritization & Math in Traditional QFD 2006

An Analysis of Methods for Prioritizing Design Characteristics in Quality Function Deployment. *Marcus J. McLeese, Maintenance Supervisor, Coca-Cola Enterprises, Alsip Operations, USA; Bruce DeRuntz, Ph.D., Southern Illinois University Carbondale, USA.* This research compares three popular methods for ranking design characteristics in the traditional House of Quality: Simple Additive Weighting; Modified Simple Additive Weighting; and Technique of Order Preference by Similarity to Ideal Solution. The three methods were simulated and statistically tested to identify whether a significant difference existed between the outcomes and the pros and cons associated with each.

2006 Appendix I:

Bonus Case Studies

QFD Applications in Health Care and Quality of Work Life by Glenn H. Mazur; Jeff Gibson, Baptist Health System, Birmingham, Alabama, USA; and Bruce Harries, TELUS Corporation, Edmonton, Alberta, Canada

Quality Function Deployment for a Medical Device by Glenn Mazur, Japan Business Consultants, Ltd.

Making The Neon Fun To Drive by J. E. Fernandez; J. L. Chamberlin; E. G. Kramer; J. H. Broomall; H. A. Rori; and R. L. Begley, Small Car Platform Engineering, Chrysler Corporation

The Application of Quality Function Deployment (QFD) To Design a Course in Total Quality Management (TQM) at the University of Michigan College of Engineering by Glenn H. Mazur, Adjunct Lecturer, The University of Michigan College of Engineering and Executive Director, QFD Institute, U.S.A.

2006 Appendix II:

Abstracts from Symposia on QFD 1989-2006