

2004: The 16th Symposium on QFD (ISBN 1-889477-16-8)

Aerospace / Kansei Engineering / Ergonomics 2004

Kansei Engineering for Commercial Airplane Interior Architecture. Jeanne Guérin, Human Factor Specialist, The Boeing Company, USA; Glenn H. Mazur, QFD Red Belt®, Japan Business Consultants, Ltd. And QFD Institute. Kansei Engineering process was used to ease the difficult task of down-selecting the final interior architecture concept for the Boeing's new commercial airplane that is under development. This paper reports the Kansei experiment performed by the design team, simultaneously with several other methods in a project that is still on-going. To be presented at the symposium are: the Kansei Engineering methodology used for this project including extraction of the Kansei words from a market research study, the Kansei Domain and Physical Domain, examples of Kansei Engineering matrices and software, and the results, as well as the experience and lessons learned by the project team.

Critical Chain Project Management / Schedule Reduction / Theory of Constraints 2004

Utilizing Critical Chain Project Management in Your QFD to Manage Project Schedule and Get More Done in Less Time. Tony Rizzo, Product Development Institute, USA. Many projects experience delays despite careful planning. Project managers, wanting to be realistic in project estimates, tend to build 'safety' into new project planning, while management, being pressed for decreasing time-to-market, tend to ax the project schedule: a vicious cycle. This paper summarizes the Critical Chain Project Management, an application of the Theory of Constraints and the project examples presented at the symposium.

Manufacturing / Chemical 2004

Implementing QFD for Product Development through Action Research. P. A. Cauchick Miguel, Quality & Methodology Research Group, Faculty of Engineering, Methodist University of Piracicaba, Brazil. A number of organizations have implemented QFD, but to what degree is a question that is difficult to tell from outside. This paper will report an 'action research' project which began in 2000 in Brazil. It will present the 'action-oriented' research through a case study of QFD implementation by a flexible packaging film manufacturer. To be included in the talk are: the new product development process employed by this company, how QFD was part of their product development practice, in what stages QFD was used, data and results of this three year research project, and the results of QFD implementation in a pilot project.

Modern QFD Tools & Deployment Methods 2004

QFD for Innovative Companies: Using Voice of Customer to Focus Opportunities. Glenn Mazur, Japan Business Consultants, USA. America's technology-driven juggernaut roars unabated by economic uncertainty, employee outsourcing, and even international opinion. Our innovative capacity is the engine for a successful tomorrow. Yet, both marketing and engineering groups within these companies complain of the same problems: too many opportunities with too few resources, products too new for customers to define their requirements, and an organization too immature to cope with it all. What is needed is a systematic, repeatable approach to: prioritizing projects and allocating human, schedule, and budget resources accordingly, exploring key customers for those projects to discover unspoken needs that can win customers away from the current technology, and organizing management and technical processes to efficiently deliver value to all stakeholders. Quality Function Deployment (QFD) is a powerful system of processes and tools that harness the efforts of managers, sales, and technical people by focusing them on what matters most to the customer. This paper will explore some of the major front end deployments in QFD, including Strategy Deployment, Project Deployment, Customer Deployment, Voice of Customer Deployment, Quality Deployment, and Schedule Deployment, as well as key processes and tools, to achieve this.

2004 Appendix I:

Select Papers from North American Countries

Sensio - The Evolution of a Revolution: QFD Applied to the Development of New Businesses. *Pierre-Hugues Routhier, Sensio, Canada.* The next chapter in one of the top presentations in 2002. Sensio's world's first Stereoscopic Home Theatre System was the fruit of a four-year effort in QFD and Value Management, which led to an instant success. Building on their earlier product development success, Sensio again set to invest in understanding and integrating the needs of its customers and partners. This case study follows the different phases of this new product's development, and demonstrate the system developed by Sensio to define which needs are assessed at which stage of the development process to maximize the effectiveness of the marketing and engineering efforts.

Large Scale System Redesign Using QFD. Robert Gerst, Converge Consulting Group Inc., Canada. This paper reports QFD applications in the public sector large system design. It will describe the consulting firm's experience in using QFD to: 1) analyze and redesign the system of funding and service delivery in providing support for those living with HIV/AIDS in southern Alberta; and 2) analyze the entire social and health services (human services) system for the regional municipality of Wood Buffalo in Alberta; and 3) analyze and redesign the system for providing services to the deaf and hard of hearing in the city of Calgary.

Prioritizing Customer Needs at Spectator Events: Obtaining Accuracy at a Difficult QFD Arena. Francisco Tamayo-Enríquez, Arnecom; González-Bosch, Mercadotecnia Estrategia Dirigid; and Javier Santa Cruz-Ruíz, Mexico. Once customer needs are extracted from customer verbalizations and field observations, it is critical to understand the relevance that each need has to customers. Accurate information must come directly from customers, but sometimes due to the complexity of gemba this information needs to be obtained very quickly. Direct evaluation of needs without tradeoffs is easy to perform, but can lead to

serious deviations from reality. On the other hand, comparison-based techniques such as AHP may be impossible to perform effectively at some gemba. An effective solution was devised by the authors while applying QFD for improving services at spectator events.

2004 Appendix II: List of Past Transactions and Abstracts 1989-2003