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Aerospace

The Synergistic Alliance of Systems Engineering and QFD *by John M. Marzec of Rocketdyne Propulsion and Power - Boeing North American.* Rocketdyne Propulsion and Power, a business unit of Boeing North American, has developed a Systems Engineering Process. QFD has been identified as a key process within that discipline. This paper will primarily focus on the role of QFD in the Requirements Management aspect of Systems Engineering. The presentation will include a case study involving a transfer orbit propulsion system.

QFD in Aerospace Applications: A Training Exercise *by Jack Barke of the Information, Space and Defense Systems, The Boeing Company.* This paper explains a teaching exercise that introduces one to the mechanics of QFD. The basis of the exercise is an actual advertisement and specification for a "heavier-than-air flying machine" put out by the Army Signal Corps in 1908. Twelve exercises are covered that walk the reader through the 4 ASI matrices and also the Pugh Concept matrix.

[Poster Paper] Method for Optimizing Resources Allocation *by James Afarin of NASA Lewis Research Center.* This is a nonlinear model which represents a structured approach to make capital investment decisions based on the priorities of the organization and the quality of outputs. This procedure was applied to a multidivisional organization for the proof of the concept at the NASA Lewis Research Center in Cleveland, Ohio.

Automotive 1998

Application of Quality Functional Deployment to Automotive Fuel System Components *by Edward J. Vinarcik of Visteon - Powertrain Control Systems Division.* With most products, consumers define quality. Complex products, however, contain components which often are never thought about by consumers. At the component level, quality must be defined internally. The purpose of this paper is to apply QFD to an automotive component, specifically a fuel rail. Included is a discussion of needs for internal customers related to design, delivery, and timing. Dynamic Characteristics / QFD by Shin Taguchi of the American Supplier Institute. The integration of Taguchi Design of Experiments and Quality Function Deployment.

QFD Methodology and its Application in an Automotive Industry Supplier *by P. A. Cauchick Miguel, N. C. Maestrelli, and L. G. Lopes, Jr. of Methodist University of Pircicaba (UNIMEP) and Meritor do Brasil Ltda., Brazil.* This paper presents a work on QFD carried out in an auto parts industry in Brazil. It describes the implementation steps as well as some of the achievements. This work also outlines the relation of QFD with aspects of QS 9000 certification. Finally, it points out the principal benefits of QFD application.

Concept Development & Ideation 1998

Consumer Encounters and Idea Development and Concept Optimization *by Brian Barton and Cathy Rings of Rubbermaid, and Glenn H. Mazur of Japan Business Consultants, Ltd.* Getting better products faster to customers is critical to the financial success of a company. Traditional approaches to ideation and concept development and optimization begin with product ideas developed internally and then validated through consumer screening and concept testing. By observing consumers in the process of living their lives in their own homes, a deeper understanding of their needs can more accurately drive the ideation process, leading to a better acceptance of concepts in the screening process, more accurate consumer testing, and better volumetric and profit forecasting. This paper reports on Rubbermaid's Consumer Encounter Form which was designed to facilitate a brief 2-hour encounter, prioritize product categories and within those, prioritize consumer needs based on the Voice of the Customer, and lead to product ideas. This form flows directly into our Concept Testing Board for use in the consumer concept tests.

Cost Deployment 1998

Cost Deployment to Improve Customer Satisfaction and to Reduce Product Cost *by Gerd Streckfuss of Institut fnr QualitStsmanagement and Dr. Weigang.* During QFD sessions, companies in "high-cost" countries request from this method not only to address customers' requirements but also to consider the cost issues. Although often published, there are few case studies, which demonstrate the cost deployment. Our approach: Using comprehensive QFD Deployment and Target Costing, the results of case studies are documented and evaluated. Special considerations: 1) There is a relationship between customer requirements and the actual cost; 2) The Value Graph can be used to start the improvement path. 3. This improvement path is documented in various HOQ's, but some important rules must be watched.

Computer & Software 1998

Introduction of QFD to "What to Design" Process In Super Design Technology *by Kunio Noguchi, Keisuke Nomura, Yuji Kyoya, Yoshifumi Ueda of Toshiba Systems & Software Research Laboratories.* The development of an advanced product design process dubbed the Super Design Technology to achieve "product on demand" is underway at Toshiba. We have added QFD to this new method in the form of a database that we can quickly access critical information which is often beyond the scope of typical QFD.

Software Availability Reporting System *by Ann Burtner of Hughes Aircraft, USA.* This paper investigates the establishment of an availability reporting system using QFD as a tool to translate "the Voice of the Customer" (VOC) into a product design. The goal of this study is to develop a software reporting product that customers and the computer vendor may easily view for any anomalies, problem trends, and cyclic outages. This report focuses on just one portion of the final product which is the output report the customers view. This report will then become a template for the remainder of the project. The methods used with QFD are VOC, DOE, and SPC.

Using QFD for Computer Aided Design Software *Selection by John Chapdelaine and Linda Coveney of The Wiremold*

Company. In 1990, Wiremold transitioned to a JIT manufacturing process. In addition, Wiremold had institutionalized Quality Function Deployment (QFD) as its product development methodology. In 1997, Wiremold recognized that its current Computer Aided Design (CAD) system would not meet the needs for future product development. This paper discusses the use of the QFD process to hear the "voice of the customer" for selecting a new CAD system. It details the process of differentiating and weighting the various customers and the methods for collecting data through surveys. Also discussed are the introduction of decision analysis tools into the process, the final results obtained from technical benchmark data, and lessons learned.

[Poster Paper] Business System Analysis *by Joseph Craig of Qualisoft Corporation and Thomas F. Teel of Business Effectiveness, L.L.C., USA.* A business system utilizing QFD ensures that customer and business requirements are met and Business Functions / Product and Services are effectively and efficiently managed. Business Functions (How) and the Products and Services Processes (What) of a business are defined and correlated by a Team of subject matter experts and facilitated by Business Effectiveness, LLC.

Education 1998

Using QFD to Research the Demanded Quality of Students for Lectures *by Professor Kozo Koura of Asahi University, Japan.* Today, improvement and innovation in education at the university level has begun to spread through Japanese universities. We are seeing a more market-in style of lectures as a two way street between teacher and students instead of a one way product-out style from the professor to the students. Students should be recognized as consumers and the lectures need to meet their requirements. This research is a case study of analysis of "opinionaires" for lecture production control using QFD. The voice of the students was translated into demanded quality deployment and measures deployment was developed from teacher experiments. A quality chart combines both deployments. Importance and weights of planned and designed quality were calculated and a Pareto Analysis implemented. The results were very useful information for the professor.

Using Service Blueprinting and Quality Function Deployment in Restructuring Educational Service Processes *by Dr. Klaes Eringa of The Christelijke Hogeschool Noord-Nederland, Leeuwarden and Ms. Isolde L. J. Boer of Rijksuniversiteit Groningen, Faculty of Business Administration, the Netherlands.* The Christelijke Hogeschool Noord-Nederland has launched a TQM project aiming to restructure educational processes tailored to students' needs. Service Blueprinting maps both the students' learning process and supporting organizational processes. QFD translates students' needs into service process specifications, emphasizing the service encounters. The integration of QFD and Service Blueprinting attempts to improve the student perceived quality of service processes.

[Poster Paper] QFD in Education: An Instructional Case *by Dr. P. A. Cauchick Miguel and Dr. A. Weidmann of Methodist University of Pirciaba (UNIMEP) and SKF GmbH.* QFD is a powerful development methodology with a wide range of applications. This case study presents a simple case which has been used for both undergraduate and post-graduate engineering courses as well as special industrial training courses. The paper shows the feedback from the participants in some of those courses.

Healthcare 1998

A Hospital-Based Service Example of QFD *by Edward Chaplin, M. D., Medical Director of Continental Rehabilitation Hospital of San Diego.* The presentation will review a project to incorporate a customer-focus to a rehabilitation hospital service that provides multi-disciplinary evaluations of complex and/or catastrophic injuries. The service is low in volume, complex, provider-intensive and involves multiple business entities (suppliers). The presentation will include the following: (1) Classic Quality Function Deployment - Customer Deployment, capturing the Voice of the Customer, Quality Deployment, Functional Deployment, Reliability Deployment, New Process and Task Deployment. (2) An example of using reinforcing (positive) feedback to self-organize and self-regulate the management of provider commitments which, in turn, enhanced the effectiveness, reliability and robustness of a deployed process. (3) An example where the use of the concepts from ARIZ broke through apparent incompatibilities between demanded qualities of the injured person and the insurance regulations.

House of Quality 1998

An Intelligent House of Quality by Prof. Xiaoqing Frank Liu of the University of Missouri-Rolla. The House of Quality (HoQ) is an important and successful tool in QFD. However, manual development of a HoQ is usually time-consuming and error-prone. We have been developing an intelligent HoQ to relieve users of all calculations involved in developing HoQs manually, detect implicit trade-off and impact relationships and maintain their consistency based on fuzzy logic, and enable automatic archival and management of HoQs based on a database system. In addition, it will not impose any restriction on the way the HoQ is currently used.

Fast QFD: First House of Quality in Half the Time *by Mark Farrell of Nortel, Northern Telecom Limited, Canada.* A common reason for not using Quality Function Deployment (QFD) is it takes too long. We have developed a method that completes the first House of Quality in half the usual time. We did this by defining two teams, one dedicated to defining customer needs and another dedicated to defining product characteristics. The first house of quality was completed in half the usual time because both customer needs and the product characteristics were defined simultaneously.

ISO and QFD 1998

Environmental Management System on ISO-14000 Combined with QFD *by Yoji Akao, Ph.D. and Tetsuya Hayazaki of the Graduate School of Business Administration, Asahi University, Japan.* ISO-14000 is combined with QFD in order to build a better environmental management system. The paper is based on a case study of a construction company with a focus on environmental issues. Environmental requirements were developed through construction work image deployment and combined in a matrix with

critical operational functions involving the installation of communication lines, which were then deployed to environmental quality assurance.

Kano Model and QFD 1998

Automated Kano Model *Implementation* *by Kaushik Ghosh, Sanjay R. Mawalkar and Lynnette Blaney of the Battelle Institute.* Automation of some tasks involved in using tools like QFD and the Kano model for new product development have contributed to their popularity in recent years. This paper presents a software application that allows for the prioritization of customer requirements by classification into the Kano categories and also allows for subsequent use of the generated data in exercises like QFD.

Medical Device 1998

Using FMEA and QFD to Improve the Design of a Medical Device *by Phil Price of Novartis Pharma AG and Ian Ferguson of Ferguson Associates, United Kingdom.* The Paper will show the steps taken to question Functionality, Cost, and Reliability of a medical device. This involved a multi-disciplined Team subjecting the proposed concept to a detailed Design and Process FMEA. The results of this evaluation highlighted areas of improvement for the mechanical Design and Patient handling characteristics. The Patient handling evaluation was supported by an ergonomic appraisal, which also yielded information concerning Patient preferences. These results and preferences were incorporated into a QFD led Project which ensured an improved medical device with the required horizons of Cost, Performance, and Reliability. The Paper will show some of the steps taken in the FMEA and QFD process, which led to these improvements.

An Application of Quality Function in the Medical Device Industry *by Dr. Shihab Asfour, Dr. Eleftherios Iakovou, Gilbert Cortez of the Department of Industrial Engineering, University of Miami.* Medical devices encompass all articles used in the treatment, prevention and diagnosis of disease. We first present the critical quality characteristics specific to the medical device industry. We then proceed with the presentation of a novel application of QFD and robust design in a real-world case study for the design and development of a medical device. Utilization of QFD and robust design in the development process will supercede the regulatory requirements of developing a safe and effective product. The employment of these techniques further leads to shorter time-to-market along with significant cost savings in R&D, manufacturing and service costs.

Quality Assurance 1998

Using QFD to Establish a Quality Assurance Network *by Antonio Carlos Ferreira Gomes, Ilka Vilardo, Marcus Vinicius Torres, Murilo Pirozzi, Paulo Roberto Villas, and Renato Machado Vilela of Poligran Polimeros Plasticos Ltda , and Fundacao Christiano Ottoni, Brazil.* This paper will describe the infrequently seen but essential aspect of QFD called the Quality Assurance Network. A real case of applying QFD to Quality Assurance in the polymer package industry will be presented not for redesign of the product or changing the specifications, but to assure the actual specifications improving the process capability (Cpk). This network allowed us to optimize the activities related to the Quality Assurance Function based on the voice of the customer and theirs priorities.

Schedule Deployment 1998

QFD Schedule Deployment: Doing Development Faster with QFD *by Richard E. Zultner of ZULTNER & CO., USA.* QFD traditionally addresses issues of quality, technology, cost, and delivery. For many development projects, the time or schedule of the project is also important. Schedule Deployment is the QFD subsystem that addresses the schedule directly. With Schedule Deployment, by better management of variation, a shorter development project plan can be made--usually 15-25% shorter--with no increase in risk. An example will be presented for software development.

Service 1998

Information Service for the Manufacturing Industry *by Elize Potgieter, Francois Smit, Heleen Snyman, and Johan Strydom of Aerotek, Division of CSIR South Africa, and Ben van Vliet of TechnoSolve.* QFD has been used to upgrade a service, called Infopak, which provides information to the manufacturing industry. Infopak is intended to help firms become more competitive, and to keep them updated on technological trends, topical issues and events in their respective manufacturing domains. Infopak has service, as well as tangible product dimensions. The QFD exercise included a voice-of-the-customer analysis, which circumscribed the definition of information vehicles, packaging and delivery features, functions, and reliability factors.

Strategy 1998

Strategic Planning Process for Welfare Reform using QFD *by Jack B. Re Velle, Ph.D. of Aerojet and G. Kevin McDonald of Raytheon Missile Systems Company.* In 1997, the United Way of Tucson partnered with Hughes Missile Systems to initiate a community-wide, strategic planning process for welfare reform. The process was designed to develop a "high-level," collaborative response to Federal and state legislative changes. A diverse group representing all sectors of the community met for 3 1/2 days to develop a comprehensive, consensual, prioritized plan. The study introduces a national model for similar community actions.

Strategy, QFD and the Balanced Scorecard *by Robert A. Hunt of Graduate School of Management, Macquarie University, Sydney, Australia.* QFD principles when applied to the development and deployment of an organization's strategy naturally develop a tailored set of key performance indicators that will provide the appropriate insights and measurements for predicting future performance that are sought by the Balanced Scorecard method developed by Kaplan and Norton. This research is based on a major four year study of 127 applications of QFD principles to innovation of physical products, services, software, processes and strategy in forty-nine companies in the South-west Pacific Rim. The paper will examine the development of balanced scorecard performance indicators by these organizations, and looks at the association between their use and corporate success.

Transportation 1998

QFD Technique for Composite Railway Sleeper *by M. R. Joshi of Research and Development Establishment (Engineers), Pune, India.* For the development of Railway Sleeper, The Product Development Team coming from three different organizations depended upon the experiences of the team members. Qualitative Requirements stated by the customer were translated into a FRP sleeper product and process characteristics using QFD approach. This work can prove to be a demonstrator for QFD in Product Development Process in India.

TRIZ and QFD 1998

A New Model of the Conceptual Design Process using QFD/FA/TRIZ *by Dr. Noel León-Rovira, Humberto Aguayo of Instituto Tecnologico y de Estudios Superiores de Monterrey, Mexico.* A comprehensive model of the Conceptual Design Process is presented, which integrates QFD, Functional Analysis and TRIZ . Instructions are presented on how to use TRIZ, starting from the QFD Diagram and continuing through Functional Analysis during the conceptual design stage of new products. The information obtained during the Functional Analysis is used to identify the product structure which reveals the technical parameters needed for the QFD process. Actual examples are shown on how the "roof" of the "House of Quality" may be used as an interface to the Technical Contradictions Table in TRIZ, as contradictory parameters are identified and the design conflicts may be solved based on the Technical Contradictions.

Innovation and Customer Focus: A Medical Marketing Success Study Demonstrating TRIZ and QFD *by Ellen Domb of The PQR Group, and David Corbin of Delcor Interactive International, Inc.* This case study illustrates the iterative combination of QFD, TRIZ, and entrepreneurial intuition that have gone into a successful new business venture. Through use of the technical tools of product development with the founders' intuition and experience, the development and marketing of a unique family of medical products and services has rapidly gone from concept, to prototype, to test market, to nation-wide distribution and sales.

[Poster Paper] Application of TRIZ to Solve a Reliability Problem of a Hard Drive *by Zinovy Royzen of TRIZ Consulting, Inc.* This paper describes TRIZ approaches to identify the best opportunities for development of products. TRIZ will guide you from understanding of the functions of your product to better utilization of its resources. Using TRIZ at the beginning of your project you will save your time and efforts in your search for the ideal solutions. A case study describes application of TRIZ to a difficult problem.

Value Engineering (VE) 1998

Adding Value to CIDM *by M. Larry Shillito.* The last decade has seen a proliferation of tools and best practices for use in product design and company commercialization processes. Each tool by itself can be helpful and effective. Combining these tools with other best practices allows us to expand the application and effectiveness of each. The enhancement of Customer Integrated Decision Making (CIDM) matrices using Value Engineering (VE) is a prime example of such a merger. The enhanced and/or hybrid model can expand team creativity and allow teams to discover new relationships and interactions. This paper will examine the use of value indices, value graphs, value targeting, Customer Oriented Product Concepting (COPC), a variant of VE, to enhance the application of CIDM. The result is an improved balance between customer and company needs and the price cost ratio.

Voice of Customer 1998

The Fuzzy Front End of the New Product Development Process *by Dr. Thomas Hsiang of Universal Foods Corporation.* By now you might have heard many buzz words related to new product development. Examples include Concept Engineering by Shiba, Voice of the Customer, Quality Creation by Kano, Creativity and Innovation, Strategic Quality Planning to name a few. But the bottom line is what are keys to new product success? How can you increase the odds of successful product launches? This presentation will discuss candidly the best new product strategies, particularly focusing on the "fuzzy front end" of the new product development process.

Using Neural Networks to Analyze the Voice of the Customer *by Robert L. Brass of Development II, USA.* There are three steps involved in the process of creating successful Utility products and services. The first is to identify the problems that exist. The second is to characterize the value of those problems as perceived by your target market while the third is to create a product or service that effectively solves the high priority problems. The key to the process is defining the problems and knowing the priority of those problems or issues in quantitative terms so that they can provide a valid benchmark. The second step, the prioritization and quantification of those problems is the main subject of this paper. This process involves market research but the uniqueness lies in the analysis of the data and the structuring of the questions to enable that analysis. The third step is left to those rare creative individuals who, given the prioritized problem, have the unique gift to develop marketable solutions.

General 1998

Managerial Implications for Customer Focused Product Development *by Anders Gustafsson, Torbjörn Forsberg, Lars Nilsson and Mattias Elg of Linköping University, Division of Quality Technology and Management, Sweden.* Several case studies on Swedish companies with great experience in the use of QFD, including Volvo, SAAB and SKF, have been conducted. This paper draws conclusions about some managerial implications on the use of QFD and draws comparison with results from other studies (Hunt, 1997). The foundation for the paper is two case studies, TA Control and Mölnlycke, two companies with positive effects of using QFD. The paper describes the effects of using QFD and scrutinizes driving forces behind some identified differences, e.g. environmental variables and approach. The result may serve as a guide when implementing QFD.

Selecting the Best Direction to Create the Ideal Product Design *by Dr. John Terninko of Responsible Management, USA.* The number of practitioners who go beyond remapping customer information into engineering information by using the House of Quality matrix is slowly increasing. Few try function analysis, reliability deployment or use the negative feedback of the gemba. This paper presents the integration of failure modes and function analysis to identify breakthrough development concepts. Reduction in the failure modes and increases in reliability are natural consequences. AHP prioritizes the projects using the priorities from the House of Quality. The driving force is the ideal final result as defined by the function associated with the most important performance measure in the House of Quality.

The Virtual Corporation and QFD: The Key to Effective Breaking of Boundaries *by Dilworth Lyman of ViewPoint & Understanding Enhancement, USA.* The virtual company is the dynamic alliance with other companies that already possess the resources required to synthesize new productive capabilities very quickly. QFD structures, methods, tools, and systems can provide the basis for meeting the critical need for understanding within and throughout all of the various points of view. We will also discuss the part QFD plays in moving beyond asset management to resource leverage.

Will Your QFD Add Value to Your Operation? How to Find Out *by Allan J. Sayle of Allan Sayle Associates.* QFD aims to enhance corporate results through improving product and service quality. Properly applied, it can be a valuable tool. But it can only be truly effective if implemented within a well-constructed framework of effective data gathering, business systems and processes. This paper describes how that framework can be assessed to determine whether or not QFD will deliver the results desired and value-adding operations will be obtained. Matters to be addressed and examined are described together with their relationship to requirements of business performance, ISO 9000, QS 9000, customer expectations and market conditions. How management can use the assessment results, to ensure not only that the method of performing QFD will be effective but also its desired outcome will be achieved, is discussed.

Value Management: Integrating QFD in the Product Value Deployment Process *by Horst R. Schoeler of Schoeler & Partner.* In the continuing search for new ways of securing a competitive edge, it becomes more and more important to be able to demonstrate that the own product or service offers better value for money than the competition. This target will be achieved through the Value Management approach. The concept of value lies in achieving a balance between the satisfaction of many different customer needs and the resources used. The presentation shows the framework of Value Management and the systematic combination and involvement of different methods like Value Engineering, QFD, Target Costing. Not a single approach of a method or methodology is responsible for successful products and services. It is necessary to achieve the best process and apply appropriate methods in a holistic view.

Moderated Knowledge Mapping - Forming Breakthrough and Knowledge Transfer! *by Janice Marconi of Marconi Works, International.* Moderated Knowledge Mapping is a powerful tool that helps teams create new ideas and form knowledge into accessible organization learning. Initially pioneered by Larry Smith, it has been further developed and codified. Moderated Knowledge Mapping is a highly interactive kinesthetic and visual process with a unique synthesis of: Mind Mapping, Functional Analysis, and German Moderation / Metaplanning techniques.

[Poster Paper] An Intelligent Systems Approach to Quality Function Deployment (QFD) *by Ms. Vivianne Bouchereau and Dr. H. Rowlands of University of Wales College, Newport, South Wales, United Kingdom.* This paper will discuss how techniques such as Taguchi Method, Fuzzy Logic, and Artificial Neural Networks could be incorporated within QFD to resolve some of its drawbacks, such as the complexity of the QFD charts, ambiguity in the data collected and determining the interrelationship between processes. These proposed techniques will be adopted to produce an intelligent systems approach to QFD.

[Poster Paper] Quality Planning in the Existence of Multiple Customers: A Scoreboard Design Case *by Gülser Köksal of Middle East Technical University and Özlem Fýndýkoglu of Aydýn Software and Electronics Inc.* In this study, an approach is presented to identify and prioritize multiple customers' requirements for the design of a scoreboard used in basketball games. Four main customer groups are identified: Audience, referees, bid evaluation committee, and the QFD team. Analytical Hierarchy Process is used to determine weights of customer requirements for each of these groups as well as the final weights.

[Poster Paper] Don't Bank Just on Methodologies *by Detlef Blankenburg, Marit Ranes, and Tore Holmboe Wiik of SINTEF Material Technology & Nordak Innovatikk, Department for Design and Product Development, Norway.* The project was planned to give the case company a new product generation. The product development process was concerned with Voice of Customer, QFD analyses, Pugh analyses, DFM and even concurrent engineering. External industrial designers and usability testing was used to secure both style and user-friendliness. After two years of extensive work the project was stopped due to the dramatic change in both product design and production system. The paper will try to describe the process performed until the final decision was made to stop the project, and to analyze some of the weaknesses of the methods mentioned when not taking into account human factors.

[Poster Paper] Merging Two QFD Models Into One: An Approach Of Application *by Luiz C. R. Carpinetti, Ph.D. and Manoel O. C. Peixoto of School of Engineering of São Carlos, University of São Paulo, Brazil.* This paper presents an approach to the application of Quality Function Deployment that brings together the models developed by Don Clausing (Enhanced QFD) and Akao. It utilizes some of the tables and matrices proposed by Akao (1990) along with the basic four phases product and process deployment proposed by Clausing (1993). The steps involved in the proposed approach are depicted and justified and a discussion is made on the benefits of the proposed approach.

[Poster Paper] Assigning Importance to Hows: Analysis of Two Competing Methodologies *by R. Alan Kemerling of Ethicon Endo-Surgery, Inc. (divison of Johnson & Johnson).* This paper and underlying research looks at two different methods (a simple arithmetic calculation and one that uses a weighted Whats importance value) for calculating the importance of Hows in the project. Using Monte Carlo simulation, hundreds of different QFD matrices were developed and the two distribution methods compared for their affect on the resulting priority of key Hows.

[Poster Paper] Using QFD to Develop a Planning Budget Linked to Organizational Objectives *by Vito Wasniewski of INFOnetics, Inc.* Annual Budgets or Operating Strategies are one of the least favored and time-consuming activities performed by Directors or Department Managers (except for perhaps employee reviews). Using QFD can speed this process, but more importantly, drive more co-ordination, communication, and agreement of projects among a management team. This case study presents the process that developed the priorities for over 180 projects, drove rapid agreement among directors, and resulted in a business model.