



September 2009

# BOOTHROYD DEWHURST **dfma**<sup>®</sup> Insights

News from the Frontlines of **DESIGN FOR MANUFACTURE AND ASSEMBLY**

## Designing the future

However you measure the economy's fragile monthly trend lines, one pattern is emerging: Most companies that have weathered the harsh storm are planning for a market response. No one can predict its strength or composition yet. But many industry sectors will need to work harder than ever, once a recovery is underway, at capturing the buyer's imagination and pricing products so people can afford them.

If price, product appeal and availability are not in place for the turnaround, expect to be trailing your competitors. Start planning now. Remember that cost analysis and product simplification are catalysts for innovation and profitability. Manufacturers have used DFMA before to reduce costs during downturns and to put the fundamentals in place for better times. Our September newsletter has several sections devoted to the theme of recovery, along with a link to our September 30 webinar titled "Are Your Product Designs Costing You Money?"

Join us in designing the future of a U.S. manufacturing revival.

*Sincerely yours,  
John Gilligan*

## WEBINAR

### Are Your Product Designs Costing You Money?

Manufacturers who forgo early design costing analysis often miss their profit targets on new products. Learn more about how to design in your profit margins—right from the beginning stages. Join our free webinar on Wednesday, September 30, from 11:00 a.m. to noon. For more information click [HERE](#).

## 2009 DFMA International Forum Gives Listeners an Earful

The panel discussion held on the last day of this year's International Forum was frank, eye-opening and invigorating. After initial remarks by Mike Shipulski (Hypertherm), Ned O'Donovan (Consultant), Chris Tsai (Consultant) and finally keynote speaker Richard McCormick (Editor, *Manufacturing & Technology News*), the discussion opened to comments from the floor. Here is a selection of some of the more telling words we heard:

"A sound economy is the bedrock of a sustainable recovery. It must be based on value creation, and manufacturing creates value."

**Mike Shipulski**

"We are living through the de-industrialization of America and we have to acknowledge the problem before we can remedy it...this needs to be addressed at the highest levels of government, as well as by investors and individuals."

**Ned O'Donovan**

"Outsourcing your competencies to others gives away value. If you're manufacturing in China, like it or not you just gave away your IP."

**Chris Tsai**

"We moved manufacturing of our lower-cost product to Asia and kept the higher-cost ones in the U.S. Our CEO refused to let his top team of designers do the low-cost design work in China."

**Participant**

"I think it's dawning on people...[that, as quoted in the GE annual report], the evolution from technology to service is wrong."

**Richard McCormick**

"We closed four CMs [contract manufacturers] in New England. That gene pool is gone – we're not teaching the guys in school like we used to."

**Participant**

"We need to think about a common vision as a country...It is about the money, but it's also about character. Who do we want to be? ... Environmental [technology] is something we can set the playing field for."

**Ned O'Donovan**

To read more, [click HERE](#).

THE 2009 INTERNATIONAL FORUM  
on Design for Manufacture and Assembly  
The Product Development Conference on DFMA Best Practices of the Fortune 1000

**Manufacturing Revival**  
through Better Design

 **BOOTHROYD DEWHURST, Inc.**  
June 9 - 10, 2009 Providence, Rhode Island USA



## Motorola University Teaches Smarter, Faster Product Design

Motorola University, based in Chicago, has been an educational innovator in business and technology since 1974, with campuses around the globe. Newer campuses in Asia meet a growing need for business optimization programs that produce rapid and tangible results in a globally connected marketplace of shifting economies and rising manufacturing costs.

Steven Lee, instructor at Motorola's Quality Institute in Taiwan, trains teams of Motorola employees, customers, and supply chain partners to integrate Motorola's legacy Six Sigma program with lean initiatives and DFMA software. His approach is an applied business strategy that works: This year, a top electronic device manufacturer completed 12 product redesign projects in four months, saving \$6.8 million. To read more, [click HERE](#).

## Minimum Part Count

### Product Simplification: Rediscover a Whole New Game

John Gilligan, President, Boothroyd Dewhurst, Inc.

Product simplification is the discipline of merging the greatest performance functionality into the fewest number of parts using the most suitable and cost-effective materials and manufacturing processes. It is an engineering board game, in a way, answering questions about a design and seeing a Design for Manufacture and Assembly (DFMA) database respond with quantitative costs and reports. There is truth and mystery in confronting an analysis that says there are too many parts, shows the team where, and then launches everyone into the intimacy of trial-and-error engineering, collaboration, and fresh creation.

It's a game that companies would ideally play regularly, but tend to do most vigorously when innovation and efficiency are both in crisis. Needless-to-say, in this current economic climate, providing optimized cost and maximum performance of design are the manufacturing nation's strongest winning moves. To read more, [click HERE](#).

## Worth reading

Outsourcing to China has led to a loss of control over manufacturing and distribution for Farouk Systems, Inc. As recounted in the *Wall Street Journal* article "Coming Home: Appliance Maker Drops China to Produce in Texas," the \$1 billion company is moving production to Houston, Texas to control quality and inventory. They've been spending about \$500,000 a month fighting counterfeits. To read more, [click HERE](#).

Although official statistics about a reversal of the offshoring trend are hard to come by, anecdotal evidence of companies bringing work back to the U.S. is building. Reasons cited range from rising costs of production in China to high transportation costs, intellectual property concerns, quality issues and others. Read more in "Yes, You Can Go Home Again, Say Some Manufacturers," in *Design2Part* magazine. To read more, [click HERE](#).

In "Home, Away—and Back Again," *Assembly Magazine* details how bit by bit, contract by contract, U.S. companies are realizing that American ingenuity and quality are not only superior to that of overseas suppliers, but also more affordable. To read more, [click HERE](#).



## DFMA News Brief

### Celebrate 25 years of DFMA with us!

Boothroyd Dewhurst, Inc. is announcing a call for papers for the 2010 International DFMA Forum to be held June 15-16 at the Crowne Plaza Hotel in Warwick, Rhode Island. This will be the 25th anniversary of the first DFMA conference. We would like to hear from experts involved in DFMA, cost management, lean manufacturing, materials and process science, supplier collaboration, sustainability and complementary PLM technologies.

The DFMA Forum is an ideal venue for learning about specific product development strategies and tactics, challenges faced, and how costs are reduced and innovation achieved.

For more information about submitting papers or attending, contact John Gilligan, President, Boothroyd Dewhurst, Inc. by clicking [HERE](#) or by calling 401-783-5840 ext 102.