

QUARTERLY OF THE INDUSTRIAL DESIGNERS SOCIETY OF AMERICA **SPRING 2011**

INNOVATION

Material Witness

AUTOMOTIVE HISTORY ■ CONSUMER ELECTRONICS ■ IN HIS OWN WRITE



INNOVATION®

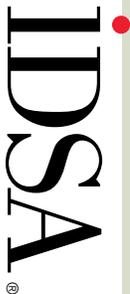


“Never miss a word.”

JBL MS-A1004 designed by Whipsaw for Livescribe; www.whipsawinc.com



Look for other Consumer Electronics Showcase designs starting on page 56.



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MATERIAL WITNESS

- 22 **The Three Stages of Understanding** by Warren Ginn, IDSA, guest editor
- 24 **Making the “Right” Choice** by Andrew H. Dent
- 27 **Tangible vs. Intangible: *Things You Can’t Draw on a Computer*** by Chris Lefteri, I/IDSA
- 30 **Punk Manufacturing: *Techno-Craft, Manufactured Brands and Data-Driven Design*** by Kara Johnson
- 35 **Rethink, Reeducate, Recycle: *Three Ways to Almost Save the Planet by Using Materials*** by Aart van Bezoooyen
- 39 **Saved by Design** by Jane Savage, IDSA
- 42 **Making the Impossible Possible** by David Kusuma, FIDSA
- 46 **What’s New? 2010 Material *ConneXion MEDIUM Award Winners***
- 47 **A New Approach to Sourcing** by Zach Kaplan
- 48 **When Worlds Collide** by Gaylon White, Affiliate IDSA
- 51 **Preparing for the Real World: *Teaching Materials & Processes*** by Lydia Bjornlund
- 55 **A Shared Innovation Opportunity** by Deidre Kruser, Affiliate IDSA with Kristin Charlton, Affiliate IDSA

FEATURES

- 13 **Design + Nursing: *Solving Health-Care Problems from the Grassroots*** by Steven Doehler, IDSA, Evelyn Fitzwater, Roberta J. Lee and Charles Puchta
- 18 **User Interface: *The Next Five Years*** by Peter Eckert

IN EVERY ISSUE

- 4 **From the Executive Editor** by Alistair Hamilton, IDSA
- 6 **Commentary** by Katrika Woodcock, IDSA
- 9 **Book Review** by Mark Dziersek, FIDSA
- 10 **A Look Back** by Carroll Gantz, FIDSA
- 56 **Showcase: Consumer Electronics**
- 64 **In His Own Write** by Jay Wilson

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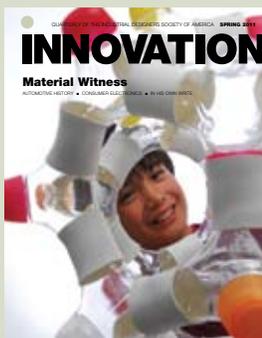
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Advertisers' Index

- 7 2011 IDSA International Conference
- c3 Bemis
- c2 Cesaroni Design
- 21 ICFF
- 1 LaFrance Corp.
- 5 MIT Press
- c4 NewDealDesign
- 8 solidThinking



By Jane Savage, IDSA

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Jane Savage is a product director and design leader in Nike's Sustainable Business + Innovation division, where she's been instrumental in helping to drive and institutionalize a sustainable design ethos across the Nike brand.

SAVED BY DESIGN

Every time I walk into a store—grocery store, clothing store, big box retailer—all I see is garbage. I can't help it. I'm not saying that the products and services are all rubbish, but I'm overwhelmed with the sinking feeling that everything is eventually destined for the dump. How could all these goods possibly be purchased and consumed before their expiration or the end of the selling season? Eventually items get put on clearance, sent to discounters, donated or discarded.

Seeing the trash in everything is a lens through which I began viewing the world early in my industrial design career while in art school. One of my mentors made it a point to take our class to the landfill to impress upon our fresh minds the value of looking downstream from our drafting tables.

At IDSA's Western District Conference in Portland in the spring of 2008, I saw top talent from industrial design programs showcase their work. To my dismay, not much was said about designing with the environment in mind. Later that spring, as a juror for the IDEA competition, one of my assigned categories was ecodesign. Again, I could discern no clear point of view on ecodesign among the entries. And yet again at the 2010 IDSA International Conference not much was mentioned about sustainability. Clearly there is not enough green fluency in design circles nor a framework for how to do green design. **My big thermometer for sustainable design, having stuck it into the profession these last few years, reads lukewarm. It's time to seriously consider how we design.**

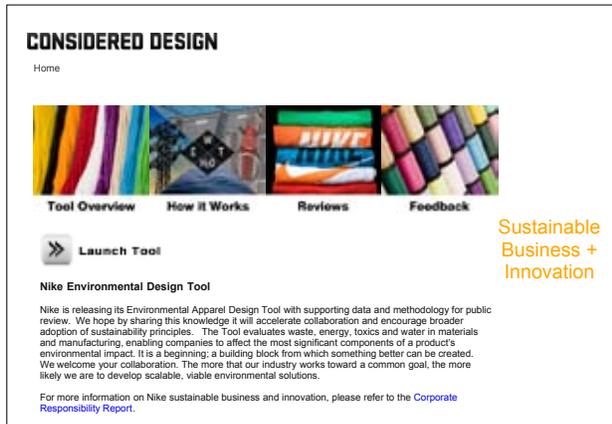
In 1998 Nike began researching environmentally preferred rubber and developing formulations that could be applied to footwear. By 2002, that work was ready for commercial use and was making its way into limited shoe production.

There are no industry standards about how to approach product design to produce a lower environmental impact. There is no LEED for products. It's not clear how universities are teaching fledgling designers to be green. And there are so many confusing terms: eco, green, sustainable, environmental, clean-tech, etc. It's complicated and it's overwhelming. But what a tremendous opportunity.

Consider Nike

I feel very fortunate to be part of the team leading the sustainability movement at Nike from its earliest beginnings. In 2005 a group of designers acted on their inspiration to create sustainable shoes, and later that year the first Considered line hit the market. It created such a stir that top executives recognized the company needed more than a shoe collection; it needed a sustainability ethos spread across the brand. A big reason why this conviction took root is because the designers were able to translate their





personal passion for having a positive environmental impact into compelling designs. When a great product gets the consumer’s attention while having a lower impact on the planet and a positive impact on the bottom line, executive support from the top down often follows.

From product line to ethos, the Considered design team was formed inside Nike’s Corporate Responsibility Division. To determine our work aims, we landscaped Nike’s waste footprint. We defined waste as anything that doesn’t end up in the consumer’s closet. Having an understanding of the waste created throughout our supply chain from concept to market, and assigning a financial value to it, allowed us to focus on what to prioritize: reducing waste. Reducing waste means taking a hard look at our materials and the largest materials streams that we source for our shoes and apparel. We worked with industry experts to create a materials assessment tool composed of a set of filters and protocols, based on our values, that gives a relative score to determine if a material is worthy of our environmentally preferred material (EPM) stamp. When looking at materials from their source—from the oil well for the petroleum that’s eventually converted into a synthetic fiber for a shoe upper or sports jersey to the cotton farm, for example—there’s a large amount of chemistry involved in converting the raw feedstock into something usable. Oftentimes if we’re attaching dissimilar materials, an amount of volatile organic compounds is needed to prime and glue together shoe parts. Hence, reducing toxics is another priority for Nike.

Reducing waste, using EPMS and reducing toxics are the criteria that inform our Considered Design Index—a predictive tool that allows product developers and designers at Nike to create a garment or a shoe with a lower environmental impact. This tool was created to help design teams make better environmental choices when producing a product. Recently we made public our Nike Environmental Design Tool for apparel designers to test at www.nikebiz.com/responsibility/.

We set corporate targets with the businesses at Nike to meet minimum baseline standards for reducing waste and toxics and for using EPMS. Nike businesses are able to

The Nike Environmental Apparel Design Tool replicates Nike’s internal Considered Index calculator with the exception that users manually enter the materials data. Like its internal index, the tool leverages Nike’s collected data from more than a decade of evaluation of materials and the examination of waste footprints in hundreds of apparel products.

meet these targets by integrating them into their operations and best practices, while at the end of the day being graded on their efforts on business scorecards. **We’ve made it easy for designers to do sustainable design by creating the conditions in the system to support their work.** We’ve garnered executive support from the top down by proving that ecodesign is good for the bottom line because it translates into materials and process efficiency. We drive strategies through our supply chain to leverage the commitment of our manufacturing partners and our materials vendors by the sheer volume of product we create.

Starting in the spring of 2009, season after season, multitudes of Nike garments and shoes began striking the right balance of being green without compromising the performance and aesthetics that athletes expect from us. When designers simply design cut-and-sew patterns to minimize waste and choose environmentally preferred materials, they’re often able to exceed our baseline goals. For example, the 2010 World Cup football jerseys for our Nike-sponsored federations were made from 100 percent recycled polyester from PET bottles, and the high-performance Pegasus running-shoe franchise will always represent our commitment to performance innovation products that minimize environmental impact.

We’re not stopping there. We continue to raise the bar and have set a long-term vision to design products that are a fully closed loop—meaning they use the fewest possible materials and are designed for disassembly, allowing them to be recycled into new products or safely returned back to nature at their end of life. Our mission is not only to design the best products but to apply forward-looking thinking to bigger global issues. We’re collaborating with thought leaders, scientists and academics to help us on our journey. And we are also working on how we brand our green efforts to make them a compelling consumer proposition. You can hear our voice at nikebetterworld.com.

My favorite quote is from David Bowie: “The key to creative freedom is to keep an eye on the business.” I think this is why I’ve spent my entire career working inside corporations. Where I sit working in what’s now Sustainable Business + Innovation (formerly Corporate Responsibility), I have even greater exposure to the workings of the company. Throughout my tenure, having come from design, I’m ever a student of the corporation who has seen it grow, evolve, morph, reorganize and redefine itself. Despite its size, Nike is still very much an entrepreneurial environment where anything can happen.

Design Can Change the World

Remember the 1967 film *The Graduate*? In the '50s and '60s, the American dream was about getting a job, making money and setting your future. Ben Braddock, Dustin Hoffman's young character, masked his horror with indifference toward the wisdom shared by his parents' friend, Mr. McGuire, "Just one word ... plastics."

The Graduate director Mike Nichols was prophetic in his cultural commentary of the time that the future was in materials consumption. Fast-forward 40-plus years into the future to today—and what advice are parents giving to young college graduates? **How are today's emerging designers prepared for living in the world of the Great Recession where the American dream is shifting away from consumption and being defined by what we buy?**

As designers we are some of the most avid consumers. We love stuff so much that we have earned degrees in how to make it, package it and get it ready for mass production and consumption. There's a piece of us in everything we design, signaling *I was here and you voted with your money for a piece of me*. What designer is immune to coveting, if not possessing, the latest action figure, "it" bag, sneaker or smart phone? I have a love-hate relationship with being a designer. Designers are skillful at making stuff—and there's too much stuff in our garages and closets. One of the gurus in Nike design once said to me that the best sustainable design is not designing anything.

A cultural anthropologist and I discussed how as individuals our currency is no longer defined by what we own but by what we bring to the table. Designers have a special gift that is our social currency: Our ability to apply critical thinking to any problem and not just solve it in creative, innovative ways but to envision something better. Designers are powerful in our visual and visionary abilities. We can imagine anything and bring it to fruition, make something out of nothing. That's why I propose we take a hard look at how we design. We need to design

The Free TR Fit is designed with a lower environmental impact using environmentally preferred rubber, water-based cementing and recycled polyester. That means every step in the multidirectional flex groove outsole replicates the foot's natural movement and helps women get more out of their workout without leaving a huge environmental footprint.



with a conscience for our environmental and social impact on the world. As one superhero's uncle said, "With great power comes great responsibility."

What if designers could envision a narrative as compelling as what film directors James Cameron or Peter Jackson are able to do? Instead of creating passive entertainment in which people lose themselves, what if we inspire action and participation and in the process change the world? What tools do designers need in order to confidently push the conversation with our clients on how to answer a design brief with a sustainable solution? **Being a designer should mean rising to the next level as a leader of the conversation. Let's make it easier for consumers to buy green because it's the only choice they have.**

Design has so much potential to shape the future because of our innate ability to visualize, see patterns, make connections and manifest our optimism. Only within the last 20 years has design proven itself to be an equal and important component of successful businesses. Designers should be doing more than just answering a brief for next season's widget. It means taking your stakeholders somewhere new by responding to the needs of the business by evolving the business. It means knowing their business just as well as, if not better than, they do. It means knowing the science behind materials and how that plays into the macro economics of a global supply chain where there are limits in the system.

Design is the keystone species that has a critical place within the system. Without design, the system can fall apart and lose consciousness. The system is the world. Design can make the world. Design can destroy the world. Design can save the world. ■



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