

INSTITUTE OF DESIGN, IIT

perspectives on

# DESIGN + STRATEGY

Points of view from the  
**2005** Institute of Design Strategy Conference

## Strategic Design

It is tough being an executive these days. “Managing” and a “leading” are curious jobs when the initiatives being managed or led are ever-changing and out of control.

There has been a power shift from producers to customers. “Any color they want as long as it’s black” has been replaced by “What they want, when they want it, at the price they want.” It is not only the customers who have gained control in a world of maximum choice at the “China price”. The companies in the supply chain who are closer to the consumer now tell the manufactures what to do. Twenty years ago, P&G told retailers what they would buy and how to display it. Now Wal-Mart tells everyone what they will make, the price, and how it will be displayed.

Standard segmentation models no longer describe customers. Toyota built the Echo and built the Scion brand for members of generation Y, but they are being purchased by members of AARP.

Competitors are not only the old assailants but are now coming from everywhere and anywhere. Are companies fighting low-cost providers in China they’ve never heard of? Or companies who, while still low-cost providers, are now buying major brands, like TCL with its acquisition of Thompson/RCA? Or is the competition coming from kids in dorm rooms inventing completely new categories of services and related products?

Whole industries are transforming. Three decades ago Apple Records let a start-up California computer company call itself Apple, little knowing that it would transform the music industry. And this is happening while long-standing giants in the music industry can’t figure out the industry’s new value web and have instead decided to sue their own customers.

A company’s increased technological possibilities, combined with an expanded number of available business models, give executives unprecedented knowledge of how to make anything. At the same time, consumers’ ever expanding options of what to buy to support how they live, work, learn and play mean companies have less knowledge about the people they are designing for. The confluence of these two trends leaves executives confused about exactly what they should make.

The good news is there are new kinds of design knowledge that executives are using to help overcome their chaotic world and create remarkable innovations. The ideas and examples from leaders of business and innovation represented in this publication provide rich examples of what is happening now.

Of course, structured methods of understanding the activities of daily life have become almost as common as the key step in creating great user experiences. Consumers now get angry when the interaction design of a product or service is not perfect. People used to think it was they who were stupid; now they say the offering and the company are stupid.

But design knowledge is more than just methods of understanding users. Executives are using design in the early stages of their processes and in solving types of problems that traditionally have not involved designers. This is in stark contrast to the conventional model of the past in which design was involved late in the process, making decisions about visual form after engineering and marketing had defined the basic direction.

Executives are doing this because designers are creating a new body of knowledge, a set of frameworks and methods that can be used by companies for understanding the relationship between the business context and the user experience; finding patterns in seemingly chaotic situations; designing systems of solutions that simultaneously creating user value and economic value; and visualizing and prototyping opportunities early in the development process.

Furthermore, these frameworks and methods are not only being used to create new communications, products and services; executives are using them to reform the ways their organizations work. The stories that follow provide concrete examples of how executives are using the new design knowledge to help them navigate the increasingly fast and chaotic forces that they face today.

### Patrick Whitney

Steelcase/Robert C. Pew Professor and Director, Institute of Design, IIT



In the months leading up to the conference, I had the privilege of sitting down to discuss business and design with twelve of the speakers and fellows from the 2005 Institute of Design Strategy Conference. While each conversation revealed a unique (and occasionally conflicting) perspective, one consistent pattern emerged: intersections and borders will define and create new, fertile opportunities for business and society. Kevin Fong, Managing Director of the Mayfield Fund states it most clearly:

“Today we’re living at a point in time where there is no hot new thing. There is no one earth-shattering theme that is just going to carry everything forward in a big wave. Instead the interesting things today are happening at the intersections of different worlds, where two worlds have never collaborated before... I think that the more I learn about other worlds and learn about what’s happening, the more it opens my eyes and causes me to think about what new opportunities there are.”

Many of these compelling intersections lie at the borders of the worlds of business and design. The perspectives that follow begin to delineate some of the opportunities that await us.

**Brandon Schauer** Editor

(Institute of Design MDes 2005)



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section **1**

perspectives on the  
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## TARA LEMMEY

### INNOVATION WRIT LARGE

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What would happen if organizations looked for innovation at the intersections where technology and society meet? Tara Lemmey knows. She is the past executive director and president of the Electronic Frontier Foundation, one of the founders of the privacy advocacy group TrustE, and the founder and present CEO of LENS Ventures, a network of leading thinkers focused on innovation in technology, science, law, and economics. She works with companies such as Nokia and Intel on next-generation strategies and products. Tara also serves as chairman of Project LENS, a worldwide nongovernmental organization that works to create an environment of cooperation between the government, the public, and the private sector.



**Brandon Schauer:** As CEO of LENS Ventures, you've been working with leading-edge companies to help them envision future strategies and products, at least in part by reflecting on much larger trends in science, design, public policy, economics, and more. But to do so, you've focused outside of the normal scope of business, to the borders of society and technology where businesses don't typically draw insights from. What's there that businesses are missing, and why is it important to their future strategies?

**Tara Lemmey:** One of the things that we see is that they tend to be focused on incremental change instead of larger shifts that are happening in their industry space. So the research and development in a good deal of these companies is, "How do you take the current product set or services offered and move them slowly forward?" What we try to do at Lens Ventures is envision where things will be in the next three to seven year and ask, "What are the shifts that are happening and how can the company anticipate and be prepared for them?" This focus

a perspective on the intersection  
of society, culture, and business

“What they’re really missing is a **holistic view of their consumers and the world they live in**, and how that world is evolving, and in turn, forcing evolution within their customers. I think that’s a huge blind spot for a lot of companies on the consumer-based side.

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TARA LEMMEY

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frequently leads businesses into new spaces — places that they wouldn't have normally gone. This may mean anticipating demographic or psycho-graphic changes, but it might also mean changes in public policy. What is going to happen in the communications industry, or what's going to happen in telecom? How do people see privacy rights changing? Or data assets changing? Or the liquidity of information affecting those things? We really try to take a look what these spaces are, as opposed to just saying, "What's the next feature for what you're currently offering?"

**BS:** Is this something that's a blind spot for businesses? For example, if you pick up a Wall Street Journal you may see plenty of coverage on technology but not on issues like societal trends.

**TL:** It's a huge blind spot. I think many companies have become tech-centric, so they've become very focused on, "What are the features that the technology can provide and how do I make it happen?" What they're really missing is a holistic view of their consumers and the world they live in, and how that world is evolving, and in turn, forcing evolution within their customers. I think that's a huge blind spot for a lot of companies on the consumer-based side.

On the public policy side what frequently happens is they don't think about it in the R&D space. Instead, they think about it in the General Counsel's office. So it's usually arguing over preventing something from happening and avoiding risk rather than looking at what the opportunities might be going forward. They don't look at it as an R&D opportunity.

**BS:** So when you're working with your business and government clients, how do they most effectively incorporate your ideas and research?

**TL:** We generally work with the CEOs and the Board of Directors, initially because so much of what we're talking about is outside of the general range of the current state of the business. Once they say, "Okay, here's where we need to go," we start looking for alternative ways of getting there and bringing these new ideas forward. I hate to use the word "skunkworks," because it implies that you're doing something on the sly, however, you do have to approach things in a way outside of the normal workflow

to subvert the corporate antibodies that are going to kill it. That's a big challenge. Many CEOs are trying to find ways of dealing with this internal resistance to exploration and innovation, and are creating new methods pursuing these business opportunities that keep them shielded for a longer period of time.

**BS:** What areas of the technology/society border do you see as the generating the most influential innovations? What has your attention?

**TL:** I think there are some interesting things related to consumer and customer support, or how people are beginning to rethink products and services. They're beginning to discard the notion of services as an add-on business revenue, and instead, look at it from a more comprehensive point-of-view about what problem somebody is trying to solve and what is the constellation of solutions. How do you create a trusted, respected relationship with your customer so that you can provide a whole constellation of solutions for them? I think we're starting to see that come to the foreground more often, although in the market right now, you don't see a lot of activity in that space. Strong activity will occur with the increase in the liquidity of data and the mobility of people, and with the capabilities that are starting to develop around identity management and data asset management. Also, with both the Boomers and the X-ers — who as a group will be over 40 soon, and are trying to manage life-at-work situations — these kind of robust support environments are going to be emerging, and I think that's going to be an interesting space to explore.

**BS:** Can you tell us a little more about what you mean by “constellations of solutions” and how you think business should explore these opportunities?

**TL:** Right now a lot of things like financial services are divided so that if you talk to an advisor who's dealing with investments they'll talk to you about investments, but they won't talk to you about other forms of strategies. They won't talk to you about whether or not real estate is an interesting way to go or how you might restructure some of the things you're currently doing or how you might plan a more holistic life strategy around your financial roadmap. To be able to do this successfully would require deeper customer relationships and partnerships with a variety of different organizations that can support the range of related customer needs.

Let's think of a simple example, about people who are struggling with weight loss. What are the kinds of collective environments that might be useful? How about a communication service where you press a button and can talk to folks when you're having cravings for chocolate cake. That service is also tied to your shopping list, which is calculating whether or not this is a good or bad decision for you. It's further tied to a service where as you're buying something it tells you, "This product contains partially hydrogenated fat and you said you didn't want this." It may also be tied to a service that's connected with your exercise regiment. It says, "Okay, because you're buying fatty foods, you're going to have to increase your training by 25% this week." All of these related services could be provided by different companies. So, it might be your YMCA, working with Whole Foods, working with an outside doctor's office, working with a support line. What you start see is a federation of relationships and services dedicated to supporting you.

That requires a very different way of looking at designing the spaces, the environments, and the end user experience. It also requires businesses to look at very different revenue streams. It's not just a cut-and-run business development agreement — you bring me deals, I bring you deals. It's a much more tightly woven set of relationships.

**BS:** Can you tell us about what ProjectLENS is up to?

**TL:** The biggest work we've been doing over the past few years is with my serving as the technology chair for the Markle Task Force on National Security in the Information Age. What we've been doing is working on how you can use the innovations of the private sector to help rethink the flow of information through the government across different agencies and different environments. The government is starting to reconsider who are the users of the information and how they can be best served and supported, rather than concentrating on who owns and controls individual pieces of data. So it's been interesting and challenging, and the Task Force has been a great success. Our approach was specifically cited and recommended in the *9-11 Commission Report*, and even further, it was written into a Presidential Executive Order, and was written into the recently-enacted Intelligence Reform and *Terrorism Prevention Act of 2004*.

That's one thing we've been doing. We're also doing lots of other work with different corporate clients, that at the moment I can't talk about.

**BS:** Can you say a little about the book you're writing, "Resilience: How to Surf the Circumstance in our Complex Times"?

**TL:** It's a Powers of Ten approach to looking at how we can become more resilient, both as individuals and in society. What I learned in doing the national security work is that as much as we can do to create protections, nothing is foolproof and we live in a very volatile time. Not just related to terrorism, but from other issues such as climate change and possible biological issues in an increasingly interconnected world. The real question is not how you build better fences or insulating yourself, but how to make yourself more capable of taking what the world is throwing at you and dealing with it.

Plus I do a lot of work with folks like Andy Weil and the Integrative Medicine doctors. I teach leadership for his program at the University of Arizona and a lot of what comes up for them from a health perspective is how can you be more resilient. It's not about trying to fix a problem after the fact. When you talk about ecological systems, you learn that they're strongly resilient, that they can pull back to tiny patches of forest or meadows and then regenerate when the circumstances again become more favorable. For a lot of people, they're not designing their lives that way — as an individual, as a family, as a community, as a region or a neighborhood, and maybe sometimes as a country.

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**TARA LEMMEY:**

**Tara Lemmey is founder and CEO of LENS, a network of leading thinkers focused on strategic innovation. She works with the boards and leadership of Fortune 2,000 companies, such as Nokia and Intel, on innovation and next-generation strategies. She is a leading member of the Markle Taskforce on National Security in the Information Age, where she heads the technology committee. Her works have been published in Wired, Business 2.0 and the Harvard Business Review. She is a Technation World Class Challenge Leader and commentator on public radio.**

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## The Institute of Design Strategy Conference

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Chicago, Illinois

The Institute of Design Strategy Conference is an international executive forum addressing how businesses use design to explore emerging opportunities, solve complex problems, and achieve strategic advantage . The 2005 conference was produced by the Institute of Design at Illinois Institute of Technology, in cooperation with the Corporate Design Foundation and AIGA, with media sponsorship by Fast Company, and sponsored by NextD.

A growing gap exists between organizations' increasing knowledge of technology and business models, and their decreasing understanding of people's everyday needs and wants for new information, services and physical products. This gap often leaves strategic decision makers in the position of knowing how to make anything, but not being sure what to make.

The conference serves as a discussion between executives and leading practitioners and researchers about how human-centered design and innovation can help executives better plan what offerings they should create. In addition to issues of innovation for existing markets, the conference explores new opportunities for using strategic design to explore emerging markets, solve complex problems of public policy, and address social issues more effectively.



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Institute of Design, IIT

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## Contact

### **Institute of Design Illinois Institute of Technology**

350 North LaSalle Street  
Chicago, IL 60610 USA  
(312) 595-4900  
(312) 595-4901 (fax)  
<http://www.id.iit.edu>

For feedback or to find out more about the Institute of Design  
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