

When the Best Design Isn't Good Enough:

Changing Organizations from the Inside Out

AN INTERVIEW WITH LARRY MARINE AND CARL ZETIE

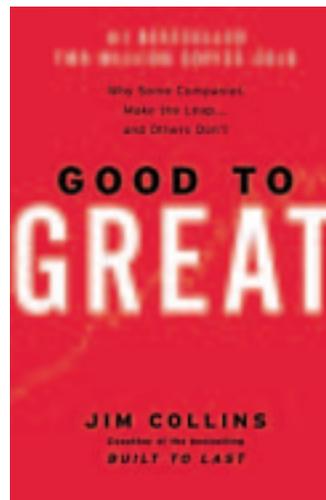
A few months ago, *User Experience* was perusing our favorite usability discussion list and read a provocative interchange between Larry Marine and Carl Zetie. The original postings talked about the kind of changes that companies—and user-experience practitioners—must be prepared to make to move from “good enough” to “truly great.” We decided that we should bring the debate to you, the readers of *User Experience*. Here is the result.

User Experience: Can you tell us what the main message should be about changing how user experience fits into the corporate structure? How do user experience folks change direction and help their companies become true winners?

Larry Marine: From my perspective, it seems like a lot of design is all about the product and not about how the product supports the business. The trick is to learn how to solve the business problem, not just the users' problems. We need to balance the needs of the users with the needs of the business.

Carl Zetie: Companies need to do *experience*, not just *products*. Hugely successful companies like Gillette are unusual in that they're willing to make their own products obsolete. Another good example of this is Amazon. Amazon lets you buy, track, and return products. The more time you spend on Amazon, the better the experience is; they feed all your interactions back into the experience.

LM: I'd like to add something. Carl's comments are exactly on the mark, but he's talking about companies that “get it.” But a lot of management people still don't get it. To help them get it, I believe user experience design will have to move “upstream.” The process will happen well before the product



is built, instead of later on, after the concept is well underway.

UX: So rather than marketing making a decision on a product idea and asking usability to test it...

LM: It's often even less organized than that. Sometimes usability is called in only to “pretty up” the interface. However, it would be best for us to be involved right up front, closer to the actual business requirements.

CZ: The list of requirements should include the user experiences.

LM: In fact, one of the key messages for usability folks is to avoid the term “usability”—it has too many connotations and it pigeonholes activities into later stages. At my company, we say we do a “more evolved version of project management.”

CZ: That's why I like “user experience” and “customer experience.” You can have the best user interface on the worst product. Do you know the story about the original Palm? A designer walked around with a block of wood with Post-It notes. Everyone thought he was crazy, but he discovered the real business needs: size, most frequent uses, and that it had to be easier to get information out than to put it in. The interface didn't have to be symmetrical.

LM: Palm is also a great example of the “good to great” idea. Palm challenged the market, which was already saturated. Casio, HP, the Apple Newton were all focused on how to make it easy to get information into the device. The Palm flipped that around by giving you a way to synchronize with the computer and get information out. Within three years, they dominated the market.

UX: What is the “good to great” model you just mentioned?



UX INTO THE BOARDROOM

CZ: It means finding the best solution to any problem. This is a really huge challenge because to become great, you have to give up being good. For example, in skiing, you first learn to turn and stop by snowplowing. But to get better, you have to give it up and fall a lot to learn other ways to ski. Tiger Woods did the same thing—he was already one of the best golfers in the country, but he stopped and found a better way to hit the ball.

In artificial intelligence, the problem is called “hill climbing”—it occurs when applications tend to find the locally best solution rather than the final best solution. Unless you can see far enough ahead, it’s hard to give up the peak and have the courage to go down into the valley.

We see this all the time in companies that are doing well but not great. Handspring, one of Palm’s competitors, was doing modestly well in the PDA business; Handsprings were a bit cheaper than Palms. Then they decided to go after the smart phone business. It took them three generations of design to get there. In fact, it took them so long, they ended merging with Palm. They took the risk, and the end result is the Treo, a truly great smart phone.

LM: It sets the standard. Handspring went from being an “also ran” to setting the standard in a parallel industry.

UX: How do you get potential clients to pay attention in the first place?

LM: Don’t talk about usability, talk about process. Speak their language. We said, “We can help you reach your goals in less time, for less money, than any other way.” Word of mouth is key. It’s a trust thing. These are their jobs, stockholders’ money, livelihoods. They have to trust the process. We’ve had maybe 150 projects and clients, and we don’t have any clients who’ve gone back to the old process, once they see how user-centered design works.

UX: What should user experience practitioners do to better fit into the corporate structure? How can we learn to speak the right language?

Good is the Enemy of Great

The book *Good to Great* that Larry Marine and Carl Zetie mention is based on the research that author Jim Collins and his team did to figure out what allowed certain “good enough” companies to become great companies. To find their great companies, they looked at 1,435 companies and then settled on twenty-eight, eleven that had made substantial improvements in their performance over time, and seventeen companies, for comparison, that didn’t. The eleven good-to-great companies had traits that led to their success; these traits didn’t appear consistently in the just-good companies.

For example, the researchers found that good-to-great leaders build companies that can tick along without them. They are not particularly charismatic—there are no Lee Iacoccas among them. Level 5 leaders are ambitious for their companies and what they stand for rather than for themselves.

Good-to-great companies also get the right people “on the bus” and the wrong people off. They select people more on the basis of their fit with the company’s core values than on particular skills or knowledge. Some good-to-great companies, like Hewlett Packard, didn’t even know what they were going to sell at first. However, Bill Hewlett and David Packard decided if they hired the right people, they’d figure it out eventually.

Another key good-to-great idea is the “hedgehog concept.” Hedgehogs simplify a complex world into a single organizing idea. A real hedgehog faced with a predator does the same thing every time—roll up into a ball of spikes. A good-to-great company decides what it does best, and any acquisition or business strategy that doesn’t help them do that one thing better is ignored.

Good to Great: Why Some Companies Make the Leap... and Others Don't by Jim Collins, New York: HarpersCollins Publishers, Inc. 2001

LM: Learn the marketing and corporate language. You need clarity and consensus: if the vision isn’t shared, if people down the line don’t know the goals, how can they design something that will achieve those goals? That’s where the user experience person can help. We re-articulate their business goals into user-centered processes. For example, marketing might say, “We want to open up a new market.” So we say, “Do you want to open up more to your existing user base or go after a new user base?” In other words, can we blue-sky it or do we have to support the many users we already have? The design can then go forward supporting both the existing or potential customers, and the company’s goals.

CZ: It’s a question of language, being able to express the user-experience goals in business terms. Unfortunately, we often don’t talk about, “making it easier to buy things from the web site” or that we can help them make more sales. Instead, we say, “We can increase click-through rate” or “We can reduce access time by 10 percent.” This just doesn’t cut it.

UX: How can you prove you met the business goal?

LM: ProFlowers.com is a huge success, although most people don’t know about them. When we were called in, we asked some questions and figured out what they were trying to do—not only sell flowers, but make sure that X percent of visits were successful. We said, “That means there are some things you’ll want to put on the back burner, because they won’t be the key actions for your users.” For example, we moved the delete function a few levels down. You don’t have to have a symmetrical interface.

Now ProFlowers has a 67 percent conversion rate, which is phenomenal. They decided it was largely due to the site redesign, but it was actually because we concentrated on the business goals that mattered to them.

CZ: The hot talent is being able to translate from the business language into design language. That is being truly customer-centric.

LM: I agree. Many of the user experience people I’ve talked to do a very poor job of that. We need to understand how to translate business priorities into design priorities.

UX: How do you see the role of user experience folks changing as corporate structures change to include good design? ➔ Continued on pg. 22



Staying Alive:

Paying Attention to Human Factors

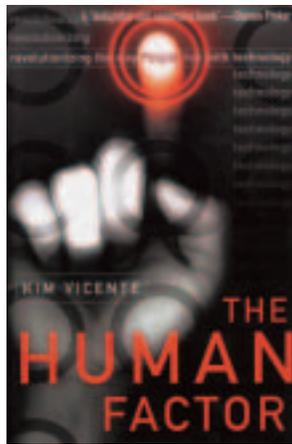
INTERVIEW WITH KIM VICENTE

Kim Vicente, author of the award-winning book, *The Human Factor: Revolutionizing the Way People Live with Technology*, is a human factors engineering evangelist.

He was recently Hunsaker Distinguished Professor of Aeronautics and Astronautics at MIT. He lectures around the world and has acted as consultant to, amongst others, NASA, NATO, the U.S. Air Force, the U.S. Navy, Microsoft Corporation, and Nortel Networks. He is professor of Engineering at the University of Toronto.

Frustrated by the needless deaths occurring daily due to poor design decisions in fields such as medicine, automotive design, and elsewhere, he wants to wake up the world. It galls him that there is an entire body of knowledge that combines engineering and design with psychology and kinesiology which makes it possible to design systems much more effectively—but few people are even aware of the field's existence. His goal is to change that.

User Experience editorial board member Tema Frank, president of Web Mystery Shoppers International, Inc., recently interviewed Dr. Vicente.



User Experience: What inspired you to write this book?

Kim Vicente: To make a difference; to bring this set of knowledge to a much wider audience. This set of knowledge affects everyone but most people have never even heard of it.

UX: Why do you think the human factor is so often under valued in design projects?

KV: There are a lot of reasons. The most fundamental one is that people in design disciplines like computing science and engineering don't get trained to focus on this—they get trained to focus on the widgets.

UX: Why don't they get such training?

KV: It is really hard to change a university curriculum! It takes a long time. But apart from that, human factors has become more important than it used to be. It is only now that systems are so complex and changing at such a rapid pace that the need for this is becoming more and more obvious every day. When things changed more slowly, people had time to adapt.

UX: What processes could be made routine at the design stage to ensure that human factors are taken into account?

KV: Several things: First, start by spending time analyzing what the need is that you should be addressing rather than jumping right away to the technological solution. This is very hard for people with technical training to do. Their focus is naturally on the technology. ➔ Continued on pg. 23

Lethal Equipment: Preventable Errors in Medicine

Excerpt from *The Human Factor* by Kim Vicente:

Unfortunately, this pattern—technology that is well tailored to the physical world but too complex for human beings to handle—isn't restricted to everyday gadgets like electronic oil checkers; it's also found in larger, safety-critical technological sectors. And the dysfunctional effects of complexity can be lethal... the threat posed to our lives by such rare catastrophic events [as Chernobyl] is actually dwarfed by a peril that is so devastating, yet so unnoticed, that it has been referred to as a "hidden epidemic." On

November 29, 1999, the U.S. Institute of Medicine... released a landmark report documenting the deadly impact of medical error on patient safety in the United States... Human error in medicine was conservatively estimated to account for between 44,000 and 98,000 preventable hospital deaths annually in the United States alone.

These estimates are so large that they're difficult for us to really understand in terms of everyday experience, but perhaps a few comparisons will help. If the preventable mortality rate were the same in commercial aviation as it is in health care, then a wide-body jet-aircraft

accident with no survivors would occur once every day or two. If you take the conservative lower estimate of 44,000 preventable deaths, then medical error is the eighth leading cause of death in the United States. It kills more people than AIDS (16,516), breast cancer (42,297), and even traffic accidents (43,458). The annual cost of preventable errors resulting in patient injury has been estimated to be between US \$19 billion and \$26 billion.... Hippocrates must be turning in his grave.

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Why Aren't You in Charge?

BY MARY M. MICHAELS AND MARCIA MORANTE

Can design-oriented people run companies? This is the provocative question Victor Lombardi, partner in the Management Innovation Group, discussed at the NYC UPA meeting on February 15, 2005.

The answer is an emphatic “yes,” he argues. In fact, companies would be smart to look for design-oriented leaders.

Lombardi began his presentation with stories of designers who moved from taking direction to running areas of a company or even striking out on their own. He interviewed each of them and asked three questions: “Where did you start out? Where are you now? How did you get there?” One respondent’s answer to the first question was, “Cleaning cages at the local vet, then information architect and writer.” To the second question, she replied, “Executive director of user experience at Razorfish,” How did she get there? “I didn’t know that what I was doing was hard!”

Lombardi also identified three separate management paths: design management, general management, and designing organizations. The last is the most challenging and includes the people who conceive, start, and run their own companies, such as Lombardi himself. He suggested that the same skills designers use in problem solving and dealing with uncertainty are highly applicable to executive and leadership positions. Furthermore, he cited several qualities that many leaders share: a positive attitude, a love for what they do, and a willingness to let go of old roles in order to grow into new roles.



He emphasized the need to demystify business aspects of management and suggested regular reading of the *Harvard Business Review* as well as books such as David Maister’s *Managing the Professional Services Firm*.

Lombardi draws parallels between good business design and personal career design. For business design, he cites abductive thinking (the ability to solve puzzles or think outside the box), creativity, collaboration, experimentation, and honesty as the most important skills. In designing their own careers, he advised the attendees to use the same research, experimentation, and collaboration skills they use at work.

In particular, Lombardi emphasized that designers should recognize they have the requisite skills to become leaders. For those who want more challenge and greater control over their work, he asserted that, “now is our chance” to take on larger roles that eventually will enable us to run the company. **UX**



ABOUT THE AUTHORS

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