



# Impediments to a Mature UX Practice: and how to avoid them

A conversation with Dr. Eric Schaffer  
CEO, Human Factors International



## Impediments to a Mature UX Practice

---

In this conversation, Dr. Schaffer discusses some of the roadblocks organizations face trying to build a mature UX practice.

“There’s a transition happening in the industry which is very exciting for me. I saw it coming more than twelve years ago, and we started working toward it. But now we clearly see it happening. Most every organization we work with has a UX team, has internal staff, and the transition that we see now is taking that internal team and creating a sustainable, industrial-strength, mature user-centered practice out of it.”

## Impediments to a Mature UX Practice: and how to avoid them —A Conversation with Dr. Eric Schaffer

**“A mature UX practice is usability work that’s done based on process, not craftsmanship. If the operation is dependent on one or more particular individuals, then it is not mature.”**

Dr. Eric Schaffer, CEO of Human Factors, talks about the development of a mature User Experience (UX) practice and how to avoid the pitfalls that crop up.

### **What do you consider a mature UX practice?**

A mature UX practice is usability work that’s done based on process, not craftsmanship. If the operation is dependent on one or more particular individuals, if it addresses each project in an ad-hoc way based on the whims of those individuals—then it is not mature.

A mature practice must be a sustainable operation that is based on an infrastructure of methodology, of standards, of templates. It needs to be based on an organizational acceptance, including executive championship and established governance. It has to be based on staff who are systematically trained and certified to work in that environment. It’s only when we have that kind of factory-like operation—factory being used in a good way, not to say that it’s boring, repetitive, or non-creative—when we have that supported process in place, then we can say it’s mature.

### **Can any organization develop a mature UX practice, or do they have to be a certain size? Are there any prerequisites?**

If you have less than about seven people in a UX operation, it’s very difficult to afford to have maturity in the organization. That’s because of the substantial investment required. It’s the difference between somebody setting up a hospital, and somebody setting up an individual practice, or perhaps a small group practice in medicine. A group practice in medicine is fine—there’s nothing bad about it. But, if you want to handle the kind of industrial-strength requirements that large organizations have, you can’t do it with just one, or even a set of these kinds of individuals, or small group practices.

### **What would you say would be the benefits of having a mature UX practice?**

You know, I have an exercise I’ve started to use, which is kind of interesting. I ask people to look around them, look in their briefcases, their pockets, and perhaps go on a scavenger hunt. They try to find things that were made using craftsman-

## Impediments to a Mature UX Practice: and how to avoid them

### —A Conversation with Dr. Eric Schaffer

**“Our culture is based on a process-driven solution. And there’s a really good reason for that: it works.”**

ship. And, what you find is that there is very little. Look in your briefcase—pretty much everything is made by a factory, by an organized group process. Pretty much everything is process-created. If you look in your purse, your office, the city around you, the country, the stores—there are very few things made by hand, by craftsmen.

That’s not random. Things are made by process throughout the world because it’s a better way of doing it. You can’t compete as an individual craftsman because none of us are as smart as all of us. None of us is able to individually, or with a small group, provide the kind of efficiencies of scale, the research investments that make the quality products we have today. Our culture is based on a process-driven solution. And there’s a really good reason for that: it works.

**A lot of the things, like UX, probably didn’t have a process when they started out. At that point, the process wasn’t necessary. But, it seems that as you mature, the process becomes more and more important. Would you say that’s true?**

It’s a natural progression. I think about shoes a lot. When I was a kid, shoes were made more by craftsmen. When you bought shoes, they would eventually open up, and the toe would flap off from the front of the shoe. You’d have to take it to a cobbler to get it fixed. Today that almost never happens, because the factories that make shoes have invested in research around adhesives, stitching, and construction, and create shoes that don’t come apart that way. The factory makes shoes faster, cheaper, and better.

It was certainly a natural progression from the first cobblers, who would learn the tricks of the trade and start their own practices. That way of making shoes transitioned to factory practices. That transition was not simply a multiplication of craftsmen. It had a lot of interesting aspects to it. The transition didn’t just take craftsmen and set them side-by-side en masse. It took a huge amount of standardization, mechanization, restructuring of the work, restructuring of the skill sets involved.

While it is a natural thing to go from craftsmanship to industrial-scale operations, it takes some serious thinking to build those factories. That thinking, in a sense, is what HFI has been busy with for the last ten or twelve years in the UX world.

## Impediments to a Mature UX Practice: and how to avoid them —A Conversation with Dr. Eric Schaffer

**What would you say are the ramifications of not having a mature practice in the UX world? What would be the equivalent of having shoes fall apart in the UX world?**

I think we see very clearly from the literature and our own experience that UX work, as it is practiced today, is worthwhile. ROI of usability is established, but I think it can be improved. ROI can be better because we can do our work faster. Today, outside of the very little bit of knowledge that an individual in an enterprise remembers—until they leave the organization—the UX team re-uses very little. They tend to start from scratch. Professionals don't start from scratch. They should be using templates. Instead they spend time making plans for projects, creating deliverable formats. Where they could be following standards, they're creating designs which, while optimized for the context, are inconsistent with the rest of the applications being created. This makes their processes less efficient, harder to develop, and harder to maintain.

**“Professionals don't start from scratch.”**

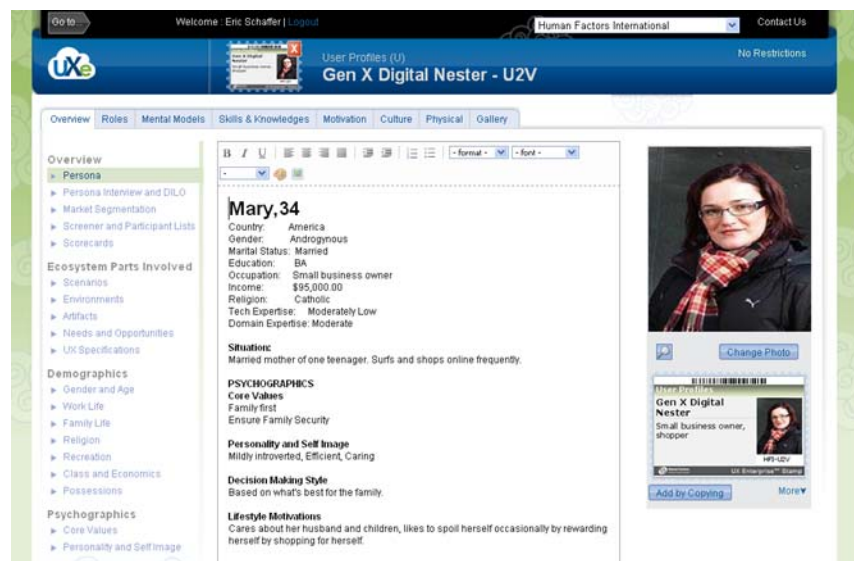


Image of a user profile in HFI's tool UX Enterprise™

So, we pay a huge price in our industry for immaturity. We have a huge risk, in that an immature practice is not actually very sustainable. Again and again we've seen UX teams that come and go because they're not integrated into the process. They're not an integral part of how the organization does business. And how could they be an integral part when those UX operations do not work consistently? They're person-based.

## Impediments to a Mature UX Practice: and how to avoid them —A Conversation with Dr. Eric Schaffer

**“Your first and foremost objective should be to get an executive champion. Without one you can never be effective in building an institutionalization program.”**

Can I say, “Our standard process is that we have Dr. John Adams coming in to work on it.” No, that’s not a sustainable solution. We need to move to an operation which can be efficient, which can be routine. And we can’t do that unless the processes are repeatable and optimized in a quality-driven way. We need to understand what we’re trying to accomplish, and continuously refine our process. We need to have a documented process, follow the process, and document that we follow the process.

**I can imagine a UX practitioner working in a large corporation with a small team. He or she gives the best possible effort to make sure that the products and services being offered are usable. But, there may have been budget constraints when it comes to setting up a mature practice. There may be a lack of interest from their board of directors. What do you find are the most common impediments to maturity?**

Well, there are quite a few.

If you have an individual working in an organic operation trying to do UX in an ad-hoc fashion, I would say that your first and foremost objective should be to get an executive champion. Without one you can never be effective in building an institutionalization program.

I have one case I’m working with now, which is the most advanced UX operation I’ve ever seen without executive championship in place. They’ve spent many millions of dollars on our services to help them build capabilities. At the end of the day, we’re still urgently working to get executive championship and governance in place. This is because right now, the UX operation mostly happens when the head of UX happens to know the person who is working on the next project, reaches them at the right time, and helps them with their program. We don’t yet have a routine operation where every time a new application is being developed, the UX process is executed. That means it’s still ad-hoc, and it’s not a mature, optimized process.

## Impediments to a Mature UX Practice: and how to avoid them

### —A Conversation with Dr. Eric Schaffer

**“The problem we see today is more about governance. Governance is how the executive sets up a routine practice within the culture. It is getting middle management on board.”**

#### **The main problem seems to be not having an executive champion.**

The executive champion is absolutely crucial. And it used to be that was the obvious problem every time we met with a team. We had many, many conversations about how to get an executive champion. But, today that’s not the worst problem. Today—while we still have some cases without an executive champion—more often than not there is quite a bit of executive championship. The executive suite knows about the UX economy and how important usability is, at least on some level. The problem we see today is more about governance. Governance is how the executive sets up a routine practice within the culture. It is getting middle management on board. So, governance is currently the most common—and largest—impediment.

#### **What would you do to avoid problems with governance?**

The problem of governance really gets to the fact that we need to execute a holistic plan to set up a UX practice. It’s not as though you can evolve it organically. One of the mistakes people make is to think that somehow, as an individual or a small group within an organization, by doing good work you will somehow create an institutionalized UX team. That won’t happen. The only thing your good work can do is get an executive champion. Then it’s the executive champion who can work in a process to set up a game plan to create an institutionalized operation.

Then, within that road map, governance, methods, standards, templates, tools, and knowledge management can be addressed. All these things are essential if we’re going to put an effective team together. If you’re busy trying to deal with projects, and you have a small percentage of the steps you need, then you won’t be able to put your attention on building these things. And many of these things you should be buying, not building. But, in any case, that’s what a small team can do to kick off the institutionalization effort.

One of the oddest paradoxes in the field is that one of the worst things an organization can do is hire a really good usability person. This seems odd, but it’s true. Often you have a usability wizard, a guru, who’s hired into an organization. But that person is really a master craftsman. And, a master craftsman who is one of the best in the world at creating shoes, is actually *not* the person to build the factory.

## Impediments to a Mature UX Practice: and how to avoid them

### —A Conversation with Dr. Eric Schaffer

**“One of the oddest paradoxes in the field is that one of the worst things an organization can do is hire a really good usability person. This seems odd, but it’s true.”**

The master craftsman loves to craft. So when asked to scale up, he will say “Well, I need a lot more master craftsmen.” But, that’s not the right answer. I’ve seen several organizations who have very strong usability staff, but who fail in establishing a mature operation. This is because the staff rarely come to the realization that institutionalization of UX is very different than what they’ve done in the past—very different from master craftsmanship.

**Would you say that the first step in developing a mature UX practice is to have an executive champion lay out an overall written strategy so that all aspects would be put into place from a high level, rather than a project level?**

If you build a hospital, you don’t hire a master surgeon and think you’ve done it. Instead, you hire a firm that builds and engineers hospitals. So, what the executive champion needs to do is have the plan for setting up the hospital. It needs to include everything from staff hiring to sewage requirements.

We’ve been doing a lot of that with organizations where we help executives set up the full set of requirements for setting up a mature usability practice. That’s something we do in concert with internal usability staff. But it’s certainly something which requires expertise not just in usability, but in the *institutionalization* of usability. It requires a mindset and determination to be process-oriented. This is very rare to find among a master UX craftsman, although a few do get it, which is great.

**What would you say are the basic requirements for the executive champion to create a mature UX process?**

What the executive needs is a written strategy which is many-pronged. In fact, if it’s not many pronged, it will fail. We see executive champions who end up with strategies that are guaranteed to fail because they’ll be something like, “Oh, let’s invest in training.” And they bring in training courses like ours, and they train and certify a bunch of staff who are then expected to solve the problems without methods, without structure, without templates, without acceptance from the organization of what they are going to do. So, training alone simply fails.

## Impediments to a Mature UX Practice: and how to avoid them

### —A Conversation with Dr. Eric Schaffer

“We need to have a strategy which addresses—in a staged fashion—the challenges of methodology, standardization, training, staffing, and organizational structure.”

Or, they might decide strategically to start doing usability testing. But usability testing alone simply reveals the problems in the design without giving the development community the ability to fix them. It’s frustrating, it makes people angry, and it doesn’t effectively solve the problem. It’s a bit like trying to build systems by natural selection; but only God has time for natural selection.

We need to do things differently. We need to have a strategy which addresses—in a staged fashion—the challenges of methodology, standardization, training, staffing, and organizational structure. All of these things need to be addressed in a way that fits the requirements of the organization.

In my book, *Institutionalization and Usability: A Step-by-Step Guide*, I provided what is still today a pretty good outline of the requirements for the development of a mature practice. That’s all well and good. But, the problem is that most organizations are trying to change the wings on the plane while the plane is in flight.

We have a very complicated problem of how to stage these things, how to bring them in, how to make them work around the organizational realities. The generic approach is good—it’s good that people see the need for a mature process. But the message is that the stool has more than three legs—it has about twenty legs. If there are twenty things that need to be put in place, it becomes a rather delicate operation.

**That brings up another impediment, budget constraints. Someone in an organization could see the need for all these different components to be put into place, but not have the budget to do all of it. Can they just start in a certain place, or is it a waste of time to start with only a few legs of the stool?**

You have to start somewhere, and that’s getting an executive champion. It’s the role of the executive champion to get the budget together. It may be there isn’t widespread acceptance of the need throughout the organization. But that’s more of a question of education. As the projects unfold, we need to demonstrate the value of the organization’s investment in UX. Then they very quickly realize the investment is tiny compared to the value. It is NOT faster, cheaper, or better to try to do UX work without a mature practice in-house.

## Impediments to a Mature UX Practice: and how to avoid them

### —A Conversation with Dr. Eric Schaffer

**“It is NOT faster, cheaper, or better to try to do UX work without a mature practice in-house.”**

**Is there a simple way to make this case? Certainly, you’ve seen this happen over the years.**

We make that case intellectually, showing case studies and literature. Really, the case is made when executives see the importance within the organization itself. It’s the work done on *their* banking systems, on *their* applications, on *their* provision assistance that makes them say, “Oh my gosh, look at the value. It’s really substantial.”

**So you need to have a project in place as a showcase in order to make the case for a mature UX operation?**

Well, you may need many showcases.

It isn’t one project that will do it. If you have a series of successes leaving everybody feeling that it’s worthwhile, then investment will be much easier to justify.

**What other roadblocks have you run into in your experience which would slow or impede this development?**

Our most difficult roadblock today is reorganization. It takes time to educate an executive champion. It takes time to build up cultural consensus. If you’ve invested a year in educating the executive champion, then the person is transferred out or is no longer in their seat, that’s a tremendous setback. The largest setbacks we’ve had are always around reorganizations.

**Is there a way to counterbalance or avoid this? People come and go—is there any way around it?**

It’s not enough to have a single executive champion. You need to reach out to many people. Many people need to be educated, so that UX becomes a part of the corporate culture. But, it is a bitter setback when that happens, regardless of how well we’ve done. That’s just a difficult thing.

## Impediments to a Mature UX Practice: and how to avoid them –A Conversation with Dr. Eric Schaffer

**What would you say are the main steps an organization should take to make this happen quickly, and not get bogged down?**

There are two steps that are crucial. One step is to get executive championship to the point where we can at least get some serious interest in setting up a mature practice, as opposed to somebody who is just thinking, “Oh, we’ll give a lecture to the development community that usability is important, and somehow magical thinking will work.” They need to understand it’s a profession. The first step is get at least enough backing to start planning for institutionalization.

**“Things like training, methods, standards, certifications—it makes no sense for most organizations to build these things. A vendor can support these aspects.”**

Then, you’ll need a specialist consultant team that will come in to guide you in setting up a mature practice. Also, this team can provide the intellectual property so you really don’t have to develop from scratch. Things like training, methods, standards, certifications—it makes no sense for most organizations to build these things. A vendor can support these aspects. That’s the best first step.



*Institutionalization dashboard from an HFI program*

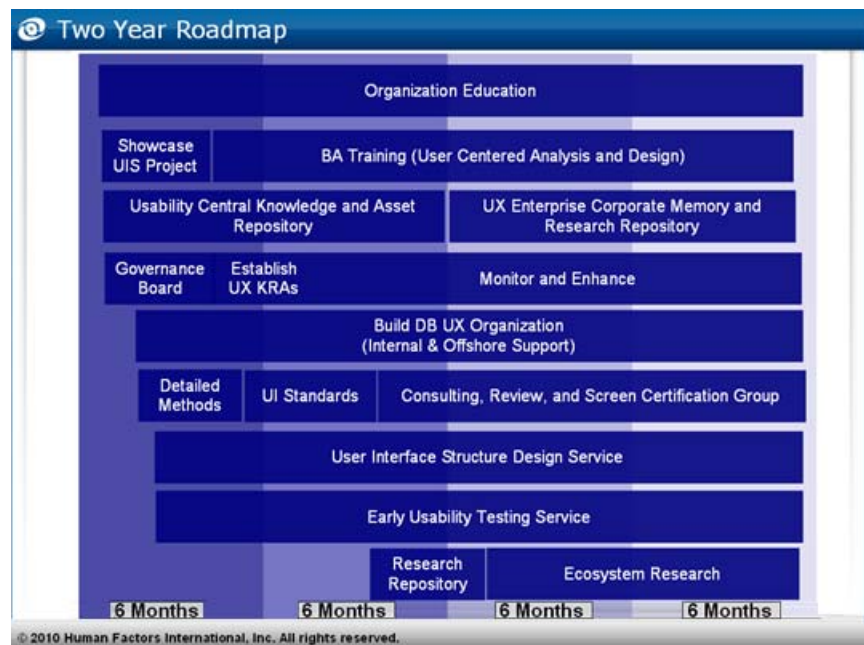
Right now, HFI is clearly the front runner in terms of our focus on institutionalization. I think over the next few years a number of consultancies will arise as organizations become serious about creating industrial strength, mature UX practices. I will see this as a sign of success.

## Impediments to a Mature UX Practice: and how to avoid them —A Conversation with Dr. Eric Schaffer

### Does HFI develop a clear roadmap to be followed?

The generic roadmap is in my book. But we develop a roadmap which is customized for each client. Because, frankly, each client has different needs, resources, and priorities. It's very important to develop a plan that fits the requirements of the specific customer.

“We develop a roadmap which is customized for each client. Because, frankly, each client has different needs, resources, and priorities.”



*Customized high-level roadmap for institutionalization*

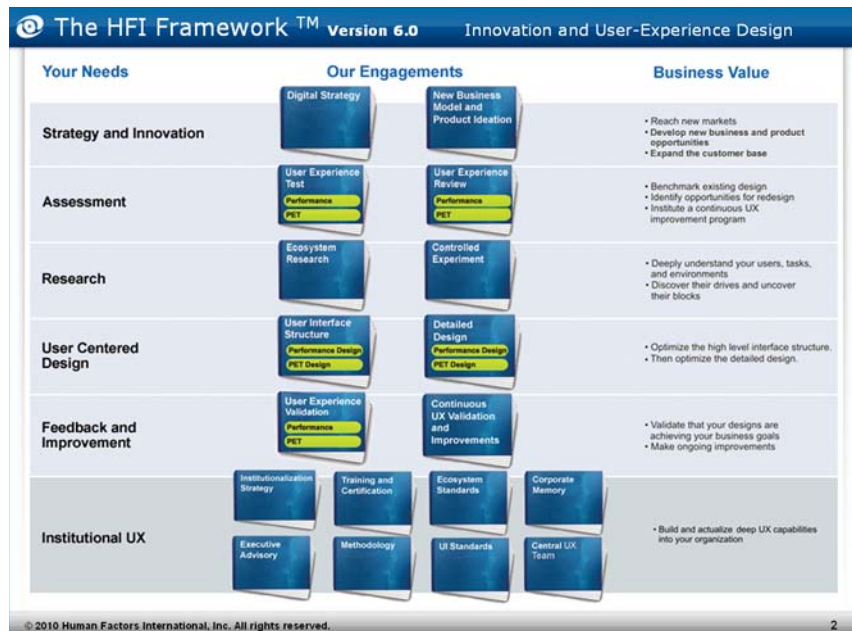
### I've heard of The HFI Framework. Is that what you're referring to?

No. The HFI framework is HFI's UX design methodology. As we work with customers, we'll use HFI's methodology. Sometimes we'll use a more simple methodology which is the Schaffer-Weinschenk Method Version 4. This is an older methodology, not as sophisticated, but we often use that method as the base to be modified to the needs of the client.

# Impediments to a Mature UX Practice: and how to avoid them

## —A Conversation with Dr. Eric Schaffer

“You might think that an internal UX director would be a better advisor. But executives usually want an external advisor who is separated from the organization’s political pressure.”



### What kinds of overall support does HFI provide for an executive champion who really wants to move towards maturity?

First and foremost, we provide executive advisory. An executive is not expected to understand how to set up a UX operation. They may know a lot about organizations, they may know a lot about their domain. But they may not understand all the issues and challenges of a mature UX operation. We’re here to help with that. Even with things like being able to recognize good staff, HR issues, organizational design issues. We support that individual in their decision making, and maintain that relationship. You might think that an internal UX director would be a better advisor. But executives usually want an external advisor who is separated from the organization’s political pressure.

Beyond that, we provide full spectrum support for setting up the usability practice.

## Impediments to a Mature UX Practice: and how to avoid them —A Conversation with Dr. Eric Schaffer

**“One roadblock that people think about is financial. This one is really a red herring. It’s not a financial problem, it’s an educational problem.”**

**So that would include methodologies, staffing, training, all that?**

Correct.

**Are there any roadblocks you’d like to discuss we haven’t presented here yet?**

One roadblock that people think about is financial. This one is really a red herring. If an organization is not willing to invest in usability—unless they’re one of the very few organizations where customer experience doesn’t matter, where staff efficiency doesn’t matter—then, they just don’t understand the value of usability. It’s not a financial problem, it’s an educational problem. This education isn’t just about knowing the numbers, it’s being able to understand the source of those numbers in a concrete way.

Somebody with a business background will not immediately understand the impact of UX work when they hear about it. But, when they can feel it and touch it, and they have case after case where they see the impact within their own organization, then money is not an issue.

If you think about it, the right investment for UX work is about ten percent of the total development cost, which is small. In fact, it will save more than ten percent by reducing development costs, and late project re-work, by avoiding building functions which are not needed, and by avoiding re-inventing the wheel by using standards and the knowledge of research-based principles.

Designing with a user-centered approach and UX professionals is faster, cheaper, and better than the old way of technology driven design. That’s why user-centered design is becoming the international, mainstream method of development. It makes sense, it makes a difference, and it’s worthwhile. The investment in UX is tiny compared to the impact on development costs, maintenance costs, customer conversion, and staff efficiency.

**This understanding needs to be established on an executive level in order to really move ahead. Is this something HFI offers in terms of consulting, or**

## Impediments to a Mature UX Practice: and how to avoid them –A Conversation with Dr. Eric Schaffer

**“The transition we see now is taking that internal team and creating a sustainable, industrial-strength, mature user-centered practice out of it.”**

**through our training courses? Where would you suggest somebody to start with all this?**

The understanding is built throughout every project we do, and this should be done in every project in the UX field. Every time we do anything, we should be looking to move this understanding forward.

**Any closing remarks?**

There's a transition happening in the industry which is very exciting for me. I saw it coming more than twelve years ago, and we started working toward it. But now we clearly see it happening. Most every organization we work with has a UX team, has internal staff, and the transition we see now is taking that internal team and creating a sustainable, industrial-strength, mature user-centered practice out of it.

As this happens, we'll be able to see the full benefit of UX work based on the power of a shared model of the customer, based on the power of standards, templates and methods. We'll see the creativity of UX staff unleashed, as they move away from spending their time doing grunt-work, and get tools that allow them maximum effectiveness and the free flow of their creative design process.

Find out more about HFI's approach to the institutionalization of usability:  
[www.humanfactors.com/services/institutionalization.asp](http://www.humanfactors.com/services/institutionalization.asp)

## Impediments to a Mature UX Practice: and how to avoid them —A Conversation with Dr. Eric Schaffer

### About Dr. Schaffer



Eric Schaffer, Ph.D., CUA, CPE  
Founder and CEO  
Human Factors International

Dr. Eric Schaffer is the founder and CEO of Human Factors International, Inc. (HFI). In the last quarter century, he has become known as the visionary who recognized that usability would be the driving force in the “Third Wave of the Information Age,” following both hardware and software as the previous key differentiators. Like Gordon Moore’s insight that processor power would double every 18 months, Dr. Schaffer foresaw that the most profound impact on corporate computing would be a positive online user experience—the ability for a user to get the job done efficiently, easily, and without frustration.

Dr. Schaffer’s book, *Institutionalization of Usability: A Step-by-Step Guide*, provides a roadmap for companies to follow in order to make usability a systematic, routine practice throughout their organizations. Dr. Schaffer also co-developed The HFI Framework™, the only ISO-certifiable process for user-centered design, built on principles from human-computer interaction, ergonomics, psychology, computer science, and marketing.

Dr. Schaffer has completed projects for more than 100 Fortune 500 clients, providing user experience design consulting and training. He has recently been traveling the world teaching HFI’s newest course, How to Design for Persuasion, Emotion, and Trust.

Dr. Schaffer is a member of the Human Factors and Ergonomics Society and a Certified Professional Ergonomist.



**Human Factors**  
International

410 West Lowe, P.O. Box 2020  
Fairfield, IA 52556  
Phone: 800.242.4480  
Fax: 641.472.5412  
[hfi@humanfactors.com](mailto:hfi@humanfactors.com)  
[www.humanfactors.com](http://www.humanfactors.com)