The Wholeness of User Experience

Eric Schaffer answers questions on HFI's
Certified User Experience Analyst (CXA) program

A Conversation with Eric Schaffer
CEO and Founder
Human Factors International

The Wholeness of User Experience

In this conversation, Dr. Schaffer answers questions about HFI's new Certified User Experience Analyst (CXA) program.

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Dr. Eric Schaffer, CEO of Human Factors, talks about HFI's new CXA certification in terms of the "Wholeness" of user experience.

The term "User Experience" or "UX" is used in many different ways these days. What do you mean when you use this expression?

Our field has been through many name changes, from engineering psychology and human performance engineering, to human factors engineering and software ergonomics. Most recently we were called usability engineers. Now we're called user experience engineers, or designers, or specialists.

The transition from usability engineer to user experience engineer is significant. This change in terminology reflects a switch from a field that focused on human-computer interface design—that is to say looking at optimizing the way a human being can operate a computer—to a field which is much wider. The field is wider because software technology is maturing.

We see digital systems that are ubiquitous. Digital systems are now mobile, are integrated into our appliances, and integrated thoughout our lives. So we need to approach our design work differently. We've had to bring in skills and insights from ethnographic experts, and use their methods to understand the entire ecosystem that our applications will operate in, and then be able to optimize our designs for that ecosystem.

Today designs are successful because they're not just single working devices, but devices that fit into an ecosystem. The difference between the wildly successful Apple music products and the failure of the Microsoft Zune is that Apple thought about the entire ecosystem of how music would be delivered, how it would be used, how it would be shared. Understanding that ecosystem was key to making them so successful.

Beyond just working in an ecosystem, we've started to go further in the scope of our design objectives. At one time it was acceptable to have an application or a website that just worked successfully. That was good enough. If things worked, that was a differentiator. We often tested ecommerce websites and found that only a small percentage of people could successfully check out. And only a small percentage of people could find the content they wanted.

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Today that's becoming a given. Pretty much every large, competent organization with a major focus in technology has some kind of a usability team and is busy making their offerings usable. That's become a hygiene factor.

Now we have to go beyond usability and think about persuasion. Persuasion engineering has become a part of the user experience field, where we use technology to compel people to see their doctor, to buy products, to vote in particular ways, even to change their lifestyle. These persuasion techniques have to become part of the skillset of the user experience professional these days.

Finally, we have started to move up the value chain in our organizations. It's not a very powerful position today to be the organization that makes sure we get the right radio buttons and check boxes. That does have to get done. But we have to go to a higher level to be recognized and valued.

Higher in the organization, what executives care about is strategy. We have to be able to speak their language and contribute to the digital strategy of our organization. Our research is key to making good decisions about how to address markets, how to persuade customers, and how best to optimize our channels.

We also have to use our ecosystem understanding in support of product ideation. Coming up with ideas for new products, websites, and applications has become another central value to a UX organization.

So the change from a usability specialist to a user experience specialist is substantial. We still have a foundation for how to design for human-computer interactions, but we've just had to go much further.

Is there a formula that would make this easier to understand?

Well we kind of joke around that what we have to deal with in the user experience field is "*Can Do*, *Will Do*, *Still Do*, and *Breakthrough*". You have to learn to say that three times, fast!

We have to be able to design so that people *Can Do* things—that's the traditional usability field.

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Will Do and *Still Do* are about persuasion engineering. *Will Do* is compelling somebody using emotional triggers, using various methods of pressure, and using characteristics of our design to go ahead and convert. So *Will Do* is conversion.

Still Do is customer retention because converting our customers once is good, but we want to keep them coming back. So there's a whole set of methods we use to ensure customer retention.

Breakthrough is the wider and more powerful perspective that lets us contribute to digital strategy and to innovation.

"UX = Can Do + Will Do + Still Do + Breakthrough"

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What does it mean to have a Certified Usability Analyst (CUA) designation?

Having the CUA designation means that you have passed a very rigorous test which is intended to validate your understanding of the core usability engineering field. It means you understand how to model users, optimize the design to have the best visual, intellectual, memory, and motor processing. It means you understand how to do usability testing. You understand the way that the field is founded in science and how to keep improving your skills. We believe that this is the core foundation of the user experience skillset.

The CUA course set teaches these fundamental skills, but you don't have to take the courses to take and pass the test and get a CUA designation. We've had many people who have taken the test and passed it because of their experience in the field, because of their study, and we are delighted that this is true.

Our CUA exam is not a validation that you have taken our courses, but is rather intended to test whether you have the fundamental skillset of the field.

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What does it mean to have a Certified User Experience Analyst (CXA) designation?

The CXA is built on the CUA. The CUA validates a person has the skills to optimize the human-computer interface. The CXA goes beyond that. This is where we look at the special issues that are required to move into the user experience field. This is where we learn the persuasion engineering field, and the strategy and innovation skillset.

> "For somebody to be qualified as a CXA, for us it means they have to have the foundation."

The other thing we think is important as part of the CXA is to understand how to work in an institutionalized user experience operation. We're moving to a time in the field where we're no longer working based on craftsmanship in isolated silos, but we're working as part of an industrial-strength operation. This means we work with a set of methods, templates, standards, and tools. Being able to understand what this means, and being able to participate appropriately in a mature UX operation, is also part of what we think of as the CXA.

Like the CUA, the CXA designation is validated by taking an exam which tests these advanced areas of the field. And once again, you do not have to take the HFI CXA courses in order to take of pass the CXA exam. The exams are really something that HFI feels are critical to moving the field ahead and for helping people to recognize qualified practitioners.

Why does a person have to be a CUA to take the CXA exam? Why would a person in marketing, strategy, or innovation require the CUA knowledge?

Certainly, somebody who's only interested in marketing and persuasion might decide to take our persuasion engineering courses—our PET Design and PET Architect classes. That would make sense, and people can do this.

But for somebody to be *qualified* as a CXA, for us it means they have to have the foundation. So it's not enough to learn a few advanced things, take the exam and say, "OK, even though I don't have the foundational stuff, I'm a CXA."

We really do require that there be a CUA foundation so you understand human-computer interface design, the core perspectives of how to design for personas, and how to do formative and summative testing. That has to be there. Then

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based on that firm foundation we can go ahead and do the more advanced work. So we absolutely require the CUA be established before taking the CXA exam.

UX = CUA + CXA

"UX = CUA + CXA"

Can a person take the CXA courses, then take the CUA exam without taking the CUA courses?

Well you can take any exam you want without taking any courses. So in our certification role we're not concerned that you've taken our courses. We're concerned that you have the necessary skillset to do the core usability engineering work, and also to work in the more advanced user experience design field— dealing with issues of *Will Do*, *Still Do*, and *Breakthrough*—and be able to work in an industrial-strength, institutionalized user experience environment.

We think these things are very important and no way do we demand that you take any course in order to take the exams.

Is there a discounted price to take the CUA exam if a person takes the CXA courses but not the CUA courses?

Yes, absolutely. And we've done this because many people with a foundation in the field are coming to take our more advanced courses and they simply need to test out on the CUA material. So we have a very large discount. Instead of $750, it's $175 to take the CUA exam if you have taken the CXA courses and are intending to then take the CXA exam.

So we want to make it very painless to just test out of the CUA exam requirements proving that you have that capability.

The other thing that some people will find is there may be gaps in their understanding. This may alert them that they may perhaps want to learn more in the design field, or in the user-centered analysis field.

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It makes no sense to be a professional without a core of fundamental skills. In many ways the fundamental skills are the part that absolutely has to be there.

Are there study aids available for the CUA exam for those who have not taken the courses?

We do not provide study aids for the CUA or the CXA exams, but rather we suggest that people interested in taking an exam simply study the field. What we're doing is testing knowledge of the field. Many people have passed the exam just by reading books in the usability engineering field. So that's a very practical way to go about preparing for the exams. The exams are not intended to be idiosyncratic tests of the HFI courses. They're really intended to be a test of your knowledge in the field.

"Today HFI certifies about 10% of the world census of usability professionals. We've done this with care and integrity, and with practical methods."

How is HFI's certification program perceived by the industry?

It's interesting. When we first came out with the CUA certification, there were many questions about why we would be the ones to provide this service. Over the last 8-10 years we've simply proven our ability to administer it in a mature and balanced way, and I think it's been well accepted.

Today HFI certifies about 10% of the world census of usability professionals. We've done this with care and integrity, and with practical methods. We know that it's perceived well in the industry because we see so many job ads that require a CUA. And we've seen many times when individuals and companies claim to have CUAs when they don't. And I guess this latter is the ultimate proof that the HFI certification is highly valued.

You'll find on our website a directory of CUAs, so you can be sure if someone actually has their CUA by looking at this list.

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Do the CUA and CXA certification programs represent the complete spectrum of knowledge for a UX practitioner? Or will HFI be coming up with more certifications in the future as our field expands?

It's a great pleasure to now offer the complete CUA and CXA training course programs and certification testing programs. For us this is a huge step forward to really representing the wholeness of the field today.

Obviously in the future our field will continue to evolve. We look forward to continuing to help this evolution and to continue to provide training, certification, tools, consultative support, and everything it takes to move our field ahead.

"The biggest threat to the user experience field today is that many people who claim to have skills in the field... don't."

What do you think will be the direction that the UX field will take in the coming years?

Certainly as I look ahead, I can see the beginnings of a new level in the field and I think we'll see some advanced methods of design using both advanced technologies and advanced capabilities among the practitioners. We've already begun to think about that next level of knowledge and skill, but for now let's get out the CUA and CXA capabilities and have certification as a way to insure excellence in our field.

The biggest threat to the user experience field today is that many people who claim to have skills in the field... don't. When I see usability tests run improperly, obviously bad design decisions, design work done without understanding the ecosystem, the practicalities, the culture of a target environment, then I truly feel upset because I know it makes our industry look bad.

That's why I think the certification programs are so very critical. If you look at the medical field in the United States, it is strong and successful because of its rigorous certification and requirements for practitioners.

So we look forward to continuing to build those requirements into our field so that when you get work done by a user experience engineer, it means something.

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It's not just somebody with a history degree who's read a few books, trying to make up a solution based on common sense and intuition—because common sense and intuition are just not enough.

For more information on HFI's CXA certification and training, please visit: www.humanfactors.com/certification/CXA.asp

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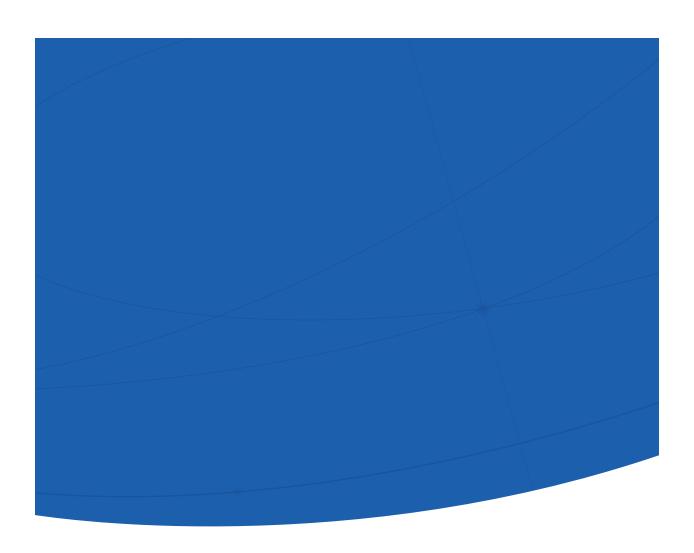
Dr. Schaffer is a member of the Human Factors and Ergonomics Society and a Certified Professional Ergonomist.

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