The Eight Tell-Tale Indicators of Counterfeit UX Design

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"Is just *one* of these indicators enough
to be certain it is a bogus operation?" Well, yes.
I think any one of these is definitive.
You don't need to see all of these.
The appearance of just *one* is an open and shut case.
You should *run.* Because using a counterfeit Rolex watch
might be embarrassing and might make you late for a meeting.
But counterfeit UX can take a wrecking ball to your career."

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UX is a strategic imperative, because it is the key differentiator.

Exposing Counterfeit User Experience Design

The Best of Times

For UX it is the best of times, and the worst of times. Almost every company now has UX as a strategic imperative. It is the key differentiator. We see demonstrated correlations between stock price and the quality of UX design. We see companies like IBM committing to hire 1,000 practitioners in one bite. And we see the rapid growth of counterfeit UX practitioners and vendors. Sometimes it feels like Shanghai — with a $10 Rolex watch offered every 20 feet.

I saw this coming almost 15 years ago. That's why we set up the Certified Usability Analyst™ (CUA) program. You can be sure that someone who has a CUA understands the core concepts in the field. And we just passed 5,000 people certified. Clearly, we hit a nerve back then. We've also set up advanced certification for individuals. And even have certifications for organizational maturity and product design. But in this paper let me take a different tack.

I can't help but notice that there are tell-tale indicators of counterfeit UX operations. You might ask, "Is just *one* of these indicators enough to be certain it is a bogus operation?" Well, yes. I think any one of these is definitive. You don't need to see all of these. The appearance of just *one* is an open and shut case. You should *run*. Because using a counterfeit Rolex watch might be embarrassing and might make you late for a meeting. But counterfeit UX can take a wrecking ball to your career.
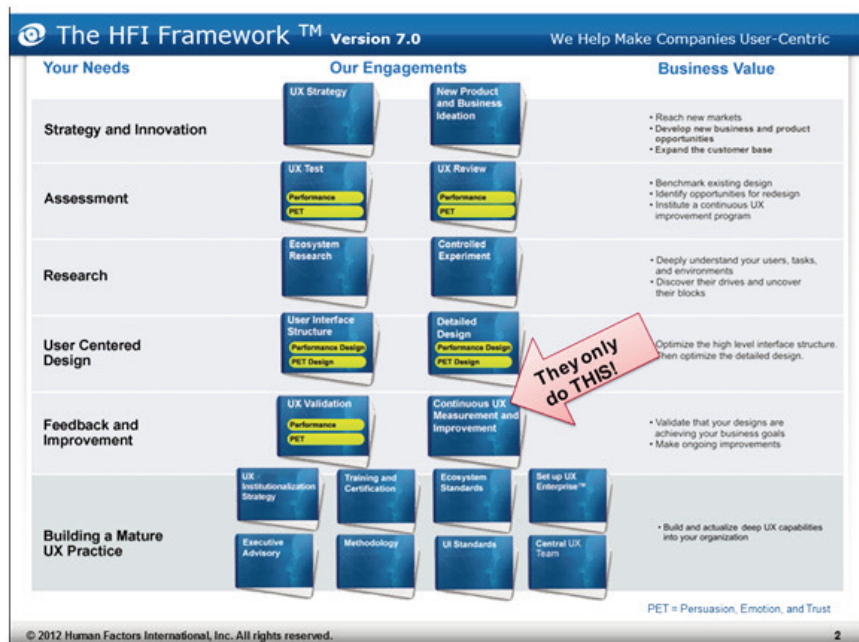
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Counterfeit Indicator #1 – "Customer Experience Design" That Isn't

A load of shops have set up as "Customer Experience Design" consultancies. The problem is that they don't really do experience design. They do "Customer Journey Mapping" and then make improvements.

Now, journey mapping is fine. It is just a fancy term for creating a flow chart of what customers do, which HFI has done for decades. The problem is that these shops then just pick out points where there seem to be problems and recommend fixes. The problems are mostly identified based on customer complaints, which is not a wonderful indicator of where and what the problems are. And the fixes are based on common sense, which sometimes helps a lot and sometimes gets it wrong. The main problem is: *they are not designing experiences*. They are just making improvements. And they are not equipped in process or skills to actually design a serious application.

In the UX field we have lots of different activities needed to optimize experience. It is a serious and complex field. These "Customer Experience Design" firms actually only deliver what we call "continuous measurement and improvement." And, at that, I'm not sure how solid that delivery is. I would like to see serious metrics. And I would like to see evaluation and design based on the scientifically validated research, models, and methods in the field, not just on common sense.

HFI"s Framework 7™ and the Part of UX Work Delivered by these Firms

UX is a serious and complex field, with lots of different activities needed to optimize experience.

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Counterfeit Indicator #2 – Focus on Graphics

Visual designers are not UX practitioners. They are vastly easier to find, and cheaper. So it is profitable to use them instead of UX staff.

Certainly, some visual design is worthwhile. We have good data to indicate that it increases trust. And there is a halo effect where nicely treated interfaces are seen as more usable in general. But if the main focus is on the graphic treatment, you are getting counterfeit UX.

Just take a moment to look at the top websites in the world. Do they have fancy graphic embellishments? Or do they have great usability and great persuasion engineering?

Visual designers are vastly easier to find, and cheaper. So it is profitable use them instead of UX staff.
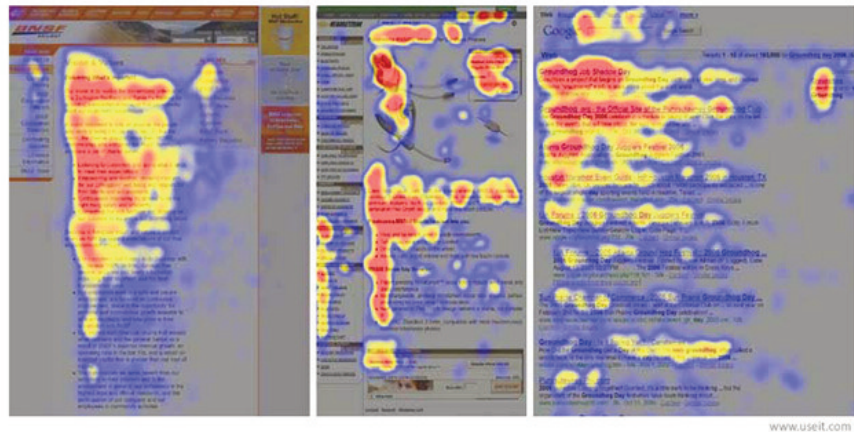
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Counterfeit Indicator #3 – Focus on Eye Tracking

I started doing eye tracking work in 1973. We have a nice TOBI eye tracker. And they are interesting for doing research. But I cannot point to a single design improvement that I have made, or seen made, based on eye tracking, that could not have been made faster and cheaper with other methods. Eye trackers are not a cost effective tool for routine design work. We use them for research. Jared Spool of User Interface Engineering often says he recommends eye tracking if you have budget left over that you need to spend and just don't have another alternative.

Eye trackers are impressive. They make executives feel that there is cutting edge work going on. They make executives feel that we are somehow getting deep into the customer's psyche. It makes executives feel like they should sign a big check. But an emphasis on eye tracking as a routine design method is a sign of a counterfeit operation. Run like hell.

Important eye tracking research from NNG
http://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/

Eye tracking can be used for research, but it is not a cost effective tool for routine design work.
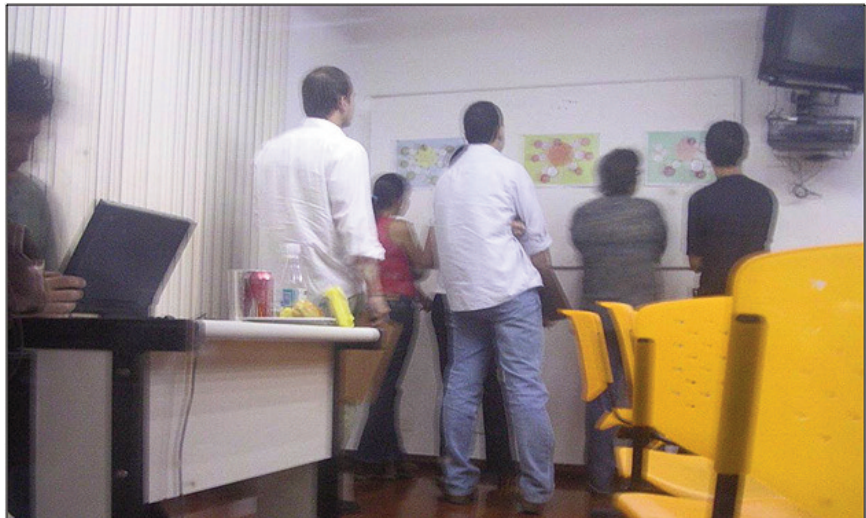
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Focus groups are a great way to generate lots of ideas, most of which are wrong.

Counterfeit Indicator #4 – Focus on Focus Groups

Focus groups are really brainstorming sessions. They are a great way to generate lots of ideas, most of them wrong. We use focus groups for ideation work, when we are developing new business models and new offerings. They are OK for that because they will go through an extensive winnowing process. And we are delighted if we can get just a few good ideas. But if you see them used to gather data to support design, or as a primary way to evaluate a design, then you know it is counterfeit UX.

One problem with group focus sessions is that you tend to hear from the stronger personalities in the room. This is OK when you just want a bunch of ideas. But if you are getting data, or evaluating a design, then it is catastrophic. You might run a few sessions, with a total of 30 people. But you are really only hearing from a few loud folks. What is worse, you have group dynamics that shift the results. People say things to seem more attractive or acceptable to the others in the group. We don't hear the truth. We get a skewed view of what people will really do. Ask, "Would you eat skinless chicken?" They will say, "Of course! I'm a health conscious person!" But then they actually buy the tasty high-fat product. Ask about a screen design and you will hear lots of opinions, most of them wrong.

Group Study called a "Flexibition" used by HFI for Innovation. Not *data gathering or design evaluation.*

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Counterfeit Indicator #5 – UX is Just Usability Testing

Usability testing is an integral part of UX work. It accounts for perhaps 5-10% of the budget of the UX operation. But sometimes you will find that you ask for UX and you just get usability testing. This is fine if it is a service firm that will run usability testing to support your overall UX operation. But if usability testing is all you get, then you have counterfeit UX.

In essence, if you try to evolve a good design through usability testing, you are doing so by natural selection. You're trying things pretty randomly, as you do not have a UX process that systematically designs based on ecosystem knowledge and research-based insights. So you test and find that the design has issues. And you iterate (without any ecosystem knowledge and research-based insights). It is design by natural selection. And only God has time for that!

One of two HFI usability test labs in Mumbai, India. They serve great chai.

Usability testing is not a substitute for a UX process that systematically designs based on ecosystem knowledge and research-based insights.

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Counterfeit Indicator #6 – UX is Just Common Sense

The UX field dates back to 1940. I have almost 40 years in the field. And I am second generation. Both my sons work in the field, and they are third generation. A couple of *billion* dollars have been spent on research and established practice in the UX field. There is research on how things should scroll. There is research on the best size of controls. There is research on how to draw people's attention. And there is research on how to compel people to buy. And if you don't see that research being applied, then it is most certainly counterfeit UX.

In job interviews I have asked applicants what makes them qualified as a human factors engineer. I've literally been told, "Well, I'm human." If you take our very first professional course (UX Foundations) you learn how deeply this field is *not* common sense. Your eyes don't work the way you think they do. You don't remember the way you think you do. You don't decide the way you think you decide. And you don't move the way you think you move. If you think your user sees like a camera, or remembers like a video tape, then you will get your designs all wrong. We have *so* many specialized methods that help us get it right. We have Visual Link Analysis, and Fitts's Law, and Signal Detection Theory. And if you are told your UX work can be done by a history major, then it is definitely time to run away. This is a field where guessing will get it wrong.

HFI's Knowledge Base System for Incorporating New Research in the UX field

A couple of billion dollars have been spent on research and established practice in the UX field. UX is a field where guessing will get it wrong.

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Counterfeit Indicator #7 – UX as Craftsmanship

In the 1980s, we mostly did UX work based on the expertise of individuals. We had few established methods, or standards, or knowledge management, or certifications. We had smart people, with advanced degrees, who were creative, and dedicated, and well meaning. We had apprentices to whom we gradually showed the tricks of the trade. But just like cobblers have been replaced by shoe factories, UX craftspeople are being replaced by institutionalized UX practices. So an immature UX offering is counterfeit, or at least past its expiration date.
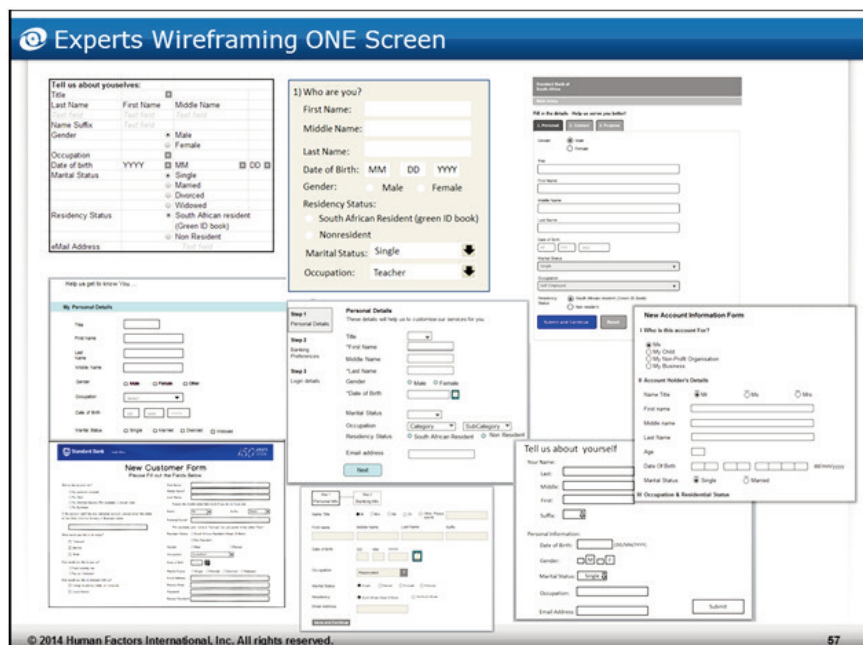
Just like cobblers have been replaced by shoe factories, UX craftspeople are being replaced by institutionalized UX practices.

If you are told you will get smart and creative people without methods, standards, and knowledge management, and training, and certifications; then it is counterfeit UX. They might argue that their disorganized operation will be more creative. And, in one sense that is true; you will get a lot of diverse things. But most will be worse (because the craftsperson is rushed and not as smart as everyone in a standards committee), and even if the designs are good they will be inconsistent.

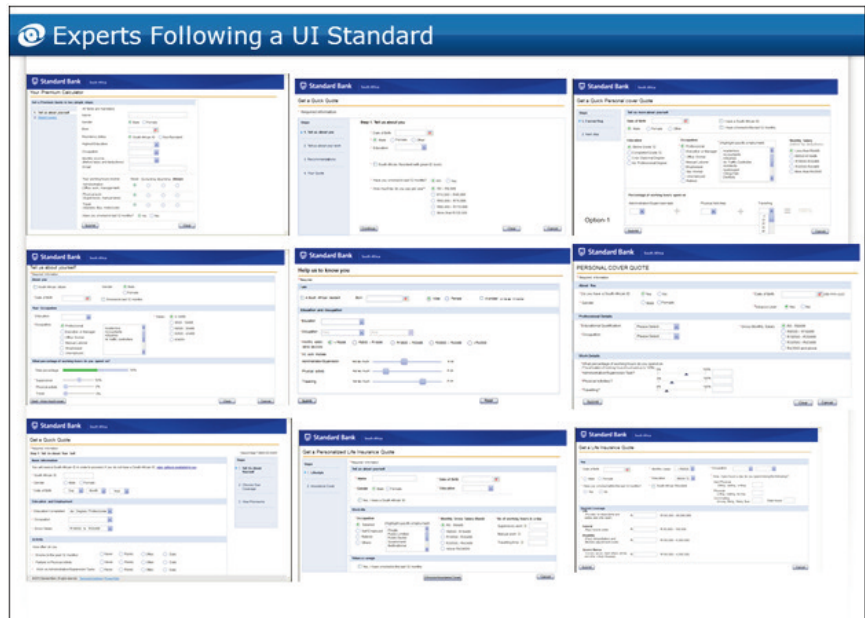*The following is a comparison recently run at HFI. All designs are of one defined insurance form. And all designers have master's degrees (or equivalent) and are Certified Usability Analysts™. The first slide is without a design standard. The second slide shows they are following a standard. There is still diversity and creativity. But it is not a confusing jumble.*

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Counterfeit Indicator #8 – Making You Decide

It is traditional with old school advertising agencies that the creative staff develop a good idea, and then two bad ones, and then show it to their client. The client stares at the three ideas and must then select one. But if you are the client, how do you decide the best advertising approach? Are you supposed to be magical? If you can actually do that, you should be running the ad agency.

In UX it is much *more* difficult to assess the advertisements. You can't possibly succeed based on common sense and even many decades of experience in your domain. There are complex interactions that you will not notice until you try a certain scenario in a certain environment. And it is nearly impossible to think through all the different dimensions of each user group – at HFI, we track 70 different dimensions for *each* type of user. There are complex interactions between types of users, types of environments, and types of scenarios. After nearly four decades of work in the field I can't just look at a design and be sure. So if your UX team asks that their design be validated by executives, then those folks are counterfeit. A competent practitioner operates based on "evidence based design." For every design there is a host of data that confirms that the design is correct. Executives are not designers or magicians. If they expect you to do magic, you should disappear as fast as you can.

The following is a summary chart of the data supporting one design. The design (at the center) has been done based on all the types of data shown attached. Each box represents a whole set of evidence that supports the design.

A competent practitioner operates on evidence-based design.

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The Genuine Article

The Single Best Indicator

If you want to know that your Rolex watch is genuine, there is a lot to look for. The best single indicator might be a second hand that sweeps rather than making small jumps as it moves. It is the same with a UX operation. The single best thing to look for is a management team that is focused on UX, experienced, credentialized, and empowered.

Don't overlook the empowerment issue. In organizations which focus on technology, media, or total solutions you might find a good UX operation that is in reality not allowed to operate properly. One large systems integrator has a nice little UX team. But it is in "pre-sales." That is, they are focused on eloquently claiming they can do UX work. But there is no one really there to deliver.

The Methodology

When HFI first got ISO certified about a decade ago, I learned about process driven design. Before that we relied on having good people. People are important, of course. But people leave; even Steve Jobs left. So you need to see a process that holds everything together. ISO certification made us…

- ▶ Document the process
- ▶ Follow the process
- ▶ Document that we followed the process
- ▶ Measure the results
- ▶ Continuously improve the process

Similarly, there should be a UX process that is fully documented and supported with tools and templates. It should include…

- ▶ UX Strategy
- ▶ Innovation
- ▶ Structural Design
- ▶ Detailed Design
- ▶ Validation
- ▶ Continuous Measurement and Improvement

It can use Agile methods for detailed design. But it should not try to use Agile for everything.

Look for a management team that is focused on UX, experienced, credentialed, and empowered.

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A page from HFI's Framework 7™ UX Methology

A team of people is needed to execute the methodology.

The Team

The methodology will not execute itself. So there needs to be a team of people. Today, a master's degree is pretty much the minimum working credential. It should be in engineering psychology or human-computer interface design. Or, at least a degree in product design or architecture. Degrees in history or programming don't really help much. Specific training and certification in UX is also pretty important. And, the team should include a solid technical mentoring program.

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HFI Consultant Maturity Modeling to Support UX Staff Mentoring and Training
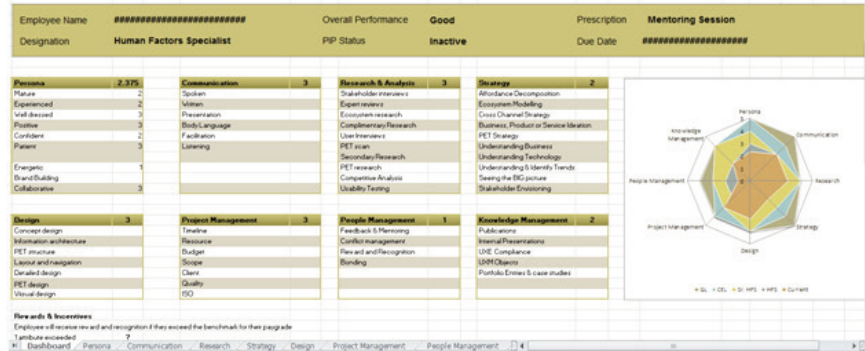
A solid UX team focuses on business objectives.

The Results

A solid UX team focuses on business objectives. All UX groups focus on a specific set of measurable dimensions of user performance and persuasion. UX practitioners work to make sure designs are...

Useful / Usable

▶ Speed

▶ Accuracy

▶ Training (Self-Evidency)

▶ Satisfaction

▶ Safety

Compelling

▶ Conversion

▶ Upsell and Cross Sell

▶ Retention

All practitioners should understand those dimensions. But they should also convert them to align with your specific business objectives. For example, in one organization we work to expand coverage to lower-income people and reduce service costs. In another, we work to help migrate customers to low-cost digital channels.

This focus on business results is a good indicator of a solid UX operation. But beyond design focus the results should be measured. The team should be able to help you to set up a dashboard of UX metrics. This is different from a dashboard of business results. Your operations group probably keeps solid business metrics and we should see these impacted by good UX work. The UX metrics will focus on the quality of the design. Was it created properly? Does it follow the research-based UX principles? How do users rate it? And, how do users actually perform in using the design? A genuine UX group will be delighted to tie their work to business objectives and generate solid metrics demonstrating their progress.

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Dashboard to track the user experience over time and report to management
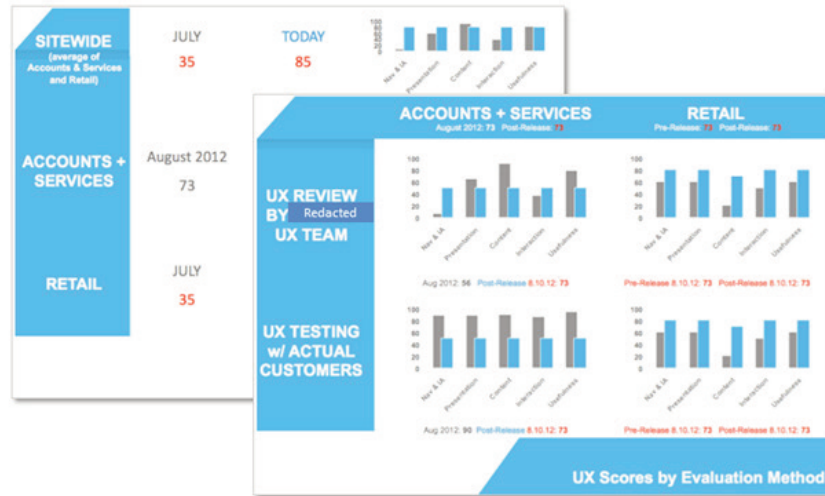
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The shift toward user centered design is a whole new wave of the information age. But that wave will not transition into a solid rising tide unless you can get the real UX work done. Counterfeit UX is the biggest threat to our success.

Now It's Our Turn – Let's Get It Right

For most of my career, UX was a secondary concern. Alan Turing, a British computer scientist and logician, used to refer to UX issues as "fussy little details" and was happy to enter numbers in the reverse sequence. Just getting the machine to run was the focus. Once machines became reliable, getting software to work was key. I've been told, "It was hard to build. It should be hard to use." Getting big programs to run was hard. But now that has become a given, and it is finally our turn. Finally, we can focus on applying those powerful machines and amazing programming skills to create precisely what people need and want. We can design carefully to accommodate people's limitations and real lifestyle. It is finally our turn.

But today I worry. If you just reach out to find a vendor in UX, or even a single practitioner, you are quite likely to get one who does not actually do proper UX. They are counterfeit, and they make the whole field look bad. I suspect there are about four "counterfeits" for each really competent operation or practitioner. I see it all the time. I often come in afterwards. I'm told they ran the tests saying, "See this button that says '*buy now*'? Now, click it. Was that easy?" I was told that one UX team went ahead and designed an interface by interviewing company staff, who were somehow magically supposed to be user surrogates; yet, we know that people inside a company will pick up all sorts of language and ideas that are not understood by real customers. I once had a UX group in a telco ask me to do data gathering for them in India. They wanted to research *one* participant. Actually, *any one* of the billion people, speaking 230 languages, from 35 different states, and earning anywhere from $1 a day to… a lot more than I earn.

It is wonderful to finally have the focus on design for users. Companies are shifting to "user centered design," which simply means that we first design the user experience and then use the technology to make that experience happen as planned. It is a whole new wave of the information age. But that wave will not transition into a solid rising tide, unless you can get the real UX work done. Counterfeit UX is the biggest threat to our success.

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Ask These Hard Questions!

Their Objectives

What does the UX team work to deliver?

They should target measurable UX objectives.

▶ Usefulness

▶ Speed   ▶ Satisfaction

▶ Accuracy   ▶ Safety

▶ Self-Evidency   ▶ Persuasion

And they should then target these objectives around your business goals. If you are building internal systems, they will worry about efficiency and reduced training time. For ecommerce, they should focus on persuasion.

What Do They Have

What kind of staff do the UX work?

They should be educated, trained, mentored, and certified for UX work. Check for at least master's degrees specific to the field. And look for leadership with a solid group of PhDs. Look for certification from HFI or the Board of Certification in Professional Ergonomics. Look for experience in the field. People with under a decade of experience should have solid oversight and guidance. UX is not a trivial field.

What kind of infrastructure do they have?

Do they even have the basics to support quality work? Look for…

▶ Methods and Templates

▶ User Interface Standards (*not* just a style guide)

▶ A knowledge management system where you can find all the research you have paid for each type of user segment, environment, and scenario. If those things end up spread across multiple Office documents you will pay to redo your research later.

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What They Do

What does their user centered design process include?
Do they cover the basics of user centered design? They should certainly have standard capabilities that include...

- ▶ Expert Review
- ▶ User-Centered Structural Design
- ▶ Detailed Design
- ▶ Usability Testing

If your group operates with Agile/Lean methods, the team should have processes to work effectively in that environment.

However, this is the minimum capability that you could have. A really good operation pushes user-centricity to another level. It will have an omni-channel strategy capability that makes sure you are designing the right things. Their process must ensure that all the channels fit together as a coherent whole, as opposed to siloed development that creates an awkward and confusing combination of disparate designs.

The user centered design team should also be able to do systematic innovation work. This is not like a company suggestion box. It means having a solid model of customer ecosystems, identifying opportunity points, and recommending new products and services that meet those needs.

And if you have a situation where conversion is important, they should have skills in persuasion engineering. I think this work is the next frontier in the UX space. It is the next differentiator. Soon there will be complete baseline expectation that designs will be easy to use. And the challenge will be having designs that are engaging and compelling.

What They Deliver

Ask what the team delivers. "Nice" slides shows are not an ideal end to user centric work. The team should provide specifications with designs that are ready to be implemented. And they should be able to shepherd those designs through successful delivery.

Finally, a team that just accomplishes its project fails to set up a foundation for a stronger practice. Does the team leave behind reusable insights and findings from each program so that each successive UX effort is more efficient and more effective? If the team is short-sighted, you will never build a strong differentiated capability. And, like Sisyphus, you will start again from scratch each day.

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Dr. Eric Schaffer
Founder and CEO
Human Factors International

About Eric

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 UX: A Step-by-Step Guide to a User Experience Practice*, 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 one hundred Fortune 500 clients, providing user experience design consulting and training. He has recently been traveling the world teaching HFI's 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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