

The Church of Usability

Six Web usability gurus, including Jakob Nielsen, offer advice on improving visitor experience.

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By Alan K'necht

Throughout history, people have sought wise leaders to show them the true light, and Web designers are no different. In the quest for effective sites, designers seek enlightened individuals—sages—to guide them to a truer path. These gurus of the GUI are respected; their books are sold out, and their lectures and seminars become standing-room-only love-ins. When they speak, the masses hang on every word, and they are quoted as if their words were divinely inspired.

Who are these special individuals, the prophets of effective Web user-interface design? We sought out and interviewed six of these inspired souls, scribed their words, and made them Web. You may already belong to one of their factions, but we've placed each on his own mount so that you can contrast and compare and pick a path to usability salvation. (Note: The editors of www.techrepublic.com take no responsibility for crusades, jihads, or other religious warfare inspired by these individuals.)

Andrew Chak

Andrew Chak spreads his gospel of effective user-interface design at conferences around the world. His approach is "to inspire by providing many examples" and highlight the lessons to be learned from those examples. Chak believes that designers are there not only to design but to support the users' tasks at a site. When not converting Web builders, Chak works as the principal consultant for User Experience Design at [Derivion](http://www.derivion.com) (<http://www.derivion.com>).

While influenced by the works of Alan Cooper and Lucy Lockwood, Chak is quickly establishing his own reputation. His philosophy of holistic experience pushes designers to look for solutions beyond the Web. Chak explains that one needs "to look at all the

competition for a Web site. The competition is not just another Web site; it's also real life. So if it's not better than real life, people won't use it."

Chak offers a simple example. If you ran out of razor blades, it wouldn't matter how easy a Web site was to use, or what its shipping policy was. You simply need razor blades now, and it's faster and simpler to run to the corner store. So a Web site selling razor blades must compete not only with other Web sites, but with the corner store as well. To improve a site, Chak encourages us to think of real-life shopping experiences. If you go to a store to buy a sports bag, "you'll pick it up, turn it over, look at it from various angles, check the measurements, perhaps try putting various objects in it. So why do Web stores only show a single view of the bag?"

Chak's three tenets of good design are fast page loads, intuitive navigation, and minimalist design.

Chak's commandments

Thou shalt:

- Optimize search
- Use trigger words with anything that is linkable (for example, use *mortgage* and don't bury it under *loans* on the home page)
- Be predictable
- Provide appropriately detailed info
- Have a call to action on each page
- Use readily understood conventions (for example, blue underline for hyperlink, no underline for normal text)
- Let users transact via multiple mediums (clicks and mortar—online, phone, and store)
- Earn the right to ask for information
- Give users starting points
- Integrate e-mail (if transaction is completed, send a receipt and thank-you to confirm that the order has been shipped)

Thou shalt not:

- Use cute labels

- Give too many choices up front
- Shorten labels for aesthetics

Adherents

Chak points to [Shutterfly](http://www.shutterfly.com) (<http://www.shutterfly.com>) as most closely adhering to his vision of effective user interface design: "Shutterfly is a digital photo processing lab that provides clear explanations on what it does and how it works. I especially like the simplicity of the home page where users primarily choose between 'Learn more' and 'Sign up.'"

As to a site that follows the wrong path, Chak points to [Free Country](http://www.freecountry.com/) (<http://www.freecountry.com/>), "a Web site for a clothing retailer that just doesn't make sense. To get to pictures of clothing, you need to navigate through a clothing matrix that requires you to click miniature clothing images ordered by sporty/formal and glossy/textured. This is an awkward navigation system, and when you finally find some clothing that you might be interested in, you then find out that you can't purchase the item online!"

Sacred texts

Chak suggests that builders read *Don't Make Me Think!* (<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&kw=don%27t+make+me+think&pid=0789723107&ps=t&pgid=info>) by Steve Krug, as well as [WebWord.com](http://www.webword.com/) (<http://www.webword.com/>).

Salvation

Chak's wish is for designers to "stop getting in the way! Make it easy for users to do what you want them to do. Don't impose your graphics, flash, and methodology. Let them do it their way. Don't design for your portfolio, design for what the customer needs."

Alan Cooper

"Good design is founded on a deep understanding of both broad human characteristics and the specific intentions of a particular constituency, so that it can marshal the appropriate information, processes, and technology to allow those constituents to achieve their goals, both professional and personal."

Attendees of Alan Cooper's addresses nod their heads in unison as if placed in a hypnotic trance. Cooper's ability to strike that

common chord, not only in all Web developers but in everyone in the IT industry, only strengthens his grip on attendees' bodies and souls and forces designers to question their assumptions. He makes his point not with evangelical fervor but with words measured to impact his listeners' intellects.

The inventor of Visual Basic, Cooper has solidified his bid for prophet status with best-selling books and keynote addresses, and has popularized the concept of interaction design strategy and personas. The three basic tenets on Cooper's road to salvation are **minimalist design**, **fast page loading**, and **robust error management**.

Cooper's commandments

- One size does not fit all; one Web page cannot serve all of your visitors, even as an entry point.
- Don't demand commitment—or anything else—from your visitors.
- Provide lots and lots of detailed, useful information in multivariate form.
- Don't make users navigate through a complex, hierarchical Web site only to find that they have to use the phone to get answers to questions.
- The only time that animation is called for on a computer screen (aside from in the movies) is when your house is on fire.
- Do not design for eyeballs. Users are citizens, not consumers.
- Do not ship early. Do not ship often. Do not experiment on users.
- Your search mechanism sucks like a Hoover. Fix it.
- [David Siegel](http://www.dsiegel.com/) (<http://www.dsiegel.com/>) (author of *Creating Killer Web Sites*) was totally wrong about that first-page thing.
- Like a bad dream, the dominance of the browser on our internetworking will eventually come to an end.
- There is no such thing as a portal.

Adherents

While many out there are devouring Cooper's latest book and attending his presentations, few—if any—have entirely incorporated his thoughts into their work. One disciple of Cooper is Andrew Chak.

Sacred texts

Alan Cooper finds his inspiration in the works of [Christopher Alexander](http://www.patternlanguage.com) (<http://www.patternlanguage.com>), [Don Norman](http://www.jnd.org/) (<http://www.jnd.org/>), [Andy Hertzfeld](http://www.gamespot.com/features/sidlegacy/), [Sid Meier](http://www.gamespot.com/features/sidlegacy/) (<http://www.gamespot.com/features/sidlegacy/>), and [Ed Tufte](http://public.logica.com/~stepneys/bib/nf/tufte.htm) (<http://public.logica.com/~stepneys/bib/nf/tufte.htm>).

Salvation

Like all of our experts on effective design, Cooper doesn't believe that heaven exists on the Web, but he paints a vision of what salvation could be after the death of the current state of Web design. He tells us that we can stop committing the sins of early software developers by following the road he has laid before us.

Robert Davis and Paul Laroche

Much like Jared Spool, [Answerthink](http://www.answerthink.com/) (<http://www.answerthink.com/>) user-interface gurus Robert Davis and Paul Laroche advance philosophies driven by results from a corporate lab and the experience of site architects on their team. Yet they mix the clinical results with the realities of the real world, where individual demands and corporate needs must be balanced for an effective design.

Through a combination of workshops for their clients and speaking engagements, they are spreading their own particular gospel of effective user-interface design. They teach that "truly successful user-interface design is a natural extension of thoughtful user-centric system/experience design." They tell their followers that "**effective** and **sexy** are not mutually exclusive. Have the courage to redefine what cool means to include **successful** and **intuitive**."

Davis and Laroche's commandments

Thou shalt:

- Be simple
- Be consistent
- Be relevant
- Be useful—design the site in support of accomplishing true user tasks efficiently
- Be clear—make navigation evident and simple, and make labels complete enough to be truly useful
- Be cruel—ensure that navigation, design, and content all suit the user's purposes, and if they don't, kill them

Thou shalt not:

- Make users wait—slow page loads, too many plug-in downloads...see ya!
- Expect the user to work to figure your site out
- Lose focus—don't show off every idea you ever had
- Go it alone—don't assume design isn't a multidisciplinary team effort
- Expect users to change for you
- Design for people you don't know—determine site requirements by engaging users directly
- Design in the dark—don't design or deploy a site without iterative testing with target users and without conducting comparative analyses on competitors
- Feel that you have to blaze your own trail all the time—conventions often become conventions for a reason
- Use cute metaphors
- Make users sit through your groovy Flash intro

Adherents

Laroche points to [Patagonia](http://www.patagonia.com) (<http://www.patagonia.com>) as an example of effective user-interface design. The user "can develop a quick mental navigation structure and it doesn't change. The site sells clothes and nothing else." [Hoover's Online](http://www.hoovers.com/) (<http://www.hoovers.com/>) stands out as the epitome of bad user-interface design. This financial information site's information is hard to find, and the home page gives users more than 70 choices.

Sacred texts

Among the works that Davis and Laroche find inspirational are:

Contextual Design (<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&kw=Contextual+Design&pid=1558604111&ps=t&pgid=info>), by Karen Holtzblatt and Hugh Beyer

Web Navigation (<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&kw=Web+Navigation+&pid=1565929845&ps=t&pgid=info>), by Jennifer Fleming

Designing Business (<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&kw=Clement+Mok&pid=0201702835&ps=t&pgid=info>), by Clement Mok

The Usability Engineering Lifecycle (<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&kw=Usability+Engineering&pid=1558605614&ps=t&pgid=info>),

by Deborah J. Mayhew

The Experience Economy (<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&kw=James+H.+Gilmore&pid=0875848192&ps=t&pgid=info>), by B.

Joseph Pine II and James H. Gilmore

Experiential Marketing (<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&kw=Experiential+Marketing&pid=0684854236&ps=t&pgid=info>), by Bernd

Schmitt

The Invisible Computer (<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&kw=invisible+Computer&pid=0262640414&ps=t&pgid=info>) and *The*

Design of Everyday Things (<http://www.mysimon.com/msrch/index.jhtml?>

[c=bookisbn&format=&author=donald+a.+norman&title=&kw=&pid=0262640376&ps=t&pgid=info](http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&format=&author=donald+a.+norman&title=&kw=&pid=0262640376&ps=t&pgid=info)), both by Don Norman

Information Architects (<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&kw=information+Architects&pid=1888001380&ps=t&pgid=info>), by Richard

Wurman

Salvation

Web development must be an "inclusive and open concept with art, architecture, and content as a total mix. One must develop the application and user interface together." The biggest sin that Davis and Laroche wish designers would immediately stop is designing pages with multiple purposes. "Each page must have a single purpose, but they often contain conflicting messages." Currently, the Web "looks like a car crash."

Jakob Nielsen

Jakob Nielsen spreads the gospel of effective user-interface design by constantly haranguing the masses through print and in person at conferences. As of the post date for this article, he has been evangelizing his ideas on the [User Experience World Tour](http://www.NNgroup.com/worldtour/) (<http://www.NNgroup.com/worldtour/>). Nielsen holds a Ph.D. and is a user advocate and principal of the [Nielsen Norman Group](http://www.NNgroup.com/) (<http://www.NNgroup.com/>), which he cofounded with Dr. Donald A. Norman (a former vice president of research at Apple Computer). Until 1998 he was a Sun Microsystems Distinguished Engineer. He is widely regarded as the world's leading expert on Web usability.

Nielsen has attained iconic status and is one of the most revered user-interface gurus lecturing today. Many designers throughout the world have placed him on one of the tallest pedestals around, while others stand armed with stones trying to knock him off.

He enlightens designers with three basic tenets: **simplicity, less is more**, and **the idea of supporting users' tasks and getting out of their way**.

Through these tenets Nielsen sets his audience on the road to better site design, which he believes, like the proverbial journey of a thousand miles, starts with one step. Nielsen asks that everyone leaving his addresses or workshops make one change to their site(s) that improves the user's experience. It is these small changes that have the biggest impact.

As proof that Nielsen has been effective in changing how we design sites, he points out that he no longer considers page-load speed to be the most critical item requiring fixing. Between increases in bandwidth and people making more efficient pages, Nielsen feels that he has already changed the world.

Nielsen's commandments

Thou shalt:

- Follow Web standards in coding the site (start with standards by W3C, then use anything else that has become an acceptable standard, such as JavaScript)
- Follow convention—if 80 percent to 90 percent of users do something, it is a convention
- Emphasize fast response time (both in page weight and in server capacity)
- Write for the Web: concise, objective, and easy to scan
- Help users decide where **not** to go: differentiate product lists
- Support search, but don't make it too fancy (Google sets the standard)
- Conduct task analysis before doing any design
- Emphasize task support while designing (for example, comparison shopping)
- Run user tests several times during the design process
- Make sites accessible to people with disabilities

Thou shalt not:

- Get in the way of the user: no splash pages, no Flash intros, don't pollute content with market-ese and gratuitous graphics (for example, photos of smiling people)
- Include uninvited pop-up windows, except for help
- Break the Back button (opening new browser windows is a common fallacy)
- Make functional design elements look like advertising (they will be ignored)
- Use moving text
- Allow linkrot to happen
- Hide shipping costs or other "gotchas"—these will cause abandoned shopping carts
- Use focus groups or surveys to guide interaction design
- Redesign obsessively: Get it right before you launch and keep the same design for a year

Adherents

Nielsen points to Yahoo as the site that most closely adheres to his definition of an effective Web site. He feels it is "consistently good in almost all elements you want to consider" and "you know what to do when you're on different pages." He points out that Yahoo "continues to tweak the design, but doesn't pull the rug out from experienced users."

Sacred texts

Nielsen has high regard not only for his latest book *Designing Web Usability: The Practice of Simplicity* (<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&format=&author=jakob+nielsen&title=&kw=web+&pid=156205810X&ps=t&pgid=info>), but also for *Understanding Comics* (<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&kw=scott+mcccloud&pid=1563897598&ps=t&pgid=info>), by Scott McCloud. "This book provides great insight into the concept of simplicity and how it works in visual communication." In addition to Nielsen's book about Web usability, people working on e-commerce sites should also examine his [219 design guidelines for e-commerce usability](http://www.nngroup.com/reports/ecommerce) (<http://www.nngroup.com/reports/ecommerce>). Web sites that Nielsen considers valuable usability resources are his own [useit.com](http://www.useit.com) (<http://www.useit.com>), [Tomalak's Realm](http://www.tomalak.org/) (<http://www.tomalak.org/>), and [Usable Web](http://www.usableweb.com/) (<http://www.usableweb.com/>).

Salvation

For Nielsen, a sinless Web site needs functional design, an accurate system for feedback to the visitor, and minimalism. Many may

be shocked to see Nielsen list minimalist design as number three, but he's quick to point out that, "I have never been against graphics on a Web site, but they must be part of the content. If you have a biography of someone on a Web page, of course you need their picture, but you don't need a blinking star burst to draw attention."

Finally, to illustrate the importance for all designers to stick to HTML standards and conventions, Nielsen points to the omnipresent traffic light: "To my knowledge, there is no international standard that red means stop and green means go. But can you imagine what would happen at an intersection if someone decided to change that color convention on their own?"

Jared Spool

Jared Spool goes out of his way to position himself as anything but a user-interface designer. Yet through his company, [User Interface Engineering](http://world.std.com/~uieweb/) (UIE), he is a frequent keynote speaker on effective Web design, produces a monthly publication reviewing Web sites for effectiveness, and runs a series of workshops of effective Web design. Founded in 1988, UIE is an independent research, training, and consulting firm specializing in user-interface design and product usability issues. It has grown into one of the United States' leading usability research practices, conducting more than 400 usability tests each year on software and Web sites.

Spool doesn't speculate on what makes the perfect Web site, or how many graphics can dance on the face of a Browser, instead restricting his comments to things in the real world. "I can only reference what I have or my company has observed."

So why has the Web design community given him so much attention? Perhaps it's the way he delivers his message or perhaps it's just that we need someone who snaps us back to reality. In either case, Web designers look to Spool for the answers. And yes, Spool has the answer, and it is 42.

Unlike the proverbial answer 42 in *Hitchhiker's Guide to the Galaxy*, Spool also has the question, which is "What percentage of the time are visitors successful at achieving their goals on the best-designed Web sites?" From Spool's observations, the answer is 42 percent. In Spool's simple understated approach, "All sites are failures." Which sites scored the best of all the failures? According to Spool, they are [Amazon.com](http://www.amazon.com), [eBay](http://www.ebay.com/), [Dell](http://www.dell.com/), and [CNN.com](http://www.cnn.com/). The worst of the worst are [Disney.com](http://www.disney.com), [About](http://www.about.com/), and any site that sells computer accessories.

Spool's commandments

Because Spool has never seen an effective Web site, he doesn't have a list of what to fix first, nor can he even list key items that make up an effective site, "I'm a historian, trying to figure out if it works, not if it will work." Yet we were able to get him to break his vow of silence and extract some morsels of information.

- Know the goals of the site.
- Know the goals of the users.
- Make sure that content is achieving your goals (including graphics, advertising, and so on).
- Make sure the developers know how the site makes money.

The most interesting fact that Spool was able to share regarded page-load speed and why we shouldn't be overly concerned with it. From one of his studies, "A group of users all ranked a series of Web sites the same (slowest to fastest)." Yet when Spool's team reviewed the videotape evidence, "there was no correlation between the actual load speeds and how the group ranked the sites." What the team discovered was "a direct correlation between perceived speed and the ability of the user to achieve their goal."

Sacred texts

Designers interested in learning from the enigmatic Spool should read *Web Site Usability: A Designer's Guide*

(<http://www.mysimon.com/msrch/index.jhtml?c=bookisbn&kw=Web+Site+Usability&pid=155860569X&ps=t&pgid=info>) and UIE's comprehensive set of reports entitled *Designing Information-Rich Web Sites* (<http://www.uireports.com/>).

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