We have known about the ability to influence people’s behavior and had it well documented since the 1960s, but not until recently have we systematically tried to apply many well known psychological principles to our work online. Your local bookstore is now full of books curiously named with one-word titles like *Influence*, *Sway*, *Drive* and *Nudge*. *Influence* [1] is the book that really popularized the principles that can effectively persuade someone to act – whether that action is to buy a product or recycle towels in a hotel room. In *Influence*, Cialdini provides fascinating demonstrations that subtle cues like saying “many people who stay in this room recycle” are much more effective than saying “please recycle.” This article walks you through the lifecycle of a decision and highlights the principles you can use to make your designs have more impact.

It is up to you to use what we know about the brain and psychology for the forces of good. Don’t mistake persuasive design with coercion – we are simply encouraging people to act much in the same way every commercial on the radio might. Groupon is a terrific example of a company that uses nearly all of the techniques described below.

Groupon uses many persuasive techniques, yet they have a terrifically positive satisfaction rating among consumers. Clearly some of these principles can be effective, and they can also be used to do good – precisely why I was asked to present this research to groups like the National Institutes of Health – who would be delighted if we ate more healthy food, exercised more and took our full course of medicine. I’ll leave it for you to decide how to use these principles to make the world a better place.

**Persuasive Design Defined**

B.J. Fogg, who founded the Captology Lab at Stanford and wrote the influential book *Persuasive Technology*, describes persuasive technology as “any interactive computing system designed to change people’s attitudes or behaviors.” [2, p. 1]
Perhaps viewed another way you could say that our work is no longer to create web pages, words on a page or smart phone interactions, but rather to change people’s behaviors. As Robert Fabricant of Frog Design says, “Behavior is our new medium.” It is an interesting perspective from which to view your work.

Zynga, Foursquare, Groupon, Mint and LivingSocial are great examples of putting this concept into practice. Ultimately each group has increased the usability of a website, tool or set of words and combined that ease of use with a brilliant experience and persuasive techniques that together motivate people to act.

Persuasive Design: Key Principles

To better describe some of the major principles I’d like you to become familiar with I want you to consider a situation where you are going online to decide if you want to make a purchase. The principles described below with the techniques summarized in Table 1 apply to all sorts of situations but are easily understood in the context of e-commerce.

Phase I: “What’s That?”

Early in the decision making process – whether buying something or even meeting someone for the first time – there are some psychological principles that can influence whether we are willing to engage and/or act.

Likability. When getting ready for an important meeting, I’m betting you try not to over dress (black tie) or under dress (flip flops). That’s because we want our audience to instantly relate to us as they use patterns and stereotypes from their past to decide if we are to be trusted. Seeing a person of approximately our age, with similar clothing and hair styles and in work and social situations we can relate to, will help put us at ease and make us more willing to listen to an offering or advice. Your designs and content should be consistent with your audience’s expectations.

Free. While I tend to run from people with free samples of food at the mall food court, many people take the samples. That acceptance helps the food court vendors in many ways: they have given you something so you feel that they are helping you. Further, we humans generally also feel the need to

<table>
<thead>
<tr>
<th>TABLE 1. Summary of Persuasive Design Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Likability</strong></td>
</tr>
<tr>
<td><strong>Free</strong></td>
</tr>
<tr>
<td><strong>Commitment</strong></td>
</tr>
<tr>
<td><strong>Intrigue</strong></td>
</tr>
<tr>
<td><strong>Aesthetics</strong></td>
</tr>
<tr>
<td><strong>Narrative</strong></td>
</tr>
<tr>
<td><strong>Achievement</strong></td>
</tr>
<tr>
<td><strong>Reputation</strong></td>
</tr>
<tr>
<td><strong>Authority</strong></td>
</tr>
<tr>
<td><strong>Social proof</strong></td>
</tr>
<tr>
<td><strong>Loss aversion</strong></td>
</tr>
<tr>
<td><strong>Status quo</strong></td>
</tr>
<tr>
<td><strong>Effort</strong></td>
</tr>
<tr>
<td><strong>Scarcity</strong></td>
</tr>
<tr>
<td><strong>Loss aversion</strong></td>
</tr>
<tr>
<td><strong>Ownership</strong></td>
</tr>
</tbody>
</table>
reciprocate, and now you owe the vendors a favor (however small). Lastly,
you’ve tried the food and understand its benefits, but without needing to
make a commitment – which we’ll find later is important. So free is good –
offer something free on your site whether it is a white paper or a free trial.
There is a reason why “Freemium” apps for your smartphones are so popular
with developers and consumers.

Commitment. Now that your design relates to your audience and has offered
something free, you need to ask for a small commitment. Infamously, in the
1990s, the Staples website used to ask for your zipcode before you could
view anything on the site – which did not make for an ideal customer
experience. But if you have offered something of value now you can ask for
a small commitment – perhaps it might be to join your email list, or you
might ask your visitors a simple question, “Which of these is your favorite?”
and let them instantly view the results. By asking for that small commitment
people are willing to give a bit more information. Perhaps the next page might
ask for the person’s state or city. Over time you are much more likely to
acquire all the information you might be seeking (within reason). Multipage
forms often succeed because of sunk costs. People say to themselves, “I
already filled out the last page, so I might as well keep going with this one.”
As long as the individuals think there is something sufficiently valuable
once they submit the form, they will tend to continue.

Phase II: “Oh Cool”

Now that I’ve you’ve got your audience browsing the store, you need
something to catch their eye. Design that is professional and appropriate for
the audience is more likely to get them to buy. Here are some interesting
principles to consider.

Intrigue. It has been frequently demonstrated that holding back some details
on a page makes your audience more likely to keep clicking. I saw a flat TV
ad that showed a side view of a flat screen TV that said “If it looks this
good from the side you should see the front.” That image and caption made
me want to see the front (and ultimately I bought that TV). Your nightly
news programs might promote themselves with teasers like this: “Will a
tornado sweep through our town with devastating consequences tonight?
Details at 11 p.m.” Avoid spilling all your candy in the lobby. Rather, slowly
mete out details and build intrigue to keep your audience hungry for more.

Aesthetics. You are more engaged with a product or idea if it is presented in
an aesthetically pleasing way. I paid several dollars more for a vegetable
peeler with the OXO Good Grips design because it looked like it worked
better than the regular metal one. Don Norman [3] cites several research
studies that reveal that we think something works better solely because we
like the way its looks (not because it actually works better). So make sure
your designs are appropriate for your target audience and that the designs relate to their aesthetic and interaction preferences.

**Phase III: “Why Would I Want One?”**

So far your audience was willing to continue to browse your site, spotted something that looked “cool” (or “sick” for the Gen Y folks). Now the question arises: Does this item have value for me. Two behavioral principles can make a big impact here.

**Narrative.** Tell me a story and help me understand why I want that particular item and how it might fit into my work or life. J&R (on the web at JR.com), an electronics store in New York City, has a terrific range of products, but they rarely wrap them in a story that helps me understand why I’d find them of value. In contrast Sears had a homepage with a pool scene, a barbeque I might want to purchase and a picture of the friendly Sears staff who might deliver and assemble the barbeque. Instantly, I could envision myself sitting next to the pool enjoying a barbeque with friends. Tell a story!

**Achievement.** Think of climbing up Maslow’s hierarchy of needs. We are always looking to move up, and the more you can demonstrate that your offer will help your audience achieve their goals and “keep up with the Joneses,” the more they will want it. Personal achievement and the praise they will get for acting on your offer will also make it much more appealing.

**Phase IV: Is It Any Good?**

Now that your audience has seen content that intrigues them and might achieve their goals, they will want proof that it really works.

**Reputation.** Your brand is important, and there is a reason why I might be more interested in buying a Weber grill than I am a Fuego grill (no offense, please, Fuego representatives). Established reputations are why many startups face an uphill battle and need to work harder on other aspects of persuasive design to be effective.

**Trusted authority.** Suppose your back tooth hurt, and you needed advice. Would you be more likely to take advice from the American Dental Association or a site called HealthyTeeth.org? I’m willing to bet your answer was the former. Having what landing page experts call “Trust Labels” for your site is important. In the United States information directly from a federal government agency is often more persuasive than information from a manufacturer with less impartiality.

**Social proof.** Lastly, I’m more likely to assume what you are offering is good if many people have bought and recommended it. Are you like me and feel nervous when you’re the only patron in a restaurant? That’s social proof in action. Try to use design techniques such as Tweet counts, Diggs or social network links to reassure your visitors that they are not the only patrons in your establishment. Using marquee clients to demonstrate your value is a great example of this technique.

**Phase V: Is It Worth That Price/Effort?**

You have established that your offerings are aesthetically pleasing, relate to your audience, will provide a sense of achievement and many reputable brands have already chosen your offerings. As a result, we have excited any number of areas within the subcortical structures of the brain. Now we need
to overcome the objections from the neocortex (or Super Ego for our Freudian friends). Here’s how we do just that.

**Framing.** As a soon-to-be professor who was being offered jobs, it was important to get a great package of start-up funds to build my laboratory. In the key interview with the provost (the holder of the purse strings) I let him/her know that, while I wanted to, I was not going to ask for a new building with a terrific MRI machine that can measure blood flow in the brain, which together cost millions of dollars. Rather, I just wanted this other equipment that costs $150,000. Now if I had asked the Provost for $150,000 outright, I would expect the provost to counter with an amount around $30,000. However, because I framed the value at several million, $150k didn’t sound so bad.

**Anchoring.** There is a terrific story behind black pearls. When they were first discovered, it turned out that they were actually fairly common and originally not thought to be valuable – because the white ones are the good ones. However, black pearls were harvested and made into necklaces but only sold at Harry Winston’s (a famous jeweler in New York) at a very high price. Because of the way they were presented (exclusive and expensive) they were a terrific hit and have ever since commanded higher prices than white pearls. Position your offerings as equally special and rare.

**Phase VI: “I Want One But…”**

We all have a last hesitation before making a big decision or purchase. Our systems are wired to be less happy about a great decision than they are unhappy about a bad decision. Here are some hurdles your designs need to overcome before they can be a smashing success.

**Loss aversion.** The e-tailer Zappos, above all others, has overcome loss aversion hesitation. By allowing shoe shoppers to buy what they like, try them on at home and provide free returns has virtually erased the fear of “buyer’s remorse” (or loss aversion). Think about how your offerings can reduce this barrier. A freemium model or “first 30 days free” is a terrific way to overcome this objection.

**Status quo.** Perhaps less well known is the phenomenon that people hesitate to make a decision when that decision might really impact their status quo.

Make sure, whatever you are asking someone to decide on (for example, paperless banking), that the change entailed by the decision is not so great that it gives them pause. Help them fit the new way of working or living into their existing expectations about how work or life should work.

**Effort.** Perhaps self-explanatory, but often an issue. Don’t make it hard for me to accept the decision you want me to make. For example, don’t make it too hard for me to buy something from you online (e.g., “For security purposes, please enter the last four digits of your grandmother’s Social Security Number”). In the ecommerce world Amazon’s “Buy Now with 1-Click” is a great example of making it extremely easy to make a commitment.

**Phase VII: Conversion**

Bravo! You have offered something free and gotten a commitment, provided intrigue and narrative, framed the issue to make the value compelling and overcome any loss aversion. Now your designs need to move people to act on the decision they’ve made.

**Scarcity.** Just take a look at offers by Groupon or Living Social for examples of scarcity. This deal is being offered today, and you’ll never ever get a better offer. That is scarcity. If you are offering products or services, you must answer the question: Why are my products or services special? Why can you only get them from me and if you don’t get them from me, it simply won’t be the same.
Loss aversion. I can tell you’ve been reading this article carefully, because you’re saying to yourself, “Didn’t he just write about loss aversion?” Indeed you are correct. But there is another angle to loss aversion. In addition to buyer’s remorse, there is the opposite effect: “Am I going to kick myself for not taking advantage of a great situation?” One way that e-tailers take full advantage of loss aversion is by up-selling. Amazon says something like “Add $14.81 worth of eligible items to qualify for free shipping.” Our family rarely passes up the chance to buy more and get free shipping – and that’s loss aversion compelling a behavior.

Ownership. Last is the concept of ownership. Simply put it reflects the fact that consumers that can control the buying process are more likely to buy. Make sure your designs make people feel like they are in the driver’s seat.

Conclusion
These principles can be applied to almost any design you encounter, from filling out a form to wholesale behavior change. Cialdini reports that using these techniques (each alone) can change typical behaviors by as much as 40%. Use the questions in Table 1 to make sure your designs have all the impact they should.

Resources Mentioned in the Article