

WHITE PAPER

THE PERSUASIVE USER EXPERIENCE

Design and content strategies that establish credibility,
build trust, and influence user behavior.



Familiar
Form

by Brian Bobo



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Executive summary

The pervasiveness of web-enabled devices and broadband Internet access has created an environment of nearly omnipresent connectivity. Because of this, people increasingly turn to online sources to guide their choices, and have felt comfortable doing so for some time. Organizations that hope to thrive in this environment must find ways to influence these choices. The most efficient method of affecting user behavior is to create a persuasive interactive experience.

This paper explains why presenting the user with a positive and persuasive interactive experience is essential to maintaining a competitive advantage. We discuss the psychology of persuasion, and the complexities of integrating elements of influence into the user experience. We also review the types of organizations that might benefit from deploying persuasive interfaces, as well as how they stand to benefit. Additionally, we emphasize the importance of aligning the strategies and tactics of persuasion with the goals of both the organization and the user.

The paper also presents an analysis of various devices of influence that can be integrated into the user experience. Credibility is one of the first means of gaining user trust and, eventually, the ability to influence user action. We discuss the four major types of credibility and their basis for believability, as

well as the individual elements of credibility that must be conveyed to the user.

Once an organization or website has established credibility, it can begin the process of building trust. We present a historical basis for trust along with a modern definition, and discuss several dimensions of trust that can be woven into a persuasive user experience.

The real process of influencing behavior begins after credibility and trust have been secured. We discuss the functional roles that interactive technologies play, and their capacity to influence users in each of those roles. We also present a framework for user attitude and action, and analyze several specific elements of influence that can be merged into human-computer interaction.

Finally, we discuss the possibility for developing a heuristic framework from these various components of influence – a framework that could serve as a structural basis for creating new persuasive designs or evaluating existing designs. We also explain some of the implications and business advantages of such a heuristic structure, as well as the importance of such a structure to organizations that expect to remain competitive – or even merely popular – in our hyper-connected era.

Introduction

When people are faced with important business or personal decisions, they tend to gather and evaluate information. The wide availability of broadband Internet access, coupled with the proliferation of mobile devices that provide Internet connectivity, have made the web the primary decision support technology for most people. For organizations to establish and sustain a competitive advantage, they must be able to effectively influence the decisions of online users.

Often, a person's first interaction with an organization will consist of a website visit. If their experience is negative, it may very well be that user's last interaction with the organization. Successful organizations form lasting relationships with their constituents. In order to begin building a relationship with a website user, an organization must present that user with a positive experience. In order to motivate a website user to take an action, the organization must also present that user with a persuasive experience.

Persuasion and user experience

There has been much discussion and debate over the precise collection of elements that form the complete user experience. Ease-of-use, design, layout, information architecture, accessibility, navigation, utility, and content each contribute to the overall user experience. However, regardless of the individual components, most human-computer interaction

practitioners agree that user experience is highly subjective. After all, the experience is ultimately the domain of the user, and not of the designers, developers, and content producers.

User experience is perhaps best viewed as a totality of the website visitor's perceptions, emotions, and responses. For a website to meet user needs, specific

strategies and tactics must be used to create positive user perceptions and emotions. For a website to meet

organizational goals, specific strategies and tactics must be used to elicit the desired user response. By introducing persuasion as an element of the user experience framework, organizations will have much greater power to influence user behavior.

Integrating persuasion into the user experience requires not only a working knowledge of user-centered design, but a deep understanding of how to build influence. Persuasive design is not just about making a website easy to use or aesthetically pleasing. It is about getting the user to like and trust the organization behind the website, and then motivating the user and guiding them through the desired action.

"A persuasive user experience is a competitive advantage."

Psychologists have identified many techniques that can be employed to persuade people. A number of these techniques – such as framing, metaphor, social proof, and reciprocity – can transfer successfully to online use. It must be understood, though, that there are several fundamental factors that affect user experience.

“Organizational and user goals must drive the design process.”

These factors include the system, the context, and of course the user.¹ How these factors affect user experience must be

fully taken into account before persuasive strategies can be dovetailed into the user experience framework.

With a solid understanding of the principles of both persuasion and user experience, a set of heuristics can be developed as a framework for influential interaction design. These same heuristics can also be used to evaluate existing web and mobile interfaces for their ability to gain user confidence and motivate action.

Benefits and goals

Almost any type of organization can benefit from presenting their website visitors with a persuasive user experience. These benefits can be realized in the form of reduced costs, increased revenue, or gaining a strategic advantage over competitors. However, for a persuasive design to produce any positive outcome, both organizational and user goals

must be clearly understood and must drive the design process.

Doctors, lawyers, accountants, and many other professional service providers often fail to take advantage of the opportunity to persuade their website visitors. Their websites are frequently little more than a dynamic yellow pages ad, listing office hours and location and a basic description of their services. This type of site provides basic information, but does little to meet either the provider’s goals or the goals of their potential customer.

A tax attorney may wish to increase revenue by getting more clients. It is not enough, however, to simply tell a potential client where the office is and what services the attorney offers. A prospective client is probably going to want to know something about the attorney’s skill and reputation. A professional’s website should always provide persuasive customer testimonials, along with meaningful content that bolsters their qualifications and emphasizes their expertise. Their users need to know why they should choose that provider over their competitors, and they need to be guided through the process starting with an initial consultation or some other first contact.

Professionals can clearly gain a strategic advantage by using techniques of persuasion to influence decision making and motivate user action. However, many other types of organizations can also employ persuasive design strategies to achieve their website goals,

as long as it is understood that the website goals are ultimately an outgrowth of both organizational and user goals.

A cable television provider might see a significant cost reduction by persuading people to seek online user assistance rather than calling its technical support department. A nonprofit may see an appreciable increase in online donations by effectively convincing website visitors of the organization's credibility. A bank may slash operating costs by influencing more customers to use online banking. Government and health organizations can positively change people's diet and exercise habits using persuasive web-based tools.

Before an organization can influence online users, however, it must understand the types of users that are likely to visit its website. Andrew Chak suggests that persuasive design can be simplified by considering just four kinds of users: browsers, evaluators, transactors, and customers. Browsers recognize a need, but don't know quite what they want and are seeking information. Evaluators know enough to weigh their options and need detailed information. Transactors have made a decision and are ready to act. Customers already have a relationship with the organization and just need to remain satisfied.²

Using a solid grasp of organizational and user goals as a foundation, designers and developers can craft a framework for a truly persuasive user experience. It must also be understood that people are influenced as much

by how information is presented to them as they are by the information itself. Persuading online users involves knowing what information to provide, how to present that information, what response to seek from the user, and precisely when to elicit that response.

Users must feel that they are making an informed choice, they must feel at ease making that choice, and they must be guided toward taking action. To that end, they must feel that they have obtained information from a sincere and believable source that is trustworthy. Only then can they be motivated to respond. Fortunately, there are specific persuasive strategies and tactics that can be used to establish credibility, build trust, and influence user behavior.

Design, Altruism, and Self-Control

In an experiment conducted at the University of Minnesota, some participants answered questions on a clean, well-designed website, and others answered questions on a sloppy, poorly-designed site.

Those on the poorly designed site were more likely to say that they would gamble rather than take a sure thing, curse and swear, and take an immediate reward rather than a larger delayed reward.

The poorly designed site also resulted in fewer donations to charity. Generosity and charity are linked to self-control, and the more effective and persuasive design of the clean website guided people unconsciously toward self-disciplined decisions and altruistic actions.³

Establish credibility

Credibility is the first essential step towards gaining a user's trust and eventually influencing their action. No one will be swayed by information they don't believe, or that comes from a source they don't see as valid. Some organizations will have credibility by virtue of their reputation alone. But the less a user knows about an organization, the harder that organization will have to work to prove itself and establish credibility.

Credibility, like the user experience as a whole, is largely subjective. It is mostly about the user's perception, rather than any objective measure of an organization's credentials or expertise. The user's perception of an organization's credibility may also get stronger or weaker as time passes. But once credibility is lost, it can be very difficult to regain.⁴ "It takes 20 years to build a reputation and five minutes to lose it. If you think about that, you'll do things differently," is a popular aphorism of business magnate and investment wizard Warren Buffett. Fortunately, there are workable strategies that user experience professionals can apply to help establish and maintain credibility.

Types of credibility

Dr. B. J. Fogg, director of Stanford University's Persuasive Technology Lab, has proposed a taxonomy of credibility. Fogg suggests that there are four primary types of credibility that relate to websites and other computing

applications: presumed, surface, reputed, and earned.⁵

Presumed credibility

Presumed credibility refers to the general assumptions that are made by the user. For example, Fogg's research indicates that a user may presume a website to be more credible simply because it represents a nonprofit organization, provides links to its competitors' sites, or because it has a ".org" domain.⁶

Reputed credibility

Reputed credibility is based on the recommendation or endorsement of a third party. Positive reviews, testimonials, referrals, awards, seals of approval, and inbound links from credible sources are all sources of reputed credibility.⁷

Surface credibility

Surface credibility is driven by the user's firsthand experience with the website, in particular their initial impression. Websites that have a clean, professional design, are frequently updated, have fast-loading pages, are easy to use, and that do not overwhelm the user with ads and pop-ups are generally perceived as credible.⁸

Earned credibility

Earned credibility is the result of the user's sustained positive experience with the website over time. This type of credibility is the most difficult to establish, but will afford the greatest level of influence. Some factors that can help a website earn credibility include providing

Four Types of Credibility	
Type of credibility	Basis for believability
Presumed	General assumptions in the mind of the perceiver
Surface	Simple inspection or initial firsthand experience
Reputed	Third-party endorsements, reports, or referrals
Earned	Firsthand experience that extends over time

Source: Fogg, B. J., *Persuasive Technology*, 2003.

Table 1: Four Types of Credibility

prompt responses to service requests, sending e-mails to confirm transactions, remembering returning visitors, delivering information tailored to the user's preferences, and making sure that it is always easy to navigate content.⁹

Elements of credibility

Fogg's credibility taxonomy provides an effective method for categorizing various elements of credibility. However, those specific elements of credibility must still be addressed by user experience designers. Content strategist Colleen Jones explains that credibility is "why people should trust and listen to you or your organization."¹⁰ Psychologists have identified several elements of credibility that user experience practitioners must keep in mind when designing to enhance credibility.

Expertise

The user's evaluation of an organization's expertise is an outgrowth of that user's perception of the organization's knowledge, skill, and experience in a particular area. Being regarded as an expert greatly enhances an individual's or organization's believability. A

website user must see the site operator as proficient in some specialized area of knowledge before granting credibility based on expertise.

Expertise can be conveyed many ways. Sometimes, titles (such as professor or doctor) are sufficient to convey expertise. Presenting content in an authoritative tone can also convey expertise, as can being an expert contributor to other websites. Curating content from other expert contributors can enhance the credibility of an organization's website. So can links from other credible sources, which indicates to users that others see the site as a source of expertise in that subject area.

Experience

Having a great deal of experience in a field usually implies expertise. Likewise, having experience in a very specialized or unique field also communicates expertise to the user. Experience should be thoroughly documented, and should emphasize major accomplishments. Remember that while experience often implies expertise, expertise alone cannot always substitute for experience.

Competence

Demonstrated competence in a particular domain is one of the easiest ways to build credibility. Competence-based credibility differs slightly from expertise-based credibility. Users grant expertise-based credibility when they think someone *knows* something, whereas they only grant competence-based credibility when they think someone has *done* something.¹¹

Reputation

If the website operator is already known as an expert source of information or for providing a specialized service, then the user will grant a certain amount of credibility based on reputation alone. Otherwise, a credible reputation must be earned by creating positive experiences for the user over time.

Endorsement

If an organization or individual is endorsed by other credible sources, it enhances the credibility of that organization. Testimonials from customers and positive reviews are an easy way to obtain credible endorsements. Seals from organizations such as the Better Business Bureau, TRUSTe, or VeriSign can also serve as an endorsement of a site's reliability or overall trustworthiness.

Achievement

Organizations with significant prior accomplishments or that are having great current success are generally perceived as credible by users. A little relevant and well-timed self promotion, as long as it isn't utterly

shameless or transparently boastful, can quickly enhance the credibility of a website and the site's operator.

Longevity

The amount of time that a website or its operator has been operating can contribute to credibility. Older organizations or websites are often considered more credible than sites that have only been operating for a short time. Of course, if the organization has built a poor reputation during that time, longevity is irrelevant. Likewise, unusually successful new sites can rapidly establish credibility among users.

Similarity

The more common ground the organization has with the user, the more credible that entity will be in that user's eyes. The more deeply users identify with the site, the site operator, or the site's other users, the more they will be drawn to that site and the more credibility the site will gain among like-minded people.

Credential

A credential is essentially another type of third-party endorsement. Credentials generally attest to an individual's or organization's qualifications, competence, or authority in a given domain. Academic degrees, industry certifications, security clearances, and authorship of peer-reviewed papers can all serve as credibility builders.

Build trust

Once an organization has established credibility among users, the next step is to build trust. Whereas credibility can be equated to believability, trust can be equated to dependability. Trust is usually earned by presenting the user with a positive experience again and again over time. Once an organization has gained user trust, it no longer has to prove itself.

Dr. Duane C. Tway defines trust as “the state of readiness for unguarded interaction with someone or something.”¹² The idea that a user might be ready for “unguarded interaction” with a website is significant. This suggests that the user has had enough previous positive experience with the site that they are willing to take the risk that future experiences will result in similar positive outcomes. It also means that the user perceives the organization behind the site to be competent, and believes that their intentions are not purely self-serving.

Elements of trust

Trust is developed incrementally. In an online environment, trust is developed by completing a series of transactions with the user that satisfy their expectations and goals. Although ultimately it is this history of favorable user experiences that will eventually result in a trust-level relationship, there are several individual elements of trust that can be addressed by user experience practitioners to help build trust. By integrating these trust

elements into the persuasive user experience framework, designers and developers can establish a deeper relationship with the user.

Integrity

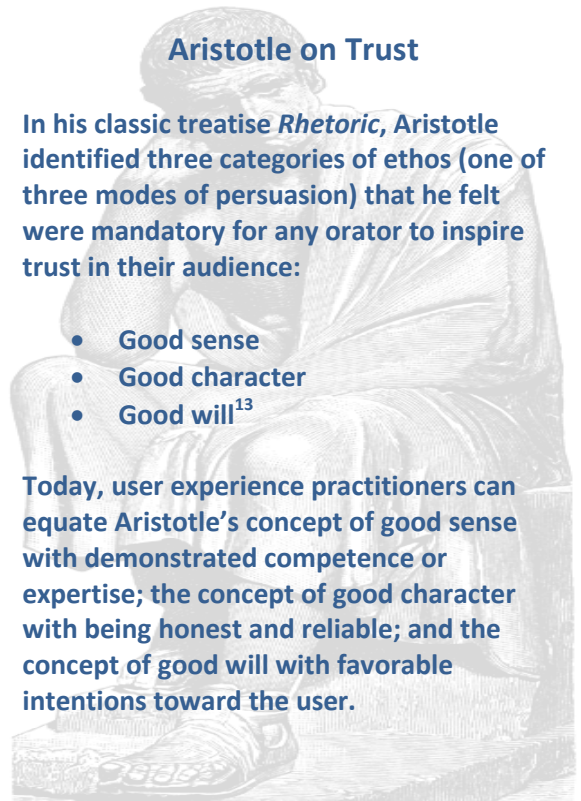
Integrity involves adhering to stated principles and making good on promises. Integrity means following through, and having the courage to admit errors. If a website tells a user they’ll get a confirmation e-mail, then they should get it. If the user was told they would not receive promotional offers from outside sources, they shouldn’t. If a user receives a promo code for a discount on the website, the code should work. If the user was told the item would arrive in 3-5 days, it should. If Twitter isn’t working because of bandwidth overload, then they should tell the user they’re over capacity (which they do).

Aristotle on Trust

In his classic treatise *Rhetoric*, Aristotle identified three categories of ethos (one of three modes of persuasion) that he felt were mandatory for any orator to inspire trust in their audience:

- Good sense
- Good character
- Good will¹³

Today, user experience practitioners can equate Aristotle’s concept of good sense with demonstrated competence or expertise; the concept of good character with being honest and reliable; and the concept of good will with favorable intentions toward the user.



Reliability

Reliability, as applied to a website, means simply that all site functionality should work like it's supposed to work. Or, at least as the user expects it to work. When search functions return irrelevant results, or forms don't submit properly, or shopping carts malfunction, then users lose trust in the site and the organization behind the site. Likewise, broken links, spelling and grammar errors, and other careless errors will undermine user trust.

Transparency

Transparency implies accountability, and accountability inspires trust. Organizations should aim for as much transparency as possible online. Users want to know who they are dealing with, and that they are being dealt with fairly. All sites should provide easily accessible contact information for the organization. The site's privacy policy should be thorough, accurate, and up-to-date, as should the site's terms and conditions of use. When in doubt, err on the side of disclosure.

Indemnity

The willingness to right wrongs can be a major trust-building factor for any individual or organization. Users want to know that they have some recourse in the event something goes wrong, and organizations that are willing to make restitution when it is due will gain favor with users. Website operators must be willing to take responsibility, should avoid cover-ups at all costs, and must make amends when necessary.

Performance history

A history of good performance is the primary method of obtaining earned credibility. If a user has had a long history of positive experiences with a website, then a relationship of trust has been established. A successful track record also goes a long way toward helping an organization establish and maintain a good reputation, and serves as proof of continuously demonstrated competence.

Influence behavior

After establishing credibility and building trust with users, it's time to convince them to act. Just as with the key components of credibility and trust, many elements of motivation and influence can be integrated into the user experience. In fact, many would argue that interactive methods of persuasion are particularly effective, since the tactics of influence can be adjusted based on user input as the interaction evolves.

The overwhelming majority of websites have some persuasive purpose, though some may be more overt than others. Website operators usually want the user to take any of a number of actions: sign up, buy, donate, like, contact, recommend, subscribe, watch, listen, review, read, link, send, or bookmark. Many times, the persuasive goal of the site is to complete some type of transaction. Unfortunately, most operators are focused on the technology needed to complete the transaction, and do not devote sufficient time and energy toward motivating the user to engage in the transaction in the first place.

A well-designed interface should seem intuitive and seamless to the user, and should even be a joy to use. An impactful user experience, however, will also be built upon a deep understanding of the user, and will influence user behavior in a meaningful and positive way. To accomplish this, user experience practitioners need to know the

persuasive roles that interactive technologies play, as well as how attitude and action combine to produce results. Additionally, a thorough knowledge of various elements of influence is necessary before they can be successfully embodied into a persuasive interaction design.

Persuasive roles of technology

Interactive technologies, and in fact all types of technologies, can and increasingly do play a role in shaping people's attitudes and behaviors. Persuasive technology researcher B.J. Fogg has proposed a framework for clarifying the roles of technology from the user's view, and how these roles might affect the technology's impact on the user. According to Fogg, computing technology plays three primary roles: tool, media, and social actor.¹⁴

Technology as a tool

When computers serve as tools, their purpose is to make human activities easier to perform, make it more efficient for us to do things, or to perform functions that could not be done at all without technological assistance. Serving as tools, interactive technologies can persuade by making it easier for users to perform desired actions, guiding users through a complex process, or by generating quantitative information that motivates the user.¹⁵

Technology as a medium

Computers function as media by communicating both symbolic and sensory information to the user. When conveying symbolic information, interactive technologies

TOOL	MEDIUM	SOCIAL ACTOR
<i>Increases capability</i>	<i>Provides experience</i>	<i>Creates relationship</i>
Can be persuasive by:	Can be persuasive by:	Can be persuasive by:
• Making target behavior easier to do • Leading people through a process • Performing calculations or measurements that motivate	• Allowing people to explore cause-and-effect relationships • Providing people with vicarious experiences that motivate • Helping people rehearse a behavior	• Rewarding people with positive feedback • Modeling a target behavior or attitude • Providing social support

Source: Fogg, B. J., *Persuasive Technology*, 2003.

Table 2: Persuasive Roles of Technology

can persuade the user through many of the same traditional methods that might be used in oratory or print. When conveying sensory information, interactive technologies can also persuade by enabling people to test cause-and-effect relationships, providing motivational virtual experiences, and by assisting people with behavior rehearsal.¹⁶

Technology as a social actor

People often respond to interactive technologies as they might respond to another human being. Humans will naturally respond in predictable ways to environmental cues. When people relate to a technology as a social presence, they respond in instinctively social ways. This allows interactive technologies to be used to apply a range of influence dynamics that might normally only be present in human social situations. When interactive technologies function as social actors, they can persuade by giving users positive feedback and praise, by

modeling a desired behavior or attitude, and by offering social support to the user.¹⁷

Attitude and action

To achieve any given result, user experience specialists must learn effective ways to influence both what users *think*, and what users *do*. That is, the desired user attitude plus the desired user action produces the desired result. Colleen Jones has proposed a framework of attitude and action based on her own practical experience, B.J. Fogg's research, social construction theory, and marketing research. She suggests that the following components form the basic structural framework of user attitude and action:

- **Awareness:** Users must know the organization and its purpose.
- **Likability:** Users must like or identify with the organization and its purpose.

- **Trust:** Users must find the organization credible, trustworthy, and true to its purpose.
- **Motivation:** Users must want to take the desired action.
- **Ability:** Users must be able to easily take the desired action.
- **Trigger:** Users require some prompt or inspiration to act immediately.¹⁸

By considering this framework of attitude and action throughout the design process, user experience professionals can more easily focus individual interactivity decisions toward achieving the desired result.

Elements of influence

By understanding the persuasive roles of technology in users' lives, and by realizing how user attitude and action combine to get results, organizations can begin to craft their own framework for persuasive design. However, practitioners must still have a firm grasp of the many different strategies and tactics that can affect user attitudes and behavior. There is no unified theory of persuasion – or even a comprehensive set of principles – to guide user experience professionals. Nonetheless, there are many commonly accepted elements of influence that can assist practitioners.

Attractiveness

Attractive people are often presumed to be more credible, capable, or likable on the basis of appearance alone. Researchers call this the “halo effect.” It describes people making a global evaluation of someone based on their

evaluation of an individual attribute.¹⁹ If the person has one obvious positive attribute, such as physical beauty, many people will automatically grant them other favorable traits such as honesty or intelligence.

In the same way that the halo effect applies to the evaluation of people, it applies to evaluating websites. People will assume an attractive, professionally designed site to be more credible, functional, and easier to use than a site that features a clunky, amateurish design.

Designers must keep in mind the aesthetic sensibilities of their target audience, however. Different people may have different standards of attractiveness.

Likability

It's much easier for a website to have a persuasive impact on a user if the user likes the website or the organization behind the site. Users may have varied and subjective preferences for specific content or design approaches that make them like a website. As far as liking the website operator, that will depend largely on the organization's purpose and values and how well they reflect those of the user. There are also many individual dimensions of likability that might be addressed by designers and content producers, including authenticity, empathy, friendliness, relevance, cooperation, similarity, conditioning, and association.

Reciprocity

When many people receive some sort of favor, they feel obligated to pay it back in kind.

Sociologists believe that there is no human society that does not observe this unwritten rule of reciprocity, and that it affects all varieties of human exchanges.²⁰ For example, many consumers have reported purchasing products that they normally wouldn't have simply because they were given a gift by a merchant or manufacturer.

Website operators have total control over what they provide to their users, and they can also specify precisely what they expect from their users in return. Designers should be aware, though, that in most cases the website must do the giving first. People generally don't feel much of an obligation to a website, so the website must provide value before the user will offer value.²¹

It's also important to note that reciprocity can be negative as well as positive. Negative reciprocity is based on taking, and has a tendency to escalate. As Colleen Jones notes, "When people experience a snub, they'll retaliate with a more intense rebuke."²²

Commitment

Once someone has made a commitment, they feel internal and external pressure to act in a manner consistent with that commitment.²³ The persuasive implication of this behavior is that if a user can be made even a small commitment, their desire for consistency will lead them to make a bigger commitment later. For example,

once a user has provided an e-mail address, they will be more willing to provide a physical address. Once they have provided a physical address, they will be more willing to provide a telephone number, and so on.

Social proof

Social proof is the concept that because other people have made the choice to do something, then they must have thought it through, so it's probably okay. Social proof is commonly used by people to determine proper behavior, since people will often gauge the propriety of their behavior in a given circumstance based on the degree that others are behaving similarly.²⁴ For example, in a crowded bar, someone may look around to see if it's acceptable to throw their cigarette butt on the floor or if they should find an ashtray.

People follow the crowd online as well. Many people download a particular song simply because they can see that it's been heavily downloaded by others. If someone searches for a video on YouTube, they will often choose the result with the most views. Amazon uses social proof to convince shoppers that similar people have purchased the very book they are viewing and have rated it highly.

User experience professionals must bear in mind, though, that social proof works best when the user can identify with the crowd. They likely won't follow just *any* crowd, but may be quite apt to follow a crowd of likeminded people.

Authority

People often find it easy to make decisions by deferring to a respected authority.

Psychologists recognize that most people have some deep-seated sense of duty to authority, and people expect authorities to guide them, give them helpful information, and make useful recommendations. Many traditional human authority roles can be played by interactive technologies. Computers can counsel, judge, teach, referee, mediate, and offer expert advice. When interactive technologies function in these roles, they inherit the influence that comes with that position.²⁵

Scarcity

Scarcity works as an influence tactic because people tend to believe that things that are rare are more valuable than things that are common. Users can be spurred to act if they are led to believe that there is a limited supply of what's on offer, or that there is limited time to act. Online retailers commonly use the scarcity principle to influence potential buyers.

The scarcity principle can be applied to information as well. People tend to show a greater desire for information if they feel it is exclusive, or if it has been banned or censored. In fact, research shows that people even tend to view information more favorably or believe it more if it was censored or restricted in some way.²⁶

Priming

Priming is the process of exposing the user to concepts, imagery, or language that will likely

influence their choice later. Priming works because we are more likely to act on what can be easily remembered. In psychological terms, priming is the effect of an earlier stimulus influencing a response to a later stimulus. For example, if people are asked the day before an election whether they are going to vote, the chance that they actually *will* vote increases almost 25 percent.²⁷

Priming can work in subtle ways. Whole Foods Market makes sure that customers enter the store surrounded by freshly cut flowers, so that they will be primed to think “freshness” right away. Subtlety should also be the key for user experience designers. The user should be ever-so-gently nudged toward the desired outcome without noticing the effects of priming.

Framing

Framing refers to a person's inclination toward making a particular choice because of how that choice was presented to them. Their decision may vary between two identical options depending on how each option is packaged. Since subjective value is often related to the magnitude of perceived gain or loss, someone's decision may depend upon whether or not the choice has been framed positively or negatively. Most marketers are keenly aware of the power of framing, and will often seek to capitalize on people's aversion to loss, rather than their desire for gain.

In his bestseller *How We Decide*, Jonah Lehrer explains that framing is why “people are

much more likely to buy meat when it's labeled *85 percent lean* instead of *15 percent fat*. And why twice as many patients opt for surgery when told there's an 80 percent chance of their surviving instead of a 20 percent chance of their dying."²⁸

Metaphor

Metaphor is a powerful method of connecting unfamiliar concepts or abstractions to what the user already knows. Metaphors should be used sparingly, though, as overuse can create confusion. Also, the most effective metaphors are usually simple and widely understood. It's more important to choose the most appropriate metaphor, and then buttress it in creative ways.

The authors of *The Art of Woo* discuss a popular metaphor used by physicists, namely that of "black holes." Technically, a black hole is simply the evolutionary terminus of massive stars that have collapsed to infinite density, and where gravitational force is so strong that even light cannot escape. But the mathematics of these phenomena are very difficult to grasp. However, most people can picture some sort of cosmic vortex inhaling all of the matter and energy in its vicinity, even though that image may be inaccurate. The authors explain that "By coming up with a good metaphor, physicists studying these phenomena have made it easier to obtain funding, to write books, and to go on television for interviews."²⁹

Metaphors are one of the fundamental ways that humans conceptualize and converse about our world. Researchers Gerald Zaltman and

Lindsay Zaltman have identified seven deep metaphors that much of human thought seems to orient around. These seven metaphors surface with the greatest frequency, across all demographics, and in every country.³⁰ Because of their universality, these metaphors may be the most relevant ones for user experience practitioners to embrace:

- **Balance:** Includes the ideas of equilibrium, adjusting, maintaining or offsetting forces, and things as they should be.
- **Transformation:** Relates to ways that changes in substance and circumstances affect thought. Involves changing states or status.
- **Journey:** Applies to how the meeting of past, present, and future affects thought. People often frame life as one big journey.
- **Container:** Pertains to how inclusion, exclusion, and other boundaries affect thought. Containers perform two functions: keeping things in and keeping things out.
- **Connection:** Addresses how the need to relate to oneself and others affects thought. Encompasses feelings of belonging or exclusion.
- **Resource:** Relates to ways acquisitions and their consequences affect thought.
- **Control:** Encompasses how the sense of mastery, vulnerability, and well-being affect thought.

Conclusion

Organizations can gain a competitive advantage by forging deeper relationships with their online users. To do this, they will need to modify their approach from building awareness to building influence. Interactive technologies are increasingly playing important roles in shaping people's attitudes and behaviors. As broadband connectivity approaches ubiquity, the ability to seamlessly weave the elements of influence and

"If the outcome is positive for both sides of the interaction, then the experience is desirable."

motivation into human-computer interactions will become a core skill of user experience designers.

It is essential to establish credibility in order to eventually

gain trust, and both are necessary prerequisites to effectively influencing user behavior. User experience practitioners should understand the various types of credibility, along with their basis for believability. Additionally, there are many individual elements of credibility – such as expertise and competence – that must be conveyed to the user. Similarly, the individual components of trust must be leveraged effectively until the organization no longer has to prove itself to the user.

If credibility and trust can be established, the user can then be more easily motivated to

act in accordance with organizational goals. Here, practitioners must be aware of the functional role that the interactive technology plays in the user's life, and how the technology can be used to persuade within the context of its role. Designers must also understand the framework of attitude and action that can be used to create results. Here again, there are also many individual elements of influence that contribute to a persuasive user experience.

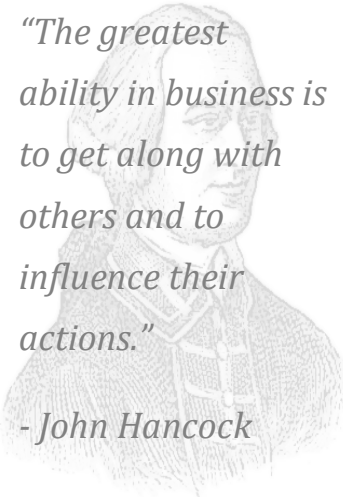
There is some conflict in the user experience community concerning whether persuasive design should even be considered part of user experience design. After all, persuasive design often seems centered around business goals rather than user goals. In that sense, many people see persuasive design as just another approach to marketing.

In order to appreciate the value of integrating persuasive design elements into the user experience, practitioners must realize that often the organization's goals are also the user's goals. They are not necessarily always at odds. Organizational goals may vary somewhat from user goals, but if the outcome is positive for both sides of the interaction, then the experience is desirable. Also, as long as persuasion does not involve deception or coercion, no ethical boundaries will be tested.

This paper discusses a number of elements of credibility, trust, and influence. These elements can be brought together to form the basis of a vigorous heuristic framework that

can be used to design and evaluate user experiences for persuasive efficacy.

Such a heuristic framework can be very effectively applied as a template to integrate elements of persuasion into new user experience designs. Similarly, this framework can be used to evaluate existing designs for persuasive impact. If performed by a skilled practitioner, a heuristic evaluation involving



"The greatest ability in business is to get along with others and to influence their actions."

- John Hancock

these principles should significantly increase the persuasive power of any new design or redesign.

Another application of this type of

heuristic structure is the possibility of persuasion profiling. By evaluating individual users according to what particular motivators work best for them, practitioners can then construct a persuasive profile of the user. In this way, website operators will know not just what kind of information a user prefers, but how to present that information in the most impactful way.

John Hancock once said that the "greatest ability in business is to get along with others and to influence their actions." New types of web-enabled devices are being deployed at a nearly exponential rate, creating a seemingly

unlimited number of opportunities to influence people's actions through persuasive interface design. Organizations that fail to embrace this new reality will quickly fall behind.

Ultimately, though, it will be the influence strategies used to guide the user experience – and not the device itself – that will determine the success or failure of the interaction.

Organizations with a willingness to design these interactions around a sound set of influence heuristics will benefit most in the always-connected future.

Notes

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